

Mode: CZH-05B



CAUTION: NEVER operate the transmitter without connecting a suitable antenna or dummy 50 Ohm load to the output otherwise there is a serious danger of destruction of the output stage of the transmitter.

These limitations shall apply not with standing any failure of essential purpose of any limited remedy.

Contents

Introducing the FM Transmitter	3
Technical target	3
Package Contents	3
About Elecsky Products and Services	3
Hardware Basics	4
Installation Instruction	5
Using the FM Transmitter	5
Adjustment of Radio Frequency Channels	6
Power On/Off	6
Important Notice	6
Troubleshooting	6
Setting and adjustment of special functions(Out Power and Freq. set)	6
Appendix	8

Thank you for purchasing our transmitter, This stereo FM transmitter can easily build a wonderful FM radio station. This one have a beautiful aluminum alloy cover.

We presents a brand new 500mW PLL FM Stereo Transmitter for FM stereo broadcasting. built in LCD display with blue backlight,Built in microcontroller for frequency control and display. Built in FM stereo transmitter IC with PLL technology,surface-mount tech, reliable working condition. the transmission frequency is highly stable. Compact design with aluminum enclosure. **transmission distance more than 300 meters (In the line of sight, field, open land)**. This transmitter is ideal for all stereo audio broadcasting, MP3, PC, TV, wireless speakers, game device, etc.

The FM Transmitter will not drift between stations because of our advanced stereo PLL Digital Tuner Technology.

The FM Transmitter use the control panel buttons to control the frequency that it broadcasts on so if the power is lost and then restored it will begin broadcasting back on that exact same frequency. This avoids any need to reset the FM Transmitter back to the frequency you originally wanted.

We use a switch to turn the transmitter on and off. This allows the transmitter to automatically turn back if power were to be lost and then restored.

The FM Transmitter is designed to operate non-stop 24/7.

The higher you place the antenna the farther you will transmit.

Complete easy to follow plug & play instructions are included plus tips on getting the best distance possible.

If you can match a good antenna to the FM transmitter, the effect will be better. The transmission range depends on many factors. The true distance is based on the sensitivity of the receiver, antenna of the receiver, and the building and other obstructions, which are between the transmitter and receiver. And the distance will much more in countryside.

Package Contents

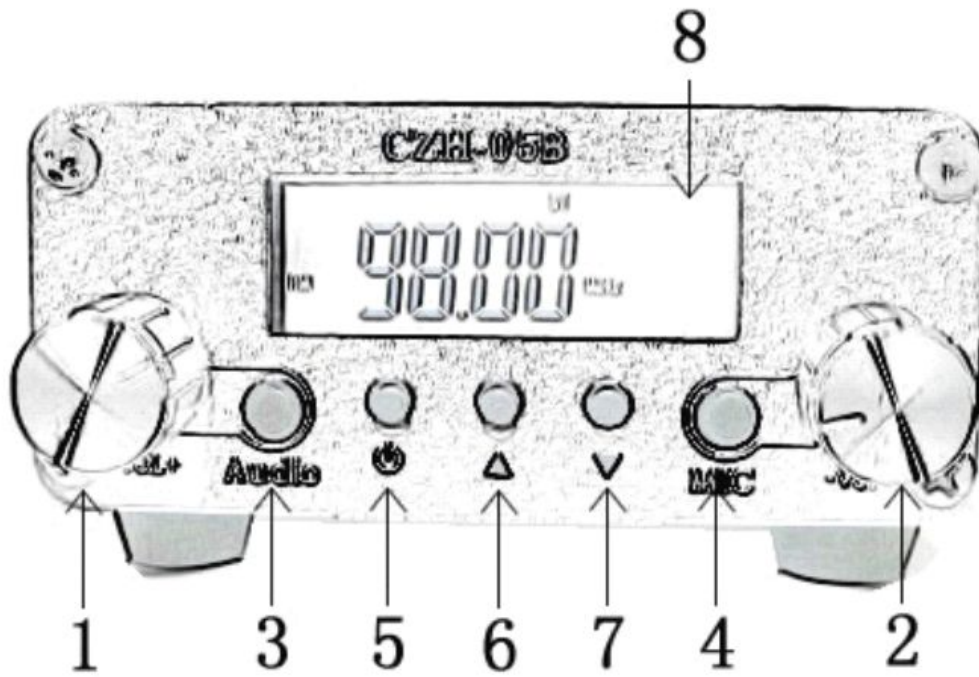
- 1x CZH-05 FM Transmitter
- 1x 100~240V Power Supply
- 1x 3.5mm Audio Cable
- 1x Rubber Antenna

