

# FM Transmitter Operation Manual

**FMT3-150A**  
**FMT3-350H**  
**FMT3-600H**  
**FMT3-1000H**



**This manual provides important guidelines for installing.  
Review this information carefully for proper installation.**



# **CAUTION**

**Possible equipment damage!**

**Before operating the transmitter for the first time, check for the proper AC line voltage setting and the antenna or dummy is good connect!**

## **IMPORTANT**

1. Maintenance can only be operated by authorized professionals.
2. Get lightening protection measures ready in thunderstorm weather.
3. Do not touch the antenna when the transmitter is powered on.
4. Do not power on the transmitter if the antenna is not well connected.
5. Do not use the transmitter under the explosive environment, such as gas/refueling station, etc.
6. Do not use the transmitter in the extreme dusty, damp or high temperature environment.
7. Be sure to comply with the rules released by the local radio administrations.
8. It is necessary that the mains system being provided with grounding to ensure both the operators' safety and correct operation of the equipment.

**无线电发射设备**  
**Radio Transmission Equipment**  
**型号核准证**  
**Type Approval Certificate**

湘潭华纳射频电子设备有限公司：

**根据《中华人民共和国无线电管理条例》**  
**In accordance with the provisions on the Radio**  
**Regulations of the People's Republic of China , the following**  
**符合中华人民共和国无线电管理规定和**  
**radio transmission equipment , after examination , conforms**  
**技术标准，其核准代码为：CMIIT ID: 2017GP1470**  
**to the provisions with its CMIIT ID:**

有效期：**五年**  
Validity



2017年3 月10 日  
Year Month Date

编号: 2017-1470  
Number

设备名称: 立体声调频广播发射机  
Equipment Name

设备型号: FMT3.0  
Equipment Type

主要功能: 语音通信  
Main Functions

调制方式: FM  
Modulation Mode

主要技术参数及其指标值:  
Main Technical Parameters

频率范围: 88-108MHz  
Frequency Range

频率容限:  $\pm 1000\text{Hz}$   
Frequency Tolerance

占用带宽:  $\leq 256\text{kHz}$   
Occupied Bandwidth

发射功率:  $1\text{kW} \pm 10\%$   
Transmitting Power

杂散发射限值:  $\leq -60\text{dB}$   
Spurious Emission Limits

  
(核发单位章)  
Sealed by issuing authority  
2017 年 3 月 10 日  
Year Month Date

## INDEX

- Features.
- General illustration.
- Operating instructions.
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## FEATURE

FMT 3.0 series product includes FMT3-150A, FMT3-350H, FMT3-600H and FMT3-1000H, which its max power is 150W, 350W, 600W and 1000W. Each of the product possesses of multiple functions, reliable and steady performance, fast operations and well-structured in heat dissipation. Main features are as follows,

1. Latest version, software updated on Ver. 1703.
2. Standard 2U, 19 inch design, whole aluminum chassis.
3. Power adjustable from 0-/150/350/600/1000Watts
4. Automatic power control maintaining the output at any preset level.
5. Color LCD and touch screen operation.
6. Internal stereo coding or External MPX input.
7. Mono/Stereo/Mute mode Optional.
8. Pre-emphasis optional at 0, 50us, 75us.
9. LCD displays working frequency, forward power, reflected power and UV meter.
10. SWR &temperature protection. Alarm prompt indicated once either is out of the scope of protection value.
11. Password protection

## GENERAL ILLUSTRATION

### 1. Illustration of front panel

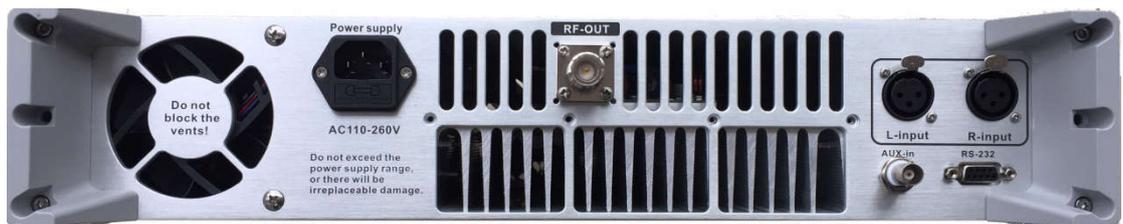


### 2. Illustration of back pane

(1) Back panel of FMT3-150A



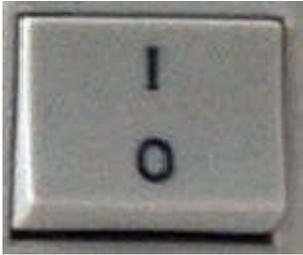
(2) Back panel of FMT3-350H/600H



## OPERATING INSTRUCTIONS

### IMPORTANT

Be sure the antenna or dummy load is well connected before turning on the transmitter.



