



# ***FTM-7250DR***

## **Operating Manual**

VHF/UHF DIGITAL/ANALOG TRANSCEIVER

**C4FM/FM**

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## Safety Precautions (Be Sure to Read)

### Be sure to read these important precautions, and use this product safely.

Yaesu is not liable for any failures or problems caused by the use or misuse of this product by the purchaser or any third party. Also, Yaesu is not liable for damages caused through the use of this product by the purchaser or any third party, except in cases where ordered to pay damages under the laws.

#### Types and meanings of the marks



#### **DANGER**

This mark indicates an imminently hazardous situation, which, if not avoided, could result in death or serious injury.



#### **WARNING**

This mark indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.




#### **CAUTION**


This mark indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury or only property damage.

#### Types and meanings of symbols



These symbols signify prohibited actions, which must not be done to use this product safely. For example:  indicates that the product should not be disassembled.



These symbols signify required actions, which must be done to use this product safely. For example:  indicates that the power plug should be disconnected.



## **DANGER**



**Do not use the device in "regions or aircrafts and vehicles where its use is prohibited" such as in hospitals and airplanes.**  
This may exert an impact on electronic and medical devices.



**Do not use this product while driving or riding a motorbike. This may result in accidents.**  
Make sure to stop the car in a safe location first before use if the device is going to be used by the driver.



**Do not operate the device when flammable gas is generated.**  
Doing so may result in fire and explosion.



**Never touch the antenna during transmission.**  
This may result in injury, electric shock and equipment failure.



**Do not transmit in crowded places in consideration of people who are fitted with medical devices such as heart pacemakers.**  
Electromagnetic waves from the device may affect the medical device, resulting in accidents caused by malfunctions.



**When an alarm goes off with the external antenna connected, cut off the power supply to this radio immediately and disconnect the external antenna from this radio.**  
If not, this may result in fire, electric shock and equipment failure.



**Do not touch any liquid leaking from the liquid display with your bare hands.**  
There is a risk of chemical burns occurring when the liquid comes into contact with the skin or gets into the eyes. In this case, seek medical treatment immediately.



## **WARNING**



**Do not use voltages other than the specified power supply voltage.**  
Doing so may result in fire and electric shock.



**Do not transmit continuously for long periods of time.**  
This may cause the temperature of the main body to rise and result in burns and failures due to overheating.



**Do not dismantle or modify the device.**  
This may result in injury, electric shock and equipment failure.



**Do not handle the power plug and connector etc. with wet hands. Also do not plug and unplug the power plug with wet hands.**  
This may result in injury, liquid leak, electric shock and equipment failure.



**When smoke or strange odors are emitted from the radio, turn off the power and disconnect the power cord from the socket.**  
This may result in fire, liquid leak, overheating, damage, ignition and equipment failure. Please contact our company amateur customer support or the retail store where you purchased the device.





**Keep the power plug pins and the surrounding areas clean at all times.**  
This may result in fire, liquid leak, overheating, breakage, ignition etc.





**Disconnect the power cord and connection cables before incorporating items sold separately and replacing the fuse.**  
This may result in fire, electric shock and equipment failure.


## Safety Precautions (Be Sure to Read)


 **Never cut off the fuse holder of the DC power cord.**  
This may cause short-circuiting and result in ignition and fire.


 **Do not use fuses other than those specified.**  
Doing so may result in fire and equipment failure.


 **Do not allow metallic objects such as wires and water to get inside the product.**  
This may result in fire, electric shock and equipment failure.


 **Do not place the device in areas that may get wet easily (e.g. near a humidifier).**  
This may result in fire, electric shock and equipment failure.


 **When connecting a DC power cord, pay due care not to mix up the positive and negative polarities.**  
This may result in fire, electric shock and equipment failure.


 **Do not use DC power cords other than the one enclosed or specified.**  
This may result in fire, electric shock and equipment failure.


 **Do not bend, twist, pull, heat and modify the power cord and connection cables in an unreasonable manner.**  
This may cut or damage the cables and result in fire, electric shock and equipment failure.

 **Do not pull the cable when plugging and unplugging the power cord and connection cables.**  
Please hold the plug or connector when unplugging. If not, this may result in fire, electric shock and equipment failure.

 **Refrain from using headphones and earphones at a loud volume.**  
Continuous exposure to loud volumes may result in hearing impairment.


 **Do not use the device when the power cord and connection cables are damaged, and when the DC power connector cannot be plugged in tightly.**  
Please contact our company amateur customer support or the retail store where you purchased the device as this may result in fire, electric shock and equipment failure.


 **Follow the instructions given when installing items sold separately and replacing the fuse.**  
This may result in fire, electric shock and equipment failure.


 **Do not use the device when the alarm goes off.**  
For safety reasons, please pull the power plug of the DC power equipment connected to the product out of the AC socket.  
Never touch the antenna as well. This may result in fire, electric shock and equipment failure due to thunder.





## CAUTION


 **Do not place this device near a heating instrument or in a location exposed to direct sunlight.**  
This may result in deformation and discoloration.


