



fungeneration

Satmix 2.1
PA system

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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.

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.

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!

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!

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.



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!

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 parquet, linoleum, laminate or PVC floor and after some time cause permanent dark stains.

In case of doubt, do not put the rubber feet directly on the floor, but use felt-pad floor protectors or a carpet.

3 Features

- Active 2.1 system consisting of an active subwoofer with built-in 4-channel mixer and two satellites
- Inputs: XLR / 1/4" combo socket, RCA jack, 3.5 mm socket Bluetooth
- Outputs: Lockable input sockets (Speaker Flex)
- Reverb effect switchable
- Digital signal processor with four presets for different sound characteristics
- Standby function

4 Installation

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 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.

Pairing with Bluetooth devices

Press *[BLUETOOTH PAIR]* to pair the device with other Bluetooth devices. It is visible under the name "Satmix 2.1". After successful pairing the LED ✂ lights.

4.1 Tips on handling speakers

We recommend you to set up the speakers in a way, that the sound signals can reach the audience unobstructedly. It will often be helpful to mount the speakers on tripods. Thus, the sound will be evenly spread with maximum range throughout the audience area.

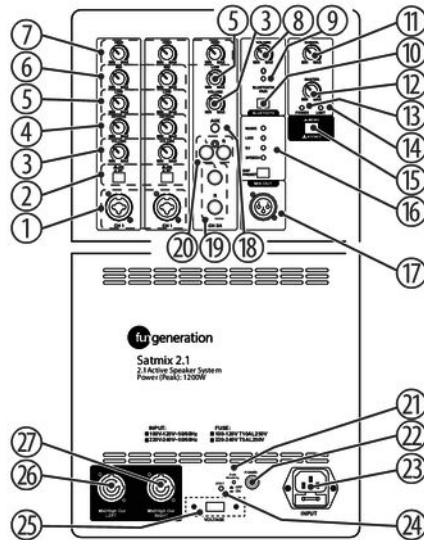
Always use high grade cable to connect your equipment. Otherwise you won't reach maximum sound quality.

For optimum results both impedance and power handling of the speakers must match the requirements of the amplifier. Always follow the technical specifications of the speakers! The overall impedance of the connected loudspeakers must not exceed the minimum output impedance of the amp. The amps max. RMS output power should be 50 % above the power handling capacity of the connected speakers.

If you notice distortion during operation, either the amp or the speaker is overloaded. This may permanently damage the amp or the speaker. Always reduce the volume when you hear distortion.

5 Connections and controls

Rear panel



1	<i>[CH 1], [CH 2]</i> Inputs for line or microphone level signals (XLR / 1/4" combo sockets).
2	<i>[LINE/MIC]</i> Switch for the signal level at the input. Switch released: Line level, switch pressed: microphone level.
3	<i>[VOLUME]</i> Volume control for the respective channel
4	<i>[REVERB]</i> Control for the reverb effect in the respective channel
5, 6, 7	<i>[LOW], [MID], [HIGH]</i> Volume control for the respective channel
8	Volume for the Bluetooth channel
9	✳ Indicator LED for the Bluetooth pairing

10	<i>[BLUETOOTH PAIR]</i> Starts the pairing with a Bluetooth device
11	<i>[SUBVOL]</i> This rotary control can be used to adjust the subwoofer volume.
12	<i>[MASTER]</i> This rotary control can be used to adjust the overall volume (subwoofer and connected external speakers).
13	<i>[POWER]</i> This LED indicates that the device is switched on and operational.
14	<i>[LIMIT]</i> This LED indicates that the input level is too high and thus the input is overloaded. In this case, reduce the level of the connected device.
15	<i>[MONO / STEREO]</i> Toggles between mono and stereo operation

16	<p><i>[DSP PRESET]</i></p> <p>Toggles the built-in digital signal processor between the different settings to adjust the sound characteristic. The indicator LEDs indicate the selected setting:</p> <ul style="list-style-type: none">■ <i>[MUSIC]</i>■ <i>[LIVE]</i>■ <i>[DJ]</i>■ <i>[SPEECH]</i>
17	<p><i>[MIX OUT]</i></p> <p>At this line level output, the sum signal is present which e.g. can be sent to a separate power amp.</p>
18	<p><i>[AUX]</i></p> <p>Input for a line level signal, designed as 3.5 mm phone socket (stereo)</p>
19	<p><i>[L], [R]</i></p> <p>Inputs for balanced or unbalanced line level signals (1/4" phone sockets)</p>
20	<p><i>[L], [R]</i></p> <p>Inputs for balanced or unbalanced line level signals (RCA sockets)</p>