Technical target

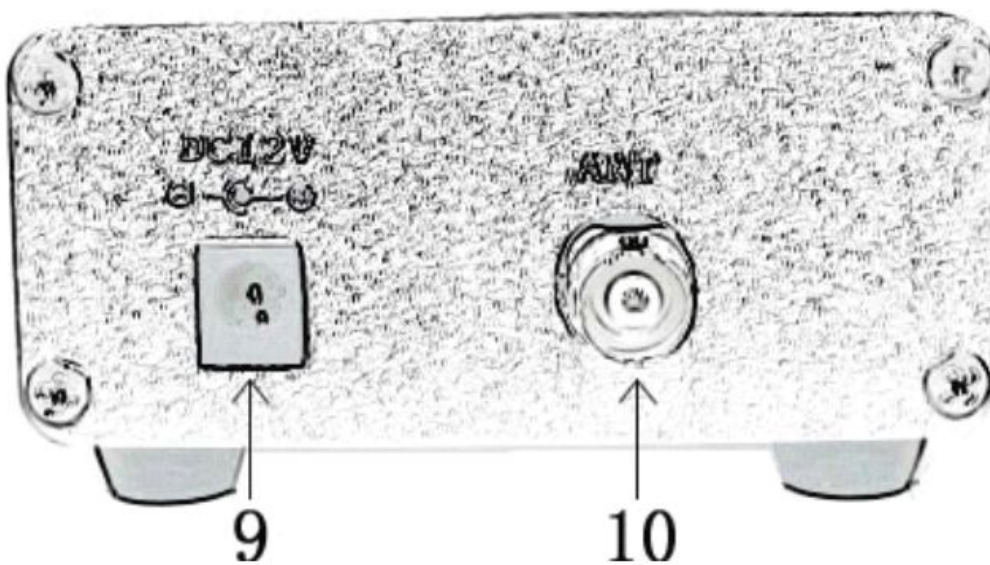
Power Output:	500mW \pm 20% (12V DC)
FM Transmitter Frequencies:	87-108Mhz (78-108Mhz 2010 V1.2 version)
Tuning Step:	100Khz/0.1Mhz
Power Supply:	9-12V DC (The current load of power supply should over 1A)
Stability of Frequency:	\pm 0ppm (-10 $^{\circ}$ C~+50 $^{\circ}$ C)
Frequency Response:	100 - 15000Hz
Pre-emphasis:	50us
type of modulation:	WFM
Tuning Design:	Stable PLL Technology
Transmission Signal:	FM Stereo
maximum frequency deviation:	\pm 75KHz

Signal to Noise Ratio:	>50dB
parasitic amplitude modulation:	<0.2%
Stereo Separation:	>30dB
Distortion:	< 0.5%
Operation Time:	True 24/7
ambient temperature:	-10 $^{\circ}$ C~+50 $^{\circ}$ C
Antenna Design:	Rubber Antenna
Antenna Connector:	BNC type
Output Impedance:	50 ohm
AF input level:	<-15dbV
Audio Input Connector:	3.5mm headphone connector
Mic Input Connector:	3.5mm headphone connector
Size of Transmitter Unit:	L:113mm, W:88mm, H:39mm
Weight of Transmitter Unit:	150g

