

ew G4

ew 100 G4 | ew 300-500 G4 | ew 100 P G4 | ew 500 P G4

PDF export of the original HTML manual

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1. Preface

PDF Export of the Original HTML Manual

This PDF document is an automatic export of an interactive set of HTML manuals. Some content and interactive elements may not be included in the PDF because they cannot be displayed in this format. In addition, automatically generated page breaks may cause related content to be slightly shifted. We can therefore only guarantee the completeness of the information in the HTML manual and recommend using it. You can find it in the Documentation Portal at www.sennheiser.com/documentation.

2. Product information

All information about the product and available accessories at a glance.

Products of the ew 100 G4 series



For information about the available **accessories**, see Accessories.

You can find technical **specifications** for the individual products under Specifications.

You can find information about **starting up** and **operating** the products under Instruction manual.

EM 100 G4 rack receiver



You can find more detailed information about the EM 100 G4 in the following sections:

- **Startup and operation**: EM 100 G4 rack receiver
- **Specifications**: EM 100 G4 rack receiver

SKM 100 G4 | SKM 100 G4-S handheld transmitter



SKM 100 G4 variant:



SKM 100 G4-S variant:



The SKM 100 G4 handheld transmitter is also available in the SKM 100 G4-S variant with an integrated mute switch.

> **i** You can find more detailed information about the SKM 100 G4 | SKM 100 G4-S in the following sections:
>
> - **Startup and operation**: SKM 100 G4 | SKM 100 G4-S handheld transmitter
> - **Specifications**: SKM 100 G4 | SKM 100 G4-S handheld transmitter

SK 100 G4 bodypack transmitter



You can find more detailed information about the SK 100 G4 in the following sections:

- **Startup and operation:** SK 100 G4 bodypack transmitter
- **Specifications:** SK 100 G4 bodypack transmitter

Products of the ew 300-500 G4 series

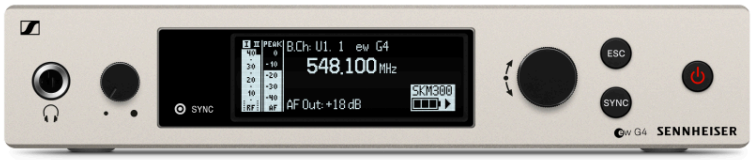


For information about the available **accessories**, see Accessories.

You can find technical **specifications** for the individual products under Specifications.

You can find information about **starting up** and **operating** the products under Instruction manual.

EM 300-500 G4 rack receiver



> You can find more detailed information about the EM 300-500 G4 in the following sections:
>
> - **Startup and operation**: EM 300-500 G4 rack receiver
> - **Specifications**: EM 300-500 G4 rack receiver

SKM 300 G4-S handheld transmitter





i You can find more detailed information about the SKM 300 G4-S in the following sections:

- **Startup and operation:** SKM 300 G4-S handheld transmitter
- **Specifications:** SKM 300 G4-S handheld transmitter

SKM 500 G4 handheld transmitter





You can find more detailed information about the SKM 500 G4 in the following sections:

- **Startup and operation**: SKM 500 G4 handheld transmitter
- **Specifications**: SKM 500 G4 handheld transmitter

SK 300 G4-RC bodypack transmitter



You can find more detailed information about the SK 300 G4-RC in the following sections:

- **Startup and operation**: SK 300 G4-RC bodypack transmitter
- **Specifications**: SK 300 G4-RC bodypack transmitter

SK 500 G4 bodypack transmitter



You can find more detailed information about the SK 500 G4 in the following sections:

- **Startup and operation**: SK 500 G4 bodypack transmitter
- **Specifications**: SK 500 G4 bodypack transmitter

Products of the ew 100 P G4 series



For information about the available **accessories**, see Accessories.

You can find technical **specifications** for the individual products under Specifications.

You can find information about **starting up** and **operating** the products under Instruction manual.

EK 100 G4 diversity receiver



You can find more detailed information about the EK 100 G4 in the following sections:

- **Startup and operation**: EK 100 G4 diversity receiver
- **Specifications**: EK 100 G4 diversity receiver

SKP 100 G4 plug-on transmitter



You can find more detailed information about the SKP 100 G4 in the following sections:

- **Startup and operation**: SKP 100 G4 plug-on transmitter
- **Specifications**: SKP 100 G4 plug-on transmitter

Products of the ew 500 P G4 series



For information about the available **accessories**, see Accessories.

You can find technical **specifications** for the individual products under Specifications.

You can find information about **starting up** and **operating** the products under Instruction manual.

EK 500 G4 diversity receiver



You can find more detailed information about the EK 500 G4 in the following sections:

- **Startup and operation**: EK 500 G4 diversity receiver
- **Specifications**: EK 500 G4 diversity receiver

SKP 500 G4 plug-on transmitter



You can find more detailed information about the SKP 500 G4 in the following sections:

- **Startup and operation**: SKP 500 G4 plug-on transmitter
- **Specifications**: SKP 500 G4 plug-on transmitter

Accessories

A variety of accessories are available for the ew G4 series.

Microphones and cables

Microphone modules

We recommend using the following microphone modules with the SKM 100 G4 | SKM 100 G4-S, SKM 300 G4-S and SKM 500 G4 handheld transmitters.

Module	Features	Article no.
MMD 835-1 BK	Dynamic, cardioid, black	502575
MMD 845-1 BK	Dynamic, super-cardioid, black	502576
MME 865-1 BK	Capacitor, super-cardioid, black	502581
MMD 935-1 BK	Dynamic, cardioid, black	502577
MMD 945-1 BK	Dynamic, super-cardioid, black	502579
MMK 965-1 BK	Capacitor, switchable Cardioid/super-cardioid, black	502582
MMK 965-1 NI	Capacitor, switchable Cardioid/super-cardioid, nickel	502584

We recommend using the following microphone modules with the **SKM 100 G4 | SKM 100 G4-S** handheld transmitter.

Module	Features	Article no.
MMD 42-1	Dynamic, omni-directional, black	506772

We recommend using the following microphone modules with the **SKM 300 G4-S** and **SKM 500 G4** handheld transmitters.

Module	Features	Article no.
Neumann KK 204	Capacitor, cardioid, nickel	008651
Neumann KK 204 BK	Capacitor, cardioid, black	008652
Neumann KK 205	Capacitor, super-cardioid, nickel	008653
Neumann KK 205 BK	Capacitor, super-cardioid, black	008654

> **i** You can find more information about the individual microphone modules on their respective product pages at sennheiser.com.

Headset and Lavalier microphones

We recommend using the following Lavalier microphones and headset microphones with the SK 100 G4, SK 300 G4-RC and SK 500 G4 bodypack transmitters.

Microphone	Features	Article no.
ME 2	Lavalier microphone, omni-directional, black	508935
ME 3	Headset microphone, cardioid, black	508928
ME 4	Lavalier microphone, cardioid, black	508936
MKE 1 (Black EW)	Lavalier microphone, omni-directional, black	502876
MKE 1 (Beige EW)	Lavalier microphone, omni-directional, beige	502879
MKE 2 (Black EW)	Lavalier microphone, omni-directional, black	009831
MKE 2 (Beige EW)	Lavalier microphone, omni-directional, beige	009832
MKE 40 (Black EW)	Lavalier microphone, cardioid, black	500527
Headmic 1 (Beige EW)	Headband microphone, omni-directional, beige	506272
Headmic 1 (Black EW)	Headband microphone, omni-directional, black	506271
Headmic 1 (Silver EW)	Headband microphone, omni-directional, silver	506904

Line/instrument cables

The following cables are available to connect instruments and line sources to the **SK 100 G4** bodypack transmitter:

- **Sennheiser CL 2** | Line cable with XLR-3F plug on lockable 3.5 mm jack plug | Article no. 004840



- **Sennheiser CI 1-N** | Guitar cable with 6.3 mm jack plug on lockable 3.5 mm jack plug | Article no. 005021



Line connecting cable

The following cables are available to connect instruments and line sources to the **EK 100 G4** and **EK 500 G4** bodypack transmitter:

- **CL 1-N** | 3.5 mm jack plug on lockable 3.5 mm jack plugs | Article no. 005022



- **CL 100** | XLR-3 on a 3.5 mm jack plug | Article no. 556950



Rechargeable battery and charger

BA 2015 rechargeable battery

The BA 2015 rechargeable battery is designed for use with evolution wireless G4 series handheld transmitters, bodypack transmitters and bodypack receivers.

Article no. 009950



L 2015 charger

The BA 2015 rechargeable battery can be charged in the L 2015 charger on its own or inside of the bodypack transmitter/bodypack receiver.

Article no. 009828



LA 2 charging adapter

Charging adapter for L 2015 charger for charging SKM G4 handheld transmitters with installed BA 2015 rechargeable battery.

Article no. 503162



Accessories for rack mounting

GA 3 rack mount kit

19” rack adapter for mounting the EM 100 G4, EM 300-500 G4 or SR IEM G4 in a 19” rack.

Article no. 503167



AM 2 antenna front mounting kit

Antenna front mounting kit for installing antenna connections on the front of the rack when using the EM 100 G4, EM 300-500 G4 or SR IEM G4 together with the GA 3 rack mounting kit.

Article no. 009912



Antennas and accessories

The following antenna components are available as accessory parts.

Omni-directional antennas

A 1031-U | passive omni-directional antenna | Article no. 004645

Directional antennas

A 2003 UHF | passive directional antenna | Article no. 003658

AD 1800 | passive directional antenna, 1.8 GHz range | Article no. 504916

Antenna splitter

ASA 214 | active antenna splitter 2×1:4

- **ASA 214-UHF** variant | 470 - 870 MHz | Article no. 508241
- **ASA 214-1G8** variant | 1785 - 1800 MHz | Article no. 508242
- see ASA 214 antenna splitter



Antenna amplifiers

AB 3700 | broadband antenna amplifier | Article no. 502196

AB 3 | antenna amplifier, up to 42 MHz bandwidth

- **AB 3-K** variant | frequency range K | Article no. 505550
- **AB 3-1G8** variant | frequency range 1G8 | Article no. 504915

AB 4 | antenna amplifier, up to 88 MHz bandwidth

- **AB 4-Aw+** variant | frequency range Aw+ | Article no. 508538
- **AB 4-Gw** variant | frequency range Gw | Article no. 508539
- **AB 4-GBw** variant | frequency range GBw | Article no. 508540
- **AB 4-Bw** variant | frequency range Bw | Article no. 508541
- **AB 4-Cw** variant | frequency range Cw | Article no. 508542
- **AB 4-Dw** variant | frequency range Dw | Article no. 508543

Antenna cables

GZL 1019 | BNC/BNC coaxial cable, antenna cable with 50 Ω characteristic (wave) impedance

- **GZL 1019-A1** variant | 1 m | Article no. 002324
- **GZL 1019-A5** variant | 5 m | Article no. 002325
- **GZL 1019-A10** variant | 10 m | Article no. 002326

Additional accessories

KEN 2 Color labeling set

Color labeling set for SKM handheld transmitters

Article no. 530195



MZQ 1 Microphone clamp

Microphone clamp for SKM handheld transmitters

Article no. 076670



RMS 1 MUTE switch

Remote mute switch for SK 300 G4

Article no. 503164



CA 2 camera adapter

Camera adapter with hot shoe for portable receivers from the ew 100 P G4 and ew 500 PG4 series.

Article no. 009986



The frequency bank system

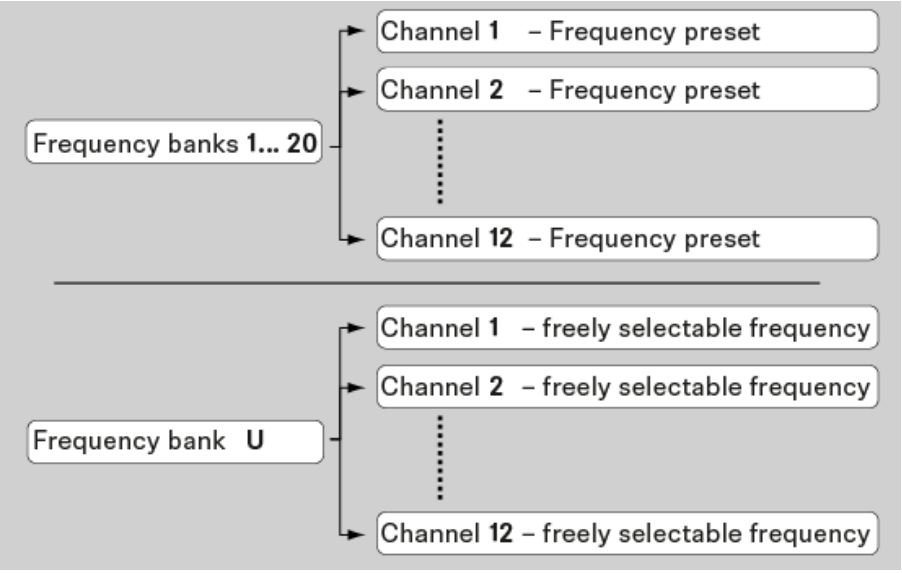
There are different frequency ranges in the UHF band available for transmission.

ew 100 G4

The following frequency ranges are available for the ew 100 G4 series:

- **A1 range**: 470 - 516 MHz
- **A range**: 516 - 558 MHz
- **AS range**: 520 - 558 MHz
- **G range**: 566 - 608 MHz
- **GB range**: 606 - 648 MHz
- **B range**: 626 - 668 MHz
- **C range**: 734 - 776 MHz
- **C-TH range**: 748.2 - 757.8 MHz
- **D range**: 780 - 822 MHz
- **JB range**: 806 - 810 MHz
- **E range**: 823 - 865 MHz
- **K+ range**: 925 - 937,5 MHz
- **1G8 range**: 1785 - 1800 MHz

Every frequency range has 21 frequency banks with up to 12 channels:



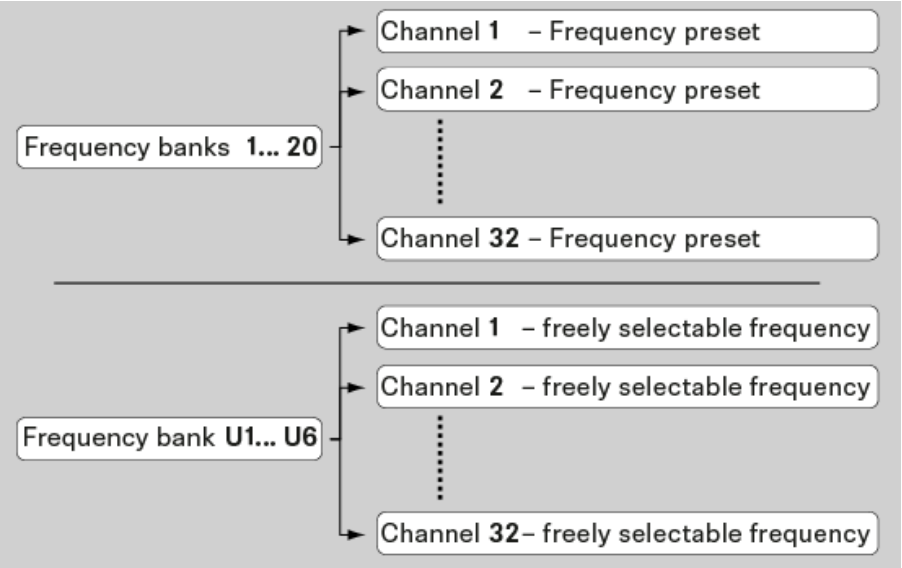
i You can find information about the frequency presets in the frequency tables of the respective frequency ranges under Frequency ranges.

ew 300-500 G4

The following frequency ranges are available for the ew 300-500 G4 series:

- **Aw+ range**: 470 - 558 MHz
- **Aw30 range**: 470 - 558 MHz
- **AS range**: 520 - 558 MHz
- **Gw1 range**: 558 - 608 MHz
- **Gw range**: 558 - 626 MHz
- **GBw range**: 606 - 678 MHz
- **Bw range**: 626 - 698 MHz
- **Bw30 range**: 626 - 698 MHz
- **Cw range**: 718 - 790 MHz
- **Cw-TH range**: 748.2 - 757.8 MHz
- **Dw range**: 790 - 865 MHz
- **JB range**: 806 - 810 MHz
- **K+ range**: 925 - 937,5 MHz

Every frequency range has 26 frequency banks with up to 32 channels:



> **i** You can find information about the frequency presets in the frequency tables of the respective frequency ranges under Frequency ranges.

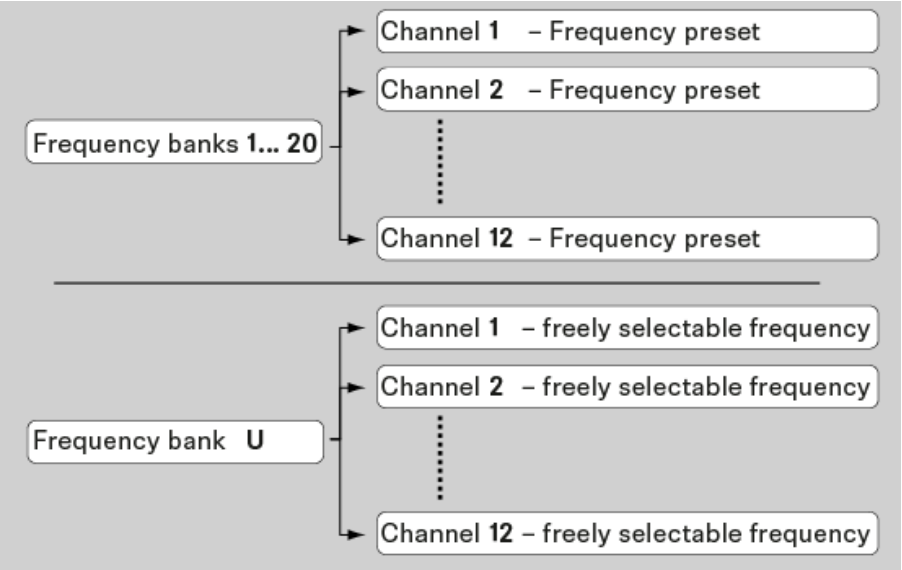
ew 100 P G4

The following frequency ranges are available for the ew 100 P G4 series

- **A1 range**: 470 - 516 MHz
- **A range**: 516 - 558 MHz
- **AS range**: 520 - 558 MHz
- **G range**: 566 - 608 MHz

- **GB range**: 606 - 648 MHz
- **B range**: 626 - 668 MHz
- **C range**: 734 - 776 MHz
- **C-TH range**: 748.2 - 757.8 MHz
- **D range**: 780 - 822 MHz
- **JB range**: 806 - 810 MHz
- **E range**: 823 - 865 MHz
- **K+ range**: 925 - 937,5 MHz

Every frequency range has 21 frequency banks with up to 12 channels:



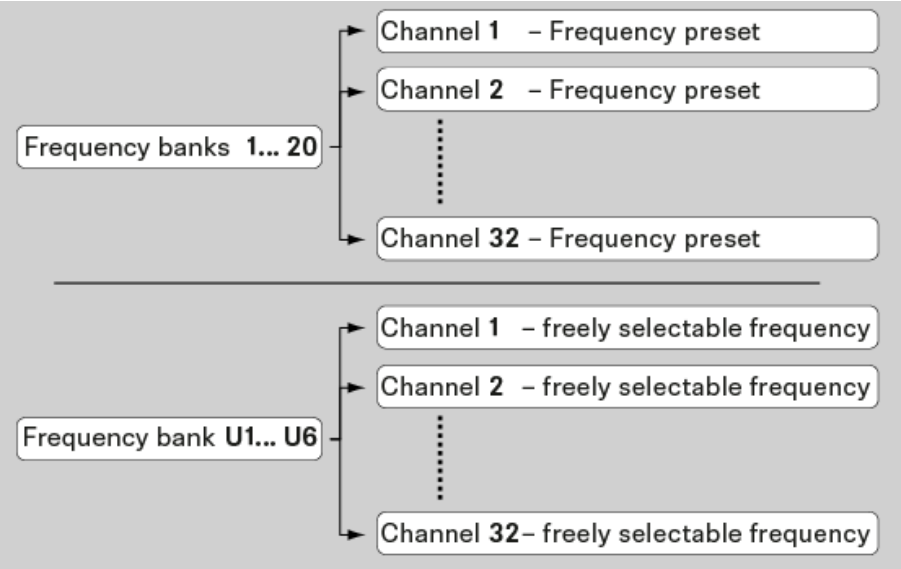
> **i** You can find information about the frequency presets in the frequency tables of the respective frequency ranges under Frequency ranges.

ew 500 P G4

The following frequency ranges are available for the ew 500 P G4 series

- **Aw+ range**: 470 - 558 MHz
- **AS range**: 520 - 558 MHz
- **Gw1 range**: 558 - 608 MHz
- **Gw range**: 558 - 626 MHz
- **GBw range**: 606 - 678 MHz
- **Bw range**: 626 - 698 MHz
- **Cw range**: 718 - 790 MHz
- **Dw range**: 790 - 865 MHz
- **JB range**: 806 - 810 MHz
- **K+ range**: 925 - 937,5 MHz

Every frequency range has 26 frequency banks with up to 32 channels:



i You can find information about the frequency presets in the frequency tables of the respective frequency ranges under Frequency ranges.

Frequency ranges

Frequency tables with the factory presets for all available frequency ranges can be found in the download area of the Sennheiser website at: sennheiser.com/download.

Enter **ew G4** in the search bar to show the frequency tables.

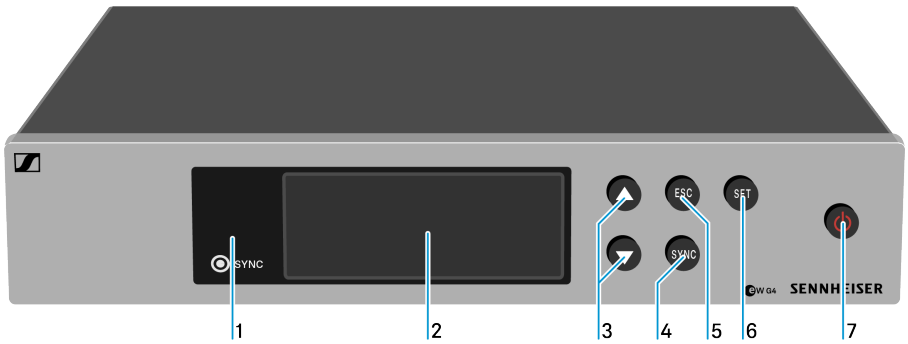
3. Instruction manual

Starting up and operating devices of the ew G4 series.

EM 100 G4 rack receiver

Product overview

Front



1 Infrared interface with a blue LED

- see Ew 100 G4 synchronizing

2 Display panel

- see Displays on the rack receiver display panel

3 **UP/DOWN** buttons

- see Buttons for navigating through the menu

4 **SYNC** button

- see Ew 100 G4 synchronizing

5 **ESC** button

- see Buttons for navigating through the menu

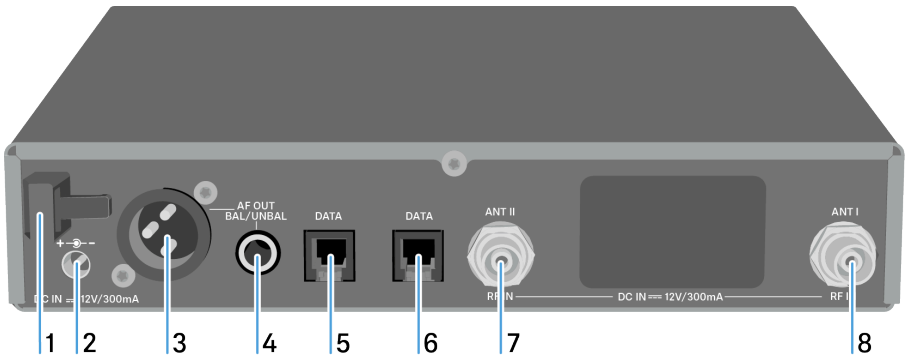
6 **SET** button

- see Buttons for navigating through the menu

7 **STANDBY** button

- see Switching the rack receiver on and off

Back



1 Strain relief for the cable of the power supply unit

- see Connecting/disconnecting the rack receiver to/from the power supply system

2 Connecting cables for the power supply unit (**DC IN**)

- see Connecting/disconnecting the rack receiver to/from the power supply system

3 XLR-3 socket for audio output, balanced (**AF OUT BAL**)

- see Outputting audio signals

4 6.3 mm jack socket for audio output, unbalanced (**AF OUT UNBAL**)

- see Outputting audio signals

5 RJ-10 interface (**DATA**)

- see Creating a data network

6 RJ-10 interface (**DATA**)

- see Creating a data network

7 BNC socket, antenna input II (**ANT II**) with remote power supply unit

- see Connecting antennas

8 BNC socket, antenna input I (**ANT I**) with remote power supply unit

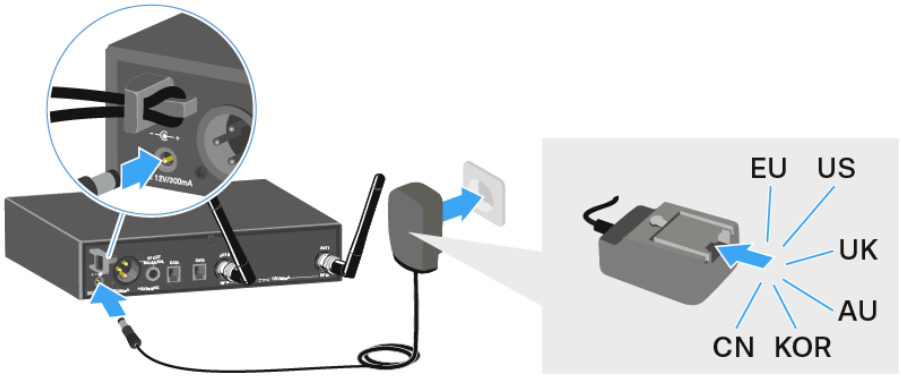
- see Connecting antennas

Connecting/disconnecting the rack receiver to/from the power supply system

Only use the supplied power supply unit. It is designed for your receiver and ensures safe operation.

To connect the rack receiver to the power supply system:

- Insert the plug of the power supply unit into the **DC IN** socket of the receiver.
- Pass the cable of the power supply unit through the cable grip.
- Slide the supplied country adapter onto the power supply unit.



- Plug the power supply unit into the wall socket.

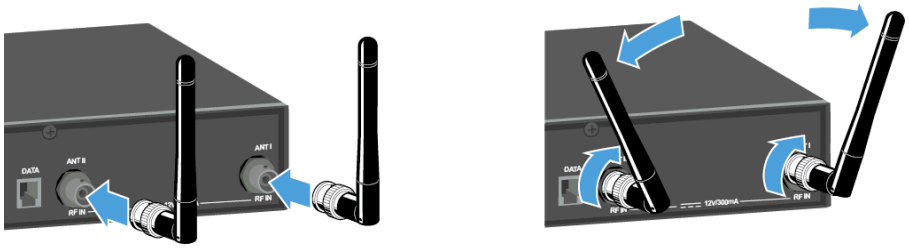
To completely disconnect the rack receiver from the power supply system:

- Unplug the power supply unit from the wall socket.
- Unplug the power supply unit from the **DC IN** socket of the receiver.

Connecting antennas

To connect the supplied rod antennas:

- Connect the first rod antenna to the **ANT I** socket on the rear side of the EM 100 G4.
- Connect the second rod antenna to the **ANT II** socket on the rear side of the EM 100 G4.
- Gently angle the rod antennas to the left and right as shown in the figure.



i If you are using more than one receiver, we recommend using remote antennas and the ASA 214 antenna splitter. You can find more information here: ASA 214 antenna splitter.

Outputting audio signals

The EM 100 G4 has a balanced XLR-3M output socket and an unbalanced 6.3 mm jack output socket.

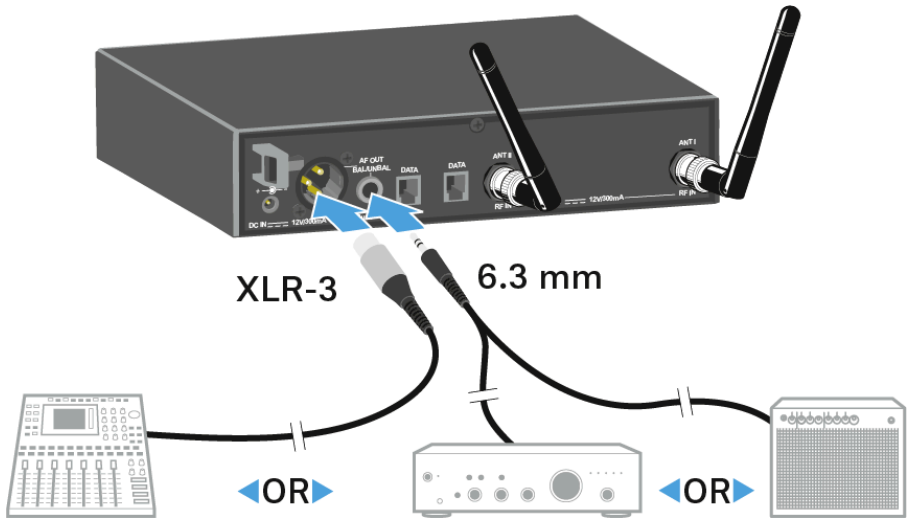
- Always use only one of the two **AF OUT** output sockets for each channel.

To connect an XLR cable:

- Plug the XLR cable into the **AF OUT BAL** socket of the EM 100 G4.

To connect a jack cable:

- Plug the jack cable into the **AF OUT UNBAL** socket of the EM 100 G4.

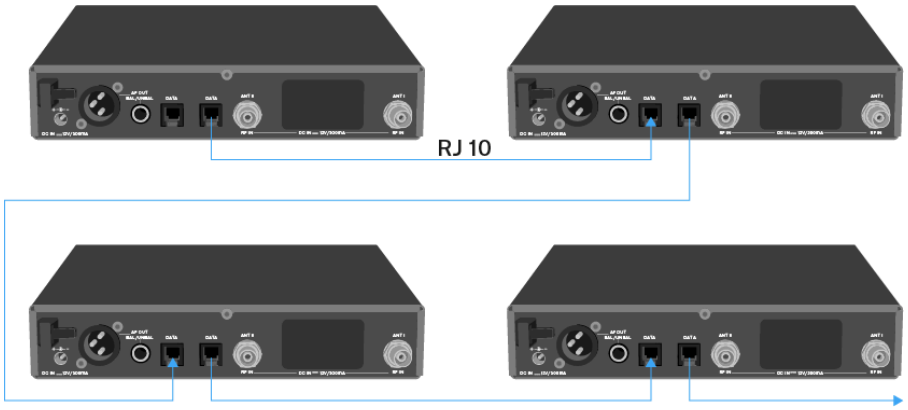


Creating a data network

You can cascade multiple EM 100 G4s to a multi-channel system using the two **DATA** RJ-10 interfaces (up to 12 receivers). You can perform a frequency setup for the entire multi-channel system via this data network using the **Easy Setup** function.

The setup only works when all of the receivers have the same frequency range.

- Connect the receivers to create a multi-channel system using the supplied RJ-10 cables as shown in the diagram.
  - Both RJ-10 sockets are interchangeable. There is no set order for cabling.



> **i** You can find more information about the **Easy Setup** function under Easy Setup menu item.

Setting up a multi-channel system with more than 12 receivers

> **i** You can use the **Easy Setup** function to automatically set up a maximum of 12 receivers.
> If you assign the frequencies manually, however, you can use up to 20 receivers in a multi-channel system (not possible in the TH, JB, K+ and 1G8 frequency ranges).

- To do so, set a frequency manually in each receiver (see Advanced -> Tune menu item).
- Use the frequencies from the following table.

	Frequency Ranges								
Channel	A1	A	AS	G	GB	B	C	D	E
1	470.100	518.200	530.100	566.200	606.500	626.200	742.200	790.200	830.200
2	470.500	518.700	530.800	566.600	606.875	626.600	742.600	790.600	830.600
3	471.050	519.650	531.650	567.200	607.325	627.200	743.150	791.200	831.200
4	471.750	520.450	532.050	568.000	607.850	628.400	743.850	792.000	832.000
5	472.200	520.900	533.050	569.200	608.250	629.800	744.300	793.200	833.200
6	472.800	521.600	533.550	571.600	608.725	631.400	744.900	795.600	834.800
7	473.650	522.000	534.850	573.800	609.275	632.200	750.200	797.800	838.600
8	474.750	522.900	535.750	572.900	609.900	634.200	750.700	796.900	839.900
9	475.250	524.750	536.850	568.475	610.400	637.600	751.550	792.475	842.600
10	506.150	526.350	537.400	570.125	611.150	632.650	752.550	794.125	843.100
11	506.950	526.900	538.200	570.575	612.200	633.550	753.950	794.575	844.800
12	511.000	527.750	539.250	572.475	612.775	635.300	754.750	796.475	845.500
13	508.500	528.400	542.400	558.200	614.700	639.450	759.000	801.950	846.750
14	512.300	529.400	545.250	558.750	615.300	640.150	761.450	803.900	848.250
15	514.350	531.500	547.000	580.650	615.975	644.150	762.100	806.600	848.900
16	515.550	534.350	549.500	583.100	616.400	645.850	763.400	807.700	851.550
17	482.100	537.700	552.900	585.800	617.975	647.300	765.000	810.350	857.000
18	482.750	541.950	554.350	587.750	620.425	647.800	765.900	817.900	858.050
19	484.100	547.350	555.000	591.800	622.600	653.550	770.550	819.500	862.750
20	485.000	550.300	555.950	594.300	623.600	656.600	775.050		864.300

Installing the rack receiver in a rack

To mount the receiver in a rack, you will need the GA 3 rack mount kit (optional accessory).

NOTICE

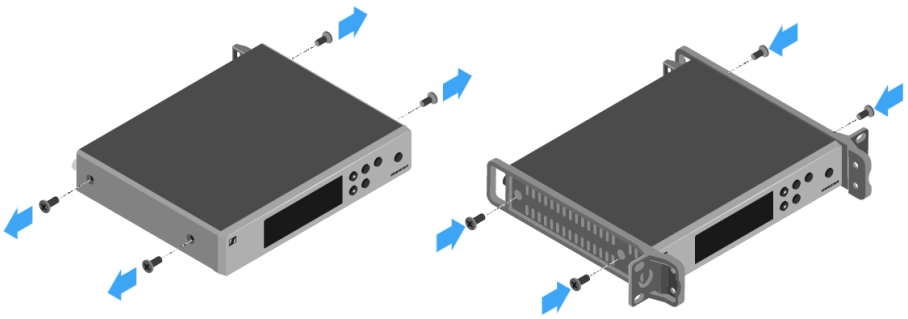
Rack mounting poses risks

When installing the device in a closed or multi-rack assembly, please consider that, during operation, the ambient temperature, the mechanical loading and the electrical potentials will be different from those of devices which are not mounted into a rack.

- Make sure that the ambient temperature within the rack does not exceed the permissible temperature limit specified in the specifications. See Specifications.
- Ensure sufficient ventilation; if necessary, provide additional ventilation.
- Make sure that the mechanical loading of the rack is even.
- When connecting to the power supply system, observe the information indicated on the type plate. Avoid circuit overloading. If necessary, provide overcurrent protection.
- When rack mounting, please note that intrinsically harmless leakage currents of the individual power supply units may accumulate, thereby exceeding the allowable limit value. As a remedy, ground the rack via an additional ground connection.

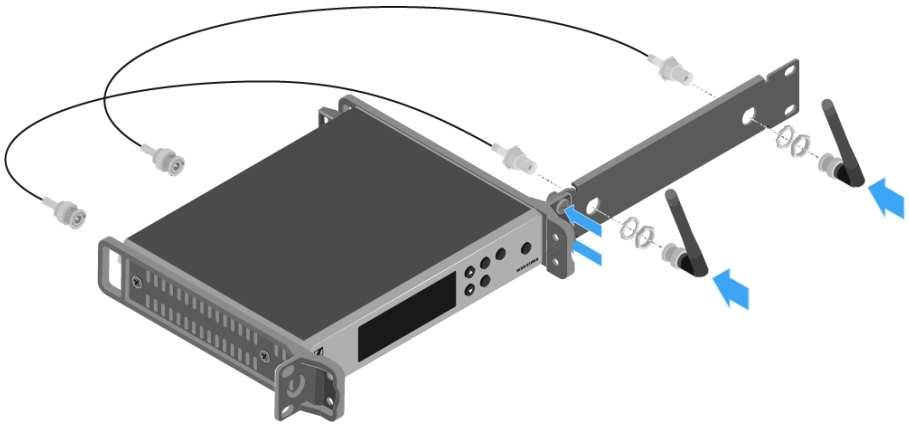
Mounting a single receiver in a rack

- Unscrew and remove the two recessed head screws (M4x8) on each side of the receiver.
- Secure both of the the mounting angles to the sides of the receiver using the previously removed recessed head screws.



- Secure the blanking plate to one of the mounting angles using two recessed head screws (M6x10).

- Attach the AM 2 antenna front mounting kit (optional accessory) and mount the rod antennas on the blanking plate.

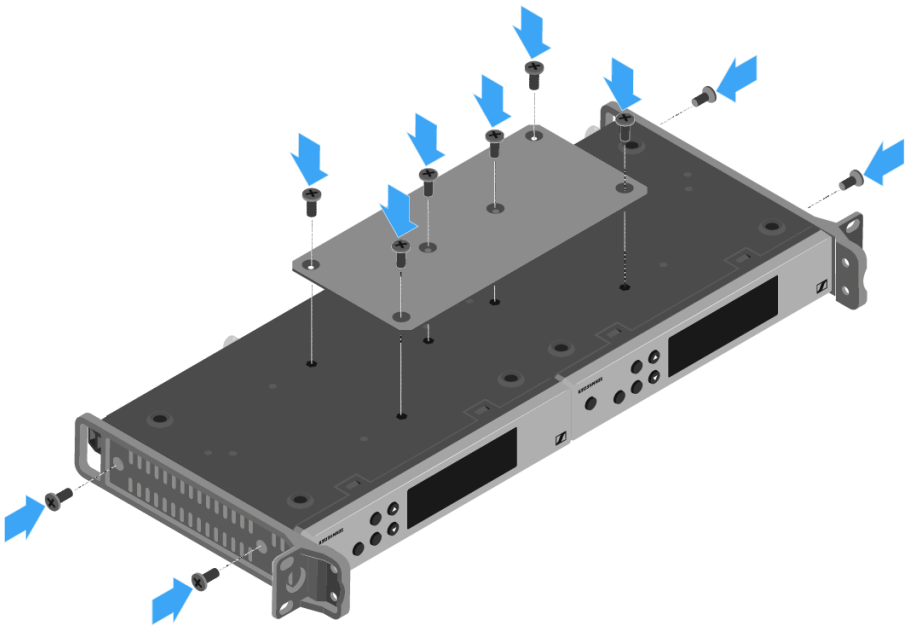


- Slide the receiver with the mounted blanking plate into the 19" rack.
- Secure the mounting angle and the blanking plate to the 19" rack.
- Align the mounted antennas in a V-shape.

Mounting two receivers side by side in a rack

> **i** When you mount two receivers side by side, it is only possible to front mount antennas when you use the ASA 214 antenna splitter in combination with the AM 2 antenna front mounting kit and an additional GA 3 rack mount kit.

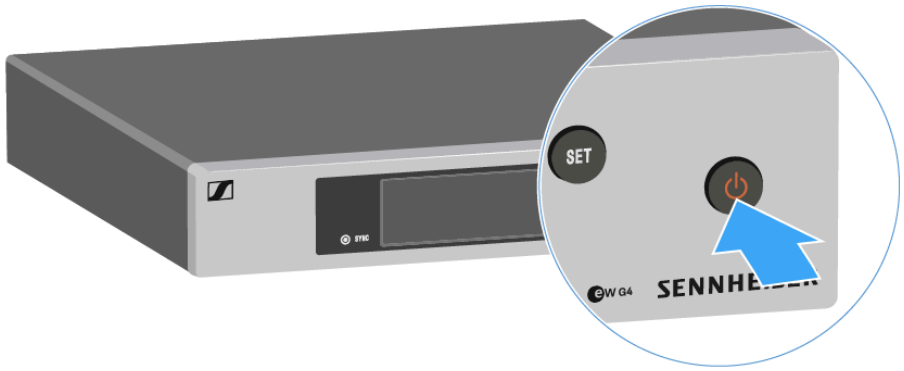
- Place both receivers upside down and side by side on an even surface.
- Secure the jointing plate to the transmitters using the six recessed head screws (M3x6).
- Secure the mounting angle.



Switching the rack receiver on and off

To switch the receiver on:

- Short-press the **STANDBY** button.



  - The receiver switches on and the Receiver Parameters standard display appears.

To switch the receiver to standby mode:

- If necessary, deactivate the lock-off function (see Lock-off function).
- Press and hold the **STANDBY** button until OFF appears on the display panel.
  - The display panel switches off.

To switch the receiver off completely:

- Disconnect the receiver from the power supply system by unplugging the power supply unit from the wall socket.

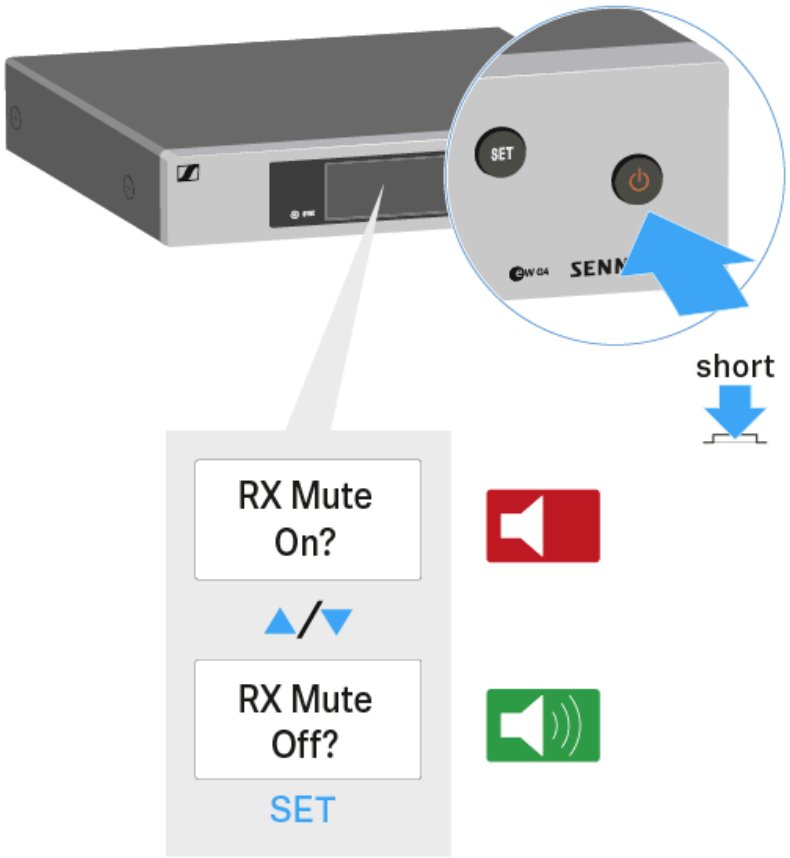
Muting the audio output

To mute the audio signal of the receiver:

- Short-press the **STANDBY** button in one of the standard displays.
  - ✓ The RX Mute On? display appears.
- Press the **SET** button.
  - ✓ The audio signal is muted.

To cancel the muting:

- Short-press the **STANDBY** button.
  - ✓ The RX Mute Off? display appears.
- Press the **SET** button.
  - ✓ The audio output is no longer muted.



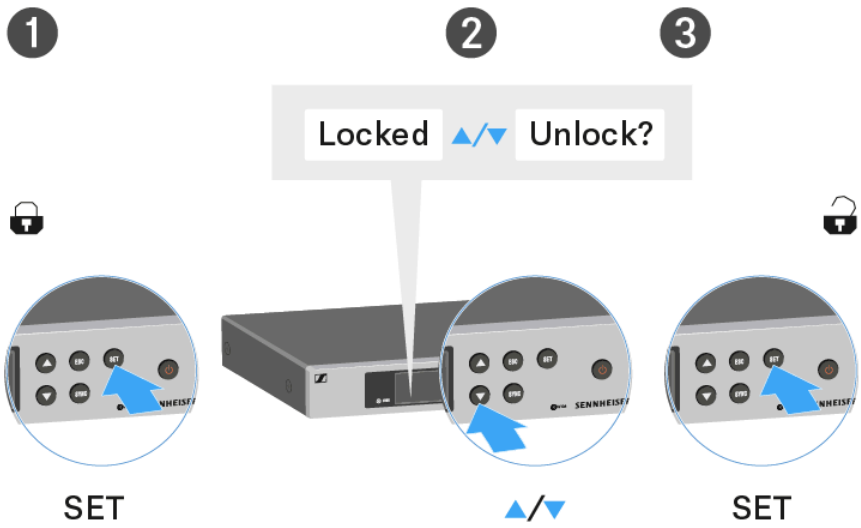
Lock-off function

You can set the automatic lock-off function in the **Auto Lock** menu (see Auto Lock menu item).

When you have switched on the lock-off function, you will have to turn the receiver off and on again in order to operate it.

To temporarily deactivate the lock-off function:

- Press the **SET** button.
  - ✓ Locked appears in the display panel.
- Press the **UP** or **DOWN** button.
  - ✓ Unlock? appears in the display panel.
- Press the **SET** button.
  - ✓ Lock-off function is now temporarily deactivated.



When you are in the operating menu

- Lock-off function is deactivated long enough for you to work in the operating menu.

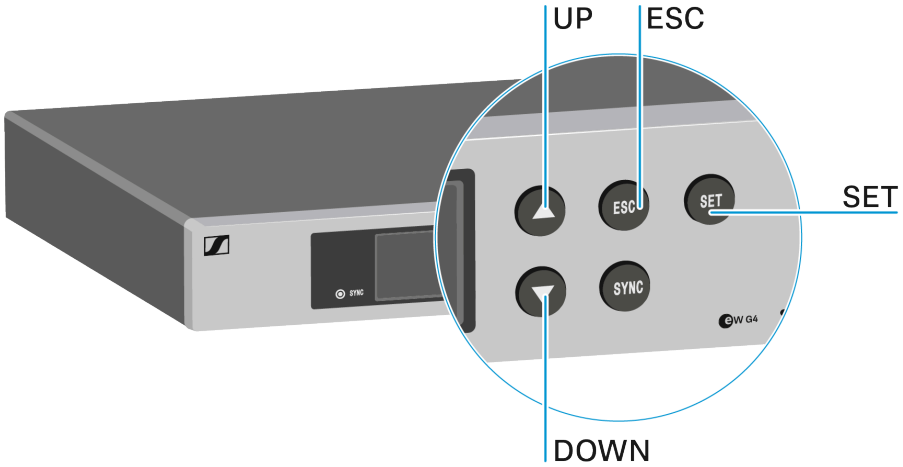
When one of the standard displays is shown

- Lock-off function is automatically activated after 10 seconds.

The Lock-off function icon flashes while the lock-off function is being activated again.

Buttons for navigating through the menu

To navigate through the EM 100 G4 operating menu, you need the following buttons.



ESC button

- Short-press
  - Cancels the entry and returns to the previous display
- Long-press
  - Cancels the entry and returns to the home screen

Press the **SET** button

- Changes from the current standard display to the operating menu
- Calls up a menu item
- Changes to a submenu
- Stores the settings and returns to the operating menu

Press the **UP** or **DOWN** button

- Selects a standard display (see Home Screen)
- Changes to the previous or next menu item
- Changes the setting of a menu item

Displays on the rack receiver display panel

Status information such as reception quality, battery status, audio level, etc. is displayed on the home screen of the display panel.

- See Home Screen

The display panel also displays the operating menu which you can use to configure all of the settings.

- See Setting options in the menu

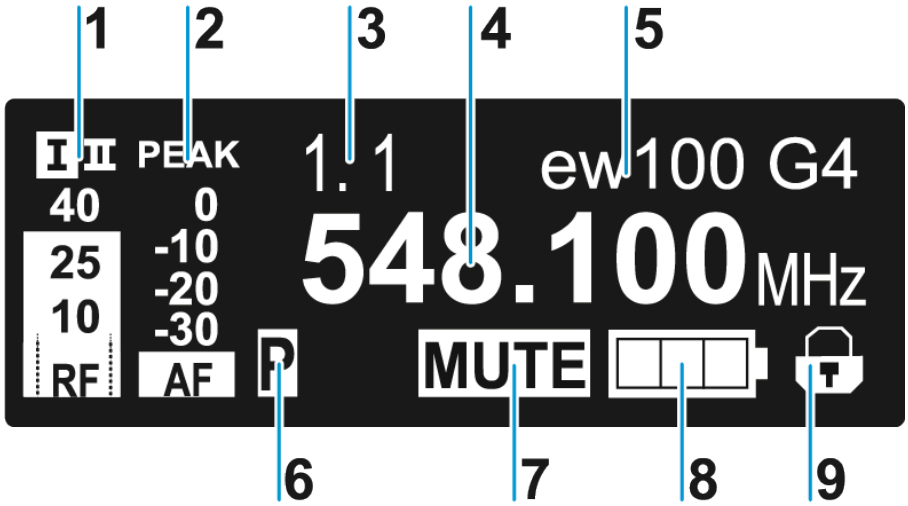
Home Screen

After you switch on the receiver, the display panel initially displays the Sennheiser logo. After a short time, the home screen is then displayed.

The home screen has three different standard displays.

- On the home screen, press the **UP** and **DOWN** buttons to switch between the standard displays.

Receiver Parameters standard display



1 RF level **RF** (radio frequency)

- RF signal level display
- including the display of the squelch threshold (see Squelch menu item)

2 Audio level **AF** (audio frequency))

- Displays the audio level of the received transmitter

  When the display shows full deflection, the audio input level is excessively high. When the transmitter is overloaded frequently or for extended periods of time, the PEAK display is shown inverted.

- see AF Out menu item

3 Frequency bank and channel

- current frequency bank and channel number
- see Frequency Preset menu item

4 Frequency

- current receiving frequency
- see Frequency Preset menu item

5 Name

- freely selectable name of the receiver
- see Name menu item

6 **P** pilot tone

- activated pilot tone evaluation
- see Advanced -> Pilot Tone menu item

7 **MUTE** muting function

- receiver or transmitter is muted
- see Muting the audio output

8 Battery status of the transmitter

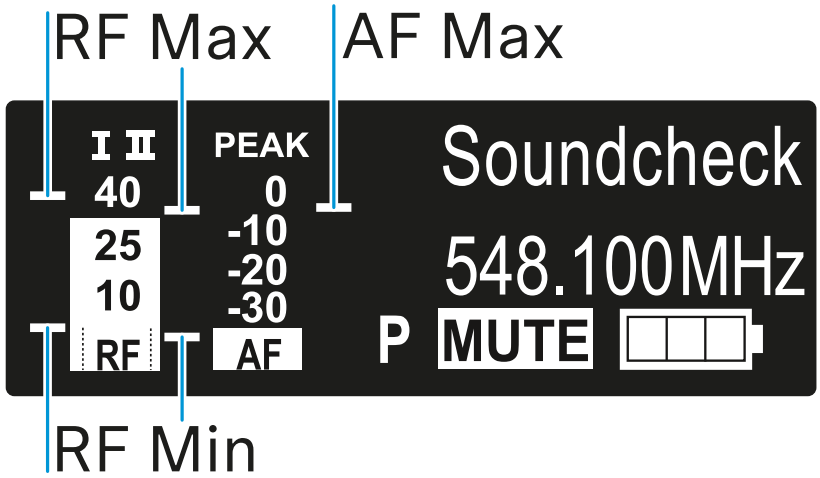
- SKM 100 G4: see Inserting and removing the batteries/rechargeable batteries
- SK 100 G4: see Inserting and removing the batteries/rechargeable batteries

9 Lock-off function

- lock-off function is activated on the receiver
- see Lock-off function

Soundcheck standard display

The Soundcheck standard display shows the transmission quality between the transmitter and the receiver.



By doing a soundcheck, you can ensure adequate transmission quality in the entire area in which you want to use the transmitter. You can do the soundcheck without the help of another person.

- With the transmitter, walk up and down the area in which you want to use the transmitter.
  - The receiver records the following parameters:

RF Min

- Minimum RF signal level
- must be well above the squelch threshold level for one of the two antennas
- Ways to optimize:
  - Check that the antennas and the antenna cables are correctly connected.
  - Improve the position of the antennas.
  - If necessary, use an antenna booster.

RF Max

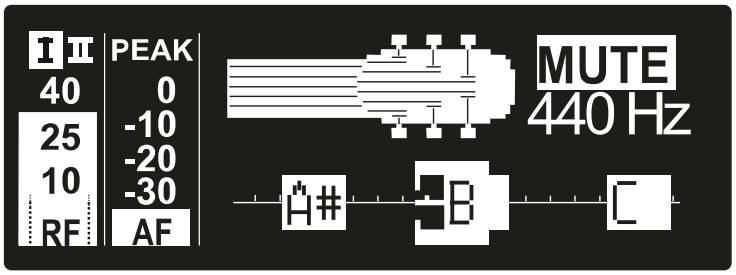
- Maximum RF signal level
- both antennas should reach 40 dBµV
- Ways to optimize:
  - Check that the antennas and the antenna cables are correctly connected.
  - Improve the position of the antennas.
  - If necessary, use an antenna booster.

AF Max

- Maximum audio level
- Ways to optimize:
    - On your transmitter, adjust the audio level as high as possible without the display for the audio level showing full deflection (AF Max is at a level with the PEAK display). See AF Out menu item.

Guitar Tuner standard display

The Guitar Tuner standard display shows the guitar tuner (only for the SK 100 G4).

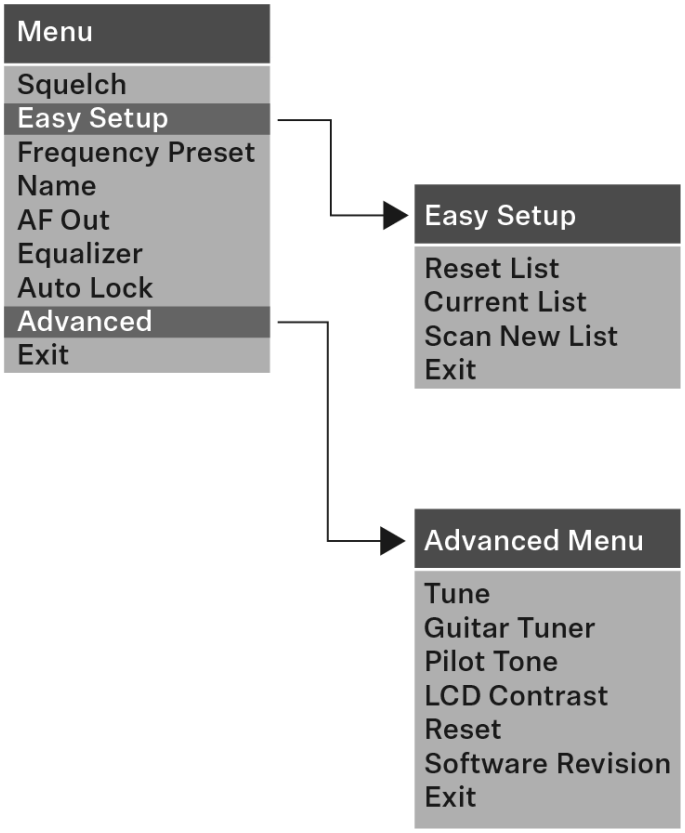


The Guitar Tuner standard display is deactivated upon delivery.

To show this standard display, you have to activate it (see Advanced -> Guitar Tuner menu item).

Menu structure

The figure shows the complete rack receiver menu structure in an overview.



Setting options in the menu

In the rack receiver menu, you can configure the following settings.

Adjusting the squelch threshold

- See Squelch menu item

Scanning for unused frequency presets, releases and selects frequency presets

- See Easy Setup menu item

Setting the frequency bank and the channel

- See Frequency Preset menu item

Entering a freely selectable name

- See Name menu item

Adjusting the audio output level

- See AF Out menu item

Adjusting the frequency response of the output signal

- See Equalizer menu item

Activating/deactivating the automatic lock-off function

- See Auto Lock menu item

Configuring enhanced settings in the Advanced Menu:

- Adjusting the receiving frequencies for the U frequency bank
- Adjusting the guitar tuner options
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the receiver
- Displaying the current software revision
- See Advanced menu item

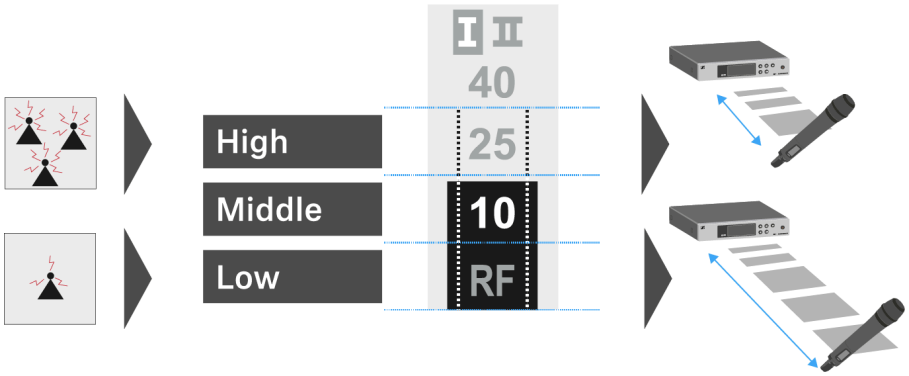
Squelch menu item

You can adjust the squelch threshold in the Squelch menu item.

Setting range:

- Low = 5 dBµV
- Middle = 15 dBµV
- High = 25 dBµV

The squelch threshold is displayed on the home screen in the RF signal level area.



CAUTION

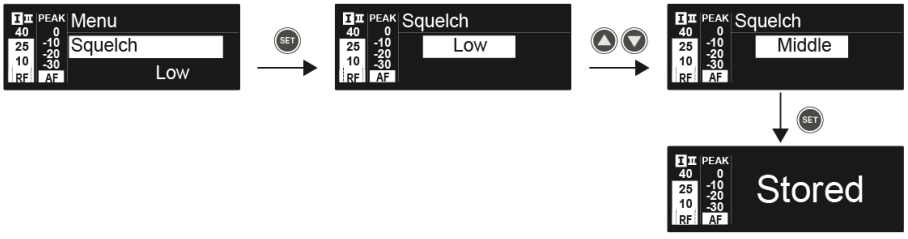
Risk of hearing and material damage

If you set the squelch threshold to a very low value, a very loud hissing noise can occur in the receiver. This hissing noise can be loud enough to cause hearing damage or overload your system's loudspeakers.

- Before adjusting the squelch threshold, set the volume of the audio output to the minimum.
- Never change the squelch threshold during a live transmission.

To open the Squelch menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Squelch** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.



- Press the **SET** button to save the changes you made to the settings.

OR

- Press the **ESC** button to cancel the entry without saving the setting.

Easy Setup menu item

You can scan for unused frequencies using the Easy Setup menu item.

When you have connected multiple EM 100 G4 devices to a network via the RJ-10 interfaces (see Creating a data network), you can perform the frequency setup for all of the connected receivers. You can find more information about connecting multiple devices under Performing multi-channel frequency setup.

> **i** Switch off all transmitters before you perform the scan. If transmitters are still switched on, they are detected as unavailable frequencies and the frequencies that are actually available cannot then be used.
> The squelch threshold setting influences the result. Set the squelch threshold to Low for as many frequencies as possible, and to High for as many safe frequencies as possible (see Squelch menu item).

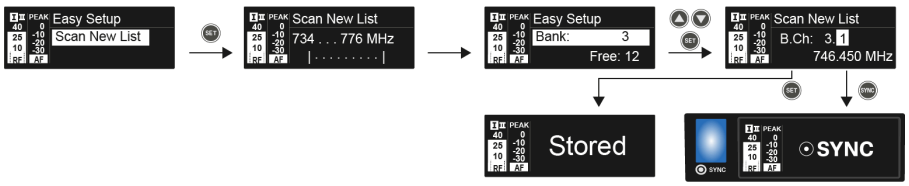
To open the Easy Setup menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Easy Setup** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.

Scan New List

- Select **Scan New List** to scan for unused frequencies.
- Press the **SET** button to start the scan.
  - ✓ The frequency range of the receiver is scanned. As a result, the number of unused frequencies is displayed for every frequency bank.
- Press the **UP** or **DOWN** buttons to select a frequency bank.
- Press the **SET** button to confirm your selection.
- Press the **UP** or **DOWN** buttons to select an unused frequency from the selected bank.
- Press the **SET** button to save your selection and synchronize the selected frequency with the transmitter at a later point (see Ew 100 G4 synchronizing).
  OR

- Press the **SYNC** button to synchronize the selected frequency with the transmitter immediately.



Current List

- Select **Current List** to show the list of unused frequencies from the last scan.

Reset

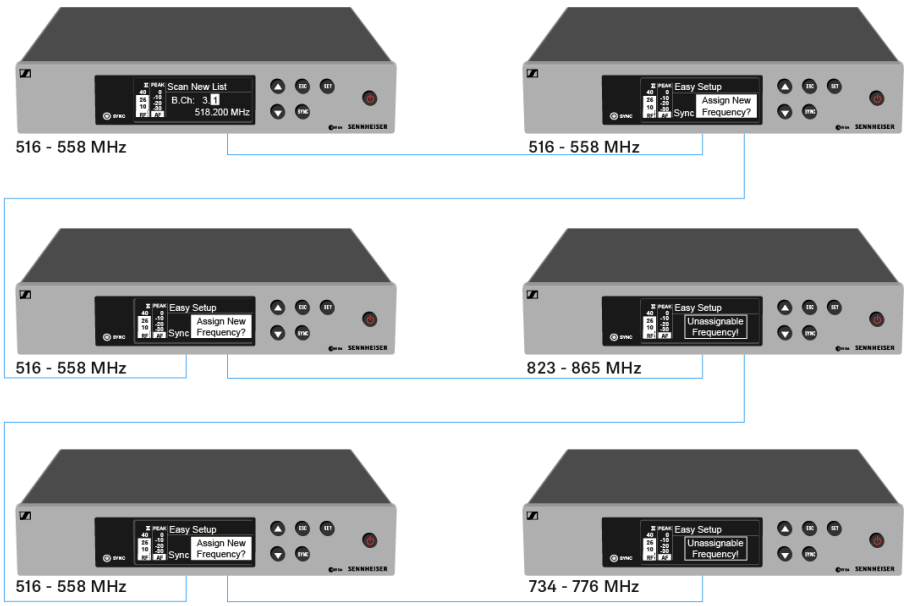
- Select **Reset List** to delete the list of unused frequencies.

Performing multi-channel frequency setup

To perform the automatic frequency setup for multiple receivers (max. 12) simultaneously:

- Connect all of the receivers to one network. See Creating a data network.
- Open the **Easy Setup** menu item on one of the receivers.
  - ✓ This receiver is the master. You can choose any receiver to be the master.
- Perform the frequency scan on the master receiver as under Scan New List.
  - ✓ After the scan, the display panels of the other receivers will display the message Assign New Frequency?.

  Receivers with non-compatible frequency ranges will display the message Unassignable Frequency!.
- Select an unused frequency for the first receiver on the master receiver.
- Press the **SET** button on the receiver that you would like to assign this frequency to.
- Use this procedure to assign a frequency to each connected receiver, one after another.
- For the last step, assign a frequency to the master receiver.
  - ✓ This completes the multi-channel frequency setup.



Setting up a multi-channel system with more than 12 receivers

You can use the Easy Setup function to automatically set up a maximum of 12 receivers.

If you assign the frequencies manually, however, you can use up to 20 receivers in a multi-channel system (not possible in the JB, K+ and 1G8 frequency ranges).

- To do so, set a frequency manually in each receiver (see Advanced -> Tune menu item).
- Use the frequencies from the following table.

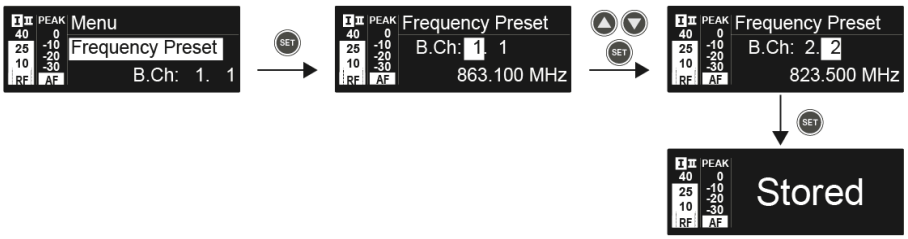
	Frequency Ranges								
Channel	A1	A	AS	G	GB	B	C	D	E
1	470.100	518.200	530.100	566.200	606.500	626.200	742.200	790.200	830.200
2	470.500	518.700	530.800	566.600	606.875	626.600	742.600	790.600	830.600
3	471.050	519.650	531.650	567.200	607.325	627.200	743.150	791.200	831.200
4	471.750	520.450	532.050	568.000	607.850	628.400	743.850	792.000	832.000
5	472.200	520.900	533.050	569.200	608.250	629.800	744.300	793.200	833.200
6	472.800	521.600	533.550	571.600	608.725	631.400	744.900	795.600	834.800
7	473.650	522.000	534.850	573.800	609.275	632.200	750.200	797.800	838.600
8	474.750	522.900	535.750	572.900	609.900	634.200	750.700	796.900	839.900
9	475.250	524.750	536.850	568.475	610.400	637.600	751.550	792.475	842.600
10	506.150	526.350	537.400	570.125	611.150	632.650	752.550	794.125	843.100
11	506.950	526.900	538.200	570.575	612.200	633.550	753.950	794.575	844.800
12	511.000	527.750	539.250	572.475	612.775	635.300	754.750	796.475	845.500
13	508.500	528.400	542.400	558.200	614.700	639.450	759.000	801.950	846.750
14	512.300	529.400	545.250	558.750	615.300	640.150	761.450	803.900	848.250
15	514.350	531.500	547.000	580.650	615.975	644.150	762.100	806.600	848.900
16	515.550	534.350	549.500	583.100	616.400	645.850	763.400	807.700	851.550
17	482.100	537.700	552.900	585.800	617.975	647.300	765.000	810.350	857.000
18	482.750	541.950	554.350	587.750	620.425	647.800	765.900	817.900	858.050
19	484.100	547.350	555.000	591.800	622.600	653.550	770.550	819.500	862.750
20	485.000	550.300	555.950	594.300	623.600	656.600	775.050		864.300

Frequency Preset menu item

In the Frequency Preset menu item, you can adjust the receiving frequency of the receiver by adjusting the frequency bank and the channel.

To open the Frequency Preset menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Frequency Preset** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.



- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ESC** button to cancel the entry without saving the setting.

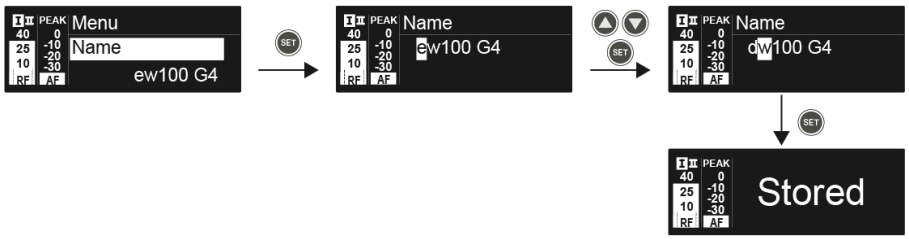
> **i** You can set the frequencies of the frequency bank U here: Advanced -> Tune menu item.

Name menu item

In the Name menu item you can enter a name for the radio link.

To open the Name menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Name** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.



- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ESC** button to cancel the entry without saving the setting.

AF Out menu item

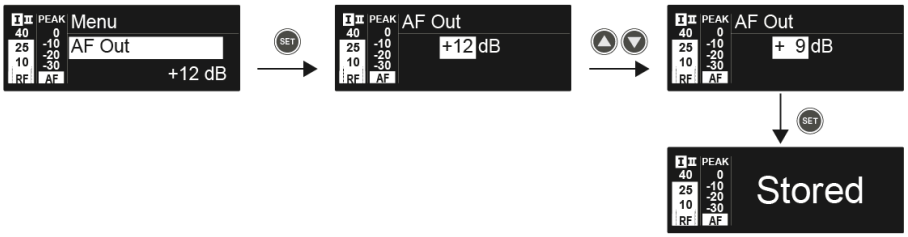
In the AF Out menu item, you can set the audio level that is output via the receiver audio outputs.

Setting range:

- -24 dB to +18 dB
- in 3 dB steps

To open the AF Out menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **AF Out** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.



- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ESC** button to cancel the entry without saving the setting.

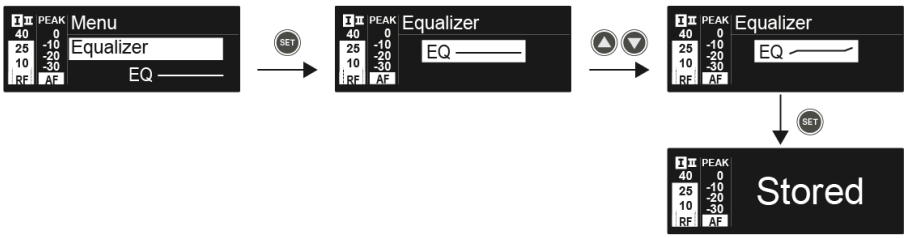
Equalizer menu item

In the Equalizer menu item, you can change the frequency response of the output signal.

You can reduce the bass range and boost the treble range.

To open the Equalizer menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Equalizer** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.



- Press the **UP** or **DOWN** buttons to configure the desired settings.
- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ESC** button to cancel the entry without saving the setting.

Auto Lock menu item

In the Auto Lock menu item you can activate or deactivate auto lock-off function.

> **i** You can find information about temporarily deactivating the lock-off function during operation under Lock-off function.

To open the Auto Lock menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Auto Lock** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.



- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ESC** button to cancel the entry without saving the setting.

Advanced menu item

In the Advanced submenu you can configure enhanced settings.

To open the Advanced submenu:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Advanced** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.

