



D110SP, D112SP, D115SP

active speaker

Musikhaus Thomann
Thomann GmbH
Hans-Thomann-Straße 1
96138 Burgebrach
Germany
Telephone: +49 (0) 9546 9223-0
E-mail: info@thomann.de
Internet: www.thomann.de

18.02.2022, ID: 523023, 523025, 523026

Table of contents

1	General information.....	5
1.1	Further information.....	6
1.2	Notational conventions.....	7
1.3	Symbols and signal words.....	8
2	Safety instructions.....	10
3	Features.....	14
4	Starting up.....	15
5	Connections and controls.....	17
6	Technical specifications.....	21
7	Plug and pin assignments.....	35
8	Cleaning.....	38
9	Protecting the environment.....	39



1 General information

This user manual contains important information on the safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to another user, be sure that they also receive this manual.

Our products and user manuals are subject to a process of continuous development. We therefore reserve the right to make changes without notice. Please refer to the latest version of the user manual which is ready for download under www.thomann.de.

1.1 Further information

On our website (www.thomann.de) you will find lots of further information and details on the following points:

Download	This manual is also available as PDF file for you to download.
Keyword search	Use the search function in the electronic version to find the topics of interest for you quickly.
Online guides	Our online guides provide detailed information on technical basics and terms.
Personal consultation	For personal consultation please contact our technical hotline.
Service	If you have any problems with the device the customer service will gladly assist you.

1.2 Notational conventions

This manual uses the following notational conventions:

Letterings

The letterings for connectors and controls are marked by square brackets and italics.

Examples: *[VOLUME]* control, *[Mono]* button.

Instructions

The individual steps of an instruction are numbered consecutively. The result of a step is indented and highlighted by an arrow.

Example:

- 1.**  Switch on the device.
- 2.**  Press *[Auto]*.
 Automatic operation is started.
- 3.**  Switch off the device.

1.3 Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this manual.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
CAUTION!	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – high-voltage.
	Warning – danger zone.

2 Safety instructions

Intended use

This device is designed for sound reinforcement. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.



DANGER!

Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard! Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke! Never let children unattended use electrical devices.



DANGER!

Electric shock caused by high voltages inside

Within the device there are areas where high voltages may be present. Never remove any covers. There are no user-serviceable parts inside. Do not use the device if covers, protectors or optical components are missing or damaged.



DANGER!

Electric shock caused by short-circuit

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.



CAUTION!

Possible hearing damage

The device can produce volume levels that may cause temporary or permanent hearing impairment. Over an extended period of time, even levels that seem to be uncritical can cause hearing damage. Decrease the volume level immediately if you experience ringing in your ears or hearing impairment. If this is not possible, keep a greater distance or use sufficient ear protectors.



NOTICE!

Radio interference

This device emits electromagnetic signals. This can cause interference due to overlapping radio waves. Do not use the device in locations where the use of wireless devices is prohibited.



NOTICE!

Risk of fire

Do not block areas of ventilation. Do not install the device near any direct heat source. Keep the device away from naked flames.



NOTICE!

Power supply



Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user. Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.



NOTICE!

Operating conditions



This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations. Only operate the device within the ambient conditions specified in the chapter 'Technical specifications' of this user manual. Avoid heavy temperature fluctuations and do not switch the device on immediately after it was exposed to temperature fluctuations (for example after transport at low outside temperatures). Dust and dirt inside can damage the unit. When operated in harmful ambient conditions (dust, smoke, nicotine, fog, etc.), the unit should be maintained by qualified service personnel at regular intervals to prevent overheating and other malfunction.



NOTICE!

Possible damage due to installation of a wrong fuse



The use of different types of fuses can cause serious damage to the unit. Fire hazard! Only fuses of the same type may be used.



NOTICE!

Possible staining

The plasticiser contained in the rubber feet of this product may possibly react with the coating of your surface and after some time cause permanent dark stains. In case of doubt, do not put the rubber feet directly on the surface and use a suitable underlay if necessary, i.e. felt-pad floor protectors or similar.

