

C.CRANE

FM TRANSMITTER 2

Operating Instructions



**PLEASE READ ALL THE INSTRUCTIONS COMPLETELY BEFORE USE
AND SAVE THIS MANUAL FOR FUTURE REFERENCE.**



Before Use



Please read IMPORTANT SAFETY INSTRUCTIONS on pages 10 - 11 before use. It is important to read and understand all instructions.



This symbol is intended to alert you to the presence of uninsulated dangerous voltage within the product's enclosure that might be of sufficient magnitude to constitute a risk of electric shock. Do not open the product's case.

Warning: To reduce the risk of fire or shock hazard, do not expose this product to rain or moisture.



CAUTION

RISK OF ELECTRIC SHOCK.
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL



This symbol is intended to inform you that important operating and maintenance instructions are included in the literature accompanying this product.

For your future reference:

Serial No. _____

(found inside battery compartment)

Date of purchase _____

Name & address of dealer _____

Patent #US D483,024 S

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Included Accessories:

1. AC Adapter
2. Patchcord For Use With RCA Line Out

Optional Accessories:

FM Transmitter Cigarette Lighter Adapter
Item Code: FMDC

Power your FM Transmitter in your car or truck
with this Cigarette Lighter Adapter. \$10.00



Introduction

Thank you for purchasing the FM Transmitter. It transmits high-fidelity audio from any audio source such as a mobile phone, computer, or music player to any nearby FM radio. Superior engineering and construction techniques were used to bring you the highest quality FM transmitter possible. Digital tuning and Phase Locked Loop technology have been incorporated for FM band frequency coverage from 88.3 MHz to 107.7 MHz, with stability and superb audio quality.

Audio Sources

From a music player to a radio: Connect the plug that is attached to the FM Transmitter to the Line Out or headphone jack of the MP3 player. Tune your radio or car stereo to the transmitting frequency.

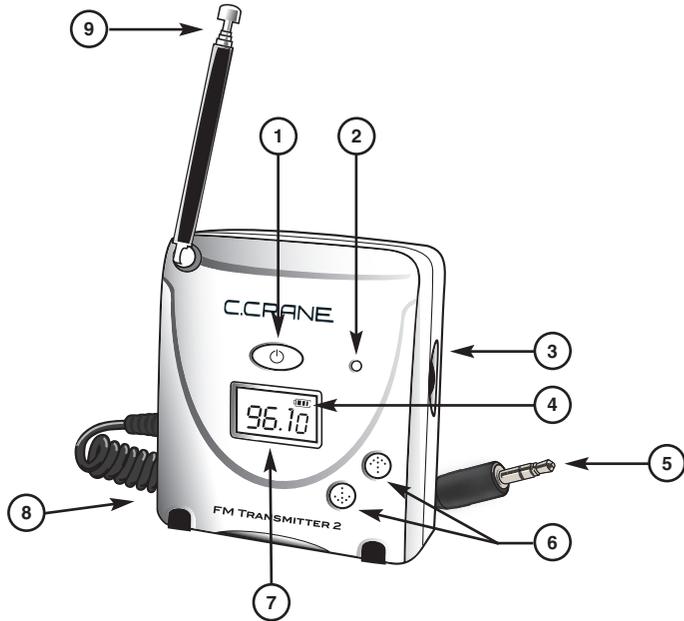
From your internet radio or computer to your home stereo: Connect the plug that is attached to the FM Transmitter to the headphone jack on your speakers or to the audio output of the computer's sound card. Tune your receiver to the transmitting frequency.

From a mobile phone to your car stereo: Connect the plug that is attached to the FM Transmitter to the Line Out or headphone jack of the phone. Tune your car stereo to the transmitting frequency.

From a portable radio to a pocket radio: Connect the plug that is attached to the FM Transmitter to the Line Out or headphone jack of your radio. Tune your pocket radio to the transmitting frequency.

This is sometimes good for office or warehouse environments where reception is only available in a window or other specific location.