Adjusting the receiving frequencies for the U frequency bank

- See Advanced -> Tune menu item

Adjusting the guitar tuner options

- See Advanced -> Guitar Tuner menu item

Activating/deactivating the pilot tone evaluation

- See Advanced -> Pilot Tone menu item

Adjusting the contrast of the display panel

- See Advanced -> LCD Contrast menu item

Resetting the receiver

- See Advanced -> Reset menu item

Displaying the current software revision

- See Advanced -> Software Revision menu item

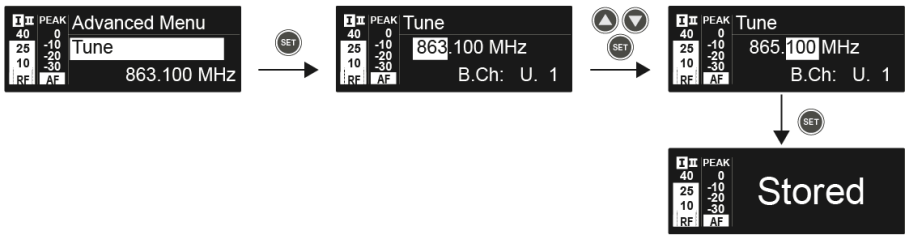
Advanced -> Tune menu item

In the Tune menu item of the Advanced submenu, you can configure the receiving frequencies for the U frequency bank.

You can save a total of 12 frequencies in the U frequency bank.

Only adjusting the frequency

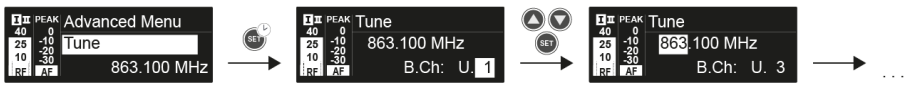
- Open the **Tune** menu item in the **Advanced** menu.
- Adjust the settings.



- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ESC** button to cancel the entry without saving the setting.

Setting the channel and frequency

- Select the **Tune** menu item and call it up by holding down the **SET** button until the channel selection appears.
- Adjust the settings.



- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ESC** button to cancel the entry without saving the setting.

Advanced -> Guitar Tuner menu item

In the Guitar Tuner menu item of the Advanced submenu, you can adjust the options of the guitar tuner.

The guitar tuner is opened in the Guitar Tuner standard display on the home screen. See Guitar Tuner standard display.



- **Inactive**: The guitar tuner is deactivated.
- **Active**: The guitar tuner is activated.
- **Audio Mute**: The guitar tuner is activated. Once the **Guitar Tuner** standard display is open on the home screen, the audio signal is muted.

Advanced -> Pilot Tone menu item

In the Pilot Tone menu item of the Advanced submenu, you can activate and deactivate the pilot tone evaluation.

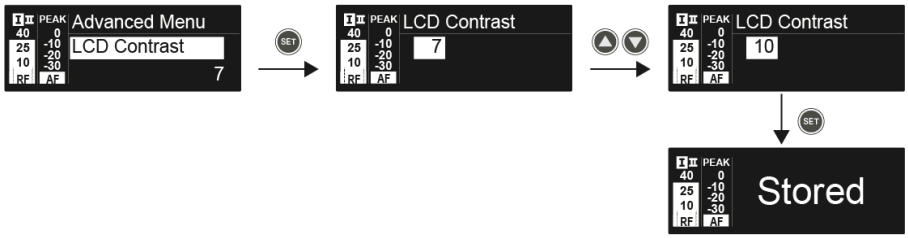


The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver's squelch function.

> **i** For the best possible operational reliability, we recommend leaving the pilot tone activated.

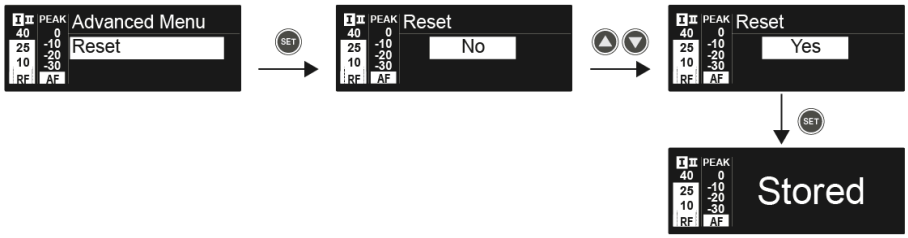
Advanced -> LCD Contrast menu item

In the LCD Contrast menu item of the Advanced submenu, you can adjust the display contrast of the display panel.



Advanced -> Reset menu item

In the Reset menu item of the Advanced submenu, you can reset all of the settings of the receiver to the factory settings.

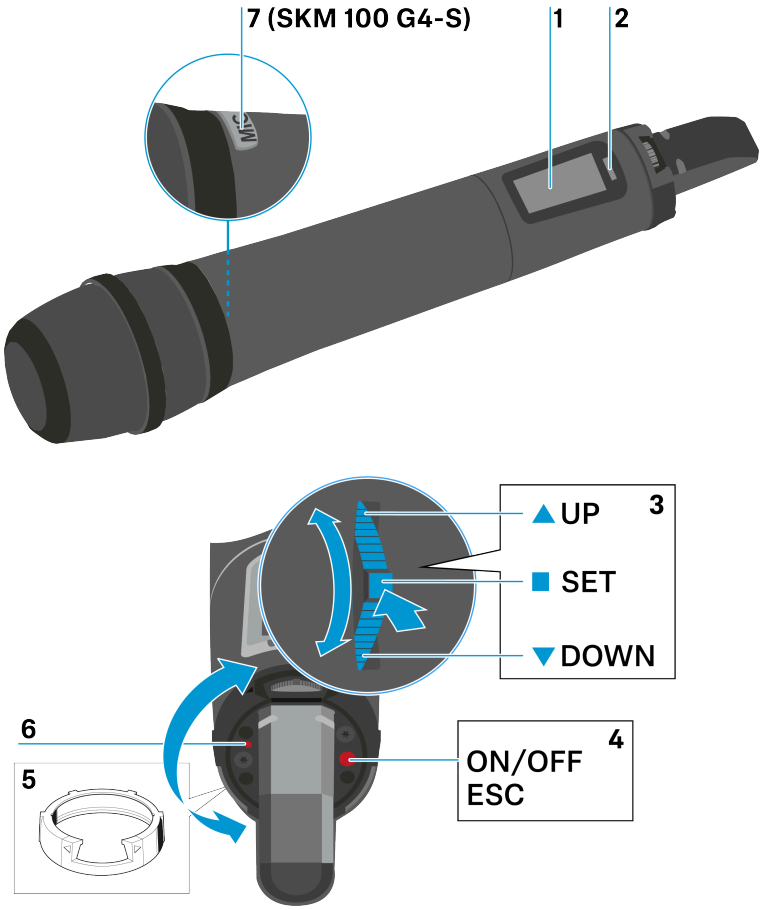


Advanced -> Software Revision menu item

In the Software Revision menu item of the Advanced submenu, you can display the current software version of the receiver.

SKM 100 G4 | SKM 100 G4-S handheld transmitter

Product overview



1 Display panel

- see Displays on the handheld transmitter display panel

2 Infra-red interface

- see Ew 100 G4 synchronizing

3 **DOWN**, **UP** and **SET** multi-function switch

- see Buttons for navigating the menu

4 **ON/OFF** button with ESC function in the operating menu

- Switch the transmitter on or off, see Switching the handheld transmitter on and off
- Escape function in the menu, see Buttons for navigating the menu

5 Colored ring

- Available in different colors, see KEN 2 Color labeling set and Changing the colored ring
- Can be turned to protect the multi-function switch

6 Operation and battery indicator, red LED

- illuminated = ON, see Switching the handheld transmitter on and off
- flashing = LOW BATTERY, see Inserting and removing the batteries/rechargeable batteries

7 **MIC** button (only SKM 100 G4-S)

- see Muting the handheld transmitter (AF mute)
- see Advanced > Mute Mode menu item (SKM 100 G4-S only)

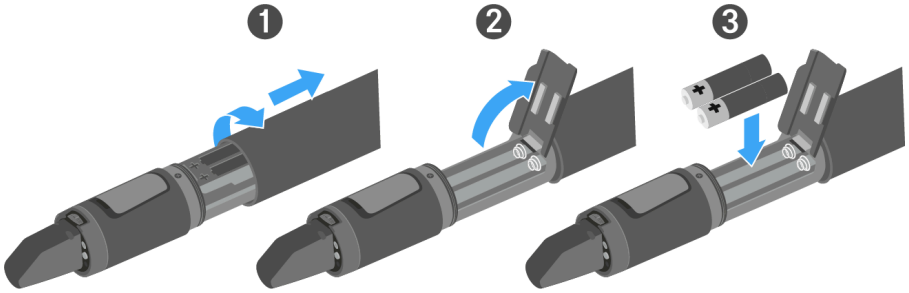
Inserting and removing the batteries/rechargeable batteries

You can operate the wireless microphone either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

- Screw the rear part of the wireless microphone in the direction of the arrow (counter-clockwise) off of the handle of the wireless microphone.

  > **i** When you remove the wireless microphone during operation, mute is automatically activated. **MUTE** appears in the display panel. When you screw the microphone back together, mute is deactivated.

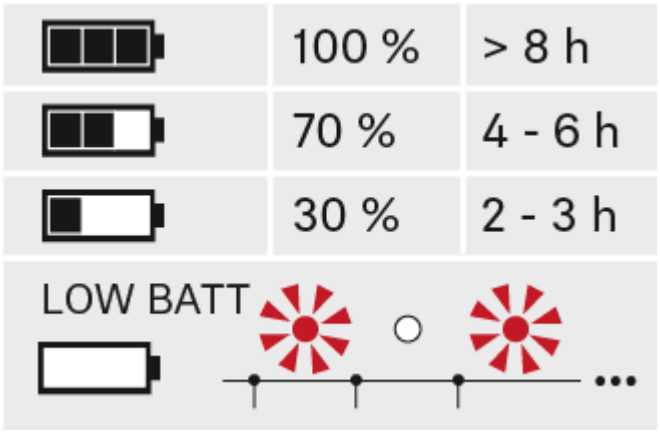
- Pull the rear part of the wireless microphone all the way out.
- Open the cover of the battery compartment.
- Place the batteries or the BA 2015 rechargeable battery in the battery compartment as shown on the cover. Please observe correct polarity when inserting the batteries/ accupack.



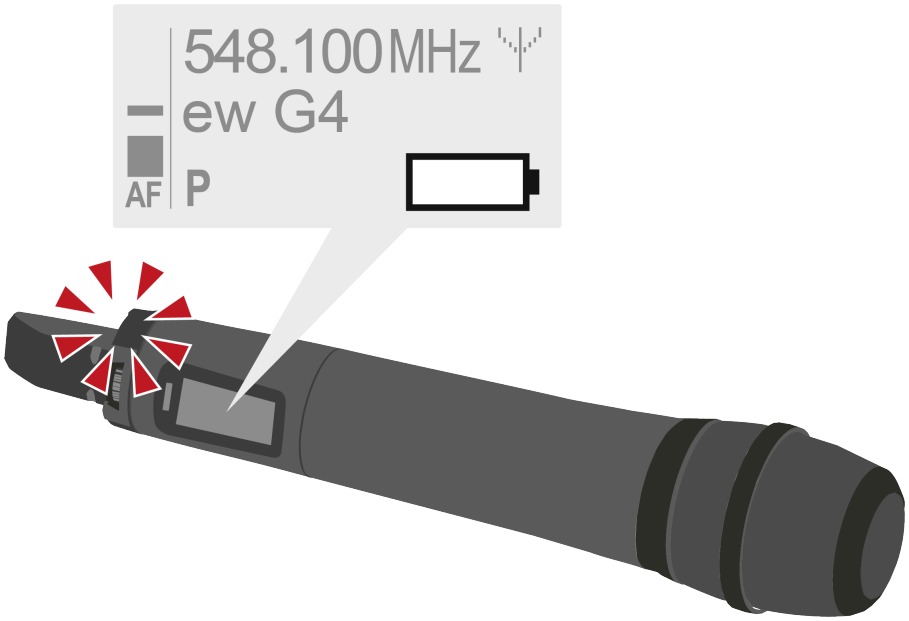
- Close the cover.
- Push the battery compartment into the handle of the wireless microphone.
- Screw the rear part of the wireless microphone back onto the handle.

Battery status

Charge status of the batteries:



Charge status is critical (LOW BATT):



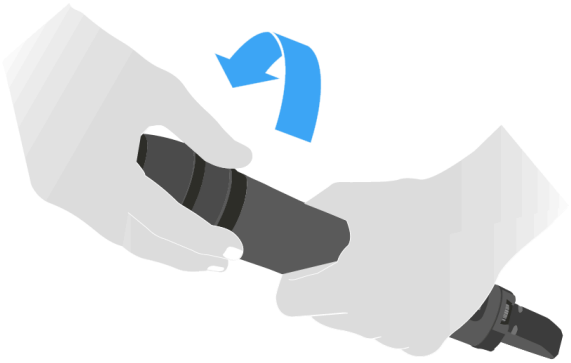
Replacing the microphone module

You can find a list of the recommended microphone modules for the handheld transmitter under Microphones and cables.

> **i** Do not touch the wireless microphone contacts or the microphone module contacts. If you touch the contacts, they may become dirty or bent.

To change the microphone module:

- Unscrew the microphone module.
- Screw the desired microphone module on.



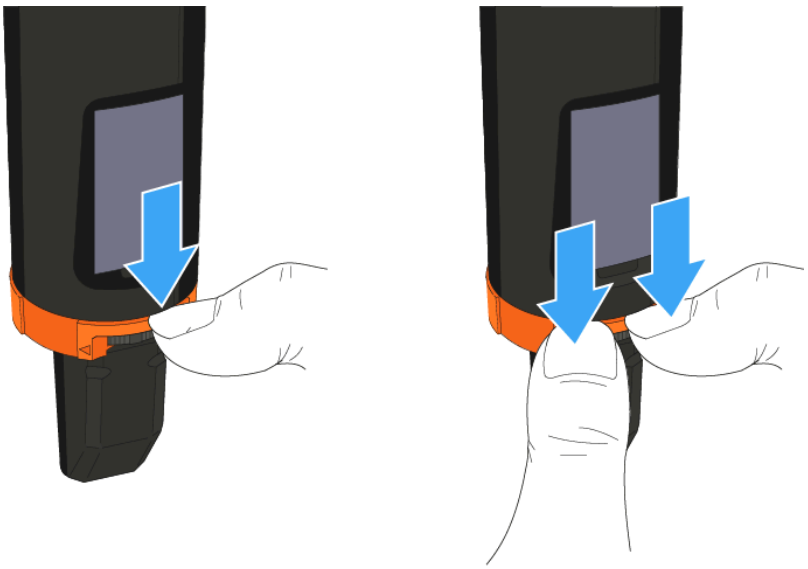


> **i** When you remove the wireless microphone during operation, mute is automatically activated. **MUTE** appears in the display panel. When you screw the microphone back together, mute is deactivated.

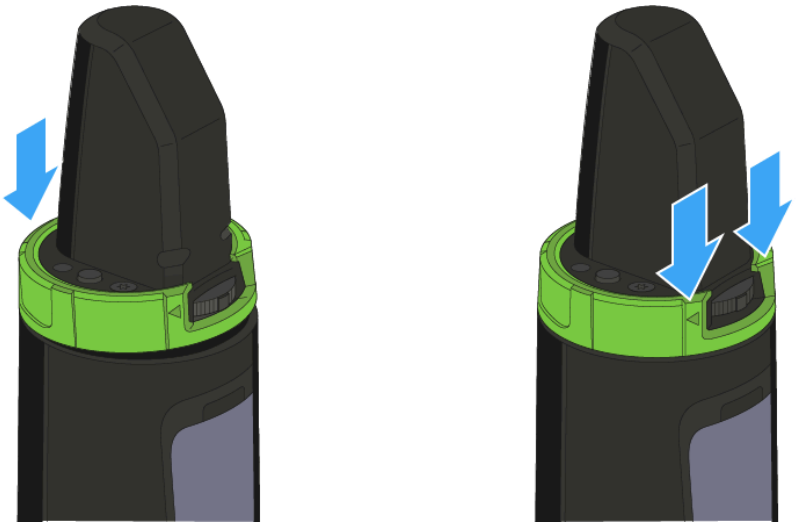
Changing the colored ring

To change the colored ring:

- Pull the colored ring off as shown in the diagram.



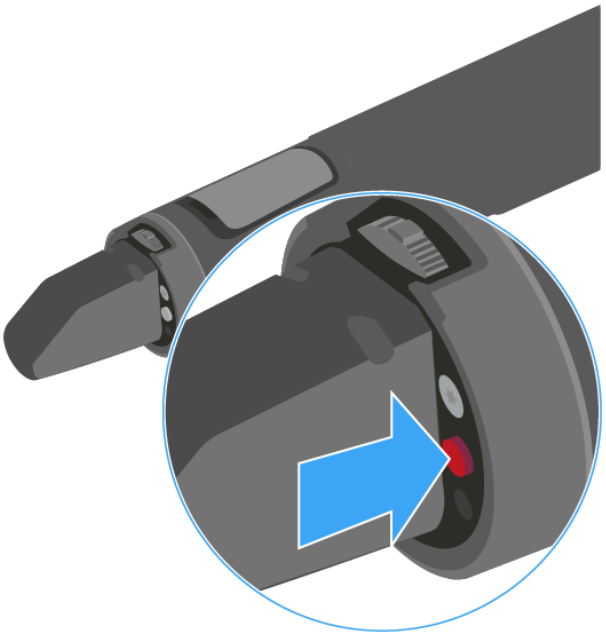
- Attached a colored ring in the color you want as shown in the diagram.



Switching the handheld transmitter on and off

To switch on the handheld transmitter:

- Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch off the handheld transmitter:

- Hold down the **ON/OFF** button until the display goes off.

Muting the handheld transmitter (AF mute)

SKM 100 G4

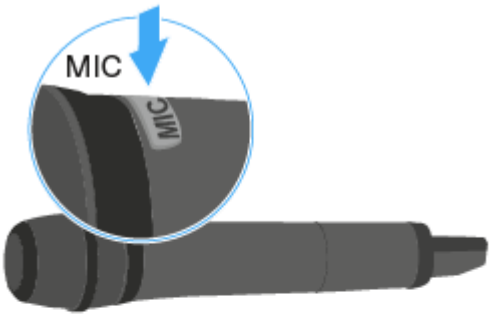
The audio signal of the transmitter cannot be muted.

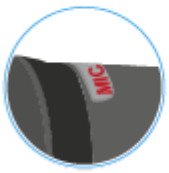
However, when you deactivate the RF signal no AF signal is output. See Deactivating the RF signal (RF mute).

SKM 100 G4-S

You can mute the audio signal by pressing the **MIC** button.

- The **MIC** button lights up red: the audio signal is activated
- The **MIC** button is not lit: the audio signal is muted











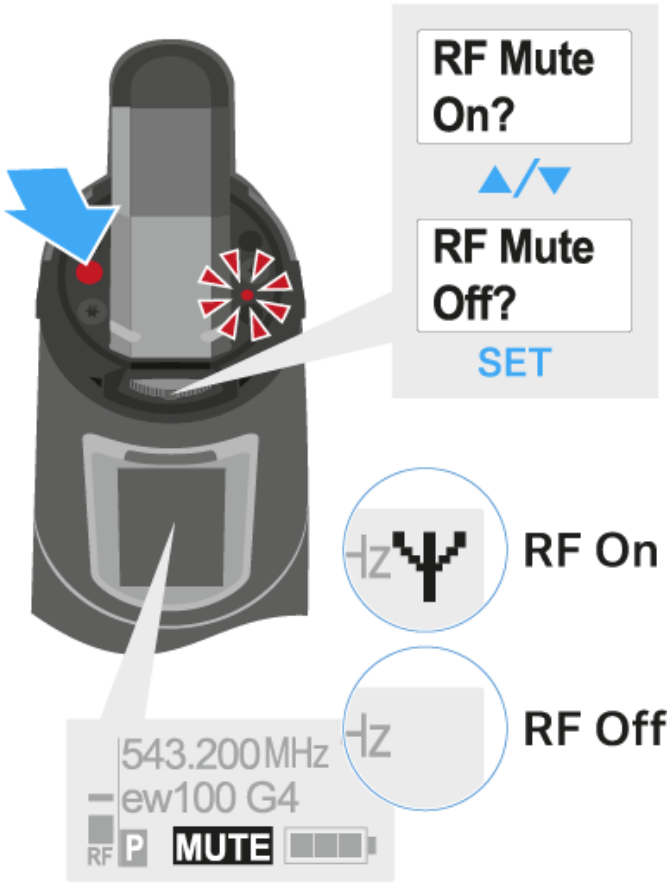
Deactivating the RF signal (RF mute)

You can temporarily deactivate the RF signal when the microphone is switched on. When the RF signal is deactivated, no audio signal is output.

Use this function to save battery or when you want to prepare a microphone for use during live broadcast without interfering with the current transmission path.

To deactivate the RF signal:

- Short-press the **ON/OFF** button.
  - ✓ RF Mute On? appears.
- Press the **SET** button.
  - ✓ The transmission frequency is displayed, however the wireless microphone is not transmitting an RF signal. The transmission icon is not lit (seee Displays on the handheld transmitter display panel).



To activate the RF signal:

- Short-press the **ON/OFF** button.
  - ✓ RF Mute Off? appears.
- Press the **SET** button.
  - ✓ The transmission icon appears again (see Displays on the handheld transmitter display panel).

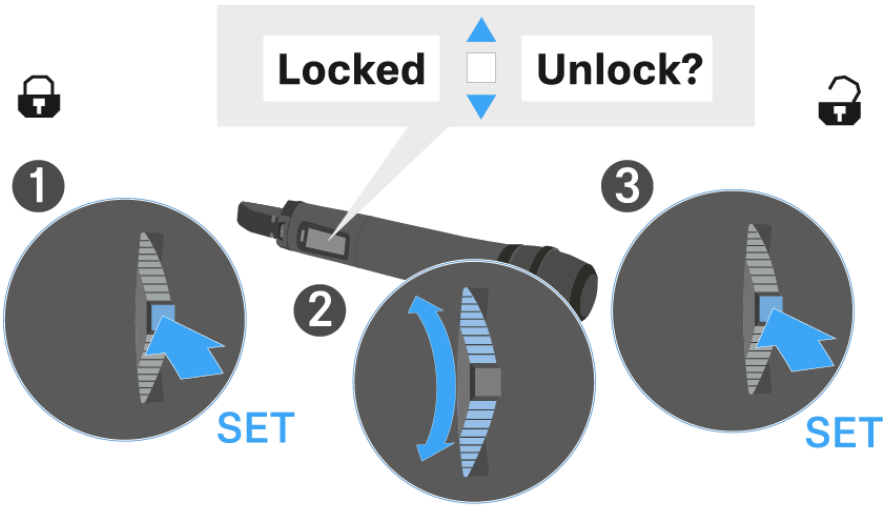
Lock-off function

You can set the automatic lock-off function in the Auto Lock menu (see Auto Lock menu item).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

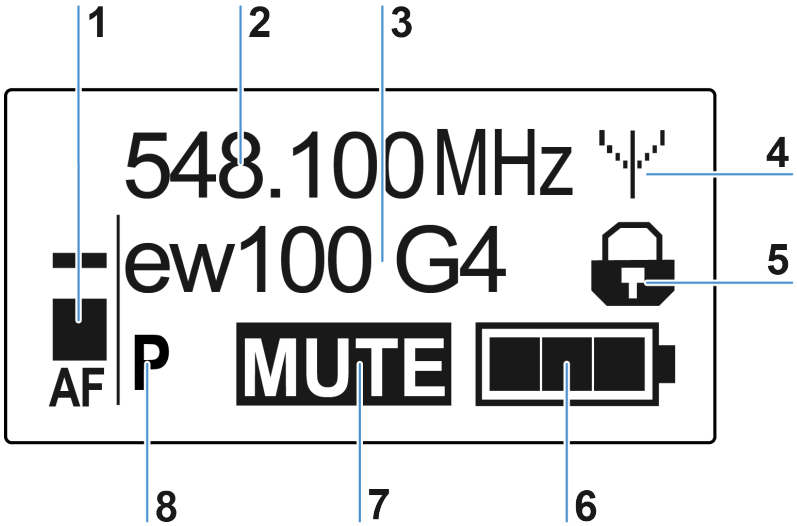
To temporarily deactivate the lock-off function:

- Press the **SET** button.
  - ✓ Locked appears in the display panel.
- Press the **UP** or **DOWN** button.
  - ✓ Unlock? appears in the display panel.
- Press the **SET** button.
  - ✓ Lock-off function is now temporarily deactivated.



Displays on the handheld transmitter display panel

You can view the following information on the transmitter display.



1 AF audio level

- Displays the audio level with peak hold function
- see Sensitivity menu item

2 Frequency

- Configured transmission frequency
- see Frequency Preset menu item

3 Name

- Freely selectable name of the receiver
- see Name menu item

4 Transmission icon

- RF signal is being transmitted
- see Deactivating the RF signal (RF mute)

5 Lock-off function

- Lock-off function is activated
- see Auto Lock menu item

6 Battery status

- see Battery status

7 **MUTE** muting function

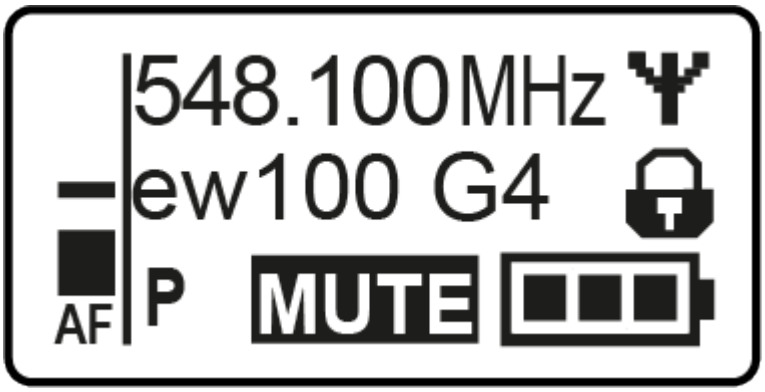
- The audio signal is muted
- see Muting the handheld transmitter (AF mute)
- see Deactivating the RF signal (RF mute)

8 **P** pilot tone

- Pilot tone transmission is activated
- see Advanced > Pilot Tone menu item

Select a standard display

▶ Move the multi-function switch to select a standard display:
Frequency/Name standard display



Channel/Frequency standard display



Name/Channel standard display



Buttons for navigating the menu

To open the menu:

- Press the **SET** button.
  - The operating menu is shown on the transmitter display panel.
- Press the **UP** or **DOWN** buttons to navigate through the individual menu items.
- Press the **SET** button to open the selected menu item.

Making changes in a menu item:

- Press the **UP** or **DOWN** buttons to set the displayed value.
- Press the **SET** button to save the setting.
- Press the **ESC (ON/OFF)** button to leave the menu item without saving the setting.

Setting options in the menu

In the SKM 100 G4 menu, you can configure the following settings.

Adjusting the input sensitivity

- See Sensitivity menu item

Setting the frequency bank and the channel

- See Frequency Preset menu item

Entering a freely selectable name

- See Name menu item

Activating/deactivating the automatic lock-off function

- See Auto Lock menu item

Configuring enhanced settings in the Advanced Menu:

- Adjusting the transmission frequencies for the U frequency bank
- Defining the MIC button setting (SKM 100 G4-S only)
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the transmitter
- Displaying the current software revision
- See Advanced menu item

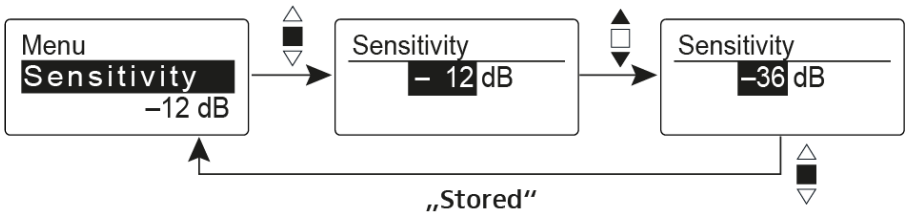
Sensitivity menu item

Adjusting the input sensitivity – AF audio level

Setting range:

- 0 to -48 dB
- in 6 dB steps

The **AF** audio level is also displayed when the wireless microphone is muted, e.g. to check the sensitivity before a live broadcast.



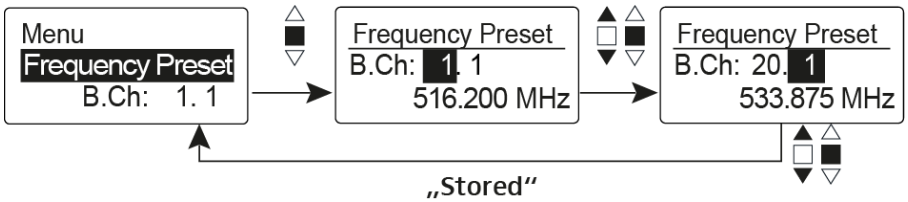
Recommended presets:

- Loud music/vocals: -48 to -18 dB
- Moderation: -18 to -12 dB
- Interviews: -12 to 0 dB

Frequency Preset menu item

Manually selecting a frequency bank and channel

> i While you work in the Frequency Preset menu, the RF signal is deactivated.



Please note when creating multi-channel systems:

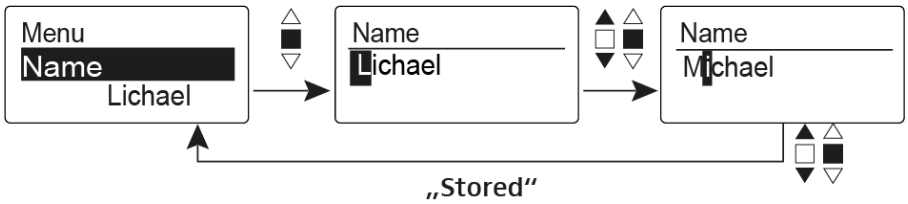
Only the factory-preset frequencies within one frequency bank are intermodulation-free. The wireless microphone and receiver must be set to the same frequency. Be sure to note the information on frequency selection under Establishing a radio link.

Name menu item

Entering names

In the **Name** menu item you can enter any name you want for the wireless microphone (e.g. the names of the musicians).

The name can be shown in the Frequency/Name and Name/Channel standard displays.



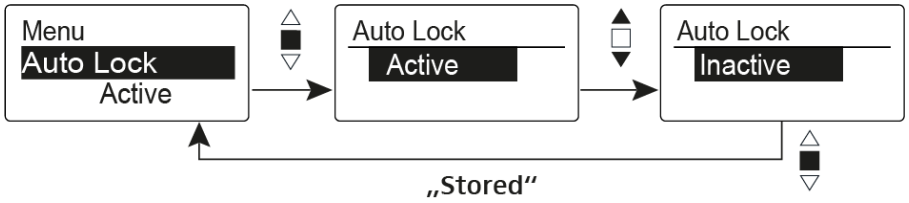
The names are a maximum of 8 characters:

- All letters except umlauts
- Numbers from 0 to 9
- Special characters and spaces

Auto Lock menu item

Switching the automatic lock-off function on and off

This lock prevents the wireless microphone from being unintentionally switched off and also prevents any unintentional changes to the transmitter's configuration. In the current standard display, the lock icon shows whether the lock-off function is currently switched on.



You can find information about using the lock-off function under Lock-off function.

Advanced menu item

In the Advanced submenu you can configure enhanced settings.

The following sub-items are available:

Adjusting the transmission frequencies for the U frequency bank

- See Advanced > Tune menu item

Defining the MIC button setting (SKM 100 G4-S only)

- See Advanced > Mute Mode menu item (SKM 100 G4-S only)

Activating/deactivating the pilot tone evaluation

- See Advanced > Pilot Tone menu item

Adjusting the contrast of the display panel

- See Advanced > LCD Contrast menu item

Resetting the transmitter

- See Advanced > Reset menu item

Displaying the current software revision

- See Advanced > Software Revision menu item

Advanced > Tune menu item

Configuring the transmission frequency and frequency bank U

When you have configured the wireless microphone to a system bank and you call up the **Tune** menu item, channel 1 of the frequency bank **U** is automatically set. The message **U.1** briefly appears in the display. In the factory settings, the channels of the frequency bank **U** are not assigned to any transmission frequency.

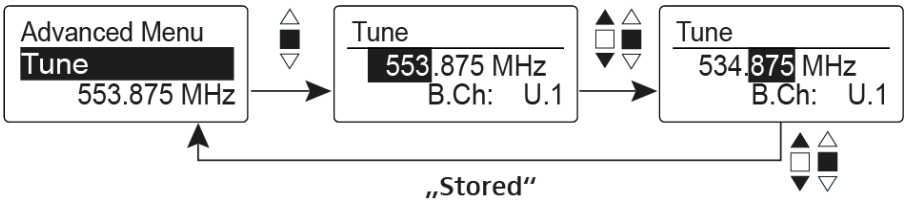
While you work in the **Tune** menu, the RF signal is deactivated.

You can configure a transmission frequency for the current channel or select a channel in the frequency bank **U** and configure a transmission frequency for this channel in the **Tune** menu. Be sure to note the information on frequency selection, see Establishing a radio link.

To configure the transmission frequency for the current channel:

▶ Open the **Tune** menu item in the **Advanced** menu.

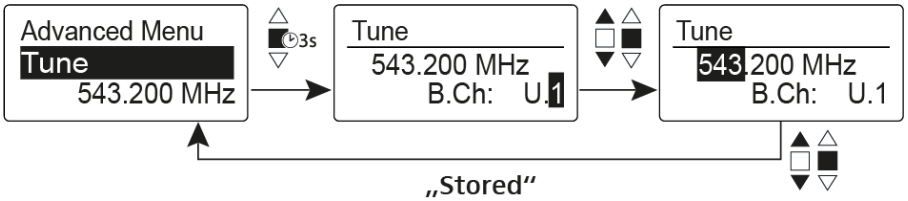
✓ The frequency selection appears.



- Configure the desired frequency.
- Press the multi-function switch.
  - Your settings will be saved. You are now back in the operating menu.

To select a channel and assign it a frequency:

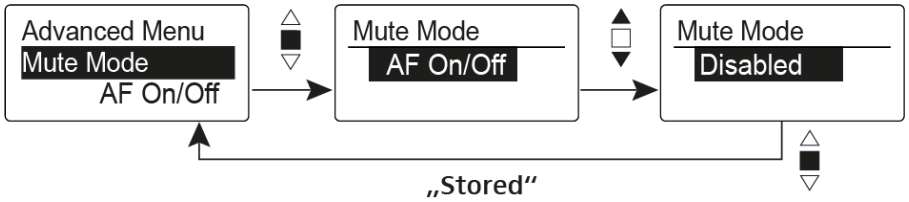
- Move the multi-function switch until the **Tune** menu item appears.
- Hold down the multi-function switch until the frequency bank selection appears.



- Set the desired channel.
- Press the multi-function switch.
  - The frequency selection appears.
- Configure the frequency.

Advanced > Mute Mode menu item (SKM 100 G4-S only)

Configuring the function of the MIC button



AF On/Off mode

- When you press the **MIC** button, no audio signal is transmitted.

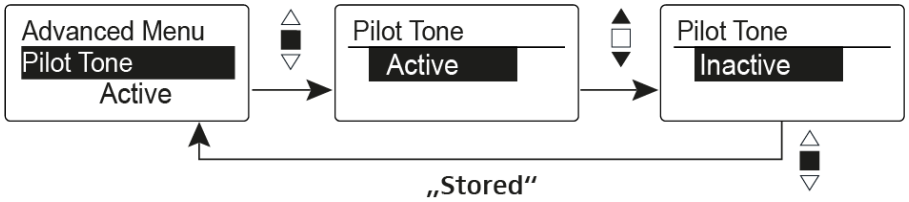
Disabled mode

- No function

> You can find information about the **MIC** button under Muting the handheld transmitter (AF mute).

Advanced > Pilot Tone menu item

Activating/deactivating pilot tone transmission



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver’s squelch function.

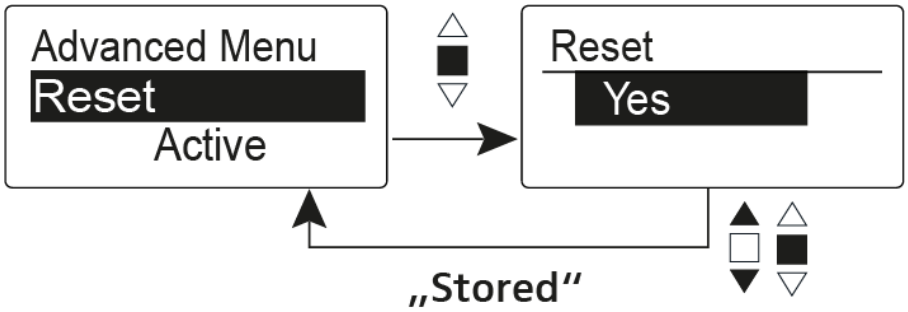
Advanced > LCD Contrast menu item

Adjusting the contrast of the display panel

You can configure the contrast of the display in 16 steps.

Advanced > Reset menu item

Resetting the wireless microphone



When you reset the wireless microphone, only the selected settings of the pilot tone and the **U** frequency bank are retained.

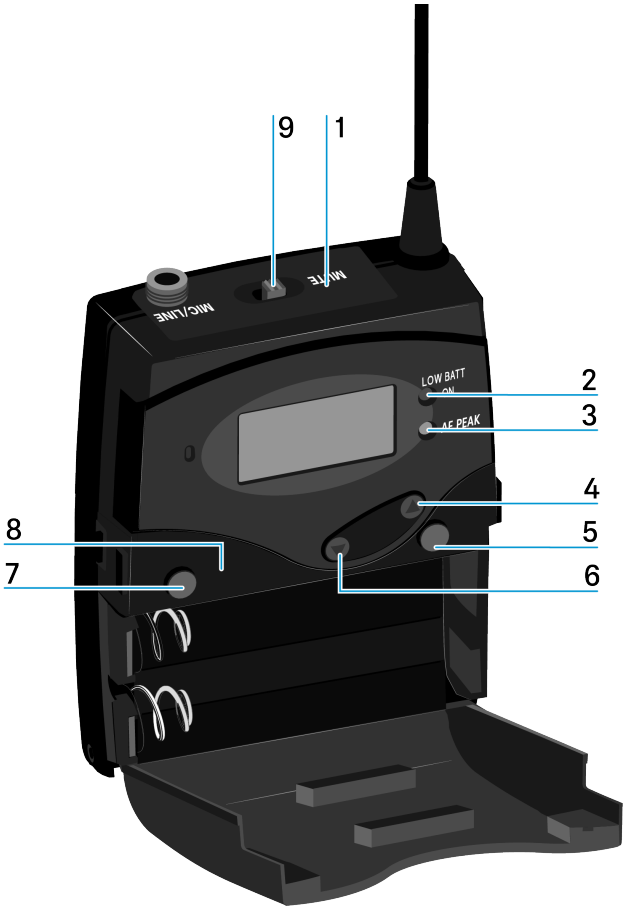
Advanced > Software Revision menu item

Show software revision

You can display the current software revision.

SK 100 G4 bodypack transmitter

Product overview



1 Display panel

- see Displays on the bodypack transmitter display panel

2 Operation and battery indicator, red LED

- illuminated = ON, see Switching the bodypack transmitter on and off
- flashing = LOW BATTERY, see Inserting and removing the batteries/rechargeable batteries

3 Audio overload indicator, yellow LED

- illuminated = AF PEAK (overload), see Sensitivity menu item

4 **UP** button

- see Buttons for navigating the menu

5 **SET** button

- see Buttons for navigating the menu

6 **DOWN** button

- see Buttons for navigating the menu

7 **ON/OFF** button with ESC function in the operating menu

- Switch the transmitter on or off, see Switching the bodypack transmitter on and off
- Escape function in the menu, see Buttons for navigating the menu

8 Infra-red interface

- see Ew 100 G4 synchronizing

9 **MUTE** switch

- Deactivate and activate audio signal, see Muting the bodypack transmitter (AF mute)
- Deactivate and activate RF signal, see Deactivating the RF signal (RF mute)

Inserting and removing the batteries/rechargeable batteries

You can operate the bodypack transmitter either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

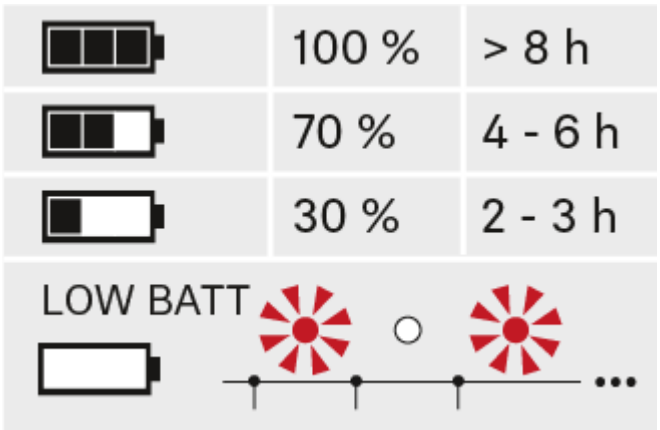
- Press the two catches and open the battery compartment cover.
- Insert the batteries or the rechargeable battery as shown below. Please observe correct polarity when inserting the batteries.



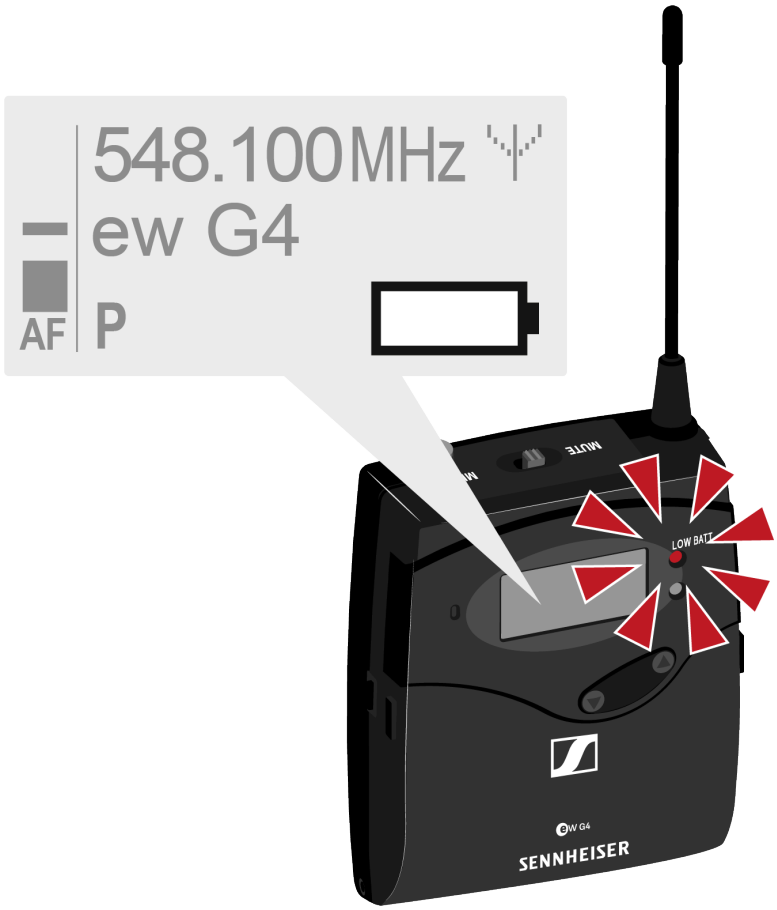
- Close the battery compartment.
  - The cover locks into place with an audible click.

Battery status

Charge status of the batteries:



Charge status is critical (LOW BATT):


548.100MHz
ew G4
AF
P
MUTE
LOW BATT
SENNHEISER

Connecting a microphone to the bodypack transmitter

You can find a list of recommended Lavalier and headset microphones for the bodypack transmitter under Microphones and cables.

To connect a microphone to the bodypack transmitter:

- Insert the cable's 3.5 mm jack plug into the **MIC/LINE** socket on the bodypack transmitter as shown in the diagram.
- Screw the plug's coupling ring onto the audio socket thread of the bodypack transmitter.



Connecting an instrument or line source to the bodypack transmitter

You can connect instruments or audio sources with a line level to the bodypack transmitter.

To do this, you will need the Ci 1-N (6.3 mm jack plug on a lockable 3.5 mm jack plug) or CL 2 (XLR-3F plug on lockable 3.5 mm jack plug) Sennheiser cables.

To connect an instrument or line source to bodypack transmitter:

- Insert the cable's 3.5 mm jack plug into the MIC/LINE socket on the bodypack transmitter as shown in the diagram.
- Screw the plug's coupling ring onto the audio socket thread of the bodypack transmitter.



Attaching the bodypack transmitter to clothing

You can use the belt clip to attach the bodypack transmitter to your waistband or on a guitar strap.

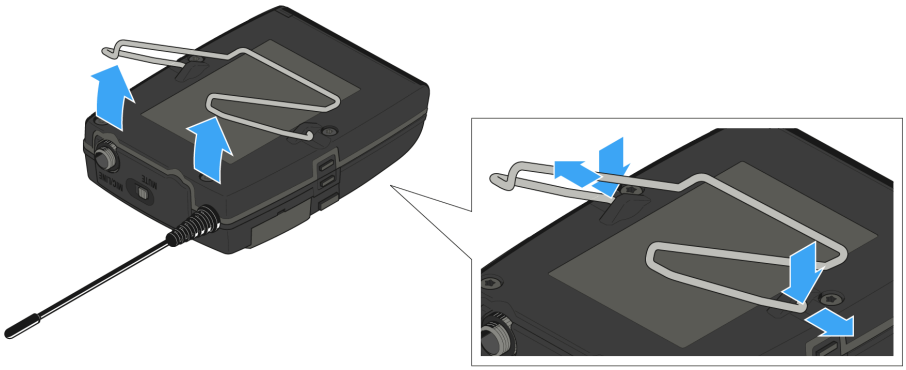
The belt clip is detachable so that you can also attach the bodypack transmitter with the antenna pointing downwards. To do so, withdraw the belt clip from its fixing points and attach it the other way round.

The belt clip is secured so that it cannot slide out of its fixing points accidentally.



To detach the belt clip:

- Lift the belt clip as shown in the diagram.
- Press one side of the clip downward on the fixing hole and pull it out of the transmitter housing.
- Do the same thing on the other side.

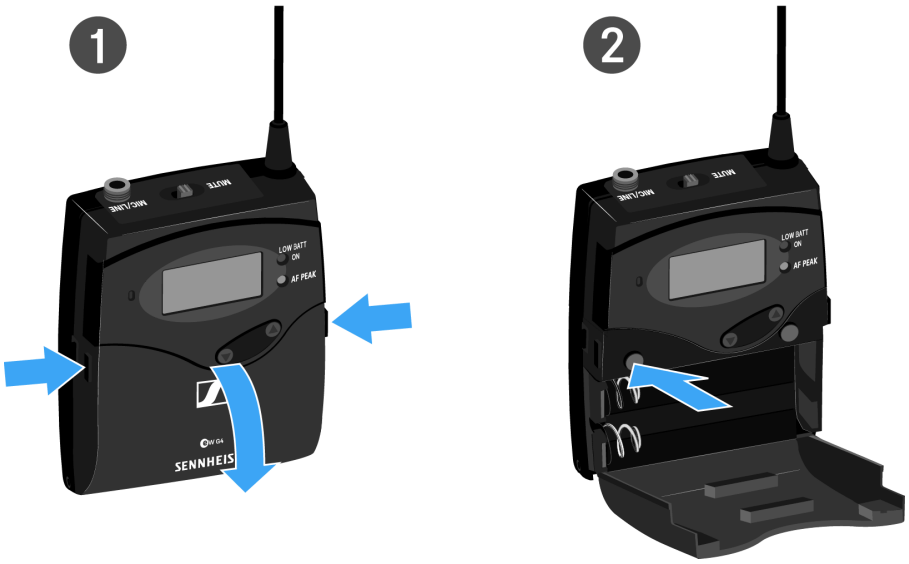


Switching the bodypack transmitter on and off

- Press the two catches and open the battery compartment cover.

To switch on the SK 100 G4:

- Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch off the SK 100 G4:

- Hold down the **ON/OFF** button until the display goes off.

Muting the bodypack transmitter (AF mute)

You can deactivate the audio signal with the **MUTE** switch.

To do this, the **MUTE** switch function must be configured to **AF On/Off**. You can find more information about this subject under Advanced > Mute Mode menu item.



- Slide the **MUTE** switch to the MUTE position.
  - The audio signal is muted. The message MUTE is shown on the display.

Deactivating the RF signal (RF mute)

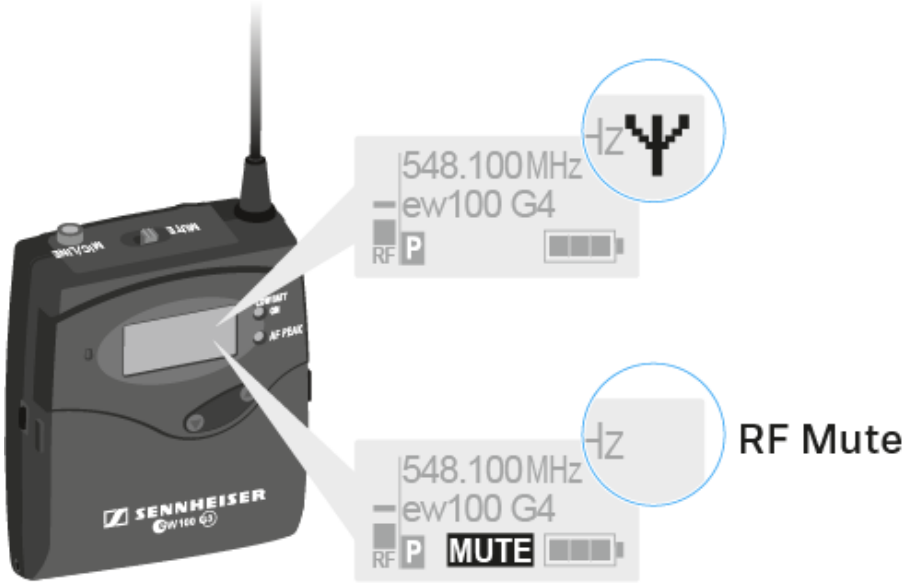
You can deactivate the RF signal in two ways:

Deactivating the RF signal with the MUTE switch

To do this, the **MUTE** switch function must be configured to **RF On/Off.** You can find more information about this subject under Advanced > Mute Mode menu item.

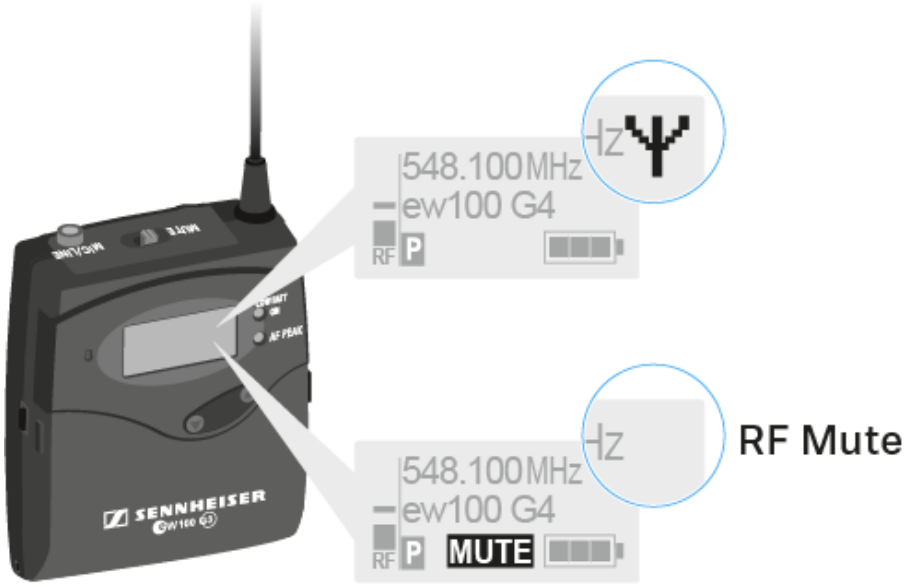


- Slide the **MUTE** switch to the MUTE position.
  - The RF signal is deactivated. The message MUTE is shown in the display and the transmission icon no longer appears.



Deactivating the RF signal with the ON/OFF button

- Short-press the **ON/OFF** button.
  - RF Mute On? appears.
- Press the **SET** button.
  - The RF signal is deactivated. The message MUTE is shown in the display and the transmission icon no longer appears.



- Short-press the **ON/OFF** button.
  - RF Mute Off? appears.

- Press the **SET** button.
  - The transmission icon appears again.

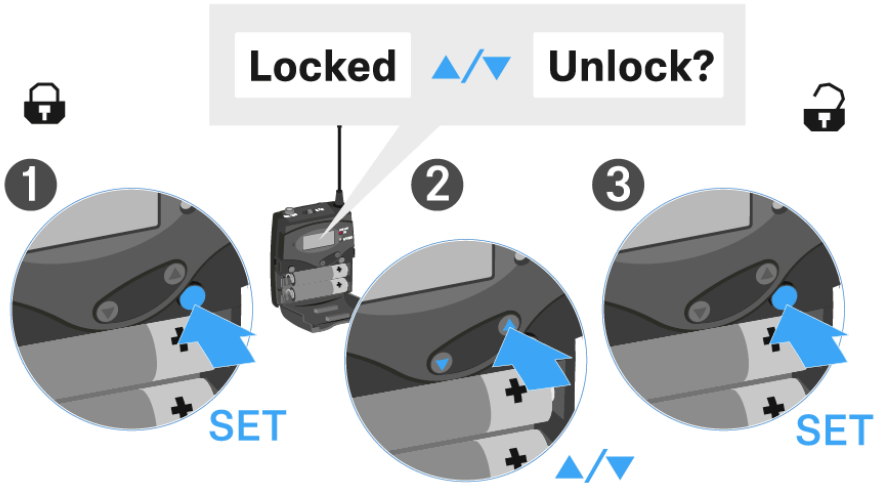
Lock-off function

You can set the automatic lock-off function in the Auto Lock menu (see Auto Lock menu item).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

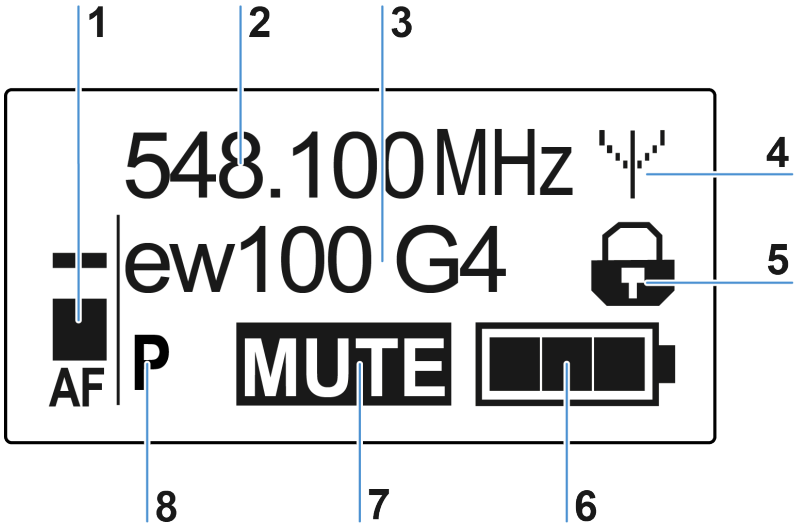
To temporarily deactivate the lock-off function:

- Press the **SET** button.
  - ✓ Locked appears in the display panel.
- Press the **UP** or **DOWN** button.
  - ✓ Unlock? appears in the display panel.
- Press the **SET** button.
  - ✓ Lock-off function is now temporarily deactivated.



Displays on the bodypack transmitter display panel

You can view the following information on the transmitter display.



1 AF audio level

- Displays the audio level with peak hold function
- see Sensitivity menu item

2 Frequency

- Configured transmission frequency
- see Frequency Preset menu item

3 Name

- Freely selectable name of the receiver
- see Name menu item

4 Transmission icon

- RF signal is being transmitted
- see Deactivating the RF signal (RF mute)

5 Lock-off function

- Lock-off function is activated
- see Auto Lock menu item

6 Battery status

- see Battery status

7 **MUTE** muting function

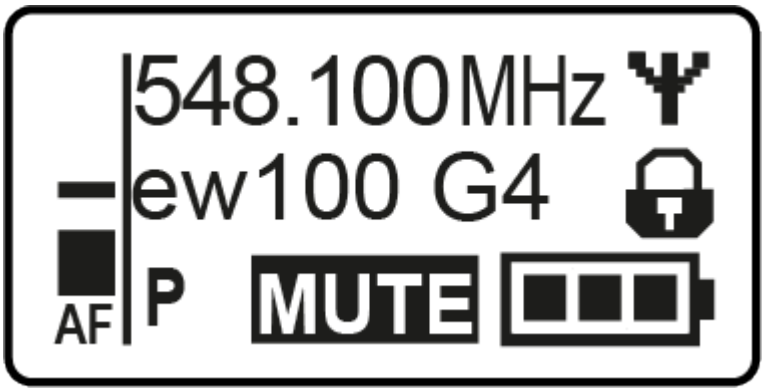
- The audio signal is muted
- see Muting the bodypack transmitter (AF mute)
- see Deactivating the RF signal (RF mute)

8 **P** pilot tone

- Pilot tone transmission is activated
- see Advanced > Pilot Tone menu item

Select a standard display

▶ Press the **UP** or **DOWN** buttons to select a standard display.
Frequency/Name standard display



Channel/Frequency standard display



Name/Channel standard display



Buttons for navigating the menu

To open the menu/a menu item:

- Press the **SET** button.
  - The operating menu is shown on the transmitter display panel.
- Press the **UP** or **DOWN** buttons to navigate through the individual menu items.
- Press the **SET** button to open the selected menu item.

Making changes in a menu item:

- Press the **UP** or **DOWN** buttons to set the displayed value.
- Press the **SET** button to save the setting.
- Press the **ESC (ON/OFF)** button to leave the menu item without saving the setting.

Setting options in the menu

In the SK 100 G4 menu, you can configure the following settings.

Adjusting the input sensitivity

- See Sensitivity menu item

Setting the frequency bank and the channel

- See Frequency Preset menu item

Entering a freely selectable name

- See Name menu item

Activating/deactivating the automatic lock-off function

- See Auto Lock menu item

Configuring enhanced settings in the Advanced Menu:

- Adjusting the transmission frequencies for the U frequency bank
- Configuring the MUTE switch
- Configuring the guitar cable emulation
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the transmitter
- Displaying the current software revision
- See Advanced menu item

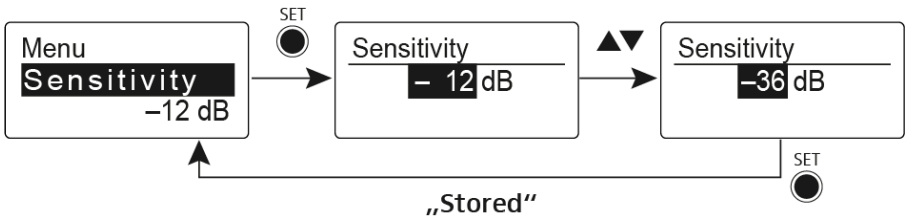
Sensitivity menu item

Adjusting the input sensitivity – AF audio level

Setting range:

- 0 to -60 dB
- in 6 dB steps.

The AF audio level is also displayed when the bodypack transmitter is muted, e.g. to check the sensitivity before a live broadcast.



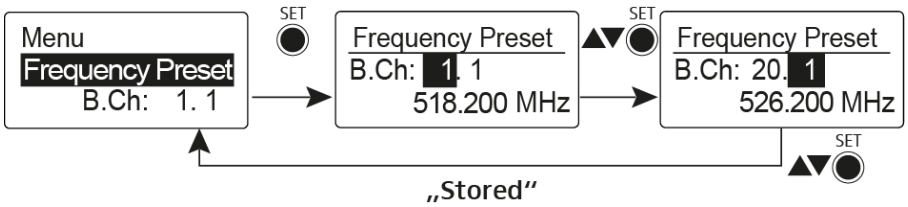
Recommended presets:

- Loud music/vocals: -30 to -21 dB
- Moderation: -21 to 0 dB
- Electric guitar with single-coil pickups: -30 to -24 dB
- Electric guitar with Humbucker pickups: -45 to -30 dB
- Electric guitars with active electronics: -45 to -30 dB

Frequency Preset menu item

Manually selecting a frequency bank and channel

> i While you work in the Frequency Preset menu, the RF signal is deactivated.



Please note when creating multi-channel systems:

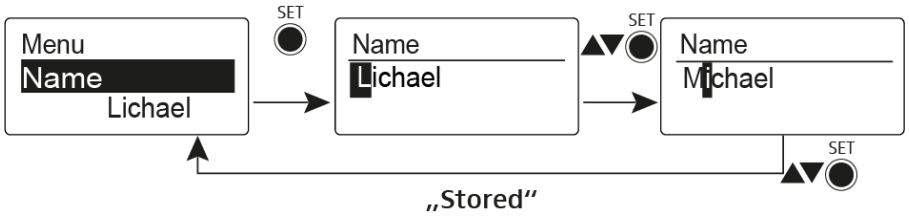
Only the factory-preset frequencies within one frequency bank are intermodulation-free. The bodypack transmitter and receiver must be set to the same frequency. Be sure to note the information on frequency selection under Establishing a radio link.

Name menu item

Entering names

In the **Name** menu item you can enter any name you want for the bodypack transmitters (e.g. the names of the musicians).

The name can be shown in the Frequency/Name and Name/Channel standard displays.



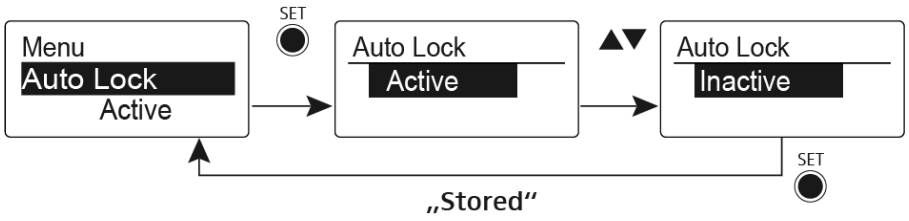
The names are a maximum of 8 characters:

- All letters except umlauts
- Numbers from 0 to 9
- Special characters and spaces

Auto Lock menu item

Switching the automatic lock-off function on and off

This lock prevents the wireless microphone from being unintentionally switched off and also prevents any unintentional changes to the transmitter's configuration. In the current standard display, the lock icon shows whether the lock-off function is currently switched on.



You can find information about using the lock-off function under Lock-off function.

Advanced menu item

In the Advanced submenu you can configure enhanced settings.

The following sub-items are available:

Adjusting the transmission frequencies for the U frequency bank

- See Advanced > Tune menu item

Configuring the MUTE switch

- See Advanced > Mute Mode menu item

Configuring the guitar cable emulation

- See Advanced > Cable Emulation menu item

Activating/deactivating the pilot tone evaluation

- See Advanced > Pilot Tone menu item

Adjusting the contrast of the display panel

- See Advanced > LCD Contrast menu item

Resetting the transmitter

- See Advanced > Reset menu item

Displaying the current software revision

- See Advanced > Software Revision menu item

Advanced > Tune menu item

Configuring the transmission frequency and frequency bank U

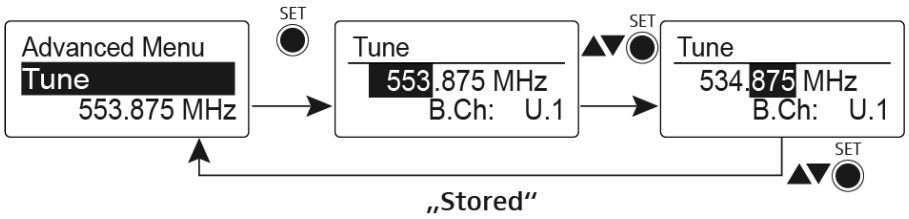
When you have configured the bodypack transmitter to a system bank and you call up the **Tune** menu item, channel 1 of the frequency bank **U** is automatically set. The message **U.1** briefly appears in the display. In the factory settings, the channels of the frequency bank **U** are not assigned to any transmission frequency.

While you work in the **Tune** menu, the RF signal is deactivated.

You can configure a transmission frequency for the current channel or select a channel in the frequency bank **U** and configure a transmission frequency for this channel in the **Tune** menu. Be sure to note the information on frequency selection, see Establishing a radio link.

To configure the transmission frequency for the current channel:

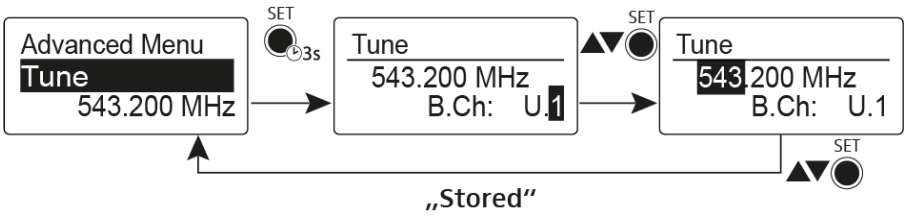
- Open the **Tune** menu item in the **Advanced** menu.
  - The frequency selection appears.



- Configure the desired frequency.
- Press the **SET** button.
  - Your settings will be saved. You are now back in the operating menu.

To select a channel and assign it a frequency:

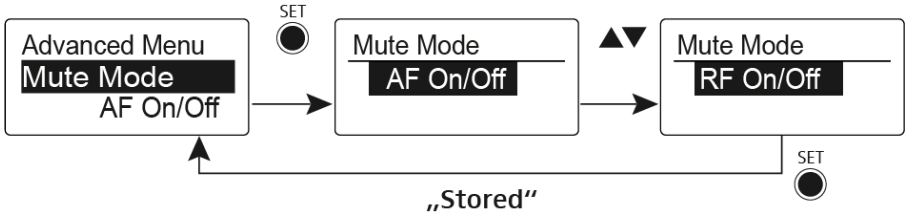
- Open the **Tune** menu item in the **Advanced** menu by pressing and holding the **SET** button until the frequency bank selection appears.



- Set the desired channel.
- Press the **SET** button.
  - The frequency selection appears.
- Configure the frequency.

Advanced > Mute Mode menu item

Configuring the MUTE switch



AF On/Off mode

- If set to position MUTE, the audio signal is muted

RF On/Off mode

- If set to position MUTE, the RF signal is deactivated

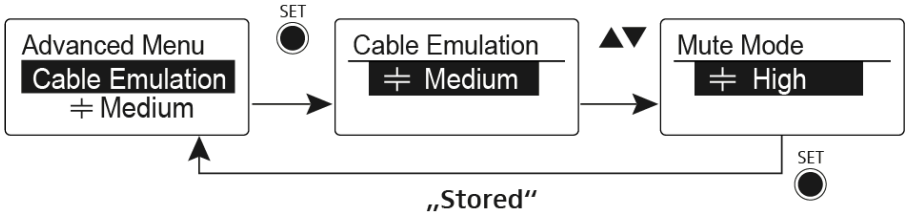
Disabled mode

- No function

> **i** You can find information about operating the mute switch under Muting the bodypack transmitter (AF mute) and Deactivating the RF signal (RF mute).

Advanced > Cable Emulation menu item

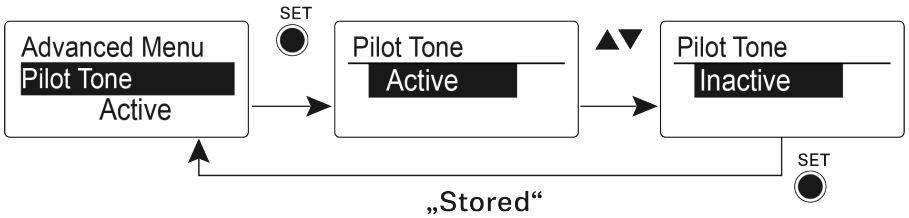
Emulating a guitar cable



Using this menu item you can emulate the capacitances of your guitar cables and influence the sound of your guitar.

Advanced > Pilot Tone menu item

Activating/deactivating pilot tone transmission



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver’s squelch function.

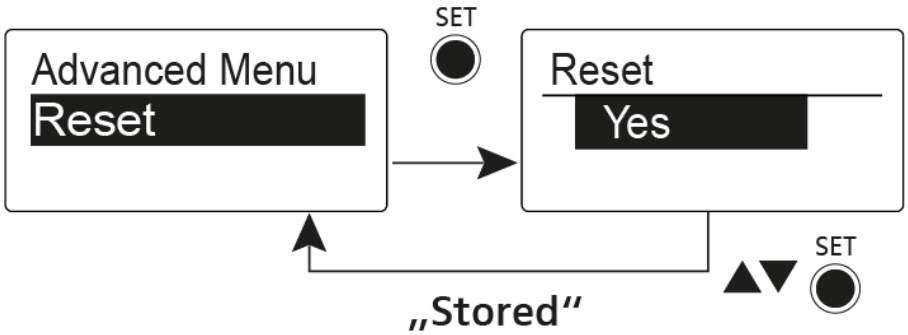
Advanced > LCD Contrast menu item

Adjusting the contrast of the display panel

You can configure the contrast of the display in 16 steps.

Advanced > Reset menu item

Resetting the bodypack transmitter



When you reset the bodypack transmitter, only the selected settings of the pilot tone and the **U** frequency bank are retained.

Advanced > Software Revision menu item

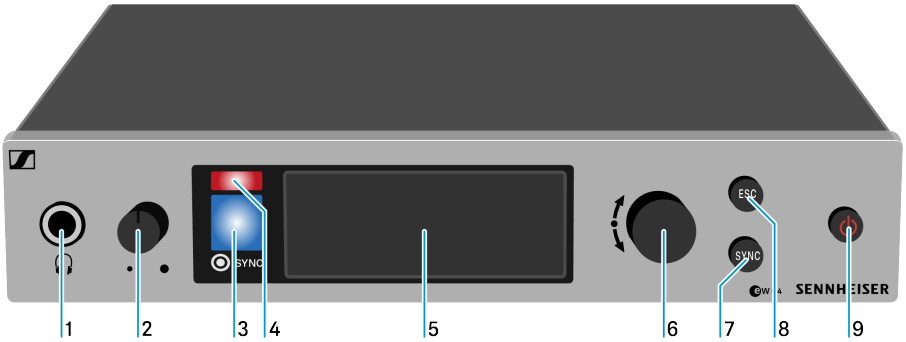
Show software revision

You can display the current software revision.