3 Features

The active speaker is characterized by the following features:

- active full-range speaker box for PA and DJ application
- maximum output power 800 W or 1400 W (depending on the model)
- 10", 12" or 15" woofer (depending on the model)
- 1" or 1.35" compression driver (depending on the model)
- 4 DSP sound programmes: Music, Vocal/LowCut, Live, Stage Monitor
- FIR filter
- Bluetooth® 5.0 with TWS (TrueWirelessStereo)
- 2 × adjustable MIC / Line input, XLR / 1/4" combo socket
- 1 × Line out, XLR
- 1 × Aux in, (3.5 mm jack socket)
- high-quality plastic housing with 35 mm tripod flange and carrying handles

4 Starting up

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the product against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

Create all connections while the device is off. Use the shortest possible high-quality cables for all connections. Take care when running the cables to prevent tripping hazards.

Notes on radio transmission

- This equipment uses a frequency range that is free of charge and registration within the European Union.
For more information, please visit: <http://www.thomann.de>.
- Make sure that no metal objects are located between transmitter and receiver.
- Avoid interference by other radio and in-ear systems.



NOTICE!

Possible property damage by magnetic fields

Loudspeakers produce a static magnetic field. Therefore, maintain an appropriate distance to devices that can be adversely affected or damaged by an external magnetic field.

The unit can be mounted on a tripod or set up on the floor or a sufficiently sized and stable surface.

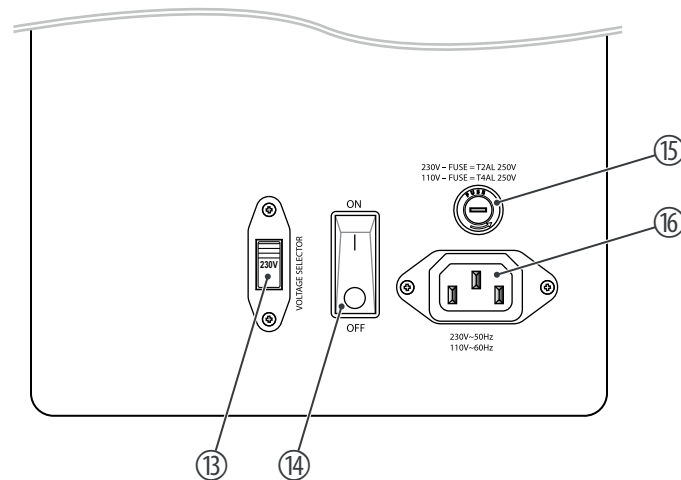
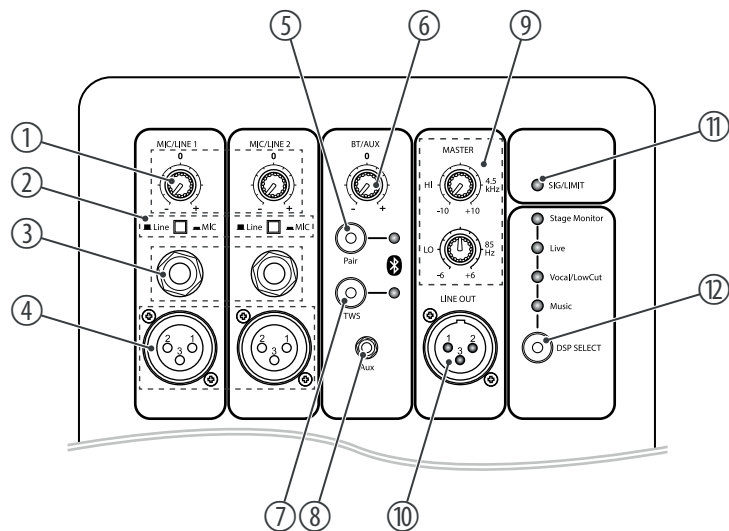


NOTICE!

Use of stands

When mounting the device onto a stand, ensure that the stand is in a safe and stable position and that the weight of the device does not exceed the maximum permissible load capacity of the stand.

