



## 1. Introduction

Welcome to MIDIPLUS!

Thank you for choosing the PM110 – our contribution to minimal music – a professional, powerful and compact amplifier system for acoustic instruments in superb quality with MIDIPLUS typical authentic, transparent and self-asserting sound performance. One channel - two individual inputs allow parallel use of instrument and microphone even though the instrument is the main focus. Dynamic controlled 50 Watts and the 10" + 20 Watts and the 2.5" speaker system give perfect performance at all sound pressure levels.

We wish you hours of happy playing with your PM110!

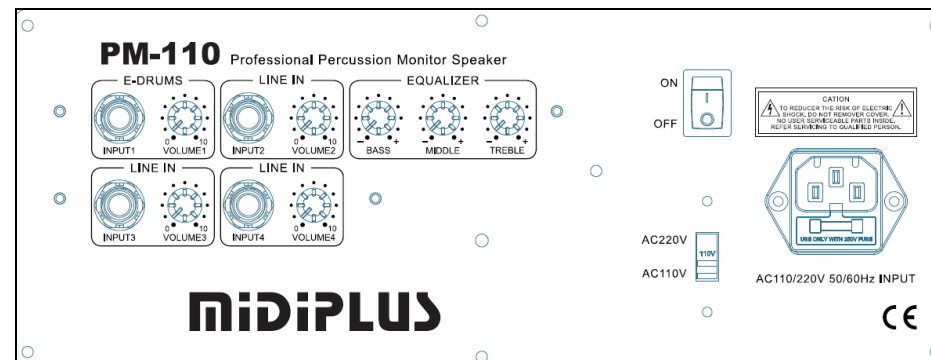
## 2. Safety Precautions

The following guidelines shall help minimize the risk of injury through fire or electric shock.

1. Carefully read these safety notes before you use the device!
2. Keep these safety notes in a safe place.
3. Pay attention to all warnings, instructions and additional texts on the unit.
4. Do not install or use your amp near the water or if you are wet yourself.
5. Use your amp in a safe place where nobody can step on cables or trip over and damage them.
6. Pay attention to an unhindered air circulation around the amp, never obstruct the air vents or grilles.
7. Always pull the mains plug before cleaning your amp. Use only a dry cloth for cleaning. Avoid the use of detergents and do not let any liquids seep into the unit.
8. Use only the right fuses with the same current rating and trigger characteristic as replacements. Never mend fuses! Pull the mains plug before replacing a fuse. Should a fuse blow again after a short while, the device needs to be checked.
9. Never install your amp close to devices with strong electromagnetic fields such as large mains transformers, revolving machines, neon illumination etc. Do not lay signal cables parallel to power current cables.
10. There are no user-serviceable components inside the unit. To avoid the risk of an electric shock, the unit must not be opened. All maintenance, adjustment and repair works should be carried out by qualified staff only. Any unauthorized tampering will void the 1-year warranty.
11. In keeping with the EMV regulations screened cables with correctly fitted connectors must be used for all signal connections.
12. Always use an earthed power supply with the correct mains voltage. If you are in doubt about the power outlets ground, have it checked by a qualified technician.
13. Cable up your amp only when it is powered off.

## 3. Controls and Connections

### Bank panel



<b>INPUT 1-4</b>	¼(6.35mm) mono jack socket
<b>VOLUME 1-4</b>	Input level control
<b>BASS</b>	Bass control
<b>MIDDLE</b>	Midrange control
<b>TREBLE</b>	Treble control
<b>Power on</b>	Combined power switch with fuse holder

### What you should have received in the box

- ... An audio interface box
- ... A power cable, L=2m
- ... An Owner's Manual

## 4. Operation Summary

### • Cabling and startup

Check if your local mains voltage (e.g. 120V in the USA, 230V in Euro-pe) complies with the required operating voltage for your amplifier. The proper mains voltage is printed on the rating plate on the rear panel of the unit, e.g. AC 230V (AC means alternating current).

Then make all the necessary cable connections (mains, instrument etc.).

### • Level adjustment

Using the VOLUME1/VOLUME 2/VOLUME 3/VOLUME4 control, you can adapt the amplifier to your signal sources (guitar pickups, microphone etc.) to achieve the best possible signal-to-noise ratio (SNR).

### • Equalization

The three-band equalizer with individual bass, middle and treble control of your PM110 has been designed in such a way that it both complies with the special requirements of acoustic instruments and also with the more general demands of other sources. The color switch activates a midrange contour filter which is especially useful for picking techniques.

One more note: Adjusting the EQ controls can also affect the level setting. Whenever you see the clip

## 5. Technical Data

### Inputs

<b>INPUT 1-4</b>	Jack ¼" (6.35 mm) socket <b>line mode:</b> High impedance, balanced input for instruments (pick-ups) and line-level sources Jack socket only Sensitivity: 15 mV (-36 dBV) Impedance: 1 KΩ Equivalent input noise, A-weighted: 2.5 uV (-112 dBV)
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### Tone controls

<b>Bass</b>	± 8 dB at 100 Hz, shelf type
<b>Middle</b>	± 6 dB at 800 Hz
<b>Treble</b>	± 8 dB at 10 kHz, shelf type

### Power

<b>Power amp</b>	50 W / 8 Ω, DMOS, monolithic I.C. Dynamic range, A-weighted: 92 dB (note 2).
<b>Analog signal processing</b>	Dedicated equalizer, subsonic filter, adaptive peak limiter
<b>Speaker system</b>	10" (50 W / 8Ω)bass speaker, 2.5" (20 W / 8Ω)tweeter speaker reflex enclosure
<b>Mains power</b>	Mains voltage (depending on model): 100, 120, 230, or 240 V AC, 50–60 Hz.Power consumption: max. 100 W
<b>Mains fuse</b>	5x20 mm Slow 1 A for 230 and 240 V models Slow 2 A for 100 and 120 V models

### General

<b>Cabinet</b>	15 mm (0.58") finish birch plywood
<b>Finish</b>	Water based acrylic, black spatter finish
<b>Dimensions</b>	360 mm , high 350 mm ,wide 358.5 mm
<b>Weight</b>	12.08 kg

### Notes:

#### 1. Input sensitivity

Input sensitivities refer to 35 watts into 4 ohms, full gain and master settings, neutral tone control settings, and 1 kHz sine-wave test signal.

#### 2. Noise and dynamic range

Equivalent input noise voltage was obtained by measuring noise voltage at speaker output and dividing by the effective voltage gain of the amplifier. Full gain and master settings, neutral tone control settings, input shorted, measuring bandwidth 20 Hz – 20 kHz.

Dynamic range of power amplifier: Range between output signal at limiter threshold and A-weighted output noise with master volume in zero position.

Specifications and appearance subject to change without notice.

# Owner's Manual

## PM110

### Professional Percussion Monitor Speaker



# MIDIPLUS