

**ADN-W C1**  
**ADN-W D1**  
Wireless Units

**ADN C1**  
**ADN D1**  
Wired Units



Instruction manual



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## 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.



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

- on the Internet at [www.sennheiser.com](http://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.



**i** 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.



All instruction manuals for components of the ADN conference system are also available on the Internet at [www.sennheiser.com](http://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

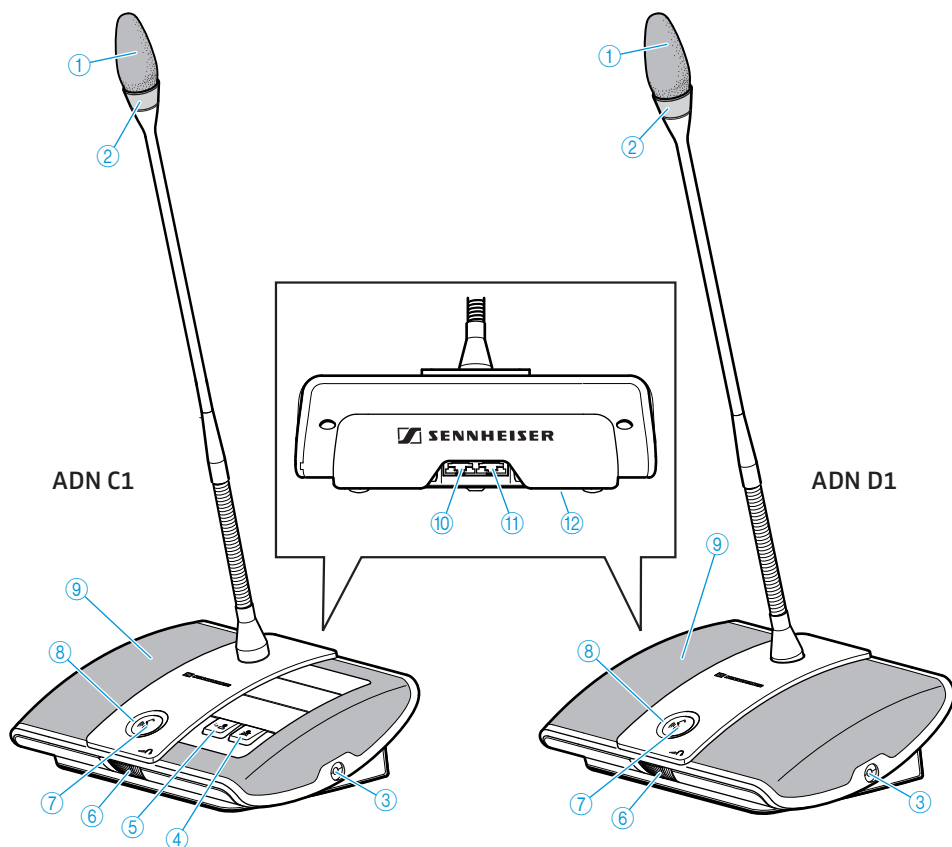
| Antenna module | Number | Description                            | Cat. No. | Function                       |
|----------------|--------|----------------------------------------|----------|--------------------------------|
|                | 1-4    | ADN-W AM antenna module                | 504743   | 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   |                                                |



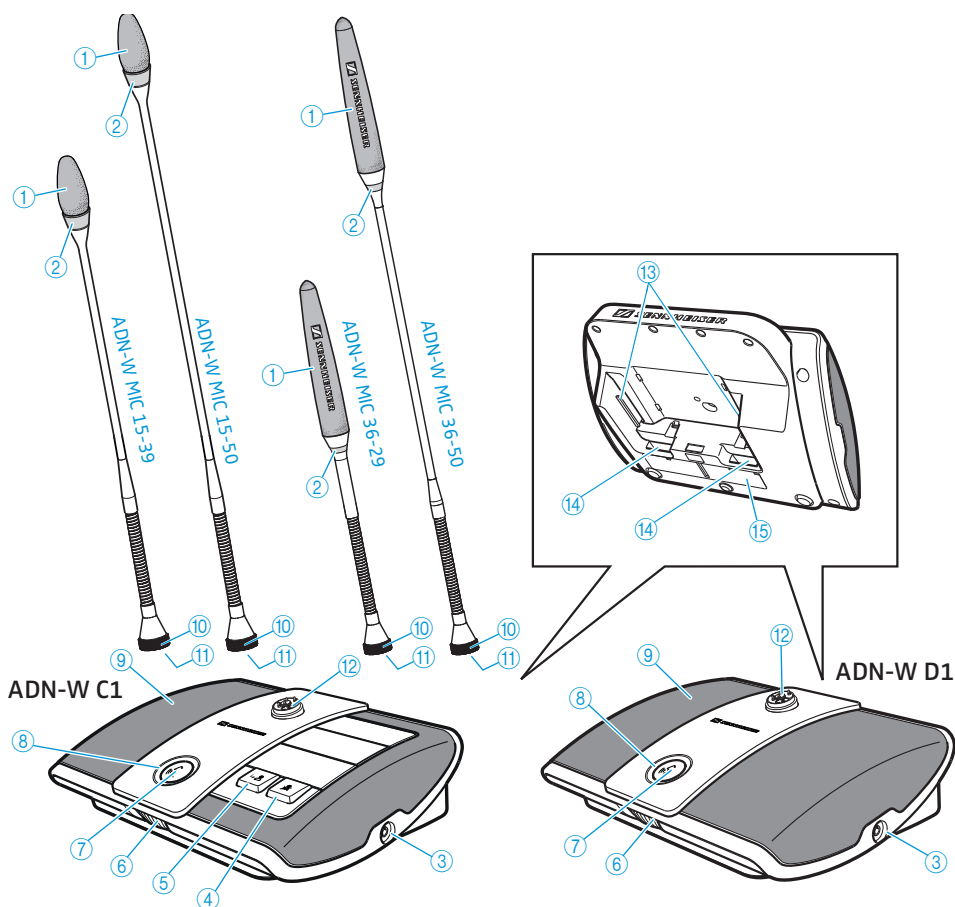
Additional accessories for the ADN conference system can be found at [www.sennheiser.com](http://www.sennheiser.com).