5 Connections and controls



1	<i>[MIC/LINE 1] / [MIC/LINE 2]</i> Rotary control for setting the input level of mic / line inputs 1 and 2
2	<i>[LINE MIC]</i> Button for selecting the input sensitivity of the mic / line inputs 1 and 2
3	Mic / line inputs 1 and 2, designed as ¼" jack socket, balanced
4	Mic / line inputs 1 and 2, designed as XLR panel socket, balanced
5	<i>[PAIR]</i> To establish a Bluetooth® connection, press and hold the button for three seconds to search for Bluetooth-enabled devices ready for pairing. The LED flashes. The Bluetooth® list of the device to be paired displays "Bluetooth". Accept the connection. After a successful connection, the LED lights up continuously.
6	<i>[BT/AUX]</i> Rotary control for setting the input level of the Bluetooth® and AUX signals

7	<i>[TWS]</i> With the TWS function (TrueWirelessStereo) you can connect 2 loudspeakers to each other in order to transmit the Bluetooth® signal in stereo. To pair two speakers, press and hold the button on the first speaker that is already connected to a pairing device for three seconds. The LED flashes. Repeat the process on the second speaker. After successful pairing, the LEDs of both loudspeakers light up continuously.
8	<i>[AUX]</i> AUX input, designed as a 3.5 mm jack socket (stereo), for connecting line level devices such as MP3 or CD players
9	<i>[MASTER]</i> Rotary control for adjusting the treble and bass in a range of +/- 10 dB for treble and +/- 6 dB for bass
10	<i>[LINE OUT]</i> Line output, designed as XLR chassis plug. This is where the combined signal from both inputs, the AUX and Bluetooth® inputs, is available affected by DSP and the tone control.

11	<i>[SIG/LIMIT]</i> The LED lights up yellow when a signal is detected at one of the two mic / line inputs. The LED lights up red as soon as the input level is too high on one of the channels. Make sure that the LED does not light up red for a long period of time in order to ensure optimal sound quality.
12	<i>[DSP SELECT]</i> Button to select the DSP function. Repeatedly press the button to choose between the sound programmes <i>[Music]</i>, <i>[Vocal/LowCut]</i>, <i>[Live]</i> and <i>[Stage Monitor]</i>. The corresponding LED lights.
13	<i>[VOLTAGE SELECTOR]</i> Voltage selector
14	<i>[ON] / [OFF]</i> Mains switch. Turns the device on and off.
15	Fuse holder
16	IEC chassis plug for the power supply

6 Technical specifications

D110SP

Speaker	Active full-range speaker	
	Two-way system with 1" compression driver and 10" woofer with 1.5" voice coil	
Amp class	Class-D & Class-AB power stage	
Input connections	Mic / Line	2 × XLR chassis socket, 3-pin, balanced 2 × ¼" jack socket, balanced
	Line level player	1 × 3.5 mm jack socket, stereo, unbalanced
	Voltage supply	IEC panel plug
Input impedance	Mic: 4.4 kΩ	
	Line: 100 kΩ	
Output connections	Line level mix from both inputs	1 × XLR chassis plug, 3-pin, balanced

Technical specifications

Output power	RMS: 200 W Peak: 800 W	
Frequency range	60 Hz ... 20 kHz	
Crossover frequency	3.5 kHz	
Dispersion characteristics	120° × 60°	
Sound pressure level (SPL), max.	123 dB	
Bluetooth®	Frequency range	2.402 GHz ... 2.480 GHz
	Max. transmission power	1.6 mW or +2 dBm
	Max. range	10 m
	Standard	Version 5.0
	Codecs	PCM, ADPCM, CBR, VBR
Power consumption	200 W	
Inrush current	25 A, 3500 µs	

Operating supply voltage	230 V ~ 50 Hz	
	110 V ~ 60 Hz	
Fuse	230 V: 5 mm × 20 mm, 2 A, 250 V, slow-blow	
	110 V: 5 mm × 20 mm, 4 A, 250 V, slow-blow	
Dimensions (W × H × D)	321 mm × 505 mm × 291 mm	
Weight	11 kg	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	20 %...80 % (non-condensing)

