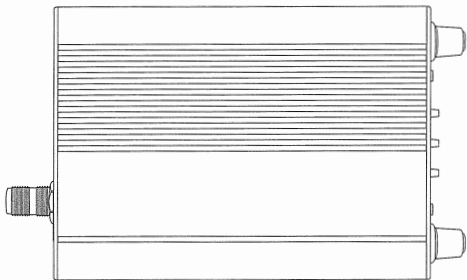


Instruction Manual

SainSonic AX-7C FM Transmitter



SainSONIC

CATALOG

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CAUTION

Never operate the transmitter without connecting a suitable antenna or a dummy 50Ohm load to the output. Otherwise there will be serious damage to the transmitter.

Copyright

Copyright by SainSonic®, all rights reserved.

FCC Information

This device complies with Part 15 of the Federal Communications Commission (FCC) Rules. The FCC ID for this device is 2ABT5AX05B7C. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Warranty

The warranty of this product will be free from defects in materials and workmanship for period of time specified on the product packaging. This limited warranty shall

commence from the purchase date. The Warranty is not transferable and is limited to the original purchaser. If the product is found to be defective, then as your sole remedy and the manufacturer's only obligation, we will repair or replace the product. This warranty shall not apply to products that have been subjected to abuse, misuse, abnormal electrical or environmental conditions, normal wear and tear or any condition other than what can be considered normal use.

Limitation of Liability

What is covered

All parts defective in material and workmanship. This limited warranty for SainSonic® products covers the functionality of FM transmitter for their normal, intended use as specified in the Owner's Guide and does not cover a malfunction that has resulted from improper or unreasonable use or maintenance, accident, excess moisture, improper packing, lightning, power surges, or unauthorized tampering, alteration or modification while not under the control of SainSonic. SainSonic® FM transmitters are not designed to be used in every environment, so please review your Owner's Guide. This Limited Warranty is also excluded if the label bearing the serial number has been removed or defaced.

Other Rights

IN NO EVENT WILL SAINSONIC BE LIABLE TO YOU FOR ANY LOST

PROFITS, LOST SAVINGS OR INCIDENTAL, INDIRECT, SPECIAL OR INABILITY TO USE THE PRODUCT OR THE BREACH OF THIS AGREEMENT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.SOME STATES DO NOT ALLOW THE LIMITATION OR EXCLUSION OF LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

What we will do

We will repair or replace any defective parts within a reasonable period of time and free of charge.

Introduction of SainSonic AX-05B FM Transmitter

Thank you for purchasing SainSonic AX-7C FM transmitter.This stereo FM transmitter, covered with excellent aluminum alloy, can easily build a wonderful FM radio station .

SainSonic present a brand new PLL FM Stereo Transmitter for FM stereo broadcasting, built in LCD display with blue backlight, along with microcontroller for frequency control and display.. Highly stable and reliable.

SainSonic AX-7C is ideal for all stereo audio broadcasting, MP3, PC, TV, wireless speakers, game device, etc.Its transmission distance is up to 1,300 feet in barrier-free area.

SainSonic AX-7C, designed to operate non-stop 24/7, will not drift between

stations because of the advanced stereo PLL Digital Tuner Technology. It uses the control panel buttons to control the frequency to broadcast. When powered out and then restored, it will begin broadcasting back on the exact same frequency. It saves your time to reset the FM Transmitter frequency.

If you find a better antenna for this FM transmitter, the transmission effect will be better. The higher you place the antenna, the farther you will transmit. Transmission range depends on many factors, such as the sensitivity of the receiver, the antenna, and the building density, and other obstructions between the transmitter and receiver.