Power Switch, to turn ON/OFF

Switch the button to 'I' to turn on the transmitter, and 'O' to turn off the transmitter.

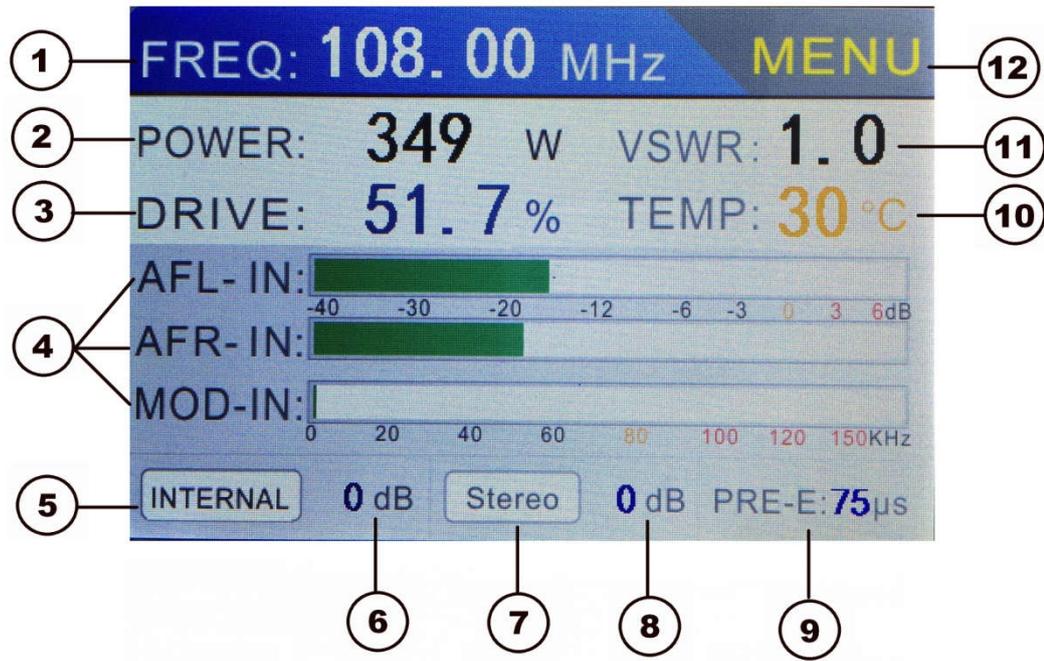
After the antenna or dummy load is connected, switch the power button to 'I' to turn on the transmitter.

Boot screen shows a loading process.



After a few seconds the transmitter goes into working status.



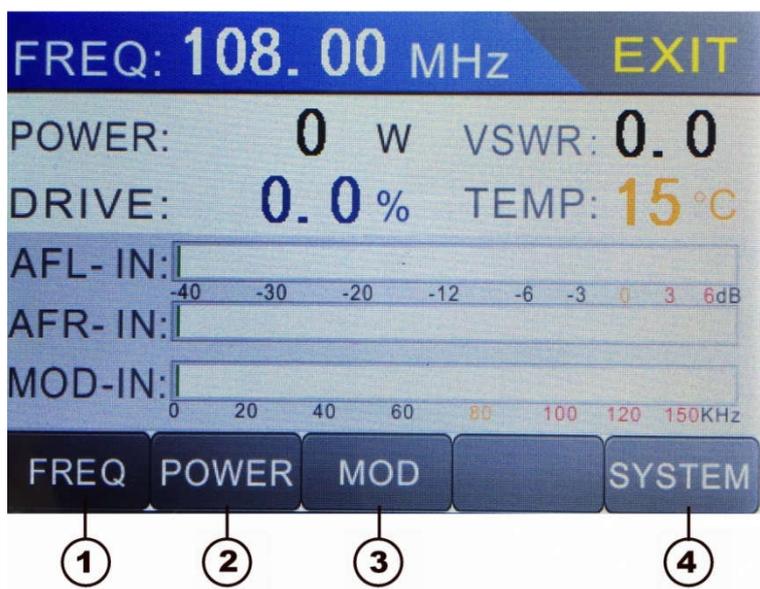


- 1: Frequency 87.5-108MHz
- 2: RF output power
- 3: Drive level state
- 4: Input level dynamic indicator. (audio or composite signal)
- 5: Internal modulation or external modulation
- 6: Modulation level gain.
- 7: Stereo mode.
- 8: Audio level gain.
- 9: Pre-emphasis 0us, 50us, 75us
- 10: Amplifier unit temperature.
- 11: Setup menu.