Hardware Basics

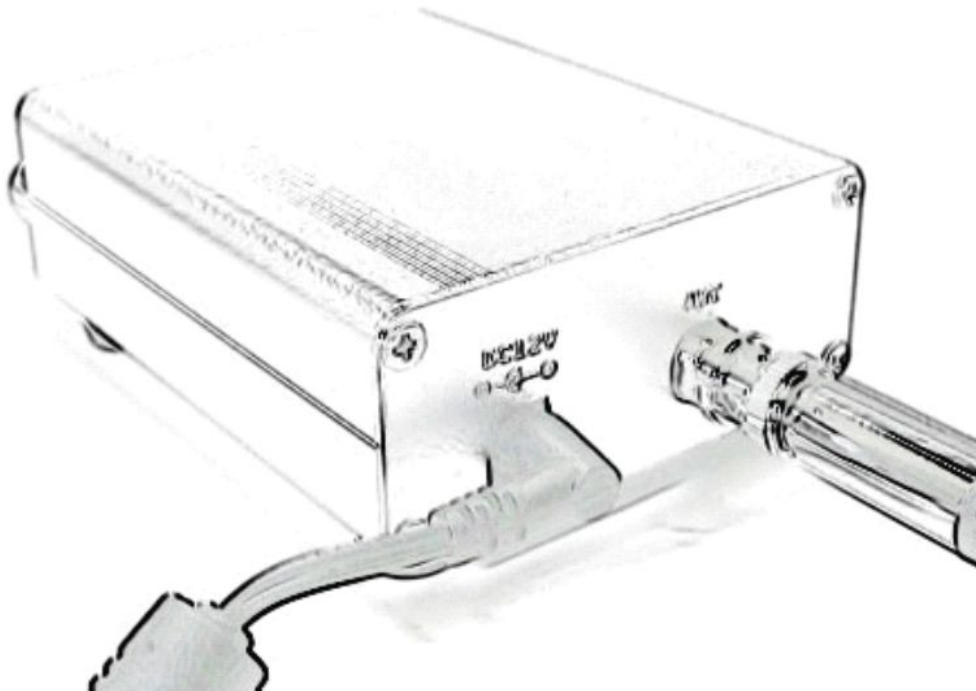


- 1、 Audio volume
- 2、 MIC volume
- 3、 3.5mm Jack for Audio Cable input
- 4、 3.5mm Jack for **electret microphone** (And the computer use the same microphone) input
- 5、 Power Button (On/Off)
- 6、 "+"Frequency Up Button (To increase the radio frequency)
- 7、 "-"Frequency Down Button (To decrease the radio frequency)
- 8、 LCD Digital Display for the Radio Frequency



- 9、 Jack for DC 9-12V

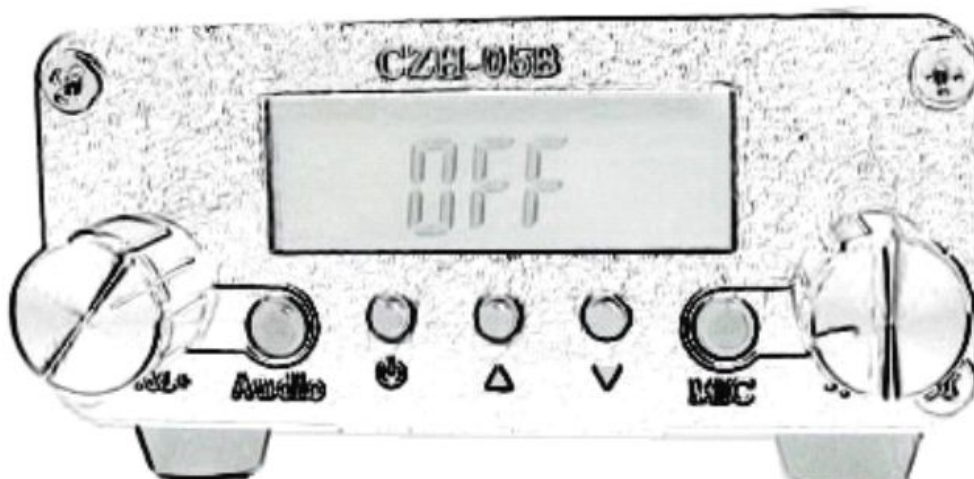
-
- 10、 Antenna socket



Connect the Antenna to FM Transmitter.