EM 300-500 G4 rack receiver

Product overview

Front



1 Headphone socket

- see Using the headphone output

2 Volume control for the headphone socket

- see Using the headphone output

3 Infrared interface with a blue LED

- see Ew 300-500 G4 synchronizing

4 Red LED for warnings

- see Advanced -> Fullscreen Warnings menu item

5 Display panel

- see Displays on the rack receiver display panel

6 Jog-Dial for navigating through the menu

- see Buttons for navigating through the menu

7 **SYNC** button

- see Ew 300-500 G4 synchronizing

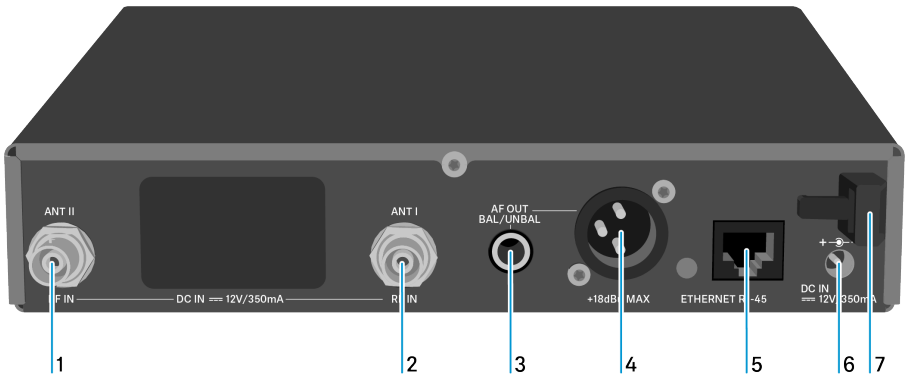
8 **ESC** button

- see Buttons for navigating through the menu

9 **STANDBY** button

- see Switching the rack receiver on and off

Back



1 BNC socket, antenna input II (**ANT II**) with remote power supply unit

- see Connecting antennas

2 BNC socket, antenna input I (**ANT I**) with remote power supply unit

- see Connecting antennas

3 6.3 mm jack socket for audio output, unbalanced (**AF OUT UNBAL**)

- see Outputting audio signals

4 XLR-3 socket for audio output, balanced (**AF OUT BAL**)

- see Outputting audio signals

5 LAN connection socket (ETHERNET **RJ 45**)

- see Creating a data network

6 Connecting cables for the power supply unit (**DC IN**)

- see Connecting/disconnecting the rack receiver to/from the power supply system

7 Strain relief for the cable of the power supply unit

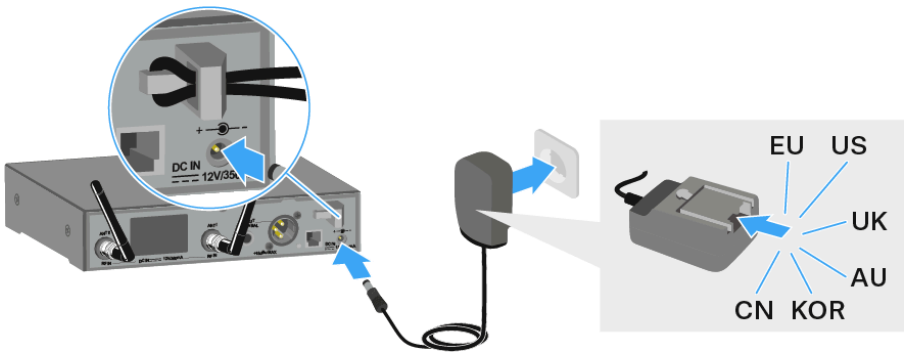
- see Connecting/disconnecting the rack receiver to/from the power supply system

Connecting/disconnecting the rack receiver to/from the power supply system

Only use the supplied power supply unit. It is designed for your receiver and ensures safe operation.

To connect the rack receiver to the power supply system:

- Insert the plug of the power supply unit into the **DC IN** socket of the receiver.
- Pass the cable of the power supply unit through the cable grip.
- Slide the supplied country adapter onto the power supply unit.



- Plug the power supply unit into the wall socket.

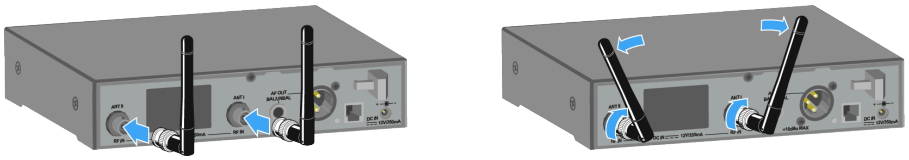
To completely disconnect the rack receiver from the power supply system:

- Unplug the power supply unit from the wall socket.
- Unplug the power supply unit from the **DC IN** socket of the receiver.

Connecting antennas

To connect the supplied rod antennas:

- Connect the first rod antenna to the **ANT I** socket on the rear side of the EM 300-500 G4.
- Connect the second rod antenna to the **ANT II** socket on the rear side of the EM 300-500 G4.
- Gently angle the rod antennas to the left and right as shown in the figure.



i If you are using more than one receiver, we recommend using remote antennas and, as needed, Sennheiser antenna accessories. For more information, visit the ew G4 product page at sennheiser.com/g4-business.

Outputting audio signals

The EM 300-500 G4 has a balanced XLR-3M output socket and an unbalanced 6.3 mm jack output socket.

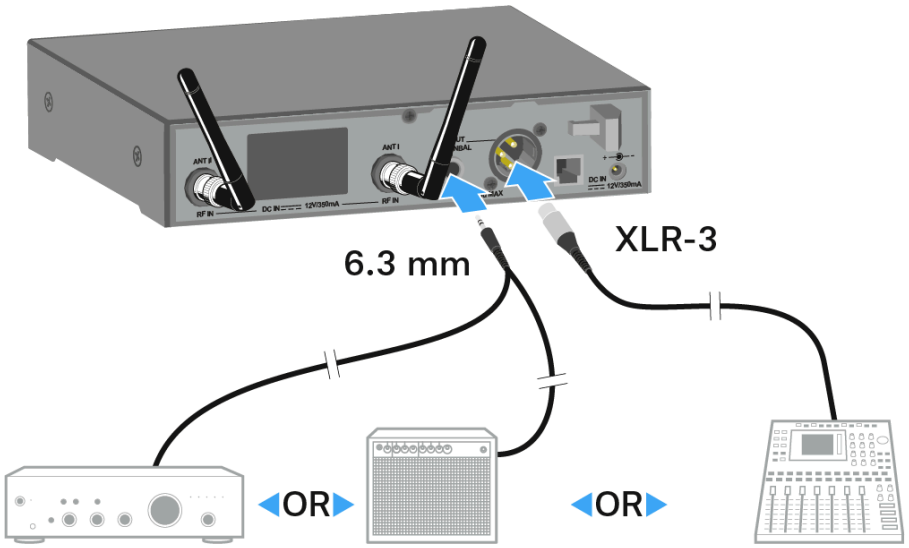
- Always use only one of the two **AF OUT** output sockets for each channel.

To connect an XLR cable:

- Plug the XLR cable into the **AF OUT BAL** socket of the EM 300-500 G4.

To connect a jack cable:

- Plug the jack cable into the **AF OUT UNBAL** socket of the EM 300-500 G4.



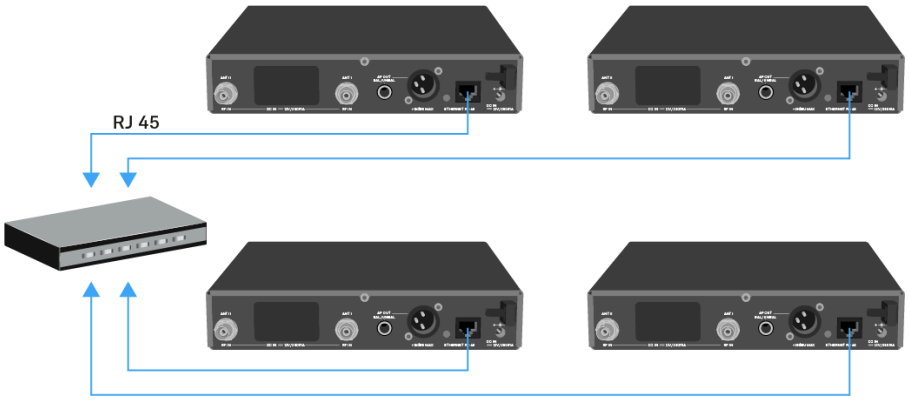
Creating a data network

You can monitor and control one or more EM 300-500 G4s via a network connection using Sennheiser **Wireless Systems Manager** (WSM) software.

> **i** Automatic frequency setup can also be performed over the network without the WSM software. See Easy Setup menu item.

To connect the EM 300-500 G4 to a network:

- Connect a network cable with an RJ-45 connector (to the **Ethernet** socket on the rear side of the EM 300-500 G4.
- Connect the other end of the network cable to a network switch.



> **i** For more information about controlling devices via the Sennheiser **Wireless Systems Manager** (WSM) software, refer to the instruction manual for the software. You can download the software here: sennheiser.com/wsm.

Installing the rack receiver in a rack

To mount the receiver in a rack, you will need the GA 3 rack mount kit (optional accessory).

NOTICE

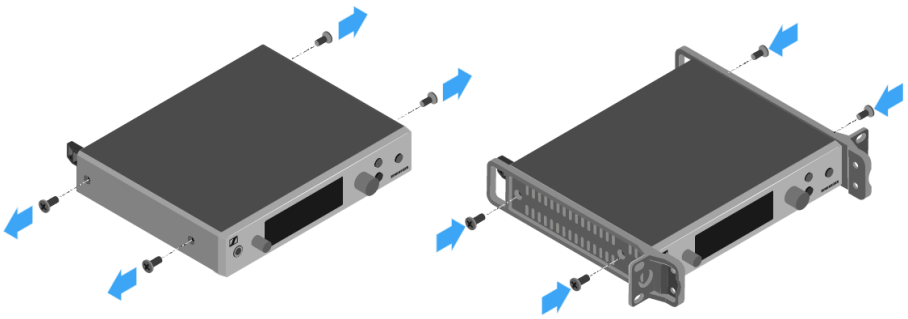
Rack mounting poses risks

When installing the device in a closed or multi-rack assembly, please consider that, during operation, the ambient temperature, the mechanical loading and the electrical potentials will be different from those of devices which are not mounted into a rack.

- Make sure that the ambient temperature within the rack does not exceed the permissible temperature limit specified in the specifications. See Specifications.
- Ensure sufficient ventilation; if necessary, provide additional ventilation.
- Make sure that the mechanical loading of the rack is even.
- When connecting to the power supply system, observe the information indicated on the type plate. Avoid circuit overloading. If necessary, provide overcurrent protection.
- When rack mounting, please note that intrinsically harmless leakage currents of the individual power supply units may accumulate, thereby exceeding the allowable limit value. As a remedy, ground the rack via an additional ground connection.

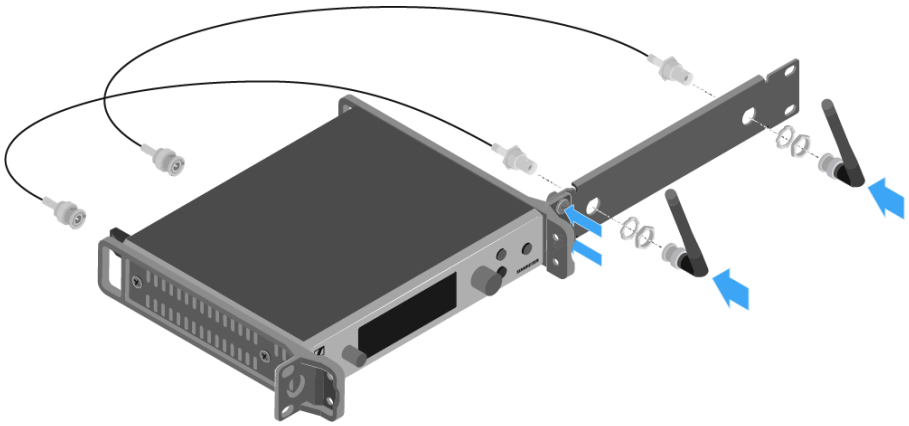
Mounting a single receiver in a rack

- Unscrew and remove the two recessed head screws (M4x8) on each side of the receiver.
- Secure both of the the mounting angles to the sides of the receiver using the previously removed recessed head screws.



- Secure the blanking plate to one of the mounting angles using two recessed head screws (M6x10).

- Attach the AM 2 antenna front mounting kit (optional accessory) and mount the rod antennas on the blanking plate.

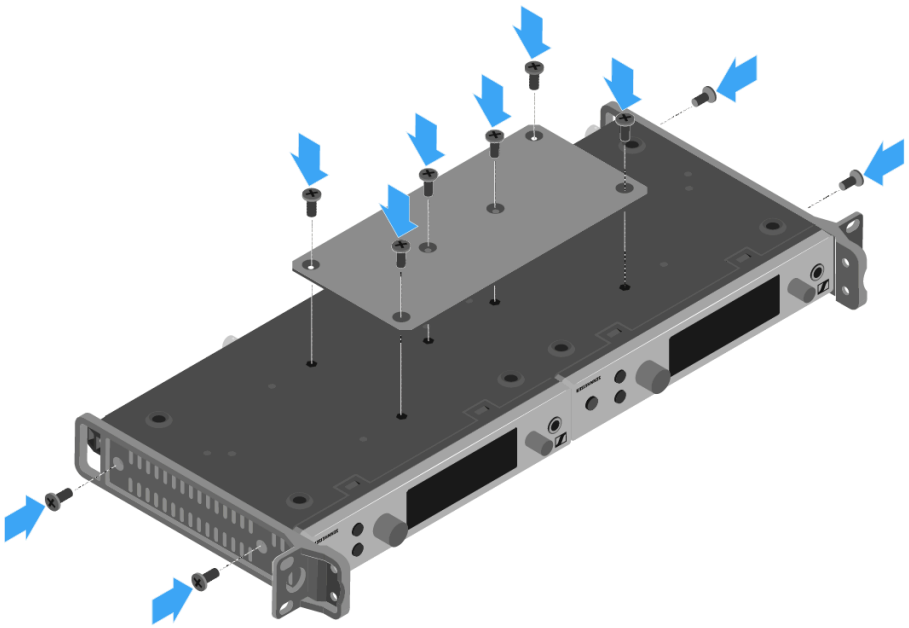


- Slide the receiver with the mounted blanking plate into the 19" rack.
- Secure the mounting angle and the blanking plate to the 19" rack.
- Align the mounted antennas in a V-shape.

Mounting two receivers side by side in a rack

> **i** When you mount two receivers side by side, it is only possible to front mount antennas when you use the ASA 214 antenna splitter in combination with the AM 2 antenna front mounting kit and an additional GA 3 rack mount kit.

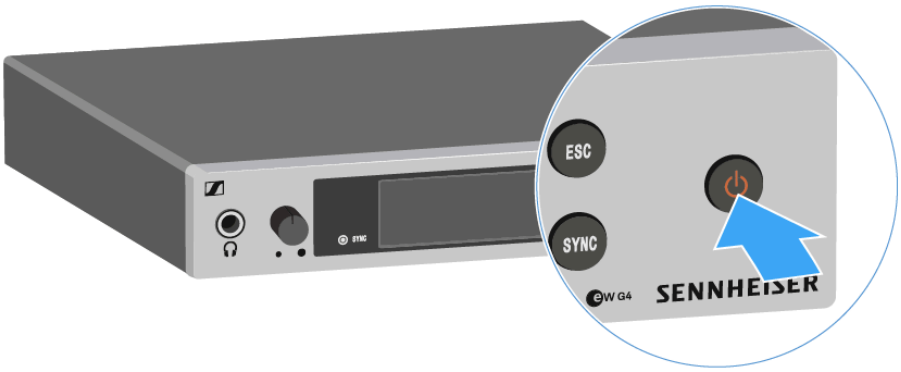
- Place both receivers upside down and side by side on an even surface.
- Secure the jointing plate to the transmitters using the six recessed head screws (M3x6).
- Secure the mounting angle.



Switching the rack receiver on and off

To switch the receiver on:

- Short-press the **STANDBY** button.



  - The receiver switches on and the Receiver Parameters standard display appears.

To switch the receiver to standby mode:

- If necessary, deactivate the lock-off function (see Lock-off function).
- Press and hold the **STANDBY** button until OFF appears on the display panel.
  - The display panel switches off.

To switch the receiver off completely:

- Disconnect the receiver from the power supply system by unplugging the power supply unit from the wall socket.

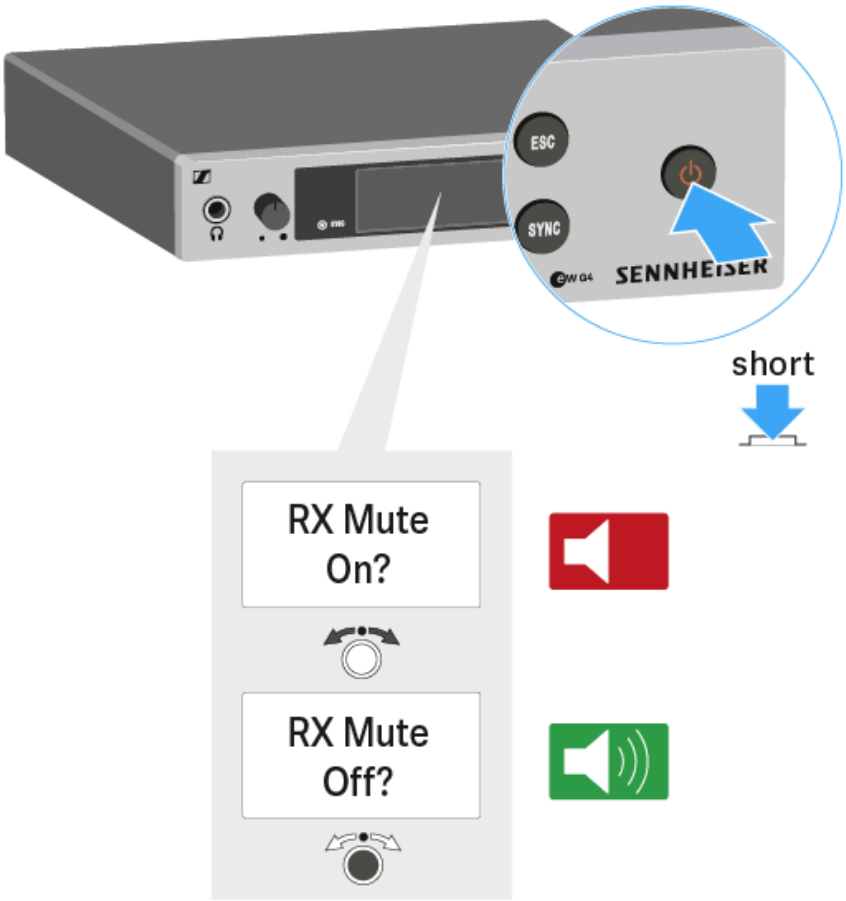
Muting the audio output

To mute the audio signal of the receiver:

- Press the **STANDBY** button in one of the standard displays.
  - ✓ The RX Mute On? display appears.
- Press the **SET** button.
  - ✓ The audio signal is muted.

To cancel the muting:

- Press the **STANDBY** button.
  - ✓ The RX Mute Off? display appears.
- Press the **SET** button.
  - ✓ The audio output is no longer muted.



Using the headphone output

You can use the headphone output on the front of the EM 300-500 G4 (6.3 mm jack) to listen to the audio signal.

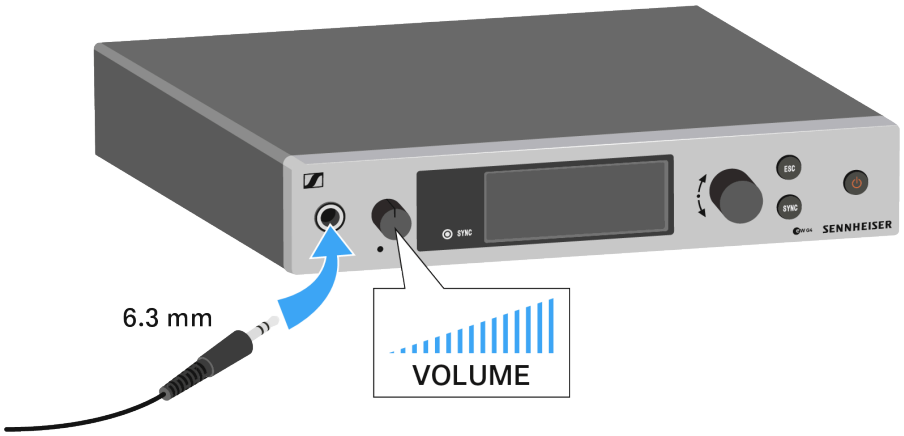
CAUTION

Danger due to high volume levels

Volume levels that are too high may damage your hearing.

- Turn down the volume of the headphone output before you put on the headphone.
- Increasing the volume of the audio output **AF Out** (see AF Out menu item) to more than +18 dB also increases the volume of the headphone output.

- Connect the headphone to the headphone socket.
- Control the volume by turning the volume control next to the headphone socket.



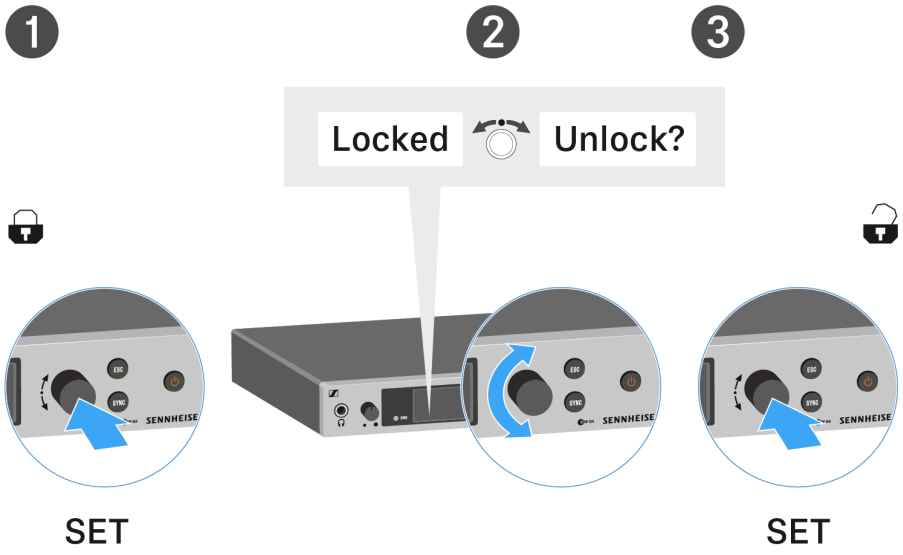
Lock-off function

You can set the automatic lock-off function in the **Auto Lock** menu (see Auto Lock menu item).

When you have switched on the lock-off function, you will have to turn the receiver off and on again in order to operate it.

To temporarily deactivate the lock-off function:

- Press the **jog dial**.
  - Locked appears in the display panel.
- Press the **jog dial**.
  - Unlock? appears in the display panel.
- Press the **jog dial**.
  - Lock-off function is now temporarily deactivated.



When you are in the operating menu

- Lock-off function is deactivated long enough for you to work in the operating menu.

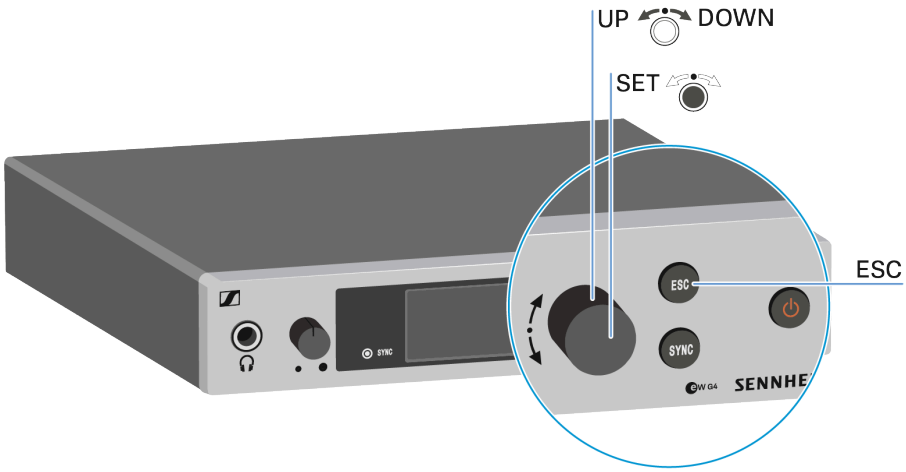
When one of the standard displays is shown

- Lock-off function is automatically activated after 10 seconds.

The Lock-off function icon flashes while the lock-off function is being activated again.

Buttons for navigating through the menu

To navigate through the EM 300-500 G4 operating menu, you need the following buttons.



ESC button

- Short-press
  - Cancels the entry and returns to the previous display
- Long-press
  - Cancels the entry and returns to the home screen

Press the **jog dial**

- Changes from the current standard display to the operating menu
- Calls up a menu item
- Changes to a submenu
- Stores the settings and returns to the operating menu

Turn the **jog dial**

- Selects a standard display (see Home Screen)
- Changes to the previous or next menu item
- Changes the setting of a menu item

Displays on the rack receiver display panel

Status information such as reception quality, battery status, audio level, etc. is displayed on the home screen of the display panel.

- See Home Screen

The display panel also displays the operating menu which you can use to configure all of the settings.

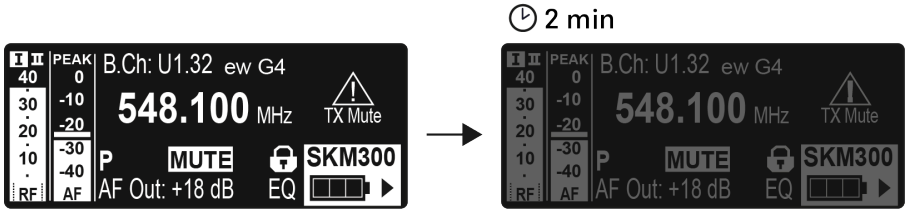
- See Setting options in the menu

Home Screen

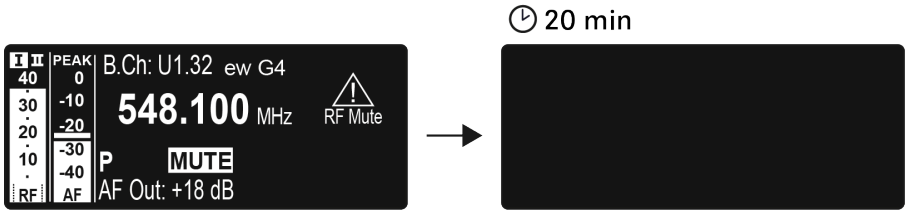
After you switch on the receiver, the display panel initially displays the Sennheiser logo. After a short time, the home screen is then displayed.

The home screen has three different standard displays.

- On the home screen, press the **UP** and **DOWN** buttons to switch between the standard displays.

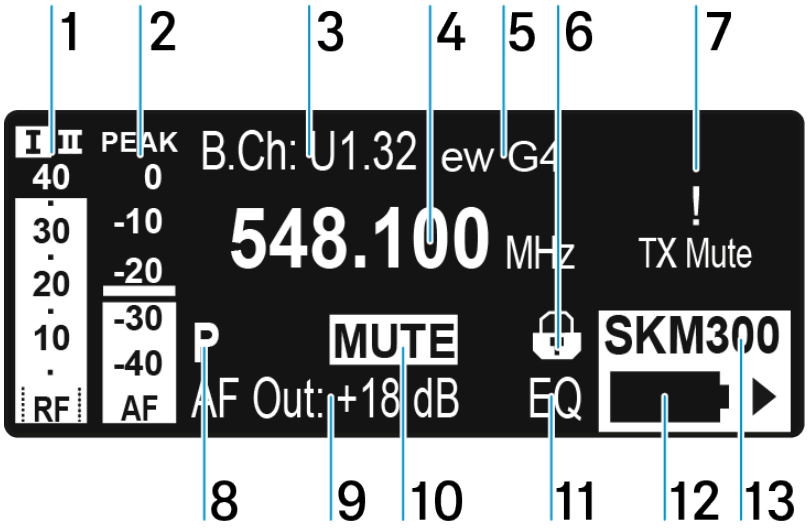


The display is dimmed automatically after 2 minutes of inactivity.



If there is no radio link to a transmitter, the display switches off after 20 minutes. The display can be reactivated by pressing any button.

Receiver Parameters standard display



1 RF level **RF** (radio frequency)

- RF signal level display
- including the display of the squelch threshold (see Squelch menu item)

2 Audio level **AF** (audio frequency)

- Displays the audio level of the received transmitter

  When the display shows full deflection, the audio input level is excessively high. When the transmitter is overloaded frequently or for extended periods of time, the PEAK display is shown inverted.

- see AF Out menu item

3 Frequency bank and channel

- current frequency bank and channel number
- see Frequency Preset menu item

4 Frequency

- current receiving frequency
- see Frequency Preset menu item

5 Name

- freely selectable name of the receiver
- see Name menu item

6 Lock-off function

- Lock-off function is activated on the receiver
- see Lock-off function

7 Warnings

- Activated warning messages are displayed
- see Advanced -> Fullscreen Warnings menu item

8 **P** pilot tone

- Activated pilot tone evaluation
- see Advanced -> Pilot Tone menu item

9 Output gain

- Current output gain of the audio frequency signal at the 6.3 mm socket / XLR socket
- see AF Out menu item

10 Equalizer setting

- Current equalizer setting
- see Equalizer menu item

11 **MUTE** muting function

- Receiver or transmitter is muted
- see Muting the audio output

12 Battery status of the transmitter

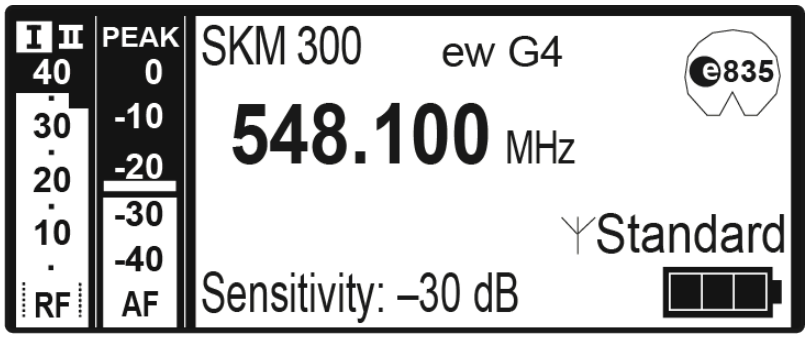
- SKM 300 G4-S: see Inserting and removing the batteries/rechargeable batteries
- SKM 500 G4: see Inserting and removing the batteries/rechargeable batteries
- SK 300 G4-RC: see Inserting and removing the batteries/rechargeable batteries
- SK 500 G4: see Inserting and removing the batteries/rechargeable batteries

13 Transmitter type

- Product name of the connected transmitter

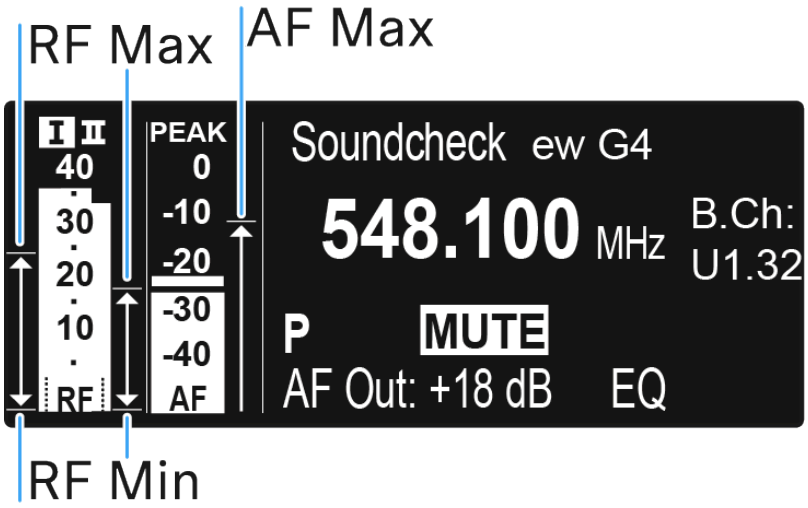
Transmitter Parameters standard display

The Transmitter Parameters standard display shows the microphone module (only for SKM) and the transmitter type.



Soundcheck standard display

The Soundcheck standard display shows the transmission quality between the transmitter and the receiver.



By doing a soundcheck, you can ensure adequate transmission quality in the entire area in which you want to use the transmitter. You can do the soundcheck without the help of another person.

- ▶ With the transmitter, walk up and down the area in which you want to use the transmitter.
  - ✓ The receiver records the following parameters:

RF Min

- Minimum RF signal level
- must be well above the squelch threshold level for one of the two antennas
- Ways to optimize:
  - Check that the antennas and the antenna cables are correctly connected.
  - Improve the position of the antennas.
  - If necessary, use an antenna booster.

RF Max

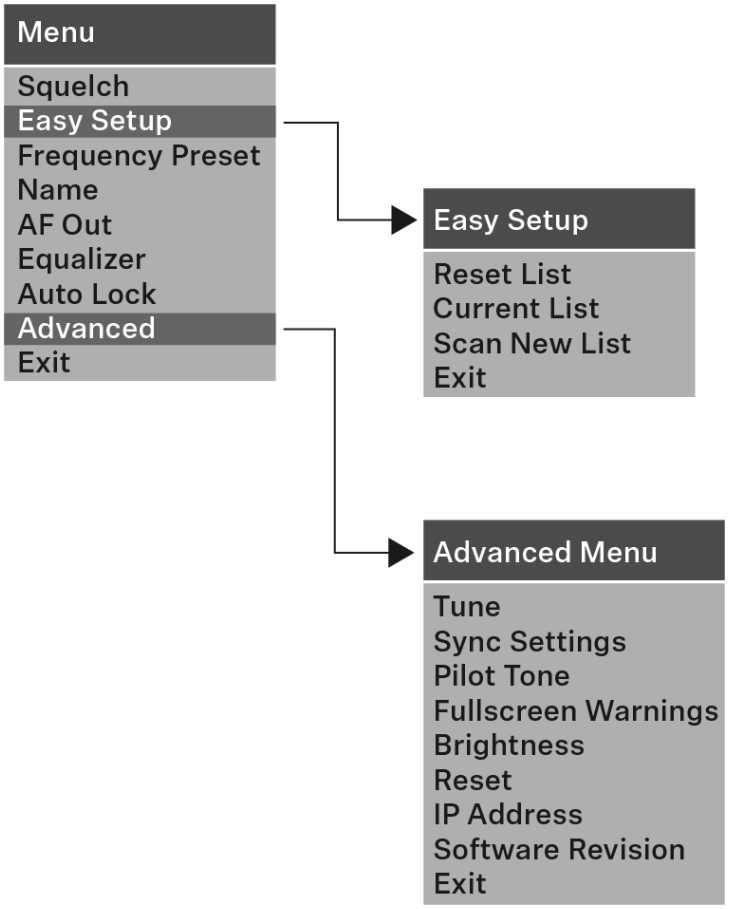
- Maximum RF signal level
- both antennas should reach 40 dBµV
- Ways to optimize:
  - Check that the antennas and the antenna cables are correctly connected.
  - Improve the position of the antennas.
  - If necessary, use an antenna booster.

AF Max

- Maximum audio level
- Ways to optimize:
    - On your transmitter, adjust the audio level as high as possible without the display for the audio level showing full deflection (AF Max is at a level with the PEAK display). See AF Out menu item.

Menüstruktur

The figure shows the complete EM 300-500 G4 menu structure in an overview.



Setting options in the menu

In the rack receiver menu, you can configure the following settings.

Adjusting the squelch threshold

- See Squelch menu item

Scanning for unused frequency presets, releases and selects frequency presets

- See Easy Setup menu item

Setting the frequency bank and the channel

- See Frequency Preset menu item

Entering a freely selectable name

- See Name menu item

Adjusting the audio output level

- See AF Out menu item

Adjusting the frequency response of the output signal

- See Equalizer menu item

Activating/deactivating the automatic lock-off function

- See Auto Lock menu item

Configuring enhanced settings in the Advanced Menu:

- Setting the receiving frequencies for the frequency banks U1 to U6
- Activating/deactivating the parameters to be transferred to the transmitters
- Activating/deactivating the pilot tone evaluation
- Activating/deactivating warnings
- Adjusting the contrast of the display panel
- Resetting the receiver
- Adjusting the network configuration
- Displaying the current software revision
- See Advanced menu item

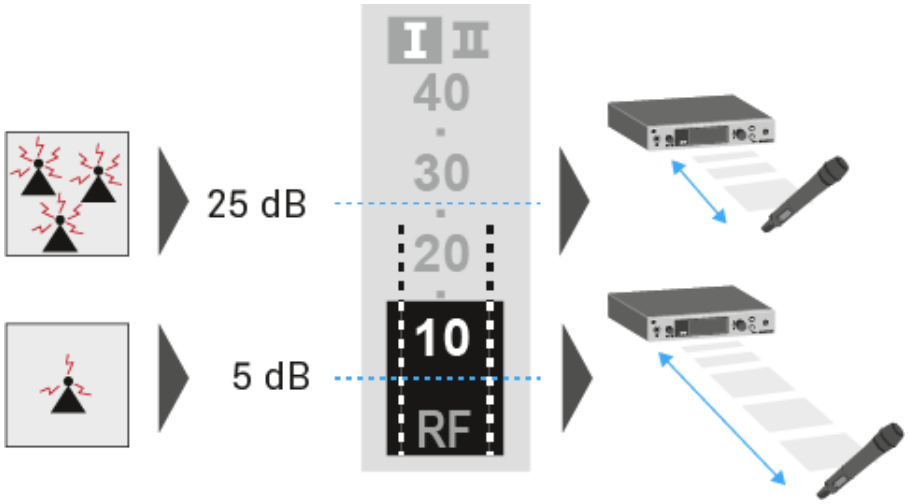
Squelch menu item

You can adjust the squelch threshold in the Squelch menu item.

Setting range:

- 5 - 25 dBµV
- adjustable in 2 dB steps

The squelch threshold is displayed on the home screen in the RF signal level area.



CAUTION

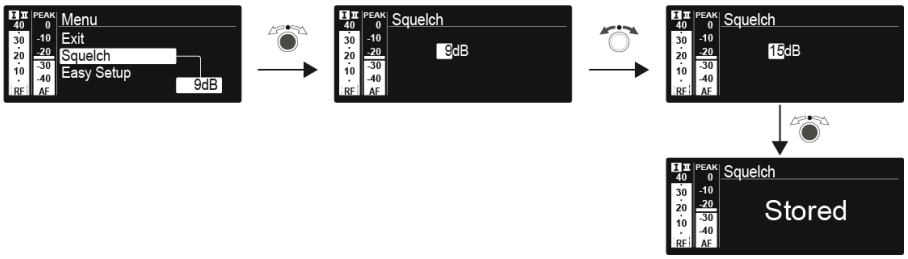
Risk of hearing and material damage

If you set the squelch threshold to a very low value, a very loud hissing noise can occur in the receiver. This hissing noise can be loud enough to cause hearing damage or overload your system's loudspeakers.

- Before adjusting the squelch threshold, set the volume of the audio output to the minimum.
- Never change the squelch threshold during a live transmission.

To open the Squelch menu item:

- On the home screen, press the **jog dial** to open the operating menu.
- Turn the **jog dial** until the Squelch menu item appears in the selection frame.
- Press the **jog dial** to open the menu.
- Adjust the settings as desired.



- Press the **jog dial** to save your selection.
  OR
- Press the **ESC** button to cancel the entry without saving the setting.

Easy Setup menu item

You can scan for unused frequencies using the Easy Setup menu item.

When you have connected multiple EM 300-500 G4 devices to a network via the RJ-45 interfaces (see Creating a data network), you can perform the frequency setup for all of the connected receivers.

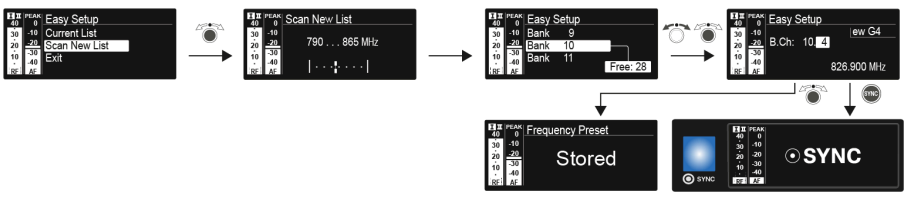
> **i** Switch off all transmitters before you perform the scan. If transmitters are still switched on, they are detected as unavailable frequencies and the frequencies that are actually available cannot then be used.

To open the Easy Setup menu item:

- On the home screen, press the **jog dial** to open the operating menu.
- Turn the **jog dial** until the **Easy Setup** menu item appears in the selection frame.
- Press the **jog dial** to open the menu.

Scan New List

- Select **Scan New List** to scan for unused frequencies.
- Press the **jog dial** to start the scan.
  - ✓ The frequency range of the receiver is scanned. As a result, the number of unused frequencies is displayed for every frequency bank.
- Turn the **jog dial** to select a frequency bank.
- Press the **jog dial** to confirm your selection.
- Turn the **jog dial** to select an unused frequency from the selected bank.
- Press the **jog dial** to save your selection and synchronize the selected frequency with the transmitter at a later point (see Ew 300-500 G4 synchronizing).
  OR
- Press the **SYNC** button to synchronize the selected frequency with the transmitter immediately.



Current List

- Select **Current List** to show the list of unused frequencies from the last scan.

Reset

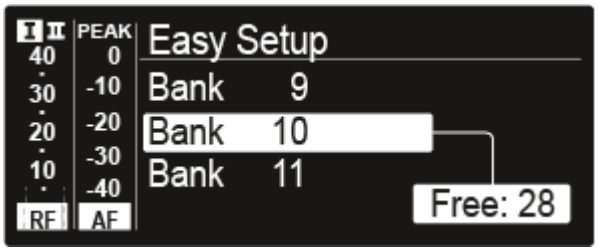
- Select **Reset List** to delete the list of unused frequencies.

Performing multi-channel frequency setup

> **i** As an alternative to the following procedure, multi-channel frequency setup can also be performed using the **Sennheiser Wireless Systems Manager (WSM)** software. For more information about controlling devices via the **Sennheiser Wireless Systems Manager (WSM)** software, refer to the instruction manual for the software. You can download the software here: sennheiser.com/wsm.

To perform the automatic frequency setup for multiple radio links simultaneously:

- Connect all of the receivers to one network using a network switch. See Creating a data network.
- Please note that all receivers must be in the same IP address range.
  - The IP addresses can be **automatically** assigned if there is a DHCP server in the network.
  - If there is no DHCP server in the network, the IP addresses must be assigned **manually**. See Advanced -> IP Address menu item.
  - Assign the IP addresses for all receivers in the **192.168.x.x** range (the link-local range **169.254.x.x** is also a possible alternative).
- Open the **Easy Setup** menu item on one of the receivers.
  - ✓ This receiver is the master. You can choose any receiver to be the master.
- Perform the frequency scan on the master receiver as described under Scan New List.
- From the scan results in the master receiver, select a frequency bank with enough free channels.

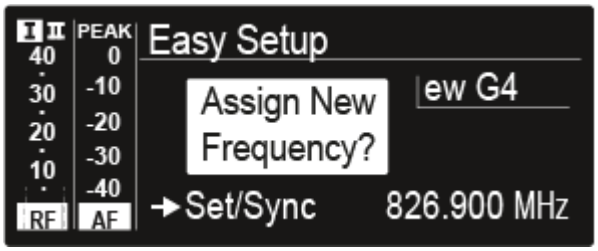


  - ✓ After you make your selection, the display panels of the other receivers will display the message Assign New Frequency?.

Receivers with non-compatible frequency ranges will display the message Unassignable Frequency!.



- Select an unused frequency for one of the connected receiver on the master receiver.
  - The frequency selected on the master receiver will also be shown on the display panel of the connected receivers.



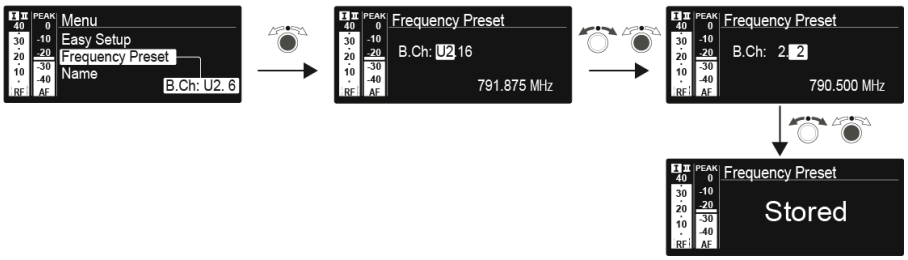
- Press the **jog dial** (SET) on the particular receiver to save your selected frequency and synchronize it with the corresponding transmitter at a later point (see Ew 300-500 G4 synchronizing).
  OR
- Press the **SYNC** button to synchronize the selected frequency with the transmitter immediately.
- Use this procedure to assign an unused frequency to all connected receivers, one after another.
- For the last step, assign a frequency to the master receiver.
  - This completes the multi-channel frequency setup.

Frequency Preset menu item

In the Frequency Preset menu item, you can adjust the receiving frequency of the receiver by adjusting the frequency bank and the channel.

To open the Frequency Preset menu item:

- On the home screen, press the **jog dial** to open the operating menu.
- Turn the **jog dial** until the **Frequency Preset** menu item appears in the selection frame.
- Press the **jog dial** to open the menu.
- Adjust the settings as desired.



- Press the **jog dial** to save your selection.
  OR
- Press the **ESC** button to cancel the entry without saving the setting.

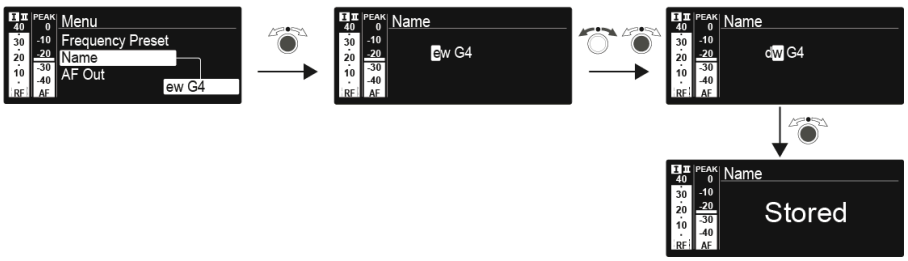
> **i** You can set the frequencies of the frequency bank U here: Advanced -> Tune menu item.

Name menu item

In the Name menu item you can enter a name for the radio link.

To open the Name menu item:

- On the home screen, press the **jog dial** to open the operating menu.
- Turn the **jog dial** until the **Name** menu item appears in the selection frame.
- Press the **jog dial** to open the menu.
- Adjust the settings as desired.



- Press the **jog dial** to save your selection.
  OR
- Press the **ESC** button to cancel the entry without saving the setting.

AF Out menu item

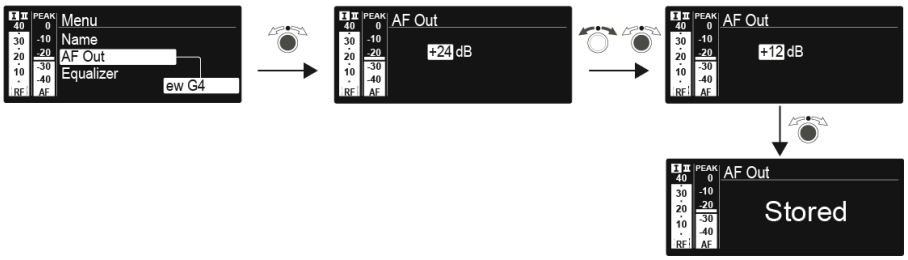
In the AF Out menu item, you can set the audio level that is output via the receiver audio outputs.

Setting range:

- -24 dB to +24 dB
- in 3 dB steps

To open the AF Out menu item:

- On the home screen, press the **jog dial** to open the operating menu.
- Turn the **jog dial** until the **AF Out** menu item appears in the selection frame.
- Press the **jog dial** to open the menu.
- Adjust the settings as desired.



- Press the **jog dial** to save your selection.
  OR
- Press the **ESC** button to cancel the entry without saving the setting.

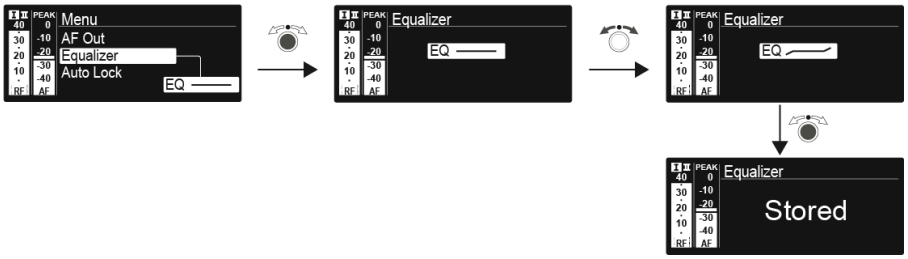
Equalizer menu item

In the Equalizer menu item, you can change the frequency response of the output signal.

You can reduce the bass range and boost the treble range.

To open the Equalizer menu item:

- On the home screen, press the **jog dial** to open the operating menu.
- Turn the **jog dial** until the **Equalizer** menu item appears in the selection frame.
- Press the **jog dial** to open the menu.
- Adjust the settings as desired.



- Press the **jog dial** to save your selection.
  OR
- Press the **ESC** button to cancel the entry without saving the setting.

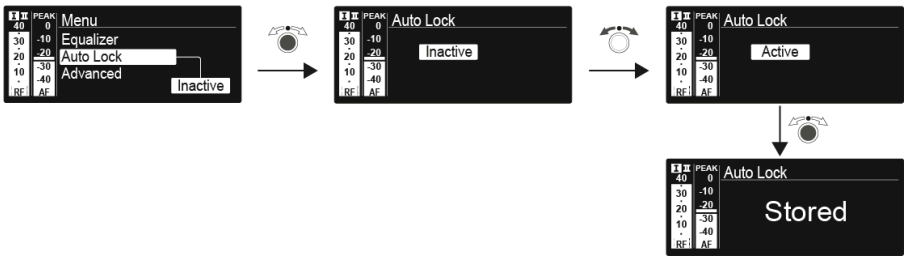
Auto Lock menu item

In the Auto Lock menu item you can activate or deactivate auto lock-off function.

> **i** You can find information about temporarily deactivating the lock-off function during operation under Lock-off function.

To open the Auto Lock menu item:

- On the home screen, press the **jog dial** to open the operating menu.
- Turn the **jog dial** until the **Auto Lock** menu item appears in the selection frame.
- Press the **jog dial** to open the menu.
- Adjust the settings as desired.



- Press the **jog dial** to save your selection.
  OR
- Press the **ESC** button to cancel the entry without saving the setting.

Advanced menu item

In the Advanced submenu you can configure enhanced settings.

To open the Advanced submenu:

- On the home screen, press the **jog dial** to open the operating menu.
- Turn the **jog dial** until the **Advanced** menu item appears in the selection frame.
- Press the **jog dial** to open the menu.
  - The following sub-items are available:

Adjusting the receiving frequency for the frequency bank U

- See Advanced -> Tune menu item

Receiving frequency

- See Advanced -> Sync Settings menu item

Activating/deactivating the pilot tone evaluation

- See Advanced -> Pilot Tone menu item

Activating/deactivating warnings

- See Advanced -> Fullscreen Warnings menu item

Adjusting the contrast of the display panel

- See Advanced -> Brightness menu item

Resetting the receiver

- See Advanced -> Reset menu item

Adjusting the network configuration

- See Advanced -> IP Address menu item

Displaying the current software revision

- See Advanced -> Software Revision menu item

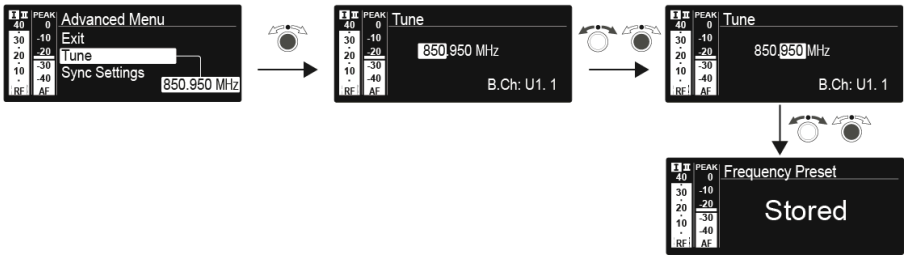
Advanced -> Tune menu item

In the Tune menu item of the Advanced submenu, you can configure the receiving frequencies for the frequency banks U1 to U6.

You can save a total of 32 frequencies in the U frequency bank.

Only adjusting the frequency

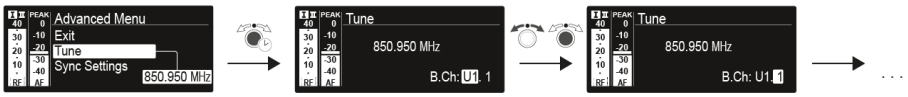
- Open the **Tune** menu item in the **Advanced** menu.
- Adjust the settings.



- Press the **jog dial** to save your selection.
  OR
- Press the **ESC** button to cancel the entry without saving the setting.

Setting the channel and frequency

- Select the **Tune** menu item and call it up by holding down the **SET** button until the channel selection appears.
- Adjust the settings.



- Press the **jog dial** to save your selection.
  OR
- Press the **ESC** button to cancel the entry without saving the setting.

Advanced -> Sync Settings menu item

In the Sync Settings menu item of the Advanced submenu, you can configure the parameters to be sent to the transmitters and activate or deactivate transmission.

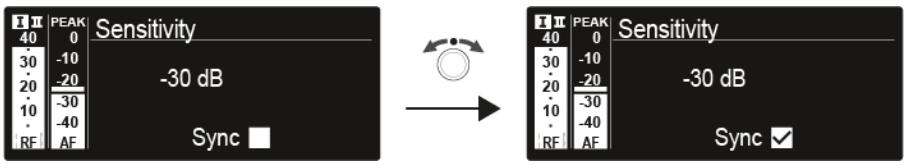
The parameters are defined separately for the SK, SKM and SKP.

You can activate/deactivate the following parameters:

- Sensitivity
- Auto Lock
- Mute Mode
- RF Power
- Phantom Power 48V (only SKP)

To configure a parameter and activate or deactivate transmission:

- Go to the parameter in question in the **Advanced -> Sync Settings** menu.
- Press the **jog dial** to open the sub-item.
- Turn the **jog dial** to set the value.
- Press the **jog dial** to save your setting.
- Turn the **jog dial** to activate or deactivate the check box.

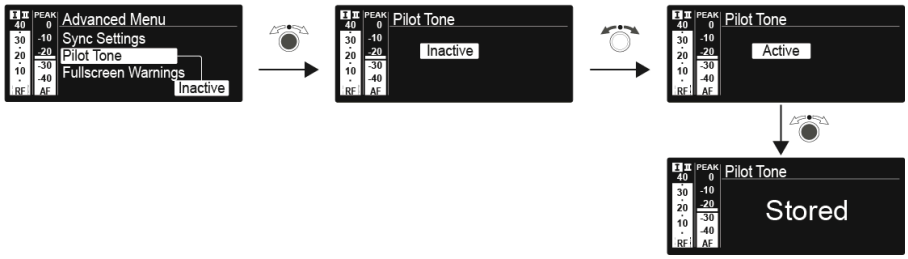


When the check box is activated, the value will be transmitted during synchronization. If it is deactivated, the value will not be transmitted.

- Press the **jog dial** to save your setting.

Advanced -> Pilot Tone menu item

In the Pilot Tone menu item of the Advanced submenu, you can activate and deactivate the pilot tone evaluation.

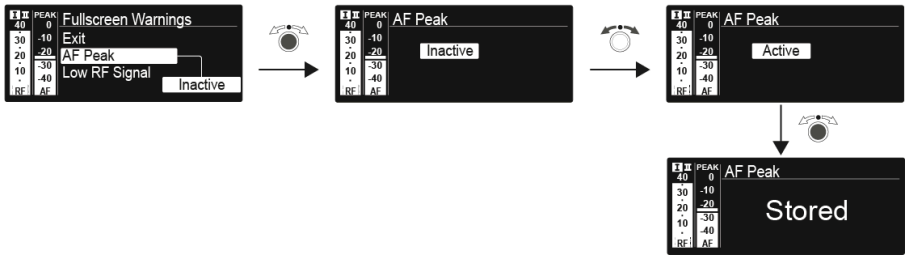


The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver’s squelch function.

Advanced -> Fullscreen Warnings menu item

In the Warnings menu item of the Advanced submenu, you can activate or deactivate warnings for certain cases.

The warning in question will flash across the entire screen.



You can activate or deactivate the following warnings:

AF Peak

- The audio level is too high.

Low RF signal

- The RF signal is too weak.

RF Mute

- The RF signal from the transmitter to the receiver is deactivated.

TX Mute

- The transmitter audio signal is muted.

RX Mute

- The receiver audio output is muted.

Low Battery

- The battery charge of the transmitter is low.

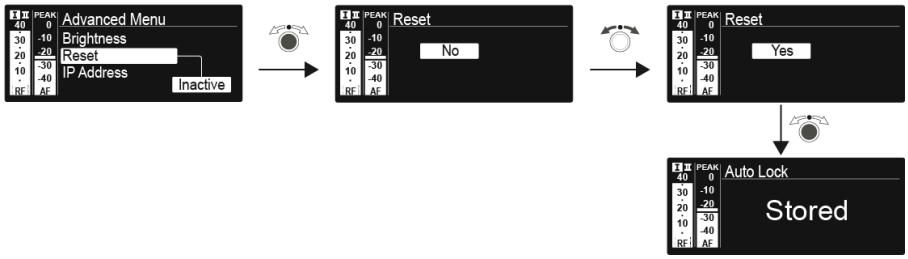
Advanced -> Brightness menu item

In the Brightness menu item of the Advanced submenu, you can adjust the display contrast of the display panel.



Advanced -> Reset menu item

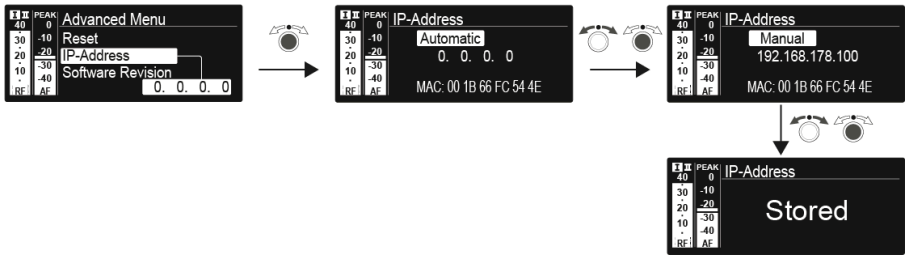
In the Reset menu item of the Advanced submenu, you can reset the settings of the receiver.



Advanced -> IP Address menu item

In the IP Address menu item of the Advanced submenu, you can configure the IP addresses.

The IP addresses can be obtained automatically (automatic) or entered manually (manual).

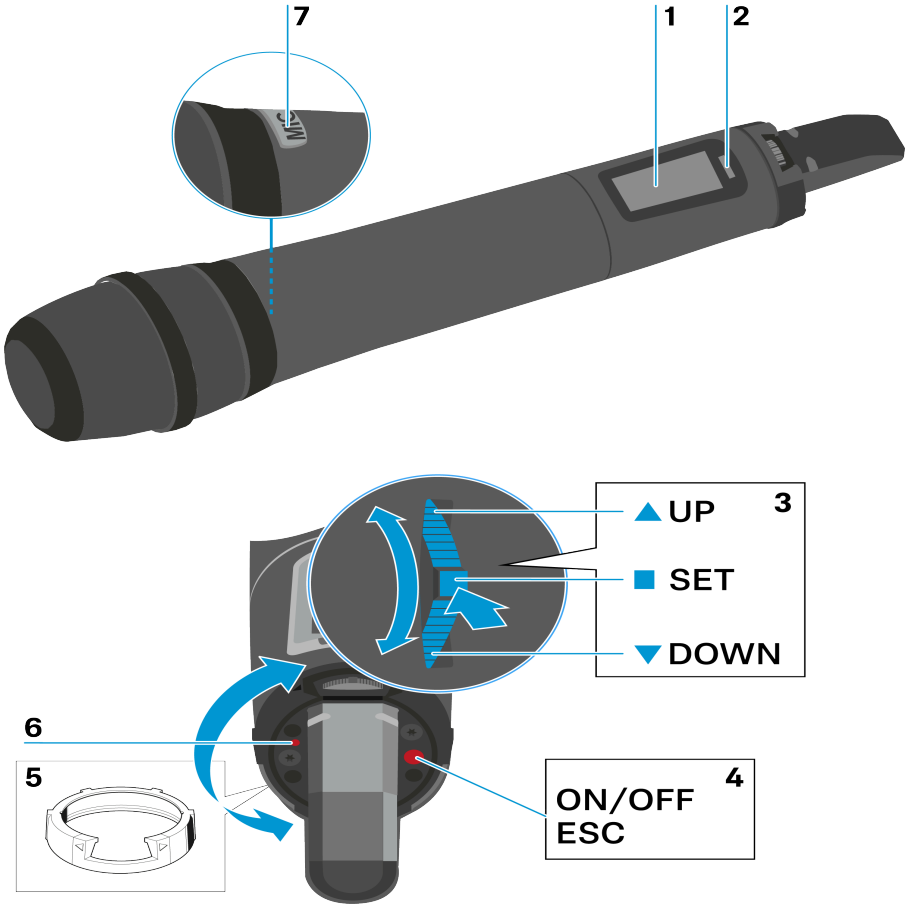


Advanced -> Software Revision menu item

In the Software Revision menu item of the Advanced submenu, you can display the current software version of the receiver.

SKM 300 G4-S handheld transmitter

Product overview



1 Display panel

- see Displays on the handheld transmitter display panel

2 Infra-red interface

- see Ew 300-500 G4 synchronizing

3 **DOWN**, **UP** and **SET** multi-function switch

- see Buttons for navigating the menu

4 **ON/OFF** button with ESC function in the operating menu

- Switch the transmitter on or off, see Switching the handheld transmitter on and off
- Escape function in the menu, see Buttons for navigating the menu
- Deactivating the RF signal, see Deactivating the RF signal (RF mute)

5 Colored ring

- Available in different colors, see KEN 2 Color labeling set and Changing the colored ring
- Can be turned to protect the multi-function switch

6 Operation and battery indicator, red LED

- illuminated = ON, see Switching the handheld transmitter on and off
- flashing = LOW BATTERY, see Inserting and removing the batteries/rechargeable batteries

7 **MIC** button (only SKM 300 G4-S)

- see Muting the handheld transmitter (AF mute)
- see Deactivating the RF signal (RF mute)
- see Advanced > Mute Mode menu item

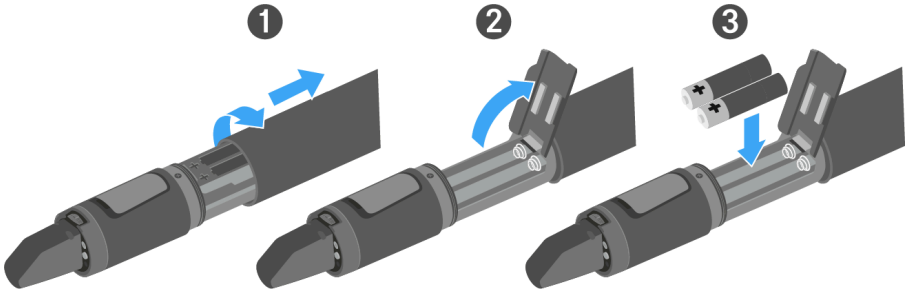
Inserting and removing the batteries/rechargeable batteries

You can operate the wireless microphone either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

- Screw the rear part of the wireless microphone in the direction of the arrow (counter-clockwise) off of the handle of the wireless microphone.

  > **i** When you remove the wireless microphone during operation, mute is automatically activated. **MUTE** appears in the display panel. When you screw the microphone back together, mute is deactivated.

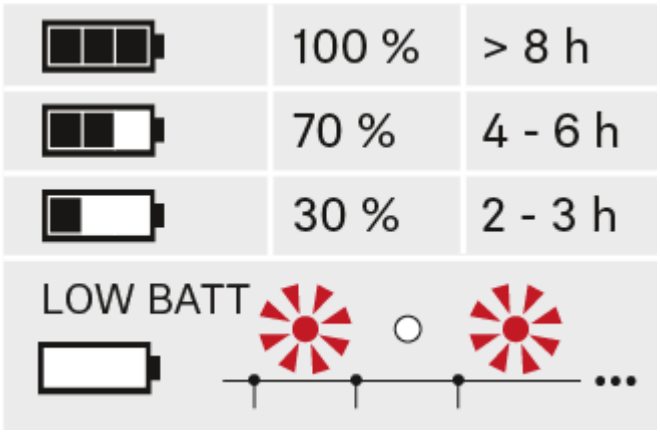
- Pull the rear part of the wireless microphone all the way out.
- Open the cover of the battery compartment.
- Place the batteries or the BA 2015 rechargeable battery in the battery compartment as shown on the cover. Please observe correct polarity when inserting the batteries/ accupack.



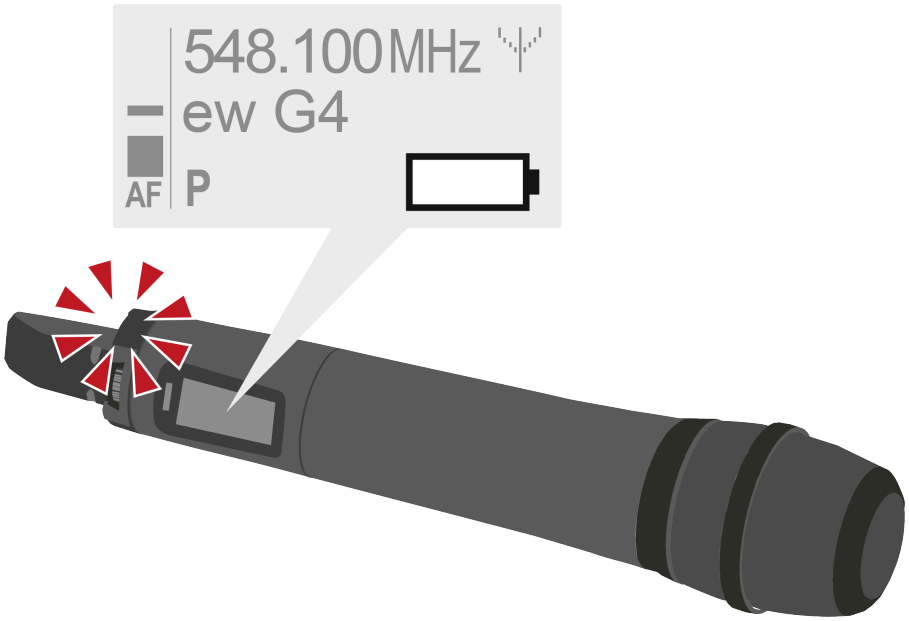
- Close the cover.
- Push the battery compartment into the handle of the wireless microphone.
- Screw the rear part of the wireless microphone back onto the handle.

Battery status

Charge status of the batteries:



Charge status is critical (LOW BATT):



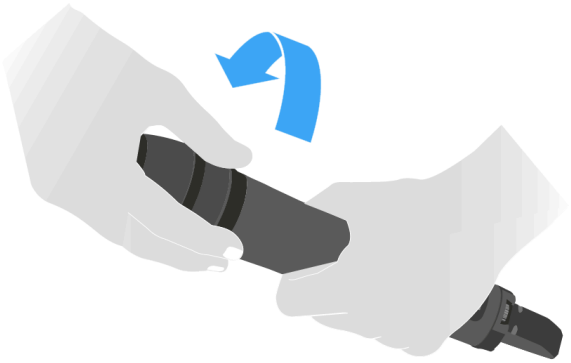
Replacing the microphone module

You can find a list of the recommended microphone modules for the handheld transmitter under Microphones and cables.

> **i** Do not touch the wireless microphone contacts or the microphone module contacts. If you touch the contacts, they may become dirty or bent.

To change the microphone module:

- Unscrew the microphone module.
- Screw the desired microphone module on.



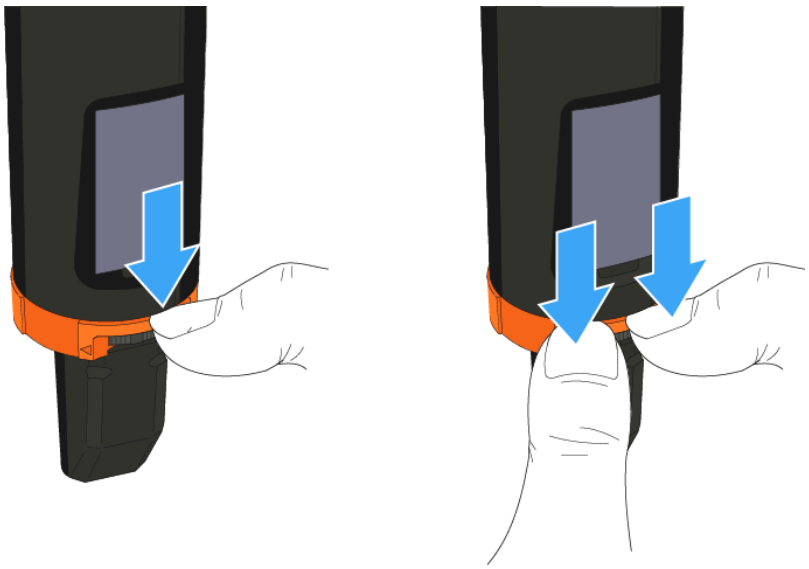


> **i** When you remove the wireless microphone during operation, mute is automatically activated. **MUTE** appears in the display panel. When you screw the microphone back together, mute is deactivated.