Press MENU in the upper right.

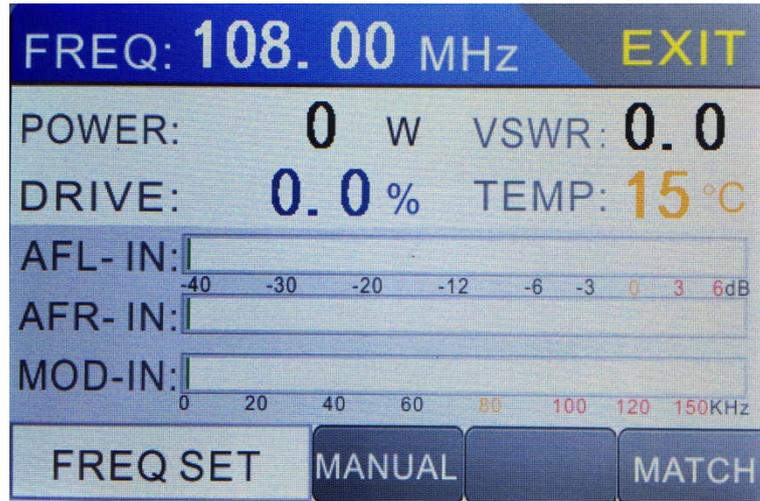
If password is enabled, you will need to enter a six-digit password. The default password is 000008.

**The password can be enabled or disabled, and it can be modified by the user. Please note to remember your password, otherwise you need to return the transmitter to the factory to unlock.**



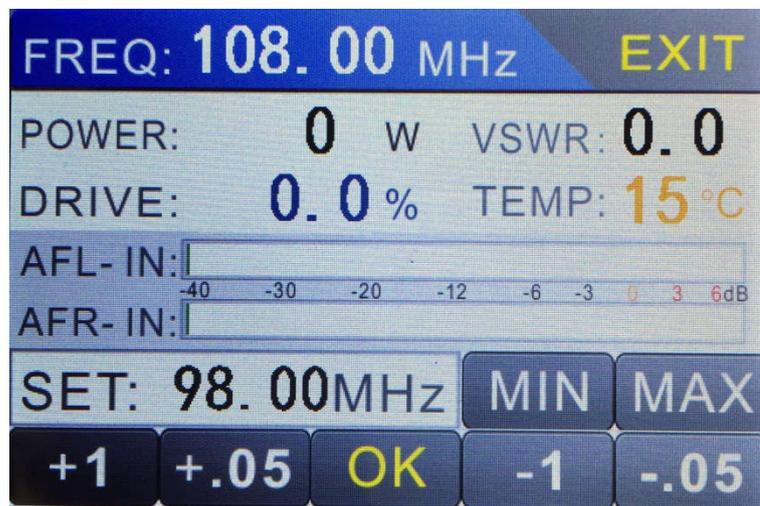
There are four options in this menu.

(1) Frequency setup



MANUAL is to set the frequency directly.

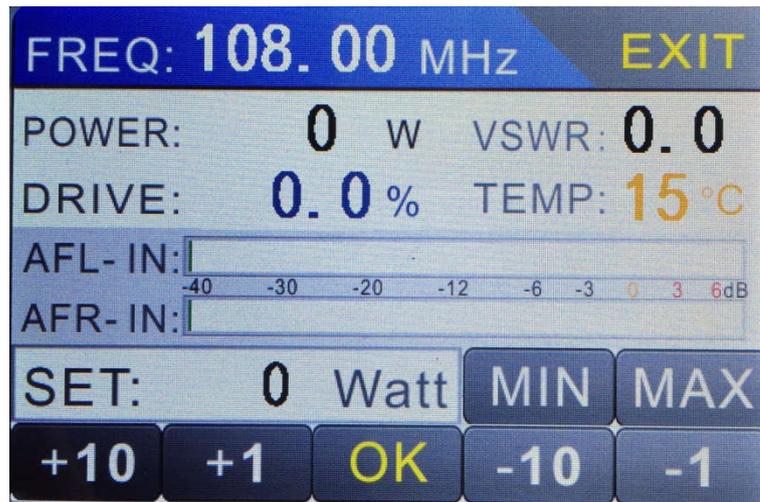
MATCH is to scan the frequency, find the best match frequency for antenna system.



