

# Outstanding Mobile Voice Communications with Advanced C4FM Digital Performance

C4FM/FM 50W  
VHF/UHF Digital AMS Transceiver

## **FTM-7250D**

FTM-7250DR: for USA, Asia and Australia  
FTM-7250DE: for Europe



(Actual Size)

# High-Performance & High-Operability

*System Fusion-II*

Large LED  
AMS & Mode Indicator  
AMS: Automatic Mode Select

System Fusion-II  
Compatible

C4FM Digital  
and  
Conventional FM modes

3W Powerful & Clear Audio  
with  
Front Speaker

True 50W  
High Power Transmitter  
with  
FACC: Funnel Air-Convection  
Conductor (Wind Tunnel)

Sophisticated Digital-  
Group-ID (DG-ID)  
Operation



**C4FM**  
Digital Clear Voice  
Clear and Crisp Voice Technology

**AMS**  
Automatic Mode Select

**WRES-X**

C4FM/FM 50W  
VHF/UHF Digital AMS Transceiver

## FTM-7250D

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FTM-7250DE: for Europe

Supplied Accessories:  
DTMF Microphone MH-48A6JA, Mobile Mounting Bracket,  
USB Cable and DC Power Cable included



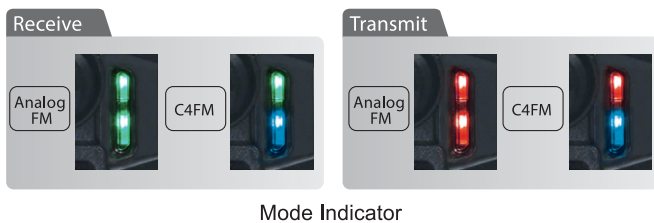
## C4FM Digital & Conventional FM Modes

Both the advanced C4FM Digital modes, and conventional FM operation are available. C4FM has better BER (Bit Error Rate) characteristics compared to other Digital modulation systems, and permits stable long-distance communications. The C4FM digital modulation provides exceptional audio quality.

## AMS with Multi-colored LED Mode-Indicator Effortless FM and C4FM Operation

Compatible FM analog and digital operation is made possible by AMS (Automatic Mode Select)

AMS (Automatic Mode Select) automatically recognizes the received signal as C4FM Digital or conventional FM, and switches the receiver to the appropriate mode. The AMS function enables hassle-free operation by removing the need to manually switch between modes. The Mode indicator shows the Transmit/Receive mode at a glance.



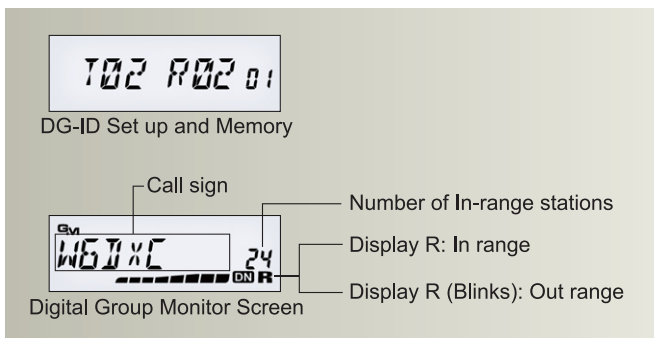
## System Fusion-II Compatible

### Enhanced Digital Group ID Feature

Digital-Group-ID (DG-ID), in the C4FM digital Mode, can be easily configured by each group member to facilitate communications between the specific group participants. The Group Monitor function automatically alerts the user when group members are within communication range.

### DG-ID Memory Feature

DG-ID memory can store up to 10 DG-ID pairs with alpha tags. The registered DG-ID numbers in the memory can quickly be recalled, using the P1/P2 keys on the supplied DTMF microphone.

