
EM193F FM Modulator

User Guide

V1.1

Release Date: Jan. 9, 2006

- ©Please read this manual carefully before using.
- ©This manual is subject to change without prior notification.
- ©There may be discrepancy between this manual and the actual operation, please refer to the actual operation or display.

For the sake of your safety, please read the following safety cautions before operation.

Safety Precautions

- Do not subject the device to severe impact or drop it from high position.
- Do not use the player in extreme hot or cold, dusty or damp field.
- Do not expose it to direct sunshine.
- Avoid using the player in strong magnetic field.
- Keep the device away from water or other liquids. In the event that water or other liquids enter the device, power off the product immediately and clean it.
- Do not use chemical solution to clean the device in order to avoid corrosion. Clean it with a dry cloth.
- We are not responsible for the damages caused by malfunction, misusing, repairing the device or battery replacement.
- Do not attempt to disassemble, repair or modify the product, or it will be out of guarantee.

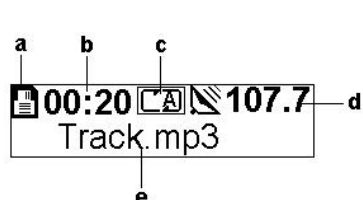
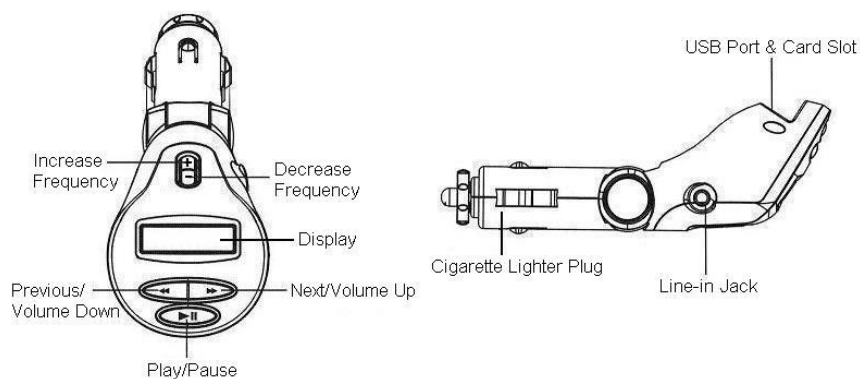
Features

- Read and playback the MP3/WMA file from the memory card/USB flash disk
- LCD Displays audio file information and frequency
- Two optional play modes: Normal and Random
- LINE-IN function that enables you to enjoy music from the external audio device such as CD, MD player
- Rotary joint design convenient for you to adjust the device's position
- 13 preset channels within 88.1MHZ~89.1MHz and 106.7~107.9MHz.
- Car cigar socket power supply (12V DC power)
- Restore the last frequency, track number and volume when you restart the device

Package Content

- Main Unit
- Line-in Cable
- Safety Fuse
- User Manual

Keys & Display



- a. Memory Card/Removable Disk Indication
- b. Elapsed Time
- c. Play Mode
- d. Current Frequency
- e. Track Title

Play Music

[Basic Operations]

Function	Operation
Play/Pause	Press the ►/ key to play the MP3/WMA file. The frequency is indicated on the display. To pause during playback, press the ►/ key. To resume, press it again.
Switch Play Mode	This device provides two play modes: Repeat All and Random. You can switch the play modes by pressing and holding the ►/ key for a while.
Previous/Next	Press the ◀◀ key to play the previous track or ▶▶

	press the ▶▶ key to play the next track.
Switch Channel	Press the “+” or “-” key to switch the preset channels. When you switch to a certain channel, the frequency is indicated on the display. Note: <i>There are 13 preset channels: 88.1, 88.3, 88.5, 88.7, 88.9, 89.1, 106.7, 106.9, 107.1, 107.3, 107.5, 107.7, 107.9 MHz.</i>
Adjust Volume	Press and hold the ◀◀ key to decrease volume, or press and hold the ▶▶ key to increase volume.