D112SP

Speaker	Active full-range speaker Two-way system with 1.35" compression driver and 12" woofer with 2.5" voice coil	
Amp class	Class-D & Class-AB power stage	
Input connections	Mic / Line	2 × XLR chassis socket, 3-pin, balanced 2 × ¼" jack socket, balanced
	Line level player	1 × 3.5 mm jack socket, stereo, unbalanced
	Voltage supply	IEC panel plug
Input impedance	Mic: 4.4 kΩ Line: 100 kΩ	
Output connections	Line level mix from both inputs	1 × XLR chassis plug, 3-pin, balanced
Output power	RMS: 350 W Peak: 1400 W	
Frequency range	50 Hz ... 20 kHz	

Crossover frequency	2.8 kHz	
Dispersion characteristics	120° × 60°	
Sound pressure level (SPL), max.	125 dB	
Bluetooth®	Frequency range	2.402 GHz ... 2.480 GHz
	Max. transmission power	1.6 mW or +2 dBm
	Max. range	10 m
	Standard	Version 5.0
	Codecs	PCM, ADPCM, CBR, VBR
Power consumption	300 W	
Inrush current	25 A, 3500 µs	
Operating supply voltage	230 V ~ 50 Hz	
	110 V ~ 60 Hz	
Fuse	230 V: 5 mm × 20 mm, 2 A, 250 V, slow-blow	
	110 V: 5 mm × 20 mm, 4 A, 250 V, slow-blow	

Technical specifications

Dimensions (W × H × D)	386 mm × 597 mm × 346 mm	
Weight	15.6 kg	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	20 %...80 % (non-condensing)

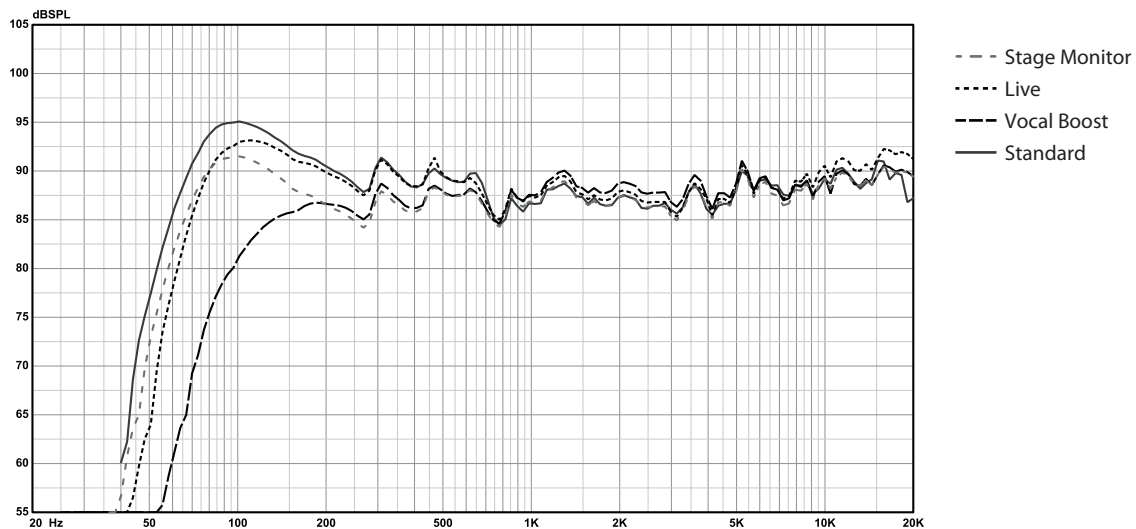
D115SP

Speaker	Active full-range speaker Two-way system with 1.35" compression driver and 15" woofer with 2.5" voice coil	
Amp class	Class-D & Class-AB power stage	
Input connections	Mic / Line	2 × XLR chassis socket, 3-pin, balanced 2 × ¼" jack socket, balanced
	Line level player	1 × 3.5 mm jack socket, stereo, unbalanced
	Voltage supply	IEC panel plug
Input impedance	Mic: 4.4 kΩ Line: 100 kΩ	
Output connections	Line level mix from both inputs	1 × XLR chassis plug, 3-pin, balanced
Output power	RMS: 350 W Peak: 1400 W	
Frequency range	45 Hz ... 20 kHz	

