

# D110SP, D112SP, D115SP

# **User** Manual

**Active Speaker** 

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# 1 General information

This document contains important instructions for the safe operation of the product. Read and follow the safety instructions and all other instructions. Keep the document for future reference. Make sure that it is available to all those using the product. If you sell the product to another user, be sure that they also receive this document.

Our products and documentation are subject to a process of continuous development. They are therefore subject to change. Please refer to the latest version of the documentation, which is ready for download under <u>www.thomann.de</u>.

### **1.1 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 document.

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.
WARNING!	This combination of symbol and signal word indicates a pos- sible dangerous situation that can result in death or serious injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a pos- sible 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!

### Risk of injury and choking hazard for children!

Children can suffocate on packaging material and small parts. Children can injure themselves when handling the device. Never allow children to play with the packaging material and the device. Always store packaging material out of the reach of babies and small children. Always dispose of packaging material properly when it is not in use. Never allow children to use the device without supervision. Keep small parts away from children and make sure that the device does not shed any small parts (such knobs) that children could play with.



### DANGER!

### Danger to life due to electric current!

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 when covers, safety equipment or optical components are missing or damaged.



### DANGER!

### Danger to life due to electric current!

A short circuit could lead to a fire hazard and risk of death. Always use proper ready-made insulated triple-core mains cable with a safety plug. Do not modify the mains cable or the plug. In case of isolation damage, disconnect immediately the power supply and arrange repair. If in doubt, seek advice from a qualified electrician.



### WARNING!

### Possible hearing damage due to operating the device at a high volume!

The device can produce volume levels that, when operated at a high volume, may cause temporary or permanent hearing impairment. Over an extended period of time, even levels that seem to be uncritical can cause hearing damage. Avoid operating the device at excessively high volumes over an extended period of time. 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 adequate ear-muffs.

## Radio interference due to electromagnetic fields!

The unit emits electromagnetic radio signals. Overlapping radio waves may cause interference with the device and other devices. Do not use the device in locations where the use of wireless devices is prohibited.

### NOTICE!

NOTICE!

### Risk of fire due to covered vents and neighbouring heat sources!

If the vents of the device are covered or the device is operated in the immediate vicinity of other heat sources, the device can overheat and burst into flames. Never cover the device or the vents. Do not install the device in the immediate vicinity of other heat sources. Never operate the device in the immediate vicinity of naked flames.

### NOTICE!

### Damage to the device due to high voltages!

The device can be damaged if it is operated with the incorrect voltage or if high voltage peaks occur. In the worst case, excess voltages can also cause a risk of injury and fires. Make sure that the voltage specification on the device matches the local power grid before plugging in the device. Only operate the device from professionally installed mains sockets that are protected by a residual current circuit breaker (FI). As a precaution, disconnect the device from the power grid when storms are approaching or it the device will not be used for a longer period.

### NOTICE!

### Damage to the device if operated in unsuitable ambient conditions!

The device can be damaged if it is operated in unsuitable ambient conditions. Only operate the device indoors within the ambient conditions specified in the "Technical specifications" chapter of this user manual. Avoid operating it in environments with direct sunlight, heavy dirt and strong vibrations. Avoid operating it in environments with strong temperature fluctuations. If temperature fluctuations cannot be avoided (for example after transport in low outside temperatures), do not switch on the device immediately. Never subject the device to liquids or moisture. Never move the device to another location while it is in operation. In environments with increased dirt levels (for example due to dust, smoke, nicotine or mist): Have the device cleaned by qualified specialists at regular intervals to prevent damage due to overheating and other malfunctions.

### NOTICE!

### Risk of fire due to installation of a wrong fuse!

Using fuses of a different type than compatible with the device may cause a fire and seriously damage the device. Only use fuses of the same type. Observe the labelling on the device casing and the information in the "Technical data" chapter.

### NOTICE!

### Possible staining due to plasticiser in rubber feet!

The plasticiser contained in the rubber feet of this product may react with the coating of the floor and cause permanent dark stains after some time. If necessary, use a suitable mat or felt slide to prevent direct contact between the device's rubber feet and the floor.

# 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<sup>®</sup> 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.



### NOTICE!

### Possible property damage to adjacent devices due to magnetic fields.

Speakers generate a static magnetic field. This magnetic field can affect other neighbouring units and in unfavourable cases damage them.

Ensure that speakers are always a sufficient distance away from sensitive equipment that may be affected 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.

