ADN-W C1
ADN-W D1
Wireless Units

ADN C1
ADN D1
Wired Units

Instruction manual

SENNHEISER

Contents

For your safety

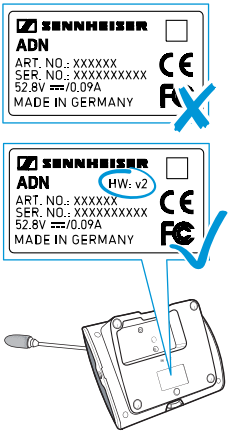
Please make sure to read the "Safety information" supplement included separately with the ADN CU1 central unit. This supplement contains important information on the safe operation of the ADN conference system as well as the manufacturer's declaration and warranty notes.

www.sennheiser.com

A detailed instruction manual for the overall ADN conference system can be found

- on the Internet at www.sennheiser.com or
- on the DVD-ROM supplied with the ADN CU1 central unit.

The ADN D1/C1 and ADN-W D1/C1 conference units



The ADN D1 wired delegate unit and the ADN C1 wired chairperson unit as well as the ADN-W D1 wireless delegate unit and the ADN-W C1 wireless chairperson unit are part of the Sennheiser ADN conference system.

To ensure full operational reliability in a redundant ring topology, the hardware of the ADN C1 and ADN D1 has been revised. If you combine conference units with hardware revision 1 (no marking on the type plate) and conference units with hardware revision 2 ("HW: v2" is printed on the type plate), fail-safe operation is only possible to a limited extent.

▶ In a redundant ring topology, only use conference units with hardware revision 2.

Package contents

ADN standard system components

1 ADN D1 delegate unit or ADN C1 chairperson unit

1 instruction manual

The ADN D1 and ADN C1 wired conference units are ready for operation upon delivery. You have to connect the conference units to the ADN CU1 central unit by means of system cables (detailed information can be found in the ADN system manual).

ADN wireless components

Console of the wireless conference unit

1 console of the ADN-W D1 wireless delegate unit or ADN-W C1 wireless chairperson unit (without battery pack and gooseneck microphone)

1 instruction manual

For operating a wireless conference unit, you additionally require one ADN-W BA battery pack and one ADN-W MIC 15 or ADN-W MIC 36 gooseneck microphone.

Wireless conference unit kit for delegate unit

1 console of the ADN-W D1 wireless delegate unit

1 ADN-W BA Lithium-Ion battery pack

1 gooseneck microphone
(ADN-W MIC 15-39 or 36-29, depending on version of the kit)

3 instruction manuals (one for the wireless conference unit, one for the battery pack and one for the gooseneck microphone)

Intended use

Intended use of the products includes

- using the products for professional purposes,
- having read and understood the safety instructions and the ADN system manual,
- using the products within the operating conditions and limitations described in the ADN system manual.

"Improper use" means using the products other than as described in the ADN system manual, or under operating conditions which differ from those described therein.

www.sennheiser.com

All instruction manuals for components of the ADN conference system are also available on the Internet at www.sennheiser.com.

Components required for operation

Wired and wireless components can be combined arbitrarily.

Central unit

Number	Description	Cat. No.	Function
1	ADN CU1-EU central unit, EU version	505553	Controls the conference (wired and wireless components) and supplies power to a max. of 40 conference units and/or one antenna module
	ADN CU1-UK central unit, UK version	505554	
	ADN CU1-US central unit, US version	505555	

Wired standard components

Power supplies

Number	Description	Cat. No.	Function
1 - 15 (optional)	ADN PS-EU power supply, EU version	505546	Supplies power to conference units connected in simple strings or in redundant ring topology, for conferences with up to 400 conference units
	ADN PS-UK power supply, UK version	505547	
	ADN PS-US power supply, US version	505548	

Conference units

Number	Description	Cat. No.	Function
max. 400	ADN D1 delegate unit	502758	Allows to make contributions to the conference
1 - 10 (optional)	ADN C1 chairperson unit	502759	Allows to manage the conference

System cables

The system cables are black and have two shielded RJ45 plugs.