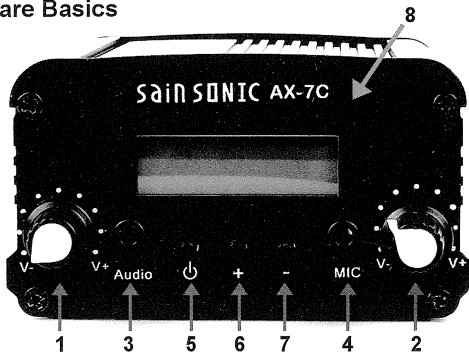
Package Contents

- **1 * SainSonic AX-7C FM Transmitter**
- **1 * Power Supply**
- **1 * 3.5mm Audio Cable**
- **1 * Retractable Antenna**

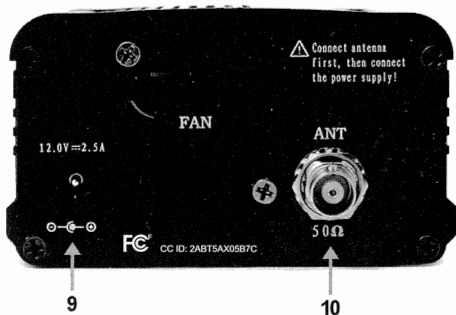
Specification

Power Output	- 48dBm/7W
FM Transmitter Frequencies	88.1-107.9 MHz/76-108MHz
Tuning Step	100Khz/0.1Mhz
Power Supply	9 -12V DC (The current load of power supply over 1A)
Stability of Frequency	±10ppm (-10°C~+50°C)
Frequency Response	20Hz-15KHz
Signal to Noise Ratio	50dB
Frequency Deviation	± 3K
Operation Time	True 24/7
Modulation Degree	9 -16K
Output Impedance	50 ohm
Audio Input Connector	3.5mm headphone connector
Mic Input Connector	3.5mm headphone connector
Tuning Design	Stable PLL Technology
Size of Transmitter Unit	160*95*54mm
Shipping Weight	1.2Kg
Transmission Signal	FM Stereo

Hardware Basics



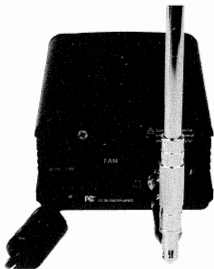
1. Audio volume
2. Mic volume
3. 3.5mm Jack for Audio cable input
4. 3.5mm Jack for electrets microphone
(And the computer use the same microphone) input
5. Power Button (On/Off)
6. '+' Frequency Up Button (To increase the radio frequency)
7. '-' Frequency Down Button (To decrease the radio frequency)
8. LCD Digital Display for the Radio Frequency



- 9. Jack for DC 9-12V
- 10. Antenna socket

Installation Instruction

1. Install the antenna to the antenna socket
2. Connect the FM Transmitter to AC Adapter, then plug AC adapter to power outlet



Note: When the Power supply is connected, the 'OFF' signal will be show on LCD Digital Display.



3. Connect the iPod, MP3 or CD player to FM Transmitter with the audio cable

Using the FM Transmitter

1. Press Power Button to turn on the Digital Transmitter. The LCD Digital Display shows the pre-set radio frequency channel (such as 98.0MHz).
2. Turn on your radio and switch to FM channel, adjust the radio frequency channel to the desired channel. And the radio will display the “zzz” sound or radio music.
3. Then adjust the radio frequency channel of the Digital Transmitter to the same radio frequency channel of the radio. (For example, if the radio frequency channel is set to 98.0MHz then the FM Transmitter should also be set to 98.0MHz).
4. When the radio frequency channel of SainSonic AX-7C and your device are the same, the “zzz” sound will stop. Adjust the volume to medium level in iPod or audio player, and start playing music.

Note: If the volume level from mp3 or audio player is too high, the sound from the radio will be distorted.

5. When interference occurs, the music from radio will not be clear. In this case, please switch to different channels by repeating the Step 2 and 3 above until the sound quality is clear.

Adjustment of Radio Frequency Channels

1. Press Frequency Up/Down Button to increase/decrease 0.1MHz radio frequency channels of the Transmitter.
2. Or you can press and hold the Frequency Up/Down Button to continuously increase/decrease radio frequency channels.

Power On/Off

Press Power Button turn on/off the FM Transmitter.

Important Notice

- This product should be kept in dry condition and away from water.
- Keep the product off direct sunlight or high temperature environment.
- Please unplug the power plug when it is not in use.

