

User
Manual

FM/AM/USB/SD
Interchangeable module



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).
- 3 This product, in combination with loudspeakers and amplifier 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 otorhinolaryngologists.
- 4 The product should be located away from heat sources such as radiators, heat vents, or other devices that produce heat.
- 5 Care should be taken that objects do not fall into liquids and liquids would not be spilled on the device.
- 6 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 air.
 - The product has been dropped or the enclosure damaged.
- 7 There are some areas with high voltage inside, to reduce the risk of electric shock do not remove cover of the device. The cover should be removed by the qualified personnel only.

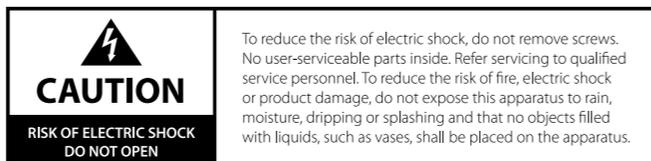


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Before you start

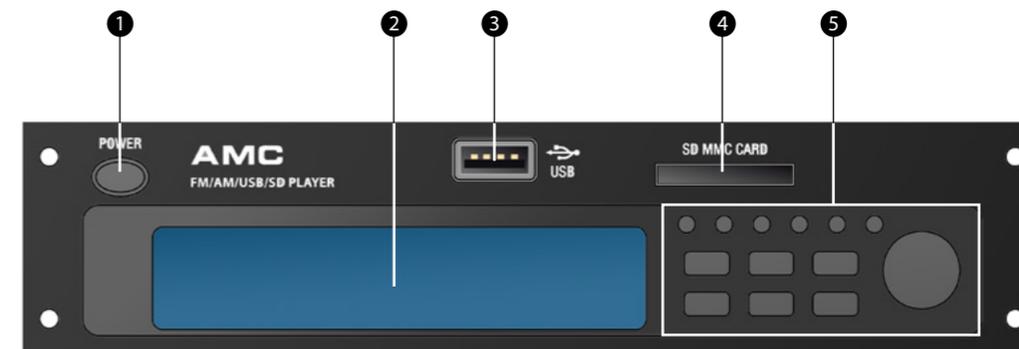
FM/AM/USB/SD interchangeable module is designed for use with AMC MMA 120X and MMA 240X 5-zone mixing amplifiers. There are four available audio sources: USB flash player, SD/MMC card player, FM and AM radio.

FEATURES

- MPEG 1/2/2.5 Layer2/3(MP3), WMA9 L1/L2 decoder with USB host and SD/MMC controller.
- Built in 64K NOR flash memory for program code storage.
- Built in 32 steps electronic volume control.
- Preset EQ (Classic / Pop / Rock) with LOUD function.
- Recognition file and folder up to 2,000 files and 200 folders.
- Available ID3 tag up to 32 characters (File name and title).
- FM freq. range 87 MHz – 108 MHz, 20 radio station preset.
- AM freq. range 520 kHz – 1720 kHz, 10 radio station preset.

Operation

Front Panel



1. Power ON/OFF switch | 2. LCD display | 3. USB Slot | 4. SD/MMC Card Slot | 5. Function Buttons

Key function description

POWER

The module's power on or off.

FUNCTION

Change function mode cyclically: USB → SD/MMC Card → Tuner.

PLAY / PAUSE

Start playing, and change mode between play and pause.

STOP

Stop playing track in USB or SD mode. Exit mode during program / repeat / random / intro or search. In tuner mode this button witch radio between AM and FM.

NEXT/ FF

Skip current file to next file. In tuner mode press this button one time for manual search, press and hold for 3 sec. for auto search.

BACK/ FB

Skip current file to previous file. In tuner mode press this button one time for manual search, press and hold for 3 sec. for auto search.

DIRRY UP

Go to next folder (mp3/wma only). In the folder search mode, used to select next folder. In tuner mode – next channel.

DIRRY DOWN

Go to previous folder (mp3/wma only). In the folder search mode, used to select previous folder. In tuner mode – next channel.

VOLUME UP

Volume control: the volume is increased.

VOLUME DOWN

Volume control: the volume is decreased.