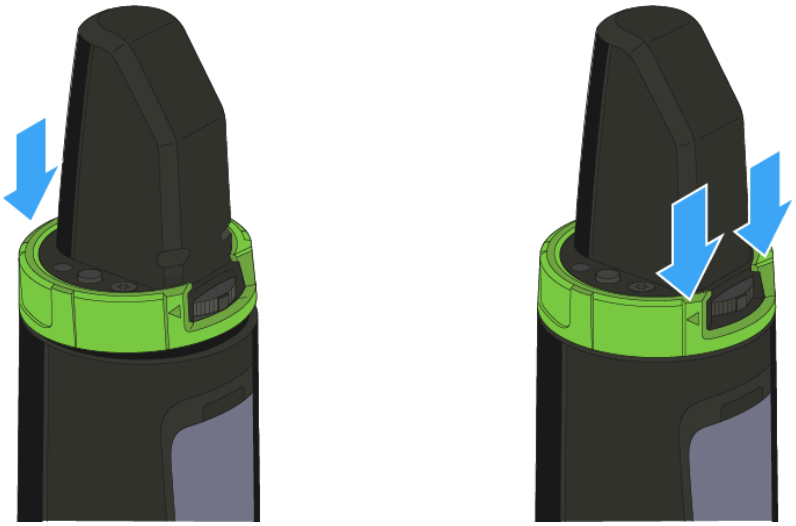
Changing the colored ring

To change the colored ring:

- Pull the colored ring off as shown in the diagram.



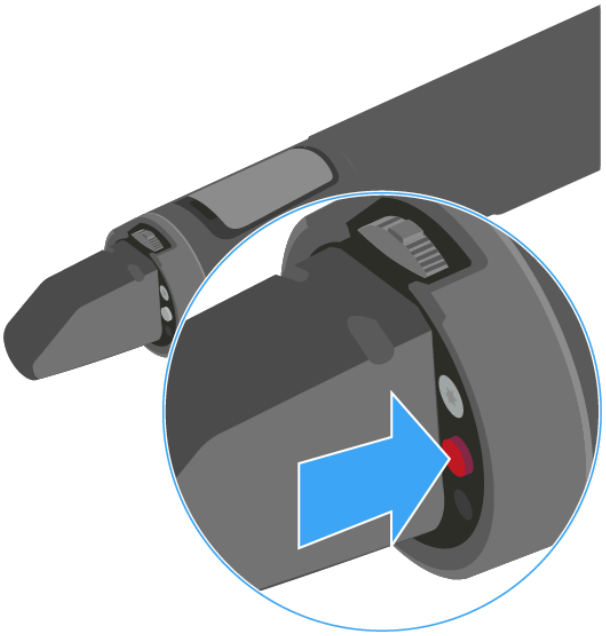
- Attached a colored ring in the color you want as shown in the diagram.



Switching the handheld transmitter on and off

To switch on the handheld transmitter:

- Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



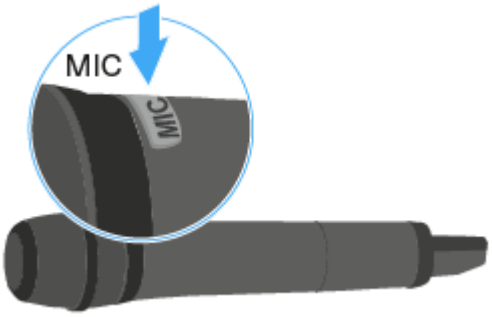
To switch off the handheld transmitter:

- Hold down the **ON/OFF** button until the display goes off.

Muting the handheld transmitter (AF mute)

You can mute the audio signal by pressing the **MIC** button.

To do this, the **MIC** button function must be configured to **AF On/Off**. You can find more information about this subject under Advanced > Mute Mode menu item.



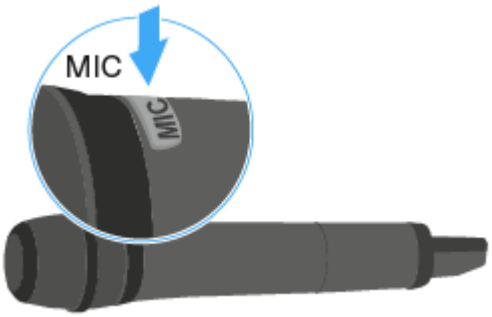
Furthermore, you can configure whether the **MIC** button should light up red and when. You can find more information about this subject under Advanced > MIC LED menu item.

Deactivating the RF signal (RF mute)

You can deactivate the RF signal in two ways:

Deactivating the RF signal with the MIC button

- You can mute the RF signal by pressing the **MIC** button.
- To do this, the **MIC** button function must be configured to **RF On/Off**. You can find more information about this subject under Advanced > Mute Mode menu item.



- Furthermore, you can configure whether the **MIC** button should light up red and when. You can find more information about this subject under Advanced > MIC LED menu item.

Deactivating the RF signal with the ON/OFF button

- You can deactivate the RF signal with the **ON/OFF** button.

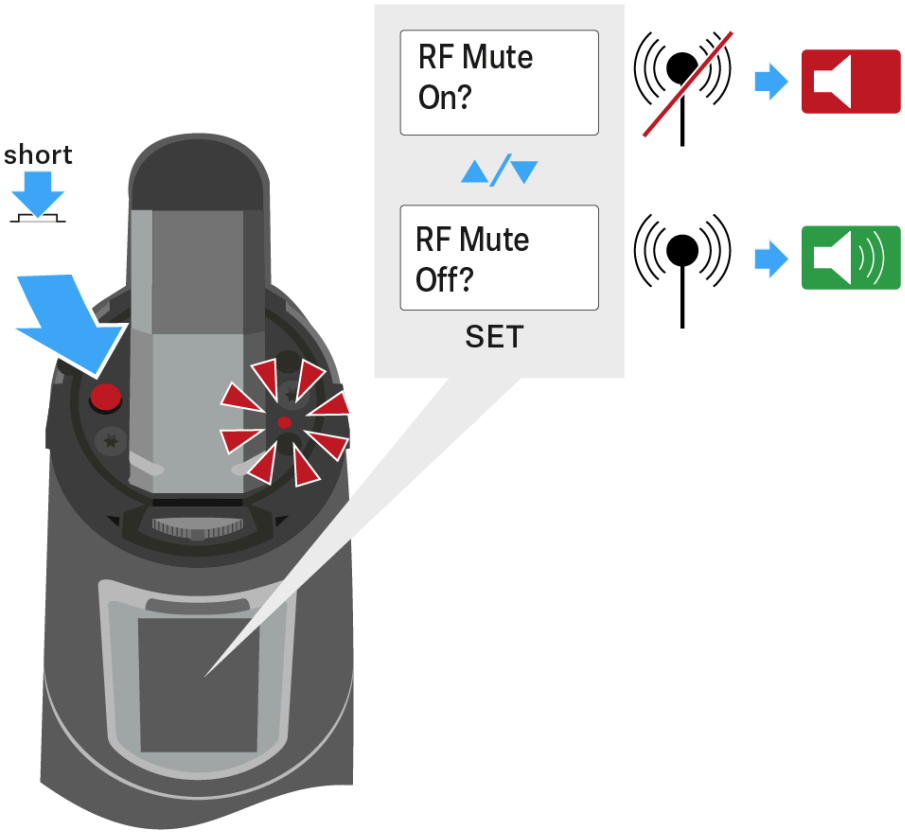
Deactivating the RF signal with the ON/OFF button

▶ Press the **ON/OFF** button.

✓ RF Mute On? appears.

▶ Press the **SET** button.

- The transmission frequency is displayed, however the wireless microphone is not transmitting an RF signal. The transmission icon is not lit (see Displays on the handheld transmitter display panel).



To activate the RF signal:

- Press the **ON/OFF** button.
  - RF Mute Off? appears.
- Press the **SET** button.
  - The transmission icon appears again (see Displays on the handheld transmitter display panel).

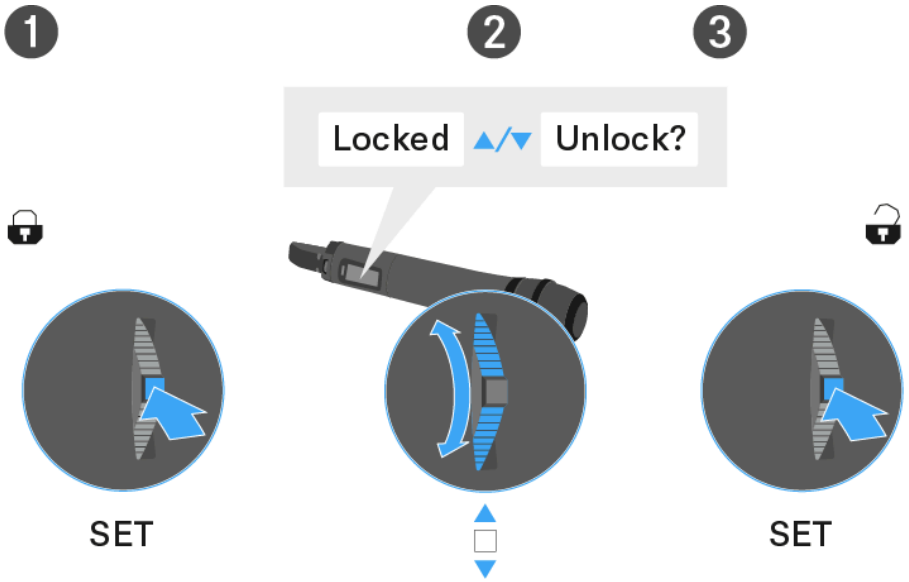
Lock-off function

You can set the automatic lock-off function in the **Auto Lock** menu (see Auto Lock menu item).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

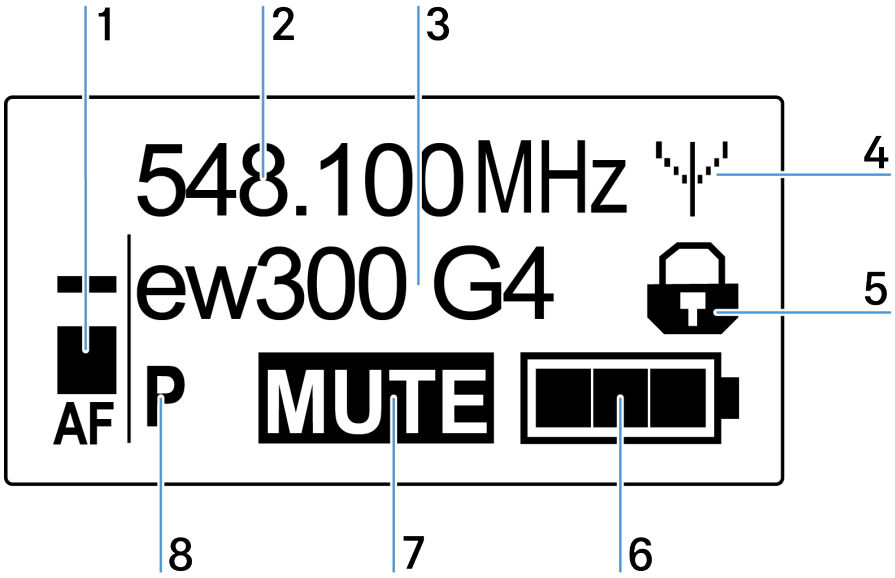
To temporarily deactivate the lock-off function:

- Press the **SET** button.
  - ✓ Locked appears in the display panel.
- Press the **UP** or **DOWN** button.
  - ✓ Unlock? appears in the display panel.
- Press the **SET** button.
  - ✓ Lock-off function is now temporarily deactivated.



Displays on the handheld transmitter display panel

You can view the following information on the transmitter display.



1 AF audio level

- Displays the audio level with peak hold function
- see Sensitivity menu item

2 Frequency

- Configured transmission frequency
- see Frequency Preset menu item

3 Name

- Freely selectable name of the receiver
- see Name menu item

4 Transmission icon

- RF signal is being transmitted
- see Deactivating the RF signal (RF mute)

5 Lock-off function

- Lock-off function is activated
- see Auto Lock menu item

6 Battery status

- see Battery status

7 **MUTE** muting function

- The audio signal is muted
- see Muting the handheld transmitter (AF mute)

8 **P** pilot tone

- Pilot tone transmission is activated
- see Advanced > Pilot Tone menu item

Select a standard display

▶ Move the multi-function switch to select a standard display:
Frequency/Name standard display



Channel/Frequency standard display



Name/Channel standard display



Buttons for navigating the menu

To open the menu:

- Press the **SET** button.
  - The operating menu is shown on the transmitter display panel.
- Press the **UP** or **DOWN** buttons to navigate through the individual menu items.
- Press the **SET** button to open the selected menu item.

Making changes in a menu item:

- Press the **UP** or **DOWN** buttons to set the displayed value.
- Press the **SET** button to save the setting.
- Press the **ESC (ON/OFF)** button to leave the menu item without saving the setting.

Setting options in the menu

In the SKM 300 G4-S menu, you can configure the following settings

Adjusting the input sensitivity

- See Sensitivity menu item

Setting the frequency bank and the channel

- See Frequency Preset menu item

Entering a freely selectable name

- See Name menu item

Activating/deactivating the automatic lock-off function

- See Auto Lock menu item

Configuring enhanced settings in the Advanced Menu:

- Adjusting the transmission frequencies for the U frequency bank
- Defining the MIC button setting
- Configuring the background lighting of the MIC button
- Configuring the transmission power
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the transmitter
- Displaying the current software revision
- See Advanced menu item

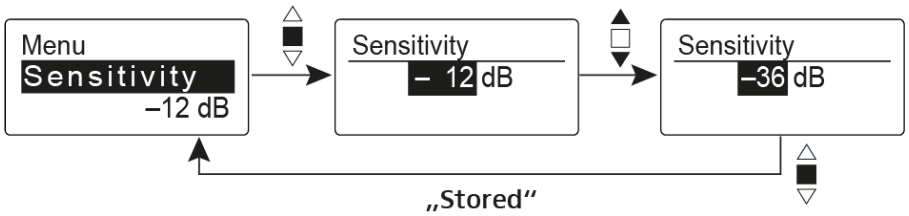
Sensitivity menu item

Adjusting the input sensitivity – AF audio level

Setting range:

- 0 to -48 dB
- in 6 dB steps

The **AF** audio level is also displayed when the wireless microphone is muted, e.g. to check the sensitivity before a live broadcast.



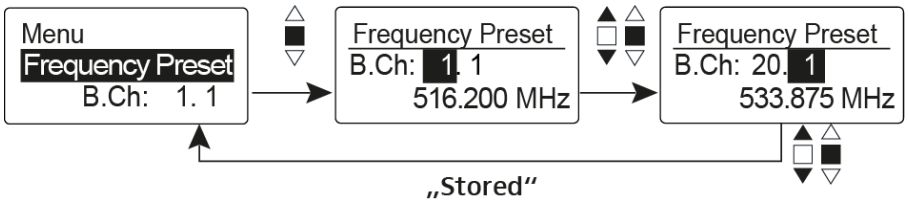
Recommended presets:

- Loud music/vocals: -48 to -18 dB
- Moderation: -18 to -12 dB
- Interviews: -12 to 0 dB

Frequency Preset menu item

Manually selecting a frequency bank and channel

> i While you work in the Frequency Preset menu, the RF signal is deactivated.



Please note when creating multi-channel systems:

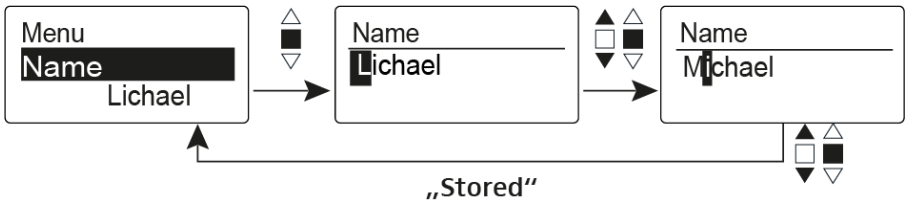
Only the factory-preset frequencies within one frequency bank are intermodulation-free. The wireless microphone and receiver must be set to the same frequency. Be sure to note the information on frequency selection under Establishing a radio link.

Name menu item

Entering names

In the **Name** menu item you can enter any name you want for the wireless microphone (e.g. the names of the musicians).

The name can be shown in the Frequency/Name and Name/Channel standard displays.



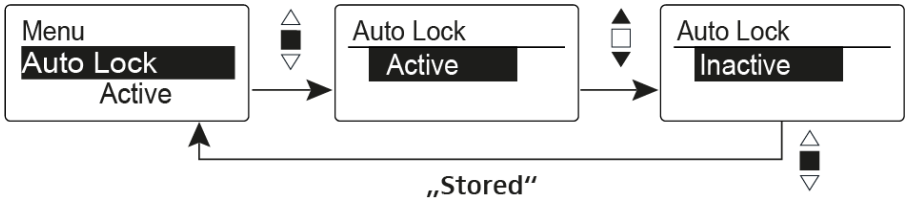
The names are a maximum of 8 characters:

- All letters except umlauts
- Numbers from 0 to 9
- Special characters and spaces

Auto Lock menu item

Switching the automatic lock-off function on and off

This lock prevents the wireless microphone from being unintentionally switched off and also prevents any unintentional changes to the transmitter's configuration. In the current standard display, the lock icon shows whether the lock-off function is currently switched on.



You can find information about using the lock-off function under Lock-off function.

Advanced menu item

In the Advanced submenu you can configure enhanced settings.

The following sub-items are available:

Adjusting the transmission frequencies for the U frequency bank

- See Advanced > Tune menu item

Defining the MIC button setting

- See Advanced > Mute Mode menu item

Configuring the background lighting of the MIC button

- See Advanced > MIC LED menu item

Configuring the transmission power

- See Advanced > RF Power menu item

Activating/deactivating the pilot tone evaluation

- See Advanced > Pilot Tone menu item

Adjusting the contrast of the display panel

- See Advanced > LCD Contrast menu item

Resetting the transmitter

- See Advanced > Reset menu item

Displaying the current software revision

- See Advanced > Software Revision menu item

Advanced > Tune menu item

Configuring the transmission frequency and frequency bank U

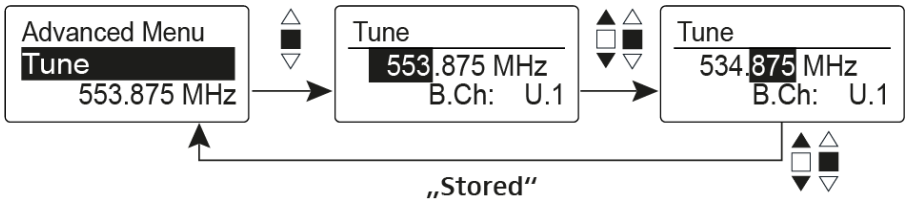
When you have configured the wireless microphone to a system bank and you call up the **Tune** menu item, channel 1 of the frequency bank **U** is automatically set. The message **U.1** briefly appears in the display. In the factory settings, the channels of the frequency bank **U** are not assigned to any transmission frequency.

While you work in the **Tune** menu, the RF signal is deactivated.

You can configure a transmission frequency for the current channel or select a channel in the frequency bank **U** and configure a transmission frequency for this channel in the **Tune** menu. Be sure to note the information on frequency selection, see Establishing a radio link.

To configure the transmission frequency for the current channel:

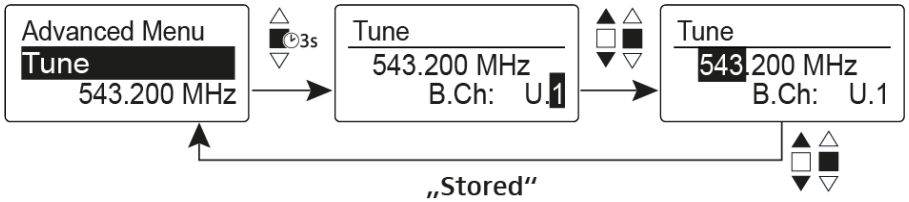
- Open the **Tune** menu item in the **Advanced** menu.
  - The frequency selection appears.



- Configure the desired frequency.
- Press the multi-function switch.
  - Your settings will be saved. You are now back in the operating menu.

To select a channel and assign it a frequency:

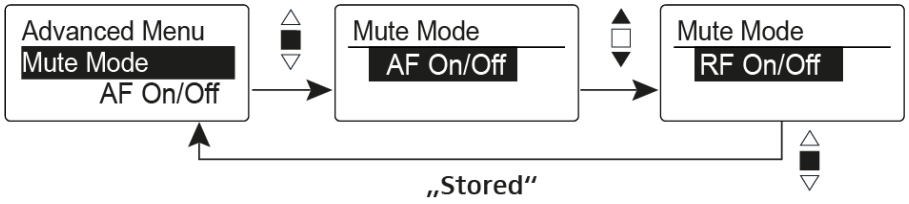
- Move the multi-function switch until the **Tune** menu item appears.
- Hold down the multi-function switch until the frequency bank selection appears.



- Set the desired channel.
- Press the multi-function switch.
  - The frequency selection appears.
- Configure the frequency.

Advanced > Mute Mode menu item

Configuring the function of the MIC button



AF On/Off mode

- When you press the **MIC** button, no audio signal is transmitted.

RF On/Off mode

- When you press the **MIC** button, the RF signal is deactivated.

Push To Mute mode

- e audio signal is deactivated as long as you press down the **MIC** button.

Push To Talk mode

- The audio signal is activated as long as you press down the **MIC** button.
- The wireless microphone is muted when you configure the **Push to Talk** function.

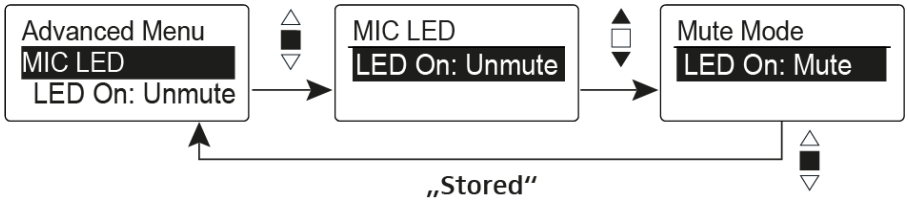
Disabled mode

- No function

> **i** You can find information about the **MIC** button under Muting the handheld transmitter (AF mute) and Deactivating the RF signal (RF mute).

Advanced > MIC LED menu item

Configuring the background lighting of the MIC button



In the **MIC LED** menu item you can configure and deactivate the background lighting of the **MIC** button regardless of the settings of the Advanced > Mute Mode menu item and the status of the RF signal.

LED On: setting Unmute

- The **MIC** button is backlit when the wireless microphone sends an RF signal or is not muted.

LED On: setting Mute

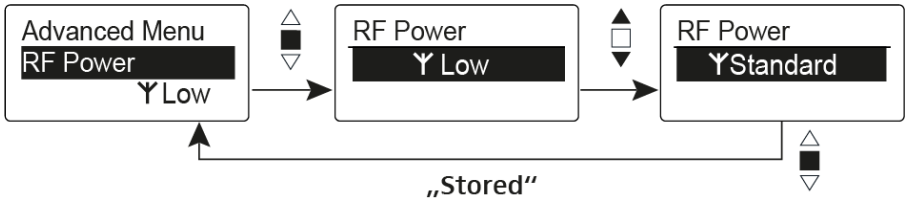
- The **MIC** button is backlit when the wireless microphone is not sending an RF signal or is muted.

Disable LED setting

- The background lighting of the **MIC** button is deactivated.

Advanced > RF Power menu item

Configuring the transmission power



You can configure the transmission power in three steps in the **RF Power** menu item.

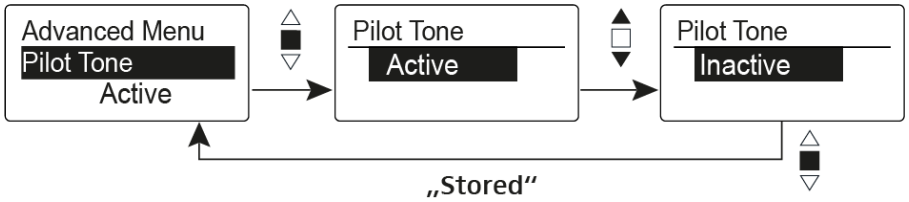
> **i** Please note the information at the following address: sennheiser.com/sifa.

Setting range:

- Low: 10 mW
- Standard: 30 mW
- High: 50 mW

Advanced > Pilot Tone menu item

Activating/deactivating pilot tone transmission



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver’s squelch function.

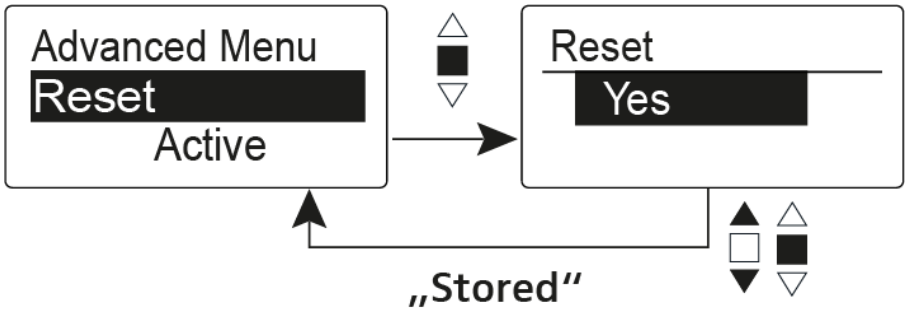
Advanced > LCD Contrast menu item

Adjusting the contrast of the display panel

You can configure the contrast of the display in 16 steps.

Advanced > Reset menu item

Resetting the wireless microphone



When you reset the wireless microphone, only the selected settings of the pilot tone and the **U1** to **U6** frequency banks are retained.

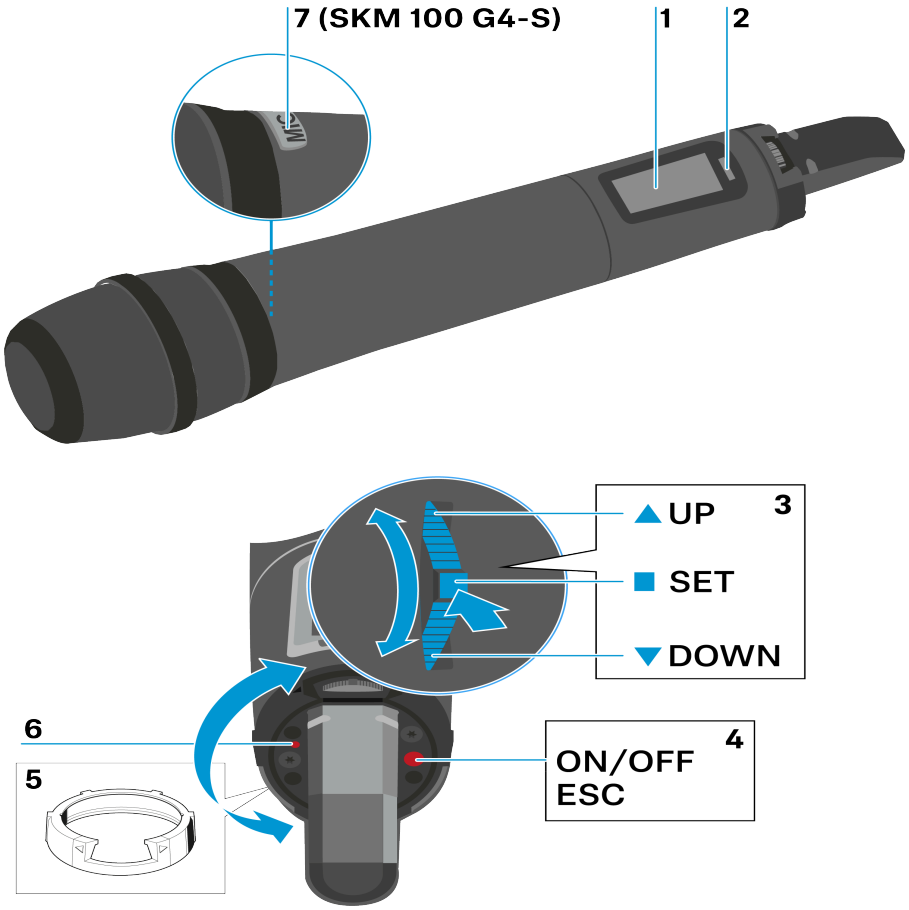
Advanced > Software Revision menu item

Show software revision

You can display the current software revision.

SKM 500 G4 handheld transmitter

Product overview



1 Display panel

- see Displays on the handheld transmitter display panel

2 Infra-red interface

- see Ew 300-500 G4 synchronizing

3 **DOWN**, **UP** and **SET** multi-function switch

- see Buttons for navigating the menu

4 **ON/OFF** button with ESC function in the operating menu

- Switch the transmitter on or off, see Switching the handheld transmitter on and off
- Escape function in the menu, see Buttons for navigating the menu
- Deactivating the RF signal, see Deactivating the RF signal (RF mute)

5 Colored ring

- Available in different colors, see KEN 2 Color labeling set and Changing the colored ring
- Can be turned to protect the multi-function switch

6 Operation and battery indicator, red LED

- illuminated = ON, see Switching the handheld transmitter on and off
- flashing = LOW BATTERY, see Inserting and removing the batteries/rechargeable batteries

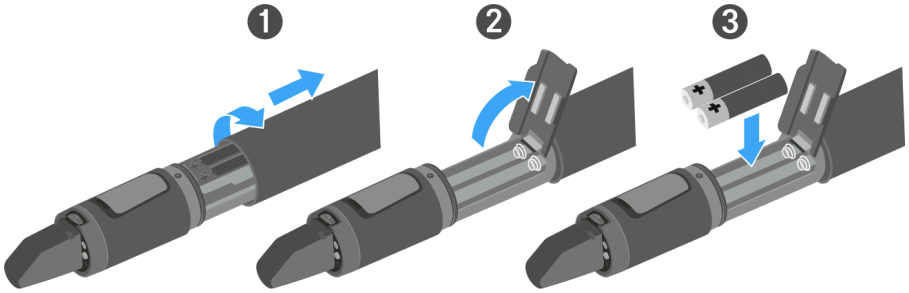
Inserting and removing the batteries/rechargeable batteries

You can operate the wireless microphone either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

- Screw the rear part of the wireless microphone in the direction of the arrow (counter-clockwise) off of the handle of the wireless microphone.

  > **i** When you remove the wireless microphone during operation, mute is automatically activated. **MUTE** appears in the display panel. When you screw the microphone back together, mute is deactivated.

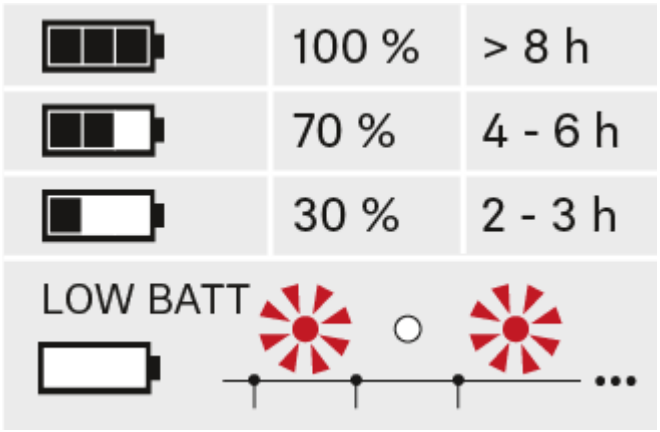
- Pull the rear part of the wireless microphone all the way out.
- Open the cover of the battery compartment.
- Place the batteries or the BA 2015 rechargeable battery in the battery compartment as shown on the cover. Please observe correct polarity when inserting the batteries/ accupack.



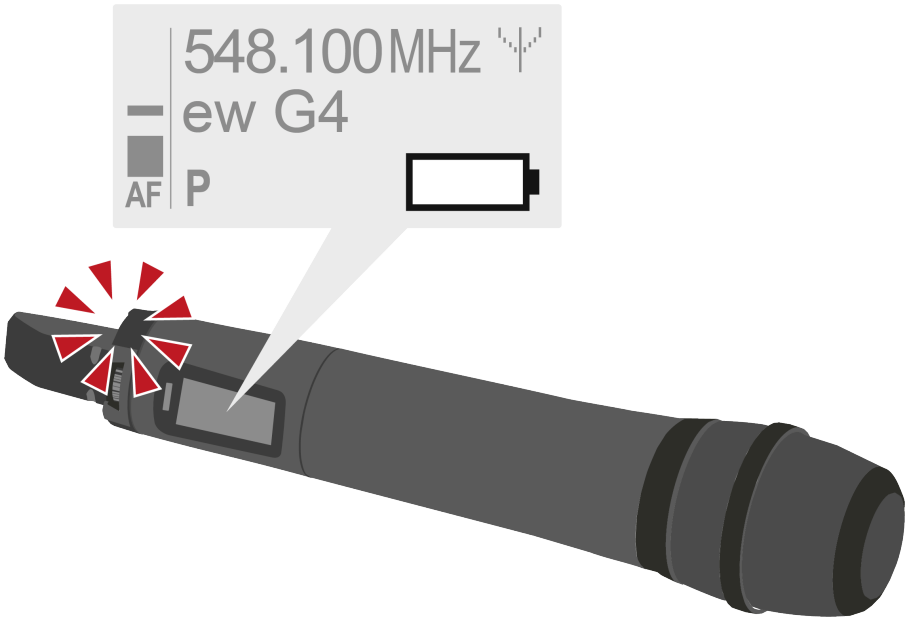
- Close the cover.
- Push the battery compartment into the handle of the wireless microphone.
- Screw the rear part of the wireless microphone back onto the handle.

Battery status

Charge status of the batteries:



Charge status is critical (LOW BATT):



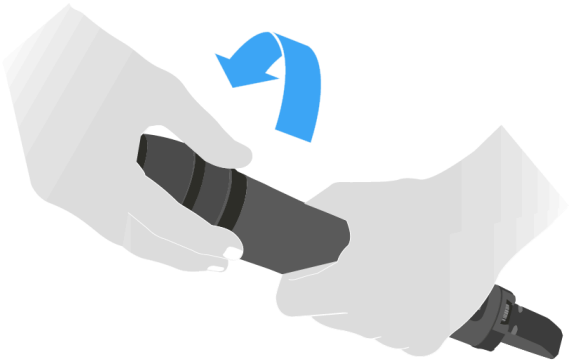
Replacing the microphone module

You can find a list of the recommended microphone modules for the handheld transmitter under Microphones and cables.

> **i** Do not touch the wireless microphone contacts or the microphone module contacts. If you touch the contacts, they may become dirty or bent.

To change the microphone module:

- Unscrew the microphone module.
- Screw the desired microphone module on.



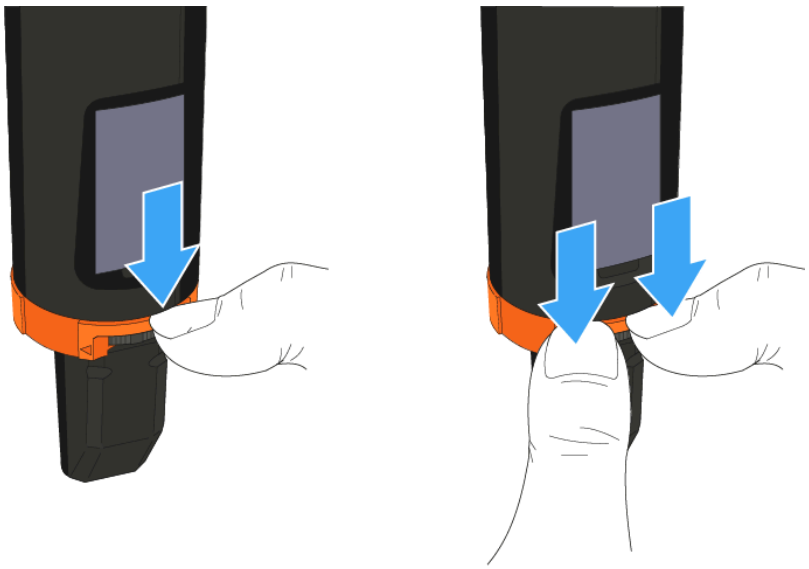


> **i** When you remove the wireless microphone during operation, mute is automatically activated. **MUTE** appears in the display panel. When you screw the microphone back together, mute is deactivated.

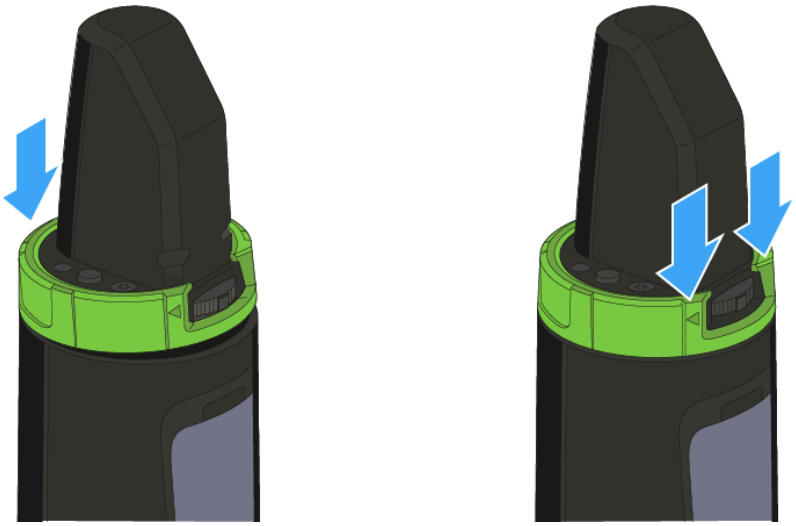
Changing the colored ring

To change the colored ring:

- Pull the colored ring off as shown in the diagram.



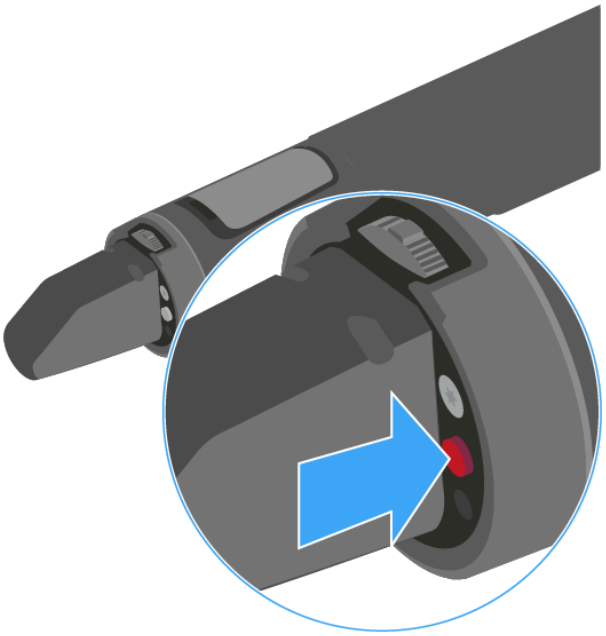
- Attached a colored ring in the color you want as shown in the diagram.



Switching the handheld transmitter on and off

To switch on the handheld transmitter:

- Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch off the handheld transmitter:

- Hold down the **ON/OFF** button until the display goes off.

Muting the handheld transmitter (AF mute)

The audio signal of the transmitter cannot be muted.

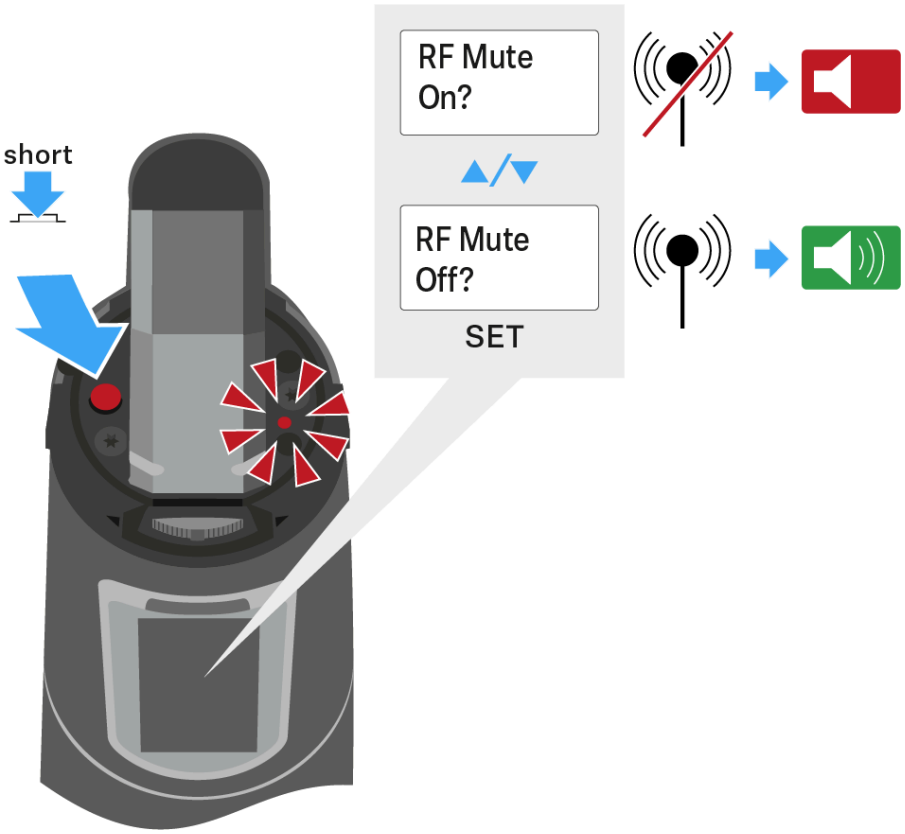
However, when you deactivate the RF signal no AF signal is output. See Deactivating the RF signal (RF mute).

Deactivating the RF signal (RF mute)

You can deactivate the RF signal with the **ON/OFF** button.

To deactivate the RF signal:

- Press the **ON/OFF** button.
  - ✓ RF Mute On? appears.
- Press the **SET** button.
  - ✓ The transmission frequency is displayed, however the wireless microphone is not transmitting an RF signal. The transmission icon is not lit (see Displays on the handheld transmitter display panel).



To activate the RF signal

- Press the **ON/OFF** button.
  - ✓ RF Mute Off? appears.
- Press the **SET** button.
  - ✓ The transmission icon appears again (see Displays on the handheld transmitter display panel).

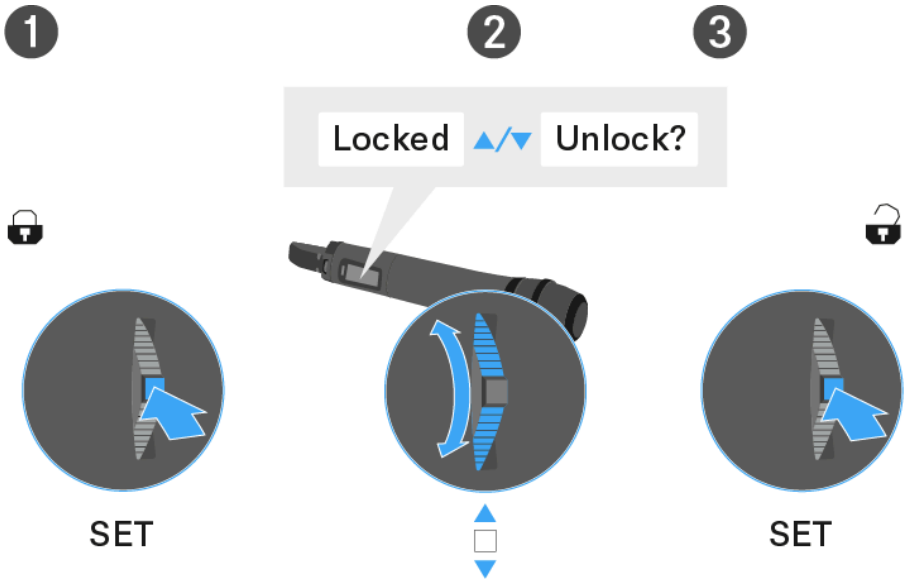
Lock-off function

You can set the automatic lock-off function in the **Auto Lock** menu (see Auto Lock menu item).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

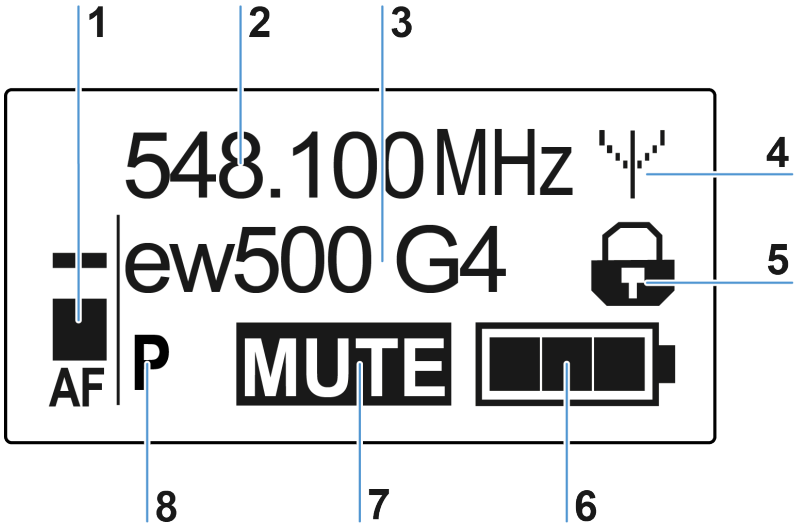
To temporarily deactivate the lock-off function:

- Press the **SET** button.
  - ✓ Locked appears in the display panel.
- Press the **UP** or **DOWN** button.
  - ✓ Unlock? appears in the display panel.
- Press the **SET** button.
  - ✓ Lock-off function is now temporarily deactivated.



Displays on the handheld transmitter display panel

You can view the following information on the transmitter display.



1 AF audio level

- Displays the audio level with peak hold function
- see Sensitivity menu item

2 Frequency

- Configured transmission frequency
- see Frequency Preset menu item

3 Name

- Freely selectable name of the receiver
- see Name menu item

4 Transmission icon

- RF signal is being transmitted
- see Deactivating the RF signal (RF mute)

5 Lock-off function

- Lock-off function is activated
- see Auto Lock menu item

6 Battery status

- see Battery status

7 **MUTE** muting function

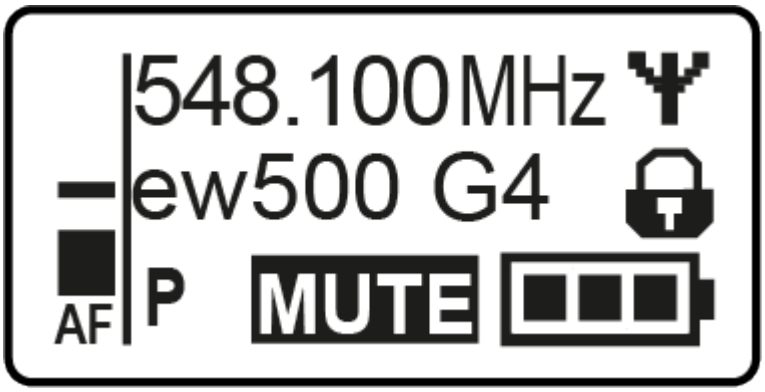
- The audio signal is muted
- see Muting the handheld transmitter (AF mute)

8 **P** pilot tone

- Pilot tone transmission is activated
- see Advanced > Pilot Tone menu item

Select a standard display

▶ Move the multi-function switch to select a standard display:
Frequency/Name standard display



Channel/Frequency standard display



Name/Channel standard display



Buttons for navigating the menu

To open the menu:

- Press the **SET** button.
  - The operating menu is shown on the transmitter display panel.
- Press the **UP** or **DOWN** buttons to navigate through the individual menu items.
- Press the **SET** button to open the selected menu item.

Making changes in a menu item:

- Press the **UP** or **DOWN** buttons to set the displayed value.
- Press the **SET** button to save the setting.
- Press the **ESC (ON/OFF)** button to leave the menu item without saving the setting.

Setting options in the menu

In the SKM 500 G4 menu, you can configure the following settings

Adjusting the input sensitivity

- See Sensitivity menu item

Setting the frequency bank and the channel

- See Frequency Preset menu item

Entering a freely selectable name

- See Name menu item

Activating/deactivating the automatic lock-off function

- See Auto Lock menu item

Configuring enhanced settings in the Advanced Menu:

- Adjusting the transmission frequencies for the U frequency bank
- Configuring the transmission power
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the transmitter
- Displaying the current software revision
- See Advanced menu item

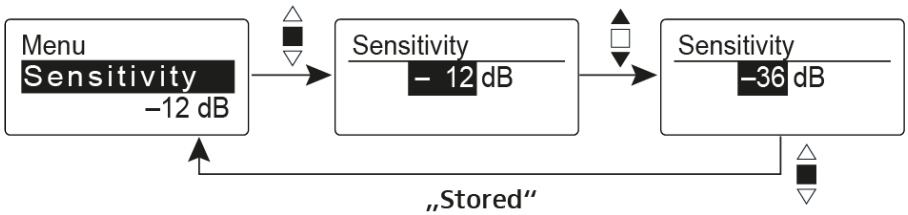
Sensitivity menu item

Adjusting the input sensitivity – AF audio level

Setting range:

- 0 to -48 dB
- in 6 dB steps

The **AF** audio level is also displayed when the wireless microphone is muted, e.g. to check the sensitivity before a live broadcast.



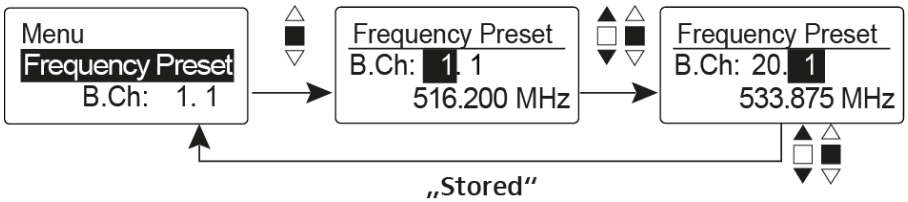
Recommended presets:

- Loud music/vocals: -48 to -18 dB
- Moderation: -18 to -12 dB
- Interviews: -12 to 0 dB

Frequency Preset menu item

Manually selecting a frequency bank and channel

> i While you work in the Frequency Preset menu, the RF signal is deactivated.



Please note when creating multi-channel systems:

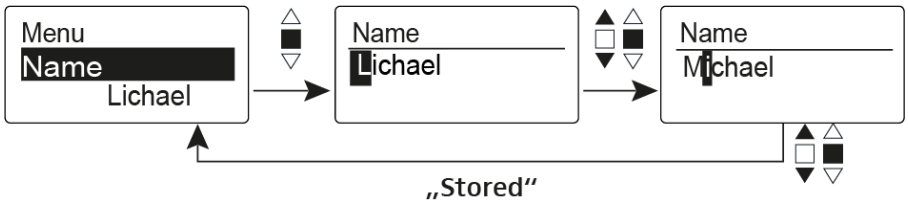
Only the factory-preset frequencies within one frequency bank are intermodulation-free. The wireless microphone and receiver must be set to the same frequency. Be sure to note the information on frequency selection under Establishing a radio link.

Name menu item

Entering names

In the **Name** menu item you can enter any name you want for the wireless microphone (e.g. the names of the musicians).

The name can be shown in the Frequency/Name and Name/Channel standard displays.



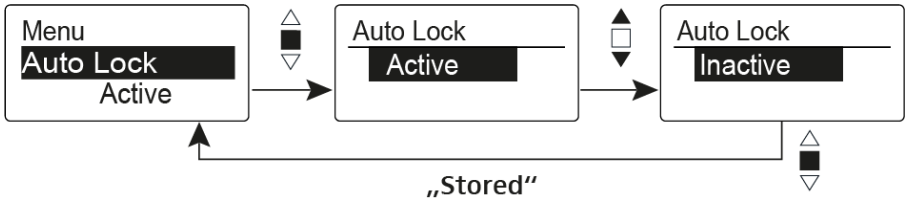
The names are a maximum of 8 characters:

- All letters except umlauts
- Numbers from 0 to 9
- Special characters and spaces

Auto Lock menu item

Switching the automatic lock-off function on and off

This lock prevents the wireless microphone from being unintentionally switched off and also prevents any unintentional changes to the transmitter's configuration. In the current standard display, the lock icon shows whether the lock-off function is currently switched on.



You can find information about using the lock-off function under Lock-off function.

Advanced menu item

In the Advanced submenu you can configure enhanced settings.

The following sub-items are available:

Adjusting the transmission frequencies for the U frequency bank

- See Advanced > Tune menu item

Configuring the transmission powerSendeleistung einstellen

- See Advanced > RF Power menu item

Activating/deactivating the pilot tone evaluation

- See Advanced > Pilot Tone menu item

Adjusting the contrast of the display panel

- See Advanced > LCD Contrast menu item

Resetting the transmitter

- See Advanced > Reset menu item

Displaying the current software revisions

- See Advanced > Software Revision menu item

Advanced > Tune menu item

Configuring the transmission frequency and frequency bank U

When you have configured the wireless microphone to a system bank and you call up the **Tune** menu item, channel 1 of the frequency bank **U** is automatically set. The message **U.1** briefly appears in the display. In the factory settings, the channels of the frequency bank **U** are not assigned to any transmission frequency.

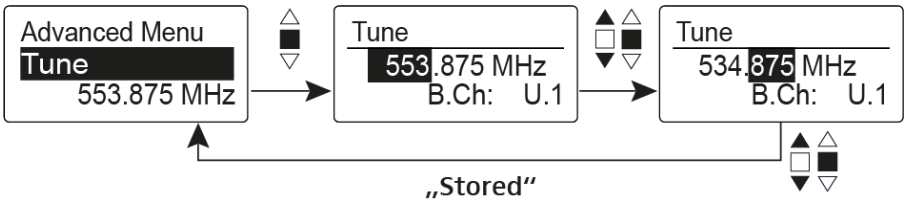
While you work in the **Tune** menu, the RF signal is deactivated.

You can configure a transmission frequency for the current channel or select a channel in the frequency bank **U** and configure a transmission frequency for this channel in the **Tune** menu. Be sure to note the information on frequency selection, see Establishing a radio link.

To configure the transmission frequency for the current channel:

▶ Open the **Tune** menu item in the **Advanced** menu.

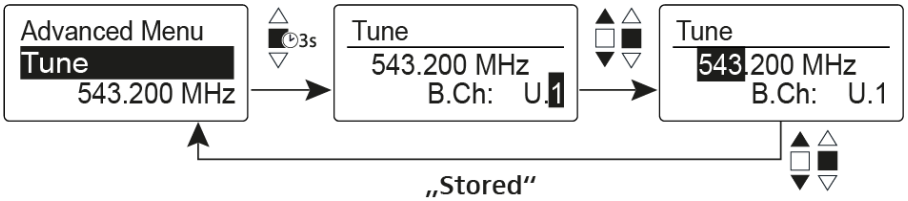
✓ The frequency selection appears.



- Configure the desired frequency.
- Press the multi-function switch.
  - Your settings will be saved. You are now back in the operating menu.

To select a channel and assign it a frequency:

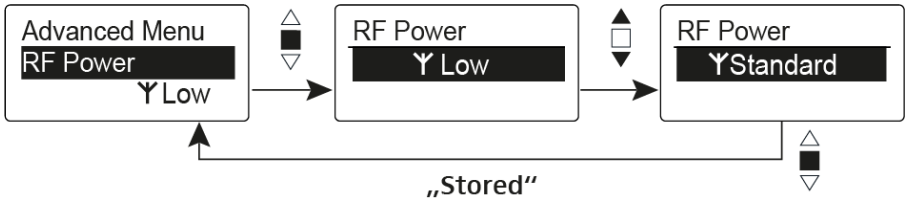
- Move the multi-function switch until the **Tune** menu item appears.
- Hold down the multi-function switch until the frequency bank selection appears.



- Set the desired channel.
- Press the multi-function switch.
  - The frequency selection appears.
- Configure the frequency.

Advanced > RF Power menu item

Configuring the transmission power



You can configure the transmission power in three steps in the **RF Power** menu item.

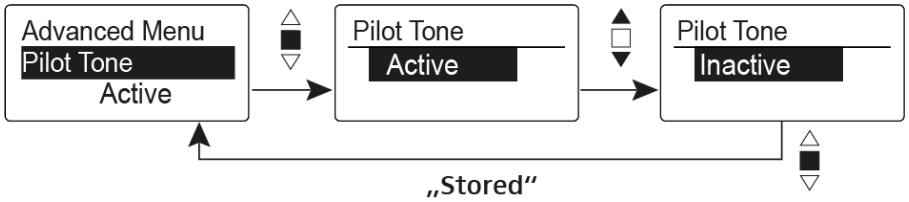
> **i** Please note the information at the following address: sennheiser.com/sifa.

Setting range:

- Low: 10 mW
- Standard: 30 mW
- High: 50 mW

Advanced > Pilot Tone menu item

Activating/deactivating pilot tone transmission



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver’s squelch function.

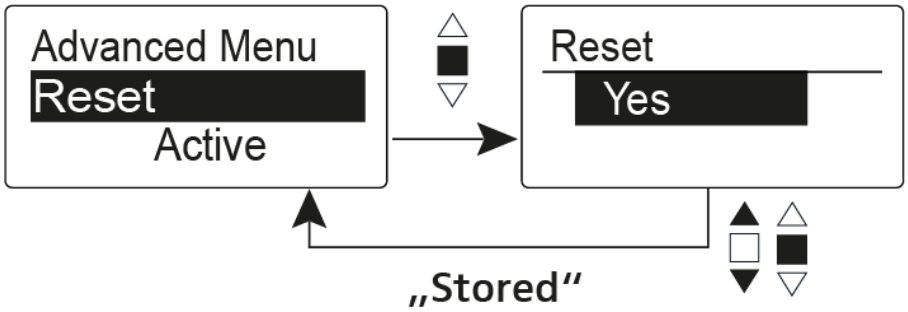
Advanced > LCD Contrast menu item

Adjusting the contrast of the display panel

You can configure the contrast of the display in 16 steps.

Advanced > Reset menu item

Resetting the wireless microphone



When you reset the wireless microphone, only the selected settings of the pilot tone and the **U1** to **U6** frequency banks are retained.

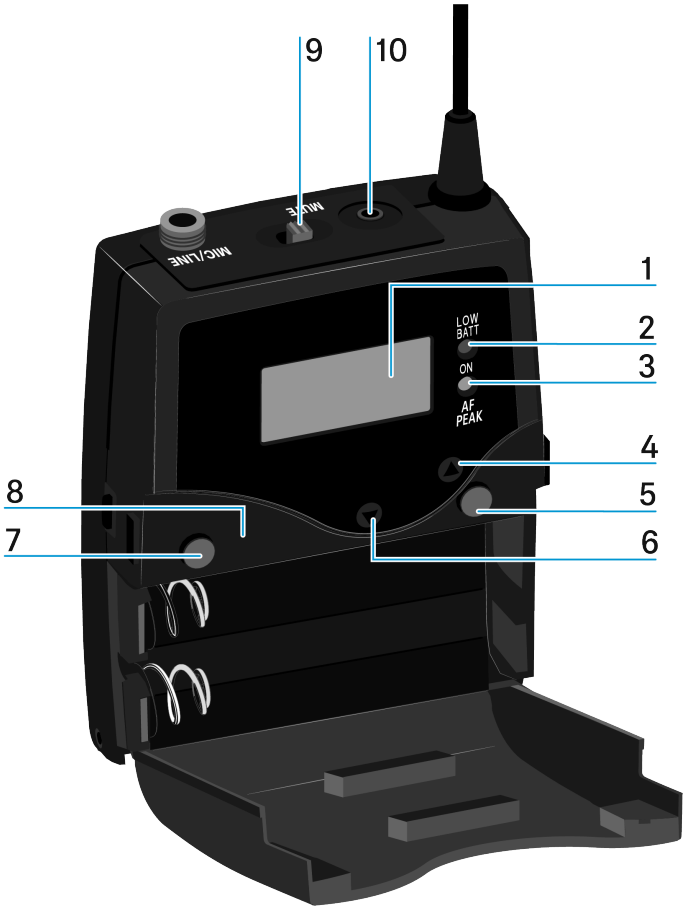
Advanced > Software Revision menu item

Show software revision

You can display the current software revision.

SK 300 G4-RC bodypack transmitter

Product overview



1 Display panel

- see Displays on the bodypack transmitter display panel

2 Operation and battery indicator, red LED

- illuminated = ON
  - see Switching the bodypack transmitter on and off
- flashing = LOW BATTERY
  - see Inserting and removing the batteries/rechargeable batteries

3 Audio overload indicator, yellow LED

- illuminated = AF PEAK (overload)
  - see Sensitivity menu item

4 **UP** button

- see Buttons for navigating the menu

5 **SET** button

- see Buttons for navigating the menu

6 **DOWN** button

- see Buttons for navigating the menu

7 **ON/OFF** button with ESC function in the operating menu

- Switch the transmitter on or off
  - see Switching the bodypack transmitter on and off
- Escape function in the menu
  - see Buttons for navigating the menu

8 Infra-red interface

- see Ew 300-500 G4 synchronizing

9 **MUTE** switch

- Deactivate and activate RF signal
  - see Muting the bodypack transmitter (AF mute)
- Deactivate and activate audio signal
  - see Deactivating the RF signal (RF mute)

10 2.5 mm jack socket

- for remote RMS 1 MUTE switch
- see Connecting the RMS 1 mute switch to the bodypack transmitter

Inserting and removing the batteries/rechargeable batteries

You can operate the bodypack transmitter either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

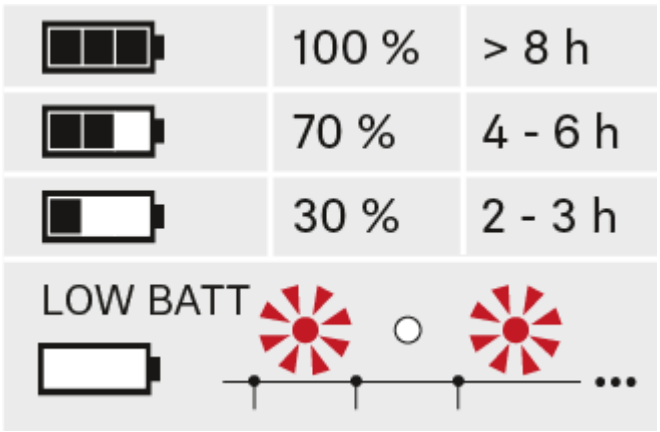
- Press the two catches and open the battery compartment cover.
- Insert the batteries or the rechargeable battery as shown below. Please observe correct polarity when inserting the batteries.



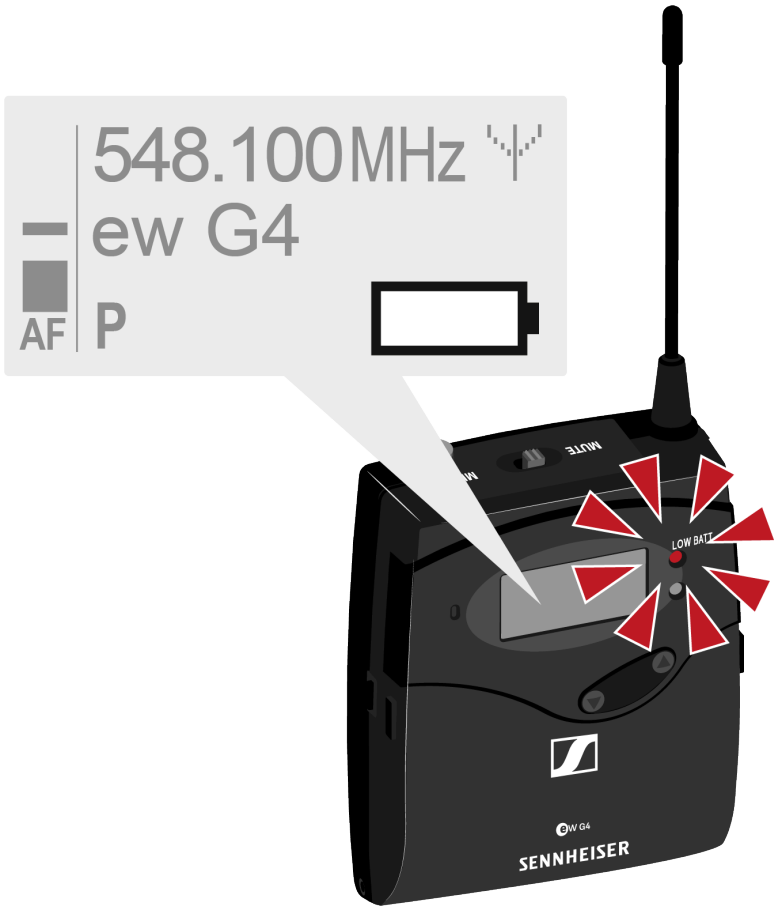
- Close the battery compartment.
  - The cover locks into place with an audible click.

Battery status

Charge status of the batteries:



Charge status is critical (LOW BATT):


548.100MHz
ew G4
AF
P
MUTE
LOW BATT
SENNHEISER

Connecting a microphone to the bodypack transmitter

You can find a list of recommended Lavalier and headset microphones for the bodypack transmitter under Microphones and cables.

To connect a microphone to the bodypack transmitter:

- Insert the cable's 3.5 mm jack plug into the **MIC/LINE** socket on the bodypack transmitter as shown in the diagram.
- Screw the plug's coupling ring onto the audio socket thread of the bodypack transmitter.



Connecting an instrument or line source to the bodypack transmitter

You can connect instruments or audio sources with a line level to the bodypack transmitter.

To do this, you will need the Ci 1-N (6.3 mm jack plug on a lockable 3.5 mm jack plug) or CL 2 (XLR-3F plug on lockable 3.5 mm jack plug) Sennheiser cables.

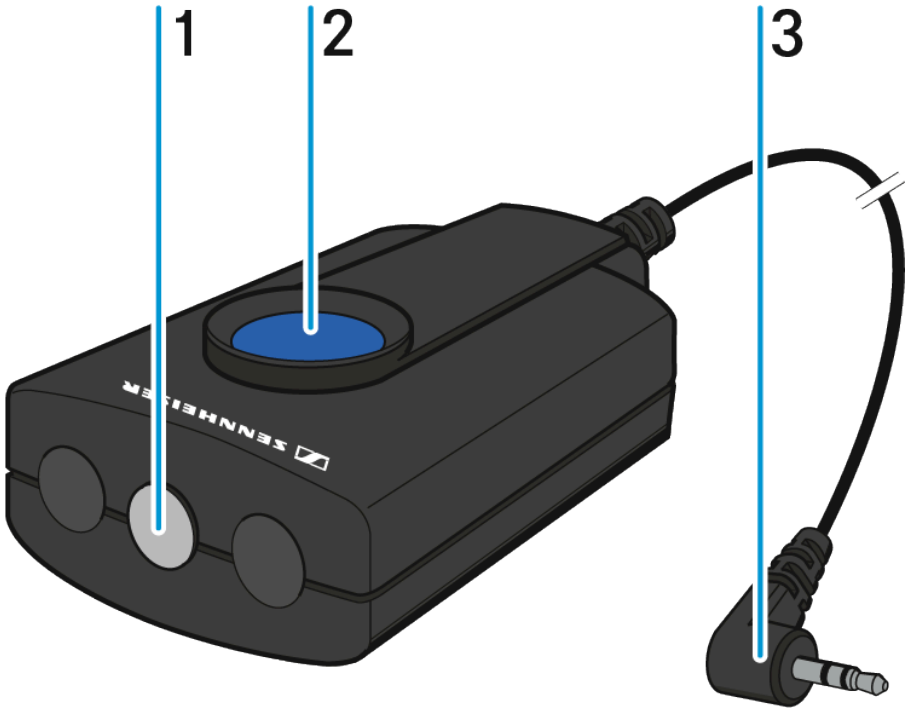
To connect an instrument or line source to bodypack transmitter:

- Insert the cable's 3.5 mm jack plug into the MIC/LINE socket on the bodypack transmitter as shown in the diagram.
- Screw the plug's coupling ring onto the audio socket thread of the bodypack transmitter.



Connecting the RMS 1 mute switch to the bodypack transmitter

You can control the SK 300 G4-RC remotely via cable with the RMS 1 remote mute switch.



1 **STATUS** LED

- see Advanced > MIC LED menu item

2 **MIC** button

- see Using the bodypack transmitter with the RMS 1 remote mute switch

3 2.5 mm jack plug

To connect the RMS 1 to the SK 300 G4-RC:

- Insert the 2.5 mm jack plug of the RMS 1 into the 2.5 mm jack socket of the SK 300 G4-RC.



This deactivates the function of the **MUTE** switch of the SK 300 G4-RC.

> You can find information about operating the RMS 1 under Using the bodypack transmitter with the RMS 1 remote mute switch.

Attaching the bodypack transmitter to clothing

You can use the belt clip to attach the bodypack transmitter to your waistband or on a guitar strap.

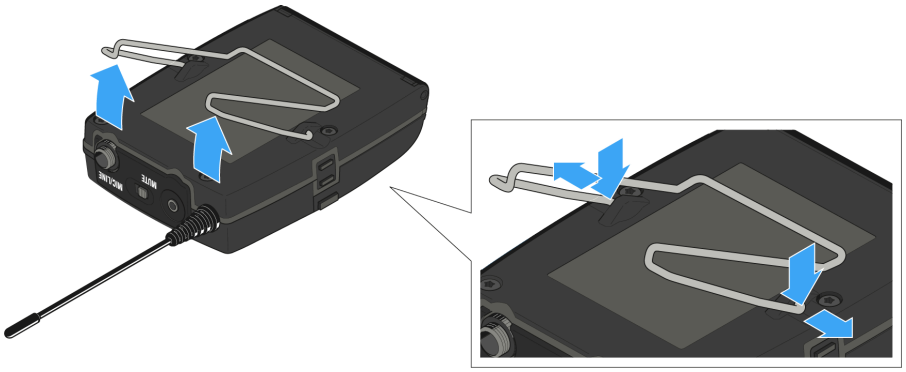
The belt clip is detachable so that you can also attach the bodypack transmitter with the antenna pointing downwards. To do so, withdraw the belt clip from its fixing points and attach it the other way round.

The belt clip is secured so that it cannot slide out of its fixing points accidentally.



To detach the belt clip:

- Lift the belt clip as shown in the diagram.
- Press one side of the clip downward on the fixing hole and pull it out of the transmitter housing.
- Do the same thing on the other side.