In the manual mode, you may set the frequency by below buttons,

- +1**: increase 1MHz.
- +0.5**: increase 0.5MHz.
- 1**: reduce 1MHz.
- 0.5**: reduce 0.5MHz
- MIN**: set at 87.5MHz
- MAX**: set at 108MHz
- OK**: confirm the frequency that you set and exit.

(2) RF Power setup



The power can be set by below buttons,

**+10**: increase 10 watts.

**+1**: increase 1 watt.

**-10**: reduce 10 watts.

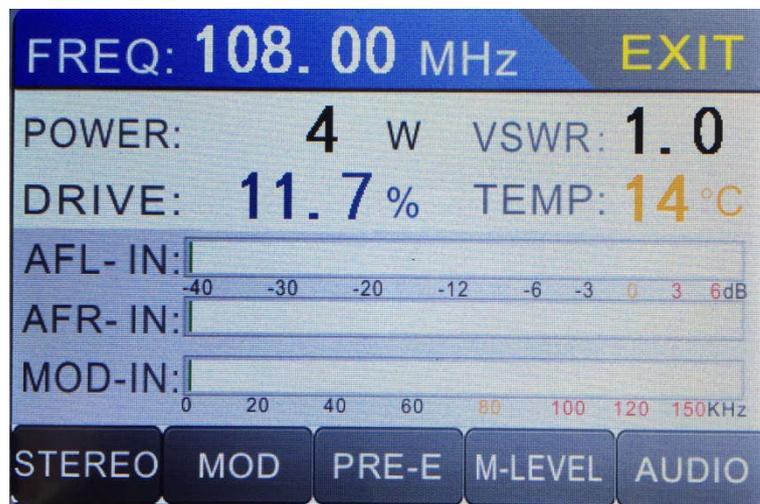
**-1**: reduce 1 watt.

**MIN**: set at 0 Watt

**MAX**: set at the rated power level.

**OK**: confirm the RF power that you set and exit.

(3) Modulations setup



Modulations parameters include:

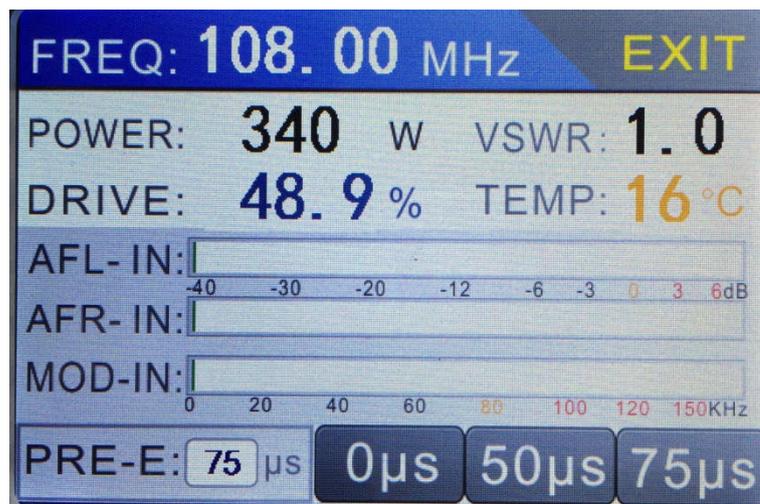
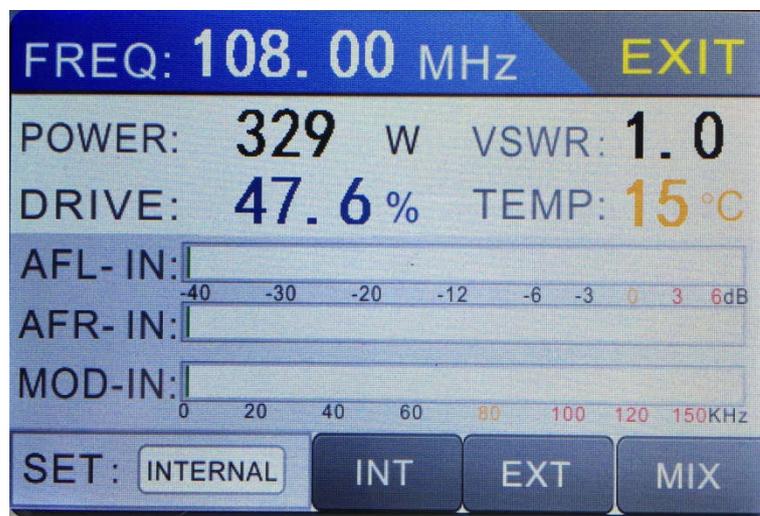
**STEREO**: Stereo mode, STEREO/MONO/MUTE