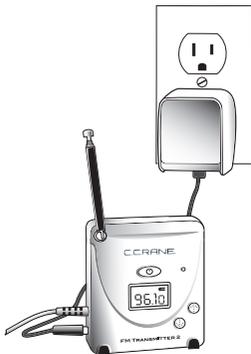
Location of Controls



Control Identification

- | | |
|---------------------------|-----------------------|
| 1) Power Button/Timer | 6) Up/Down Tuning |
| 2) Audio Input Indicator | 7) Frequency Display |
| 3) Input Level Control | 8) DC Input Jack |
| 4) Battery Strength Meter | 9) Telescopic Antenna |
| 5) 1/8" Audio Input Cable | |

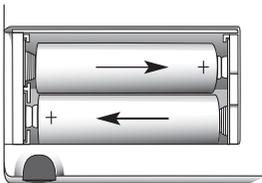
Connection to Power



The FM Transmitter 2 will operate on the included AC Adapter. It will also operate on two “AA” size Alkaline batteries (optional).

Battery Installation

1. Open the cover by pushing down on the textured tab firmly and pushing the cover off toward the side of the unit, the same direction the textured arrow is pointing.



2. Insert two “AA” batteries into the compartment as indicated in the drawing (at left). Be sure the negative (-) end is against the spring. Refer to the drawing to ensure correct battery installation. See page 5, #4 for location of Battery Strength Meter.

Tuning

To transmit audio from the FM Transmitter 2, it is best to find a clear FM frequency that is not being broadcast on and is free from interference.

1. To find an unused frequency in your area, you can go to www.radiolocator.com, click on “find unused frequencies” and enter your zip code and state. It will list vacant frequencies as “best”, “next best”, “third best”. You can also use a radio and scan through the entire FM band (using a digital radio will be easiest). Look for the largest gap in between stations. Once you find a gap, select a frequency located somewhere in the middle. Example: If there are no stations broadcasting between 90.1 - 93.5, select 91.5. Preferably there won't be a station broadcasting on either side of the frequency you have selected.
2. Now on your FM Transmitter 2, turn the power on. Use the Up or Down Tuning Arrows to select the same frequency as you have set on your radio. Hold the arrows down for faster tuning.
3. With the FM Transmitter 2 plugged into the radio, or other audio source, make sure you have adequate volume. The Audio Input Indicator LED will flash green in normal use. If the LED light rapidly flashes red or glows steadily red, it is indicating there is too much volume, causing distortion. Adjust the Input Level Control on the side of the unit or adjust the volume of your audio source until the Audio Input Indicator LED light goes back to flashing green. (See page 5 for location of controls.)



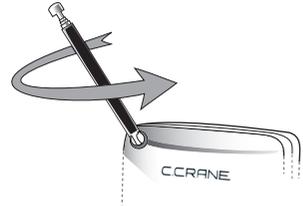
Notes On Tuning

If you are using an analog (needle and dial) radio, tune the transmitter to the general vicinity of where you think you are on your radio. Because you can't match the frequency exactly, you may need to fine tune your radio to the frequency. If you have a second radio to plug the FM Transmitter 2 into, you can tune the FM Transmitter 2 until you can get the clearest signal on your first radio.

Tuning (continued)

Antenna Orientation

Start with the antenna straight up and fully extended. You can then orientate the antenna to help transmit the signal a certain direction.



Tips To Make It Work Better

Location

Optimum placement for the FM Transmitter 2 is usually away from other electronic devices and objects. The higher the transmitter is located the better. The transmitter can be helped by placing it on something that will act as a ground plane like a metal filing cabinet or a refrigerator. Try moving it around for best performance.

Range is subject to many variables, including obstructions such as walls and FM signal overload in your area. The range of the FM Transmitter 2 is between 30 and 75 feet, line of sight with no obstructions.

Auto Shut-Off Timer

The “Auto Shut-Off” will not work until you activate it. Press and hold the Power Button until the words Auto-OFF appear in the display and the transmitter begins to cycle through the available shut-off times. You can choose from 1, 2, 3, 4 or 8 hour shut-off times. If you miss the time you want, just keep holding the Power Button down and it will start over. To select your time, let go of the button. Turning the power off and back on clears the Auto Shut-Off.

