



PROCASTER FM TRANSMITTER

USER MANUAL USA



Table of contents

Introduction	1
Operation	2
Setup Tips	3
Audio Input	4
Mounting Options	5
Troubleshooting	6
Specifications	7
Regulatory	8
Warranty/Support/Contact	9

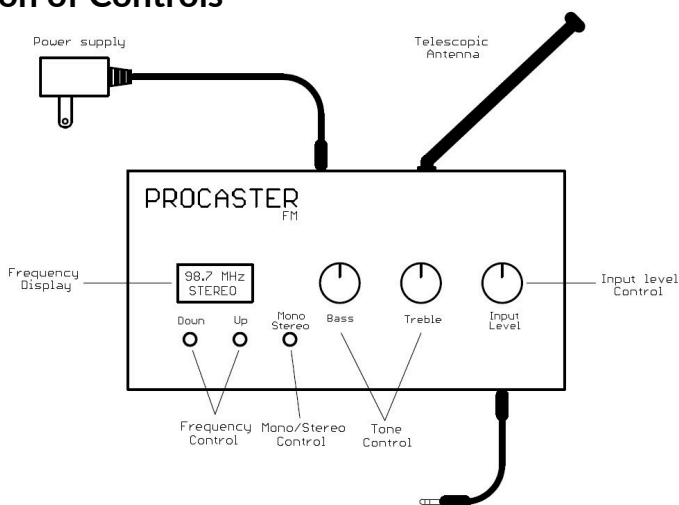
Introduction

Thank you for purchasing the Procaster FM transmitter. The Procaster FM is a professional grade, low noise FM transmitter capable of transmitting high quality stereo FM signals to any FM radio receiver.

Features

- Professional quality hi-fi sound
- DSP (digital signal processing) technology
- Backlit LCD frequency display with up/down control
- Frequency setting is retained when powered down
- Mono/stereo selector
- Bass and treble tone controls
- Input level control
- Front panel 3.5mm stereo line level input jack
- 635mm (25in) stainless steel directional telescopic antenna
- 12V AC or DC supply capable includes car battery operation
- FCC certified for unlicensed use
- Typical line of sight range is 75ft to 150ft or more
- Range is also dependent on receiver quality and a clear frequency

Location of Controls



Operation

1. The Procaster FM operates on 12VAC , 12VDC or 12V battery.
2. Extend the telescopic antenna fully.
3. Plug one end of the audio input cable into the input jack on the front panel and the other end into the output of your audio source. The Procaster FM audio level control automatically limits if the signal is too strong to prevent over-modulation. The INPUT LEVEL control should be adjusted by listening to the received signal on a FM receiver to ensure the sound is clear.
4. Find a clear FM frequency not being used and free from interference. Once that frequency is known, tune using the UP and DOWN buttons until the desired frequency is reached. Holding the buttons down will rapidly advance the frequency change. Frequency selection is retained even if power is removed.
5. Adjust the BASS and TREBLE controls to suit your listening preference.
6. Toggling the MONO/STEREO button selects between mono or stereo transmission as shown on the display.
7. Start with the antenna vertical and fully extended. Adjust the antenna as necessary to get the best reception.
8. Operate the transmitter away from other electrical devices and objects to maintain best performance. For best range, mount the Procaster FM higher up on a tripod or light stand using the standard tripod mount on the underside. There are also two keyhole slots on the underside to allow mounting on a vertical surface. Make sure the antenna is clear of any objects.
9. Availability of a clear frequency, weather conditions and the quality of the FM receiver will determine range achievable. Longer ranges will result in deterioration of signal quality.
10. When using outdoors, make sure the Procaster FM remains dry at all times.
11. The Procaster FM does not have a microphone input, only line level. For microphone operation, plug microphone into an external mixer/soundboard and run the line output of the mixer/soundboard to the input of the Procaster FM.