 **Do not place this device in a location where there is a lot of dust and humidity.**  
Doing so may result in fire and equipment failure.


 **Stay as far away from the antenna as possible during transmission.**  
Long-term exposure to electromagnetic radiation may have a negative effect on the human body.


 **Do not wipe the case using thinner and benzene etc.**  
Please use a soft and dry piece of cloth to wipe away the stains on the case.


 **Keep out of the reach of small children.**  
If not, this may result in injuries to children.


 **Do not put heavy objects on top of the power cord and connection cables.**  
This may damage the power cord and connection cables, resulting in fire and electric shock.


 **Do not transmit near the television and radio.**  
This may result in electromagnetic interference.


 **For safety reasons, switch off the power and pull out the DC power cord connected to the DC power connector when the device is not going to be used for a long period of time.**  
If not, this may result in fire and overheating.


 **When using the device in a hybrid car or fuel-saving car, make sure to check with the car manufacturer before using.**  
The device may not be able to receive transmissions normally due to the influence of noises from the electrical devices (inverters etc.) fitted in the car.


 **Do not throw or subject the device to strong impact forces.**  
This may result in equipment failure.


 **Do not put this device near magnetic cards and video tapes.**  
The data in the cash card and video tape etc. may be erased.


 **Do not turn on the volume too high when using a headphone or earphone.**  
This may result in hearing impairment.


 **Do not use optional products other than those specified by our company.**  
If not, this may result in equipment failure.

 **Do not place the device on an unsteady or sloping surface, or in a location where there is a lot of vibration.**  
The device may fall over or drop, resulting in fire, injury and equipment failure.

 **Do not stand on top of the product, and do not place heavy objects on top or insert objects inside it.**  
If not, this may result in equipment failure.

 **Do not use a microphone other than those specified when connecting a microphone to the device.**  
If not, this may result in equipment failure.

 **Do not touch the heat radiating parts.**  
When used for a long period of time, the temperature of the heat radiating parts will get higher, resulting in burns when touched.

 **Do not open the case of the product except when replacing the fuse and when installing items sold separately.**  
This may result in injury, electric shock and equipment failure.

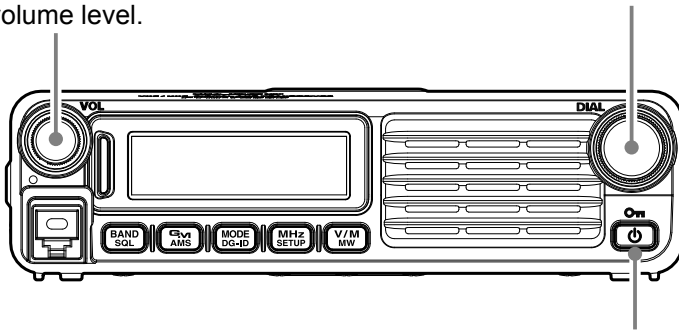
## FTM-7250DR Quick Reference Guide

### ② VOL Knob

Adjusts the audio volume level.

### ③ Frequency DIAL Knob

Selects the operating Frequency.

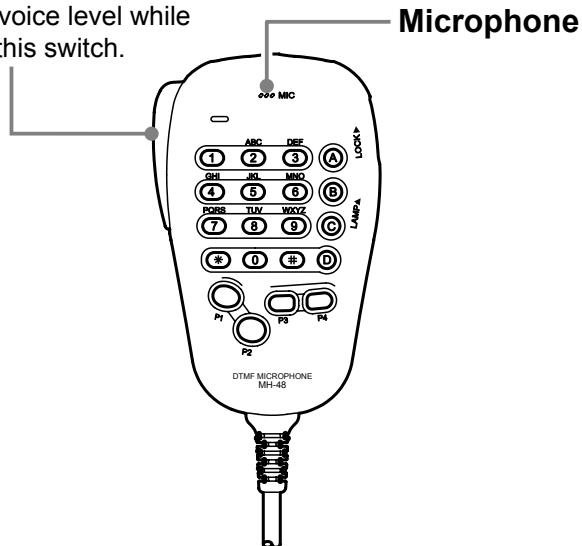


### ① Power Switch

Press and hold for one second.

### ④ Transmission Switch

Speak into the microphone in a normal voice level while pressing this switch.



## Introduction

### Features of this radio

- 430 MHz mobile radio, equipped with a C4FM communication modem.
- 50 Watts of power output, with selection of three power levels for every operating situation.
- Clear audio and data communication is achieved using the C4FM modem functions.
- Expanded receiver coverage: 420-470 MHz.
- With the GD-ID (Digital Group ID) feature, the Group Monitor (GM) feature enables automatically locating, and communicating with other stations that have the same DG-ID number within contact range, by utilizing a matching group ID number from 00 to 99.
- The Digital Personal ID (DP-ID) feature supports communication specifically with transceivers registered with the individual ID information. The DP-ID is different for each transceiver and is included in each C4FM transmission.
- Easily connect with the WIRES-X linking system.
- Keyboard entry of operating frequencies from the microphone.
- 220 memories (199 “basic” memory channels, 10 sets of band-edge memory channels, and one “Home” channel) which can store repeater shifts, odd repeater shifts, CTCSS/DCS tones, and 8-character Alpha-Numeric labels for easy channel recognition.
- Built-in CTCSS and DCS Encoder/Decoder circuits.
- Extensive Menu system, which allows customization of a number of transceiver performance characteristics.
- Equipped with the GM (Group Monitor) function.