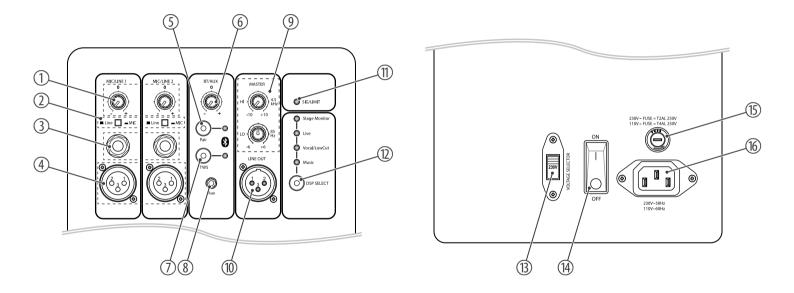
### NOTICE!

### Potential property damage due to unsuitable stands!

If the device is mounted on an unsuitable stand, there is a risk that the stand will fall over and cause damage.

Only use stands whose maximum bearing capacity is at least as high as the weight of the device. Always ensure that the stand is stable.

# 5 Connections and controls



## Connections and controls

- 1 [MIC/LINE 1] / [MIC/LINE 2] | Rotary control for setting the input level of mic / line inputs 1 and 2
- 2 [LINE | MIC] | Button for selecting the input sensitivity of the mic / line inputs 1 and 2
- 3 Mic / line inputs 1 and 2, designed as 1/4" jack socket, balanced
- 4 Mic / line inputs 1 and 2, designed as XLR panel socket, balanced
- 5 [PAIR] | To establish a Bluetooth<sup>®</sup> connection, press and hold the button for three seconds to search for Bluetoothenabled devices ready for pairing. The LED flashes. The Bluetooth<sup>®</sup> list of the device to be paired displays the corresponding device name as Bluetooth<sup>®</sup> name (*'Syrincs D110SP'*, *'Syrincs D112SP'* or *'Syrincs D115SP'*). Accept the connection. After a successful connection, the LED lights up continuously.
- 6 [BT/AUX] Rotary control for setting the input level of the Bluetooth<sup>®</sup> and AUX signals
- 7 [TWS] | With the TWS function (TrueWirelessStereo) you can connect 2 loudspeakers to each other in order to transmit the Bluetooth<sup>®</sup> signal in stereo.

To pair two speakers via TWS, press and hold [TWS] for three seconds on the first speaker that is already connected to a pairing device. The LED flashes. On the second speaker, press [PAIR] and then [TWS]. After successful pairing, the LEDs of both speakers light up continuously.

- 8 [AUX] | AUX input, designed as a 3.5 mm jack socket (stereo), for connecting line level devices such as MP3 or CD players
- 9 [MASTER] | Rotary control for adjusting the treble and bass in a range of +/- 10 dB for treble and +/- 6 dB for bass
- 10 [LINE OUT] | Line output, designed as XLR chassis plug. This is where the combined signal from both inputs, the AUX and Bluetooth<sup>®</sup> inputs, is available unaffected by DSP and tone control.

11 [SIG/LIMIT] | 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 [DSP SELECT] | Button to select the DSP function. Repeatedly press the button to choose between the sound programmes [Music], [Vocal/LowCut], [Live] and [Stage Monitor]. The corresponding LED lights.
- 13 [VOLTAGE SELECTOR] | Voltage selector
- 14 [ON] / [OFF] | 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	Class-D & Class-AB power stage	
Input connections	Mic / Line	$2 \times XLR$ chassis socket, 3-pin, balanced	
		$2 \times \frac{1}{4}$ " jack socket, balanced	
	Line level player	$1 \times 3.5$ 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	$1 \times XLR$ chassis plug, 3-pin, balanced	
Output power	RMS: 200 W		
	Peak: 800 W		
Frequency range	60 Hz 20 kHz		
Crossover frequency	3.5 kHz		

Dispersion characteristics	115° × 80°		
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	110/230 V ~ 50/60 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 $\times$ H $\times$ D) 321 mm $\times$ 505 mm $\times$ 291 mm			
Weight	11 kg		
Ambient conditions	Temperature range	0 °C40 °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	$2 \times XLR$ chassis socket, 3-pin, balanced	
		$2 \times \frac{1}{4}$ " jack socket, balanced	
	Line level player	$1 \times 3.5$ 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	$1 \times XLR$ 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	110° × 65°		
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	110/230 V ~ 50/60 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 $\times$ H $\times$ D)	386 mm $\times$ 597 mm $\times$ 346 mm		
Weight	15.6 kg		
Ambient conditions	Temperature range	0 °C40 °C	
	Relative humidity	20 %80 % (non-condensing)	