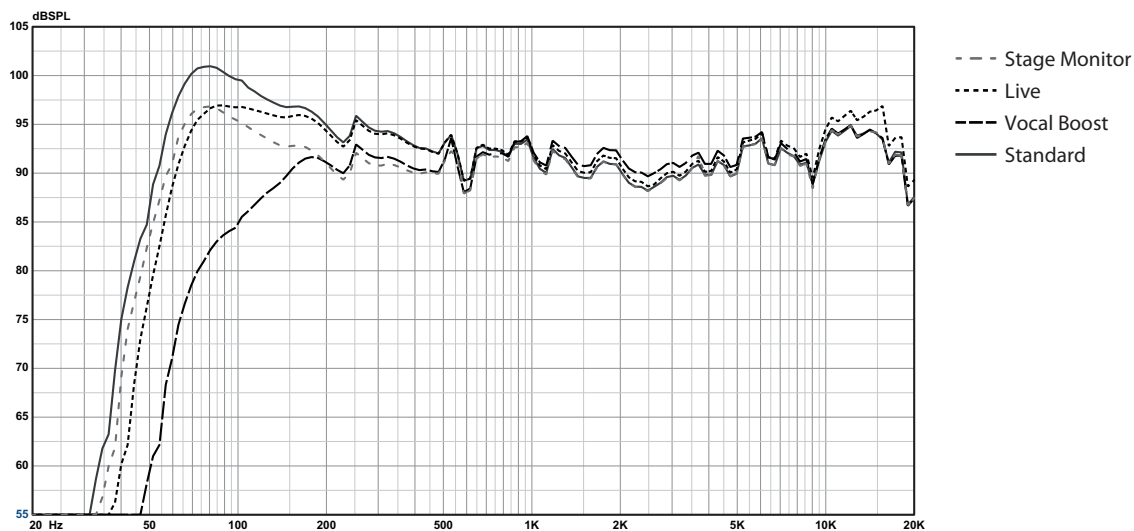
Crossover frequency	3.6 kHz	
Dispersion characteristics	120° × 60°	
Sound pressure level (SPL), max.	126 dB	
Bluetooth®	Frequency range	2.402 GHz ... 2.480 GHz
	Max. transmission power	1.6 mW or +2 dBm
	Max. range	10 m
	Standard	Version 5.0
	Codecs	PCM, ADPCM, CBR, VBR
Power consumption	300 W	
Inrush current	25 A, 3500 µs	
Operating supply voltage	230 V ~ 50 Hz	
	110 V ~ 60 Hz	
Fuse	230 V: 5 mm × 20 mm, 2 A, 250 V, slow-blow	
	110 V: 5 mm × 20 mm, 4 A, 250 V, slow-blow	

Dimensions (W × H × D)	460 mm × 705 mm × 415 mm	
Weight	19.5 kg	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	20 %...80 % (non-condensing)

