



fungeneration

PM-6
powermixer

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

23.04.2021, ID: 471921 (V5)

Table of contents

1	General information	4
	1.1 Further information.....	5
	1.2 Notational conventions.....	6
	1.3 Symbols and signal words.....	6
2	Safety instructions	8
3	Features	11
4	Installation	12
5	Connections and controls	13
6	Playback via Bluetooth®	24
7	Technical specifications	25
8	Plug and connection assignment	29
9	Protecting the environment	32

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.



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
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.
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 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.



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

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

4 Installation



NOTICE!

Danger of short circuit

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

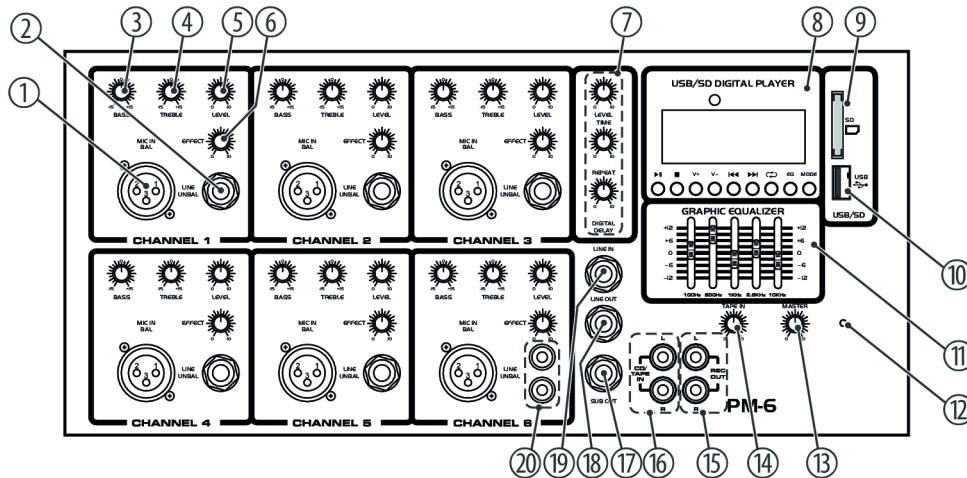
Only turn on phantom power when exclusively balanced XLR cables are connected.

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

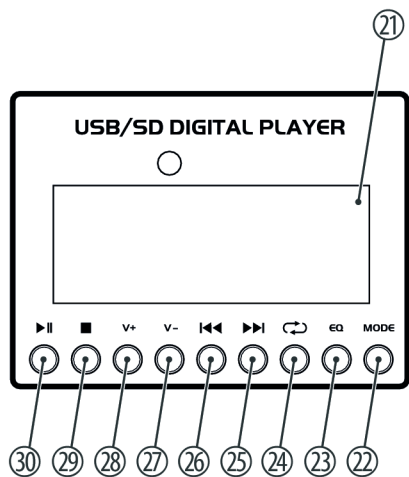
1	Microphone input, designed as XLR socket, 3-pin, balanced
2	Line input, designed as 1/4" phone jack, unbalanced
3	<i>[BASS]</i> Rotary control for adjusting the low frequencies of the respective channel
4	<i>[TREBLE]</i> Rotary control for adjusting the high frequencies of the respective channel
5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

13	<i>[MASTER]</i> Master control to adjust the sum level at the speaker outputs
14	<i>[TAPE IN]</i> Rotary control to adjust the signal strength of <i>[CD/TAPE IN]</i> .
15	<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.
16	<i>[CD/TAPE IN]</i> Input for external device, designed as a pair of RCA sockets
17	<i>[SUB OUT]</i> Designed as 1/4" phone jack; provides the line level master signal with a crossover frequency of 120 Hz for a powered subwoofer
18	<i>[LINE OUT]</i> Line output, designed as a 1/4" jack, mono, unbalanced; provides the line level master signal.