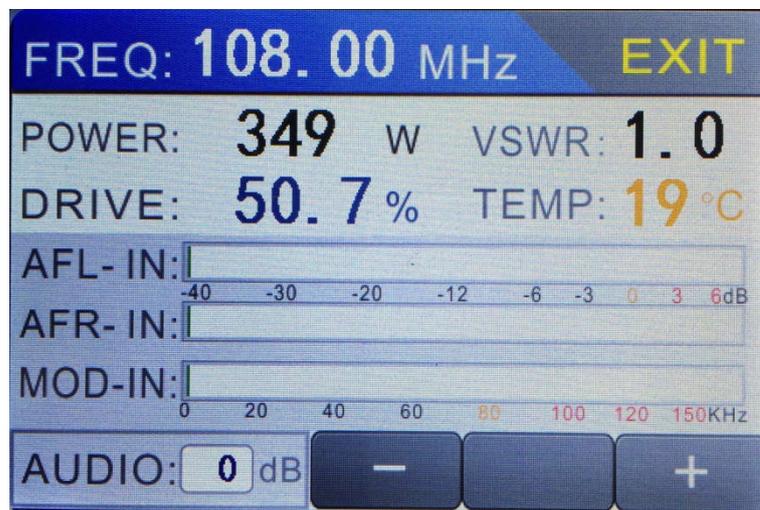
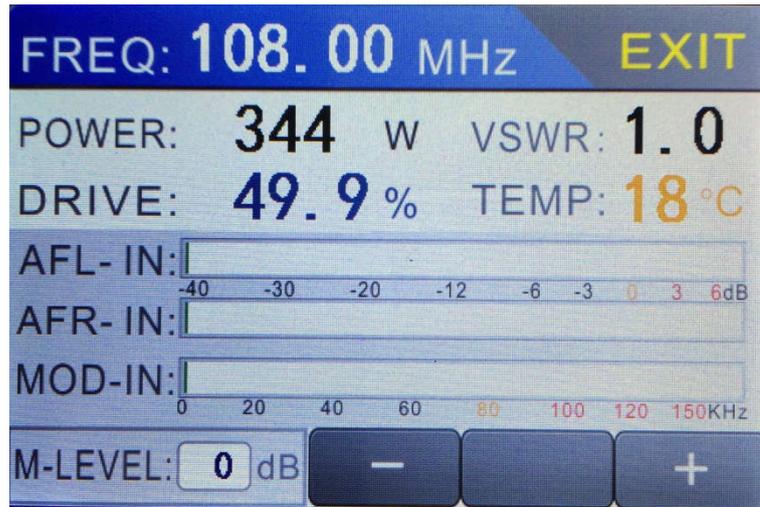
**MOD**: Internal modulations or External modulations

**PRE-E**: Pre-emphasis, 0 us / 50us / 75us

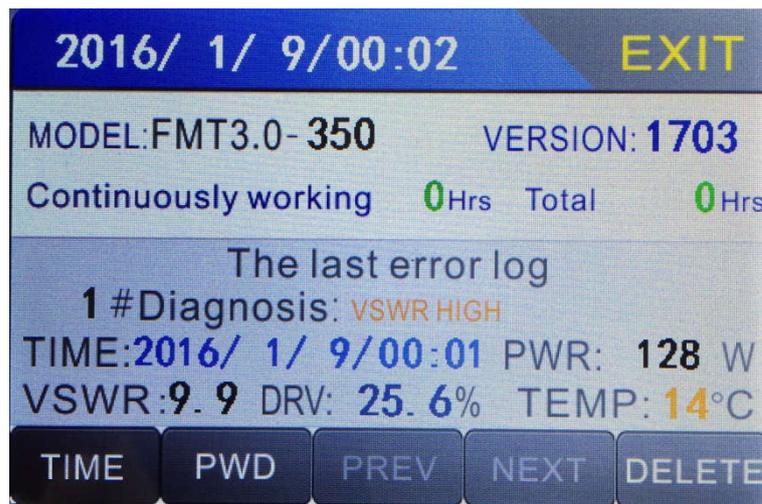
**M-LEVEL**: Modulations level, -9dB ~ +9dB