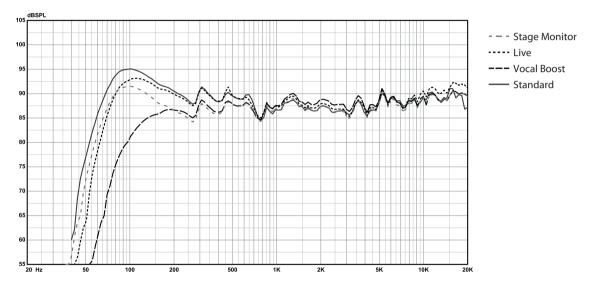
### D115SP

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	$2 \times XLR$ chassis socket, 3-pin, balanced	
		$2 \times \frac{1}{4}$ " jack socket, balanced	
	Line level player	$1 \times 3.5$ 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	$1 \times XLR$ 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	115° × 80°		
Sound pressure level (SPL), max.	126 dB		

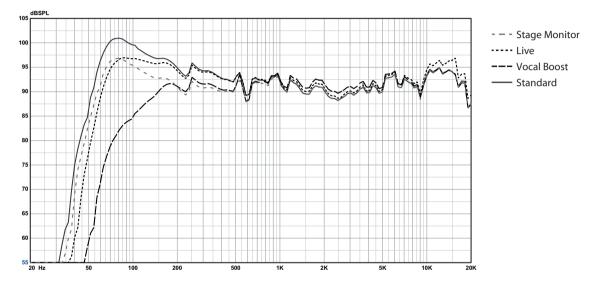


Bluetooth®	Frequency range	2.402 GHz 2.480 GHz	
	Max. transmission power	1.6 mW or +2 dBm	
	Max. range	10 m	
	Standard	Version 5.0	
	Codecs	PCM, ADPCM, CBR, VBR	
Power consumption	300 W		
Inrush current	25 A, 3500 μs		
Operating supply voltage	110/230 V ~ 50/60 Hz		
Fuse	230 V: 5 mm × 20 mm, 2 A, 250 V, slow-blow		
	110 V: 5 mm × 20 mm, 4 A, 250 V, slow-blow		
Dimensions (W $\times$ H $\times$ D)	460 mm $\times$ 705 mm $\times$ 415 mm		
Weight	19.5 kg		
Ambient conditions	Temperature range	0 °C40 °C	
	Relative humidity	20 %80 % (non-condensing)	

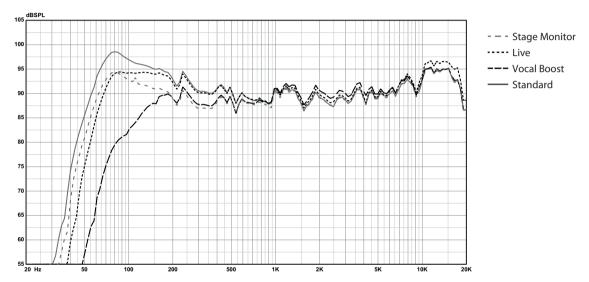
Frequency response D110SP



### Frequency response D112SP



Frequency response D115SP



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### **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 <sup>®</sup> -Play	yes
Bluetooth <sup>®</sup> -Control	No
USB player	No
SD card player	No
Low Cut	yes
Ground Lift	No
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 equip- ment 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 trans- mission	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 trans- mitted 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 conduc- tors '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

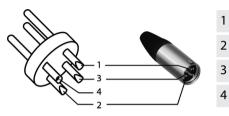
# Three-pole 1/8" mini phone jack (stereo, unbalanced)



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



### XLR plug (balanced)



Ground, shielding
Signal (in phase, +)
Signal (out of phase, –)
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 packing material



Environmentally friendly materials have been chosen for the packaging. These materials can be sent for normal recycling. Ensure that plastic bags, packaging, etc. are disposed of in the proper manner.

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



Observe the disposal note regarding documentation in France.



### Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) as amended.

Do not dispose of your old device with your normal household waste; instead, deliver it for controlled disposal by an approved waste disposal firm or through your local waste facility. If in doubt, consult your local waste management facility. You can also return the device to a retailer if they offer to take the device back for free or if they are legally obliged to do so. When disposing of the device, comply with the rules and regulations that apply in your country. You can also return your old device to Thomann GmbH at no charge. Check the current conditions on <u>www.thomann.de</u>.

Proper disposal protects the environment as well as the health of your fellow human beings. This is because the proper handling of old devices negates the potential negative effects of hazardous substances, and because it conserves resources by recycling them.

Also note that waste avoidance is a valuable contribution to environmental protection. Repairing a device or passing it on to another user is an ecologically valuable alternative to disposal.

If your old device contains personal data, delete those data before disposing of it.

Notes



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Notes