Number	Description, length	Cat. No.	Function
Divers	SDC CBL RJ45-2, 2 m	009842	Allows to interconnect components and conference units
	SDC CBL RJ45-3, 3 m	009843	
	SDC CBL RJ45-5, 5 m	009844	
	SDC CBL RJ45-10, 10 m	009845	
	SDC CBL RJ45-20, 20 m	009846	
	SDC CBL RJ45-50, 50 m	009847	

Wireless components

Antenna module

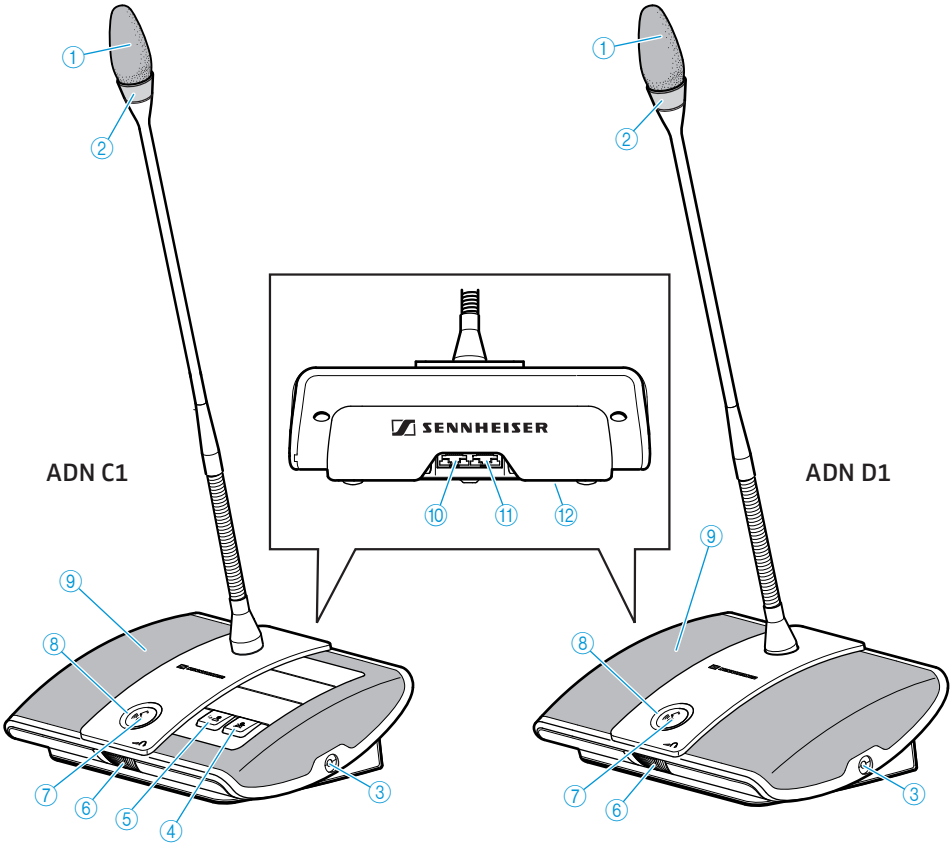
Number	Description	Cat. No.	Function
1-4	ADN-W AM antenna module	504743	Allows to transmit data via RF
	ADN-W AM-US antenna module, US version	505715	

Wireless conference units

Number	Description	Cat. No.	Function
max. 150	ADN-W D1 wireless delegate unit	504748	Allows to make contributions to the conference
1 - 10 (optional)	ADN-W C1 wireless chairperson unit	504745	Allows to manage the conference
depending on the number of wireless conference units	ADN-W BA battery pack	504744	Supplies power to wireless conference units
	ADN-W MIC 15-39	504750	Gooseneck microphones to make contributions
	ADN-W MIC 36-29	504751	
	ADN-W MIC 15-50	504752	
	ADN-W MIC 36-50	504753	