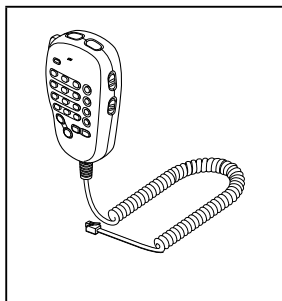
Additional features include a transmit Time-Out-Timer (TOT), Automatic Power-Off (APO), and Automatic Repeater Shift (ARS). Also included is an RF Squelch circuit that allows the owner to set the squelch to open at a programmed setting of the S-Meter, thus reducing guesswork in setting the squelch threshold.

Congratulations on your purchase of the FTM-7250DR! Whether this is your first rig, or if Yaesu equipment is already the backbone of your station, the Yaesu organization is committed to ensuring your enjoyment of this high-performance transceiver. It should provide you with many years of satisfying operation. Our dealer network and technical support personnel stand behind every product we sell, and we invite you to contact us should you require technical advice or assistance.

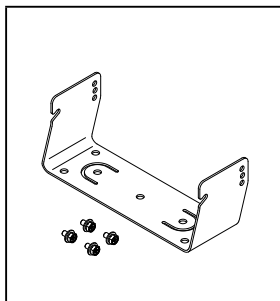
We recommend that you read this manual in its entirety prior to installing the FTM-7250DR, so that you fully understand the capabilities of your new transceiver.

## Accessories & Options

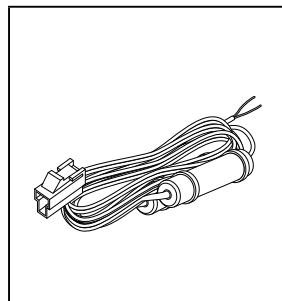
### Supplied Accessories



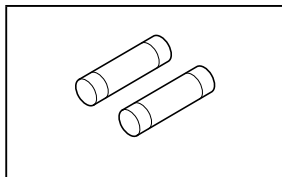
DTMF Microphone  
MH-48A6JA



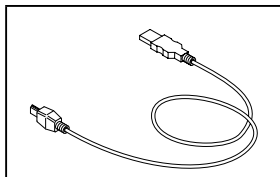
Mobile Mounting Bracket  
(Attachment screw set)



DC power cable w/Fuse



Spare fuse (15 A)



USB cable

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### Optional Accessories

MH-42C6J	Microphone
MH-48A6JA	DTMF Microphone
MLS-100	High-Power External Speaker
FP-1030A	AC Power Supply (USA market only)

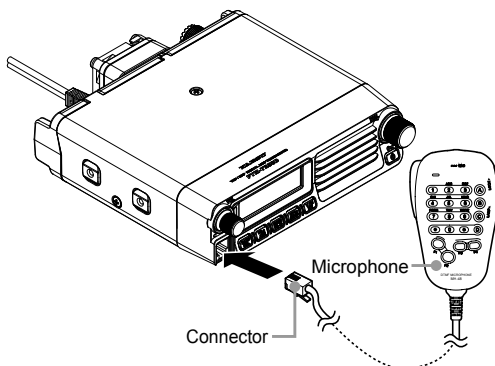
## Installation

### Connecting the Microphone

Connect the supplied MH-48A6JA microphone to the FTM-7250DR.

Plug the microphone connector into the MIC jack on the front panel until it clicks.

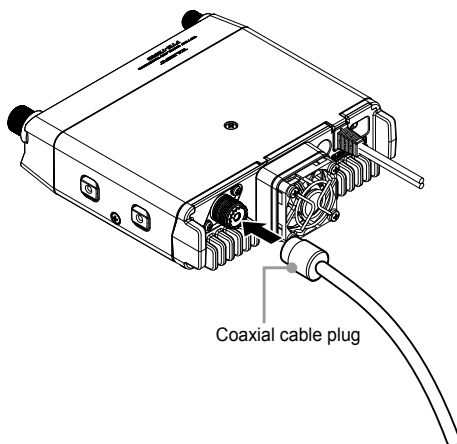
**Note:** When disconnecting the microphone, pull the cable while pressing the connector latch.



### Connecting the Antenna

Connect the coaxial cable to the body.

Plug the coaxial cable jack into the ANT terminal on the rear panel of the body, then rotate and tighten it.





## Installation

### Mobile Installation

The FTM-7250DR must only be installed in vehicles having a 13.8 Volt negative ground electrical system. Mount the transceiver where the display, controls, and microphone are easily accessible, using the supplied mounting bracket.

The transceiver may be installed in almost any location, but should not be positioned near a heating vent nor anywhere where it might interfere with driving (either visually or mechanically).

Make sure to provide plenty of space on all sides of the transceiver so that air can flow freely around the radio's case. Refer to the diagrams showing proper installation procedures.