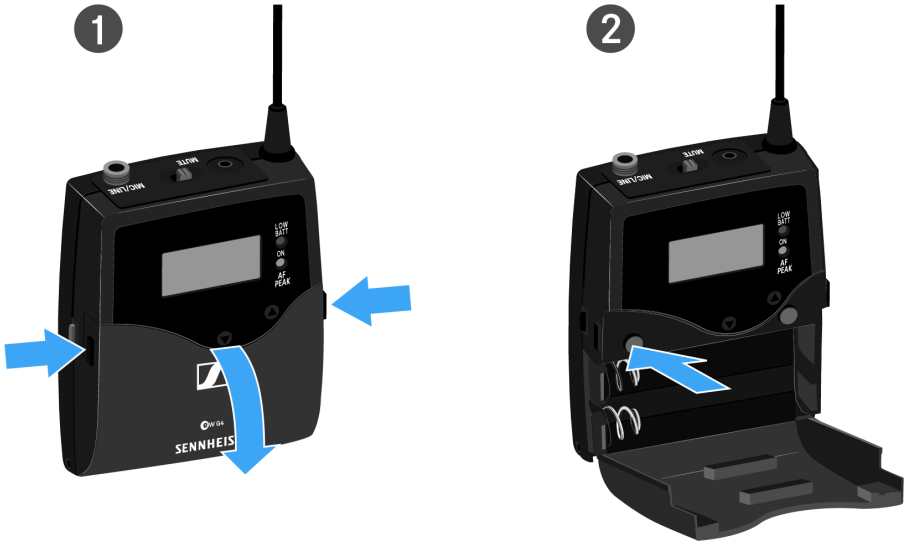


Switching the bodypack transmitter on and off

- Press the two catches and open the battery compartment cover.

To switch on the SK 100 G4:

- Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch off the SK 100 G4:

- Hold down the **ON/OFF** button until the display goes off.

Muting the bodypack transmitter (AF mute)

You can mute the audio signal in two ways:

Muting the audio signal with the MUTE switch

You can mute the audio signal with the **MUTE** switch.

To do this, the **MUTE** switch function must be configured to **AF On/Off**. You can find more information about this subject under Advanced > Mute Mode menu item.



- Slide the **MUTE** switch to the MUTE position.

The audio signal is muted. The message MUTE is shown on the display.

Muting the audio signal with the RMS 1 remote mute switch

See Using the bodypack transmitter with the RMS 1 remote mute switch.

Deactivating the RF signal (RF mute)

You can deactivate the RF signal in three ways:

Deactivating the RF signal with the MUTE switch

To do this, the **MUTE** switch function must be configured to RF On/Off. You can find more information about this subject under Advanced > Mute Mode menu item.



- Slide the **MUTE** switch to the MUTE position.
  - The RF signal is deactivated. The message MUTE is shown in the display and the transmission icon no longer appears.



Deactivating the RF signal with the ON/OFF button

- Short-press the **ON/OFF** button.
  - ✓ RF Mute On? appears.
- Press the **SET** button.
  - ✓ The RF signal is deactivated. The message MUTE is shown in the display and the transmission icon no longer appears.



- Short-press the **ON/OFF** button.
  - ✓ RF Mute Off? appears.
- Press the **SET** button.
  - ✓ The transmission icon appears again.

Deactivating the RF signal with the RMS 1 remote mute switch

See Using the bodypack transmitter with the RMS 1 remote mute switch.

Using the bodypack transmitter with the RMS 1 remote mute switch

You can control the SK 300 G4 remotely via cable with the RMS 1 remote mute switch.

- Configure the desired function for the RMS 1 in the Advanced > Mute Mode menu item of the SK 300.
- Press the **MIC** button.



The bodypack transmitter will behave as described in the table in Advanced > Mute Mode menu item angegeben.

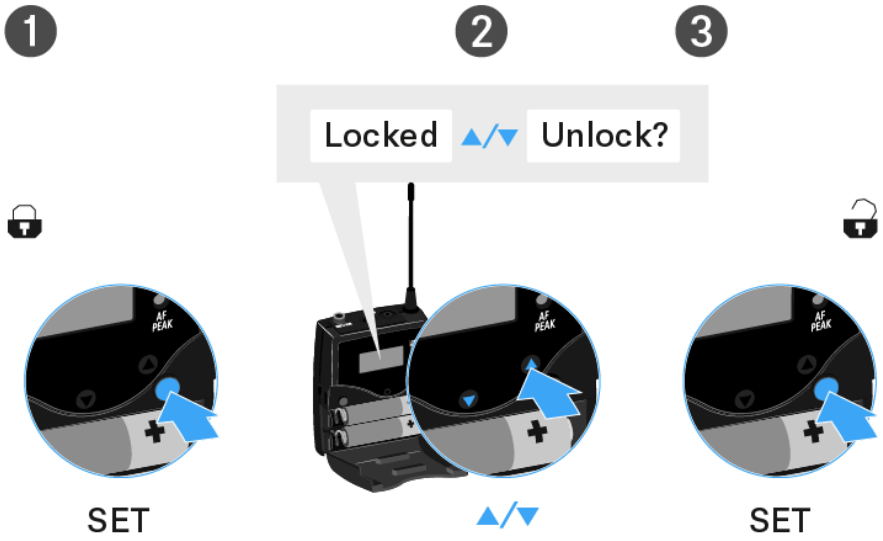
Lock-off function

You can set the automatic lock-off function in the Auto Lock menu (see Auto Lock menu item).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

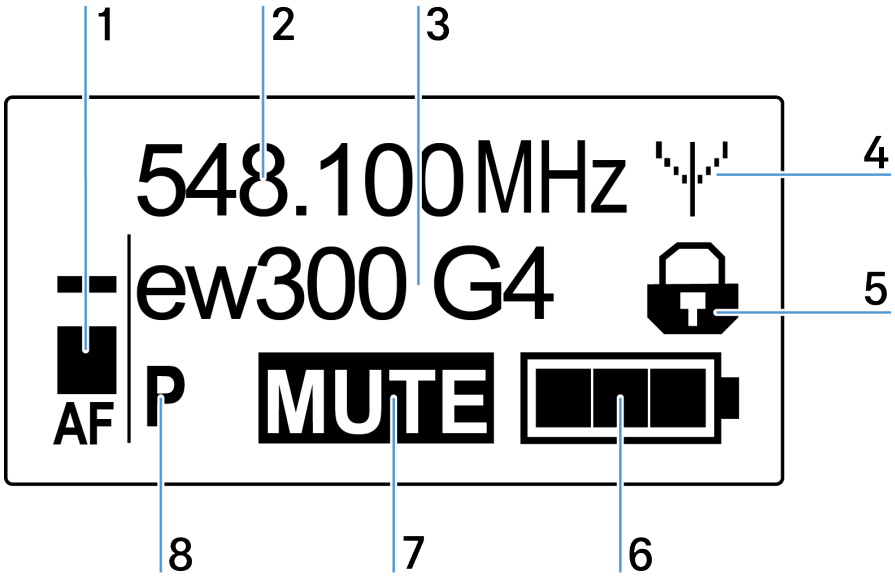
To temporarily deactivate the lock-off function:

- Press the **SET** button.
  - ✓ Locked appears in the display panel.
- Press the **UP** or **DOWN** button.
  - ✓ Unlock? appears in the display panel.
- Press the **SET** button.
  - ✓ Lock-off function is now temporarily deactivated.



Displays on the bodypack transmitter display panel

You can view the following information on the transmitter display.



1 AF audio level

- Displays the audio level with peak hold function
- see Sensitivity menu item

2 Frequency

- Configured transmission frequency
- see Frequency Preset menu item

3 Name

- Freely selectable name of the receiver
- see Name menu item

4 Transmission icon

- RF signal is being transmitted
- see Deactivating the RF signal (RF mute)

5 Lock-off function

- Lock-off function is activated
- see Auto Lock menu item

6 Battery status

- see Battery status

7 **MUTE** muting function

- The audio signal is muted
- see Muting the bodypack transmitter (AF mute)
- see Deactivating the RF signal (RF mute)

8 **P** pilot tone

- Pilot tone transmission is activated
- see Advanced > Pilot Tone menu item

Select a standard display

▶ Press the **UP** or **DOWN** buttons to select a standard display.
Frequency/Name standard display



Channel/Frequency standard display



Name/Channel standard display



Buttons for navigating the menu

To open the menu/a menu item:

- Press the **SET** button.
  - The operating menu is shown on the transmitter display panel.
- Press the **UP** or **DOWN** buttons to navigate through the individual menu items.
- Press the **SET** button to open the selected menu item.

Making changes in a menu item:

- Press the **UP** or **DOWN** buttons to set the displayed value.
- Press the **SET** button to save the setting.
- Press the **ESC (ON/OFF)** button to leave the menu item without saving the setting.

Setting options in the menu

In the SK 500 G4-RC menu, you can configure the following settings.

Adjusting the input sensitivity

- See Sensitivity menu item

Setting the frequency bank and the channel

- See Frequency Preset menu item

Entering a freely selectable name

- See Name menu item

Activating/deactivating the automatic lock-off function

- See Auto Lock menu item

Configuring enhanced settings in the Advanced Menu:

- Adjusting the transmission frequencies for the U frequency bank
- Configuring the function of the MUTE switch and the RMS 1 remote mute switch
- Configuring the LED behavior of the RMS 1 external mute switch
- Configuring the transmission power
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the transmitter
- Displaying the current software revision
- See Advanced menu item

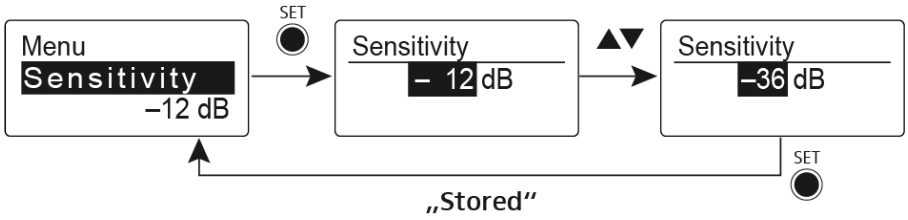
Sensitivity menu item

Adjusting the input sensitivity – AF audio level

Setting range:

- 0 to -60 dB
- in 3 dB steps

The AF audio level is also displayed when the bodypack transmitter is muted, e.g. to check the sensitivity before a live broadcast.



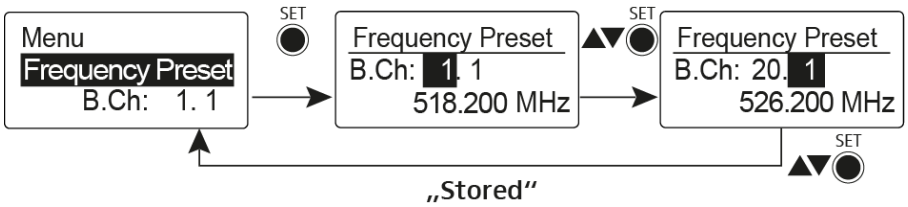
Recommended presets:

- Loud music/vocals: -30 to -21 dB
- Moderation: -21 to 0 dB
- Instrument input
    - Electric guitar with single-coil pickup: -30 to -24 dB
    - Electric guitar with Humbucker pickups: -45 to -30 dB
    - Guitars with active electronics (active pickups, active EQs, Piezo pickups): -45 to -30 dB

Frequency Preset menu item

Manually selecting a frequency bank and channel

> i While you work in the Frequency Preset menu, the RF signal is deactivated.



Please note when creating multi-channel systems:

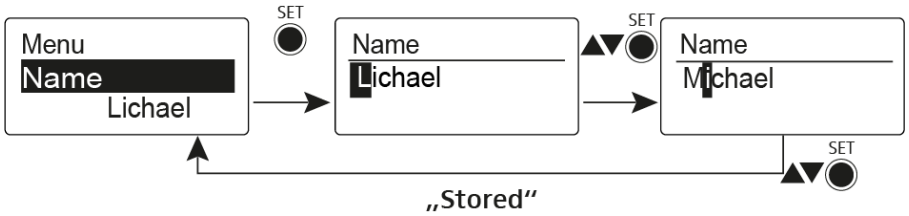
Only the factory-preset frequencies within one frequency bank are intermodulation-free. The bodypack transmitter and receiver must be set to the same frequency. Be sure to note the information on frequency selection under Establishing a radio link.

Name menu item

Entering names

In the **Name** menu item you can enter any name you want for the bodypack transmitters (e.g. the names of the musicians).

The name can be shown in the Frequency/Name and Name/Channel standard displays.



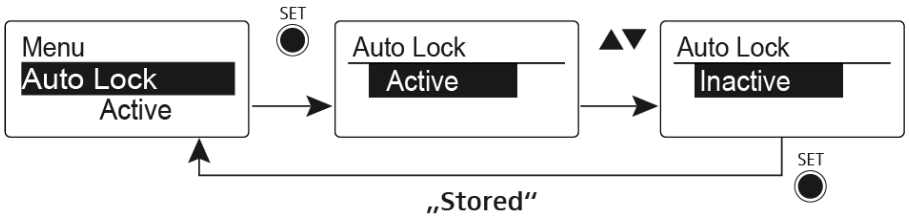
The names are a maximum of 8 characters:

- All letters except umlauts
- Numbers from 0 to 9
- Special characters and spaces

Auto Lock menu item

Switching the automatic lock-off function on and off

This lock prevents the wireless microphone from being unintentionally switched off and also prevents any unintentional changes to the transmitter's configuration. In the current standard display, the lock icon shows whether the lock-off function is currently switched on.



You can find information about using the lock-off function under Lock-off function.

Advanced menu item

In the Advanced submenu you can configure enhanced settings.

The following sub-items are available:

Adjusting the transmission frequencies for the U frequency bank

- See Advanced > Tune menu item

Configuring the function of the MUTE switch and the RMS 1 remote mute switch

- See Advanced > Mute Mode menu item

Configuring the LED behavior of the RMS 1 external mute switch

- See Advanced > MIC LED menu item

Configuring the transmission power

- See Advanced > RF Power menu item

Activating/deactivating the pilot tone evaluation

- See Advanced > Pilot Tone menu item

Adjusting the contrast of the display panel

- See Advanced > LCD Contrast menu item

Resetting the transmitter

- See Advanced > Reset menu item

Displaying the current software revision

- See Advanced > Software Revision menu item

Advanced > Tune menu item

Configuring the transmission frequency and frequency bank U

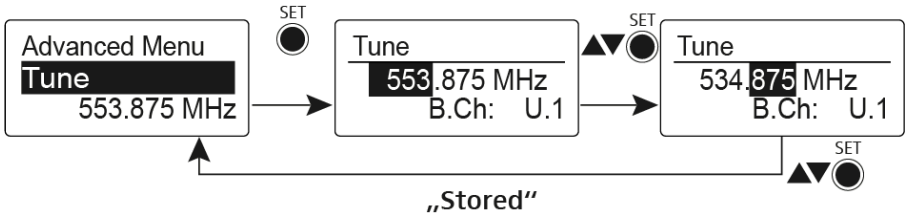
When you have configured the bodypack transmitter to a system bank and you call up the **Tune** menu item, channel 1 of the frequency bank **U** is automatically set. The message **U.1** briefly appears in the display. In the factory settings, the channels of the frequency bank **U** are not assigned to any transmission frequency.

While you work in the **Tune** menu, the RF signal is deactivated.

You can configure a transmission frequency for the current channel or select a channel in the frequency bank **U** and configure a transmission frequency for this channel in the **Tune** menu. Be sure to note the information on frequency selection, see Establishing a radio link.

To configure the transmission frequency for the current channel:

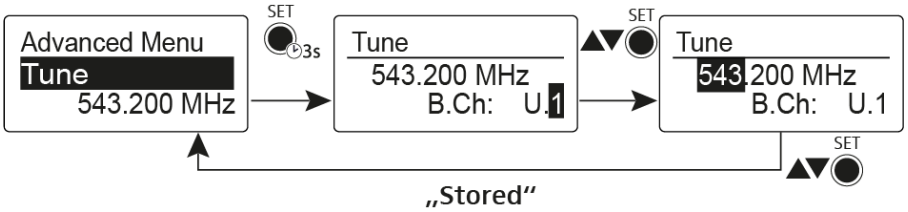
- Open the **Tune** menu item in the **Advanced** menu.
  - The frequency selection appears.



- Configure the desired frequency.
- Press the **SET** button.
  - Your settings will be saved. You are now back in the operating menu.

To select a channel and assign it a frequency:

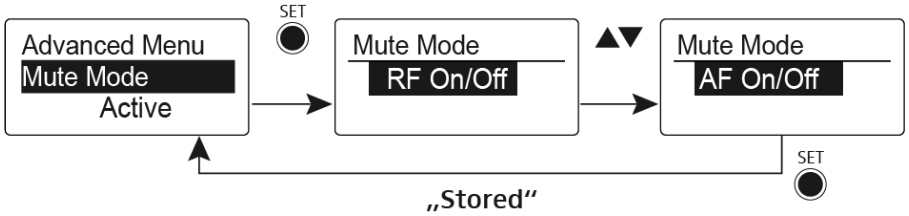
- Open the **Tune** menu item in the **Advanced** menu by pressing and holding the **SET** button until the frequency bank selection appears.



- Set the desired channel.
- Press the **SET** button.
  - The frequency selection appears.
- Configure the frequency.

Advanced > Mute Mode menu item

Configure the function of the mute switch and the RMS 1 remote mute switch



i The **Push to mute** and **Push to talk** menu items can only be used with an RMS 1 remote mute switch.

MUTE switch functions

AF On/Off mode

- If set to position MUTE, the audio signal is muted

RF On/Off mode

- If set to the MUTE selector position, the RF signal is deactivated.

Disabled mode

- No function

Functions of the RMS 1 remote mute switch

AF On/Off mode

- Press the RMS 1 mute switch: The audio signal is muted.
- Press the RMS 1 mute switch again: The audio signal is no longer muted.

RF On/Off mode

- Press the RMS 1 mute switch: The RF signal is deactivated.
- Press the RMS 1 mute switch again: The RF signal is activated.

Push To Mute mode

- The audio signal is deactivated as long as the RMS 1 mute switch is pressed.

Push To Talk mode

- The audio signal is activated as long as the RMS 1 mute switch is pressed.
- The bodypack transmitter is muted when you configure the Push to Talk function.

Disabled mode

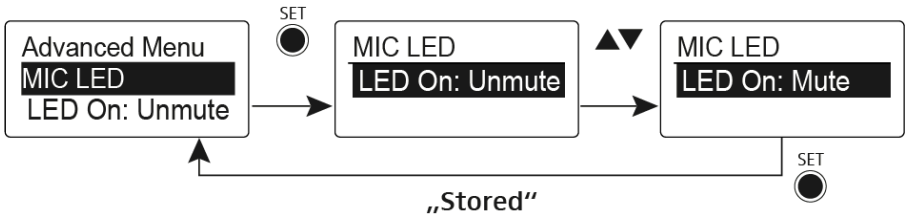
- No function

> When you connect the RMS 1 remote mute switch you can only mute the signal using this switch. The **MUTE** switch's function is deactivated during this time.

Advanced > MIC LED menu item

Configure the STATUS LED of the RMS 1 remote mute switch

In the MIC LED menu item you can configure and deactivate the STATUS LED (see Connecting the RMS 1 mute switch to the bodypack transmitter) of the RMS 1 remote mute switch regardless of the settings of the Advanced > Mute Mode menu item and the status of the RF signal.



LED On: setting Unmute

- The STATUS LED is illuminated when the bodypack transmitter is sending an RF signal or is not muted.

LED On: setting Mute

- The STATUS LED is illuminated when the bodypack transmitter is not sending an RF signal or is muted.

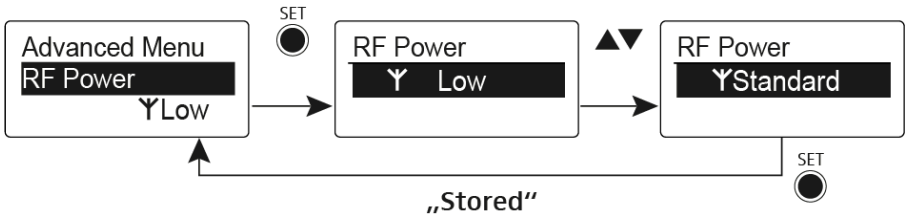
Disable LED setting

- The STATUS LED is deactivated.

Advanced > RF Power menu item

Configuring the transmission power

You can configure the transmission power in three steps in the RF Power menu item.



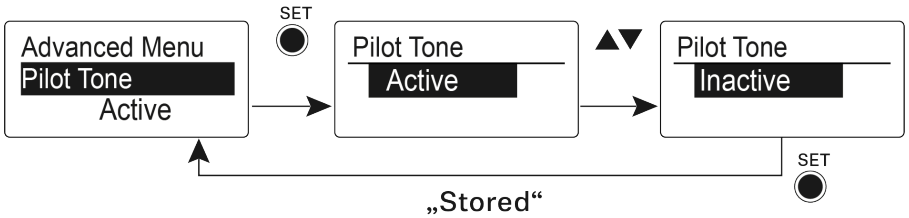
Please note the information at the following address: sennheiser.com/sifa.

Setting range:

- Low: 10 mW
- Standard: 30 mW
- High: 50 mW

Advanced > Pilot Tone menu item

Activating/deactivating pilot tone transmission



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver’s squelch function.

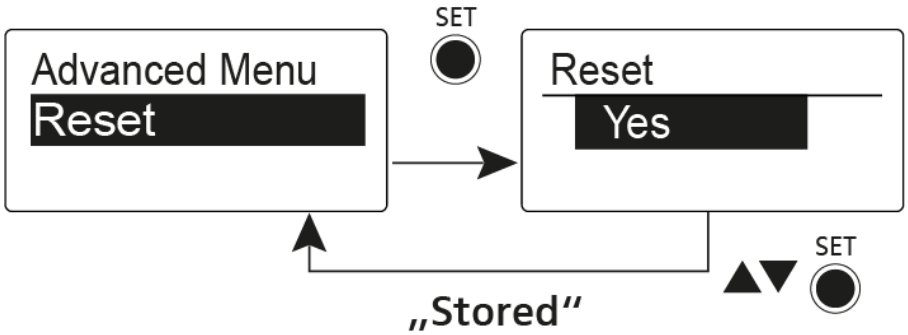
Advanced > LCD Contrast menu item

Adjusting the contrast of the display panel

You can configure the contrast of the display in 16 steps.

Advanced > Reset menu item

Resetting the bodypack transmitter



When you reset the bodypack transmitter, only the selected settings of the pilot tone and the **U1** to **U6** frequency banks are retained.

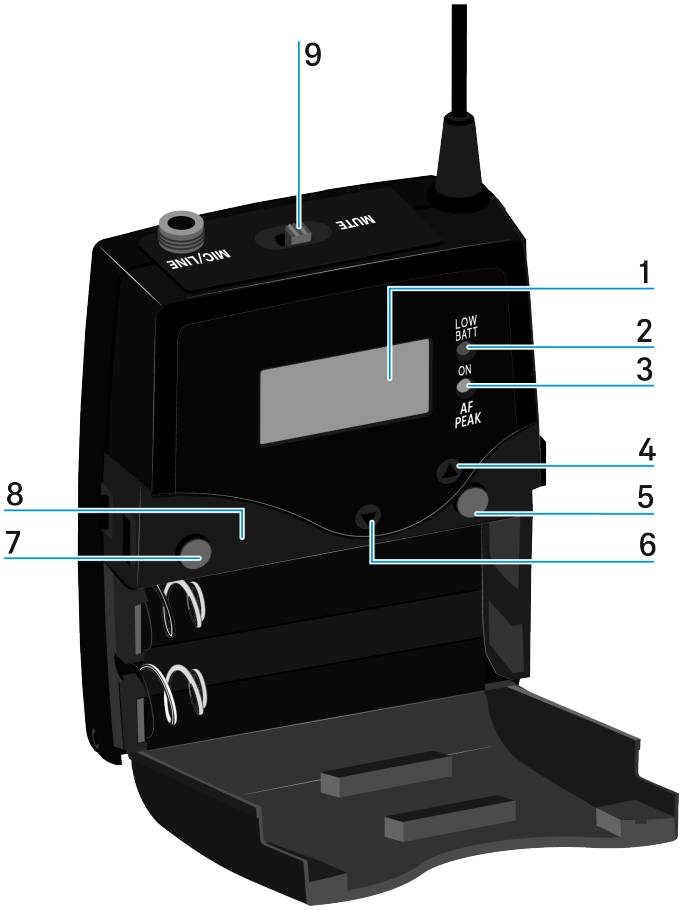
Advanced > Software Revision menu item

Show software revision

You can display the current software revision.

SK 500 G4 bodypack transmitter

Product overview



1 Display panel

- see Displays on the bodypack transmitter display panel

2 Operation and battery indicator, red LED

- illuminated = ON
  - see Switching the bodypack transmitter on and off
- flashing = LOW BATTERY
  - see Inserting and removing the batteries/rechargeable batteries

3 Audio overload indicator, yellow LED

- illuminated = AF PEAK (overload)
  - see Sensitivity menu item

4 **UP** button

- see Buttons for navigating the menu

5 **SET** button

- see Buttons for navigating the menu

6 **DOWN** button

- see Buttons for navigating the menu

7 **ON/OFF** button with ESC function in the operating menu

- Switch the transmitter on or off
  - see Switching the bodypack transmitter on and off
- Escape function in the menu
  - see Buttons for navigating the menu

8 Infra-red interface

- see Ew 300-500 G4 synchronizing

9 **MUTE** switch

- Deactivate and activate RF signal
  - see Muting the bodypack transmitter (AF mute)
- Deactivate and activate audio signal
  - see Deactivating the RF signal (RF mute)

Inserting and removing the batteries/rechargeable batteries

You can operate the bodypack transmitter either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

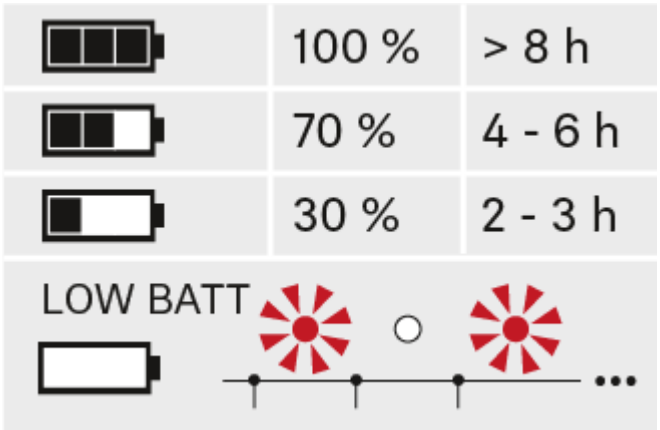
- Press the two catches and open the battery compartment cover.
- Insert the batteries or the rechargeable battery as shown below. Please observe correct polarity when inserting the batteries.



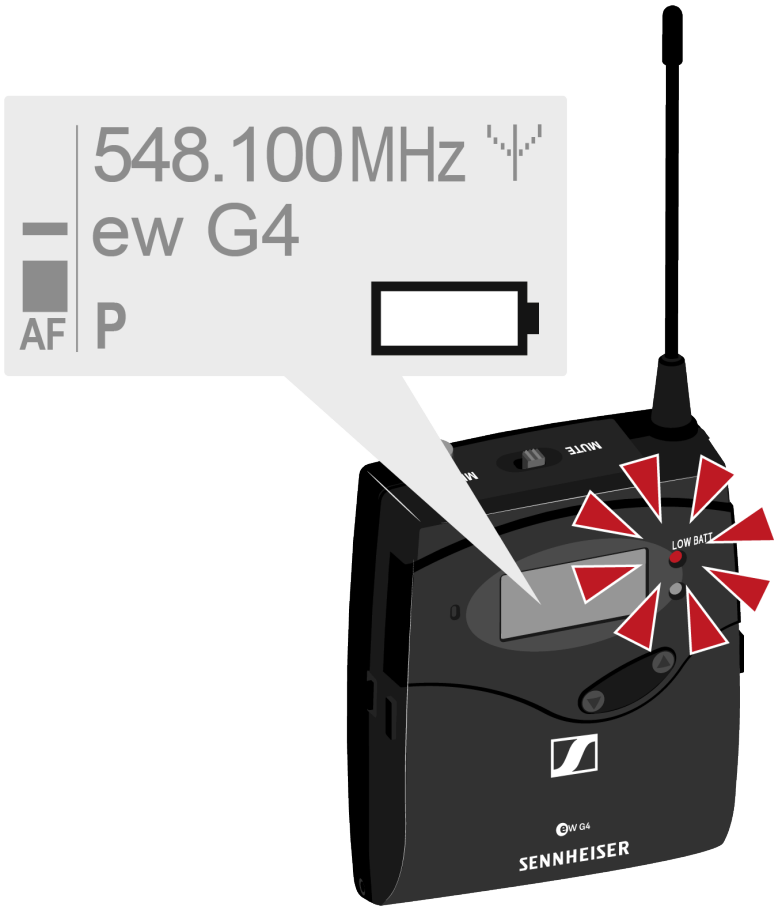
- Close the battery compartment.
  - The cover locks into place with an audible click.

Battery status

Charge status of the batteries:



Charge status is critical (LOW BATT):


548.100MHz
ew G4
AF
P
MUTE
LOW BATT
ew G4
SENNHEISER

Connecting a microphone to the bodypack transmitter

You can find a list of recommended Lavalier and headset microphones for the bodypack transmitter under Microphones and cables.

To connect a microphone to the bodypack transmitter:

- Insert the cable's 3.5 mm jack plug into the **MIC/LINE** socket on the bodypack transmitter as shown in the diagram.
- Screw the plug's coupling ring onto the audio socket thread of the bodypack transmitter.



Connecting an instrument or line source to the bodypack transmitter

You can connect instruments or audio sources with a line level to the bodypack transmitter.

To do this, you will need the Ci 1-N (6.3 mm jack plug on a lockable 3.5 mm jack plug) or CL 2 (XLR-3F plug on lockable 3.5 mm jack plug) Sennheiser cables.

To connect an instrument or line source to bodypack transmitter:

- Insert the cable's 3.5 mm jack plug into the MIC/LINE socket on the bodypack transmitter as shown in the diagram.
- Screw the plug's coupling ring onto the audio socket thread of the bodypack transmitter.



Attaching the bodypack transmitter to clothing

You can use the belt clip to attach the bodypack transmitter to your waistband or on a guitar strap.

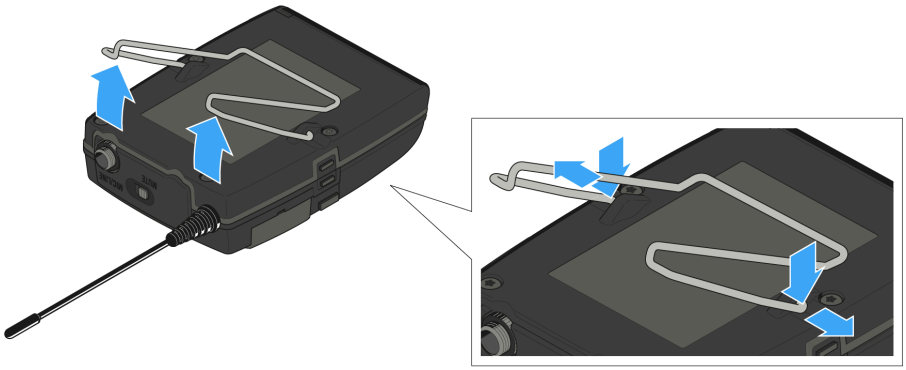
The belt clip is detachable so that you can also attach the bodypack transmitter with the antenna pointing downwards. To do so, withdraw the belt clip from its fixing points and attach it the other way round.

The belt clip is secured so that it cannot slide out of its fixing points accidentally.



To detach the belt clip:

- Lift the belt clip as shown in the diagram.
- Press one side of the clip downward on the fixing hole and pull it out of the transmitter housing.
- Do the same thing on the other side.

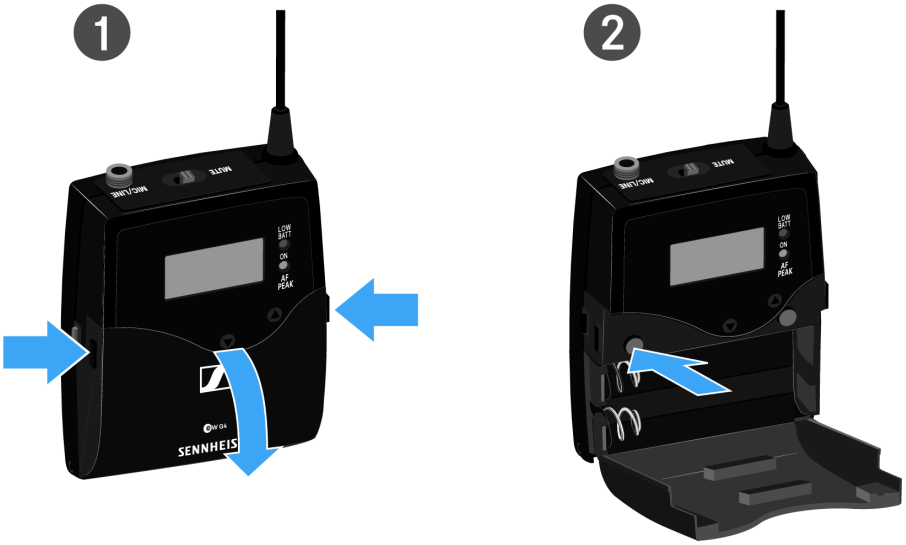


Switching the bodypack transmitter on and off

- Press the two catches and open the battery compartment cover.

To switch on the SK 100 G4:

- Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch off the SK 100 G4:

- Hold down the **ON/OFF** button until the display goes off.

Muting the bodypack transmitter (AF mute)

You can deactivate the audio signal with the **MUTE** switch.

To do this, the **MUTE** switch function must be configured to **AF On/Off**. You can find more information about this subject under Advanced > Mute Mode menu item.



- Slide the **MUTE** switch to the MUTE position.
  - The audio signal is muted. The message MUTE is shown on the display.

Deactivating the RF signal (RF mute)

You can deactivate the RF signal in two ways:

Deactivating the RF signal with the MUTE switch

To do this, the MUTE switch function must be configured to RF On/Off. You can find more information about this subject under Advanced > Mute Mode menu item.

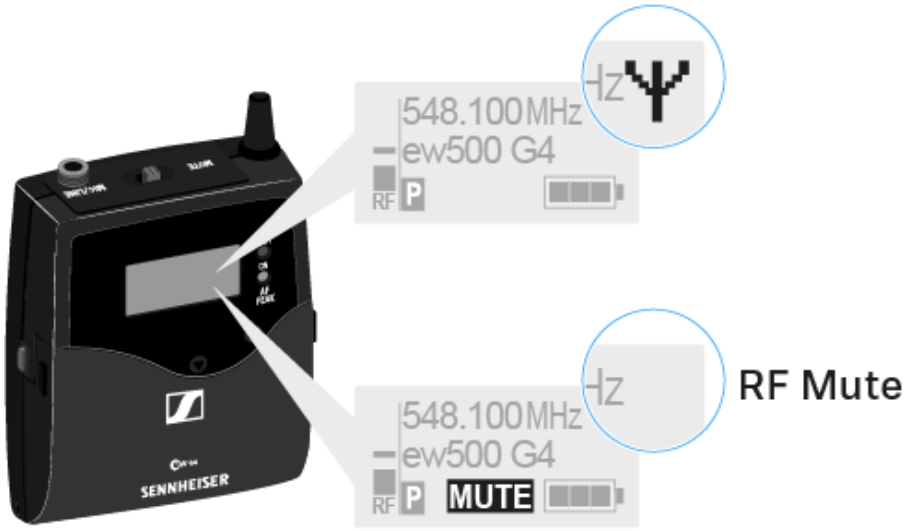


- Slide the **MUTE** switch to the MUTE position.
  - The RF signal is deactivated. The message MUTE is shown in the display and the transmission icon no longer appears.



Deactivating the RF signal with the ON/OFF button

- Short-press the **ON/OFF** button.
  - ✓ RF Mute On? appears.
- Press the **SET** button.
  - ✓ The RF signal is deactivated. The message MUTE is shown in the display and the transmission icon no longer appears.



- Short-press the **ON/OFF** button, to activate the RF signal.
  - ✓ RF Mute Off? appears.
- Press the **SET** button.
  - ✓ The transmission icon appears again.

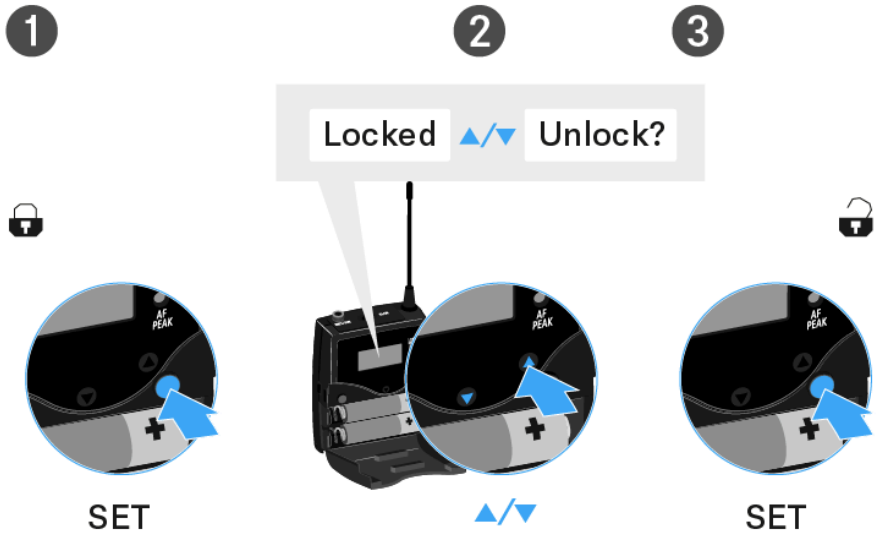
Lock-off function

You can set the automatic lock-off function in the Auto Lock menu (see Auto Lock menu item).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

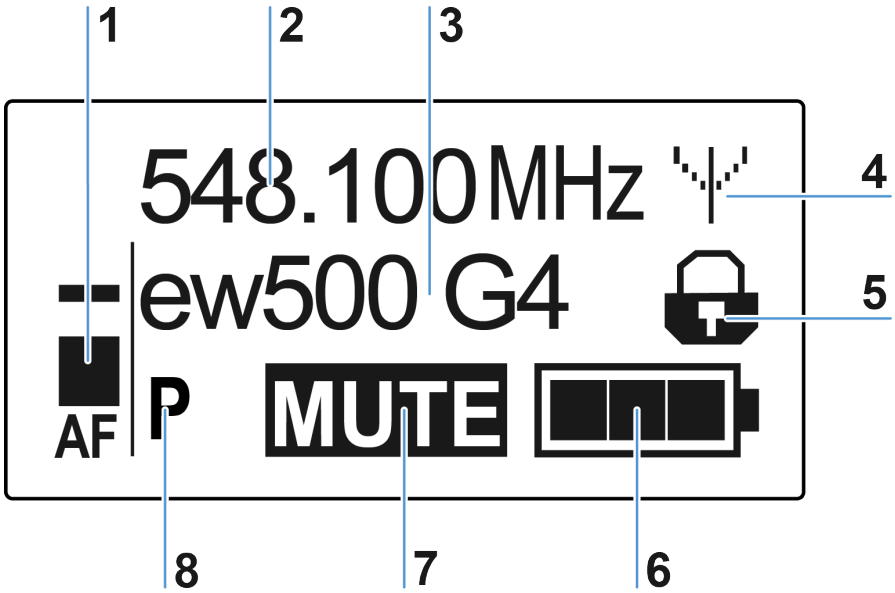
To temporarily deactivate the lock-off function:

- Press the **SET** button.
  - ✓ Locked appears in the display panel.
- Press the **UP** or **DOWN** button.
  - ✓ Unlock? appears in the display panel.
- Press the **SET** button.
  - ✓ Lock-off function is now temporarily deactivated.



Displays on the bodypack transmitter display panel

You can view the following information on the transmitter display.



1 AF audio level

- Displays the audio level with peak hold function
- see Sensitivity menu item

2 Frequency

- Configured transmission frequency
- see Frequency Preset menu item

3 Name

- Freely selectable name of the receiver
- see Name menu item

4 Transmission icon

- RF signal is being transmitted
- see Deactivating the RF signal (RF mute)

5 Lock-off function

- Lock-off function is activated
- see Auto Lock menu item

6 Battery status

- see Battery status

7 **MUTE** muting function

- The audio signal is muted
- see Muting the bodypack transmitter (AF mute)
- see Deactivating the RF signal (RF mute)

8 **P** pilot tone

- Pilot tone transmission is activated
- see Advanced > Pilot Tone menu item

Select a standard display

▶ Press the **UP** or **DOWN** buttons to select a standard display.
Frequency/Name standard display



Channel/Frequency standard display



Name/Channel standard display



Buttons for navigating the menu

To open the menu/a menu item:

- Press the **SET** button.
  - The operating menu is shown on the transmitter display panel.
- Press the **UP** or **DOWN** buttons to navigate through the individual menu items.
- Press the **SET** button to open the selected menu item.

Making changes in a menu item:

- Press the **UP** or **DOWN** buttons to set the displayed value.
- Press the **SET** button to save the setting.
- Press the **ESC (ON/OFF)** button to leave the menu item without saving the setting.

Setting options in the menu

In the SK 500 G4 menu, you can configure the following settings.

Adjusting the input sensitivity

- See Sensitivity menu item

Setting the frequency bank and the channel

- See Frequency Preset menu item

Entering a freely selectable name

- See Name menu item

Activating/deactivating the automatic lock-off function

- See Auto Lock menu item

Configuring enhanced settings in the Advanced Menu:

- Adjusting the transmission frequencies for the U frequency bank
- Configuring the MUTE switch
- Configuring the transmission power
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the transmitter
- Displaying the current software revision
- See Advanced menu item

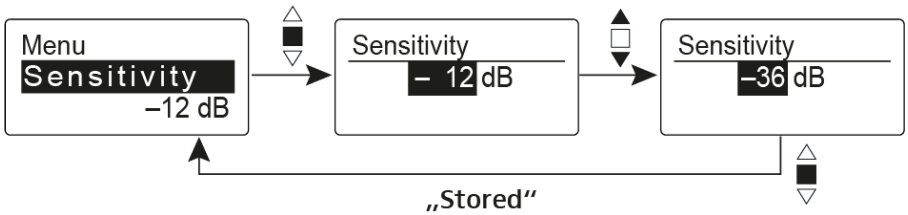
Sensitivity menu item

Adjusting the input sensitivity – AF audio level

Setting range:

- 0 to -60 dB
- in 6 dB steps.

The AF audio level is also displayed when the bodypack transmitter is muted, e.g. to check the sensitivity before a live broadcast.



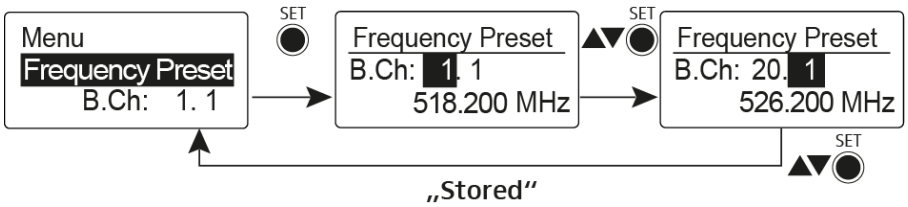
Recommended presets:

- Loud music/vocals: -30 to -21 dB
- Moderation: -21 to 0 dB
- Electric guitar with single-coil pickups: -30 to -24 dB
- Electric guitar with Humbucker pickups: -45 to -30 dB
- Electric guitars with active electronics: -45 to -30 dB

Frequency Preset menu item

Manually selecting a frequency bank and channel

> While you work in the Frequency Preset menu, the RF signal is deactivated.



Please note when creating multi-channel systems:

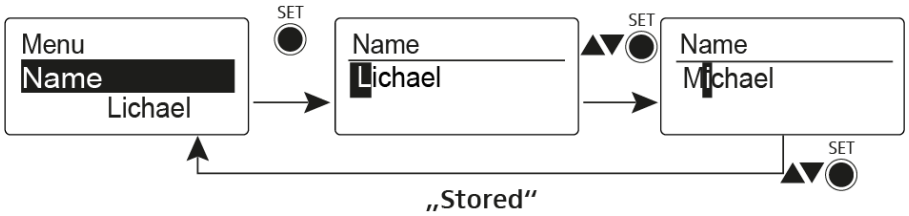
Only the factory-preset frequencies within one frequency bank are intermodulation-free. The bodypack transmitter and receiver must be set to the same frequency. Be sure to note the information on frequency selection under Establishing a radio link.

Name menu item

Entering names

In the **Name** menu item you can enter any name you want for the bodypack transmitters (e.g. the names of the musicians).

The name can be shown in the Frequency/Name and Name/Channel standard displays.



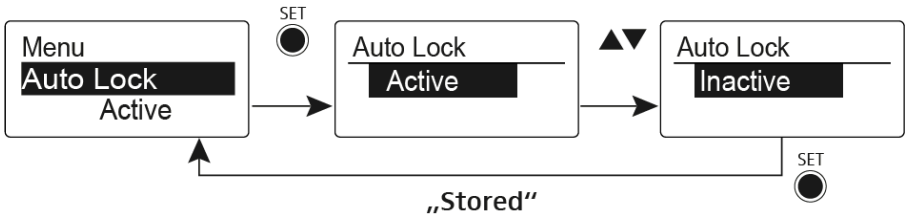
The names are a maximum of 8 characters:

- All letters except umlauts
- Numbers from 0 to 9
- Special characters and spaces

Auto Lock menu item

Switching the automatic lock-off function on and off

This lock prevents the wireless microphone from being unintentionally switched off and also prevents any unintentional changes to the transmitter's configuration. In the current standard display, the lock icon shows whether the lock-off function is currently switched on.



You can find information about using the lock-off function under Lock-off function.

Advanced menu item

In the Advanced submenu you can configure enhanced settings.

The following sub-items are available:

Adjusting the transmission frequencies for the U frequency bank

- See Advanced > Tune menu item

Configuring the function of the MUTE switch and the RMS 1 remote mute switch

- See Advanced > Mute Mode menu item

Configuring the transmission power

- See Advanced > RF Power menu item

Activating/deactivating the pilot tone evaluation

- See Advanced > Pilot Tone menu item

Adjusting the contrast of the display panel

- See Advanced > LCD Contrast menu item

Resetting the transmitter

- See Advanced > Reset menu item

Displaying the current software revision

- See Advanced > Software Revision menu item

Advanced > Tune menu item

Configuring the transmission frequency and frequency bank U

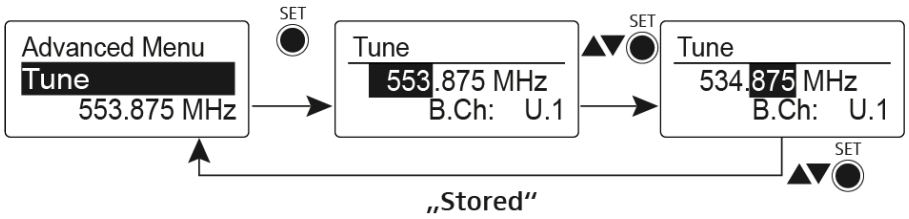
When you have configured the bodypack transmitter to a system bank and you call up the **Tune** menu item, channel 1 of the frequency bank **U** is automatically set. The message **U.1** briefly appears in the display. In the factory settings, the channels of the frequency bank **U** are not assigned to any transmission frequency.

While you work in the **Tune** menu, the RF signal is deactivated.

You can configure a transmission frequency for the current channel or select a channel in the frequency bank **U** and configure a transmission frequency for this channel in the **Tune** menu. Be sure to note the information on frequency selection, see Establishing a radio link.

To configure the transmission frequency for the current channel:

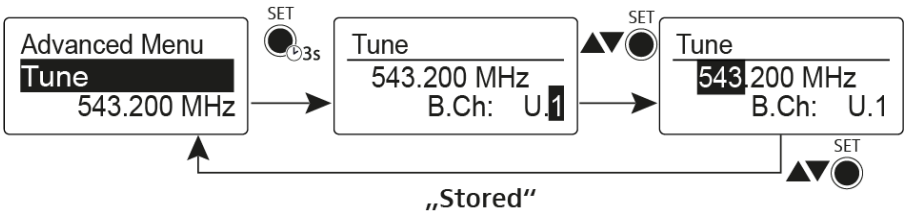
- Open the **Tune** menu item in the **Advanced** menu.
  - The frequency selection appears.



- Configure the desired frequency.
- Press the **SET** button.
  - Your settings will be saved. You are now back in the operating menu.

To select a channel and assign it a frequency:

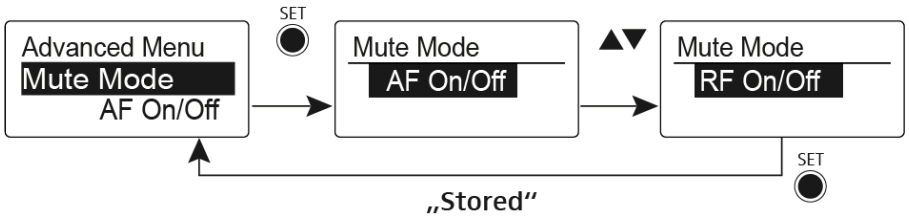
- Open the **Tune** menu item in the **Advanced** menu by pressing and holding the **SET** button until the frequency bank selection appears.



- Set the desired channel.
- Press the **SET** button.
  - The frequency selection appears.
- Configure the frequency.

Advanced > Mute Mode menu item

Configuring the MUTE switch



AF On/Off mode

- If set to position MUTE, the audio signal is muted

RF On/Off mode

- If set to position MUTE, the RF signal is deactivated.

Disabled mode

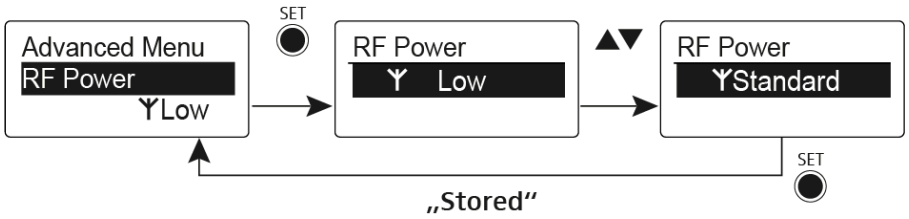
- No function

> **i** You can find information about operating the mute switch under Muting the bodypack transmitter (AF mute) and Deactivating the RF signal (RF mute).

Advanced > RF Power menu item

Configuring the transmission power

You can configure the transmission power in three steps in the RF Power menu item.



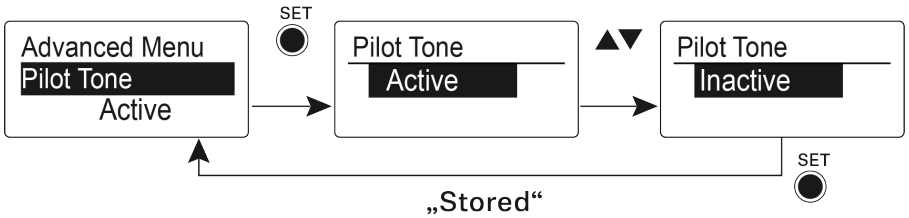
Please note the information at the following address: sennheiser.com/sifa.

Setting range:

- Low: 10 mW
- Standard: 30 mW
- High: 50 mW

Advanced > Pilot Tone menu item

Activating/deactivating pilot tone transmission



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver’s squelch function.

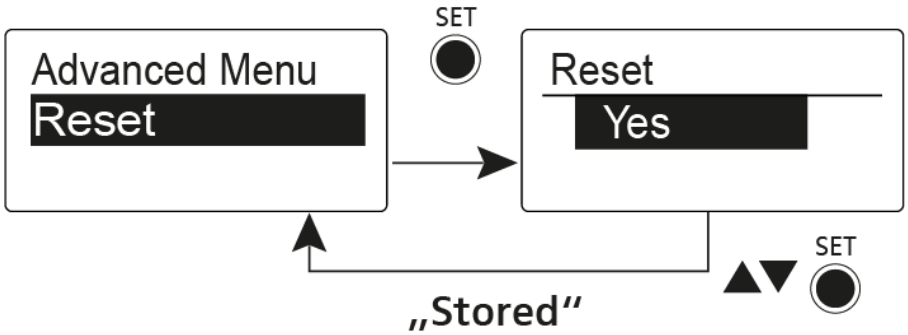
Advanced > LCD Contrast menu item

Adjusting the contrast of the display panel

You can configure the contrast of the display in 16 steps.

Advanced > Reset menu item

Resetting the bodypack transmitter



When you reset the bodypack transmitter, only the selected settings of the pilot tone and the **U** frequency bank are retained.

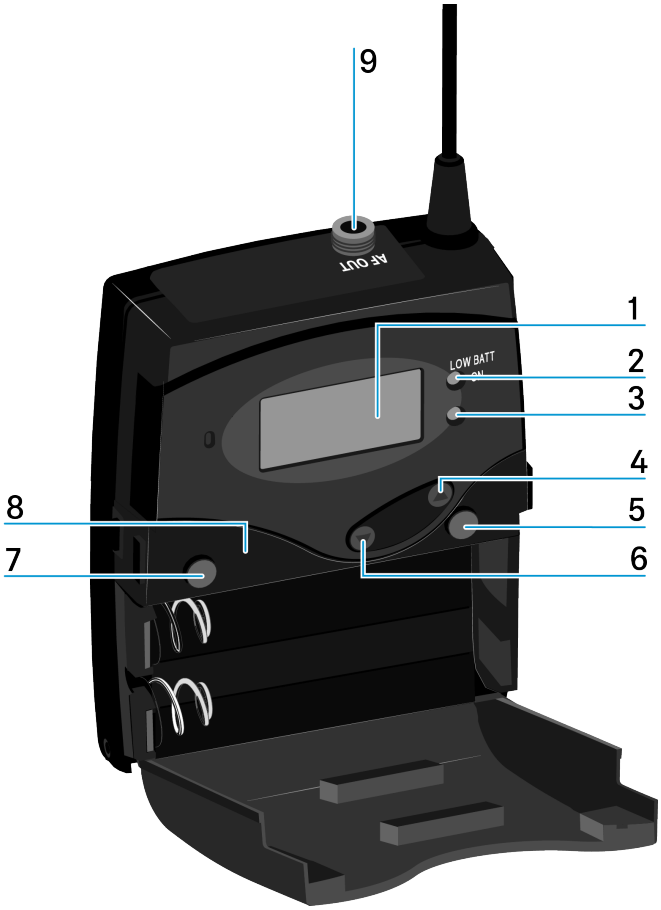
Advanced > Software Revision menu item

Show software revision

You can display the current software revision.

EK 100 G4 diversity receiver

Product overview



1 Display panel

- see Displays on the EK 500 G4 display panel

2 Operation and battery indicator, red LED

- illuminated = ON
  - see Switching the diversity receiver on and off
- flashing = LOW BATTERY
  - see Inserting and removing the batteries/rechargeable batteries

3 Wireless reception indicator, green LED

- illuminated = RF

4 **UP** button

- see Buttons for navigating through the menu

5 **SET** button

- see Buttons for navigating through the menu

6 **DOWN** button

- see Buttons for navigating through the menu

7 **ON/OFF** button with ESC function in the operating menu

- Switch the transmitter on or off
  - see Switching the diversity receiver on and off
- Escape function in the menu
  - see Buttons for navigating through the menu

8 Infra-red interface

- see Ew 100 P G4 synchronizing

9 3.5 mm jack socket

- lockable
- see Connecting the diversity receiver to a camera

Inserting and removing the batteries/rechargeable batteries

You can operate the diversity receiver either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

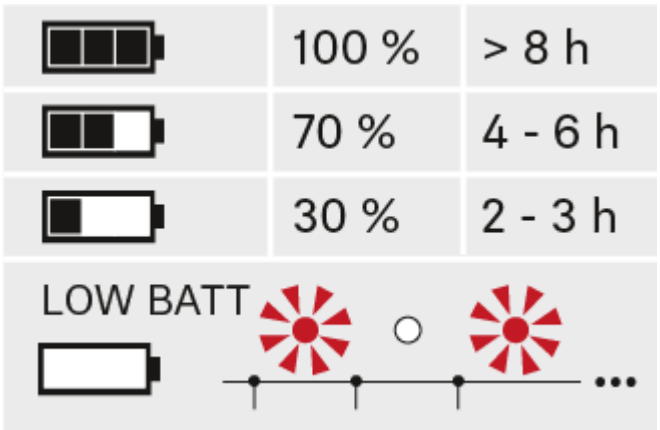
- Press the two catches and open the battery compartment cover.
- Insert the batteries or the rechargeable battery as shown below. Please observe correct polarity when inserting the batteries.



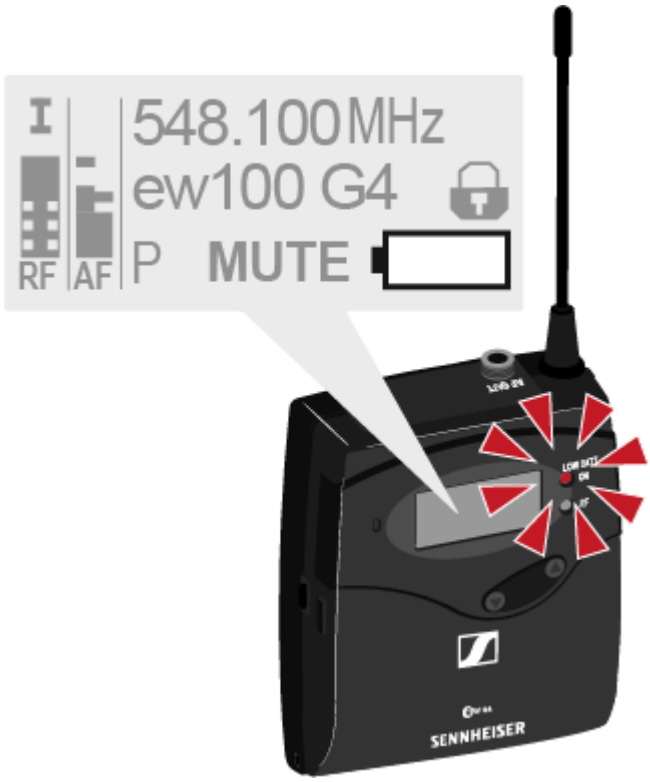
- Close the battery compartment.
  - The cover locks into place with an audible click.

Battery status

Charge status of the batteries:



Charge status is critical (LOW BATT):

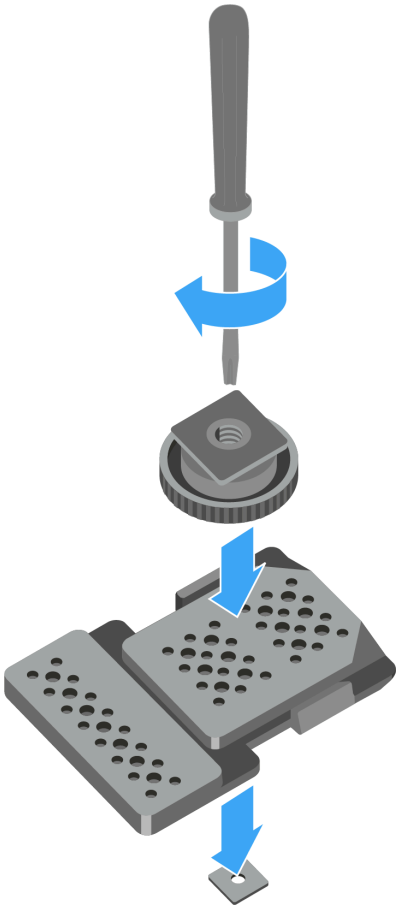

548.100 MHz
ew100 G4
RF
AF
P
MUTE
SENNHEISER

Attaching the diversity receiver to a camera

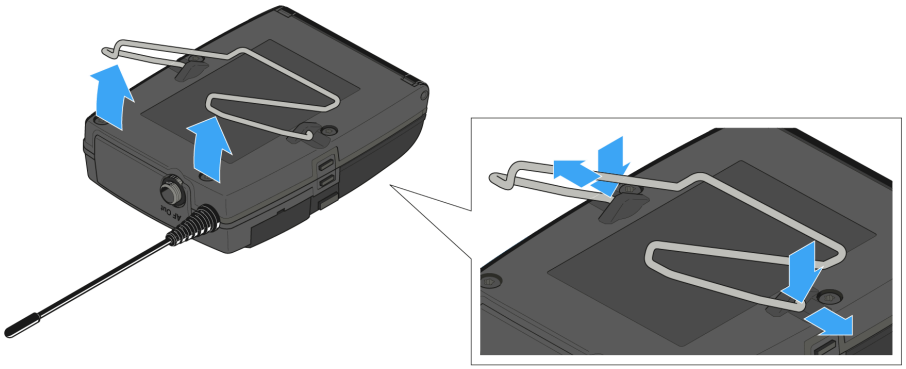
You can attach the diversity receiver on the hot shoe of the camera with the included CA 2 camera kit.

To attach the diversity receiver to a camera:

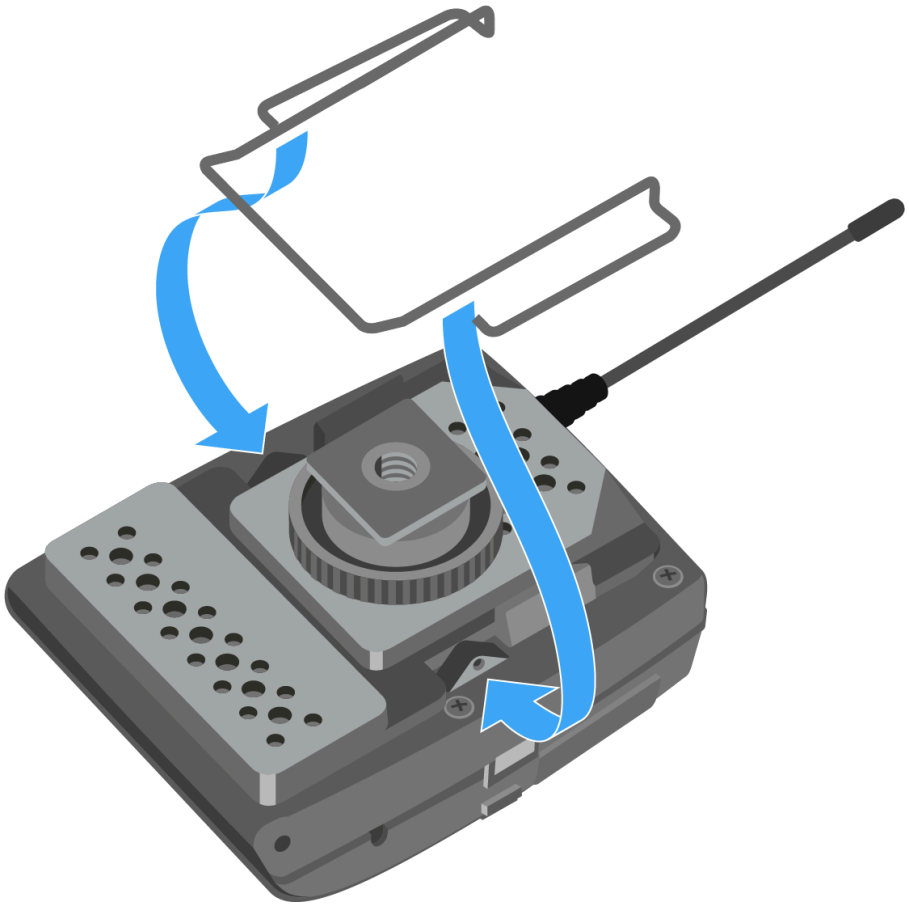
- Determine where on the perforated plate you need to attach the hot shoe adapter so that the diversity receiver can be optimally attached to the camera.
- Place a square nut under the perforated plate at this position.
- Affix the hot shoe adapter to the perforated plate with the square nut.



- Lift the belt clip.
- Press one side of the clip downward on the fixing hole and pull it out of the housing.
- Do the same thing on the other side.

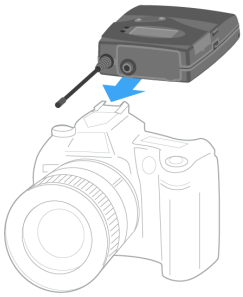


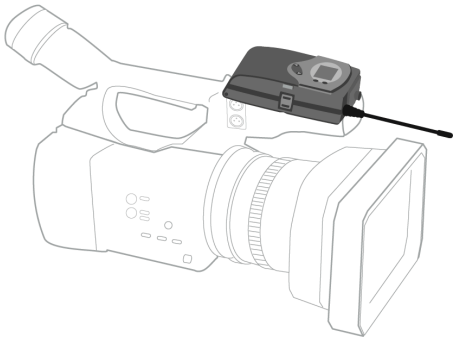
- Place the perforated plate on the rear side of the diversity receiver.
- Reattach the clip.



- Slide the receiver onto a camera.

OR





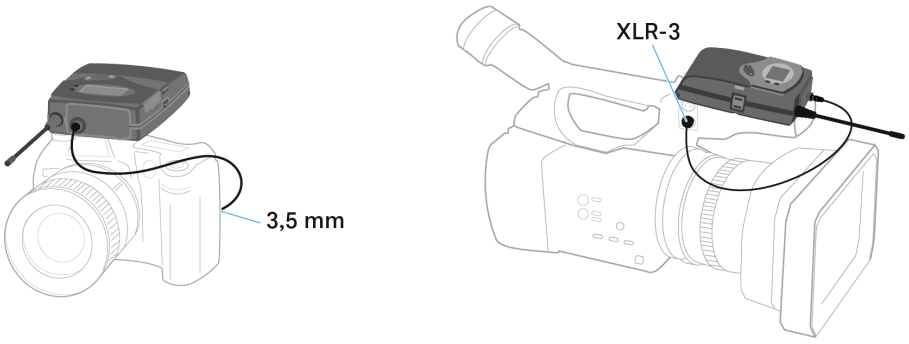
Connecting the diversity receiver to a camera

To connect the diversity receiver to a camera:

- Attach the line input of the camera to the jack socket of the receiver using one of the enclosed line connecting cables.



OR



- Adjust the level of the AF Out audio output in the operating menu of the diversity receiver based on the input level of the camera (see AF Out menu item).

The shielding of the line cable acts as an antenna for the second diversity branch. For details on the pin assignment, see Pin assignment.

Switching the diversity receiver on and off

- Press the two catches and open the battery compartment cover.

To switch the receiver on:

- Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch the receiver off:

- Hold down the **ON/OFF** button until the display goes off.

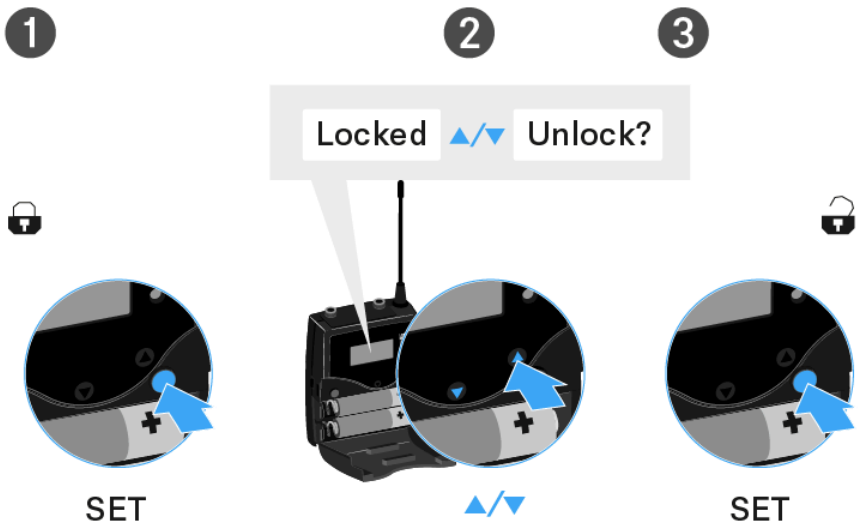
Lock-off function

You can set the automatic lock-off function in the Auto Lock menu (see Auto Lock menu item).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

To temporarily deactivate the lock-off function:

- Press the **SET** button.
  - Locked appears in the display panel.
- Press the **UP** or **DOWN** button.
  - Unlock? appears in the display panel.
- Press the **SET** button.
  - Lock-off function is now temporarily deactivated.



When you are in the operating menu

- Lock-off function is deactivated long enough for you to work in the operating menu.

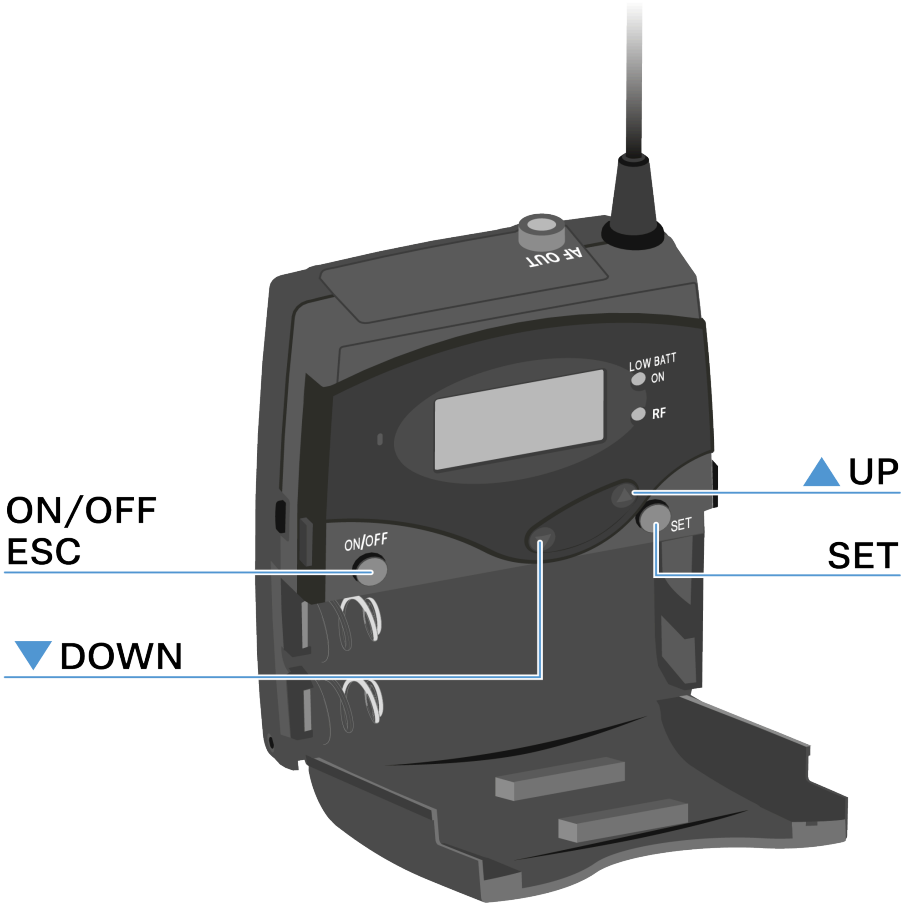
When one of the standard displays is shown

- Lock-off function is automatically activated after 10 seconds.

