

# USER GUIDE FOR FU-05B 0.5W FM TRANSMITTER



CAUTION: NEVER operate the transmitter without connecting a suitable antenna or dummy 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.

Thank you for purchasing our transmitter , this stereo fm transmitter can easily build a wonderful FM radio station.

We present a brand new 500mw PLL FM stereo transmitter for FM stereo broadcasting. Built-in LCD display with blue backlight, built-in microcontroller for frequency 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 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 the exact same frequency. This avoid 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 lost and then restored.

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

Completely 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 receivers. And the distance will be much more farther in countryside than in the city.

### **Package Contents:**

- 1\*FU-05B 0.5W FM transmitter
- 1\*TNC Short antenna
- 1\*12V 2A Power adapter
- 1\*3.5mm Audio cable

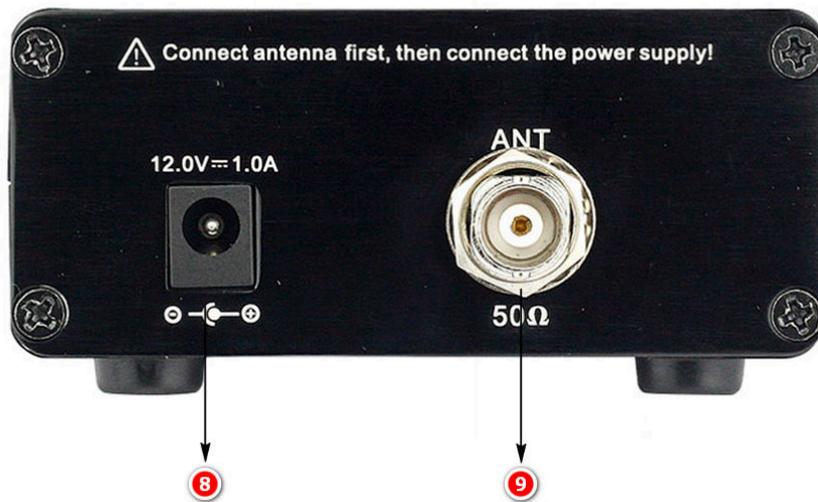
### **Technical Specifications:**

- \*Operating frequency: 76~108MHz
- \*Output power: 50mw
- \*Rated voltage: DC12V
- \*Output Impedance: 50 Ohm
- \*Temperature: -5 ~ 40 degrees Celsius
- \* Tuning Step : 100khz
- \* Stability of Frequency:  $\pm 5$ ppm Less than 10ppm ( better system)
- \* Freq. Response: -55dB(100~5000Hz); -45dB(5000 ~ 15000Hz )
- \* Audio Input Connector: 3.5mm headphone connector

### **Panel Description:**



1. Audio Volume
2. 3.5mm Jack for Audio cable input
3. Power Button ON/OFF
4. + Frequency Up Button (To increase the frequency)
5. – Frequency Down Button (To decrease the radio frequency)
6. 3.5mm Jack for **Electret** Microphone
7. Microphone Volume



8. Jack for DC 12V
9. Antenna Interface

- Note: When the power supply is connected, the “OFF” signal will show on the LCD Digital Display.

### **How to use this transmitter?**

1. Press **Power Button** to turn on the 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.
3. Then adjust the radio frequency channel of the transmitter to the same as the radio (if your radio is tuned to 88mhz, please tune the fm transmitter to 88mhz as well). By then, the “zzz” sound on radio will stop. Adjust the volume to medium level in your iPod or other audio players, start playing music, now you’ll hear the same music on the radio receiver.  
**Note: if volume level from your audio player is too high, the music output from 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 is clear again.

## **Adjust the frequency on transmitter:**

1. Press **Power Button** to turn on FM transmitter.
2. Adjust the FM frequency channel by pressing the **UP or DOWN button on the panel** (adjustable range is 76-108mhz)

## **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.

## **Trouble Shooting:**

1. If the FM transmitter does not function normally:
  - \* please check whether all wires/cables are connected tight and correctly.
  - \*if the product cannot be powered on, check whether the AC adapter works properly.
2. If music output from the radio is distorted or not clear:
  - \* Reduce volume from your audio player to medium volume range, then turn up volume from radio to desired level. The music quality should improve then.
  - \* If the previous method does not improve the music quality, the problem may be due to frequency interference, please switch the frequency on the transmitter.
3. If the volume output from radio is too loud when the FM transmitter is not being in use:
  - \* When FM transmitter is in use, desired volume output level from the radio is typically higher than without using FM transmitter. To prevent the volume output form being too loud when the FM transmitter is not being in use, you can decrease the radio volume and increase the volume on audio player as long as the sound from radio remains clear.
4. If the music output from radio have current acoustic interference:
  - \* Try to change the location of t he transmitter, or change the location of power supply or audio cable. Power supply must be away from the transmitter at work.

## **Set / Adjust the power output**

There are two modes of power output on this transmitter 0.1w/0.5w, following the steps to switch:

1. Press and hold the power button, insert the power supply onto the transmitter.
2. Release the power button after 3 seconds, the LCD screen shows the "H" or "L". Through the UP and DOWN button you can switch the power mode.
3. After you switched to desired mode, press the power button to confirm setting.

**For any help needed, please contact us at [rita@fmuser.net](mailto:rita@fmuser.net).**