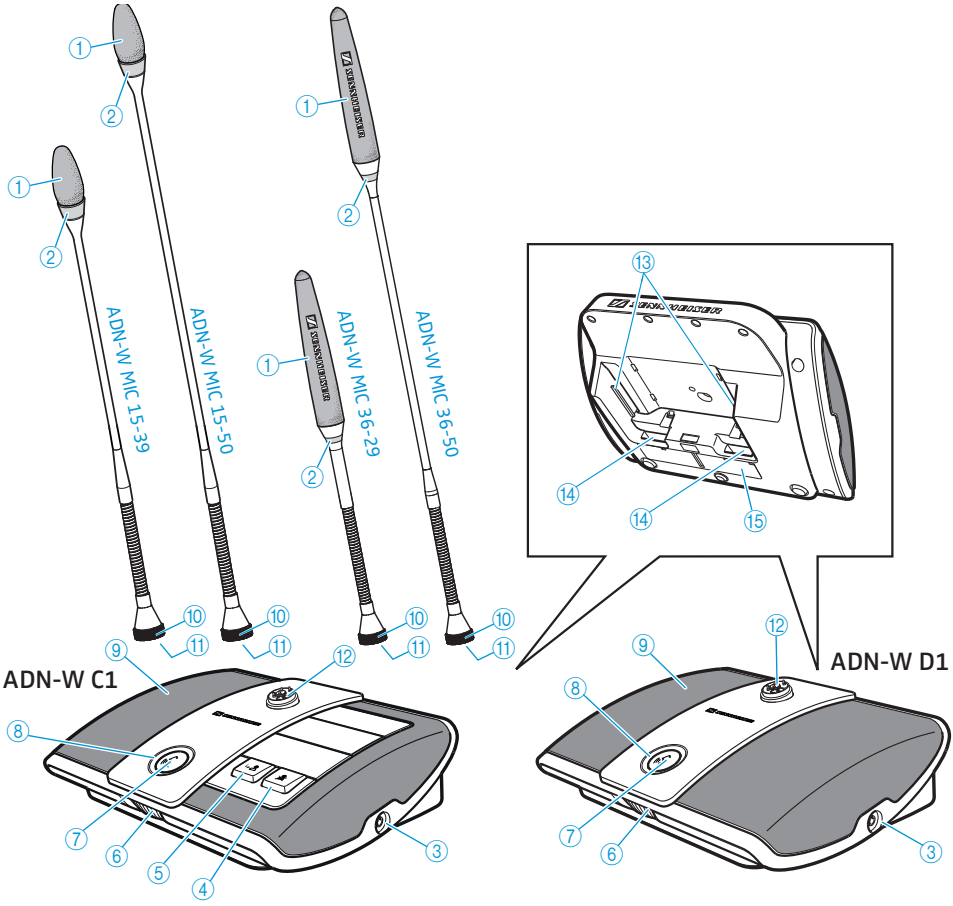
Additional accessories for the ADN conference system can be found at www.sennheiser.com.

Product overview ADN D1/C1



① Sound inlet basket with glued windshield
② Signal light ring
③ Headphone socket
④ Priority key
⑤ Next key
⑥ Headphone volume control for headphone socket
⑦ Microphone key
⑧ Microphone LED
⑨ Loudspeaker
⑩ IN socket
⑪ OUT socket
⑫ Type plate (see bottom)

Product overview ADN-W D1/C1



① Sound inlet basket with glued windshield
ADN-W MIC 15: glued windshield
ADN-W MIC 36: plug-on windshield

