

**fur**generation

PM-6

power mixer

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# Table of contents

<b>1</b>	<b>General information</b> .....	<b>4</b>
	1.1 Further information.....	5
	1.2 Notational conventions.....	6
	1.3 Symbols and signal words.....	6
<b>2</b>	<b>Safety instructions</b> .....	<b>8</b>
<b>3</b>	<b>Features</b> .....	<b>14</b>
<b>4</b>	<b>Installation</b> .....	<b>15</b>
<b>5</b>	<b>Connections and controls</b> .....	<b>17</b>
<b>6</b>	<b>Technical specifications</b> .....	<b>27</b>
<b>7</b>	<b>Plug and connection assignment</b> .....	<b>29</b>
<b>8</b>	<b>Protecting the environment</b> .....	<b>33</b>

# 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](http://www.thomann.de).

## 1.1 Further information

On our website ([www.thomann.de](http://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.



### Displays

Texts and values displayed on the device are marked by quotation marks and italics.

**Examples:** *'24ch'*, *'OFF'*.

## 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
<b>DANGER!</b>	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.
<b>NOTICE!</b>	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 intended to be used for amplification, mixing and playback of signals from musical instruments and microphones. 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.



**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.

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!**

**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.

### 3 Features

- 6-channel power mixer with  $2 \times 80$  W RMS
- Built-in media player for MP3 files from USB stick or SD card
- $6 \times$  microphone input (XLR chassis socket, 3-pin, balanced)
- $6 \times$  line input (1/4" phone jack, unbalanced)
- $1 \times$  line input (pair of RCA socket)
- Bluetooth audio streaming
- 2-band EQ in mono channels
- 5-band graphic equalizer for master
- $1 \times$  CD / Tape input (pair of RCA socket)
- $1 \times$  recording output (pair of RCA socket)
- $1 \times$  line output (1/4" phone jack, unbalanced)
- $1 \times$  sub output (1/4" phone jack, unbalanced)
- $2 \times$  passive speaker included

## 4 Installation



### **NOTICE!**

#### **Danger of short circuit**

Switching on phantom power will damage the device if unbalanced XLR cables are connected.

Only turn on phantom power when exclusively balanced XLR cables are connected.

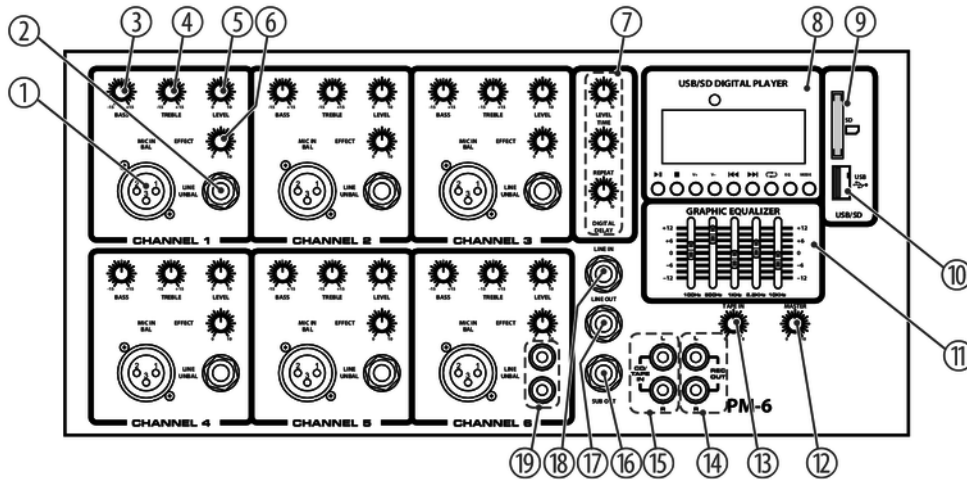
Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the product against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage,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