The Lock-off function icon flashes while the lock-off function is being activated again.

Buttons for navigating through the menu

To navigate through the diversity receiver operating menu, you need the following buttons.



Press the **ON/OFF** button

- ESC function: Cancels the entry and returns to the current standard display
- Selects a standard display (see Home Screen)

Press the **SET** button

- Changes from the current standard display to the operating menu
- Calls up a menu item
- Changes to a submenu
- Stores the settings and returns to the operating menu

Press the **UP** or **DOWN** button

- Changes to the previous or next menu item
- Changes the setting of a menu item

Displays on the EK 500 G4 display panel

Status information such as reception quality, battery status, audio level, etc. is displayed on the home screen of the display panel.

- See Home Screen

The display panel also displays the operating menu which you can use to configure all of the settings.

- See Setting options in the menu

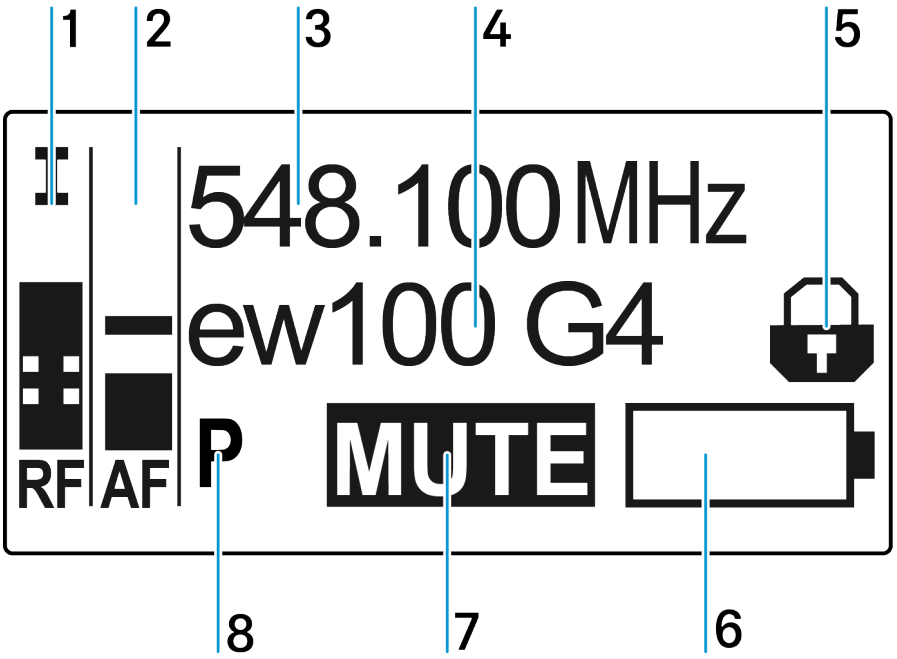
Home Screen

After you switch on the receiver, the display panel initially displays the Sennheiser logo. After a short time, the home screen is then displayed.

The home screen has two different standard displays.

▶ Short-press the **ON/OFF** button to switch between the standard displays.

Frequency/Name standard display



1 RF level (radio frequency)

- RF signal level display
- including the display of the squelch threshold (see Squelch menu item)

2 AF audio level (audio frequency)

- Displays the audio level of the received transmitter When the display shows full deflection, the audio input level is excessively high.
- see AF Out menu item

3 Frequency

- Current receiving frequency
- see Frequency Preset menu item

4 Name

- Freely selectable name of the receiver
- see Name menu item

5 Lock-off function

- Lock-off function is activated on the receiver
- see Lock-off function

6 Battery status of the receiver

- see Inserting and removing the batteries/rechargeable batteries

7 **MUTE** muting function

- No RF signal received

8 **P** pilot tone

- P = Activated pilot tone evaluation
- No symbol = Evaluation is deactivated
- P is black = Pilot tone is being received on the current frequency
- see Advanced -> Pilot Tone menu item

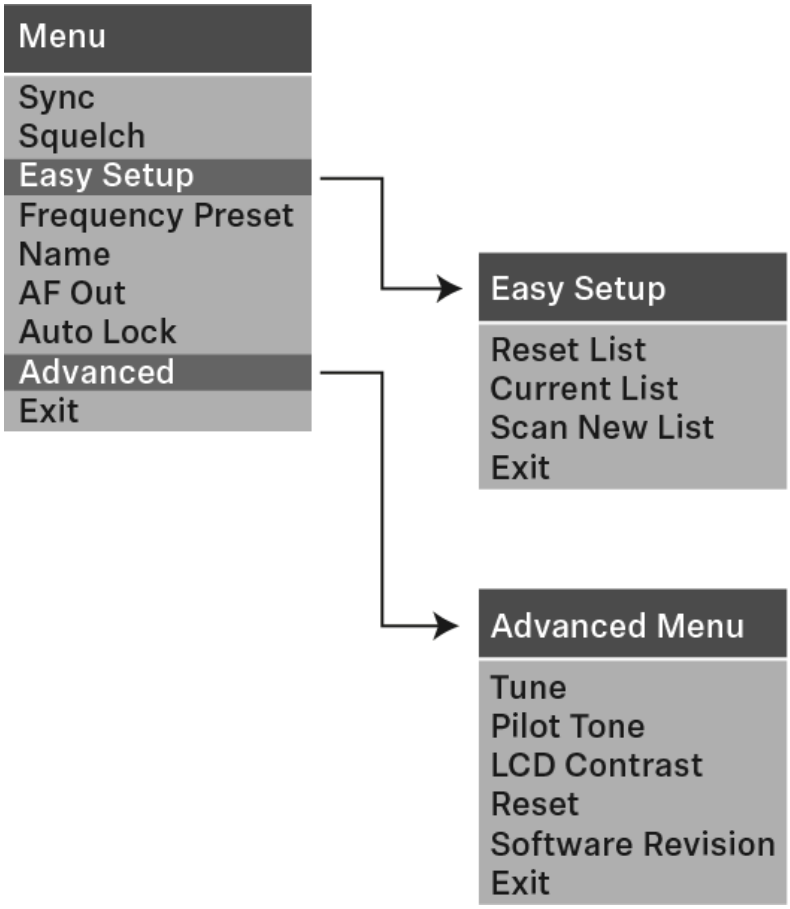
Frequency Bank/Channel/Name standard display

The Frequency Bank/Channel/Name standard display shows the level of the line output AF Out instead of the **MUTE** muting function.



Menu structure

The figure shows the complete diversity receiver menu structure in an overview.



Setting options in the menu

In the diversity receivers menu, you can configure the following settings.

Synchronizing the transmitter with the diversity receiver

- See Sync menu item

Adjusting the squelch threshold

- See Squelch menu item

Scanning for unused frequency presets, releases and selects frequency presets

- See Easy Setup menu item

Setting the frequency bank and the channel

- See Frequency Preset menu item

Entering a freely selectable name

- See Name menu item

Adjusting the audio output level

- See AF Out menu item

Activating/deactivating the automatic lock-off function

- See Auto Lock menu item

Configuring enhanced settings in the Advanced Menu:

- Adjusting the receiving frequencies for the U frequency bank
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the receiver
- Displaying the current software revision
- See Advanced menu item

Sync menu item

In the Sync menu item you can synchronize ew 100 P G4 series transmitters and receivers.

> **i** For more information, see Ew 100 P G4 synchronizing.

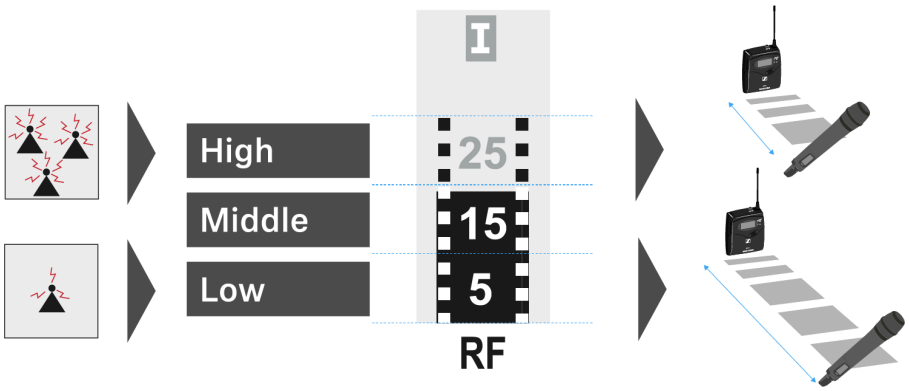
Squelch menu item

You can adjust the squelch threshold in the Squelch menu item.

Setting range:

- Low >> 5 dBµV
- Middle >> 15 dBµV
- High >> 25 dBµV

The squelch threshold is displayed on the home screen in the RF signal level area.



CAUTION

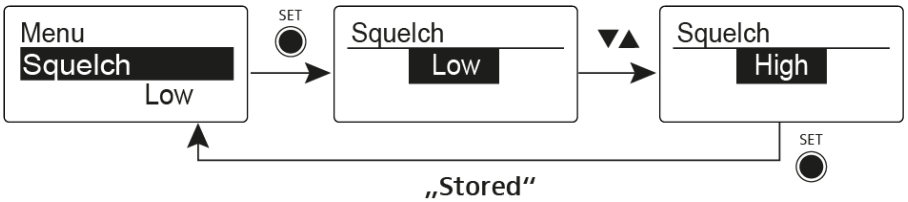
Risk of hearing and material damage

If you set the squelch threshold to a very low value, a very loud hissing noise can occur in the receiver. This hissing noise can be loud enough to cause hearing damage or overload your system's loudspeakers.

- Before adjusting the squelch threshold, set the volume of the audio output to the minimum.
- Never change the squelch threshold during a live transmission.

To open the Squelch menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Squelch** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.



- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ON/OFF** button to cancel the entry without saving the settings.

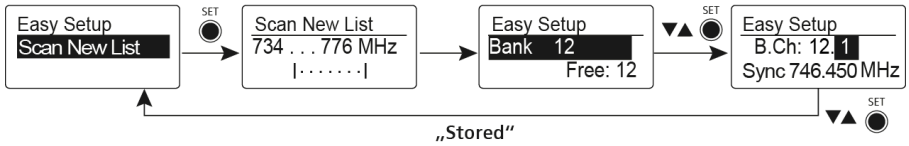
Easy Setup menu item

You can scan for unused frequencies using the Easy Setup menu item.

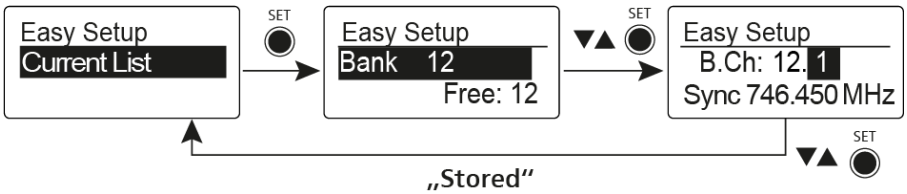
> **i** Switch off all transmitters before you perform the scan. If transmitters are still switched on, they are detected as unavailable frequencies and the frequencies that are actually available cannot then be used.

To open the Easy Setup menu item:

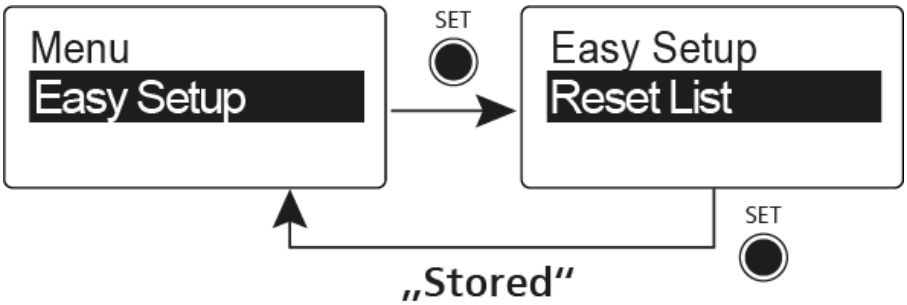
- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Easy Setup** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.
  - **Scan New List**: Automatically searches for unused receiving frequencies (frequency preset scan):



  - **Current List**: Selects an unused frequency preset:



  - **Reset List**: Releases all occupied frequency presets and selects an unused frequency preset:



- Press the **SET** button to save the changes you made to the settings.

OR

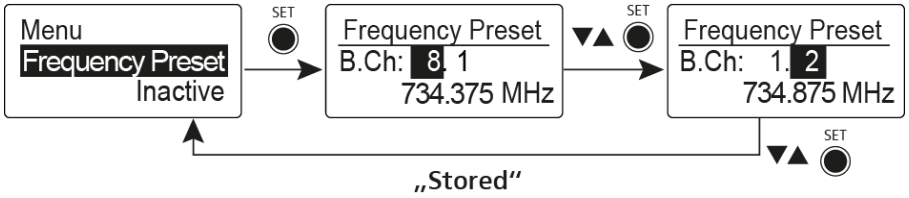
- Press the **ON/OFF** button to cancel the entry without saving the settings.

Frequency Preset menu item

In the Frequency Preset menu item, you can adjust the receiving frequency of the receiver by adjusting the frequency bank and the channel.

To open the Frequency Preset menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Frequency Preset** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.



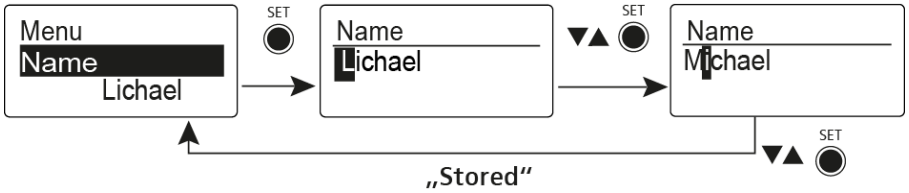
- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ON/OFF** button to cancel the entry without saving the settings.

Name menu item

In the Name menu item you can enter a name for the radio link.

To open the Name menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Name** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.



- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ON/OFF** button to cancel the entry without saving the settings.

AF Out menu item

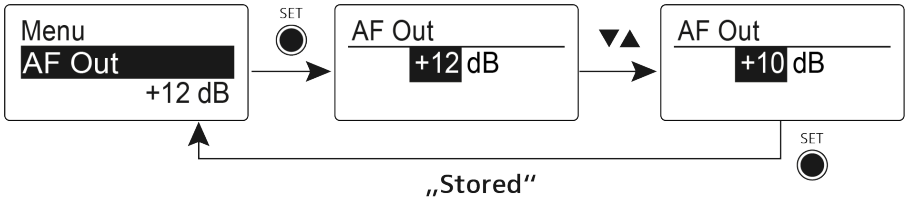
In the AF Out menu item you can adjust the level of the line audio output based on the level of the connected camera.

Setting range:

- -30 dB to +12 dB
- in 6 dB steps

To open the AF Out menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **AF Out** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.



- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ON/OFF** button to cancel the entry without saving the settings.

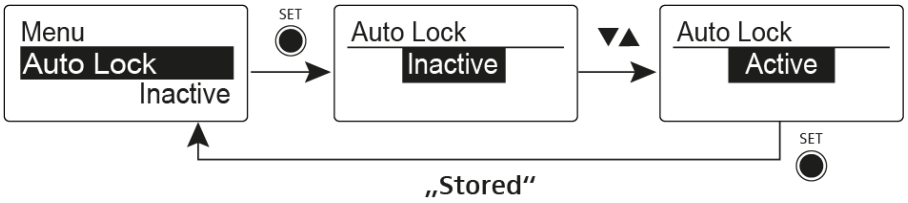
Auto Lock menu item

In the Auto Lock menu item you can activate or deactivate auto lock-off function.

> **i** You can find information about temporarily deactivating the lock-off function during operation under Lock-off function.

To open the Auto Lock menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Auto Lock** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.



- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ON/OFF** button to cancel the entry without saving the settings.

Advanced menu item

In the Advanced submenu you can configure enhanced settings.

To open the Advanced submenu:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Advanced** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.

  The following sub-items are available:

Adjusting the receiving frequency for the frequency bank U

- See Advanced -> Tune menu item

Activating/deactivating the pilot tone evaluation

- See Advanced -> Pilot Tone menu item

Adjusting the contrast of the display panel

- See Advanced -> LCD Contrast menu item

Resetting the receiver

- See Advanced -> Reset menu item

Displaying the current software revision

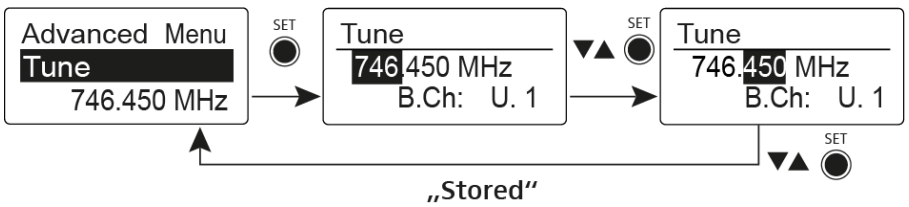
- See Advanced -> Software Revision menu item

Advanced -> Tune menu item

In the Tune menu item of the Advanced submenu, you can configure the receiving frequencies for the U frequency bank.

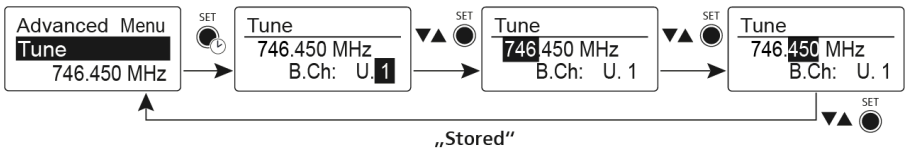
Only adjusting the frequency

- Open the **Tune** menu item in the **Advanced** menu.
- Adjust the settings.



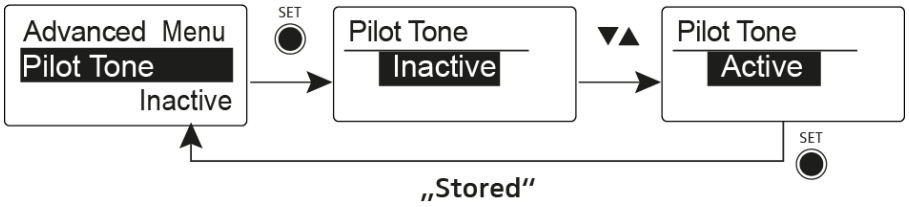
Setting the channel and frequency

- Select the menu item and call it up by holding down the **SET** button until the channel selection appears.



Advanced -> Pilot Tone menu item

In the Pilot Tone menu item of the Advanced submenu, you can activate and deactivate the pilot tone evaluation.



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver’s squelch function.

Advanced -> LCD Contrast menu item

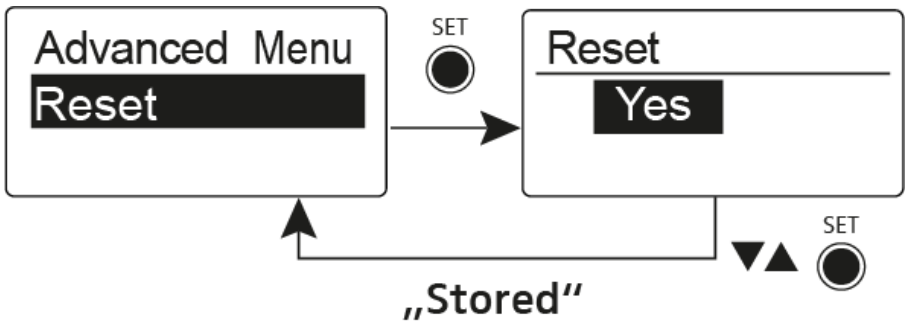
In the LCD Contrast menu item of the Advanced submenu, you can adjust the display contrast of the display panel in 16 steps.



Advanced -> Reset menu item

In the Reset menu item of the Advanced submenu, you can reset the settings of the receiver.

When you reset the diversity receiver, only the selected settings of the pilot tone and the U frequency bank are retained.

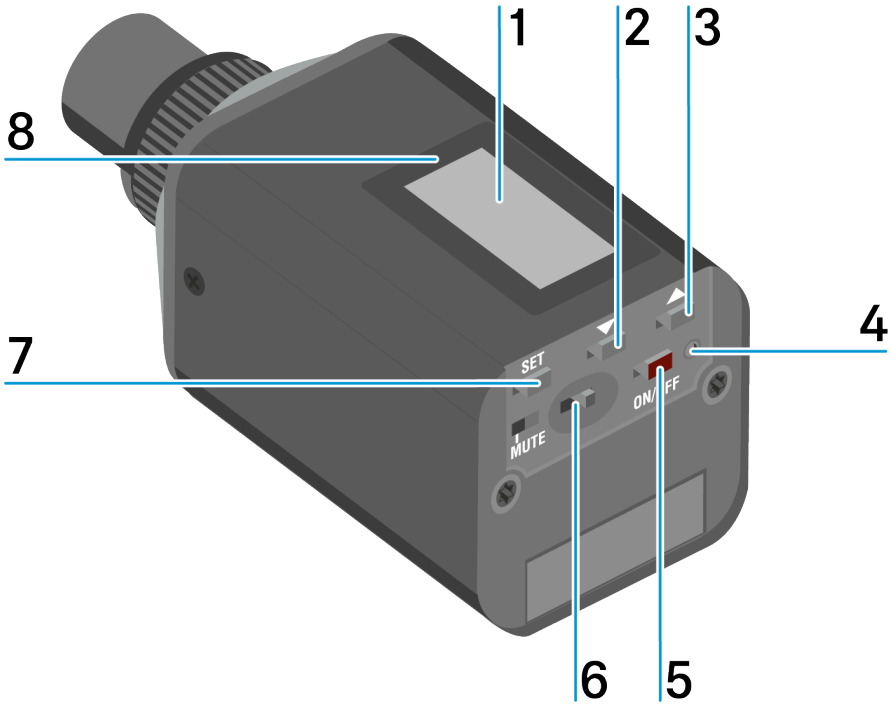


Advanced -> Software Revision menu item

In the Software Revision menu item of the Advanced submenu, you can display the current software version of the receiver.

SKP 100 G4 plug-on transmitter

Product overview



1 Display panel

- see Displays on the plug-on transmitter display panel

2 **DOWN** button

- see Buttons for navigating the menu

3 **UP** button

- see Buttons for navigating the menu

4 Operation and battery indicator, red LED

- illuminated = ON, see Switching the plug-on transmitter on and off
- flashing = LOW BATTERY, see Inserting and removing the batteries/rechargeable batteries

5 **ON/OFF** button with **ESC** function in the operating menu

- Switch the transmitter on or off, see Switching the plug-on transmitter on and off
- Escape function in the menu, see Buttons for navigating the menu

6 **MUTE** switch

- see Muting the plug-on transmitter (AF mute)

7 **SET** button

- see Buttons for navigating the menu

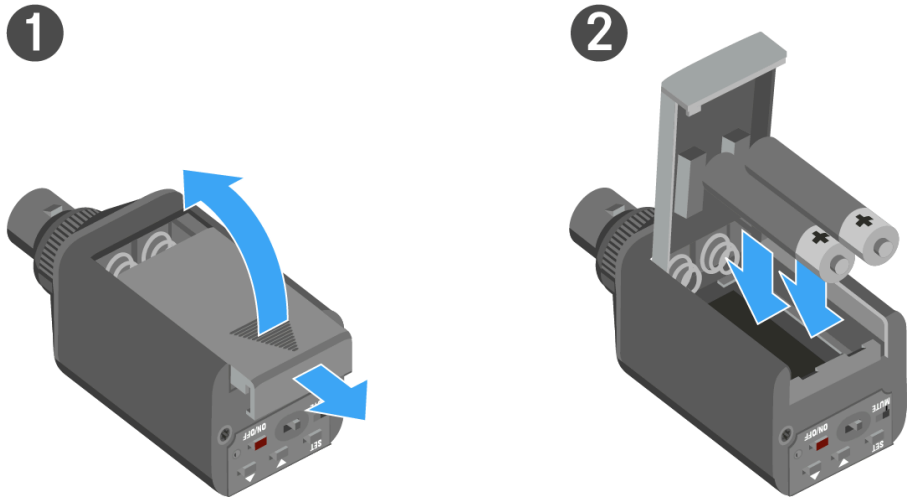
8 Infra-red interface

- see Ew 100 P G4 synchronizing

Inserting and removing the batteries/rechargeable batteries

You can operate the plug-on transmitter either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

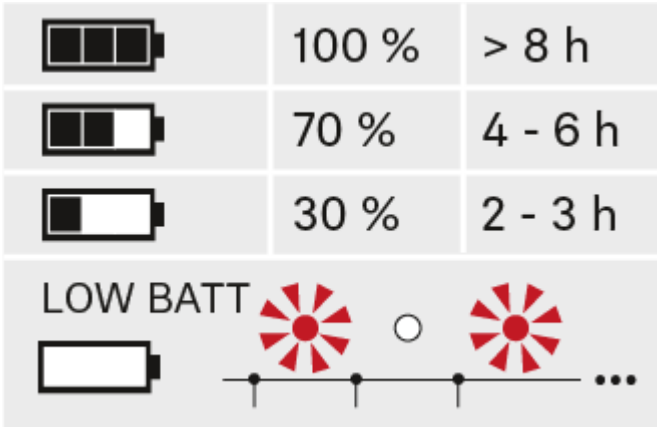
- Slide the battery compartment cover in the direction of the embossed arrow and open the cover.
- Insert the batteries or the accupack as shown below. Please observe correct polarity when inserting the batteries/accupack.



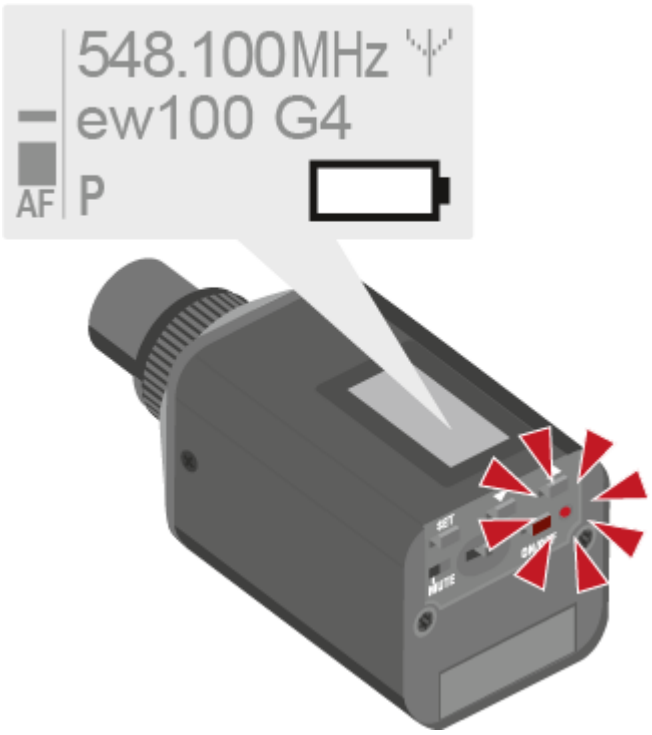
- Close the battery compartment.
  - The cover locks into place with an audible click.

Battery status

Charge status of the batteries:



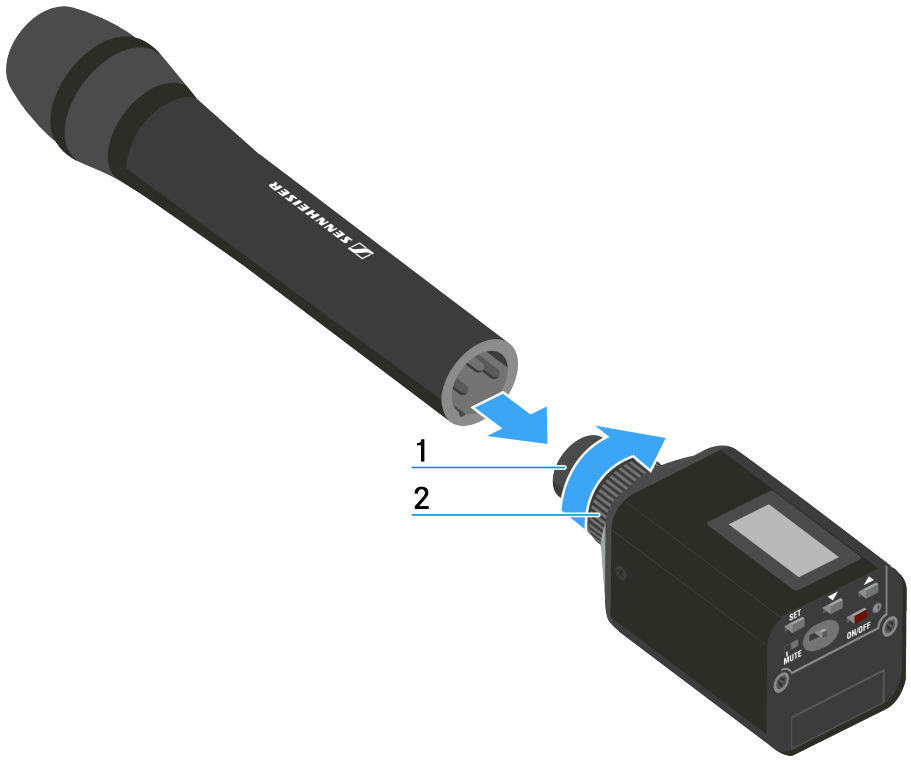
Charge status is critical (LOW BATT):


548.100MHz
ew100 G4
AF
P

Attaching the plug-on transmitter to the microphone

> **i** Microphones with a metal casing should be used for optimal signal transmission.

- Loosen the locking ring (2) by rotating it in the clockwise direction past the center point.
  - ✓ This unlocks the XLR-3 plug (1) of the plug-on transmitter.
- Connect the plug-on transmitter's XLR-3 plug (1) to the XLR-3 socket of the microphone.
- Tighten the locking ring (2) by rotating it counter-clockwise in the direction of the arrow.



Switching the plug-on transmitter on and off

To switch on the plug-on transmitter:

- Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch off the plug-on transmitter:

- Hold down the **ON/OFF** button until the display goes off.

Muting the plug-on transmitter (AF mute)

You can mute the audio signal with the MUTE switch.

To do this, the **MUTE** switch function must be configured to **AF On/Off**. You can find more information about this subject under Advanced > Mute Mode menu item.

- Slide the **MUTE** switch to the MUTE position.



The audio signal is muted. The message MUTE is shown on the display.

Deactivating the RF signal (RF mute)

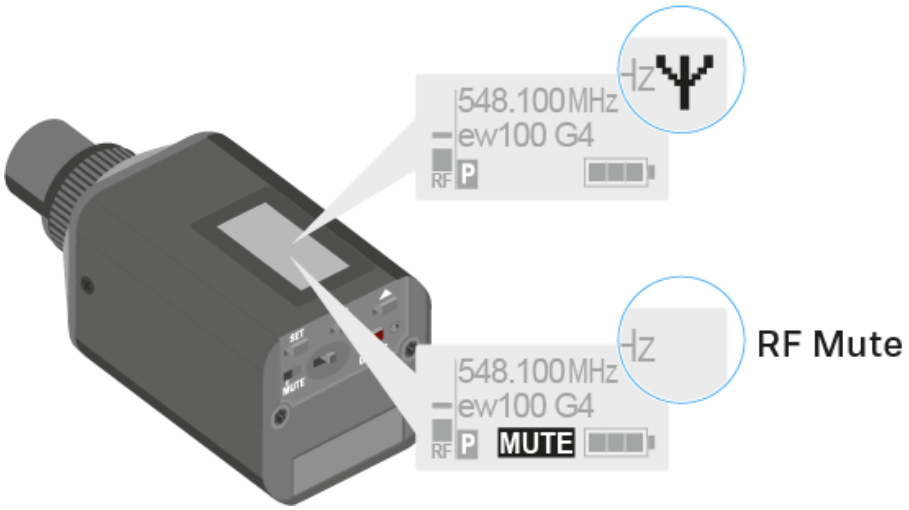
You can deactivate the RF signal in two ways:

Deactivating the RF signal with the MUTE switch

You can deactivate the RF signal with the **MUTE** switch. To do this, the **MUTE** switch function must be configured to RF On/Off. You can find more information about this subject under Advanced > Mute Mode menu item.

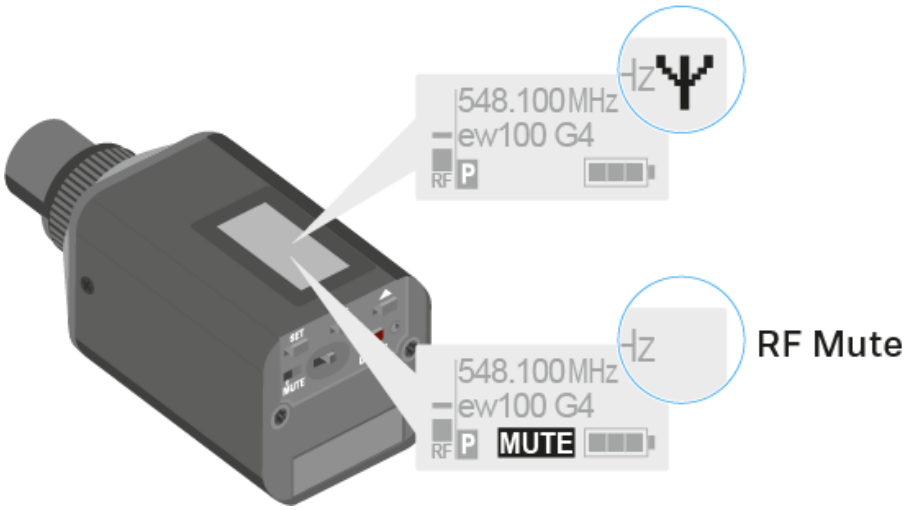


- Slide the **MUTE** switch to the MUTE position.
  - The RF signal is deactivated. The message MUTE is shown in the display and the transmission icon no longer appears.



Deactivating the RF signal with the ON/OFF button

- Short-press the **ON/OFF** button.
  - RF Mute On? appears.
- Press the **SET** button.
  - The RF signal is deactivated. The message MUTE is shown in the display and the transmission icon no longer appears.



- Short-press the **ON/OFF** button, to activate the RF signal.
  - RF Mute Off? appears.
- Press the **SET** button.
  - The transmission icon appears again.

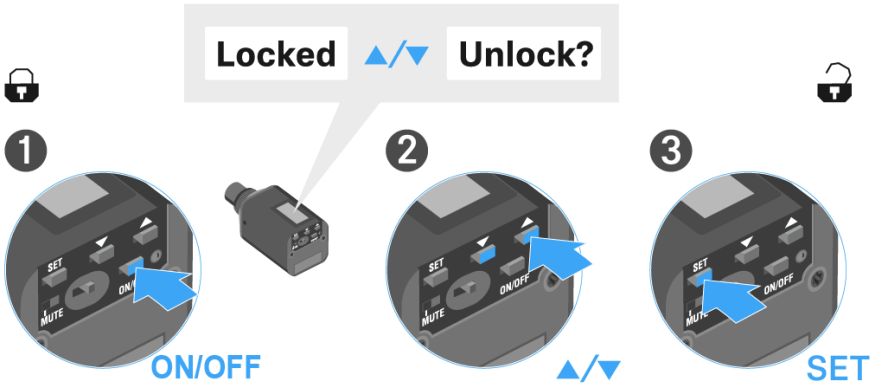
Lock-off function

You can set the automatic lock-off function in the Auto Lock menu (see Auto Lock menu item).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

To temporarily deactivate the lock-off function:

- Press the **SET** button.
  - ✓ Locked appears in the display panel.
- Press the **UP** or **DOWN** button.
  - ✓ Unlock? appears in the display panel.
- Press the **SET** button.
  - ✓ Lock-off function is now temporarily deactivated.



When you are in the operating menu

- Lock-off function is deactivated long enough for you to work in the operating menu.

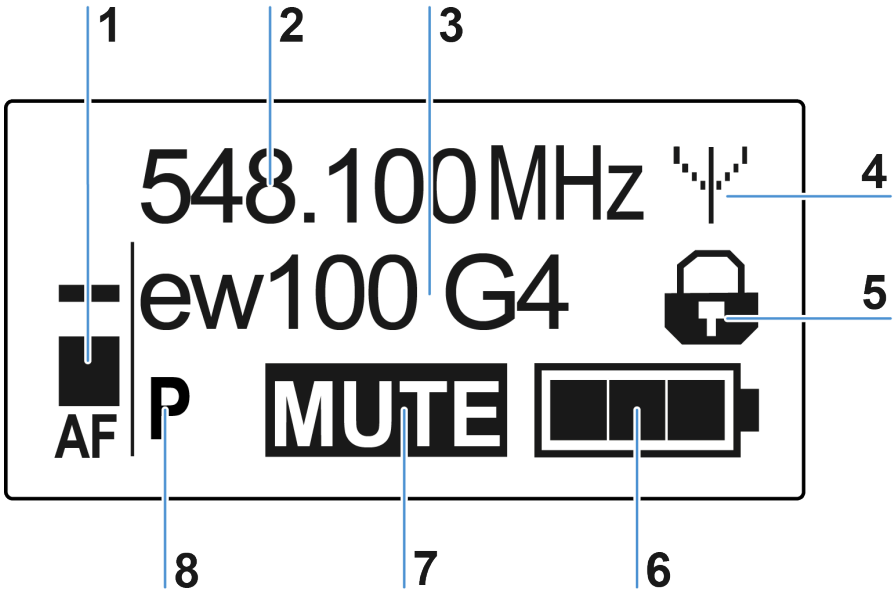
When one of the standard displays is shown

- Lock-off function is automatically activated after 10 seconds.

The Lock-off function icon flashes while the lock-off function is being activated again.

Displays on the plug-on transmitter display panel

You can view the following information on the transmitter display.



1 AF audio level

- Displays the audio level with peak hold function
- see Sensitivity menu item

2 Frequency

- Configured transmission frequency
- see Frequency Preset menu item

3 Name

- Freely selectable name of the receiver
- see Name menu item

4 Transmission icon

- RF signal is being transmitted
- see Deactivating the RF signal (RF mute)

5 Lock-off function

- Lock-off function is activated
- see Auto Lock menu item

6 Battery status

- see Battery status

7 **MUTE** muting function

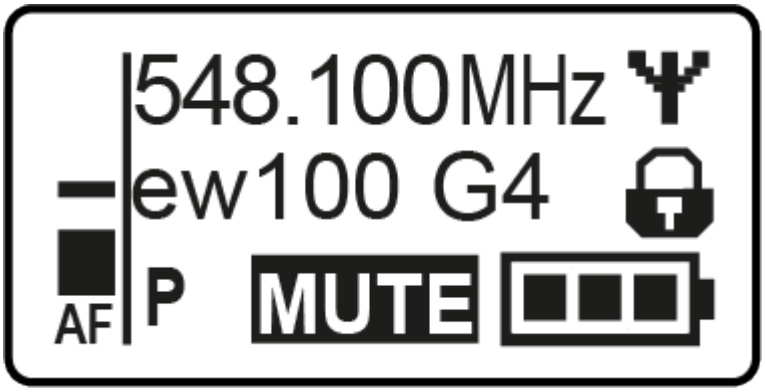
- The audio signal is muted
- see Muting the plug-on transmitter (AF mute)

8 **P** pilot tone

- Pilot tone transmission is activated
- see Advanced > Pilot Tone menu item

Select a standard display

▶ Press the **UP** or **DOWN** buttons to select a standard display.
Frequency/Name standard display



Channel/Frequency standard display



Name/Channel standard display



Buttons for navigating the menu

To open the menu/a menu item:

- Press the **SET** button.
  - The operating menu is shown on the transmitter display panel.
- Press the **UP** or **DOWN** buttons to navigate through the individual menu items.
- Press the **SET** button to open the selected menu item.

Making changes in a menu item

- Press the **UP** or **DOWN** buttons to set the displayed value.
- Press the **SET** button to save the setting.
- Press the **ESC (ON/OFF)** button to leave the menu item without saving the setting.

Setting options in the menu

In the plug-on transmitters menu, you can configure the following settings.

Adjusting the input sensitivity

- See Sensitivity menu item

Setting the frequency bank and the channel

- See Frequency Preset menu item

Entering a freely selectable name

- See Name menu item

Activating/deactivating the automatic lock-off function

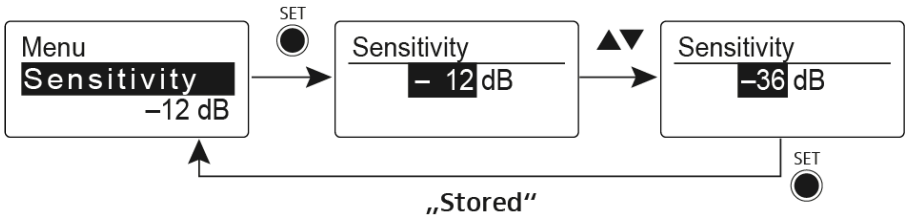
- See Auto Lock menu item

Configuring enhanced settings in the Advanced Menu:

- Adjusting the transmission frequencies for the U frequency bank
- Configuring the MUTE switch
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the transmitter
- Displaying the current software revision
- See Advanced menu item

Sensitivity menu item

Adjusting the input sensitivity – AF audio level



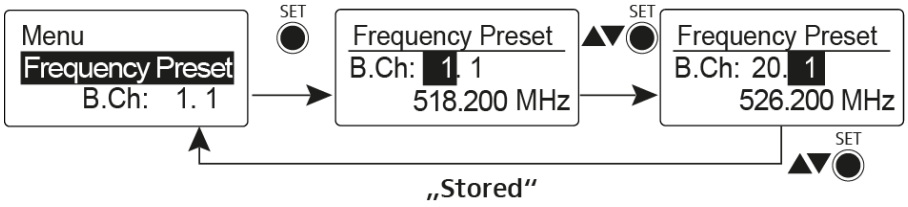
Setting range:

- 0 to -48 dB
- in 6 dB steps

The AF audio level is also displayed when the plug-on transmitter is muted, e.g. to check the sensitivity before a live broadcast.

Frequency Preset menu item

Manually selecting a frequency bank and channel



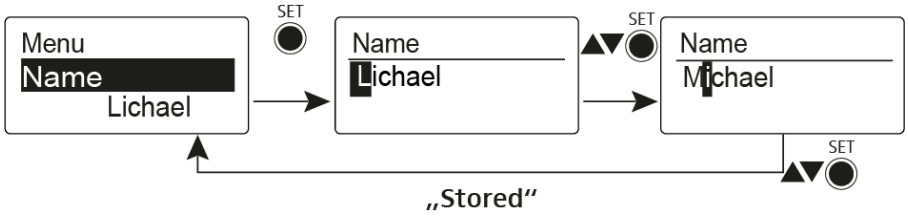
> While you work in the Frequency Preset menu, the RF signal is deactivated.

Please note when creating multi-channel systems:

Only the factory-preset frequencies within one frequency bank are intermodulation-free. The bodypack transmitter and receiver must be set to the same frequency. Be sure to note the information on frequency selection under Establishing a radio link.

Name menu item

Entering names



In the Name menu item you can enter any name you want for the bodypack transmitters (e.g. the names of the musicians).

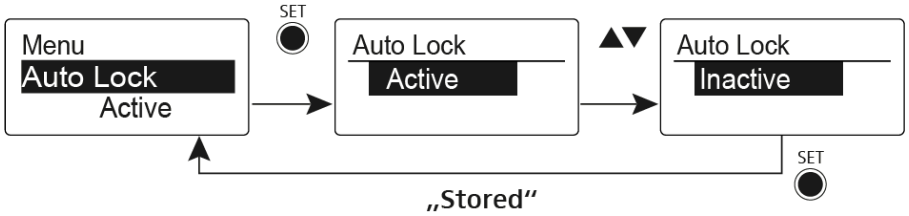
The name can be shown in the Frequency/Name and Name/Channel standard displays.

The names are a maximum of 8 characters:

- All letters except umlauts.
- Numbers from 0 to 9
- Special characters and spaces

Auto Lock menu item

Switching the automatic lock-off function on and off



This lock prevents the wireless microphone from being unintentionally switched off and also prevents any unintentional changes to the transmitter's configuration. In the current standard display, the lock icon shows whether the lock-off function is currently switched on.

You can find information about using the lock-off function under Lock-off function.

Advanced menu item

In the Advanced submenu you can configure enhanced settings.

The following sub-items are available:

Adjusting the transmission frequencies for the U frequency bank

- See Advanced > Tune menu item

Configuring the MUTE switch

- See Advanced > Mute Mode menu item

Activating/deactivating the pilot tone evaluation

- See Advanced > Pilot Tone menu item

Adjusting the contrast of the display panel

- See Advanced > LCD Contrast menu item

Resetting the transmitter

- See Advanced > Reset menu item

Displaying the current software revision

- See Advanced > Software Revision menu item

Advanced > Tune menu item

Configuring the transmission frequency and frequency bank U

When you have configured the bodypack transmitter to a system bank and you call up the **Tune** menu item, channel 1 of the frequency bank **U** is automatically set. The message **U.1** briefly appears in the display. In the factory settings, the channels of the frequency bank **U** are not assigned to any transmission frequency.

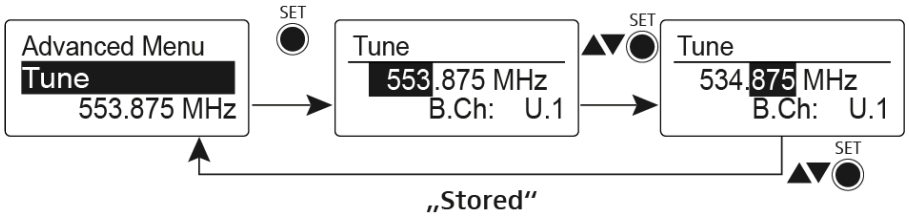
While you work in the **Tune** menu, the RF signal is deactivated.

You can configure a transmission frequency for the current channel or select a channel in the frequency bank **U** and configure a transmission frequency for this channel in the **Tune** menu. Be sure to note the information on frequency selection, see Establishing a radio link.

To configure the transmission frequency for the current channel:

▶ Open the **Tune** menu item in the **Advanced** menu.

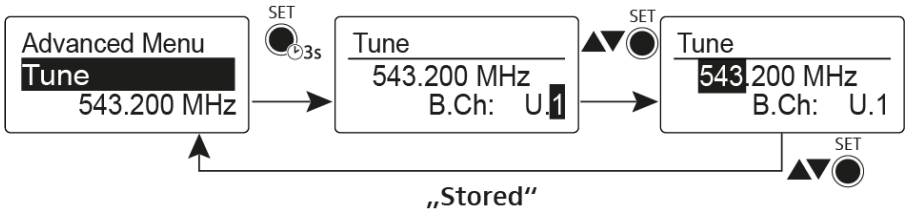
✓ The frequency selection appears.



- Configure the desired frequency.
- Press the **SET** button.
  - Your settings will be saved. You are now back in the operating menu.

To select a channel and assign it a frequency:

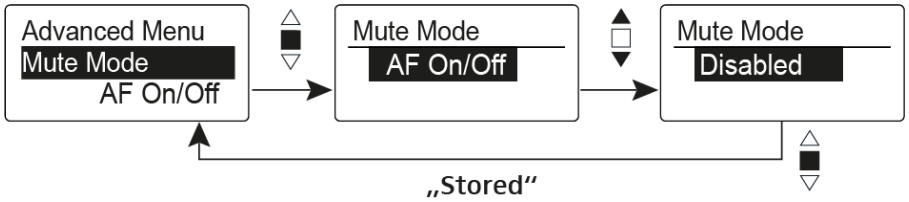
- Open the **Tune** menu item in the **Advanced** menu by pressing and holding the **SET** button until the frequency bank selection appears.



- Set the desired channel.
- Press the **SET** button.
  - The frequency selection appears.
- Configure the frequency.

Advanced > Mute Mode menu item

Configuring the MUTE switch



AF On/Off mode

- If set to position MUTE, the audio signal is muted

RF On/Off mode

- If set to the MUTE selector position, the RF signal is deactivated

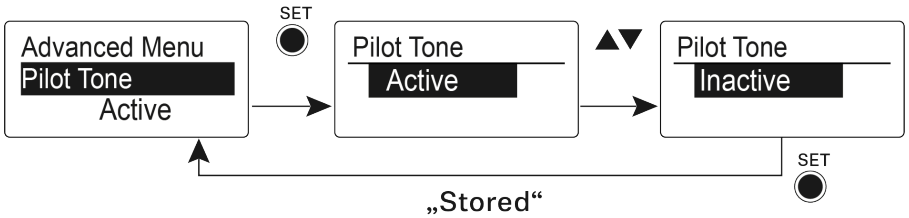
Disabled mode

- No function

> You can find information about operating the mute switch under Muting the plug-on transmitter (AF mute) and Deactivating the RF signal (RF mute).

Advanced > Pilot Tone menu item

Activating/deactivating pilot tone transmission



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver’s squelch function.

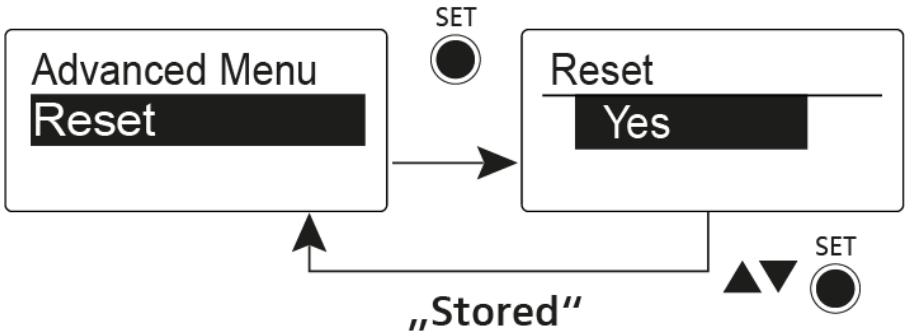
Advanced > LCD Contrast menu item

Adjusting the contrast of the display panel

You can configure the contrast of the display in 16 steps.

Advanced > Reset menu item

Resetting the plug-on transmitter



When you reset the plug-on transmitter, only the selected settings of the pilot tone and the U frequency bank are retained.

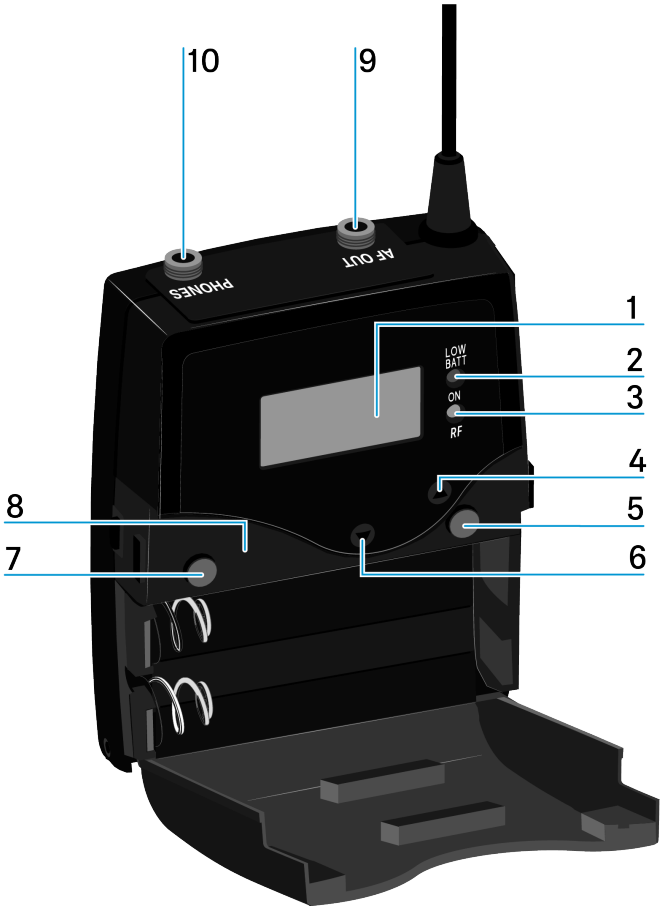
Advanced > Software Revision menu item

Show software revision

You can display the current software revision.

EK 500 G4 diversity receiver

Product overview



1 Display panel

- see Displays on the EK 500 G4 display panel

2 Operation and battery indicator, red LED

- illuminated = ON
  - see Switching the diversity receiver on and off
- flashing = LOW BATTERY
  - see Inserting and removing the batteries/rechargeable batteries

3 Wireless reception indicator, green LED

- illuminated = RF

4 **UP** button

- see Buttons for navigating through the menu

5 **SET** button

- see Buttons for navigating through the menu

6 **DOWN** button

- see Buttons for navigating through the menu

7 **ON/OFF** button with ESC function in the operating menu

- Switch the transmitter on or off
  - see Switching the diversity receiver on and off
- Escape function in the menu
  - see Buttons for navigating through the menu

8 Infra-red interface

- see Ew 500 P G4 synchronizing

9 3.5 mm jack socket **PHONES**

- see Connecting headphones to the diversity receiver
- see Volume control of the PHONES socket

10 3.5 mm jack socket **AF OUT**

- lockable
- see Connecting the diversity receiver to a camera

Inserting and removing the batteries/rechargeable batteries

You can operate the diversity receiver either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

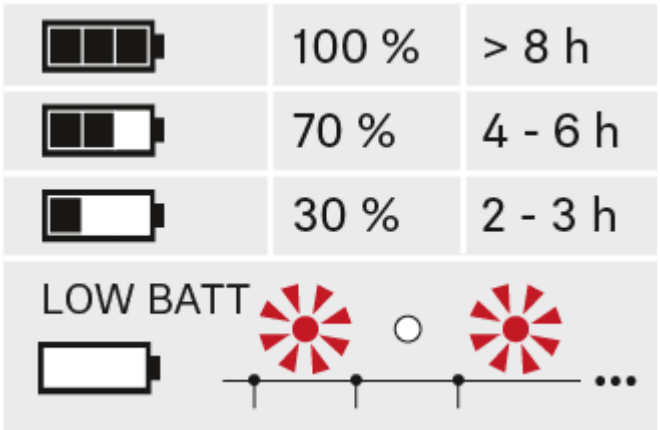
- Press the two catches and open the battery compartment cover.
- Insert the batteries or the rechargeable battery as shown below. Please observe correct polarity when inserting the batteries.



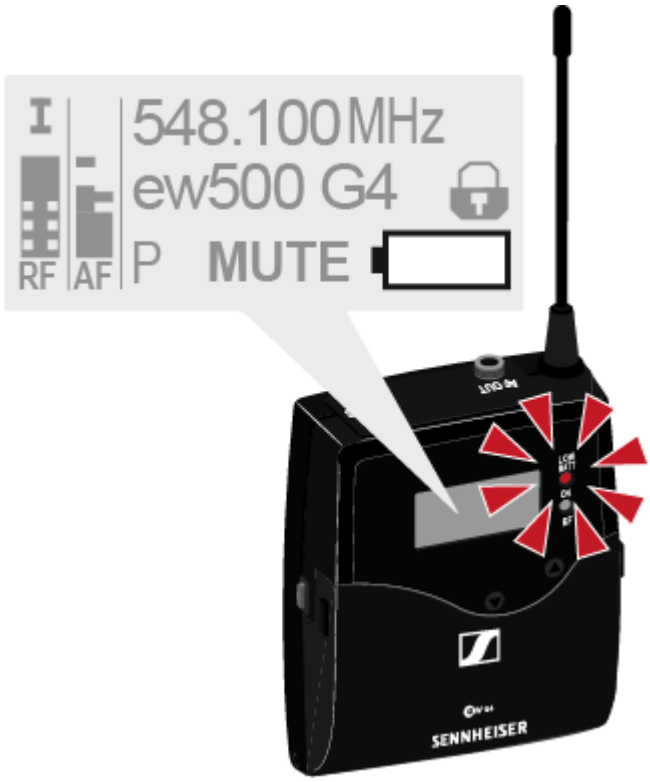
- Close the battery compartment.
  - The cover locks into place with an audible click.

Battery status

Charge status of the batteries:



Charge status is critical (LOW BATT):


548.100 MHz
ew500 G4
P MUTE
RF
AF
SENNHEISER

Connecting headphones to the diversity receiver

CAUTION

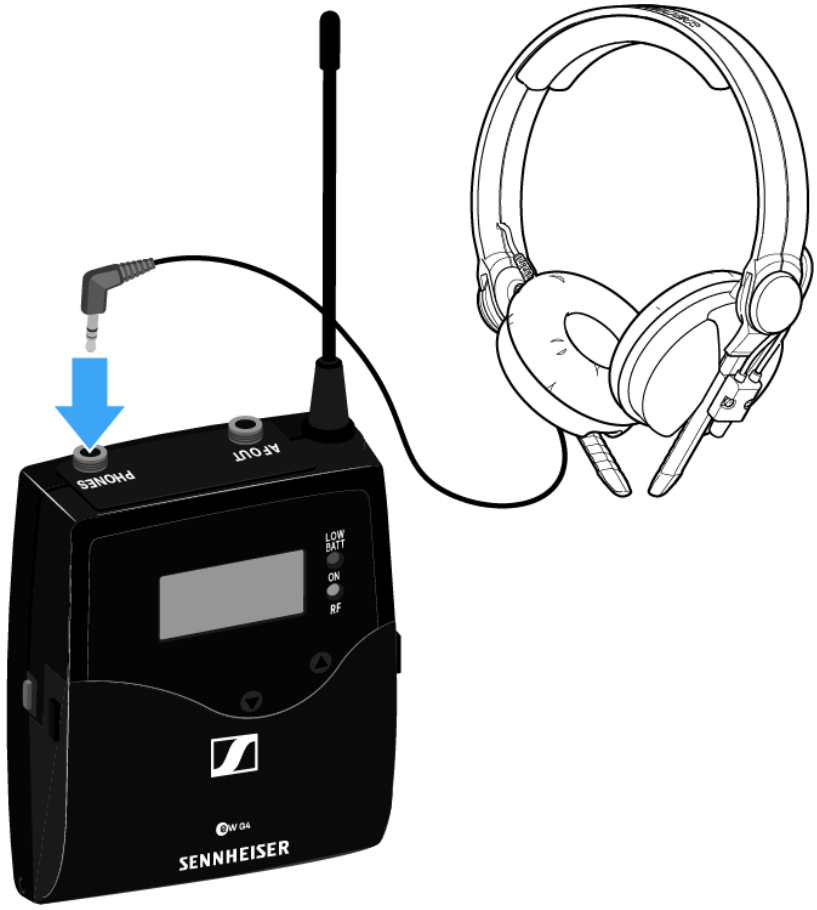
Danger due to high volume levels

Volume levels that are too high may damage your hearing.

- Turn down the volume of the headphone output before you put on the headphone.

To connect the headphones to the receiver:

- Insert the cable's 3.5 mm jack plug into the **PHONES** socket on the receiver as shown in the diagram.
- Screw the plug's coupling ring onto the audio socket thread of the receiver if needed.

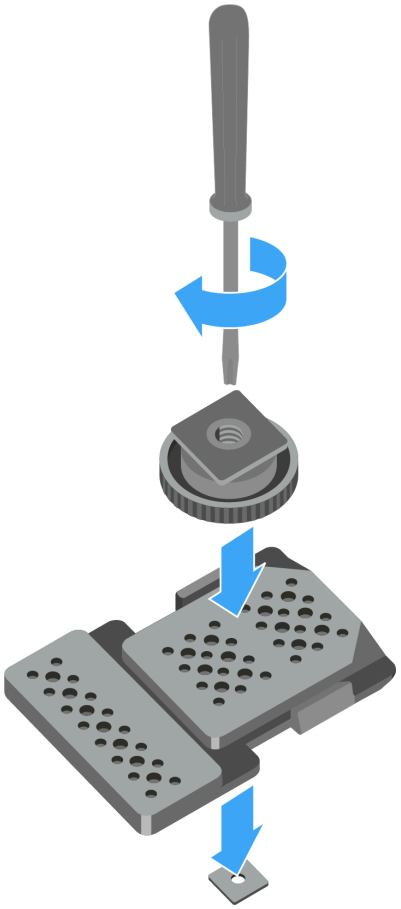


Attaching the diversity receiver to a camera

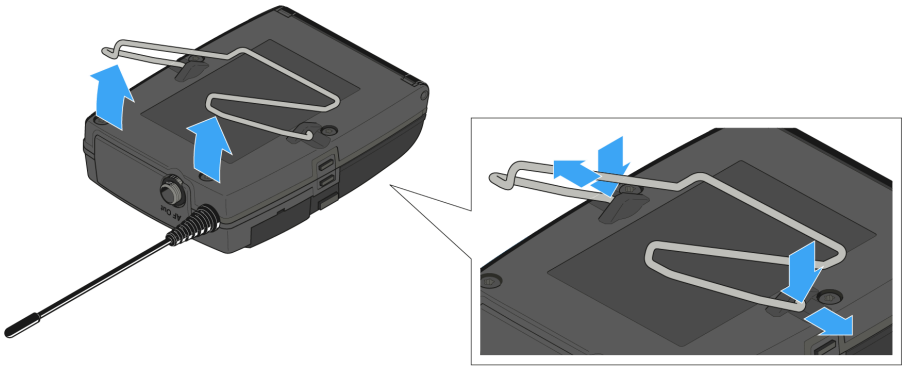
You can attach the diversity receiver on the hot shoe of the camera with the included CA 2 camera kit.

To attach the diversity receiver to a camera:

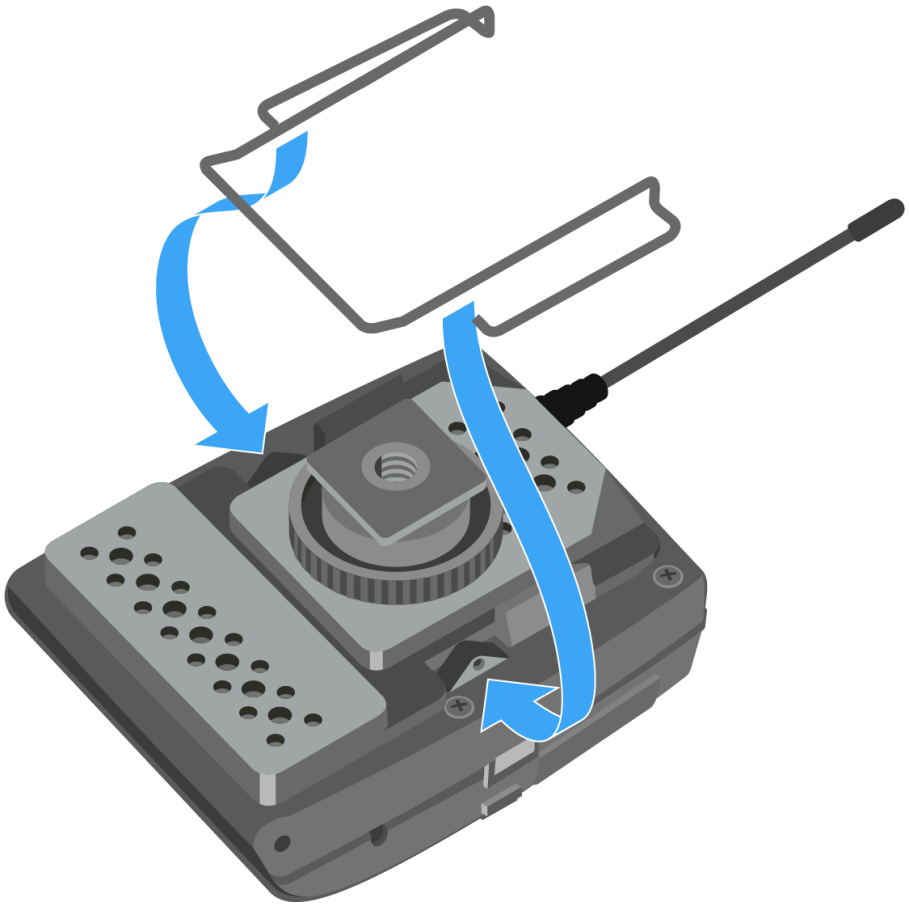
- Determine where on the perforated plate you need to attach the hot shoe adapter so that the diversity receiver can be optimally attached to the camera.
- Place a square nut under the perforated plate at this position.
- Affix the hot shoe adapter to the perforated plate with the square nut.



- Lift the belt clip.
- Press one side of the clip downward on the fixing hole and pull it out of the housing.
- Do the same thing on the other side.

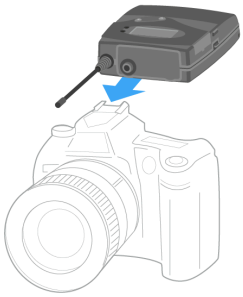


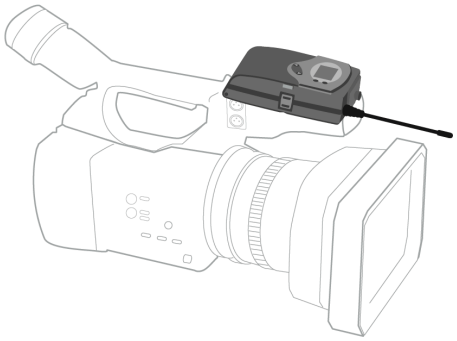
- Place the perforated plate on the rear side of the diversity receiver.
- Reattach the clip.



- Slide the receiver onto a camera.

OR

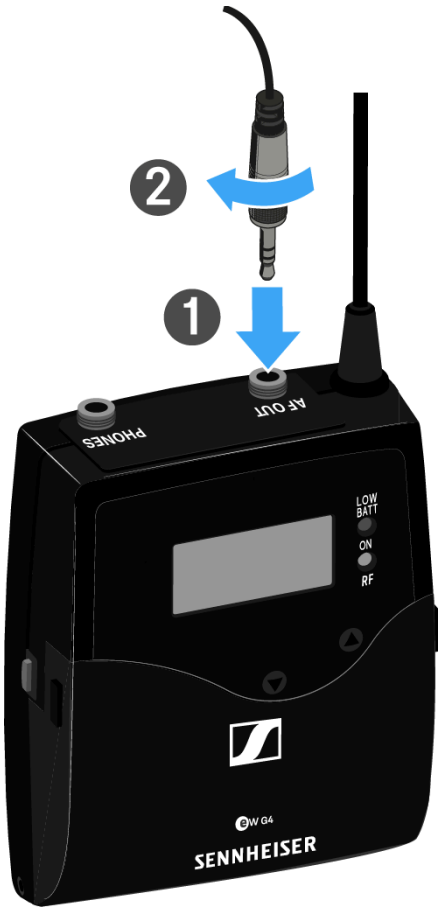




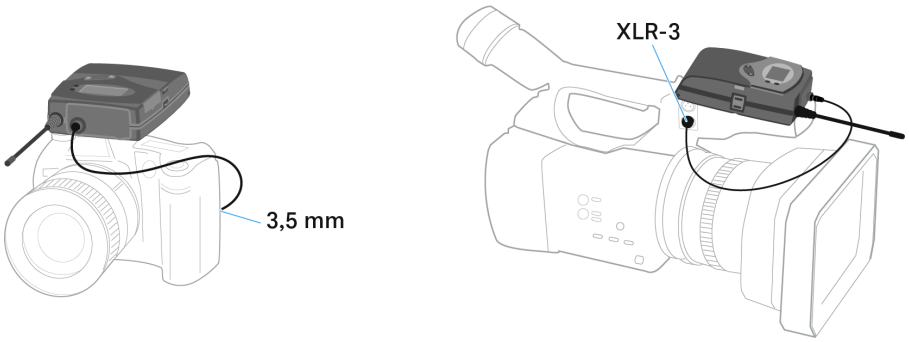
Connecting the diversity receiver to a camera

To connect the diversity receiver to a camera:

- Attach the line input of the camera to the jack socket of the receiver using one of the enclosed line connecting cables.



OR



- Adjust the level of the AF Out audio output in the operating menu of the diversity receiver based on the input level of the camera (see AF Out menu item).

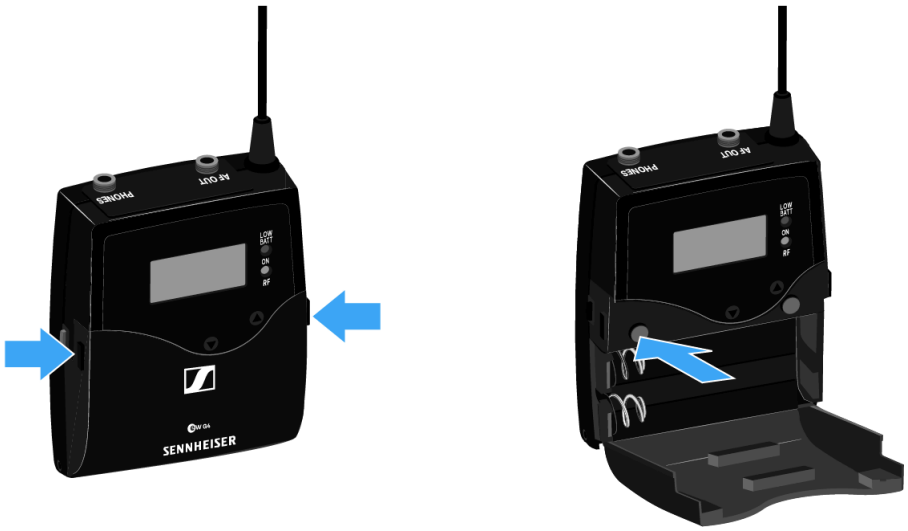
The shielding of the line cable acts as an antenna for the second diversity branch. For details on the pin assignment, see Pin assignment.

Switching the diversity receiver on and off

- Press the two catches and open the battery compartment cover.

