MASUNN MA-700

MASUNN Kinter MA-700 Mini FM Radio Amplifier

User Manual

Model: MA-700

1. Introduction

This manual provides detailed instructions for the proper setup, operation, and maintenance of your MASUNN Kinter MA-700 Mini FM Radio Amplifier. Please read this manual thoroughly before using the device to ensure optimal performance and safety.

2. Safety Information

Observe the following safety precautions to prevent electric shock, fire, or damage to the unit:

- Do not expose this unit to rain or moisture.
- Do not open the casing. Refer all servicing to qualified personnel.
- Ensure proper ventilation around the unit.
- Use only the specified power supply (DC 12V).
- Keep the unit away from heat sources and direct sunlight.
- Do not place heavy objects on the unit.

3. Package Contents

Verify that all items are present in the package:

- 1 x MA-700 Power Amplifier
- 1 x Remote Control
- 1 x 3.5mm Audio Cable
- *(Note: Speaker wires and power adapter may be included depending on the specific package variant.)*

Figure 3.1: Overview of the MA-700 amplifier, remote control, and included cables.

4. Product Features

- Supports MP3 music playback from U disk (USB drive) and SD/MMC cards.
- Integrated FM stereo radio function.
- Professional four-channel integrated circuit power amplifier design for minimal distortion and strong output.
- Professional-level operational amplifier IC for transparent and bright sound.
- Features filtering and anti-large capacity power supply circuit.
- DSP sound field pattern across four channels.
- Two main channels and two towing channel outputs.

5. Product Overview

5.1 Front Panel

Figure 5.1: Front panel controls and inputs.

1. **NEXT Button:** Short press for next track (MP3) or next station (FM).
2. **SCAN/PLAY/PAUSE Button:** Short press to play/pause (MP3). Long press to auto-scan FM stations.
3. **PREV Button:** Short press for previous track (MP3) or previous station (FM).
4. **MODE Button:** Switches between USB, AUX, and FM radio input modes.
5. **USB Port:** For connecting USB flash drives with MP3 audio files.
6. **SD/MMC Card Slot:** For inserting SD or MMC cards with MP3 audio files (located near USB, not explicitly visible but implied by description).
7. **VOLUME Knob:** Adjusts the overall output volume.
8. **TREBLE Knob:** Adjusts the high-frequency audio level.
9. **BASS Knob:** Adjusts the low-frequency audio level.

5.2 Rear Panel

Figure 5.2: Rear panel connections.

1. **SPEAKER Output Terminals:** Connect your passive speakers here. Ensure correct polarity (+/-).
2. **DC 12V 5A Power Input:** Connect the 12V DC power adapter (not included).
3. **REM INPUT:** Remote turn-on input, typically for car audio systems.
4. **LED Indicator:** Power indicator light.
5. **ANT (FM Antenna Input):** Connect an FM antenna for radio reception.
6. **AUX Input (RCA):** Connect external audio sources using RCA cables.

5.3 Remote Control

Figure 5.3: The MA-700 amplifier shown with its remote control.

The included remote control allows for convenient operation of the amplifier's functions from a distance. Functions include power on/off, volume adjustment, track navigation, mode selection, and FM radio controls.

6. Setup

1. **Connect Speakers:** Connect your passive speakers to the SPEAKER output terminals on the rear panel. Ensure correct positive (+) and negative (-) polarity for each speaker. Incorrect wiring can lead to poor sound quality or damage.
2. **Connect Audio Source:**
    - **USB Drive:** Insert a USB flash drive containing MP3 files into the USB port on the front panel.
    - **SD/MMC Card:** Insert an SD or MMC card containing MP3 files into the card slot on the front panel.
    - **AUX Input:** Connect an external audio device (e.g., smartphone, CD player) to the AUX RCA inputs on the rear panel using appropriate RCA cables, or use the 3.5mm audio cable if your device has a 3.5mm output and you have an adapter.
3. **Connect FM Antenna:** For FM radio reception, connect an external FM antenna to the ANT input on the rear panel.
4. **Connect Power:** Connect a DC 12V 5A power adapter (not included) to the DC 12V 5A power input on the rear panel. Ensure the power adapter is suitable for the amplifier's requirements.