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.**



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 (For example, 98.0MHz).
2. Turn on your radio and switch to FM channel, adjust the radio frequency channel to desired channel. Now the radio will output as “zzz” sound or radio music now.
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). When the radio frequency channel of the Digital Transmitter and the radio are same, the “zzz” sound will stop. Adjust the volume to medium level in iPod or audio player, and start playing music. Now you will hear the music playing from the mp3 or audio player will output from the radio. **Note: If volume level from mp3 or audio player is high, the music output from the radio will sound distorted.**
5. Adjust the volume in your radio until the satisfactory output is reached.
6. When interference occurs, the music from radio will not sound clear. In this case, please switch to different channels by

repeating Step 2 and 3 until the music sound quality is clear again.

Adjustment of Radio Frequency Channels

- 1.Press **Power Button** to turn on the FM Transmitter
- 2.Adjust the FM frequency channels: (Radio frequency channels adjustment range is 87.0MHz~108.0MHz.)
- 3.Press **Frequency Up/Down Button** to increase/decrease 0.1MHz radio frequency channels on the Transmitter.
- 4.Press and hold the **Frequency Up/Down Button** to continuously increase/decrease radio frequency channels on the Digital Transmitter.

Power On/Off and Power

Press **Power Button** turn 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) If the FM Transmitter does not function normally,

- Please check whether all wires/ cables being connected tight and correct.
- If the product cannot be powered on, check whether the AC adapter works and connects properly.

2) If 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 desired level. The music sound quality should improve.
- If the pervious method does not improve the music sound quality, it means the problem may be due to frequency interference. Then you need to switch to other channel.

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

- When FM Transmitter is in used, 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 decrease the radio volume and increase the iPod or audio player volume as long as the sound from the radio remains clear.

4) If music output from the radio have current acoustic interference,

- 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.

Setting and adjustment of special functions

Setting and adjustment of special functions

power adjustment and frequency adjustment

- 2010 V1.2 version with two level power adjustment: High power (H):> 500mW; low-power (L): <100mW

Step 1:

First press and hold the power switch "⏻",

and then insert the power plug to the power jack "⊖—⊕".

Step 2:

Release the power switch "⏻" after 3 seconds , LCD screen shows the "H" or "L". Through the "▲/▼" switch "H/L". Press "▲", LCD screen display "H", Press "▼" LCD screen display "L".

"H" is the output power > 500mW;; "L" is the output power <100mW.

Step 3:

Press the power switch "⏻" confirm settings, The LCD screen display "108.00MHz". This is the highest frequency of use, Through the "▲/▼" can be changed it, adjustable range: 76-108Mhz..

Again press the power switch "⏻" confirm settings, The LCD screen display "87.00MHz". This is the lowest frequency of use, Through the "▲/▼" can be changed it, adjustable range: 76-108Mhz..

Warning: 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, Through the "▲/▼" changed to 100Mhz, press the power switch "⏻" confirm settings, follow Through the "▲/▼" changed to 90Mhz..

Step 4:

Press the power switch "⏻" confirm settings, after 3 seconds , The LCD screen display "OFF".

Again press the power switch "⏻" , The transmitter Start working.

Appendix**Transmitter covering Distance (Reference: kilometer) :**

Receive sensitivity	Transmit power	Transmit power	Transmit power	Transmit power	Transmit power
0.2uV/12dB	0.1~0.5W	1~2W	3~5W	10~30W	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, also the covering distance is concern with the antenna and environment.