To switch the receiver on:

- Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



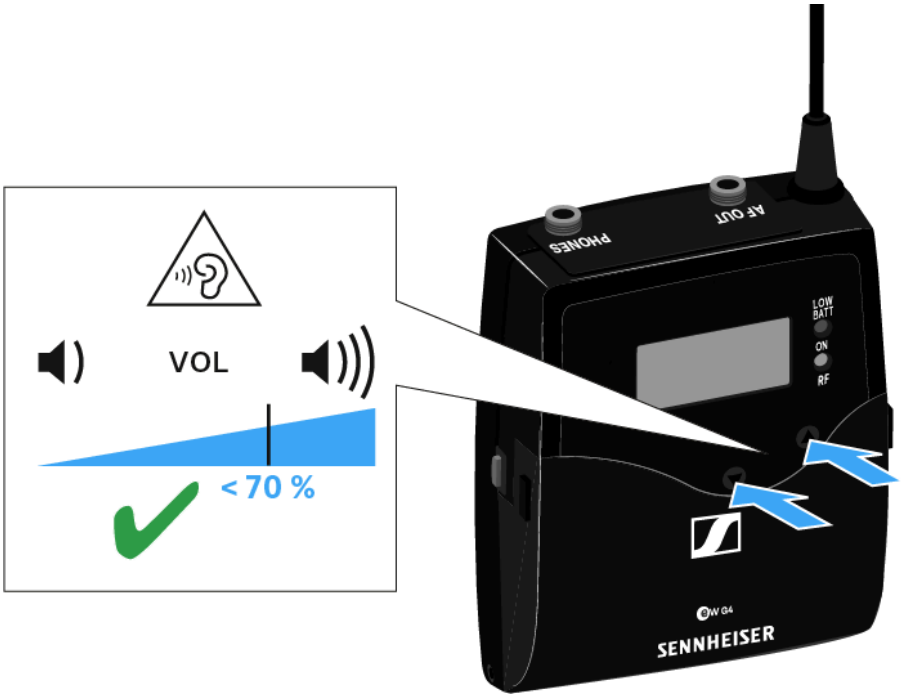
To switch the receiver off:

- Hold down the **ON/OFF** button until the display goes off.

Volume control of the PHONES socket

To adjust the volume of the connected headphone:

- Press the **UP** or **DOWN** buttons.



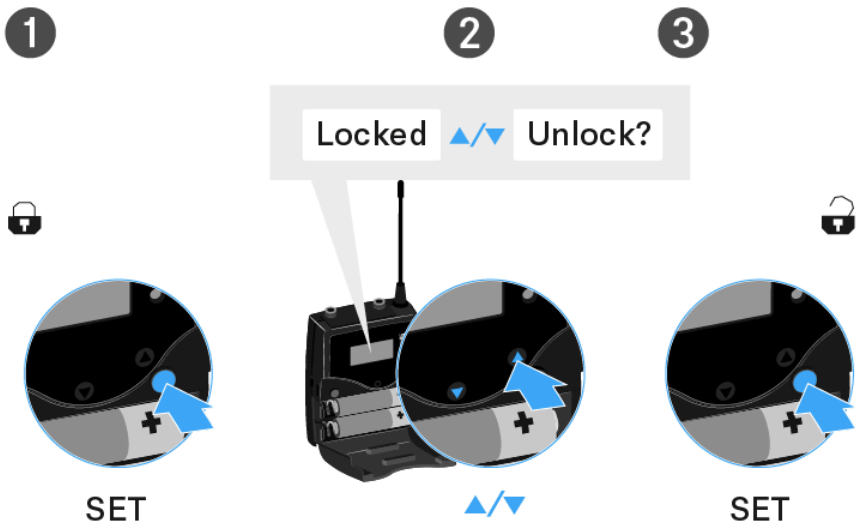
Lock-off function

You can set the automatic lock-off function in the Auto Lock menu (see Auto Lock menu item).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

To temporarily deactivate the lock-off function:

- Press the **SET** button.
  - ✓ Locked appears in the display panel.
- Press the **UP** or **DOWN** button.
  - ✓ Unlock? appears in the display panel.
- Press the **SET** button.
  - ✓ Lock-off function is now temporarily deactivated.



When you are in the operating menu

- Lock-off function is deactivated long enough for you to work in the operating menu.

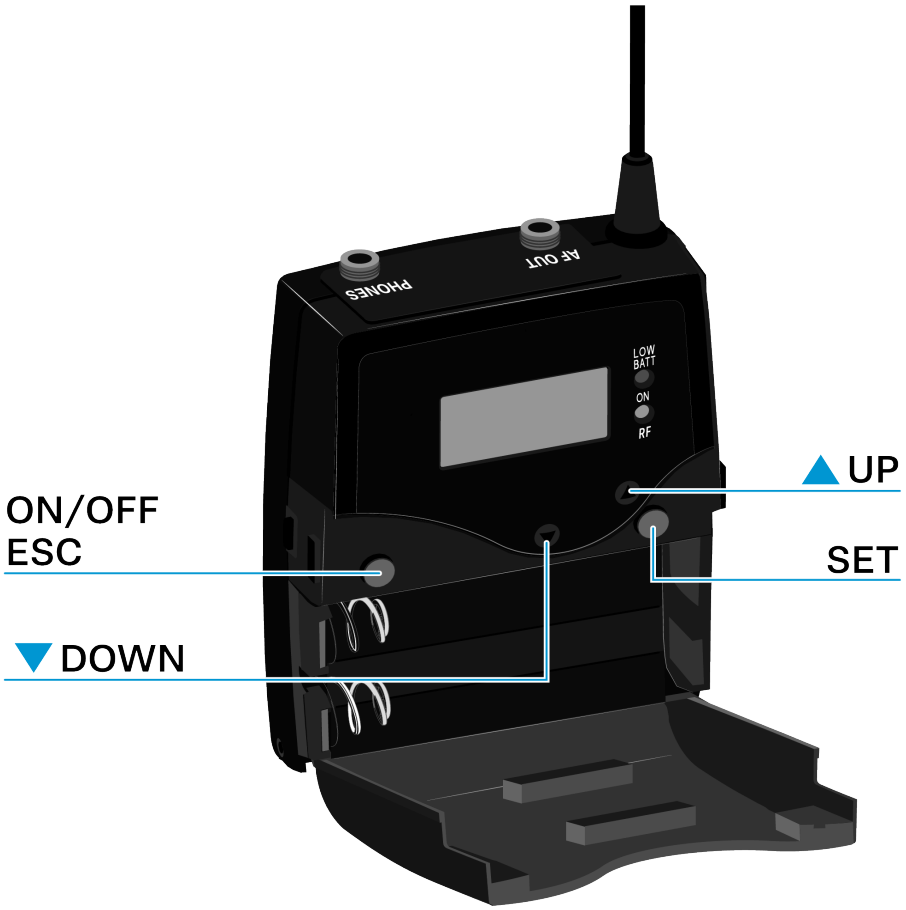
When one of the standard displays is shown

- Lock-off function is automatically activated after 10 seconds.

The Lock-off function icon flashes while the lock-off function is being activated again.

Buttons for navigating through the menu

To navigate through the diversity receiver operating menu, you need the following buttons.



Press the **ON/OFF** button

- ESC function: Cancels the entry and returns to the current standard display
- Selects a standard display (see Home Screen)

Press the **SET** button

- Changes from the current standard display to the operating menu
- Calls up a menu item
- Changes to a submenu
- Stores the settings and returns to the operating menu

Press the **UP** or **DOWN** button

- Changes to the previous or next menu item
- Changes the setting of a menu item

Displays on the EK 500 G4 display panel

Status information such as reception quality, battery status, audio level, etc. is displayed on the home screen of the display panel.

- See Home Screen

The display panel also displays the operating menu which you can use to configure all of the settings.

- See Setting options in the menu

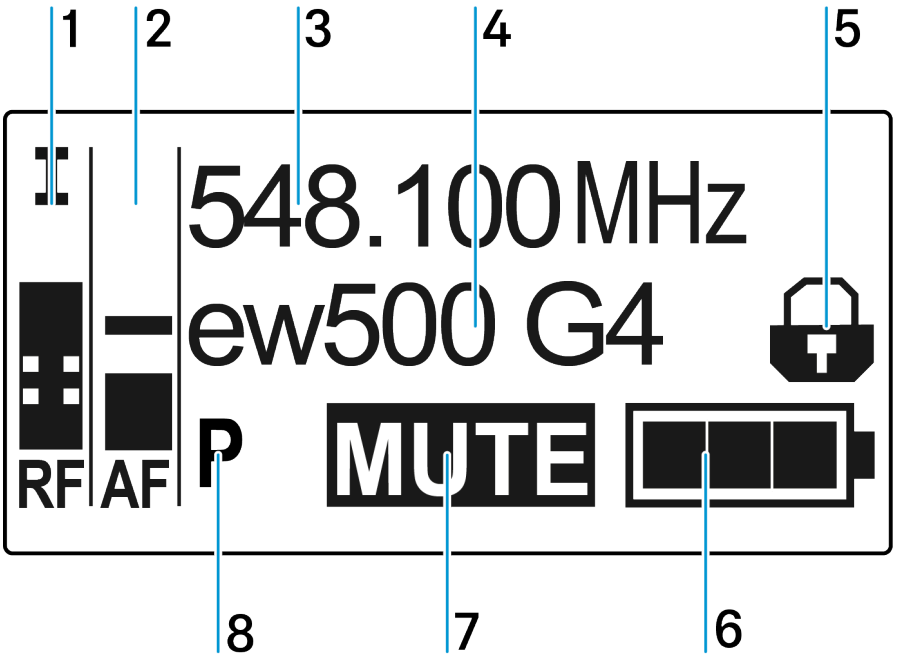
Home Screen

After you switch on the receiver, the display panel initially displays the Sennheiser logo. After a short time, the home screen is then displayed.

The home screen has two different standard displays.

- Short-press the **ON/OFF** button to switch between the standard displays.

Frequency/Name standard display



1 RF level (radio frequency)

- RF signal level display
- including the display of the squelch threshold (see Squelch menu item)

2 AF audio level (audio frequency)

- Displays the audio level of the received transmitter When the display shows full deflection, the audio input level is excessively high.
- see AF Out menu item

3 Frequency

- Current receiving frequency Empfangsfrequenz
- see Frequency Preset menu item

4 Name

- Freely selectable name of the receiver
- see Name menu item

5 Lock-off function

- Lock-off function is activated on the receiver
- see Lock-off function

6 Battery status of the receiver

- see Inserting and removing the batteries/rechargeable batteries

7 **MUTE** muting function

- No RF signal received

8 **P** pilot tone

- P = Activated pilot tone evaluation
- No symbol = Evaluation is deactivated
- P is black = Pilot tone is being received on the current frequency
- see Advanced -> Pilot Tone menu item

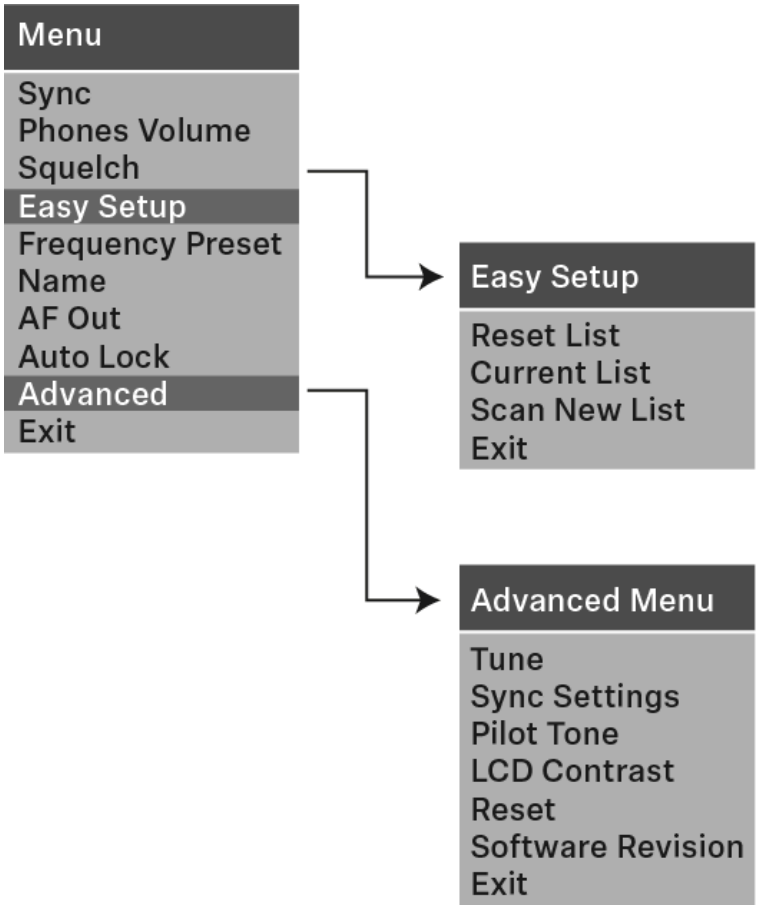
Frequency Bank/Channel/Name standard display

The Frequency Bank/Channel/Name standard display shows the level of the line output AF Out instead of the **MUTE** muting function.



Menu structure

The figure shows the complete diversity receiver menu structure in an overview.



Setting options in the menu

In the diversity receivers menu, you can configure the following settings.

Synchronizing the transmitter with the diversity receiver

- See Sync menu item

Adjusting the volume of the headphone socket

- See Phones Volume menu item

Adjusting the squelch threshold

- See Squelch menu item

Scanning for unused frequency presets, releases and selects frequency presets

- See Easy Setup menu item

Setting the frequency bank and the channel

- See Frequency Preset menu item

Entering a freely selectable name

- See Name menu item

Adjusting the audio output level

- See AF Out menu item

Activating/deactivating the automatic lock-off function

- See Auto Lock menu item

Configuring enhanced settings in the Advanced Menu:

- Adjusting the receiving frequencies for the U frequency bank
- Activating/deactivating the parameters to be transferred to the transmitters
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the receiver
- Displaying the current software revision
- See Advanced menu item

Sync menu item

In the Sync menu item you can synchronize ew 500 P G4 series transmitters and receivers.

For more information, see Ew 500 P G4 synchronizing.

Phones Volume menu item

In the Phones Volume menu item you can adjust the volume for the headphone output.

Setting range:

- 1 to 5

You can also adjust the headphone volume in the standard display with the **UP** and **DOWN** buttons. See Volume control of the PHONES socket.

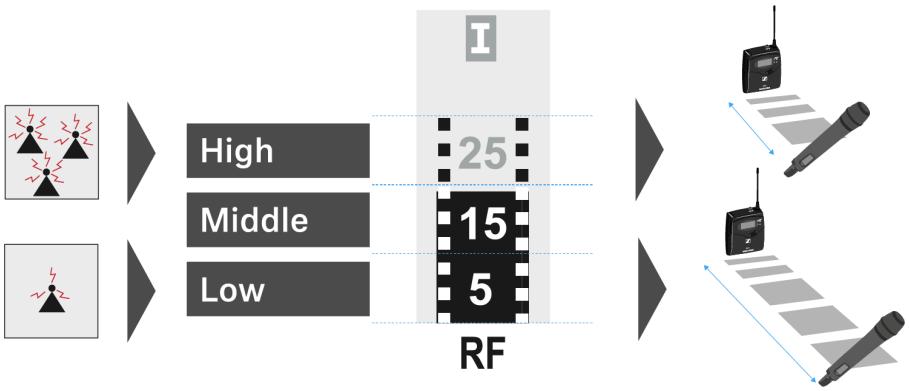
Squelch menu item

You can adjust the squelch threshold in the Squelch menu item.

Setting range:

- Low >> 5 dBµV
- Middle >> 15 dBµV
- High >> 25 dBµV

The squelch threshold is displayed on the home screen in the RF signal level area.



CAUTION

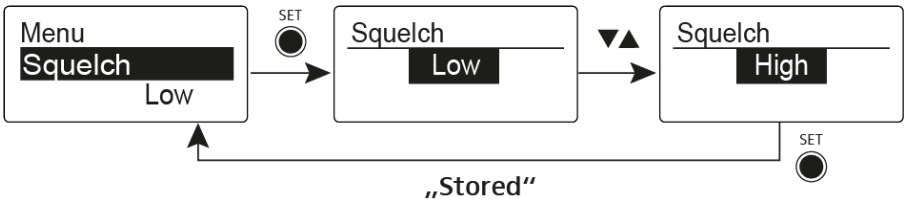
Risk of hearing and material damage

If you set the squelch threshold to a very low value, a very loud hissing noise can occur in the receiver. This hissing noise can be loud enough to cause hearing damage or overload your system's loudspeakers.

- Before adjusting the squelch threshold, set the volume of the audio output to the minimum.
- Never change the squelch threshold during a live transmission.

To open the Squelch menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Squelch** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.



- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ON/OFF** button to cancel the entry without saving the settings.

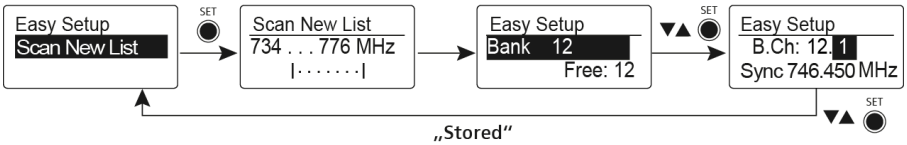
Easy Setup menu item

You can scan for unused frequencies using the Easy Setup menu item.

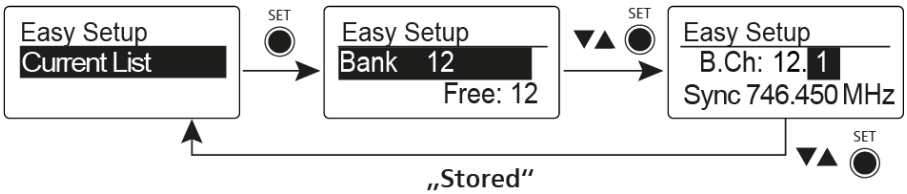
> **i** Switch off all transmitters before you perform the scan. If transmitters are still switched on, they are detected as unavailable frequencies and the frequencies that are actually available cannot then be used.

To open the Easy Setup menu item:

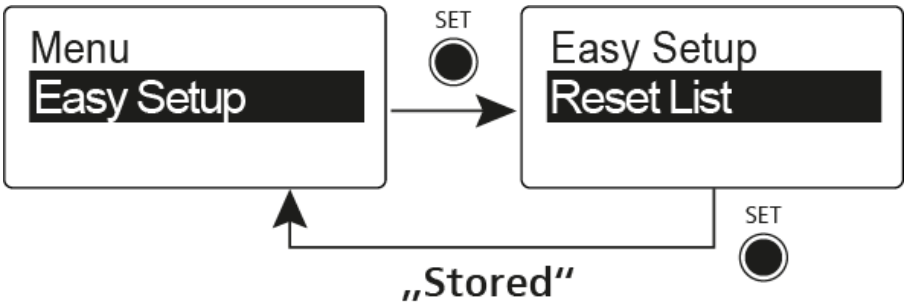
- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Easy Setup** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.
  - **Scan New List**: Automatically searches for unused receiving frequencies (frequency preset scan):



  - **Current List**: Selects an unused frequency preset:



  - **Reset List**: Releases all occupied frequency presets and selects an unused frequency preset:



- Press the **SET** button to save the changes you made to the settings.

OR

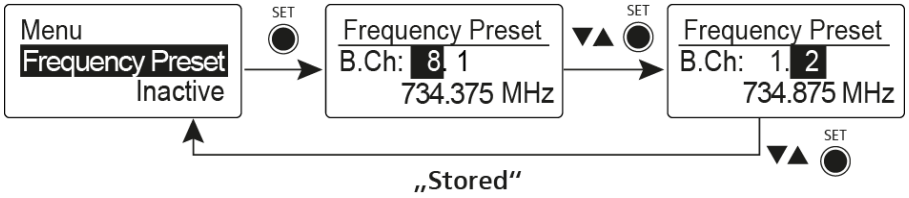
- Press the **ON/OFF** button to cancel the entry without saving the settings.

Frequency Preset menu item

In the Frequency Preset menu item, you can adjust the receiving frequency of the receiver by adjusting the frequency bank and the channel.

To open the Frequency Preset menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Frequency Preset** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.



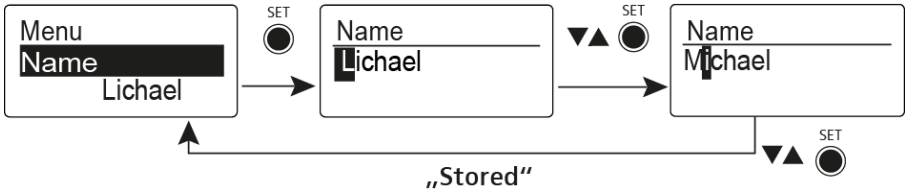
- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ON/OFF** button to cancel the entry without saving the settings.

Name menu item

In the Name menu item you can enter a name for the radio link.

To open the Name menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Name** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.



- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ON/OFF** button to cancel the entry without saving the settings.

AF Out menu item

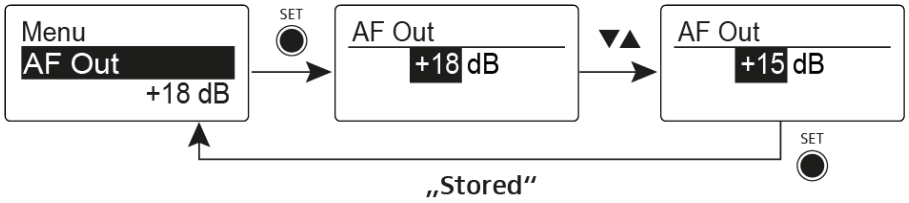
In the AF Out menu item you can adjust the level of the line audio output based on the level of the connected camera.

Setting range:

- -24 dB to +18 dB
- in 6 dB steps

To open the AF Out menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **AF Out** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.



- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ON/OFF** button to cancel the entry without saving the settings.

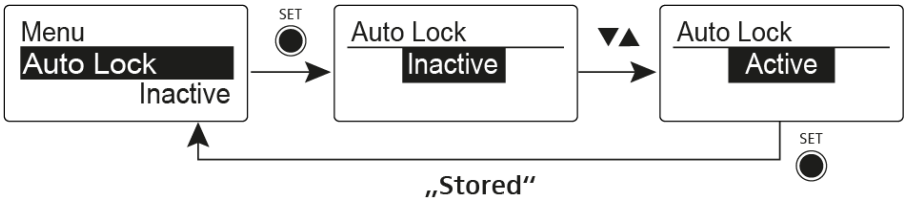
Auto Lock menu item

In the Auto Lock menu item you can activate or deactivate auto lock-off function.

> i You can find information about temporarily deactivating the lock-off function during operation under Lock-off function.

To open the Auto Lock menu item:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Auto Lock** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
- Adjust the settings as desired.



- Press the **SET** button to save the changes you made to the settings.
  OR
- Press the **ON/OFF** button to cancel the entry without saving the settings.

Advanced menu item

In the Advanced submenu you can configure enhanced settings.

To open the Advanced submenu:

- On the home screen, press the **SET** button to open the operating menu.
- Press the **UP** or **DOWN** button until the **Advanced** menu item appears in the selection frame.
- Press the **SET** button to open the menu item.
  - The following sub-items are available:

Adjusting the receiving frequency for the frequency bank U

- See Advanced -> Tune menu item

Activating/deactivating the parameters to be transferred to the transmitters

- See Advanced -> Sync Settings menu item

Activating/deactivating the pilot tone evaluation

- See Advanced -> Pilot Tone menu item

Adjusting the contrast of the display panel

- See Advanced -> LCD Contrast menu item

Resetting the receiver

- See Advanced -> Reset menu item

Displaying the current software revision

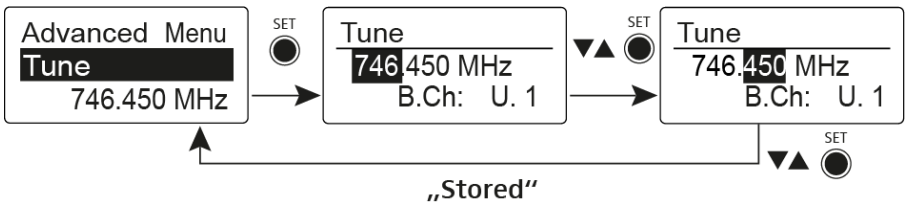
- See Advanced -> Software Revision menu item

Advanced -> Tune menu item

In the Tune menu item of the Advanced submenu, you can configure the receiving frequencies for the U frequency bank.

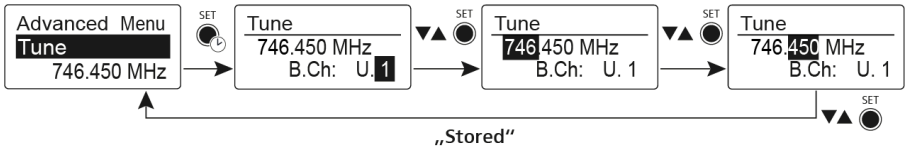
Only adjusting the frequency

- Open the **Tune** menu item in the **Advanced** menu.
- Adjust the settings.



Setting the channel and frequency

- Select the menu item and call it up by holding down the **SET** button until the channel selection appears.



Advanced -> Sync Settings menu item

In the Sync Settings menu item of the Advanced submenu, you can configure the parameters to be sent to the transmitters and activate or deactivate transmission

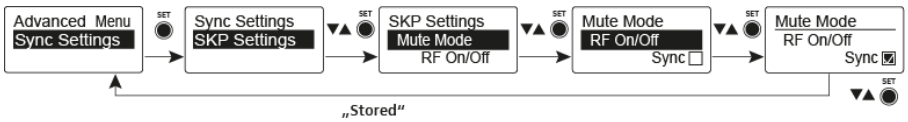
The parameters are defined separately for the SK, SKM and SKP.

You can activate/deactivate the following parameters:

- Sensitivity
- Auto Lock
- Mute Mode
- RF Power
- Phantom Power 48V (only SKP 500 G4)

To configure a parameter and activate or deactivate transmission:

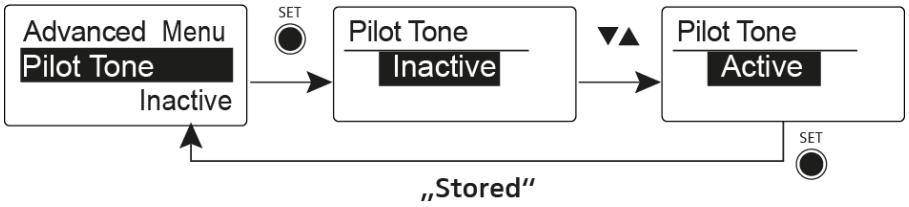
- Go to the parameter in question in the **Advanced -> Sync Settings** menu.
- Press the **SET** button to open the sub-item.
- Press the **UP** and **DOWN** buttons to set the value.
- Press the **SET** button to save the setting.
- Press the **UP** and **DOWN** buttons to activate or deactivate the check box.



  - When the check box is activated, the value will be transmitted during synchronization. If it is deactivated, the value will not be transmitted.
- Press the **SET** button to save the setting.

Advanced -> Pilot Tone menu item

In the Pilot Tone menu item of the Advanced submenu, you can activate and deactivate the pilot tone evaluation.



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver’s squelch function.

Advanced -> LCD Contrast menu item

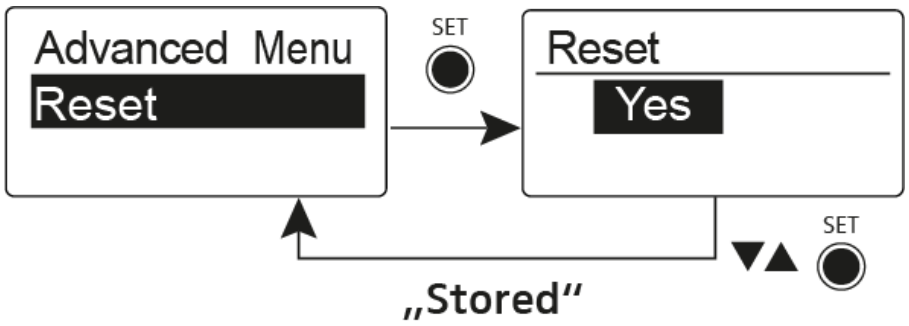
In the LCD Contrast menu item of the Advanced submenu, you can adjust the display contrast of the display panel in 16 steps.



Advanced -> Reset menu item

In the Reset menu item of the Advanced submenu, you can reset the settings of the receiver.

When you reset the diversity receiver, only the selected settings of the pilot tone and the U frequency bank are retained.

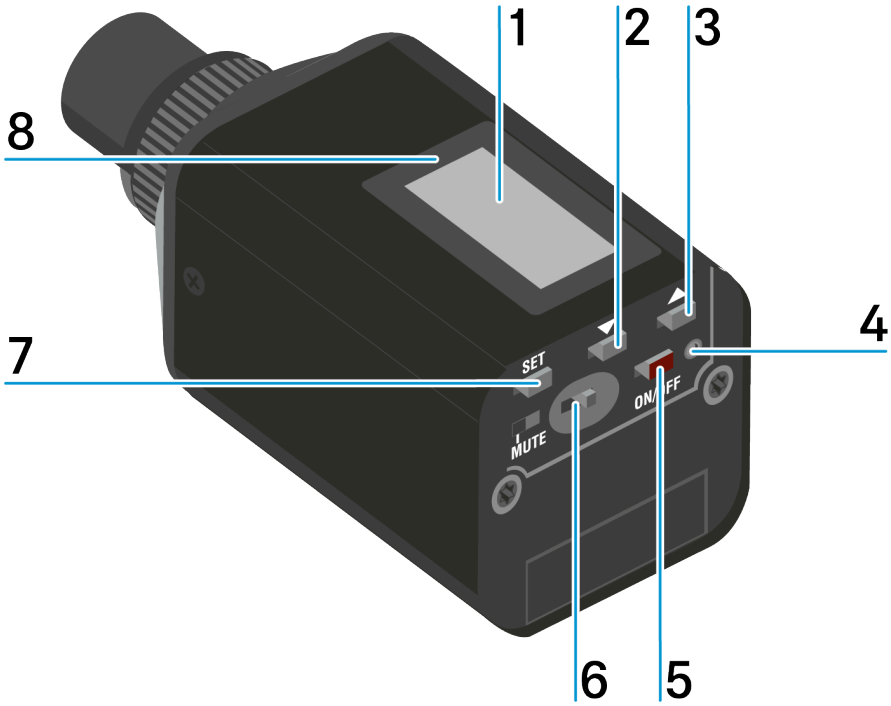


Advanced -> Software Revision menu item

In the Software Revision menu item of the Advanced submenu, you can display the current software version of the receiver.

SKP 500 G4 plug-on transmitter

Product overview



1 Display panel

- see Displays on the plug-on transmitter display panel

2 **DOWN** button

- see Buttons for navigating the menu

3 **UP** button

- see Buttons for navigating the menu

4 Operation and battery indicator, red LED

- illuminated = ON, see Switching the plug-on transmitter on and off
- flashing = LOW BATTERY, see Inserting and removing the batteries/rechargeable batteries

5 **ON/OFF** button with **ESC** function in the operating menu

- Switch the transmitter on or off, see Switching the plug-on transmitter on and off
- Escape function in the menu, see Buttons for navigating the menu

6 **MUTE** switch

- see Muting the plug-on transmitter (AF mute)

7 **SET** button

- see Buttons for navigating the menu

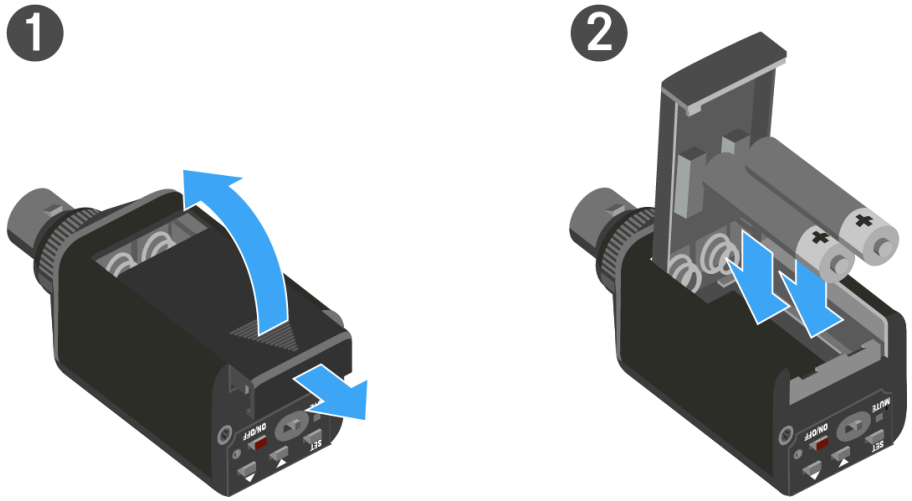
8 Infra-red interface

- see Ew 500 P G4 synchronizing

Inserting and removing the batteries/rechargeable batteries

You can operate the plug-on transmitter either with batteries (AA, 1.5 V) or with the rechargeable Sennheiser BA 2015 battery.

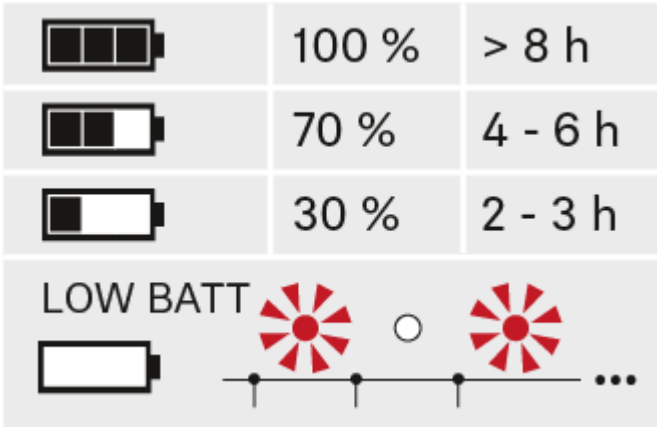
- Slide the battery compartment cover in the direction of the embossed arrow and open the cover.
- Insert the batteries or the accupack as shown below. Please observe correct polarity when inserting the batteries/accupack.



- Close the battery compartment.
  - The cover locks into place with an audible click.

Battery status

Charge status of the batteries:



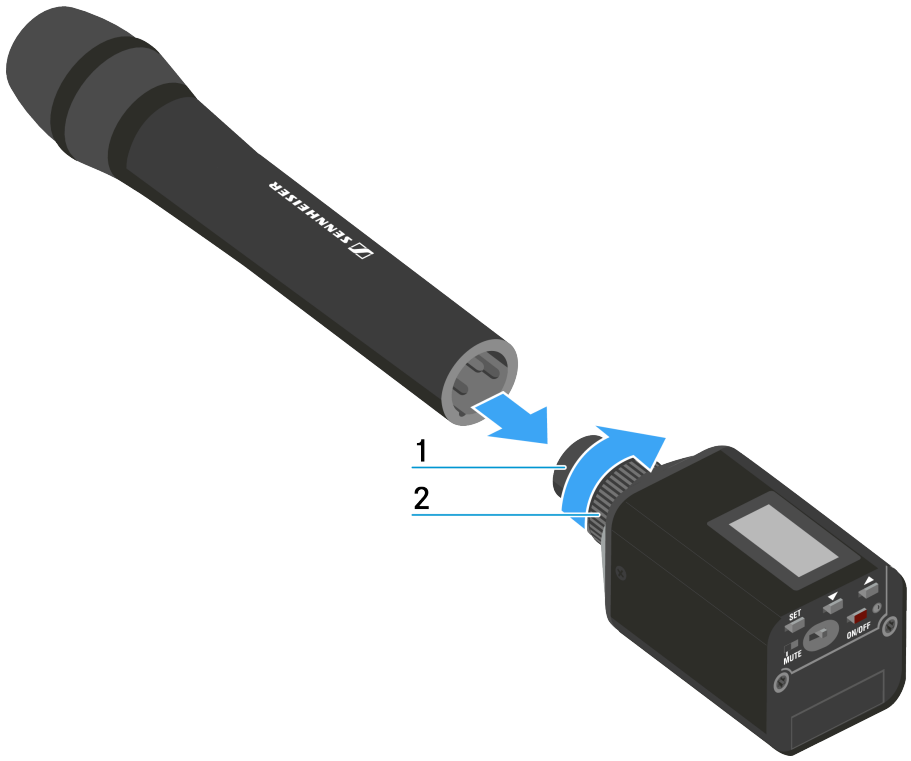
Charge status is critical (LOW BATT):


548.100MHz
ew500 G4
AF
P
SET
MUTE

Attaching the plug-on transmitter to the microphone

> **i** Microphones with a metal casing should be used for optimal signal transmission.

- Loosen the locking ring (2) by rotating it in the clockwise direction past the center point.
  - ✓ This unlocks the XLR-3 plug (1) of the plug-on transmitter.
- Connect the plug-on transmitter's XLR-3 plug (1) to the XLR-3 socket of the microphone.
- Tighten the locking ring (2) by rotating it counter-clockwise in the direction of the arrow.



Switching the plug-on transmitter on and off

To switch on the plug-on transmitter:

- Hold down the **ON/OFF** button until the Sennheiser logo appears on the display.



To switch off the plug-on transmitter:

- Hold down the **ON/OFF** button until the display goes off.

Muting the plug-on transmitter (AF mute)

You can mute the audio signal with the MUTE switch.

To do this, the **MUTE** switch function must be configured to **AF On/Off**. You can find more information about this subject under Advanced > Mute Mode menu item.

- Slide the **MUTE** switch to the MUTE position.



The audio signal is muted. The message MUTE is shown on the display.

Deactivating the RF signal (RF mute)

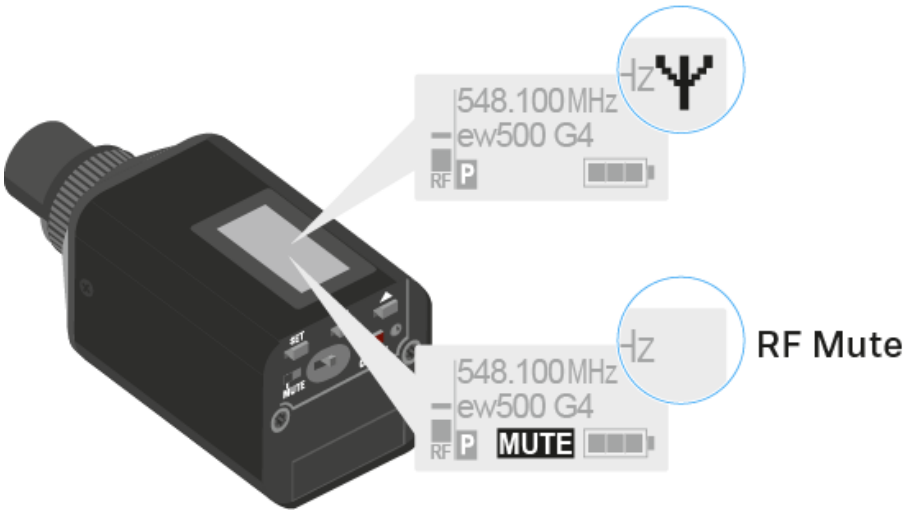
You can deactivate the RF signal in two ways:

Deactivating the RF signal with the MUTE switch

You can deactivate the RF signal with the **MUTE** switch. To do this, the MUTE switch function must be configured to RF On/Off. You can find more information about this subject under Advanced > Mute Mode menu item.

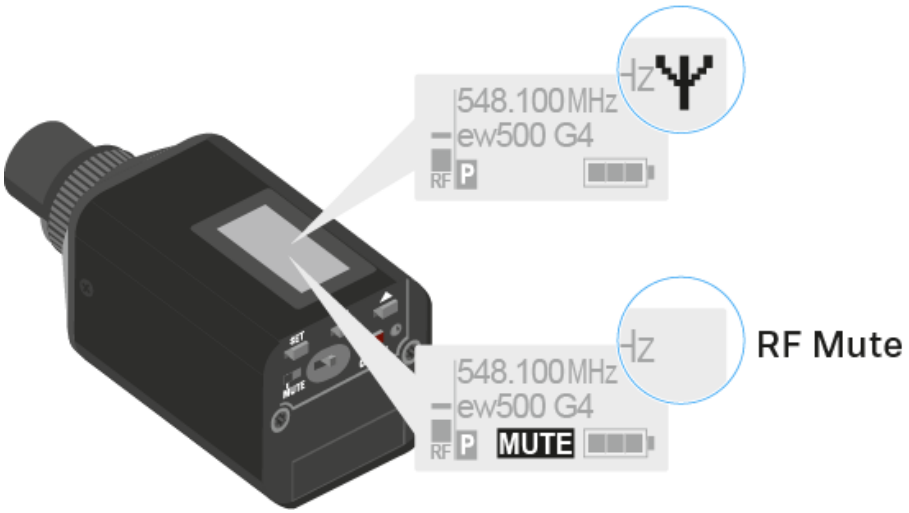


- Slide the **MUTE** switch to the MUTE position.
  - The RF signal is deactivated. The message MUTE is shown in the display and the transmission icon no longer appears.



Deactivating the RF signal with the ON/OFF button

- Short-press the **ON/OFF** button.
  - RF Mute On? apprears.
- Press the **SET** button.
  - The RF signal is deactivated. The message MUTE is shown in the display and the transmission icon no longer appears.



- Short-press the **ON/OFF** button, to activate the RF signal.
  - RF Mute Off? appears.
- Press the **SET** button.
  - The transmission icon appears again.

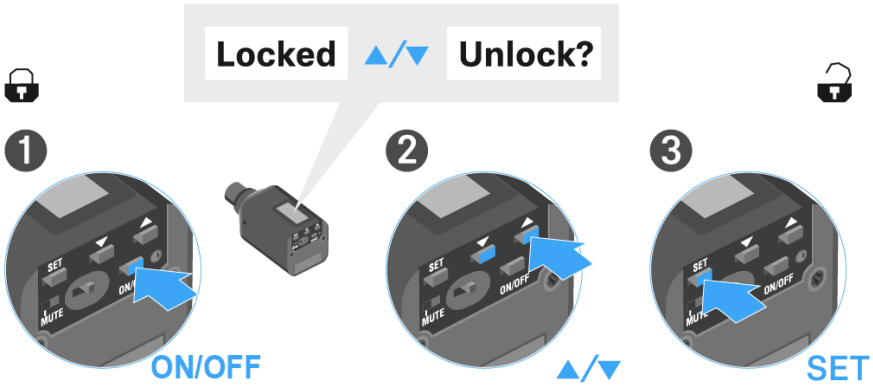
Lock-off function

You can set the automatic lock-off function in the Auto Lock menu (see Auto Lock menu item).

When you have switched on the lock-off function, you will have to turn the transmitter off and on again in order to operate it.

To temporarily deactivate the lock-off function:

- Press the **SET** button.
  - ✓ Locked appears in the display panel.
- Press the **UP** or **DOWN** button.
  - ✓ Unlock? appears in the display panel.
- Press the **SET** button.
  - ✓ Lock-off function is now temporarily deactivated.



When you are in the operating menu

- Lock-off function is deactivated long enough for you to work in the operating menu.

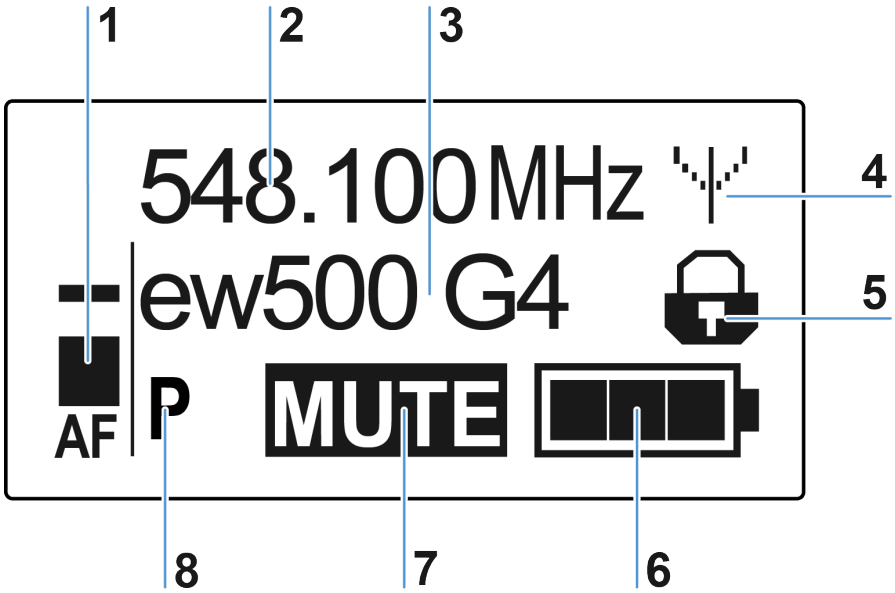
When one of the standard displays is shown

- Lock-off function is automatically activated after 10 seconds.

The Lock-off function icon flashes while the lock-off function is being activated again.

Displays on the plug-on transmitter display panel

You can view the following information on the transmitter display.



1 AF audio level

- Displays the audio level with peak hold function
- see Sensitivity menu item

2 Frequency

- Configured transmission frequency
- see Frequency Preset menu item

3 Name

- Freely selectable name of the receiver
- see Name menu item

4 Transmission icon

- RF signal is being transmitted
- see Deactivating the RF signal (RF mute)

5 Lock-off function

- Lock-off function is activated
- see Auto Lock menu item

6 Battery status

- see Battery status

7 **MUTE** muting function

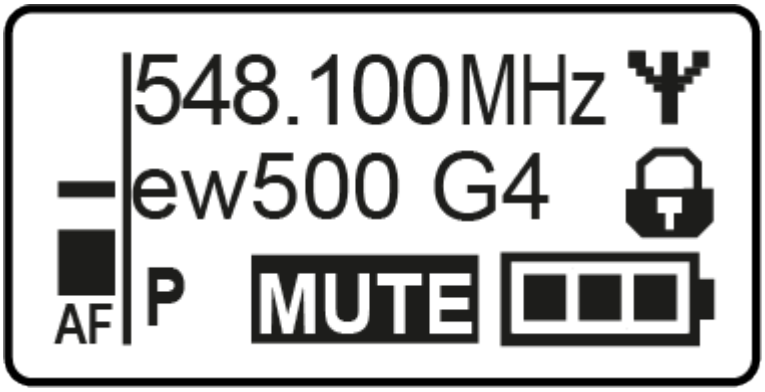
- The audio signal is muted
- see Muting the plug-on transmitter (AF mute)

8 **P** pilot tone

- Pilot tone transmission is activated
- see Advanced > Pilot Tone menu item

Select a standard display

▶ Press the **UP** or **DOWN** buttons to select a standard display.
Frequency/Name standard display



Channel/Frequency standard display



Name/Channel standard display



Buttons for navigating the menu

To open the menu/a menu item:

- Press the **SET** button.
  - The operating menu is shown on the transmitter display panel.
- Press the **UP** or **DOWN** buttons to navigate through the individual menu items.
- Press the **SET** button to open the selected menu item.

Making changes in a menu item

- Press the **UP** or **DOWN** buttons to set the displayed value.
- Press the **SET** button to save the setting.
- Press the **ESC (ON/OFF)** button to leave the menu item without saving the setting.

Setting options in the menu

In the plug-on transmitters menu, you can configure the following settings.

Adjusting the input sensitivity

- See Sensitivity menu item

Setting the frequency bank and the channel

- See Frequency Preset menu item

Entering a freely selectable name

- See Name menu item

Activating/deactivating the automatic lock-off function

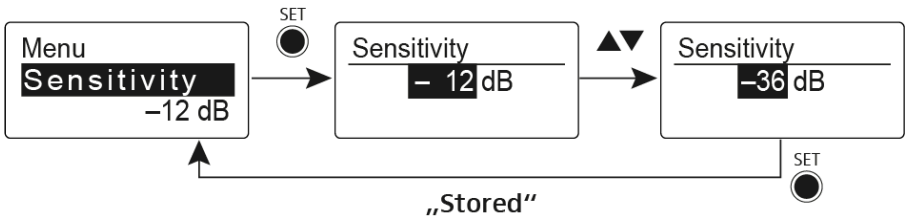
- See Auto Lock menu item

Configuring enhanced settings in the Advanced Menu:

- Adjusting the transmission frequencies for the U frequency bank
- Configuring the MUTE switch
- Configuring the transmission power
- Activating phantom powering
- Activating/deactivating the pilot tone evaluation
- Adjusting the contrast of the display panel
- Resetting the transmitter
- Displaying the current software revision
- See Advanced menu item

Sensitivity menu item

Adjusting the input sensitivity – AF audio level



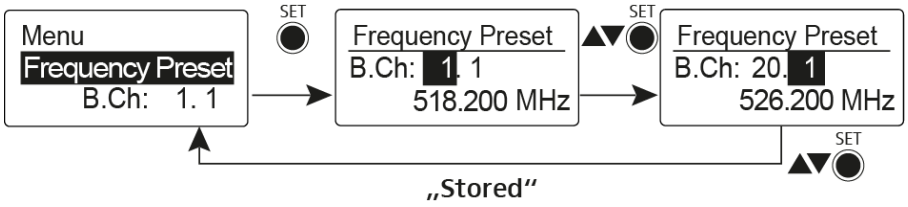
Setting range:

- 0 to -48 dB
- in 6 dB steps

The AF audio level is also displayed when the plug-on transmitter is muted, e.g. to check the sensitivity before a live broadcast.

Frequency Preset menu item

Manually selecting a frequency bank and channel



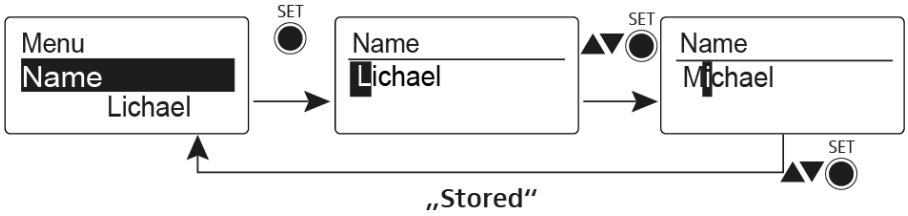
> While you work in the Frequency Preset menu, the RF signal is deactivated.

Please note when creating multi-channel systems:

Only the factory-preset frequencies within one frequency bank are intermodulation-free. The bodypack transmitter and receiver must be set to the same frequency. Be sure to note the information on frequency selection under Establishing a radio link.

Name menu item

Entering names



In the Name menu item you can enter any name you want for the bodypack transmitters (e.g. the names of the musicians).

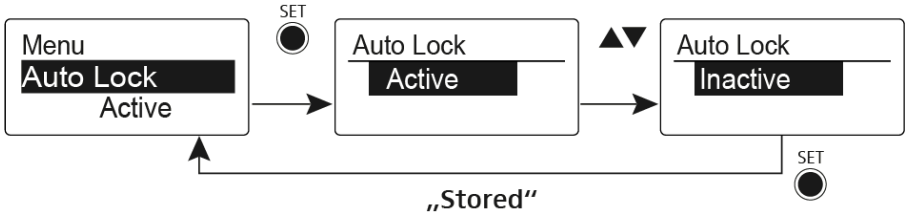
The name can be shown in the Frequency/Name and Name/Channel standard displays.

The names are a maximum of 8 characters:

- All letters except umlauts.
- Numbers from 0 to 9
- Special characters and spaces

Auto Lock menu item

Switching the automatic lock-off function on and off



This lock prevents the wireless microphone from being unintentionally switched off and also prevents any unintentional changes to the transmitter's configuration. In the current standard display, the lock icon shows whether the lock-off function is currently switched on.

You can find information about using the lock-off function under Lock-off function.

Advanced menu item

In the Advanced submenu you can configure enhanced settings.

The following sub-items are available:

Adjusting the transmission frequencies for the U frequency bank

- See Advanced > Tune menu item

Configuring the function of the MUTE switch and the RMS 1 remote mute switch

- See Advanced > Mute Mode menu item

Configuring the transmission power

- See Advanced > RF Power menu item

Activating phantom powering

- See Advanced > Phantom Power 48V menu item

Activating/deactivating the pilot tone evaluation

- See Advanced > Pilot Tone menu item

Adjusting the contrast of the display panel

- See Advanced > LCD Contrast menu item

Resetting the transmitter

- See Advanced > Reset menu item

Displaying the current software revision

- See Advanced > Software Revision menu item

Advanced > Tune menu item

Configuring the transmission frequency and frequency bank U

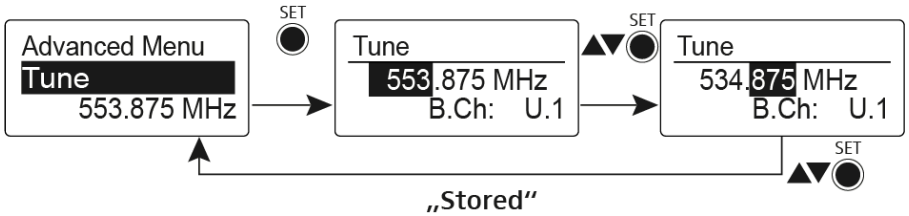
When you have configured the bodypack transmitter to a system bank and you call up the **Tune** menu item, channel 1 of the frequency bank **U** is automatically set. The message **U.1** briefly appears in the display. In the factory settings, the channels of the frequency bank **U** are not assigned to any transmission frequency.

While you work in the **Tune** menu, the RF signal is deactivated.

You can configure a transmission frequency for the current channel or select a channel in the frequency bank **U** and configure a transmission frequency for this channel in the **Tune** menu. Be sure to note the information on frequency selection, see Establishing a radio link.

To configure the transmission frequency for the current channel:

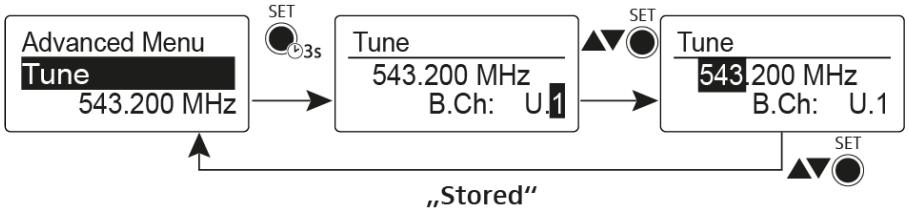
- Open the **Tune** menu item in the **Advanced** menu.
  - The frequency selection appears.



- Configure the desired frequency.
- Press the **SET** button.
  - Your settings will be saved. You are now back in the operating menu.

To select a channel and assign it a frequency:

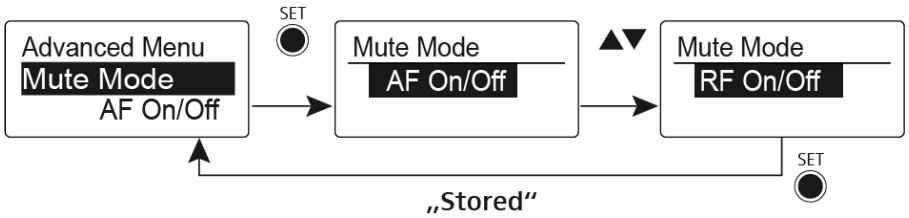
- Open the **Tune** menu item in the **Advanced** menu by pressing and holding the **SET** button until the frequency bank selection appears.



- Set the desired channel.
- Press the **SET** button.
  - The frequency selection appears.
- Configure the frequency.

Advanced > Mute Mode menu item

Configuring the MUTE switch



AF On/Off mode

- If set to position MUTE, the audio signal is muted

RF On/Off mode

- If set to the MUTE selector position, the RF signal is deactivated.

Disabled mode

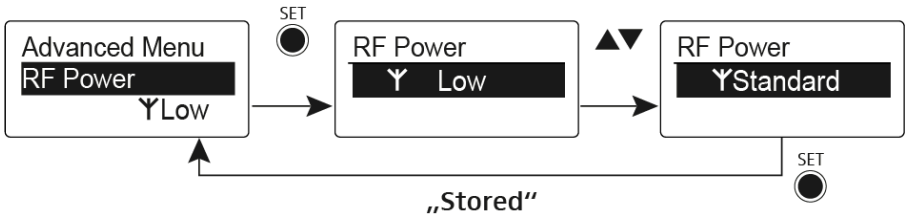
- No function

> **i** You can find information about operating the mute switch under Muting the plug-on transmitter (AF mute) and Deactivating the RF signal (RF mute).

Advanced > RF Power menu item

Configuring the transmission power

You can configure the transmission power in three steps in the RF Power menu item.



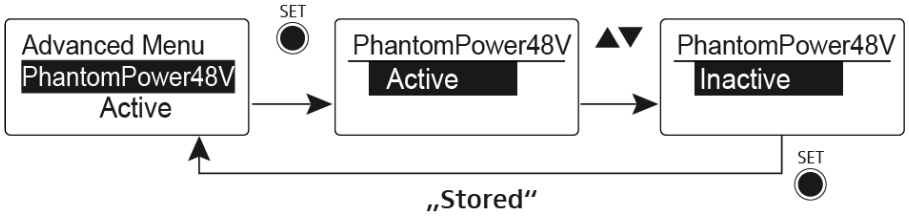
Please note the information at the following address: sennheiser.com/sifa.

Setting range:

- Low: 10 mW
- Standard: 30 mW
- High: 50 mW

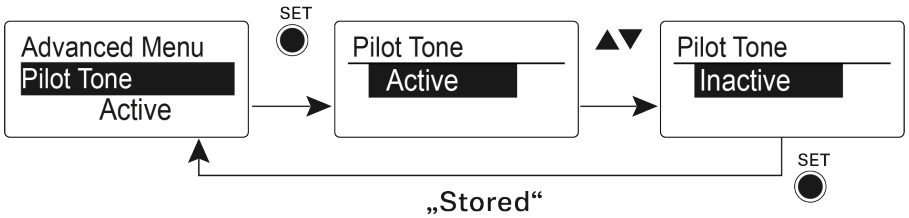
Advanced > Phantom Power 48V menu item

Activating phantom powering



Advanced > Pilot Tone menu item

Activating/deactivating pilot tone transmission



The pilot tone has an inaudible frequency that is sent from the transmitter and evaluated by the receiver. It supports the receiver’s squelch function.

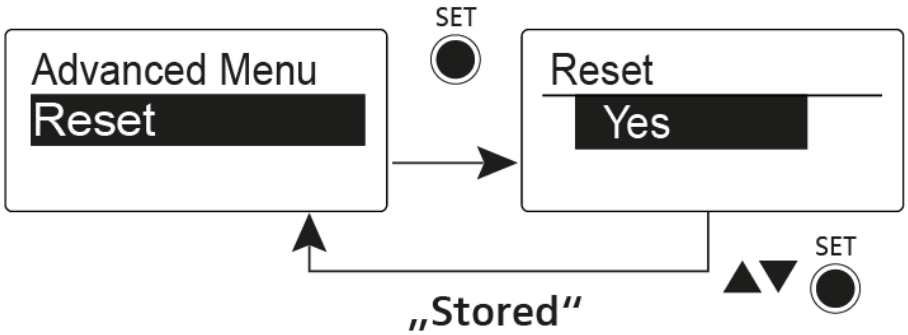
Advanced > LCD Contrast menu item

Adjusting the contrast of the display panel

You can configure the contrast of the display in 16 steps.

Advanced > Reset menu item

Resetting the plug-on transmitter



When you reset the plug-on transmitter, only the selected settings of the pilot tone and the U frequency bank are retained.

Advanced > Software Revision menu item

Show software revision

You can display the current software revision.

Establishing a radio link

Setting notes

Please note the following when synchronizing a transmitter with a receivers:

- Only use transmitters and receivers from the same frequency range (see the type plate on the transmitter and receiver).
- Make sure that your chosen frequencies are listed in the frequency table for the particular frequency range (see Frequency ranges).
- Ensure that the desired frequencies are permitted in your country and apply for an operating license if necessary.
- Please note the information at the following address: sennheiser.com/sifa.

Ew 100 G4 Establishing a radio link

To establish a radio link between the transmitter and receiver, the same frequency must be set in both devices.

You can do this in a number of different ways:

- Use the Easy Setup function to perform an automatic frequency setup (see Easy Setup menu item).
- Set a frequency in the receiver manually (see Frequency Preset menu item) and synchronize it with the transmitter Ew 100 G4 synchronizing).
- Set the frequency on the receiver and the transmitter manually.
    - EM 100 G4: Frequency Preset menu item
    - SKM 100 G4: Frequency Preset menu item
    - SK 100 G4: Frequency Preset menu item

Ew 300-500 G4 Establishing a radio link

To establish a radio link between the transmitter and receiver, the same frequency must be set in both devices.

You can do this in a number of different ways:

- Use the Easy Setup function to perform an automatic frequency setup (see Easy Setup menu item).
- Set a frequency in the receiver manually (see Frequency Preset menu item) and synchronize it with the transmitter Ew 300-500 G4 synchronizing).
- Set the frequency on the receiver and the transmitter manually.
    - EM 300-500 G4: Frequency Preset menu item
    - SKM 300 G4-S: Frequency Preset menu item, SKM 500 G4: Frequency Preset menu item
    - SK 300 G4-RC: Frequency Preset menu item, SK 500 G4: Frequency Preset menu item

Ew 100 P G4 Establishing a radio link

To establish a radio link between the transmitter and receiver, the same frequency must be set in both devices.

You can do this in a number of different ways:

- Use the Easy Setup function to perform an automatic frequency setup (see Easy Setup menu item).
- Set a frequency in the receiver manually (see Frequency Preset menu item) and synchronize it with the transmitter Ew 100 P G4 synchronizing).
- Set the frequency on the receiver and the transmitter manually.
    - EK 100 G4: Frequency Preset menu item
    - SKM 100 G4: Frequency Preset menu item
    - SK 100 G4: Frequency Preset menu item
    - SKP 100 G4: Frequency Preset menu item

Ew 500 P G4 Establishing a radio link

To establish a radio link between the transmitter and receiver, the same frequency must be set in both devices.

You can do this in a number of different ways:

- Use the Easy Setup function to perform an automatic frequency setup (see Easy Setup menu item).
- Set a frequency in the receiver manually (see Frequency Preset menu item) and synchronize it with the transmitter Ew 500 P G4 synchronizing).
- Set the frequency on the receiver and the transmitter manually.
    - EK 500 G4: Frequency Preset menu item
    - SKM 500 G4: Frequency Preset menu item
    - SK 500 G4: Frequency Preset menu item
    - SKP 500 G4: Frequency Preset menu item

Synchronizing devices

Ew 100 G4 synchronizing

You can synchronize ew 100 G4 series transmitters and receivers via the receiver's infrared interface.

The following Parameters are transferred to the transmitters:

- Frequency Preset >> currently configured frequency (see Frequency Preset menu item)
- Name >> currently configured frequency (see Name menu item)
- Pilot Tone >> current setting of the pilot tone on the receiver (see Advanced -> Pilot Tone menu item)

To synchronize the devices:

- Switch the transmitter and the receiver on.
- Press the **SYNC** button on the receiver.
  - Sync appears in the receiver's display and the blue LED turns blue.



- Hold the infra-red interface of the transmitter (see SKM Product overview and SK Product overview) in front of the infra-red interface of the receiver (see EM Front).



✓ The parameters are transferred to the transmitter. The blue LED blinks during transmission.

When the transfer is complete, a tick appears in the receiver's display as a confirmation.

Then the receiver will return to the current standard display.

To cancel synchronization:

▶ Press the **ESC** button on the receiver.

✓ An X appears in the display.

> **i** This icon also appears when:
> - no transmitter is found or the transmitter is not compatible.
> - no transmitter is found and the synchronization process automatically ends after 30 seconds.

Ew 300-500 G4 synchronizing

You can synchronize ew 300-500 G4 series transmitters and receivers via the receiver's infrared interface.

You can adjust the Parameters to be transferred to the transmitter here: Advanced -> Sync Settings menu item.

To synchronize the devices:

- Switch the transmitter and the receiver on.
- Press the **SYNC** button on the receiver.
  - Sync appears in the receiver's display and the blue LED turns blue.



- Hold the infra-red interface of the transmitter in front of the infra-red interface of the receiver.



✓ The parameters are transferred to the transmitter. The blue LED blinks during transmission.

When the transfer is complete, a tick appears in the receiver's display as a confirmation.

Then the receiver will return to the current standard display.

To cancel synchronization:

▶ Press the **ESC** button on the receiver.

✓ An X appears in the display.

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> - no transmitter is found and the synchronization process automatically ends after 30 seconds.

Ew 100 P G4 synchronizing

You can synchronize ew 100 P G4 series transmitters and receivers via the receiver's infrared interface.

To synchronize the devices:

- Switch the transmitter and the receiver on.
- Call up the **Sync** menu item on the receiver.
  - ✓ Sync appears in the receiver's display.
- Hold the infra-red interface of the transmitter in front of the infra-red interface of the receiver.
  - ✓ The parameters are transferred to the transmitter. When the transfer is complete, a tick appears in the receiver's display as a confirmation. Then the receiver will return to the current standard display.



To cancel synchronization:

- Press the **ESC** button on the receiver.
  - ✓ An X appears in the display.

> **i** This icon also appears when:
> - no transmitter is found or the transmitter is not compatible.
> - no transmitter is found and the synchronization process automatically ends after 30 seconds.

Ew 500 P G4 synchronizing

You can synchronize ew 500 P G4 series transmitters and receivers via the receiver's infrared interface.

You can adjust the Parameters to be transferred to the transmitter here: Advanced -> Sync Settings menu item.

To synchronize the devices:

- Switch the transmitter and the receiver on.
- Call up the **Sync** menu item on the receiver.
  - Sync appears in the receiver's display.
- Hold the infra-red interface of the transmitter in front of the infra-red interface of the receiver.
  - The parameters are transferred to the transmitter. When the transfer is complete, a tick appears in the receiver's display as a confirmation. Then the receiver will return to the current standard display.



To cancel synchronization:

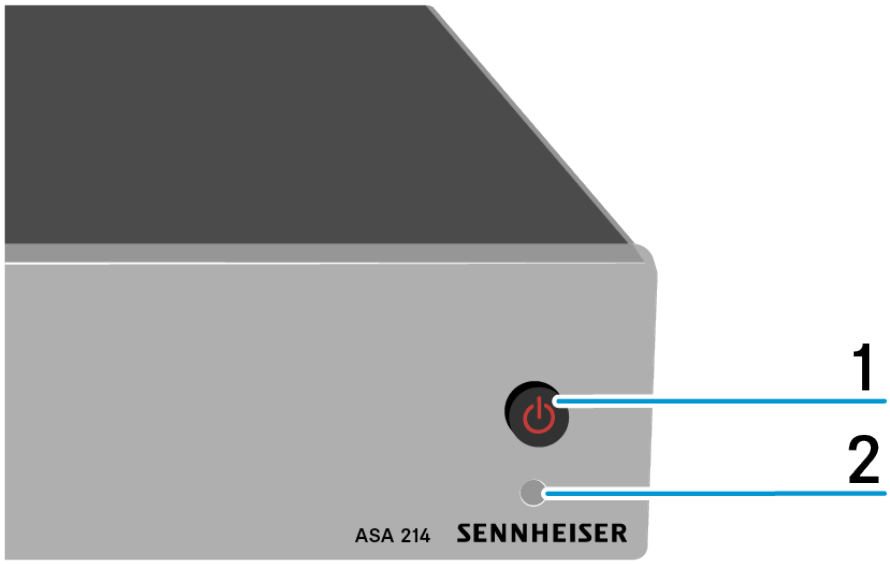
- Press the **ESC** button on the receiver.
  - An X appears in the display.

> **i** This icon also appears when:
> - no transmitter is found or the transmitter is not compatible.
> - no transmitter is found and the synchronization process automatically ends after 30 seconds.

ASA 214 antenna splitter

Product overview

Front

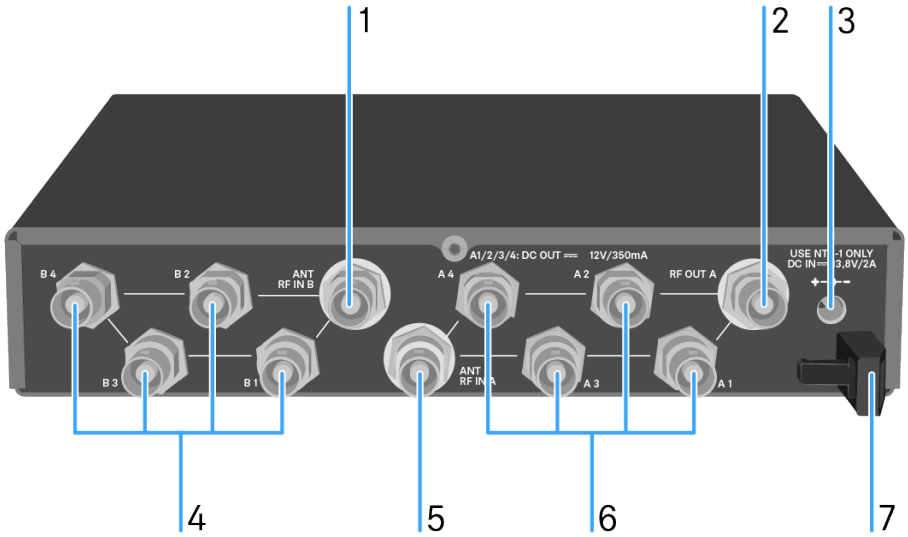


1 STANDBY button

- see Switching the splitter on and off

2 LED: Operation indicator

Back



1 **ANT RF IN B** BNC socket

- Antenna input of diversity branch B
- see Connecting antennas

2 **RF OUT A** BNC socket

- RF output only for connecting an additional ASA 214 to build an 8-channel diversity system
- see Configuring multi-channel systems

3 **DC IN** socket

- To connect the NT 1-1 power supply unit
- see Connecting/disconnecting the splitter to/from the power supply system

4 BNC sockets **B1** to **B4**

- RF outputs of diversity branch B for connection to the receiver
- see Connecting receivers

5 **ANT RF IN A** BNC socket

- Antenna input of diversity branch A
- see Connecting antennas

6 BNC sockets **A1** to **A4**

- RF outputs of diversity branch A for connection to the receiver
- Every one of these RF outputs can also provide voltage to a receiver.
- see Connecting receivers

7 Strain relief for the cable of the power supply unit

- see Connecting/disconnecting the splitter to/from the power supply system

Connecting/disconnecting the splitter to/from the power supply system

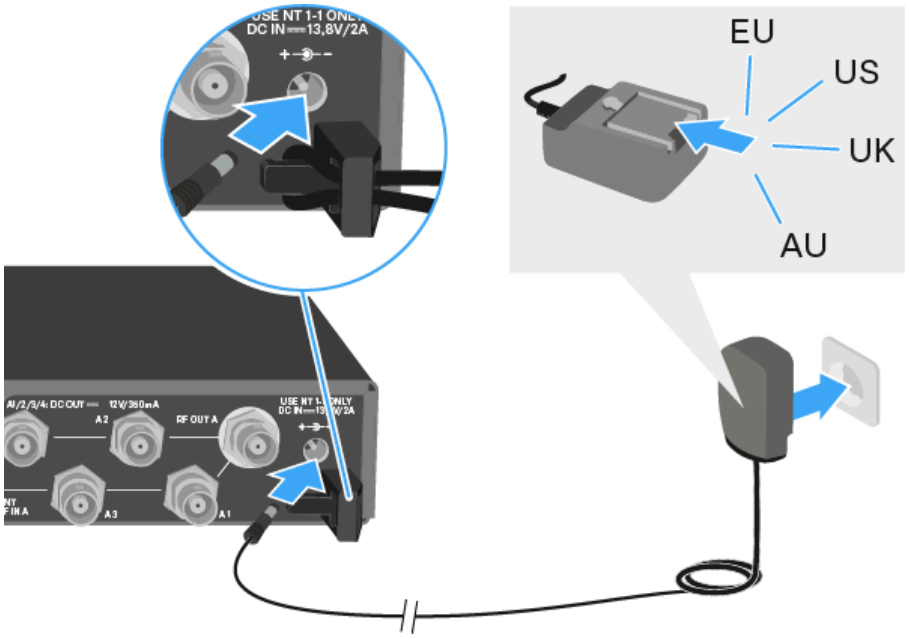
To supply power to the ASA 214, the connected receivers and any antenna amplifiers used, you will need the NT 1-1 power supply unit.