Figure 6.1: Example of included 3.5mm audio cable and speaker wires (may vary).

7. Operating Instructions

7.1 Power On/Off

Once all connections are secure, connect the power adapter to a wall outlet. The LED indicator on the rear panel should illuminate. The unit can be powered on/off using the remote control or by disconnecting the power adapter.

7.2 Volume and Tone Control

- **VOLUME Knob:** Rotate clockwise to increase volume, counter-clockwise to decrease.
- **TREBLE Knob:** Adjusts high frequencies.
- **BASS Knob:** Adjusts low frequencies.
- *Note: Volume can also be adjusted via the remote control.*

7.3 Source Selection

Press the **MODE** button on the front panel or the remote control to cycle through available input sources: USB, SD/MMC, AUX, and FM Radio.

7.4 MP3 Playback (USB/SD/MMC)

When a USB drive or SD/MMC card with MP3 files is inserted and the correct mode is selected:

- **PLAY/PAUSE:** Short press the SCAN/PLAY/PAUSE button on the front panel or the corresponding button on the remote.
- **NEXT/PREV:** Short press the NEXT or PREV buttons on the front panel or remote to skip tracks.

7.5 FM Radio Operation

When FM mode is selected:

- **Auto-Scan:** Long press the SCAN/PLAY/PAUSE button on the front panel to automatically scan and save available FM stations.
- **Station Navigation:** Use the NEXT or PREV buttons on the front panel or remote to cycle through saved stations.

8. Specifications

Feature	Specification
Input Voltage	DC 12V
Frequency Response	20 Hz - 20 kHz
Harmonic Distortion	0.05% and less (4W 1kHz)
High Control (Treble)	12 dB
Bass Control	12 dB
Signal Level	220 MV 47 K
FM Frequency Response	87.5 - 108 MHz
Design	Car (Compact)
Compatible With	MP3
Supports	Speaker, Remote Control
Functions	Song Track Navigation
Connectivity	Wired
Interface	3.5mm Audio (via cable), USB, SD/MMC, RCA
Audio Source	Electronic products with 3.5mm jack, USB drive, SD/MMC card
Material	Aluminum Alloy
Dimensions (L x W x H)	15.50 x 12.00 x 4.00 cm / 6.1 x 4.72 x 1.57 inches
Number of Channels	4

9. Troubleshooting

Problem	Possible Cause	Solution
No power	Power adapter not connected or faulty. Incorrect voltage.	Ensure power adapter is securely connected and functioning. Verify it is a DC 12V 5A adapter.
No sound output	Speakers not connected correctly. Volume too low. Incorrect input source selected. Faulty audio cable.	Check speaker wiring polarity. Increase volume. Press MODE to select correct input. Test with a different audio cable.
Poor FM reception	Antenna not connected or poorly positioned. Weak signal.	Connect an external FM antenna. Adjust antenna position for better reception.
USB/SD card not playing	Card/drive not inserted correctly. Files not in MP3 format. Incorrect mode selected.	Reinsert USB drive/SD card. Ensure files are MP3. Press MODE to select USB/SD mode.
Remote control not working	Battery depleted. Obstruction between remote and unit.	Replace remote control battery. Ensure clear line of sight to the amplifier's IR receiver.

10. Maintenance

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit. Do not use liquid cleaners or solvents.
- **Storage:** When not in use for extended periods, disconnect the power adapter and store the unit in a cool, dry place away from direct sunlight.

11. Warranty and Support

For warranty information or technical support, please refer to the documentation provided at the time of purchase or contact your retailer. Keep your proof of purchase for any warranty claims.