

User Manual

DMPA *Light* Media Player Amplifier



Safety instructions

When using this electronic device, basic precautions should always be taken, including the following:

- 1 Read all instructions before using the product.
- 2 Do not use this product near water (e.g., near a bathtub, washbowl, kitchen sink, in a wet basement or near a swimming pool etc). Care should be taken that objects do not fall into liquids and liquids would not be spilled on the device.
- 3 Use this device when you are sure that it has a stable base and it is fixed securely.
- 4 This product, in combination with loudspeakers may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult with otorhinolaryngologist.
- 5 The product should be located away from heat sources such as radiators, heat vents, or other devices that produce heat.
- 6 Note for power connections: for pluggable equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible.
- 7 The power supply should be undamaged and never share an outlet or extension cord with other devices. Never leave device plugged into the outlet when it is not being used for a long period of time.
- 8 Power disconnection: when the power cord connected to the power grid is connected to the machine, the standby power is turned ON. When the power switch is turned ON, the main power is turned ON. The only operation to disconnect the power supply from the grid, unplug the power cord.
- 9 Protective Grounding - An apparatus with class I construction shall be connected to a power outlet socket with a protective grounding connection.
Protective Earthing - An apparatus with class I construction shall be connected to a mains socket outlet with a protective earthing connection.
- 10 The lightning flash with an arrowhead symbol, with an equilateral triangle, is intended to alert the user to the presence of uninsulated dangerous voltage¹ within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons. 
- 11 The exclamation mark within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance. 
- 12 There are some areas with high voltage inside, to reduce the risk of electric shock do not remove cover of the device or power supply. The cover should be removed by the qualified personnel only.
- 13 The product should be serviced by qualified service personnel if:
 - The power supply or the plug has been damaged.
 - Objects have fallen into or liquid has been spilled on the product.
 - The product has been exposed to rain.
 - The product has been dropped or the enclosure damaged.

 CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	To reduce the risk of electric shock, do not remove screws. No user-serviceable parts inside. Refer servicing to qualified service personnel. To reduce the risk of fire, electric shock or product damage, do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
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Table of contents

Before you start

Introduction.....	2
Features.....	2

Operation

Front panel.....	3
Rear panel.....	3
Front panel functions.....	4
Rear panel functions.....	4
Media player functions.....	5
FM radio receiver.....	6
Bluetooth.....	7

Specifications

General specifications.....	8
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Before you start

DMPA Light series device is a compact 1U half-rack size public address mixing amplifier, containing media player with AUX input, Bluetooth and FM radio receivers, 1 microphone input, emergency mute control. This system is designed for installations, such as gas stations, restaurants, convenience stores, where easy operation is appreciated.

FEATURES

- Compressed audio playback
- Supports up to 32 GB USB flash and SD cards
- Bluetooth and FM radio receivers
- 3 channel mixer with microphone and aux inputs
- Microphone input priority and phantom power
- RCA output
- Stereo RCA AUX input
- Emergency mute
- Amplifier output with phoenix connector
- Supports 100 V and low impedance speaker installations
- DMPA 120 & 240 Light supports 2 Ω speaker installations

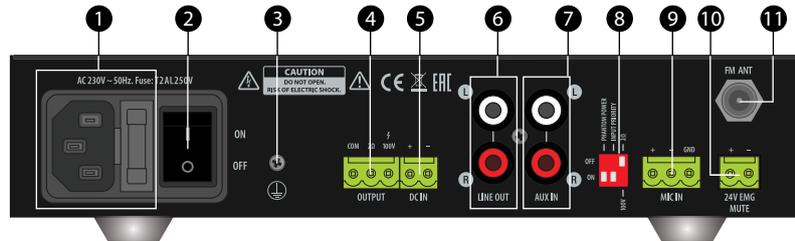
Operation

Front Panel



1. MIC, AUX & Media player volume | 2. Bass and treble controls | 3. USB drive input | 4. 3,5 mm AUX input | 5. LCD display
6. Master volume | 7. Mode button | 8. Player control buttons | 9. Repeat function button | 10. Media player mute / power button

Rear Panel



1. Mains power input & fuse holder | 2. Power switch | 3. Ground connecting point | 4. Amplifier output | 5. DC power supply input | 6. RCA LINE output
7. RCA AUX input | 8. Phantom power and mic input priority settings | 9. Microphone input | 10. 24 V emergency mute connector | 11. FM antenna connector

Operation

Front panel functions

MIC 1 / AUX / PLAYER LEVEL CONTROLS

Rotary knobs for adjusting volume level of selected channel.