Setup Tips

For unlicensed use, the signal power allowed is low, therefore for best performance, it is better to mount the transmitter higher up. For example: to broadcast to cars in a parking lot, it would be best to mount the transmitter on a tripod stand and place the stand in the centre or as near as possible to the parked cars to ensure a strong signal to each listener.

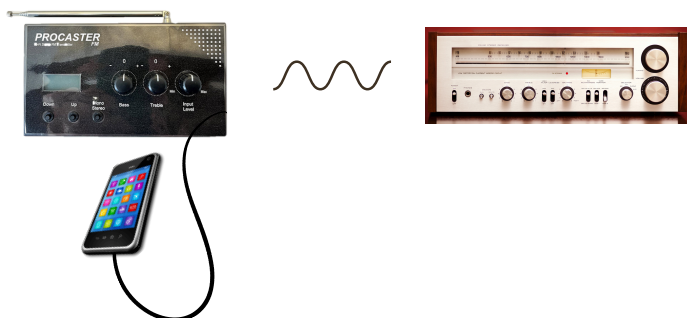
Inside buildings, it is better to locate the transmitter in the centre of the room away from concrete and steel and higher up to allow for line of sight directly to listeners receivers.

For best quality reception and longest range, switch to MONO transmission. Most receivers will automatically switch to mono if the signal is too weak.

The Procaster FM is not waterproof and must be protected from rain when used outside. For example, if setting up on a tripod to broadcast to parked cars for a church service, drape a plastic bag over the extended antenna and transmitter to prevent getting wet. The bottom of the bag can be closed using a twist tie.

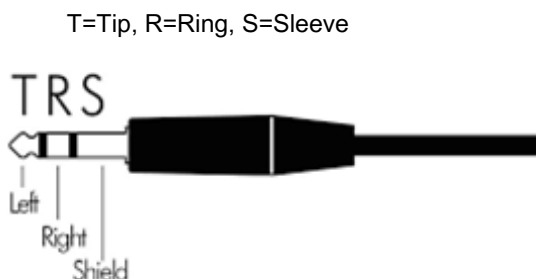
Hi-Fi Listening

The Procaster FM is ideal for high quality unprocessed listening of your favourite audio on your home stereo. Simply connect your audio source such as a smartphone to the Procaster input, choose an empty channel on the FM dial and tune the transmitter to that channel. Now you can listen to your favourite audio while conveniently being able to adjust volume and tone to suit your listening preference.



Audio Input

The line level unbalanced audio input jack has an input impedance of 10kohm and mates with a standard 3.5mm plug as follows:



Audio input sensitivity is approximately 300mV for full frequency deviation. The transmitter will automatically prevent splatter to adjacent channels irrespective of input level setting.

Smartphone

Connect the headphone output of the smartphone using the supplied 3.5mm audio cable to the transmitter input. Set the transmitter input level control midway and the smartphone level to maximum. Next, turn on the transmitter and adjust the input level until the desired sound is reached.

Mixer/Sound Board

Connect the mixer line output to the transmitter input. You may need an adapter cable (RCA plug to 3.5mm plug) or (1/4in plug to 3.5mm plug). Set the transmitter input level control midway. Next, turn on the transmitter and adjust the input level until the desired sound is reached.

Mounting Options

Choose from three versatile mounting options:

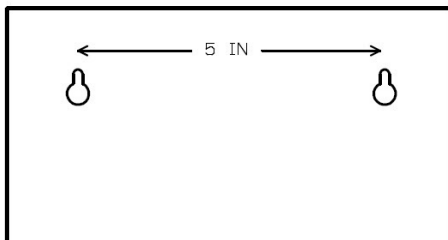
Table Top

Transmitter sits on bumpers on the underside.



Vertical Mount

Transmitter hangs on two keyhole slots spaced 5 in apart located on the underside. Keyholes are designed for #6 screw heads. Make sure nothing is near the antenna.



Tripod Mount

Transmitter screws onto standard tripod mounts.

Thread size is 1/4-20 and is located on the underside.