② Signal light ring

③ Headphone socket

④ Priority key

⑤ Next key

⑥ Headphone volume control for headphone socket

⑦ Microphone key

⑧ Microphone LED

⑨ Loudspeaker

⑩ Fastening thread

⑪ Sliding contacts

⑫ Microphone connection

⑬ Guide rails for ADN-W BA battery pack

⑭ Connection for ADN-W BA battery pack

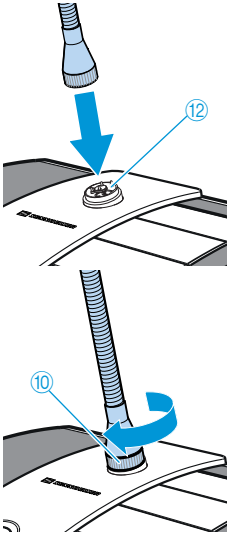
⑮ Type plate

Preparing the ADN-W D1/C1 wireless conference units for operation

To operate the wireless conference unit, you have to connect a gooseneck microphone (ADN-W MIC 15 or ADN-W MIC 36; available in different lengths) to the console of the conference unit. The ADN-W BA battery pack supplies power to the wireless conference unit. The conference system automatically recognizes if the connected wireless conference unit is a chairperson unit (ADN-W C1) or a delegate unit (ADN-W D1) and initializes it automatically. Information on how to configure the wireless conference components can be found in the ADN system manual or in the instruction manuals of the ADN CU1 central unit and the ADN-W AM antenna module.

If you do not connect a microphone to the wireless conference unit, you can use the console as a loudspeaker to output the floor channel.

Screwing on/unscrewing the ADN-W MIC 15/36 gooseneck microphone



To screw on the gooseneck microphone:

- Put the gooseneck microphone onto the microphone connection ⑫.
- Screw the microphone to the microphone connection by turning the fastening thread ⑩ clockwise.
  The microphone is securely connected to the conference unit.

To unscrew the gooseneck microphone:

- Unscrew the microphone by turning the fastening thread ⑩ counterclockwise.
- Carefully remove the gooseneck microphone from the microphone connection.

Function check of the microphone

After switch-on, the wireless conference unit checks the proper functioning of the gooseneck microphone.

If errors occur during the check of the microphone, the microphone LED ⑧ and, if the microphone is power supplied, the signal light ring ② flash red rapidly and the microphone is automatically deactivated.

- Replace the defective microphone by a new one.

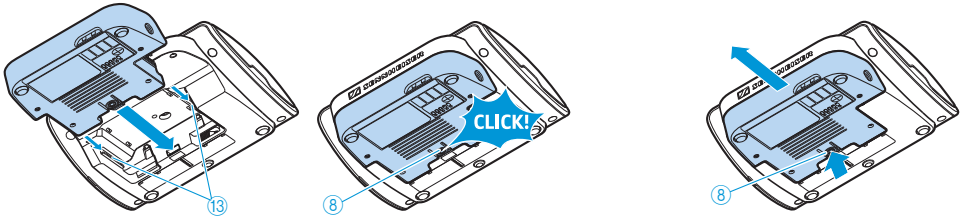
If you screw the microphone to or unscrew it from the wireless conference unit during operation (wireless conference unit is switched on), proper functioning of the conference unit cannot be guaranteed, i.e. volume differences or noise may occur.

- First connect the microphone and then switch the conference unit on.

Inserting/removing the battery pack

To insert the ADN-W BA battery pack into the wireless conference unit:

- Check the battery pack before using it in order to ensure sufficient battery capacity and to exclude a defective battery pack (see the instruction manual of the battery pack).
- Charge the battery pack if necessary (see the instruction manual of the battery pack).
- Slide the battery pack into the battery guide rails ⑬ of the wireless conference unit.
  The battery release clip ⑧ locks into place with an audible click and secures the battery pack.



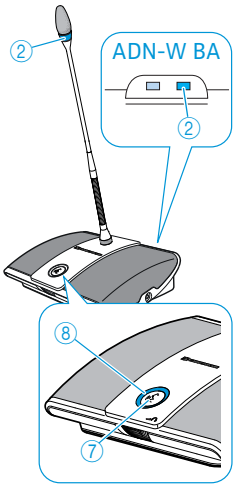
To remove the battery pack from the wireless conference unit:

- Press the battery release clip ⑧ and pull the battery pack out of the battery guide rails.