Trouble Shooting Guide

Audio is distorted:

Try adjusting the Input Level Control on the side of the FM Transmitter 2 (see page 7, #3). If that doesn't help, try adjusting the volume of your audio source.

No Audio:

- 1) Verify that the power on the FM Transmitter 2, your audio source, and your receiver are on.
- 2) Try adjusting the Input Level Control on the side of the FM Transmitter 2. If that doesn't help, try adjusting the volume of your audio source.
- 3) Check your cable and make sure it is connected to the right audio source (see page 4).
- 4) Check your frequency and make sure you are tuned to the correct frequency.

If none of the above options work, try the FM Transmitter 2 on another device.

Service Information

If your unit requires service, call C. Crane Company at 1-800-522-8863.

Safety Instructions

READ BEFORE OPERATING EQUIPMENT SAVE THESE INSTRUCTIONS

1. Read and understand all safety and operating instructions before the FM Transmitter 2 is operated.
2. Retain Instructions: The safety and operating instructions should be retained for future reference.
3. Heed Warnings: All warnings on this appliance and all operating instructions should be followed.
4. Water and Moisture: The FM Transmitter 2 should not be used near water. Do not use near a bathtub, washbowl, laundry tub, kitchen sink, wet basement, swimming pool, etc. Risk of electric shock may result. 
5. Unplug the FM Transmitter 2 from the DC Power Adapter before cleaning. Only use a damp cloth for cleaning the exterior surfaces of the transmitter.
6. Heat: Never put the FM Transmitter 2 in direct sunlight or behind glass such as a car's interior. The transmitter should be kept away from heat sources such as radiators, heat registers, stoves, or other appliances that produce heat.
7. DC Power Adapter: The DC Power Adapter should be positioned so it is not walked on, pinched, or items placed on top of it. All power and other cables should be routed away from walkways or areas of foot traffic to avoid being tripped on. Always unplug the DC Power Adapter by gripping the adapter unit and pulling it out of the wall socket. Never pull on the cord. Always operate the FM Transmitter 2 using the supplied DC Power Adapter. Adapters that are not correctly rated can damage the transmitter. If you are not sure of the correct DC Power Adapter, consult your dealer.
8. Never insert objects of any kind into the FM Transmitter 2 through openings. The objects may touch dangerous voltage points or short out parts, causing damage to the transmitter.

Safety Instructions

9. If the transmitter is stored for long periods of time, unplug it from the wall outlet and remove the batteries. This will prevent damage caused by lightning or power line surges and battery acid from old batteries leaking inside of the transmitter.
10. Never attempt to service the FM Transmitter 2 yourself. Removing the cover may expose you to dangerous voltage levels and will void the warranty. Refer all servicing to authorized service personnel.
11. The FM Transmitter 2 should be serviced by qualified service personnel when:
 - a) Objects have fallen or liquid has been spilled into the transmitter;
 - b) The transmitter has been exposed to rain;
 - c) The transmitter does not appear to operate normally or exhibits a marked change in performance; or
 - d) The transmitter has been dropped or the enclosure damaged.
12. If liquid leaks into the transmitter, do not turn it on. The interior of the transmitter must be fully dry or it will be damaged when power is applied.
13. The user should not attempt to service this transmitter beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel. The symbols on page 2 are to alert you to important operation or servicing instructions that may appear in the owner's manual.

Specifications

Dimensions

3" W x 3.5" H x 1" D

Weight

5.8 oz. without batteries

Frequency Coverage

88.3 MHz - 107.7 MHz

Frequency Response

40 Hz - 16,500 Hz

DC Input Jack

3-6V; center tip negative;
3.5mm male jack

AC Adapter

5V 100mA; center tip negative;
5.5 ft cord; 2.1mm female tip

Audio Input Cord

5 ft; stereo (extension cords are not recommended)

Patchcord

1/8 F X 2 RCA male; stereo; 1 cord

Battery Life

A fresh set of 2 "AA" alkaline batteries last 120+ hours

Note: Specifications are subject to change without notice.

Model: FM TRANSMITTER 2

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.

OPERATION 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 UNDESIRE OPERATION.

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