BASS & TREBLE TONE CONTROLS

Tone controls provide attenuation of bass and treble response. The flat position is obtained when the knobs are set to middle position. Turn the knob clockwise to raise tone level approximately +7.5 dB for bass and +10 dB for treble; turn counter-clockwise to lower tone level by approximately -7.5 dB for bass and +10 dB for treble.

AUX INPUT

3,5 mm stereo TRS input for auxiliary audio source. Select AUX input in media player to play sound from this input. Volume is controlled with "PLAYER" level control knob on the front panel.

MASTER VOLUME

Rotary knob for adjusting master volume.

Rear panel functions

MAIN POWER CONNECTOR AND FUSE

Power connector for mains power, combined with fuse holder. Use only the same type of fuse that is written on the device.

POWER SWITCH

Switch amplifier power ON or OFF.

Rear panel functions

LINE LEVEL AUDIO OUTPUT

RCA stereo output for connecting device to external audio amplifier or other equipment.

AMPLIFIER OUTPUT DMPA 30/60

Audio outputs for Low impedance (4 Ω) and Hi-Z (100 V) speakers. Use the DIP switch located in the rear next to microphone input to enable amplifiers output type suitable for your installation. Only one output can be used at a time. Especially for small background music systems, we recommend using 4 Ω output in order to perform the best audio quality and frequency reproduction. Low Z output allows connecting in parallel 4x16 Ω or 2x8 Ω loudspeakers. Amplifier's 4 Ω output designed without output transformer and has 20 Hz-20 kHz frequency response to sure the best possible audio quality for background.

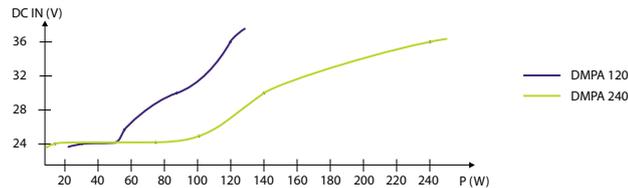
AMPLIFIER OUTPUT DMPA 120/240

Audio outputs for Low impedance (2 Ω) and 100 V speakers. Be sure that correct speaker output is enabled by using the DIP switch located in the rear next to the microphone input. Only one output can be used at a time. Especially for small background music systems, we recommend using 2 Ω output in order to perform the best audio quality and frequency reproduction. Low Z output allows using 8x16 Ω loudspeakers or 4x8 Ω loudspeakers connected in parallel. Amplifier's 2 Ω output designed without output transformer and has traditional 20 Hz-20 kHz frequency responses to sure the best possible audio quality for background. Pay attention to wiring on low Z output! Please use a minimum of 1.5 mm² cables to connect speakers to a short distance. Depending on audio line length, cable diameter must be increased in order to minimize voltage drop on cable.

Operation

Rear panel functions

DC POWER SUPPLY INPUT



The amplifier can be powered using an external power source that provides voltage from 24 V to 36 V DC power. This is useful for emergency situations or when AC mains power is not available. Voltage in DC input affects the maximum amplifier's power. Please check the table above. It shows the relation between the amplifier's output power and the DC input voltage.

OUTPUT IMPEDANCE SELECTOR

This selector sets up amplifier outputs depending on audio system type. 100 V mode enables output transformer and sets up amplifier circuits to adjust and amplify audio optimized for 100V speaker lines. 4 Ω (DMPA 30/60) and 2 Ω (DMPA 120/240) modes turn off the 100 V output transformer, in order to connect speaker lines directly from the power amplifier stage. This mode ensures the best amplifier performance also enables 20 Hz-20 kHz frequency reproduction in order to force low impedance loudspeakers to sound as best as they can.

AUX INPUT

RCA stereo input for connecting external audio source.

MIC INPUT

Phoenix connector for balanced microphone connection.

PHANTOM POWER AND INPUT PRIORITY

MIC input can provide 18 V phantom power for condenser microphones. This input can also have a priority over other inputs.

EMERGENCY MUTE

When 24 V DC current is supplied to EMG MUTE input, all device outputs will be muted. This is useful when using device combined with external alarm systems.

Media player functions

LCD SCREEN

LCD screen displays main information about media player status: track number and time, media player volume level, music source, FM frequency.