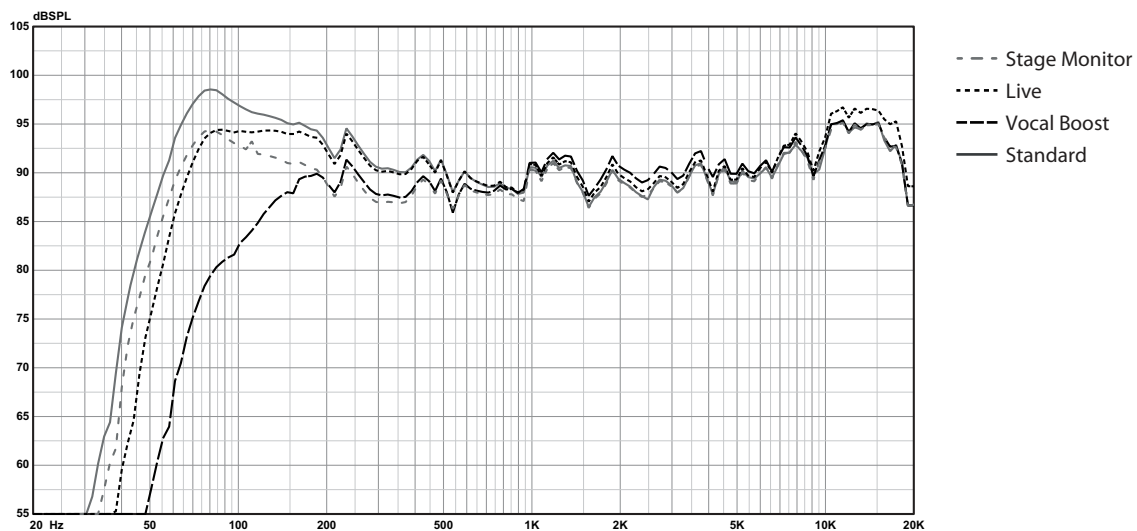
Frequency response D110SP



Frequency response D112SP



Frequency response D115SP



Further information

Multifunctional housing	yes
Tripod flange	yes
Monitor wedge	yes
Simultaneous inputs	3
Mic preamps	2
Tone control per channel	No
Master tone control	yes
Bluetooth®-Play	yes
Bluetooth®-Control	No
USB player	No
SD card player	No
Low Cut	yes
Ground Lift	No

Technical specifications

Fan	No
Truss-capable	No

7 Plug and pin assignments

Introduction

This chapter will help you select the right cables and plugs to connect your valuable equipment in such a way that a perfect sound experience is ensured.

Please note these advices, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into the socket, an incorrect connection may result in a destroyed power amp, a short circuit or 'just' in poor transmission quality!

Balanced and unbalanced transmission

Unbalanced transmission is mainly used in semi-professional environment and in hifi use. Instrument cables with two conductors (one core plus shielding) are typical representatives of the unbalanced transmission. One conductor is ground and shielding while the signal is transmitted through the core.

Unbalanced transmission is susceptible to electromagnetic interference, especially at low levels, such as microphone signals and when using long cables.

In a professional environment, therefore, the balanced transmission is preferred, because this enables an undisturbed transmission of signals over long distances. In addition to the conductors 'Ground' and 'Signal', in a balanced transmission a second core is added. This also transfers the signal, but phase-shifted by 180°.

Since the interference affects both cores equally, by subtracting the phase-shifted signals, the interfering signal is completely neutralized. The result is a pure signal without any noise interference.

1/4" TRS phone plug (stereo, unbalanced)



1	Signal (left)
2	Signal (right)
3	Ground

3.5 mm TRS phone plug (mono, balanced)



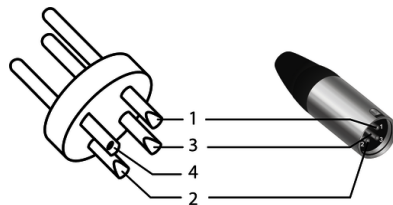
1	Signal (in phase, +)
2	Signal (out of phase, -)
3	Ground

Three-pole 1/8" mini phone jack (stereo, unbalanced)



1	Signal (left)
2	Signal (right)
3	Ground, shielding

XLR plug (balanced)



1	Ground, shielding
2	Signal (in phase, +)
3	Signal (out of phase, -)
4	Shielding on plug housing (option)

8 Cleaning

Device components

Clean the device components that are accessible from the outside regularly. The cleaning frequency depends on the operating environment: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the device components.

- Clean with a dry soft cloth.
- Stubborn dirt can be removed with a slightly dampened cloth.
- Never use solvents or alcohol for cleaning.

9 Protecting the environment

Disposal of the packaging material



For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) in its currently valid version. Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