WARNING: To avoid possible damage, do not screw in more than 1/2 in!



Troubleshooting

Note: For unlicensed use, the regulatory authorities only permit low power resulting in limited range, that is why no broadcast license is required. To ensure maximum range and the clearest transmission possible, it is important to optimize your setup.

Check this list...

- Make sure the antenna is in the clear and not close to objects
- Line of sight is best for maximum range - try not to block the signal
- Choose a clear, unused FM channel in your area. May be challenging to find a clear channel in some urban areas
- Switch to MONO for best range and clearest reception
- To increase range:
 - Place the Procaster FM on a metal surface such as a vehicle roof or try lining a table or shelf with aluminum foil
 - Try using a better receiver
 - Mount the transmitter in a higher location like on a light stand or on the second story of a building near a window
- If broadcasting to cars in a parking lot, try to locate the transmitter in the centre of the parked cars, or if that is not practical, as close to the cars as possible
- Make sure the audio signal provided is of a sufficiently high level - at least 300mV
- Re-orient the antenna for the clearest signal

In the box

- Procaster FM transmitter
- Wall adapter power supply
- Audio input cable
- User manual (US)

Specifications

- Model: Procaster FM
- Frequency Response: 30Hz to 15kHz +/-1dB
- Total Harmonic Distortion: <0.1%
- Stereo Separation: 42dB typical
- Input sensitivity: 300mV
- Input impedance: 10kohm
- Bass/Treble Tone Control Range: +/-12dB @30Hz and 15kHz
- Tunable Frequency Range: 88.1 to 107.9MHz
- Frequency Step: 100kHz
- Power output: 250uV/m at 3m
- Pre-emphasis: 75us
- Controls: Input Level, Bass, Treble, Frequency Up/Down, Mono/Stereo
- Audio Input: 3.5mm Stereo Jack
- Power Input: 2.1mm jack 12VAC or 12VDC, 200mA
- Reverse power polarity protected
- Casing: 18 gauge black powder coat steel
- Dimensions: 165W x 92D x 36H (mm)
6.5W x 3.6D x 1.4H (in)
- Weight:: 600g
21oz
- Fixed Antenna: 635mm (25in) Stainless Steel
- USA Certification: FCC 15.239 (VCJ-FMTX200)
- Designed and made in Canada

Regulatory

USA Notice (Part 15.239) 250uV/m @ 3m FCC ID: VCJ-FMTX200

This device complies with Part 15 of the FCC rules. Operation of this device 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.

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

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

Warning

Unlicensed use of radio transmitters is a serious offence with hefty fines (see below). The Procaster FM has been FCC certified for unlicensed use and has an FCC ID number as proof of compliance.

Public Law No: 116-109 (01/24/2020) This bill addresses unlicensed radio broadcasting (called pirating), including by increasing to \$2 million the maximum fine for a pirate radio broadcasting violation and imposing a fine of up to \$100,000 per day for pirating violations subject to the \$2 million limit.

Warranty/Support/Contact

Warranty

Chezradio Inc. (the company) warrants to the original purchaser of this Procaster FM transmitter that should this transmitter be proven defective in material or workmanship within 1 (one) year from the date of original purchase, such defects will be repaired or replaced (at the company's option) without charge for parts or labour.

This warranty does not apply to a Procaster transmitter or part thereof which has been damaged through alterations, mishandling, misuse, neglect or accident.

The company is not responsible or liable for indirect, special or consequential damages arising out of or in connection with the use or performance of the Procaster FM transmitter or damages with respect to any economic loss, loss of revenues or profits, installation or other consequential damages of whatsoever nature.

Some provinces/states may or may not allow the exclusion or limitation of incidental or consequential damages. Accordingly, the above limitation may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from province/state to province/state.

Support

If you have any questions or issues with your Procaster FM transmitter, email us at: info@chezradio.com

Contact

 info@chezradio.com

 chezradio.com