## 5 Connections and controls

### Front panel



PM-6

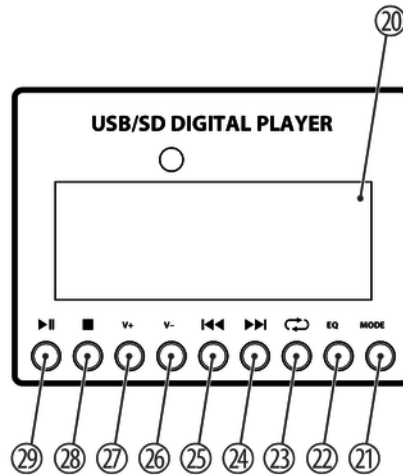
1	Microphone input, designed as XLR socket, 3-pin, balanced
2	Line input, designed as 1/4" phone jack, unbalanced
3	<i>[BASS]</i> Rotary control to adjust the low frequencies of the respective channel
4	<i>[TREBLE]</i> Rotary control to adjust the high frequencies of the respective channel
5	<i>[LEVEL]</i> Rotary control for adjusting the volume of the respective channel
6	<i>[EFFECT]</i> Rotary control to adjust the signal portion sent to the internal effects section
7	<i>[DIGITAL DELAY]</i> The signal of all input channels is sent subject to each EFFECT control through the built-in digital delay and then to the speaker output.




	<i>[LEVEL]</i>	Rotary control to adjust the effect section's volume. Turn the control to the right to increase the effect.
	<i>[TIME]</i>	Rotary control to adjust the delay time. Turn the control to the right to increase the interval.
	<i>[REPEAT]</i>	Rotary control to set the delay duration. Turn the control to the right to increase the duration.
8	<i>[USB / SD DIGITAL PLAYER]</i>	To play MP3 music files from an SD card or USB stick
9	<i>[SD]</i>	SD card slot
10	<i>[USB]</i>	USB connection socket
11	<i>[GRAPHIC EQUALIZER]</i>	The signal of all input channels is sent through the equalizer and then to the speaker output.

12	<i>[MASTER]</i> Master rotary control to adjust the sum level at the speaker outputs
13	<i>[TAPE IN]</i> Rotary control to adjust the signal strength of <i>[CD/TAPE IN]</i> .
14	<i>[REC OUT]</i> Output for connection to a tape deck, a computer sound card or a portable recorder; the signal reflects the speaker output signal.
15	<i>[CD/TAPE IN]</i> Input for external device, designed as a pair of RCA sockets
16	<i>[SUB OUT]</i> This output is designed as a 1/4" phone socket and provides the master line level signal with a crossover frequency of 120 Hz for an powered bass speaker
17	<i>[LINE OUT]</i> Line output, designed as 1/4" phone socket, mono, unbalanced; the master line level signal is provided here.

18	<i>[LINE IN]</i> Line input, designed as 1/4" phone jack, mono, unbalanced; turn off the device volume before connecting a device here.
19	Line input, designed as a pair of RCA sockets.