Switching the wireless conference unit on/off

To switch the wireless conference unit on:

- Press the microphone key ⑦.
  The microphone LED ⑧ and the signal light ring ② flash red and the RF status indicator ② on the ADN-W BA battery pack flashes blue slowly. Once the initialization process is complete and after connection to the ADN-W AM antenna module is established, the microphone LED ⑧ and the signal light ring ② go off. The RF status indicator ② on the ADN-W BA battery pack indicates the transmission quality:



Status LED	Color	Meaning
RF status indictor ②	–	good transmission quality
	blue, flashing slowly	transmission quality is temporarily reduced
	blue, flashing rapidly	transmission quality is permanently reduced

If no connection to an antenna module can be established within 5 minutes, the wireless conference unit automatically switches off.

To switch all wireless conference units off:

- Set the on/off switch of the ADN CU1 central unit to position "0". The central unit is switched off and the display panel goes off. The ADN-W AM antenna module connected to the central unit is switched off. All switched-on and connected wireless conference units are automatically switched off after 5 minutes.

If you are using the "Conference Manager" software, you can also switch off all wireless conference units with a mouse click (detailed information can be found in the ADN system manual).

To switch individual wireless conference units off:

- Press the microphone key ⑦ for 5 seconds.

Or:

- Remove the ADN-W BA battery pack from the conference unit (see page 8).
  The conference unit switches off. All LEDs go off.

If the conference mode is set to "Push to talk", you can only switch off the wireless conference unit by removing the battery pack.

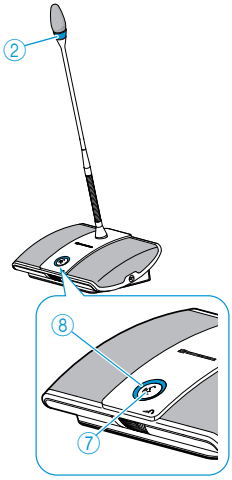
The manual switch-off function via the microphone key can be deactivated (detailed information can be found in the ADN system manual).

Operating a delegate unit

The operation of the ADN D1 wired conference unit and the ADN-W D1 wireless conference unit is identical.

Taking the floor/Making a request to speak

If the conference mode is set to "Direct Access" or "Override" (detailed information can be found in the ADN system manual):



- Press the microphone key ⑦.
  Your microphone switches on and you can take the floor immediately. The microphone LED ⑧ and the signal light ring ② light up red. The loudspeaker ⑨ is muted. Depending on the conference mode and the speaker limit set, the microphone of the previous speaker will be deactivated.

If the conference mode is set to "Push to talk":

- Press the microphone key ⑦ and keep it pressed for the duration of your contribution.
  Your microphone switches on and you can take the floor immediately. The microphone LED ⑧ and the signal light ring ② light up red. The loudspeaker ⑨ is muted.

If the conference mode is set to "Request", you have to be granted speaking privileges:

- Press the microphone key ⑦.
  Depending on the setting adjusted in the operating menu (detailed information can be found in the ADN system manual)
  - the microphone LED ⑧ flashes green and the signal light ring ② flashes red or
  - only the microphone LED ⑧ flashes green.

  When the chairperson grants you speaking privileges, your microphone is activated. The microphone LED ⑧ and the signal light ring ② light up red. The loudspeaker ⑨ is muted. Depending on the conference mode and the speaker limit set, the microphone of the previous speaker will be deactivated.

Deactivating the microphone/Canceling a request to speak

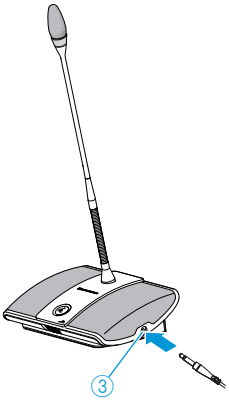
To deactivate the microphone when you have finished speaking or to cancel a request to speak ("Direct Access", "Override" or "Request" mode):

- Press the microphone key ⑦ once more.
  The microphone LED ⑧ and the signal light ring ② go off.

If the conference mode is set to "Push to talk":

- Release the pressed microphone key ⑦.
  The microphone LED ⑧ and the signal light ring ② go off.

Connecting headphones



- Connect headphones with a 3.5 mm jack plug to the headphone socket ③.