USB FLASH DRIVE

Supports up to 32 GB USB flash drives formatted in FAT32 file system.

MODE

Switch player between Bluetooth, FM and USB player modes.

FM ANTENNA

F-type connector for FM radio antenna.

Operation

Media player functions

PLAY/PAUSE

Switch player mode between play and pause. Hold this button at FM mode in order to start radio station auto scan. Press this button rapidly in order to toggle FM frequency auto/manual scanning mode.

FORWARD / BACKWARD

Single short press in music and Bluetooth modes will change currently playing track. Holding buttons for few seconds Increase or decrease volume level of media player. In FM mode use these buttons to change FM frequency in 0.1 MHz steps, also switch radio presets.

PLAY FROM USB

When a USB memory stick is inserted into the USB port, the track number and time will show in the display and audio files will start to play automatically.

REPEAT AND RANDOM PLAY

Select one of three modes:

RTA – Repeat all tracks.

RT1 – Repeat one track.

RND – Random play

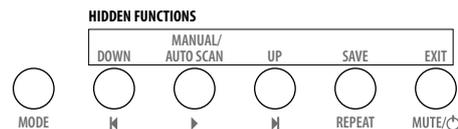
Second function of this button is to save FM radio frequency to selected preset.

MUTE / POWER

Press this button to mute audio. Hold this button longer in order to turn off/on media player.

FM radio receiver

FM radio receiver allows to save 26 presets with selected radio stations. It uses the same control buttons, but with a different functionality (pictured below).



ENTER TO AUTO TUNING MODE

Press and hold Play/Pause button for few seconds to scan available stations and store them as presets. Press and hold Play/Pause button for few second to abort auto tuning.

To step through presets, press the Previous or Next buttons.

ENTER TO MANUAL TUNING MODE

Press Play/Pause button to enter manual tuning mode. Use Backward/Forward button to adjust frequency in 0.1 MHz steps. Press Repeat button to select preset number and change it by using Backward/Forward buttons. Press Repeat button again to save radio station to preset.

Press Mute button to exit manual frequency adjusting without saving radio station preset.

Operation

Bluetooth

PAIR

1. Enter Bluetooth mode on your DMPA Light media player.
2. Open the Bluetooth settings menu on your mobile device and search for "AMC Player_0000" in the list of available devices.
3. Select "AMC Player_0000" and confirm that it is connected as an audio device.

CONTROL

Backward, Forward and Play/pause buttons control audio player on your mobile device.

Holding the Backward or Forward buttons will adjust the output volume of the mobile device.

RENAME

Customize device Bluetooth name by holding Play/Pause button until "AMC Player_0000" is displayed. It is possible to change 4-digit part of the name. Press backward or Forward buttons to edit the number and Play/Pause to select another character.
Hold Play/Pause to save changes and exit.

Android devices have the facility to re-name devices within the Bluetooth settings menu. If the Bluetooth ID has been re-named on the Android device, editing the Bluetooth ID on the media player will not affect the name displayed on that Android device.

General Specifications

DMPA Light Media Player Amplifier

	DMPA Light 30	DMPA Light 60	DMPA Light 120	DMPA Light 240
Power supply	230 VAC, 50 Hz			
	24 V DC		24-36 V DC	
Output power	30 W	60 W	120 W	240 W
Maximum power consumption	45 W	90 W	155 W	298 W
Low Z output impedance	4 Ω		2 Ω	
Phantom power voltage	19 VDC			
Total harmonic distortions	< 0.4 % @ 1 kHz			
Input impedance	1 k Ω (mic/line)			
Input sensitivity	-10 dB (line), -45 dB (mic)			
S/N ratio	80 dB (line), 75 dB (mic)			
Frequency response	100 V output 80 Hz - 19 kHz			
	4 Ω output 20 Hz-20 kHz		2 Ω output 20 Hz-20 kHz	
Equalizer	Bass: 140 Hz +/-7.5 dB Treble: 16 kHz +/-10 dB			
Dimensions	204 x 210 x 44 mm	224 x 210 x 44 mm	320 x 210 x 44 mm	350 x 210 x 44 mm
Weight	2.45 kg	2.57 kg	3.34 kg	4.62 kg

The specifications are correct at the time of printing this manual. For improvement purposes, all specifications for this unit, including design and appearance, are subject to change without prior notice.