## 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:

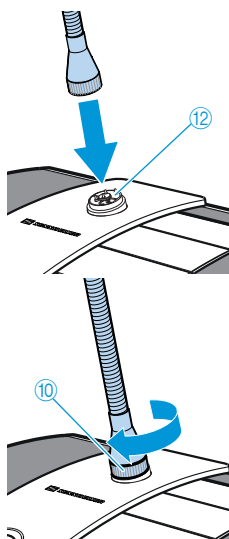
- ▶ Unscrew the microphone by turning the fastening thread ⑩ counterclockwise.
- ▶ Carefully remove the gooseneck microphone from the microphone connection.

### 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.



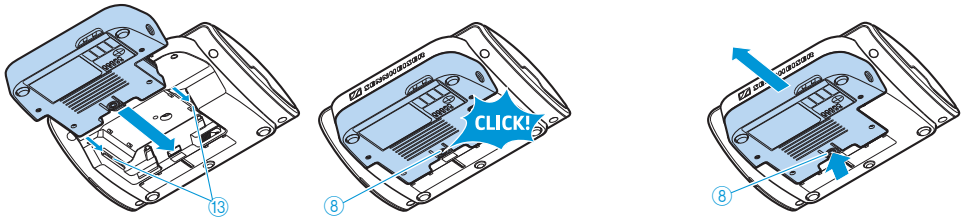
If you screw the microphone to or unscrew it from the wireless conference unit during operation (wireless conference unit is switched on), proper functioning of the conference unit cannot be guaranteed, i.e. volume differences or noise may occur.

- ▶ 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.



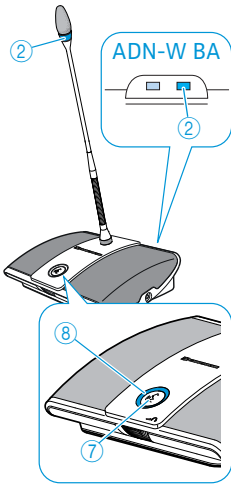
To **remove** the battery pack from the wireless conference unit:

- ▶ 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 indicator 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.

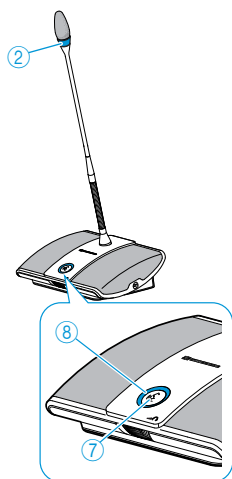
If the conference mode is set to “**Push to talk**”:

- ▶ 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

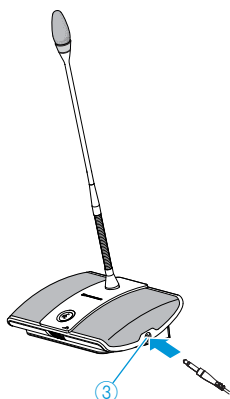


#### CAUTION

#### Hearing damage due to high volumes!

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

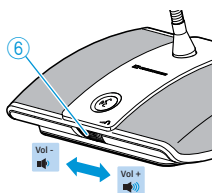
- ▶ Set the volume to a medium level.
- ▶ Do not continuously expose yourself and other conference participants to high volumes.



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.

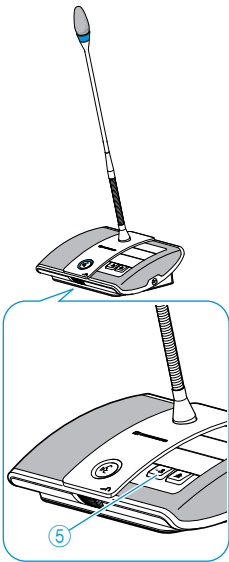
To grant speaking privileges to the next participant from the request-to-speak list:

- Press the Next key ⑤.

The next participant from the request-to-speak list is granted speaking privileges.

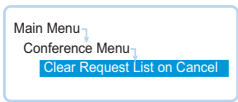


If you are using the “Conference Manager” software, you can also grant speaking privileges with a mouse click (detailed information can be found in the ADN system manual).

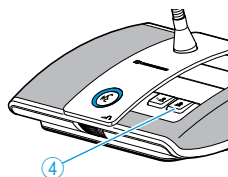


### Ending a conference or withdrawing speaking privileges (cancel function)

- 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. |



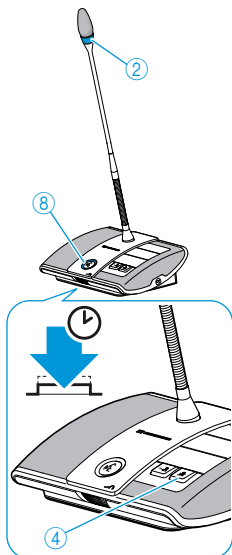
- ▶ Briefly press the priority key ④.  
The conference system behaves as set.

**i** 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<br>storage: -25°C to +70°C |
| Relative humidity                | operation: 10 to 80%<br>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:                                                                           | 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<br>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<br>storage: -25°C to +70°C                                       |
| Relative humidity                   | operation: 20 to 80%<br>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<br>ADN-W MIC 15 or ADN-W MIC 36 gooseneck<br>microphone |

In compliance with

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

Approved by

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



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