Adjusting the headphone volume

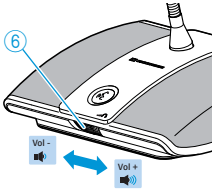
CAUTION

Hearing damage due to high volumes!

Listening at high volume levels for long periods can lead to permanent hearing defects.

- Set the volume to a medium level.
- Do not continuously expose yourself and other conference participants to high volumes.

To adjust the volume:



- Turn the headphone volume control ⑥
  – to the right to increase the volume or
  – to the left to reduce the volume.

  At switch-off, the headphone volume is reset to a medium level.

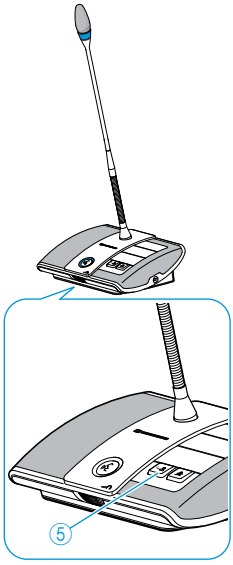
The volume of the conference units' loudspeakers can be set via the central unit (detailed information can be found in the ADN system manual).

Operating a chairperson unit

The operation of the ADN C1 wired conference unit and the ADN-W C1 wireless conference unit is identical.

Beside the chairperson functions, chairperson units offer the same functions as delegate units.

A chairperson unit allows you to take the floor at any time without having to "apply" for a comment. If your conference system comprises several chairperson units, all chairperson units have equal rights.



Granting speaking privileges

All participants who have made a request to speak will join a request-to-speak list. Depending on the setting adjusted in the operating menu:

- the microphone LED ⑧ flashes green and the signal light ring ② flashes red or
- only the microphone LED ⑧ flashes green.

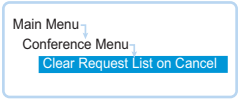
To grant speaking privileges to the next participant from the request-to-speak list:

▶ Press the Next key ⑤.
The next participant from the request-to-speak list is granted speaking privileges.

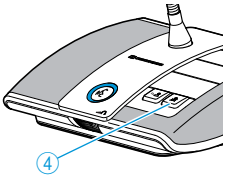
If you are using the "Conference Manager" software, you can also grant speaking privileges with a mouse click (detailed information can be found in the ADN system manual).

Ending a conference or withdrawing speaking privileges (cancel function)

▶ Set the function ("Clear Request List on Cancel") of the chairperson unit's priority key ④ via the central unit's operating menu:



Setting	Function of the priority key
"On"	Pressing the priority key ④ deactivates all delegate units. All requests to speak are deleted.
"Off"	Pressing the priority key ④ deactivates all currently active delegate units. All requests to speak are retained.

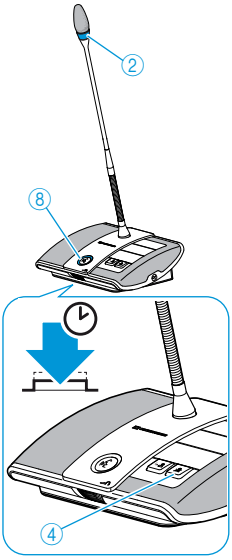


- Briefly press the priority key ④.
  The conference system behaves as set.

If you are using the "Conference Manager" software, you can also deactivate all delegate units with a mouse (detailed information can be found in the ADN system manual).

Muting all delegate units temporarily (priority function)

Using the priority function, the chairperson can interrupt a discussion at any time. The speaking privileges of all chairperson units remain active at any time.



- Keep the priority key ④ pressed for as long as you want to mute the delegate units.
  All conference units – except for the chairperson units – are muted immediately. The microphone LED ⑧ and the signal light ring ② of the previously active conference units flash red. You can take the floor immediately. The microphone LED ⑧ and the signal light ring ② of your chairperson unit light up red.
- Release the priority key ④.
  The muting of the conference units is canceled. The discussion is continued.