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

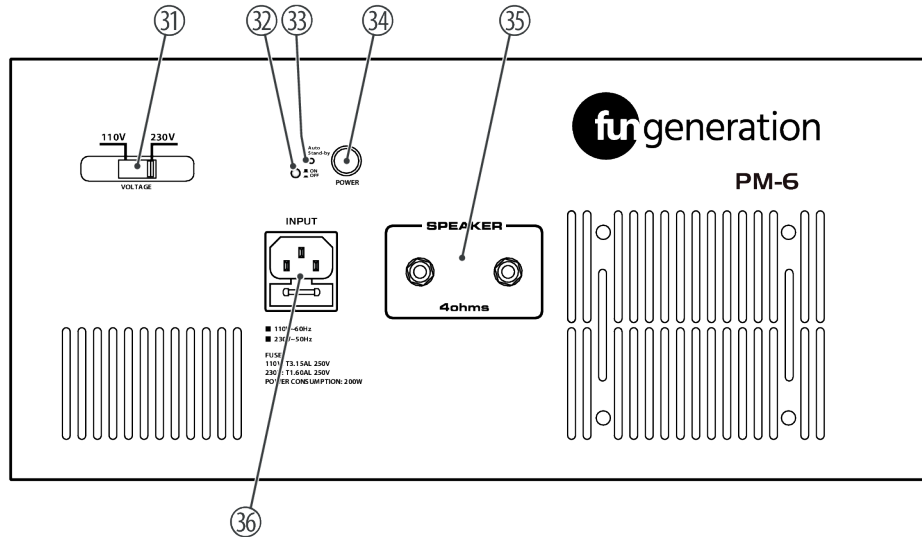
Display



21	Display
22	[MODE] Selection of audio source (USB stick, SD card or Bluetooth®). Press the button for 2 seconds to activate the display.
23	[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.
24	 Press this button to navigate through repeat mode options: 'Random', 'Single', 'All'.
25	 Selects the next track for playback.
26	 Selects the previous track for playback.
27	[V-] Press and hold the button to decrease the volume of the media player.

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

Rear panel



PM-6

31	<i>[VOLTAGE]</i> Selector switch for power supply voltage.
32	<i>LED [Auto Stand-by]</i> This LED lights up when the automatic shutdown function is active.
33	<i>Switch [Auto Stand-by]</i> In this opening, you find the switch that turns the automatic shutdown function on and off. When pressed, the function is deactivated; when released, it is activated and switches off the device after 50 minutes without input signal. The device automatically turns back on again on returning input signal.
34	<i>[POWER]</i> Main switch to turn the device on and off.

- | | |
|----|--|
| 35 | <p><i>[SPEAKER]</i></p> <p>2 × 1/4" jack socket, mono, unbalanced; for connecting two passive speakers.</p> <p>When using 2 speakers at the same time, use speakers with 8 Ω on each output.</p> <p>When using only one speaker, use a speaker with 4 Ω.</p> |
| 36 | <p><i>[INPUT]</i></p> <p>IEC chassis plug with fuse holder</p> |

6 Playback via Bluetooth®

You can play music wirelessly off mobile Bluetooth® devices such as smart phones, tablets or laptops via the built-in Bluetooth® receiver of the device. Follow the instructions for use of your Bluetooth® device. Place the Bluetooth® device near the box and turn it on.

Press *[MODE]* repeatedly until the display shows first *'BLUETOOTH INITIALZING'* and then *'BLUETOOTH UNCONNECTED'*. After a few seconds your Bluetooth® device is detected and will be displayed as *'PM-6'*. The display shows the message *'BT CONNECTED'*.

You can then play the music files stored in the Bluetooth® device. Use the buttons of the built-in player or the control panel for control.

7 Technical specifications

Input connections	Power 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

	for 230 V	5 mm × 20 mm, 1,25 A, 250 V, slow-blow
Dimensions (W × H × D)		395 mm × 200 mm × 230 mm
Weight		7.0 kg
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	20 %...80 % (non-condensing)

Media player

Media type		SD, MMC, TF card
Max. size of accepted storage device		32 GB
File system		FAT12, FAT16, FAT32, EXFAT
Audio file format		MP3 (Layer I, II and III), WAV (PCA, IMA, ADPCM)
Sampling rate		8 / 11.025 / 12 / 16 / 22.05 / 24 / 32 / 44.1 / 48 kHz
Bit depth		16-bit DAC
Bluetooth®	Frequency of operation	2.402 GHz ... 2.480 GHz

	Max. transmission power	+2 dBm
	Standard	Version 5.0
	Name	PM-6

Further information

Design	Suitcase shape
19" rack-mountable	No
RMS power @ 4Ω/channel	80 W
Simultaneously useable channels	6
Mic-In	6
Mono Line-In	6
Stereo-In	2
Aux ways	0
Effects processor	1
USB player	1

8 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)



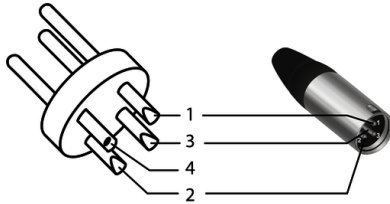
1	Signal
2	Ground, shielding

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

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.

PM-6