RANDOM

Set or release RANDOM play mode.

INTRO

Set or release the intro scan mode.

REPEAT

Cyclically select the repeat play mode:
Repeat 1 track → 1 folder → all tracks → Repeat Off.

MUTE

Set or release the mute mode.

EQ

Press key to change EQ mode cyclically.
Flat → Classic → Rock → Pop

DBBS

Set or release the DBBS mode.

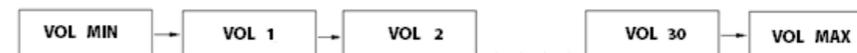
DISPLAY

IN MP3/WMA mode, if key is pressed, display mode is toggled between time display and File information scrolling as follows: File name → Title → Time

System operation

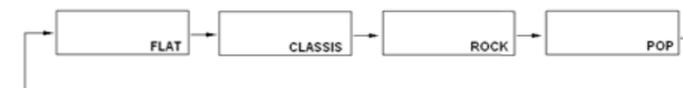
1. VOLUME CONTROL

Turning the volume jog allows adjusting output signal level with 32 steps from MIN to MAX.



2. EQ CONTROL

Pressing EQ button you can change EQ mode cyclically: FLAT → CLASSIS → ROCK → POP



3. MUTE CONTROL

The MUTE key allows music sources muting or unmuting. LCD shows blinking 'MUTE' on mute status.



4. INPUT SOURCE (USB/SD CARD) SELECTION

You can choose input source between USB, SD Card and Radio tuner by FUNCTION key (by pressing volume knob). After selection LCD shows available input for 2 sec.



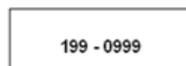
Operation

5. MEMORY CHECKING

If this unit can't find MP3/WMA files from memory 'NO FILE' is displayed on the LCD.



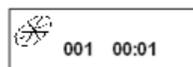
If this unit finds available files in memory, LCD shows total number of folders and total number of files. Example shows that the memory has 199 folders and 999 files.



6. PLAY, PAUSE AND STOP

Press PLAY key to start playing MP3/WMA file. LCD shows file, folder number and playback time. During playback, press PLAY key to pause.

Press STOP key to stop playing MP3/WMA file.



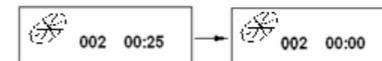
7. FORWARD

Press NEXT key to play the next file.



8. BACKWARD

Press BACK key, current file will be played from beginning.



Press BACK key again within 1 second from beginning, previous file will be played.



9. FILE NAME / ID3 DISPLAY

Press DISPLAY key in the play mode for current file name. Press DISPLAY key again for ID3 tag information mode, that scrolls follows:

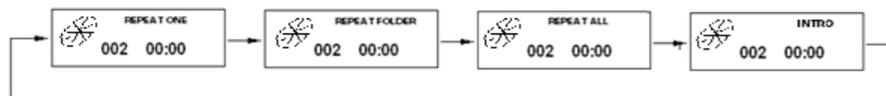
FILE → TITLE → TIME. This ID3 information supports up to 32 characters for each tag.



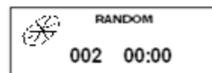
Operation

10. REPEAT AND RANDOM PLAY

Press REPEAT key to select repeat type. The sequence is as follows: Repeat one file → repeat folder → repeat all → Intro



In the stop or play mode, press RANDOM to activate or deactivate the random mode.



11. Folder up and down

These keys allow you to search folder in the USB/SD card memory.

12. Radio preset

- Using NEXT or BACK keys choose a radio station.
- Press PRG/BND key
- Using DIRRY-UP or DIRRY-DN keys choose the preset number.
- Press PRG/BND key to store station in memory .

General Specifications

FM/AM/USB/SD interchangeable module

Signal to Noise Ratio	Less than -70 dB
Frequency Response	20 Hz ~ 20 kHz
Total Harmonic Distortion (THD)	Less than 0.1%
Power Supply Voltage	DC 12V
Maximum Current Consumption	500 mA
FM frequency range	87 MHz – 108 MHz
AM frequency range	520 kHz – 1720 kHz