**AUDIO**: Audio gain, -9dB ~ +9dB





(4) System setup



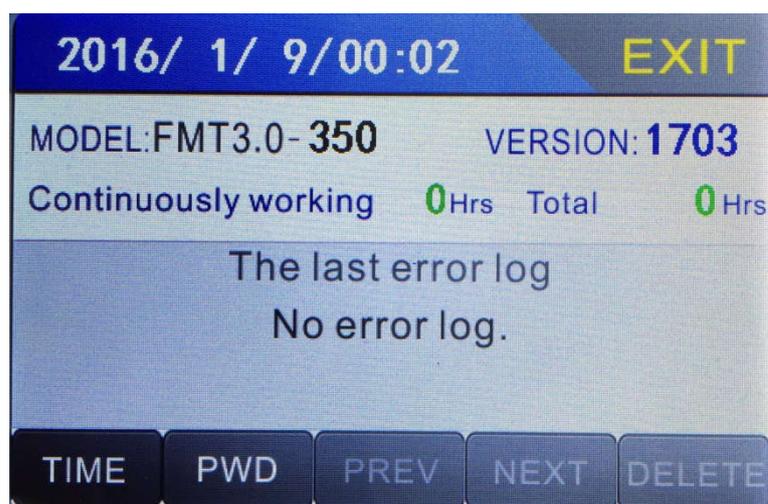
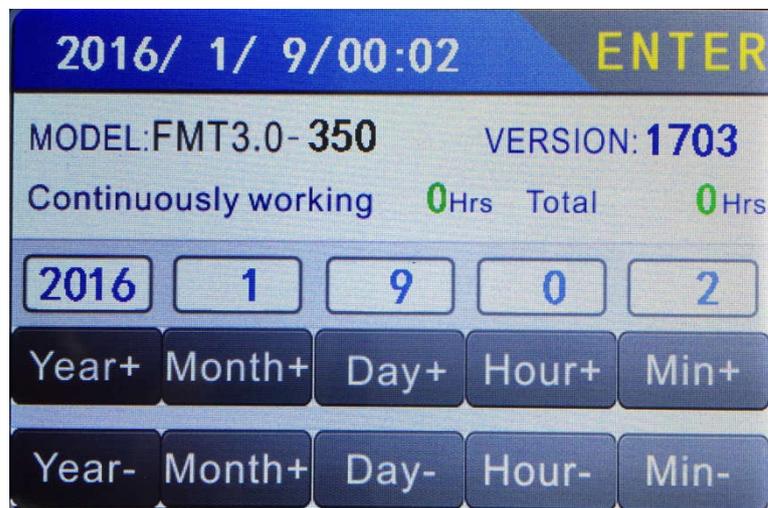
**TIME**: set the realtime

**PWD**: set the password or enable/disable the password.

**PREV**: Look over the previous fault record.

**NEXT**: Look over the next fault record.

**DELETE**: Delete fault record.



## TECHNICAL SPECIFICATIONS

- Power step: 1 watt (30W, step 0.1 watt)
- Frequency Range: 87.5MHz to 108MHz
- Frequency step: 100 KHz
- Modulation mode: WFM
- Tuning Design: Stable PLL Technology
- Frequency deviation:  $< \pm 75\text{KHz}$
- Harmonic: More than 65dB
- Frequency Stability:  $\pm 10 \text{ Ppm } (-10^\circ \text{ C to } +60^\circ \text{ C})$
- Parasitic amplitude: Less than 0.2%
- Frequency Response: 50 - 15000Hz
- SNR: More than 50dB
- Transmission Signal: FM Stereo or Mono
- Audio Input Level: -15db Max: -30db
- Audio Input Connect: RCA
- Stereo Separation: More than 40dB
- RF Output Impedance: 50 Ohm

## ABOUT US

We are a professional company focus on RF technology research and development, specialized in professional fm transmitter! Our fm transmitters are ideal equipments to build your own broadcast station, especially used in campus, factories, farms etc. Please be assured, we provide you after-all services and technical supports! Any questions can be sent to: [littleshirely@gmail.com](mailto:littleshirely@gmail.com).

WhatsApp: +86 18627319118

<https://www.108MHz.com>

<http://stores.ebay.com/Warner-RF-Center>

<https://www.facebook.com/WarnerFM/>

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