Troubleshooting

1. Does not function normally
 - Please check whether all wires/ cables being connected properly.
 - If the product cannot be powered on, make sure the AC adapter works and connects properly.
2. The music output from the radio is distorted (not clear),
 - First, reduce volume from iPod or audio player to medium or lower volume

range, and then turn up volume from radio to the desired level. The sound quality should be improved.

- The pervious operation does not improve the sound quality, it may be due to frequency interference. And you need to switch to other channel.

3. The volume output from the radio is too loud when the FM Transmitter is not being in use,

- When FM Transmitter is in use, the desired volume output level from the radio is typically higher than without using FM Transmitter. To prevent the volume output too loud when the FM Transmitter is not being in use, you can turn down the radio volume and turn up the iPod or audio player volume as long as the sound from the radio remains clear.

4. There is some current acoustic interference from the music output of the radio,

- Try to change the location of the transmitter, or change the location of the power supply, or change the location of the audio line. Power supply must be away from the transmitter at work.

5. How to switch the output power?

Hold the power button for 3 seconds, you will see the L Mode (-48dBm) or the H Mode (0.5w), and then choose the output mode you want.



Setting and Adjustment

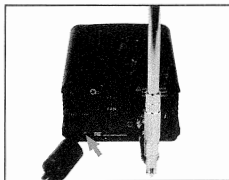
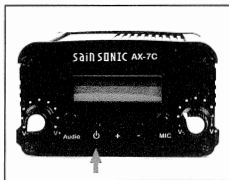
Power and frequency

Two level power adjustment of the 2014 V1.2 version:

High power (H):> 7W; low-power (L): <-48dBm

Step 1:

Press and hold the power switch , and insert the power plug to the power jack .

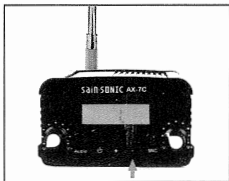
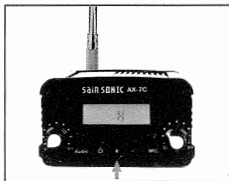


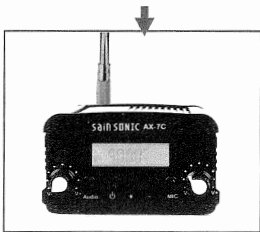
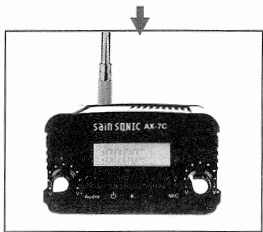
Step 2:

Release the power switch , LCD screen shows the 'H' or 'L'.


Press '+/-' to switch 'H/L'.

Press '+', the LCD screen displays 'H', Press '-' LCD screen displays 'L'.





Step 3:

Press the power switch  to confirm settings, and the LCD screen displays '108.00MHz'.

This is the highest frequency available. The frequency range is 88.1-107.9 MHz/76-108MHz; you can change it by +/-

The same way to adjust low frequency as above.

Warning: The lowest frequency high-end can not be even higher than the highest frequency.

For example, to set the transmitting frequency range is 90MHz to 100MHz, you can change it to 100Mhz by +/- press the power switch ϕ to confirm settings, and then press +/- to change to 90Mhz.

Step 4:

Press the power button ϕ to confirm settings after 3 seconds, the LCD screen displays 'OFF'. Again press the power switch ϕ , the transmitter start to work.

Appendix

Transmitter covering Distance (Reference: kilometer)

Receive sensitivity 0.2uV/12dB	Transmit power 0.1~0.5W	Transmit power 1~2W	Transmit power 3~5W	Transmit power 10~30W	Transmit power 30~50W
City	0.1~0.5	0.5~1	1~2	3~5	5~8
Town	0.2~0.6	1~2	2~3	5~8	8~10
Environs	0.3~1	2~3	3~5	8~15	10~30
Widen Plain	0.5~2	3~5	8~20	10~30	20~40
Sea communication	1~3	5~15	10~30	20~40	20~50

★ Only for reference, as the covering distance is effected by the antenna and environment.

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