21	<i>[Auto Stand-by]</i> Switch that turns the automatic shutdown function on and off. When pressed, the function is deactivated, when not pressed, it is activated. The device will turn off after approx. 60 minutes without input signal. When the input signal recurs, the device returns automatically. This LED lights when the automatic shutdown function is turned on.
22	<i>[POWER]</i> Main switch. Turns the device on and off
23	<i>[INPUT]</i> IEC chassis plug for power supply with fuse holder
24	<i>[STBY]</i> The LED indicates that the device is in Standby mode.
25	<i>[VOLTAGE]</i> Voltage selector
26.27	<i>[Mid/High Out LEFT], [Mid/High Out RIGHT]</i> Speaker outputs, designed as lockable panel sockets (Speaker Twist)

6 Technical specifications

Subwoofer

Speaker	1 × 10" woofer with 2" voice coil
Inputs	2 × XLR/1/4" combo socket (balanced), 2 × 6.35 mm jack (balanced/unbalanced), 1 × 3.5 mm phone socket, 2 × RCA sockets
Outputs	2 × input sockets (Speaker Twist) for the satellites, 1 × XLR chassis sockets for line output to other audio devices
Bluetooth standard	Bluetooth version 5.0
Bluetooth name	SATMIX 2.1
Power output subwoofer	300 W (RMS)
	600 W (PEAK)
Power output to satellites	2 × 150 W (RMS)
	2 × 300 W (PEAK)
Sound pressure level	124 dB (max.)

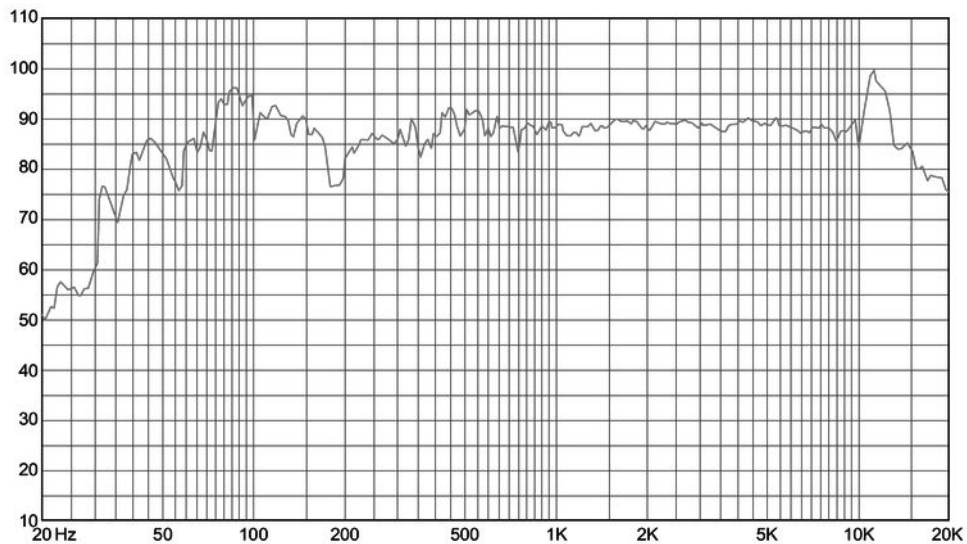
Technical specifications

Supply voltage	110/230 V ~ 50/60 Hz
Power consumption	850 W
Fuse	110 V: 5 × 20 mm, 10 A, 250 V, slow-blow 230 V: 5 × 20 mm, 5 A, 250 V, slow-blow
Dimensions (W × H × D)	470 mm × 515 mm × 356 mm
Weight	16.5 kg

Satellites

Speaker	6 × 2 3/4" Neodym full range speakers each
Inputs	Lockable input sockets (Speaker Twist)
Dimensions (W × H × D)	107 mm × 540 mm × 107 mm
Weight	1.76 kg

Frequency response



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7 Plug and connection assignment

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" TS phone plug (mono, unbalanced)



1	Signal
2	Ground, shielding

1/4" TRS phone plug (mono, balanced)



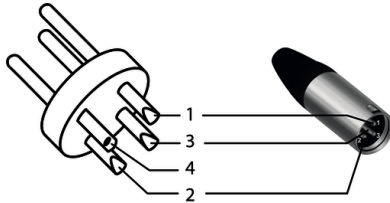
1	Signal (in phase, +)
2	Signal (out of phase, -)
3	Ground

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



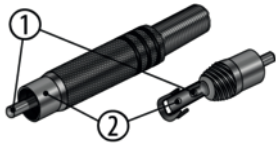
1	Signal (left)
2	Signal (right)
3	Ground, shielding

XLR plug (balanced)



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

RCA connection



Drawing and table indicate the pin assignment of an RCA plug.

1	Signal
2	Ground, shielding

8 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.

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