[Play music on a removable disk]

- 1.** Plug the USB flash disk that stores MP3 files into the USB port.
- 2.** Insert the device into the cigarette lighter socket to draw 12 V DC power.
- 3.** Press the “+” key or “-” key to select the preset channel without signal interference. You see the selected frequency indicated on the display.
- 4.** Tune the car FM radio to the same channel as indicated on the display.
- 5.** Now you can enjoy your MP3/WMA music by controlling the keys on the device. For detail information about operation, see “Basic Operation” section.

[Play music on a memory card]

This device can read audio files stored on a SD/MMC memory card, and transmit the audio signals to a FM radio for your listening.

- 1.** Plug a memory card that stores audio files into the card slot beside the USB port.
- 2.** Insert the device into the cigarette lighter socket to draw 12 V DC power.
- 3.** Press the “+” key or “-” key to select the preset channel without signal interference. You see the selected frequency indicated on the display.
- 4.** Tune the car FM radio to the same channel as indicated on the display.
- 5.** Now you can enjoy your MP3/WMA music by controlling the keys on the device. For detail information about playback operation, see “Basic Operation” section.

 **Note:** *If a removable disk and a memory card are both inserted properly, only the audio files on the removable disk is transmitted and played.*


[Play music on an extra audio player]

The device supports LINE-IN feature that enables you to enjoy the music from an external audio device such as CD, MD player, etc. The external audio source comes into the device through the line-in jack and is transmitted to the FM tuner by the built-in FM transmitter. You enjoy the music through the FM stereo audio system.

- 1.** Connect one end of the LINE-IN cable to the line-in jack of the device and connect the other end to the earphone jack of the external audio device.
- 2.** Turn on the external audio player and play the music.
- 3.** Press the “+” key or “-” key to select the preset channel without signal interference. You see the selected frequency indicated on the display.

4. Tune the car FM radio to the same channel as indicated on the display.

5. Now you can enjoy music with keys on the audio player.

 **Note:** All keys except channel switch are unavailable when you use the line-in function. You can only use the keys on the extra audio player to control the playback.

Troubleshooting

Problem	Solution
The frequency display does not light up when I install the device in the car.	Reinsert the device to the cigarette lighter. If the problem still exists, try to replace the safety fuse.
I cannot play the music on the removable disk or memory card.	<ul style="list-style-type: none">• Reload the music files• Reinsert the removable disk or memory card
The display lights up, but the keys don't function	Reinsert the device to the cigarette lighter.
The display lights up, but there is no sound.	<ul style="list-style-type: none">• Check whether the removable disk or memory card is inserted well.• Check whether the LINE-IN cable is connected well.• Check whether the music file is in a supported format• Adjust the volume.
There is noise when I tune to a station	Make sure the frequency on the device and the FM radio is the same.

Notice

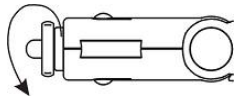
- Operation voltage for the device is +12V. Too high or too low voltage could cause the device damaged or failed.
- For the sake of safety, please insert the USB flash disk or memory card before you plug the device into the car cigar socket.
- The device supports most USB flash disks or memory card except a few.
- Frequency of the car FM tuner should be the same as that of the device.
- Do not pull out or insert a USB flash disk or memory card while the device is being powered by the car cigarette lighter. If you want to, remove the device from the socket first and insert or remove the disk or card before you re-power the device.
- The progress may be slow when the USB flash disk or memory card stores too many audio files.
- In order to extend the device life, please do not keep it in use for too long.

Safety Fuse Replacement

When the device cannot work properly, it may due to the safety fuse failure. Please replace the safety fuse following these steps if necessary:

1. Remove the device from the cigarette lighter socket.

2. Twist the tip of the cigar plug.



3. Remove the bad safety fuse and insert a new one (provided with the package)

Technical Specification

Item	Description
USB Interface	USB1.1 (USB2.0 Compatible)
FM frequency range	88.1~89.1MHz; 106.7~107.9MHz
SNR	85dB
Output Frequency	20HZ-20KHZ
Supported File	MP3, WMA
Audio Source	USB flash disk, audio player, memory card
Bit Rate	32Kbps—256Kbps
Safety Fuse	500mA, 250V

FCC NOTICE

- 1. This device complies with Part 15 of the FCC Rules.**
Operation is subject to the following two conditions:
 - (1) This device may not cause harmful interference, and**
 - (2) This device must accept any interference received, including interference that may cause undesired operation.**
- 2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.**