Cleaning and maintaining the conference units

- Remove the ADN-W BA battery pack from the ADN-W C1 or ADN-W D1 wireless conference units (see page 8).
- Only use a dry and soft cloth to clean the products.
- Clean the grids of the conference units with a soft brush or paintbrush in order to avoid dust deposits.

Specifications

ADN D1 and ADN C1 conference units

Console	
Supply voltage	35 V to 52.8 V ⎓
Power consumption	2 W (without reproduction via loudspeakers)
Headphone socket	3.5 mm stereo jack socket
Output level at headphone socket	50 mW/16 Ω
THD (at 1 kHz)	0.03 % at 50 mW/16 Ω
Frequency response	100 Hz to 14.5 kHz
Signal-to-noise ratio	> 70 dB(A)
Temperature range	operation: +10°C to +40°C storage: -25°C to +70°C
Relative humidity	operation: 10 to 80% storage: 10 to 90%
Dimensions (W x H x D)	185 x 63 x 140 mm; without gooseneck
Weight	approx. 700 g
Microphone	
Pick-up pattern	super-cardioid
Frequency response	190 Hz to 14.5 kHz

In compliance with

Europe: CE	EMC	EN 55103-1/-2
	Safety	EN 60065

ADN-W D1 and ADN-W C1 wireless conference units

Console	
RF frequency ranges	2.4 GHz, 5.1 to 5.9 GHz
RF output power	max. 100 mW
Audio quality	16 bit / 32 kHz
Operating time	> 20 hours (ADN-W BA battery pack)
Voltage for optional external power supply	12 V ⎓ via ADN-W BA battery pack
Charging time of battery pack	typ. 4 hours
Headphone socket	3.5 mm stereo jack socket

Output level at headphone socket	50 mW/16 Ω
THD (at 1 kHz)	0.03% at 50 mW/16 Ω
Frequency response	100 Hz to 14.5 kHz
Signal-to-noise ratio	> 70 dB(A)
Temperature range	operation: +5°C to +45°C storage: -25°C to +70°C
Relative humidity	operation: 20 to 80% storage: 10 to 90%
Dimensions (W x H x D)	185 x 67 x 180 mm; without gooseneck
Weight	approx. 940 g
Microphone	see the instruction manual of the ADN-W MIC 15 or ADN-W MIC 36 gooseneck microphone

In compliance with

Europe	EMC	EN 301489-1/-17
	Radio	EN 300328
		EN 301893
		EN 300440-1/-2
	Safety	EN 60065
		EN 62311 (SAR)

Approved by

USA	47 CFR Part 15 FCC ID: DMOADNWDU
Canada	CAN ICES-3(B)/NMB-3(B) Industry Canada RSS 210 IC: 2099A-ADNWDU
Japan R 202-SMA058 T D 12-0045 202	Japanese Radio Law and Japanese Telecommunications Business Law Compliance This device is granted pursuant to the Japanese Radio Law (電波法) and the Japanese Telecommunications Business Law (電気通信事業法)This device should not be modified (otherwise the granted designation number will become invalid)
Brazil	ADN-W D1: 3100-15-7356 ADN-W C1: 3108-15-7356

CE Declaration of Conformity

RoHS Directive (2011/65/EU)
Radio Equipment Directive (2014/53/EU)
EMC Directive (2014/30/EU)
The declaration is available at
www.sennheiser.com/download
Before putting the product into operation, please observe the respective country-specific regulations.

Italy: For private use, a general authorization for the frequency band 5150 - 5725 MHz is required if our wireless system is used outside own premises.
For public use, a general authorization is required.

Statements regarding the FCC and Industry Canada rules

This device complies with part 15 of the FCC rules and RSS-210 of Industry Canada. 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.

The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio

frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

Changes or modifications not expressly approved by Sennheiser electronic Corp. could void the user's authority to operate the equipment.

This Class B digital apparatus complies with the Canadian ICES-003.

Radiofrequency radiation exposure Information:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Sennheiser electronic GmbH & Co. KG

Am Labor 1, 30900 Wedemark, Germany
www.sennheiser.com

Printed in Germany, Publ. 08/16, 549160/A04