## Display

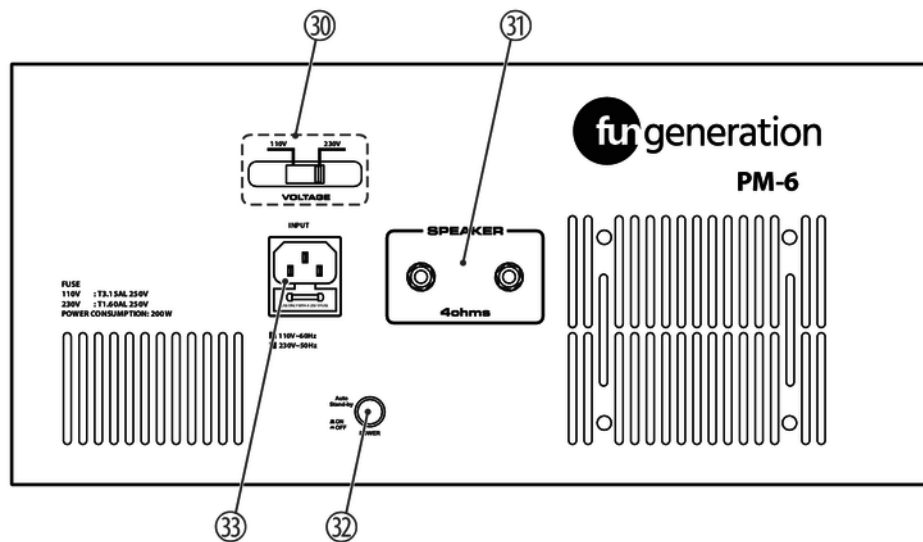


20	Display
21	[MODE] Selection of audio source (USB stick or SD card). Press the button for 2 seconds to activate the display.
22	[EQ] Press this button to navigate through the digital equalizer presets you can apply to the tune: 'Pop', 'Rock', 'Jazz', 'Classic', 'Normal'. The equalizer can only be used when playing MP3 files from the connected USB stick or from the connected SD card, not with other audio sources or inputs.
23	 Press this button to navigate through repeat mode options: 'Random', 'Single', 'All'.
24	 Selects the next track for playback.
25	 Selects the previous track for playback.
26	[V-] Press and hold the button to decrease the volume of the media player.

27	[V+] Press and hold the button to increase the volume of the media player.
28	■ Stops playback.
29	▶   Starts or pauses playback.



Rear panel



PM-6

30	<i>[AC VOLTAGE]</i> Selector switch for power supply voltage.
31	<i>[SPEAKER]</i> 2 × 1/4" phone socket, mono, unbalanced, for connecting the two supplied passive speakers. When using 2 speakers per output at the same time, use speakers with 8 Ω impedance. When using only one speaker, use a 4 Ω speaker.
32	<i>[POWER]</i> Main switch to turn the device on and off.
33	<i>[INPUT]</i> IEC chassis plug with fuse holder

## 6 Technical specifications

Input connections	Voltage supply	IEC chassis plug C14 with fuse holder
	Signal input	6 × XLR panel socket, 3-pin (balanced)
		6 × 1/4" jack socket (unbalanced)
	Line input	1 × 1/4" jack socket (unbalanced)
CD/Tape input	1 × pair of RCA sockets	
Output connections	Speaker output	2 × 1/4" jack socket (unbalanced)
	Line output	1 × 1/4" jack socket (unbalanced)
	Sub output	1 × 1/4" jack socket (unbalanced)
	Rec output	1 × pair of RCA sockets
Power consumption		200 W
Supply voltage (selectable)		110 V ~ 60 Hz or 230 V ~ 50 Hz
Fuse	for 110 V	5 mm × 20 mm, 3,15 A, 250 V, slow-blow

## Technical specifications

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	for 230 V	5 mm × 20 mm, 1,25 A, 250 V, slow-blow
Dimensions (W × H × D)		395 mm × 230 mm × 200 mm
Weight		7.0 kg
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	50 %, non-condensing

### Further information

Design	Suitcase shape
19" rack-mountable	No

## 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

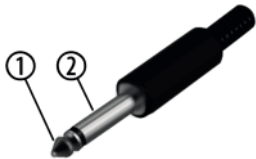
Unbalanced transmission is mainly used in semi-professional environment and in hifi use. Instrument cables with two conductors (one core plus shielding) are typical representatives of the unbalanced transmission. One conductor is ground and shielding while the signal is transmitted through the core.

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)



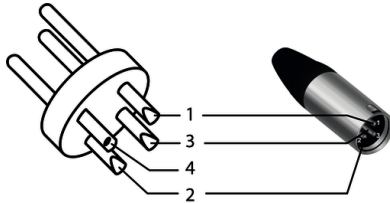
1	Signal
2	Ground, shielding

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



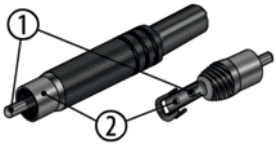
1	Signal (in phase, +)
2	Signal (out of phase, -)
3	Ground

**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.