> Only use the supplied NT 1-1 power supply unit.

It is designed for your antenna splitter and ensures safe operation.

To connect the ASA 214 antenna splitter to the power supply system:

- Plug the hollow jack plug of the power supply unit into the **DC IN** socket of the antenna splitter.
- Pass the cable of the power supply unit through the cable grip.
- Slide the supplied country adapter onto the power supply unit.
- Plug the power supply unit into the wall socket.



To completely disconnect the ASA 214 antenna splitter from the power supply system:

- Unplug the power supply unit from the wall socket.
- Unplug the hollow jack plug of the power supply unit from the **DC IN** socket of the antenna splitter.

Connecting receivers

You can connect and operate up to four stationary receivers to the ASA 214.

Sennheiser receivers of the ew G4 and ew G3 series can also be supplied with power from the ASA 214.

The following receivers are compatible:

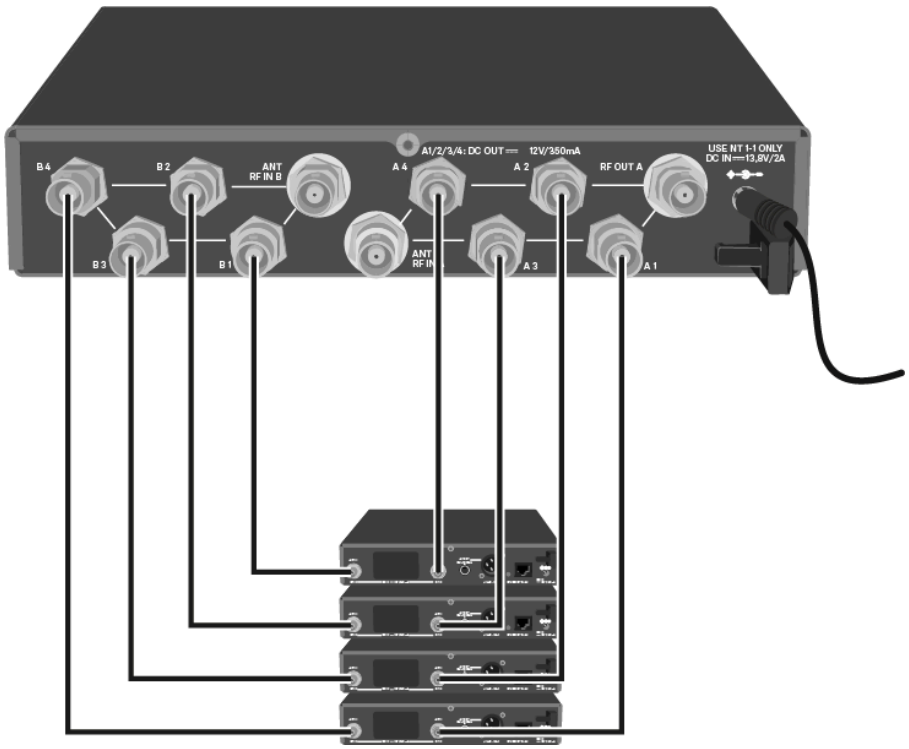
- evolution wireless G4:
    - EM 100 G4
    - EM 300-500 G4
- evolution wireless G3:
    - EM 100 G3
    - EM 300 G3
    - EM 500 G3
- 2000 series:
    - EM 2000 (with its own power supply)
    - EM 2050 (with its own power supply)

To connect the receivers to the ASA 214 antenna splitter:

- Connect one of the receiver's antenna inputs to one of the BNC sockets **A1** to **A4** using one of the supplied BNC cables.

    The compatible receivers listed above do not require their own power supply. They are powered via the BNC sockets **A1** to **A4**.

- Connect the receiver's other antenna input to one of the BNC sockets B1 to B4 using one of the supplied BNC cables.



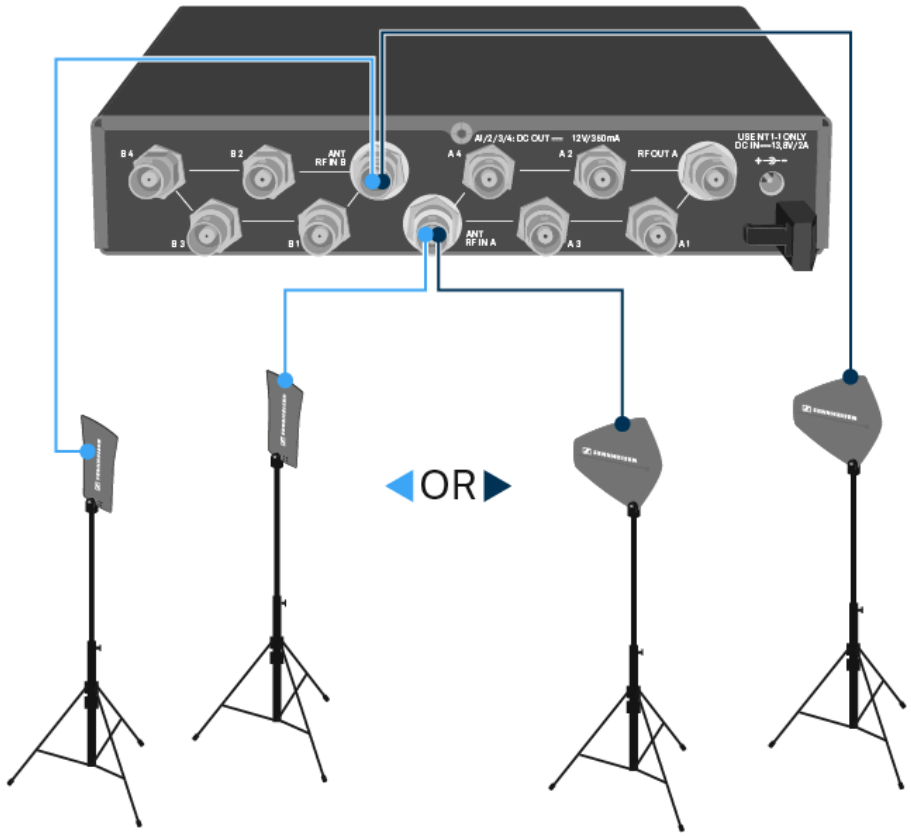
Connecting antennas

> **i** For more information about antennas and antenna accessories, see Antennas and accessories.

> **i** In order to ensure optimal reception even in the case of poor reception conditions, we recommend using remote antennas.

Connecting remote antennas

- Mount two antennas or a combination of an antenna and an antenna amplifier to the BNC sockets **ANT RF IN A** and **ANT RF IN B**.



Connecting rod antennas

- Mount the antennas to the BNC sockets **ANT RF IN A** and **ANT RF IN B**.
- Align the antennas in a V-shape in order to ensure the best possible reception.

Information on antenna amplifiers and cable lengths

The following table shows which cable lengths require the use of the AB 3 or AB 4 antenna amplifier as well as the maximum recommended cable lengths.

Device	Frequency range around	Number of AB 3	Max. cable length	
			RG 58	GZL 5000
ASA 214	500 MHz	0	8 m	16 m
		1	36 m	72 m
		2	64 m	128 m
	700 MHz	0	7 m	14 m
		1	30 m	60 m
		2	53 m	106 m
	900 MHz	0	6 m	12 m
		1	26 m	52 m
		2	46 m	92 m
ASA 214 - 1G8	1800 MHz	0	4 m	8 m
		1	16 m	36 m
		2	28 m	64 m

Use the **AB 3** for the following frequency ranges:

- **K+ range**: 925 - 937,5 MHz
- **1G8 range**: 1785 - 1800 MHz

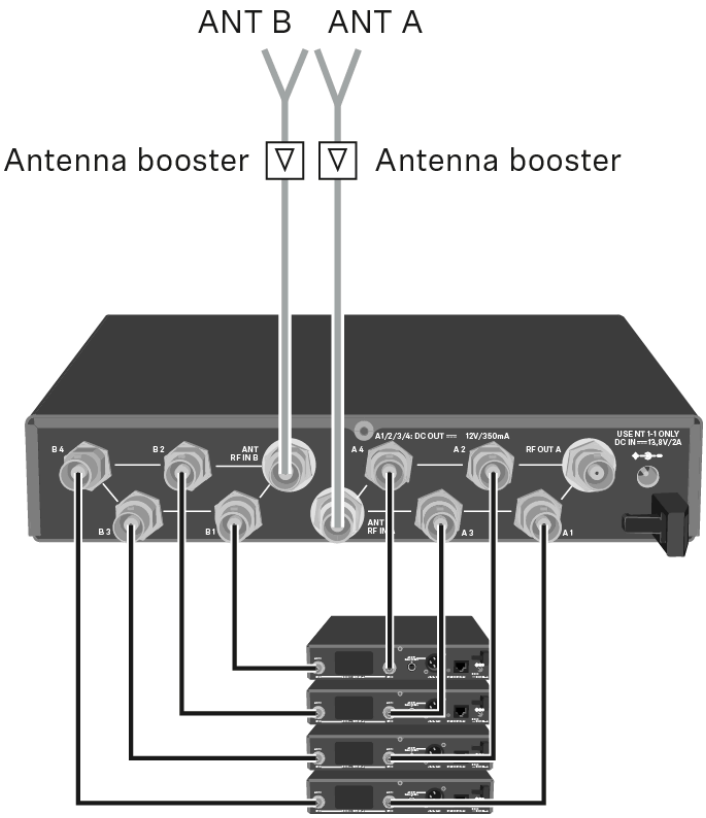
Use the **AB 4** for the following frequency ranges:

- **Aw+ range**: 470 - 558 MHz
- **Gw range**: 558 - 626 MHz
- **GBw range**: 606 - 678 MHz
- **Bw range**: 526 - 698 MHz
- **Cw range**: 718 - 790 MHz
- **Dw range**: 790 - 865 MHz

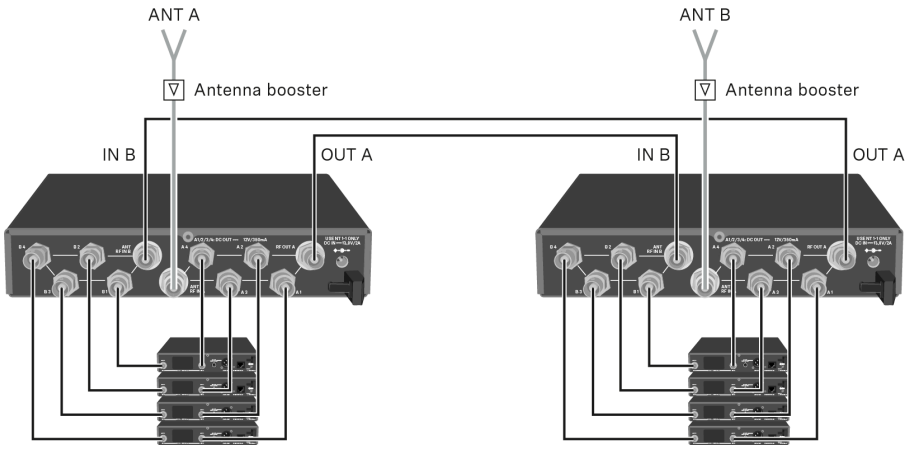
Configuring multi-channel systems

The following options for connecting multi-channel systems are possible:

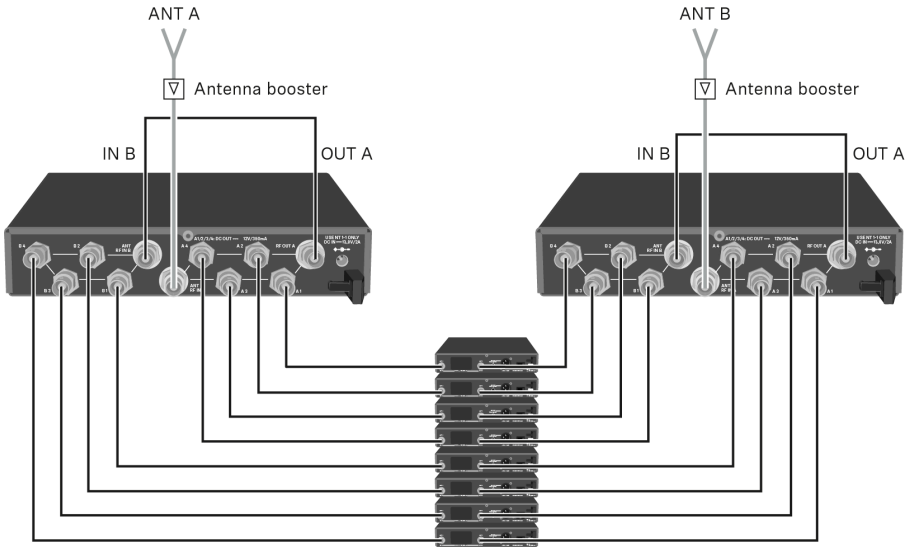
Option 1: Two antennas supply a 4-channel system



Option 2: Two 4-channel systems are interconnected



Option 3: Two antennas supply a 8-channel system



Installing the splitter in a rack

NOTICE

Rack mounting poses risks

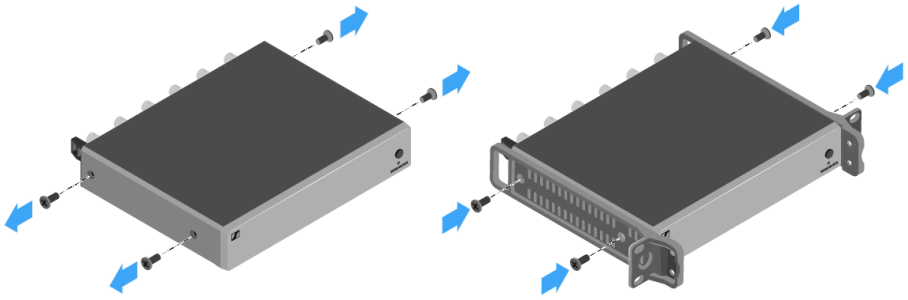
When installing the device in a closed or multi-rack assembly, please consider that, during operation, the ambient temperature, the mechanical loading and the electrical potentials will be different from those of devices which are not mounted into a rack.

- Make sure that the ambient temperature within the rack does not exceed the permissible temperature limit specified in the specifications. See Specifications.
- Ensure sufficient ventilation; if necessary, provide additional ventilation.
- Make sure that the mechanical loading of the rack is even.
- When connecting to the power supply system, observe the information indicated on the type plate. Avoid circuit overloading. If necessary, provide overcurrent protection.
- When rack mounting, please note that intrinsically harmless leakage currents of the individual power supply units may accumulate, thereby exceeding the allowable limit value. As a remedy, ground the rack via an additional ground connection.

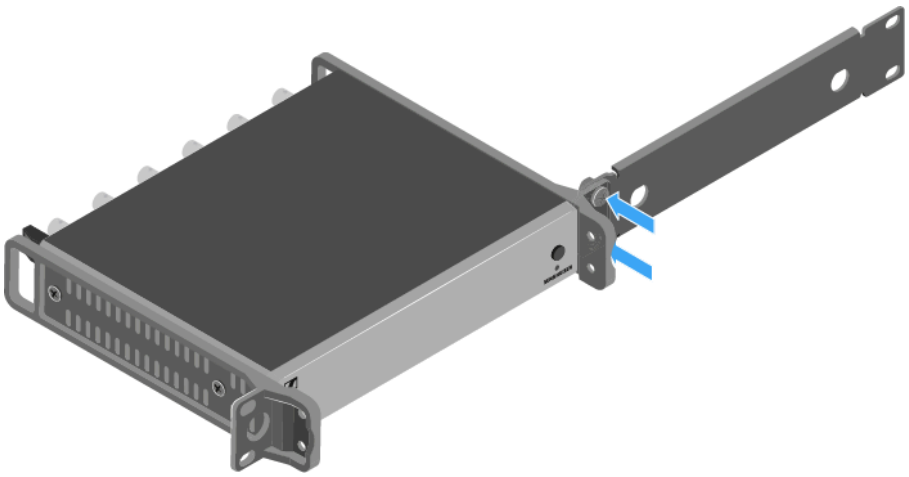
i To mount the antenna splitter in a rack, you will need the GA 3 rack mount kit (optional accessory).

Mounting a single antenna splitter in a rack

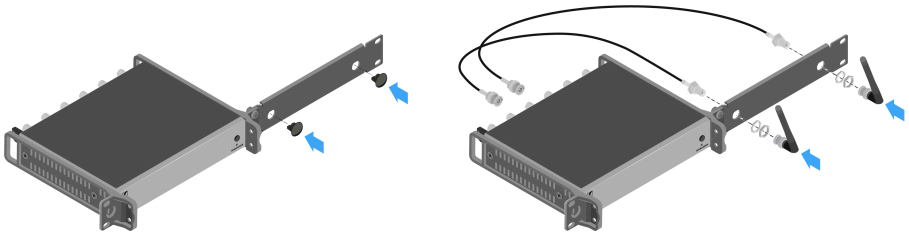
- Unscrew and remove the two recessed head screws (M4x8) on each side of the antenna splitter.
- Secure the mounting angles to the sides of the antenna splitter using the previously removed recessed head screws.



- Secure the blanking plate to one of the mounting angles using two recessed head screws (M6x10).



- Attach the antennas. You have the following options:
  - Connect the supplied rod antennas on the rear side of the antenna splitter. In this case, cover the antenna holes with the two covers (left diagram).
  - Attach the AM 2 antenna front mounting kit (optional accessory) and mount the rod antennas on the blanking plate (right diagram).

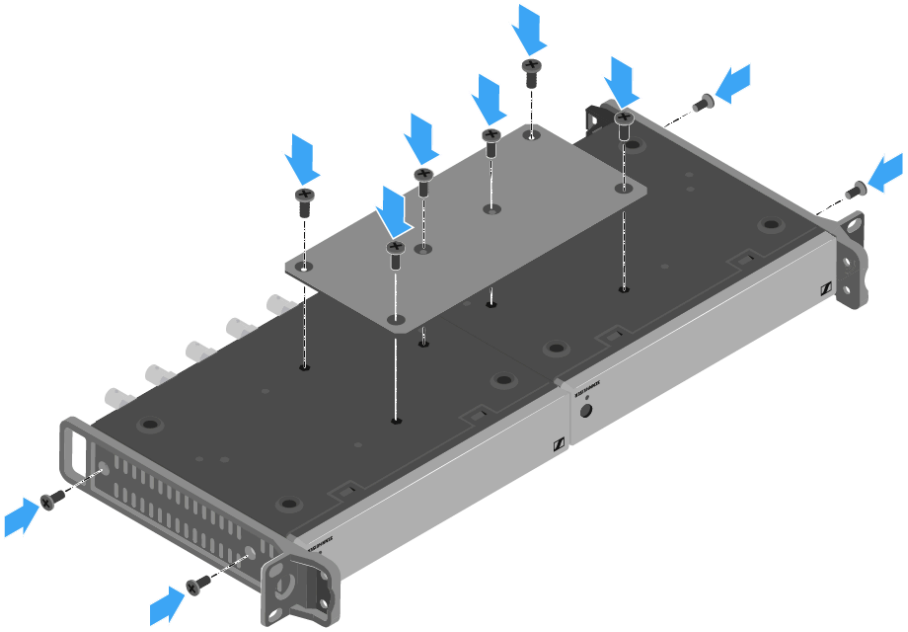


- Slide the antenna splitter with the mounted blanking plate into the 19" rack.
- Secure the mounting angle and the blanking plate to the 19" rack.
- Align the mounted antennas in a V-shape.

Mounting two antenna splitters side by side in a rack

- Place both antenna splitters upside down and side by side on an even surface.
- Secure the jointing plate to the transmitters using the six recessed head screws (M3x6).

- Secure the mounting angle.



Switching the splitter on and off

To switch on the antenna splitter:

- Short-press the **STANDBY** button.
  - The antenna splitter switches on and the power LED turns green.

The RF signals of the connected antennas are distributed to all connected receivers.



To switch the antenna splitter to standby mode:

- Press the **STANDBY** button for approx. 2 seconds.
  - The LED turns off. The connected antenna amplifiers are switched off. Connected receivers are switched off if they draw their supply voltage from the BNC sockets A1 to A4 (see Connecting receivers).

To fully switch off the antenna splitter:

- Disconnect the antenna splitter from the power supply system by unplugging the power supply unit from the wall socket.
  - The LED turns off.

Cleaning and maintenance

Note the following information when cleaning and maintaining products of the ew G4 series.

NOTICE

Liquids can damage the electronics of the product

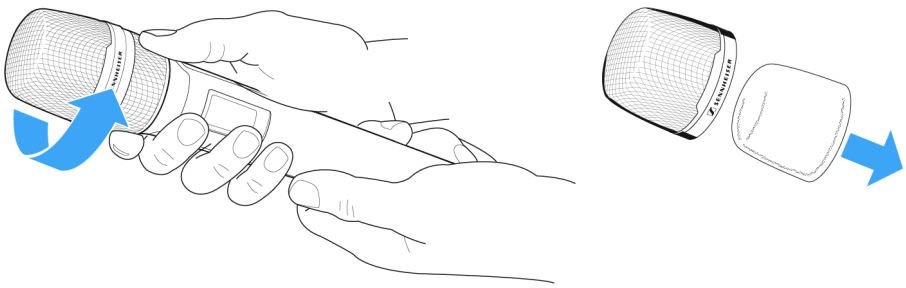
Liquids entering the product housing can cause a short-circuit and damage the electronics.

- Keep all liquids away from the products.
- Do not use any solvents or cleansing agents.
- Disconnect the mains-operated products from the power supply system and remove rechargeable batteries and batteries (if present) before you begin cleaning.
- Clean all products only with a soft, dry cloth.

- Note the special cleaning instructions below for the following products.

Cleaning the sound inlet basket of the microphone module

- Unscrew the top sound inlet basket from the microphone module by turning it counterclockwise.
- Remove the foam insert.



You can clean the sound inlet basket in two ways:

- Use a slightly damp cloth to clean the top sound inlet basket from the inside and outside.
- Use a brush and rinse with clean water.
- If necessary, clean the foam insert with a mild detergent or replace the foam insert.
- Dry the top sound inlet basket and foam insert.
- Reinsert the foam insert.
- Screw the sound inlet basket back onto the microphone module.

From time to time, you should also clean the microphone module contacts:

- Wipe the contacts of the microphone module with a soft, dry cloth.

4. Specifications

All specifications at a glance.

EM 100 G4 rack receiver

RF characteristics

Modulation	Wideband FM
Receiving frequency ranges	A1: 470 - 516 MHz
	A: 516 - 558 MHz
	AS: 520 - 558 MHz
	G: 566 - 608 MHz
	GB: 606 - 648 MHz
	B: 626 - 668 MHz
	C: 734 - 776 MHz
	C-TH: 748.2 - 757.8 MHz
	D: 780 - 822 MHz
	E: 823 - 865 MHz
	JB: 806 - 810 MHz
	K+: 925 - 937,5 MHz
	1G8: 1785 - 1800 MHz
Receiving frequencies	Max 1680 receiving frequencies, adjustable in 25 kHz steps
	20 frequency banks, each with up to 12 factory-preset channels, no intermodulation
	1 frequency bank with up to 12 programmable channels
Switching bandwidth	up to 42 MHz
Nominal/peak deviation	±24 kHz / ±48 kHz
Receiver principle	True diversity
Sensitivity (with HDX, peak deviation)	< 2,5 µV for 52 dBA $_{\text{eff S/N}}$
Adjacent channel selection	typ. ≥ 65 dB
Intermodulation attenuation	typ. ≥ 65 dB

Blocking	≥ 70 dB
Squelch	Off
	Low: 5 dBµV
	Middle: 15 dBµV
	High: 25 dBµV
Pilot tone squelch	Can be switched off
Antenna inputs	2 BNC sockets

AF characteristics

Compander system	Sennheiser HDX
EQ presets (switchable, act on line and monitor outputs):	
• **Preset 1: Flat**	
• **Preset 2: Low Cut**	-3 dB at 180 Hz
• **Preset 3: Low Cut / High Boost**	-3 dB at 180 Hz +6 dB at 10 kHz
• **Preset 4: High Boost**	+6 dB at 10 kHz
Signal-to-noise ratio (1 mV, peak deviation)	≥ 110 dBA
Total harmonic distortion (THD)	≤ 0,9 %
AF output voltage (at peak deviation, 1 kHz AF	6.3 mm jack socket (unbalanced): +12 dBu BNC socket (balanced): +18 dBu
AF OUT setting range	48 dB in 3 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	12 V DC

Power consumption	300 mA
Dimensions	approx. 190 x 212 x 43 mm
Weight	approx. 980 g

EM 300-500 G4 rack receiver

RF characteristics

Modulation	Wideband FM
Receiving frequency ranges	Aw+: 470 - 558 MHz
	AS: 520 - 558 MHz
	Gw1: 558 - 608 MHz
	Gw: 558 - 626 MHz
	GBw: 606 - 678 MHz
	Bw: 526 - 698 MHz
	Cw: 718 - 790 MHz
	Cw-TH: 748.2 - 757.8 MHz
	Dw: 790 - 865 MHz
	JB: 806 - 810 MHz
	K+: 925 - 937,5 MHz
Receiving frequencies	Max 2880 receiving frequencies, adjustable in 25 kHz steps
	20 frequency banks, each with up to 32 factory-preset channels, no intermodulation
	6 frequency banks with up to 32 programmable channels
Switching bandwidth	>up to 88 MHz
Nominal/peak deviation	±24 kHz / ±48 kHz
Receiver principle	True diversity
Sensitivity (with HDX, peak deviation)	< 2,5 µV for 52 dBA $_{\text{eff S/N}}$
Adjacent channel selection	typ. ≥ 75 dB
Intermodulation attenuation	typ. ≥ 70 dB
Blocking	≥ 75 dB
Squelch	5 to 25 dBµV
	can be set in 2 dB steps
Pilot tone squelch	Can be switched off
Antenna inputs	2 BNC sockets

AF characteristics

Compander system	Sennheiser HDX
EQ presets (switchable, act on line and monitor outputs):	
• **Preset 1: Flat**	
• **Preset 2: Low Cut**	-3 dB at 180 Hz
• **Preset 3: Low Cut / High Boost**	-3 dB at 180 Hz +6 dB at 10 kHz
• **Preset 4: High Boost**	+6 dB at 10 kHz
Signal-to-noise ratio (1 mV, peak deviation)	≥ 115 dBA
Total harmonic distortion (THD)	≤ 0,9 %
AF output voltage (at peak deviation, 1 kHz AF	6.3 mm jack socket (unbalanced): +12 dBu BNC socket (balanced): +18 dBu
AF OUT setting range	48 dB in 3 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	12 V DC
Power consumption	300 mA
Dimensions	approx. 202 x 212 x 43 mm
Weight	approx. 980 g

SKM 100 G4 | SKM 100 G4-S handheld transmitter

RF characteristics

Modulation	Wideband FM
Frequency ranges	A1: 470 - 516 MHz
	A: 516 - 558 MHz
	A10: 516 - 558 MHz
	AS: 520 - 558 MHz
	G: 566 - 608 MHz
	GB: 606 - 648 MHz
	B: 626 - 668 MHz
	B10: 626 - 668 MHz
	C: 734 - 776 MHz
	C-TH: 748.2 - 757.8 MHz
	D: 780 - 822 MHz
	JB: 806 - 810 MHz
	E: 823 - 865 MHz
	K+: 925 - 937,5 MHz
	1G8: 1785 - 1800 MHz
Transmission frequencies	Max 1680 receiving frequencies, adjustable in 25 kHz steps
	20 frequency banks, each with up to 12 factory-preset channels, no intermodulation
	1 frequency bank with up to 12 programmable channels
Switching bandwidth	up to 42 MHz
Nominal/peak deviation	±24 kHz / ±48 kHz
Frequency stability	≤ ±15 ppm
RF output power at 50 Ω	max. 30 mW
Pilot tone squelch	Can be switched off

AF characteristics

Compander system	Sennheiser HDX

AF frequency response	80 - 18.000 Hz
Signal-to-noise ratio (1 mV, peak deviation)	≥ 110 dBA
Total harmonic distortion (THD)	≤ 0,9 %
Input voltage	3 V_{eff}
Input impedance	40 kΩ
Input capacitance	Switchable
Setting range for input sensitivity	48 dB, in 6 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• **at nominal voltage**	• typ. 180 mA
• **with transmitter switched off**	• ≤ 25 µA
Operating time	typ. 8 h
Dimensions	approx. ø 50 x 265 mm
Weight	approx. 450 g

SKM 300 G4-S handheld transmitter

RF characteristics

Modulation	Wideband FM
Frequency ranges	Aw+: 470 - 558 MHz
	Aw30: 470 - 558 MHz
	AS: 520 - 558 MHz
	Gw1: 558 - 608 MHz
	Gw: 558 - 626 MHz
	GBw: 606 - 678 MHz
	Bw: 526 - 698 MHz
	Bw30: 526 - 698 MHz
	Cw: 718 - 790 MHz
	Cw-TH: 748.2 - 757.8 MHz
	Dw: 790 - 865 MHz
	JB: 806 - 810 MHz
	K+: 925 - 937,5 MHz
Transmission frequencies	Max 2880 receiving frequencies,adjustable in 25 kHz steps
	20 frequency banks, each with up to 32 factory-preset channels, no intermodulation
	6 frequency banks with up to 32 programmable channels
Switching bandwidth	>up to 88 MHz
Nominal/peak deviation	±24 kHz / ±48 kHz
Frequency stability	≤ ±15 ppm
RF output power at 50 Ω	Switchable:
	Low: typ. 10 mW
	Standard: typ. 30 mW
	High: typ. 50 mW
Pilot tone squelch	Can be switched off

AF characteristics

Compander system	Sennheiser HDX
AF frequency response	80 - 18.000 Hz
Signal-to-noise ratio (1 mV, peak deviation)	≥ 115 dBA
Total harmonic distortion (THD)	≤ 0,9 %
Setting range for input sensitivity	48 dB, in 6 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• **at nominal voltage**	• typ. 180 mA
• **with transmitter switched off**	• ≤ 25 µA
Operating time	typ. 8 h
Dimensions	approx. ⌀ 50 x 265 mm
Weight	approx. 450 g

SKM 500 G4 handheld transmitter

RF characteristics

Modulation	Wideband FM
Frequency ranges	Aw+: 470 - 558 MHz
	AS: 520 - 558 MHz
	Gw1: 558 - 608 MHz
	Gw: 558 - 626 MHz
	GBw: 606 - 678 MHz
	Bw: 526 - 698 MHz
	Cw: 718 - 790 MHz
	Cw-TH: 748.2 - 757.8 MHz
	Dw: 790 - 865 MHz
	JB: 806 - 810 MHz
	K+: 925 - 937,5 MHz
Transmission frequencies	Max 2880 receiving frequencies,adjustable in 25 kHz steps
	20 frequency banks, each with up to 32 factory-preset channels, no intermodulation
	6 frequency banks with up to 32 programmable channels
Switching bandwidth	up to 88 MHz
Nominal/peak deviation	±24 kHz / ±48 kHz
Frequency stability	≤ ±15 ppm
RF output power at 50 Ω	Switchable:
	Low: typ. 10 mW
	Standard: typ. 30 mW
	High: typ. 50 mW
Pilot tone squelch	Can be switched off

AF characteristics

Compander system	Sennheiser HDX

AF frequency response	80 - 18.000 Hz
Signal-to-noise ratio (1 mV, peak deviation)	≥ 115 dBA
Total harmonic distortion (THD)	≤ 0,9 %
Setting range for input sensitivity	48 dB, in 6 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• **at nominal voltage**	• typ. 180 mA
• **with transmitter switched off**	• ≤ 25 µA
Operating time	typ. 8 h
Dimensions	approx. Ø 50 x 265 mm
Weight	approx. 450 g

SK 100 G4 bodypack transmitter

RF characteristics

Modulation	Wideband FM
Frequency ranges	A1: 470 - 516 MHz
	A: 516 - 558 MHz
	A10: 516 - 558 MHz
	AS: 520 - 558 MHz
	G: 566 - 608 MHz
	GB: 606 - 648 MHz
	B: 626 - 668 MHz
	B10: 626 - 668 MHz
	C: 734 - 776 MHz
	C-TH: 748.2 - 757.8 MHz
	D: 780 - 822 MHz
	JB: 806 - 810 MHz
	E: 823 - 865 MHz
	K+: 925 - 937,5 MHz
	1G8: 1785 - 1800 MHz
Transmission frequencies	Max 1680 receiving frequencies, adjustable in 25 kHz steps
	20 frequency banks, each with up to 12 factory-preset channels, no intermodulation
	1 frequency bank with up to 12 programmable channels
Switching bandwidth	up to 42 MHz
Nominal/peak deviation	±24 kHz / ±48 kHz
Frequency stability	≤ ±15 ppm
RF output power at 50 Ω	max. 30 mW
Pilot tone squelch	Can be switched off

AF characteristics

Compander system	Sennheiser HDX

AF frequency response	Microphone: 80 - 18.000 Hz Line: 25 - 18.000 Hz
Signal-to-noise ratio (1 mV, peak deviation)	≥ 110 dBA
Total harmonic distortion (THD)	≤ 0,9 %
Input voltage	3 V_{eff}
Input impedance	40 kΩ, unbalanced/1 MΩ
Input capacitance	Switchable
Setting range for input sensitivity	60 dB, in 3 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• **at nominal voltage**	• typ. 180 mA
• **with transmitter switched off**	• ≤ 25 µA
Operating time	typ. 8 h
Dimensions	approx. 82 x 64 x 24 mm
Weight	approx. 160 g

SK 300 G4-RC bodypack transmitter

RF characteristics

Modulation	Wideband FM
Frequency ranges	Aw+: 470 - 558 MHz
	Aw30: 470 - 558 MHz
	AS: 520 - 558 MHz
	Gw1: 558 - 608 MHz
	Gw: 558 - 626 MHz
	GBw: 606 - 678 MHz
	Bw: 526 - 698 MHz
	Bw30: 526 - 698 MHz
	Cw: 718 - 790 MHz
	Cw-TH: 748.2 - 757.8 MHz
	Dw: 790 - 865 MHz
	JB: 806 - 810 MHz
	K+: 925 - 937,5 MHz
Transmission frequencies	Max 2880 receiving frequencies,adjustable in 25 kHz steps
	20 frequency banks, each with up to 12 factory-preset channels, no intermodulation
	6 frequency banks with up to 32 programmable channels
Switching bandwidth	up to 88 MHz
Nominal/peak deviation	±24 kHz / ±48 kHz
Frequency stability	≤ ±15 ppm
RF output power at 50 Ω	Switchable:
	Low: typ. 10 mW
	Standard: typ. 30 mW
	High: typ. 50 mW
Pilot tone squelch	Can be switched off

AF characteristics

Compander system	Sennheiser HDX
AF frequency response	Microphone: 80 - 18.000 Hz Line: 25 - 18.000 Hz
Signal-to-noise ratio (1 mV, peak deviation)	≥ 115 dBA
Total harmonic distortion (THD)	≤ 0,9 %
Input voltage	3 V_{eff}
Input impedance	40 kΩ, unbalanced/1 MΩ
Input capacitance	Switchable
Setting range for input sensitivity	60 dB, in 3 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• **at nominal voltage**	• typ. 180 mA
• **with transmitter switched off**	• ≤ 25 µA
Operating time	typ. 8 h
Dimensions	approx. 82 x 64 x 24 mm
Weight	approx. 160 g

SK 500 G4 bodypack transmitter

RF characteristics

Modulation	Wideband FM
Frequency ranges	Aw+: 470 - 558 MHz
	AS: 520 - 558 MHz
	Gw1: 558 - 608 MHz
	Gw: 558 - 626 MHz
	GBw: 606 - 678 MHz
	Bw: 526 - 698 MHz
	Cw: 718 - 790 MHz
	Cw-TH: 748.2 - 757.8 MHz
	Dw: 790 - 865 MHz
	JB: 806 - 810 MHz
	K+: 925 - 937,5 MHz
Transmission frequencies	Max 2880 receiving frequencies, adjustable in 25 kHz steps
	20 frequency banks, each with up to 12 factory-preset channels, no intermodulation
	6 frequency banks with up to 32 programmable channels
Switching bandwidth	up to 88 MHz
Nominal/peak deviation	±24 kHz / ±48 kHz
Frequency stability	≤ ±15 ppm
RF output power at 50 Ω	Switchable:
	Low: typ. 10 mW
	Standard: typ. 30 mW
	High: typ. 50 mW
Pilot tone squelch	Can be switched off

AF characteristics

Compander system	Sennheiser HDX
AF frequency response	Microphone: 80 - 18.000 Hz

	Line: 25 - 18.000 Hz
Signal-to-noise ratio (1 mV, peak deviation)	≥ 115 dBA
Total harmonic distortion (THD)	≤ 0,9 %
Input voltage	3 V_{eff}
Input impedance	40 kΩ, unbalanced/1 MΩ
Input capacitance	Switchable
Setting range for input sensitivity	60 dB, in 3 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• **at nominal voltage**	• typ. 180 mA
• **with transmitter switched off**	• ≤ 25 µA
Operating time	typ. 8 h
Dimensions	approx. 82 x 64 x 24 mm
Weight	approx. 160 g

EK 100 G4 diversity receiver

RF characteristics

Modulation	Wideband FM
Frequency ranges	A1: 470 - 516 MHz
	A: 516 - 558 MHz
	AS: 520 - 558 MHz
	G: 566 - 608 MHz
	GB: 606 - 648 MHz
	B: 626 - 668 MHz
	C: 734 - 776 MHz
	C-TH: 748.2 - 757.8 MHz
	D: 780 - 822 MHz
	JB: 806 - 810 MHz
	E: 823 - 865 MHz
	K+: 925 - 937,5 MHz
Transmission frequencies	Max 1680 receiving frequencies, adjustable in 25 kHz steps
	20 frequency banks, each with up to 12 factory-preset channels, no intermodulation
	1 frequency bank with up to 12 programmable channels
Switching bandwidth	up to 42 MHz
Nominal/peak deviation	±24 kHz / ±48 kHz
Receiver principle	Adaptive-Diversity
Sensitivity (with HDX, peak deviation)	< 1,6 µV for 52 dBA $_{\text{eff S/N}}$
Adjacent channel selection	≥ 65 dB
Intermodulation attenuation	≥ 65 dB
Blocking	≥ 70 dB
Squelch	low: 5 dBµV
	middle: 15 dBµV
	high: 25 dBµV

Pilot tone squelch	Can be switched off

AF characteristics

Compander system	Sennheiser HDX
Signal-to-noise ratio (1 mV, peak deviation)	≥ 110 dBA
Total harmonic distortion (THD)	≤ 0,9 %
AF output voltage (at peak deviation, 1 kHz AF	3.5 mm jack socket +12 dBu (mono, unbalanced)
“AF Out” setting range	48 dB (in 6 dB steps)

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• **at nominal voltage**	• typ. 180 mA
• **with transmitter switched off**	• ≤ 25 µA
Operating time	typ. 8 h
Dimensions	approx. 82 x 64 x 24 mm
Weight	approx. 160 g

EK 500 G4 diversity receiver

RF characteristics

Modulation	Wideband FM
Frequency ranges	Aw: 470 - 558 MHz
	AS: 520 - 558 MHz
	Gw1: 558 - 608 MHz
	Gw: 558 - 626 MHz
	GBw: 606 - 678 MHz
	Bw: 526 - 698 MHz
	Cw: 718 - 790 MHz
	Dw: 790 - 865 MHz
	JB: 806 - 810 MHz
	K+: 925 - 937,5 MHz
Transmission frequencies	Max 2880 receiving frequencies, adjustable in 25 kHz steps
	20 Kanalbänke mit jeweils >up to 32 voreingestellten Kanälen, no intermodulation
	6 frequency banks with up to 32 programmable channels
Switching bandwidth	>up to 88 MHz
Nominal/peak deviation	±24 kHz / ±48 kHz
Receiver principle	Adaptive-Diversity
Sensitivity (with HDX, peak deviation)	< 1,6 µV for 52 dBA $_{\text{eff S/N}}$
Adjacent channel selection	≥ 65 dB
Intermodulation attenuation	≥ 65 dB
Blocking	≥ 70 dB
Squelch	low: 5 dBµV
	middle: 15 dBµV
	high: 25 dBµV
Pilot tone squelch	Can be switched off

AF characteristics

Compander system	Sennheiser HDX
Signal-to-noise ratio (1 mV, peak deviation)	Line: ≥ 110 dBA Phones: approx. 90 dBA
Total harmonic distortion (THD)	≤ 0,9 %
AF output voltage (at peak deviation, 1 kHz AF	3.5 mm jack socket +17 dBu (mono, unbalanced)
“AF Out” setting range	42 dB (in 6 dB steps)

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• **at nominal voltage**	• typ. 180 mA
• **with transmitter switched off**	• ≤ 25 µA
Operating time	typ. 8 h
Dimensions	approx. 82 x 64 x 24 mm
Weight	approx. 130 g

SKP 100 G4 plug-on transmitter

RF characteristics

Modulation	Wideband FM
Frequency ranges	A1: 470 - 516 MHz
	A: 516 - 558 MHz
	AS: 520 - 558 MHz
	G: 566 - 608 MHz
	GB: 606 - 648 MHz
	B: 626 - 668 MHz
	C: 734 - 776 MHz
	C-TH: 748.2 - 757.8 MHz
	D: 780 - 822 MHz
	JB: 806 - 810 MHz
	E: 823 - 865 MHz
	K+: 925 - 937,5 MHz
Transmission frequencies	Max 1680 receiving frequencies, adjustable in 25 kHz steps
	20 frequency banks, each with up to 12 factory-preset channels, no intermodulation
	1 frequency bank with up to 12 programmable channels
Switching bandwidth	up to 42 MHz
Nominal/peak deviation	±24 kHz / ±48 kHz
Frequency stability	≤ ±15 ppm
RF output power at 50 Ω	max. 30 mW
Pilot tone squelch	Can be switched off

AF characteristics

Compander system	Sennheiser HDX
AF frequency response	80 - 18.000 Hz
Signal-to-noise ratio (1 mV, peak deviation)	≥ 110 dBA

Total harmonic distortion (THD)	≤ 0,9 %
Input voltage	3 V_{eff}
Input impedance	68 kΩ, unbalanced
Input capacitance	Switchable
Setting range for input sensitivity	48 dB, in 6 dB steps

Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• **at nominal voltage**	• typ. 180 mA
• **with transmitter switched off**	• ≤ 25 µA
Operating time	typ. 8 h
Dimensions	approx. 105 x 43 x 43 mm
Weight	approx. 195 g

SKP 500 G4 plug-on transmitter

RF characteristics

Modulation	Wideband FM
Frequency ranges	Aw: 470 - 558 MHz
	AS: 520 - 558 MHz
	Gw1: 558 - 608 MHz
	Gw: 558 - 626 MHz
	GBw: 606 - 678 MHz
	Bw: 526 - 698 MHz
	Cw: 718 - 790 MHz
	Dw: 790 - 865 MHz
	JB: 806 - 810 MHz
	K+: 925 - 937,5 MHz
Transmission frequencies	Max 2880 receiving frequencies, adjustable in 25 kHz steps
	20 Kanalbänke mit jeweils >up to 32 voreingestellten Kanälen, no intermodulation
	6 frequency banks with up to 32 programmable channels
Switching bandwidth	up to 88 MHz
Nominal/peak deviation	±24 kHz / ±48 kHz
Frequency stability	≤ ±15 ppm
RF output power at 50 Ω	Switchable:
	Low: typ. 10 mW
	Standard: typ. 30 mW
	High: typ. 50 mW
Pilot tone squelch	Can be switched off

AF characteristics

Compander system	Sennheiser HDX
AF frequency response	80 - 18.000 Hz

Signal-to-noise ratio (1 mV, peak deviation)	≥ 120 dBA
Total harmonic distortion (THD)	≤ 0,9 %
Input voltage	6 V_{eff}
Input impedance	68 kΩ, unbalanced
Input capacitance	Switchable
Setting range for input sensitivity	48 dB, in 6 dB steps

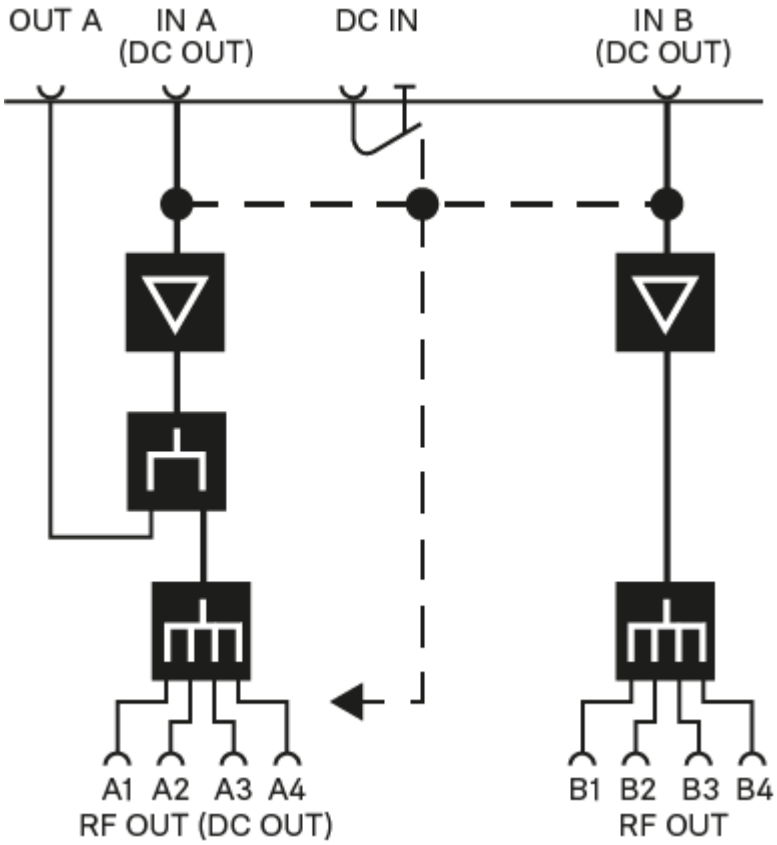
Overall device

Temperature range	-10 °C to +55 °C (14 °F to 131 °F)
Power supply	2 AA batteries, 1,5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Power consumption	
• **at nominal voltage**	• typ. 180 mA
• **with transmitter switched off**	• ≤ 25 µA
Operating time	typ. 8 h
Dimensions	approx. 105 x 43 x 43 mm
Weight	approx. 195 g

ASA 214 antenna splitter

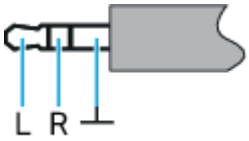
ASA 214 antenna splitter	2 x 1:4 or 1 X 1:8, active
Connection cable	8 pieces, 50 cm, BNC
Frequency range	ASA 214-UHF: 470 - 870 MHz at -3 dB
	ASA 214-1G8: 1785 - 1805 MHz at -3 dB
Amplification	In A – Out A: 0 ± 1 dB
	In A – Out A1 ... A4: 0 ± 1 dB
	In B – Out B1 ... B4: 0 ± 1 dB
IIP3	20 dBm min.
	23 dBm typ.
Impedance	50 Ω
Reflection loss	10 dB (all RF outputs)
Operating voltage	13.8 V DC (with power supply unit NT 1-1)
Power consumption	ASA 214: 245 mA
	ASA 214-1G8: 350 mA
Total power consumption	max. 2.0 A with 4 receivers and 2 × 2 antenna amplifiers per antenna input
Antenna amplifier power supply at ANT RF IN A and ANT RF IN B	12 V, 130 mA
Receiver power supply at A1 to A4	12 V (protected against reverse supply), 350 mA
Relative air humidity	5 to 95 %
Temperature range	Operation: -10 °C to +55 °C (14 °F to 131 °F)
	Storage: -20 °C to +70 °C
Dimensions	approx. 212 x 168 x 43 mm
Weight	approx. 1090 g

Block diagram


OUT A
IN A
(DC OUT)
DC IN
IN B
(DC OUT)
A1 A2 A3 A4
RF OUT (DC OUT)
B1 B2 B3 B4
RF OUT

Pin assignment

3.5 mm stereo jack plug

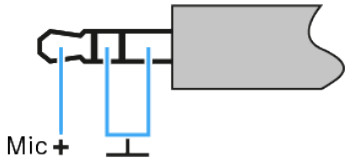


Plug for headphone and earphone cables, e.g. IE 4.

Connect to:

- EK IEM G4
- EK 500 G4

3.5 mm mic jack plug Mic

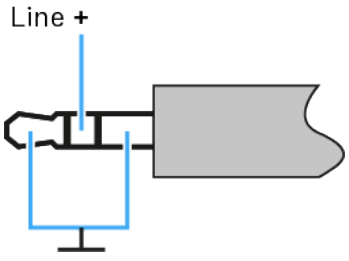


Plug for lavalier and headset microphone, e.g. ME 2

Connect to:

- SK 100 G4
- SK 300 G4-RC
- SK 500 G4

3.5 mm line jack plug Line

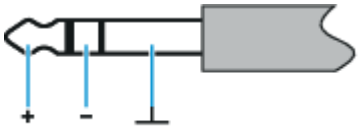


Plug for line and instrument cables, e.g. Ci 1-N

Connect to:

- SK 100 G4
- SK 300 G4-RC
- SK 500 G4

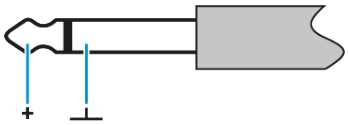
6.3 mm stereo jack plug, balanced (audio in/loop out)



Connect to:

- SR IEM G4 Audio In
- SR IEM G4 Loop Out

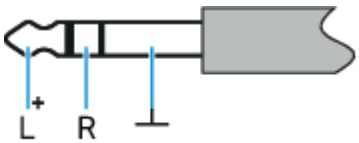
6,3 mm Mono-Klinkenstecker, unsymmetrisch



Connect to:

- EM 100 G4 Audio Out
- EM 300-500 G4 Audio Out

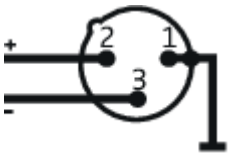
6.3 mm mono jack plug, unbalanced



Connect to:

- EM 100 G4 headphone input
- EM 300-500 G4 headphone input
- SR IEM G4 headphone input

XLR-3 plug, balanced



Hollow jack plug for power supply



5. Regulatory information

Information on manufacturer declarations, environmental and disposal notices, and terms of use.

Model: EM 100 G4, SKM 100 G4 | SKM 100 G4-S, SK 100 G4, EM 300-500 G4, SKM 300 G4-S, SKM 500 G4, SK 300 G4-RC, SK 500 G4, EK 100 G4, SKP 100 G4, EK 500 G4, SKP 500 G4, EK IEM G4, SR IEM G4

Conditions and restrictions for using frequencies

There may be special conditions and restrictions for using frequencies in your country.

Before putting the product into operation, find the information for your country at the following address: sennheiser.com/sifa.

Warranty

Sennheiser electronic SE & Co. KG gives a warranty of 24 months on these products.

For the current warranty conditions, please visit our website at sennheiser.com or contact your Sennheiser partner.

In the US please contact:

Sennheiser Electronic Corporation

1 Enterprise Drive, Old Lyme, CT 06371

www.sennheiser.com

Warranty for Australia and New Zealand only

Sennheiser Australia Pty Ltd provides a warranty of 24 months on these products. For the current warranty conditions, visit Sennheiser website: Australia: sennheiser.com, New Zealand: sennheiser.com

Sennheiser goods come with guarantees that cannot be excluded under Australian and New Zealand Consumer law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

This warranty is in addition to other rights or remedies under law. Nothing in this warranty excludes, limits or modifies any remedy available to be consumer which is granted by law.

To make a claim under this contract, raise a case via Sennheiser website. Australia: sennheiser.com/support, New Zealand: sennheiser.com/support

All expenses of claiming the warranty will be borne by the person making the claim.

Sennheiser international warranty is provided by: Sennheiser Australia Pty Ltd (ABN 68 165 388 312) Level 14, Tower A Zenith Building, 821 Pacific Highway, Chatswood NSW 2067, Australia

Europe

CE

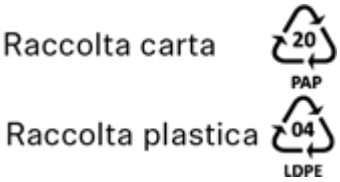
Range A1 (470 - 516 MHz), Range Aw+ (470 - 558 MHz), Range A (516 - 558 MHz), Range AS (520 - 558 MHz), Range Gw1 (558 - 608 MHz), Range Gw (558 - 626 MHz), Range G (566 - 608 MHz), Range GB (606 - 648 MHz), Range GBw (606 - 678 MHz), Range B (626 - 668 MHz), Range Bw (626 - 698 MHz), Range Cw (718 - 790 MHz), Range C (734 - 776 MHz), Range D (780 - 822 MHz), Range Dw (790 - 865 MHz), Range E (823 - 865 MHz), Range 1G8 (1785 - 1800 MHz)

In compliance with the following requirements

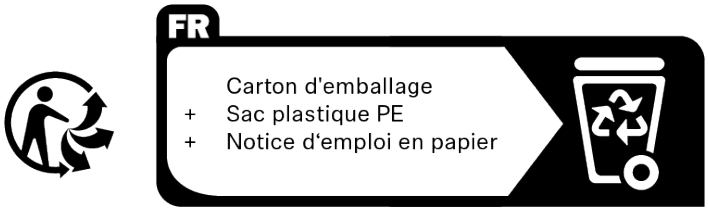
- Regulation (EU) 2023/988 on general product safety
- WEEE Directive (2012/19/EU)
- Regulation (EU) 2023/1542 concerning batteries and waste batteries



Italy:



France:



Notes on disposal

The symbol of the crossed-out dumpster on the product, the (rechargeable) battery (if applicable) and/or the packaging indicates that these products must not be disposed of with normal household waste, but must be disposed of separately at the end of their service life. For the packaging, follow the regulations in your country for separating waste. Improper disposal of packaging materials can be harmful to your health and the environment.

The separate collection of waste electrical and electronic equipment, (rechargeable) batteries (if applicable) and packaging is intended to promote reuse and recycling and to prevent

negative impacts on public health and the environment, for example due to hazardous substances contained in these products. At the end of their service life, recycle electrical and electronic equipment and (rechargeable) batteries so that their materials can be reused and to prevent environmental pollution.

If (rechargeable) batteries can be removed without destroying them, you are obliged to dispose of them separately (see the product's operating instructions for information on how to remove the batteries safely). Be especially careful when handling (rechargeable) batteries containing lithium, as these pose special hazards, such as the risk of fire and/or health risks if button cells are swallowed. Reduce battery waste as much as possible by using longer-life batteries or rechargeable batteries.

Further information on the recycling of these products can be obtained from your municipal administration, from the municipal collection points, or from your Sennheiser partner. You may also be able to return electrical or electronic equipment to your distributor, if they are legally required to do so. By disposing of your batteries properly, you are helping to protect public health and the environment.

EU Declaration of conformity

- RoHS Directive (2011/65/EU)

Hereby, Sennheiser electronic SE & Co. KG declares that the radio equipment type evolution wireless G4 is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: sennheiser.com/download.

United Kingdom

UK CA

Range A1 (470 - 516 MHz), Range Aw+ (470 - 558 MHz), Range A (516 - 558 MHz), Range AS (520 - 558 MHz), Range Gw1 (558 - 608 MHz), Range Gw (558 - 626 MHz), Range G (566 - 608 MHz), Range GB (606 - 648 MHz), Range GBw (606 - 678 MHz), Range B (626 - 668 MHz), Range Bw (626 - 698 MHz), Range Cw (718 - 790 MHz), Range C (734 - 776 MHz), Range D (780 - 822 MHz), Range Dw (790 - 865 MHz), Range E (823 - 865 MHz), Range 1G8 (1785 - 1800 MHz)

In compliance with the following requirements

- WEEE Regulations (2013)
- Battery Regulations (2015)



UK Declaration of conformity

- RoHS Regulations (2012)
- Radio Equipment Regulations (2017)

Importer: Sennheiser UK Ltd.

Pacific House, Third Avenue, Globe Park, Marlow

Buckinghamshire SL7 1EY, United Kingdom

USA

Statements regarding FCC and ISED

This device complies with part 15 of the FCC rules and RSS-210 of Innovation, Science and Economic Development Canada (ISED). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class B digital device complies with the Canadian ICES-003.

Changes or modifications not expressly approved by Sennheiser electronic Corp. could void the user's authority to operate the equipment.

Contact information: Sennheiser Electronic Corporation, 1 Enterprise Drive, Old Lyme, CT 06371; sennheiser.com

Caution:

You are cautioned that any changes or modifications not expressly approved in the instruction manual could void your authority to operate this equipment. Wireless microphone users shall rely on the white space databases in part 15 to determine that their intended operating frequencies are available for unlicensed wireless microphone operation at the location where they will be used. Wireless microphone users must register with and check a white space database to determine available channels prior to beginning operation at a given location. A user must re-check the database for available channels if it moves to another location.

Radiofrequency radiation exposure Information

This equipment complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment. The SR IEM G4 should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

SK / SKM / SKP: The radiated output power of the device is far below the FCC and ISED radio frequency exposure limits. Nevertheless, the device shall be used in such a manner that the potential for human contact during normal operation is minimized.

RSS-Gen Issue 5 - 6.8 Transmit antenna

This radio transmitter [IC: 2099A-G4SR] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Omni Antenna: +1.75 dBi, 50 Ω

RSS-210 Issue 10 Annex G.6

This device operates on a no-interference, no-protection basis. Should the user seek to obtain protection from other radio services operating in the same TV bands, a radio licence is required. For further details, consult Innovation, Science and Economic Development Canada' s Client Procedures Circular CPC-2-1-28, Voluntary Licensing of Licence-Exempt Wireless Microphones in the TV Bands.

Range A1 (470 - 516 MHz), Range A (516 - 558 MHz), Range AS (520 - 558 MHz), Range G (566 - 608 MHz)

SKM FCC ID: DMOSKM1574

SK FCC ID: DMOSK1574

SKP FCC ID: DMOG4SKP

SR FCC ID: DMOG4SR

Range Aw+ (470 - 558 MHz), Range Gw1 (558 - 608 MHz)

SKM FCC ID: DMOSKM1574

SK FCC ID: DMOSK1574

SKP FCC ID: DMOG4SKP

Canada

Statements regarding FCC and ISED

This device complies with part 15 of the FCC rules and RSS-210 of Innovation, Science and Economic Development Canada (ISED). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class B digital device complies with the Canadian ICES-003.

Changes or modifications not expressly approved by Sennheiser electronic Corp. could void the user's authority to operate the equipment.

Radiofrequency radiation exposure Information

This equipment complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment. The SR IEM G4 should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

SK / SKM / SKP: The radiated output power of the device is far below the FCC and ISED radio frequency exposure limits. Nevertheless, the device shall be used in such a manner that the potential for human contact during normal operation is minimized.

RSS-Gen Issue 5 - 6.8 Transmit antenna

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Range A1 (470 - 516 MHz), Range A (516 - 558 MHz), Range AS (520 - 558 MHz), Range G (566 - 608 MHz)

SKM IC: 2099A-SKM1574

SK IC: 2099A-SK1574

SKP IC: 2099A-G4SKP

SR IC: 2099A-G4SR

Range Aw+ (470 - 558 MHz), Range Gw1 (558 - 608 MHz)

SKM IC: 2099A-SKM1574

SK IC: 2099A-SK1574

SKP IC: 2099A-G4SKP

Australia

Range AS (520 - 558 MHz), Range Gw1 (558 - 608 MHz), Range Gw (558 - 626 MHz), Range GB (606 - 648 MHz), Range GBw (606 - 678 MHz), Range B (626 - 668 MHz), Range 1G8 (1785 - 1800 MHz)

Range Bw (626 - 698 MHz) limited to 694 MHz

New Zealand



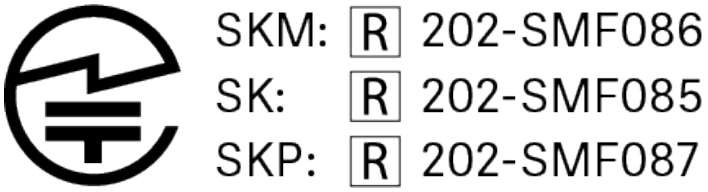
Range AS (520 - 558 MHz), Range B (626 - 668 MHz), Range Bw (626 - 698 MHz)

Range Gw1 (558 - 608 MHz) limited to 606 MHz

Range GB (606 - 648 MHz), Range GBw (606 - 678 MHz) starting at 622 MHz

Japan

Range JB (806 - 810 MHz)



Brazil

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

Para maiores informações, consulte o site da ANATEL

www.gov.br/anatel/pt-br

Range A1 (470 - 516 MHz), Range A (516 - 558 MHz), Range AS (520 - 558 MHz), Range G (566 - 608 MHz), Range B (626 - 668 MHz), Range Bw (626 - 698 MHz)

ANATEL
Agência Nacional de Telecomunicações

SK 07061-18-07356

SKM 00325-19-07356

SKP 00330-19-07356

SR 00703-19-07356

Range Aw+ (470 - 558 MHz), Range Gw1 (558 - 608 MHz)

ANATEL
Agência Nacional de Telecomunicações

SK 07061-18-07356

SKM 00325-19-07356

SKP 00330-19-07356

India

Range A1 (470 - 516 MHz), Range Aw+ (470 - 558 MHz), Range A (516 - 558 MHz), Range Gw (558 - 626 MHz), Range G (566 - 608 MHz), Range B (626 - 668 MHz), Range Bw (626 - 698 MHz), Range Cw (718 - 790 MHz), Range C (734 - 776 MHz)

SK, SKM, SKP

IS 616/IEC 60065

R-41196606
www.bis.gov.in

South Korea

Range Aw30 (470 - 558 MHz), Range Bw30 (626 - 698 MHz)

기기의 명칭: True Diversity Receiver

- 모델명: EM 300-500 G4 인증번호: R-R-SE9-EMG4-Aw30

기기의 명칭: 특정소출력 무선기기 (음성 및 음향신호 전 송용 무선기기)

- 모델명 SK 300 G4 인증번호: R-C-SE9-SK300G4-Aw30
- 모델명: SKM 300 G4 인증번호: R-C-SE9-SKM300G4-Aw30

기기의 명칭: 특정소출력 무선기기 (음성 및 음향신호 전 송용 무선기기)

- 모델명 SK 100 G4 인증번호: MSIP-CRM-SE9-SK100G3-A
- 모델명: SKM 100 G4 & SKM 100-S G4 인증번호: MSIP-CRM-SE9-SKM100G3-A
- 모델명: SKP 100 G4 인증번호: R-C-SE9-SKP100G4-A

Range A (516 - 558 MHz), Range B (626 - 668 MHz)

기기의 명칭: True Diversity Receiver

- 모델명: EM 100 G4 인증번호: R-R-SE9-EM100G4-A

기기의 명칭: Diversity Receiver

- 모델명: EK 100 G4 인증번호: MSIP-REM-SE9-EK100G3-A

Range A30 (516 - 558 MHz), Range B30 (626 - 668 MHz)

기기의 명칭: Diversity Receiver

- 모델명: EK IEM G4 인증번호: R-R-SE9-EKIEMG4-A30

기기의 명칭: 특정소출력 무선기기 (음성 및 음향신호 전 송용 무선기기)

- 모델명 SR IEM G4 인증번호: R-C-SE9-SRIEMG4-A30

Range K+ (925 - 937.5 MHz)

기기의 명칭: Diversity Receiver

- 모델명: EK 100 G4 인증번호: MSIP-REM-SE9-EK100G3
- 모델명: EK 500 G4 인증번호: R-REM-SE9-EK500G4

기기의 명칭: True Diversity Receiver

- 모델명: EM 100 G4 인증번호: MSIP-REM-SE9-EM100G3
- 모델명: EM 300-500 G4 인증번호: MSIP-REM-SE9-EM500G3

기기의 명칭: 특정소출력 무선기기 (음성 및 음향신호 전 송용 무선기기)

- 모델명: SK 100 G4 인증번호: MSIP-CRM-SE9-SK100G3
- 모델명 SK 300 G4 인증번호: MSIP-CRM-SE9-SK100G3
- 모델명: SK 500 G4 인증번호: MSIP-CRM-SE9-SK100G3
- 모델명: SKM 100 G4 인증번호: MSIP-CRM-SE9-SKM300G3
- 모델명: SKM 100 S G4 인증번호: MSIP-CRM-SE9-SKM300G3
- 모델명: SKM 300 G4 인증번호: MSIP-CRM-SE9-SKM300G3
- 모델명: SKM 500 G4 인증번호: MSIP-CRM-SE9-SKM300G3
- 모델명: SKP 500 G4 인증번호: R-CRM-SE9-SKP500G4
- 모델명: SKP 100 G4 인증번호: R-CRM-SE9-SKP500G4

상호:

Sennheiser electronic SE & Co. KG 제조년월일: 2018 제조자/제조국: Sennheiser electronic SE & Co. KG / 독일

Vietnam

Kể từ ngày 1 tháng 12 năm 2012, các sản phẩm được sản xuất bởi Sennheiser tuân thủ Thông tư 30/2011/TT-BCT quy định về giới hạn cho phép đối với một số chất độc hại trong các sản phẩm điện và điện tử.

Thailand

Range C-TH (748.2 - 757.8 MHz), Range Cw-TH (748.2 - 757.8 MHz)



ผู้ใดมีไว้ในครอบครอง หรือ ใช้ซึ่งเครื่องวิทยุ
คมนาคมหรือตั้งสถานีวิทยุคมนาคมนี้ ต้องได้รับ
ใบอนุญาตจากเจ้าพนักงานผู้ออกใบอนุญาต
หากฝ่าฝืน มาตรา 6 หรือมาตรา 11 มีความผิด
ตามมาต รา 23 แห่งพ ระ ร าชบัญญัติวิทยุ
คมนาคม พ.ศ. 2498 ต้องระวางโทษปรับไม่เกิน
หนึ่งแสนบาท หรือจ าคุกไม่เกินห้าปี หรือทั้งปรับ
ทั้งจ า





Singapore



Range Aw+ (470 - 558 MHz), Range Gw1 (558 - 608 MHz), Range Gw (558 - 626 MHz), Range GB (606 - 648 MHz), Range Bw (626 - 698 MHz) max. RF Power 10 mW

Range A10 (516 - 558 MHz), Range B10 (626 - 668 MHz)

China

使用微功率短距离无线电发射设备应当符合国家无线电管理有关规定

（一）符合“微功率短距离无线电发射设备目录和技术要求”的具体条款和使用场景，

采用的天线类型和性能，控制、调整及开关等使用方法：

具体条款

无线传声器

用于教育、文化部门的视听训练，电影院、音乐厅、会议室等公共

场所及残疾

人士的听觉辅助使用。在旅游区作为小型广播设备应用。

若使用频率与当地声音、电视广播电台频率相同时，不得在当地

使用；若对

当地声音、电视广播接收产生干扰时，应立即停止使用，待消除干

扰或调整

到无干扰频率后方可重新使用。

1・使用频率及发射功率：

(1) 使用频率：87-108MHz

发射功率限值：

45nW(e.r.p)，手机附带无线传声器；

3mW(e.r.p)，其他设备。

(2) 使用频率：75.4-76MHz, 84-87MHz, 189.9-223MHz

发射功率限值：10mW(e.r.p)

(3) 使用频率：470-510MHz, 630-698MHz

发射功率限值：50mW(e.r.p)

2・占用带宽：不大于200kHz

3・频率容限：100×10-6

使用场景：音乐舞台、演讲台、剧院、会议

天线的类型：单极天线

性能/控制：无线电范围100米

调整及开关产品的使用方法：通过接收器的用户界面

（二）不得擅自改变使用场景或使用条件、扩大发射频率范围、加大发射功率（包括额外加装射频功率放大器），不得擅自更改发射天线；

（三）不得对其他合法的无线电台（站）产生有害干扰，也不得提出免受有害干扰保护；

（四）应当承受辐射射频能量的工业、科学及医疗（ISM）应用设备的干扰或其他合法的无线电台（站）干扰；

（五）如对其他合法的无线电台（站）产生有害干扰时，应立即停止使用，并采取措施消除干扰后方可继续使用；

（六）在航空器内和依据法律法规、国家有关规定、标准划设的射电天文台、气象雷达

站、卫星地球站（含测控、测距、接收、导航站）等军民用无线电台（站）、机场等的

电磁环境保护区域内使用微功率设备，应当遵守电磁环境保护及相关行业主管部门的规定；

（七）禁止在以机场跑道中心点为圆心、半径5000 米的区域内使用各类模型遥控器；

（八）微功率设备使用时温度和电压的环境条件

-10°C-+ 55°C的工作溫度，2个1.5V AA电池，并随附机架式接收器的电源。

China RoHS

部件名称 (Parts)	有害物质										
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)	邻苯二甲酸二(2-乙基己)酯 (DEHP)	邻苯二甲酸丁苄酯 (BBP)	邻苯二甲酸二丁酯 (DBP)	邻苯二甲酸二异丁酯 (DIBP)	产品环保年限 EFUP
金属部件 (Metal parts)	x	o	o	o	o	o	o	o	o	o	15
电路模块 (Circuit Modules)	x	o	o	o	o	o	o	o	o	o	15
电缆及电缆组件 (Cables & Cable Assemblies)	x	o	o	o	o	o	o	o	o	o	15
外部电力适配器 - 如果包含 (external power supply - if available)	x	o	o	o	o	o	o	o	o	o	10

本表格依据 SJ/T 11364 的规定编制。

o：表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572 规定的限量要求以下。

x：表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求。



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