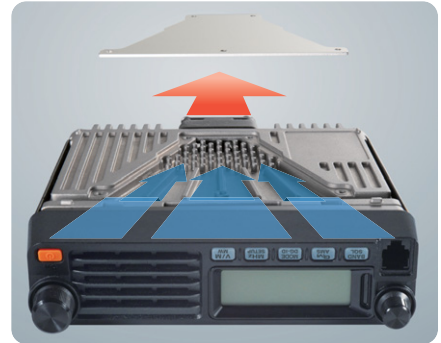


## 225 Memory Channels with 8-character Alpha-numeric Tags

The FTM-7250D makes available a wide variety of memory resources, including 199 "Basic" memories, six "Home" channels for favorite frequencies and 10 sets of band-edge memories. The channel TAGs are programmable with 8 alpha-numeric characters for easy recognition.

## 50 Watts (VHF and UHF) Stable High-Power Output with FACC

The compact VHF/UHF Mobile Transceiver offers the Yaesu legendary mechanical toughness and stable high output power. The FACC: Funnel Air-Convection Conductor (Wind Tunnel) gathers cool air through the wide open front air intake and directs it to the final amplifier area and out the rear cooling fan. This efficient cooling system ensures stable output power for sustained long-distance communications.



FACC: Funnel Air-Convection Conductor (Wind Tunnel)

## 3W Loud Front Speaker

The front facing speaker provides 3 watts of loud audio. The FTM-7250D speaker audio has been tuned for improved sound quality. The optional Yaesu MLS-100 external speaker is available for use in noisy field operations.



3 Watts (35 x 58mm) Front Speaker

## User-Programmable Microphone Keys

Four Programmable keys (P1-P4) on the microphone allow one-touch access to favorite command functions. The microphone function commands replicate the corresponding front panel functions.

### Available Key Functions:

- Recall HOME channel
- Scan operation
- Set the TX Power
- Open the Squelch
- WX channel access<sup>\*2</sup>
- Select communication Mode (D/A)
- Activate the Group Monitor function
- DG-ID registration and Recall<sup>\*1</sup>
- WIRES-X Node access
- Quick access of the Setup Menu

<sup>\*1</sup> Fixed the functions as P1/P2 key

<sup>\*2</sup> Only for US version

## Advanced Features

- Keypad entry of operating frequencies from the Microphone
- Versatile Scan features: Preferential Memory Scan, Programmable memory scan, VFO scan, Priority Channel Scanning (Dual watch), and Weather Alert Scan: (USA version only)
- Supports WIRES-X communications (Not functional as a WIRES-X Node Station)
- Memory Only operating mode
- CTCSS (50 tones) and DCS (104 codes) Encode/Decode, with split Tone and DCS Encode-only capability
- Split Memory (TX/RX separate frequency Memory)
- RF Squelch
- DTMF Auto dialer
- Automatic Repeater Shift
- Mini USB Data jack for Software updates.

## Convenient Features

- EPCS (Enhanced Paging & Code Squelch) Operation
- Microphone Gain Setting
- Adjustable TX Deviation Level
- DC Voltage Indication
- Temperature Display
- Display Illumination Adjustment
- Automatic Power Off (APO)
- Time Out Timer (TOT)
- Busy Channel Lock-Out (BCLO)
- Weather Broadcast Reception (US version only)
- Severe Weather Alert Feature (US version only)
- Band Edge Beeper
- CTCSS / DCS Bell Operation
- DCS Code Inversion
- Lock Feature
- Cloning

Specifications	
<b>General</b>	
Frequency Range:	
Band RX:	108 - 579.995MHz (108 - 137MHz: Airband)
TX:	144 - 148 (146MHz) (Depends on the transceiver version) 430 - 450 (440MHz) (Depends on the transceiver version)
Channel Steps:	5, 6.25, (8.33)*1, 10, 12.5, 15, 20, 25, 50, 100kHz
Frequency Stability:	±2.5ppm -4°F to +140°F (-20°C to +60°C)
Emission Type:	F2D, F3E, F7W
Supply Voltage:	Nominal 13.8VDC, Negative Ground Operating 11.7 - 15.8VDC, Negative Ground
Current Consumption:	less than 0.5A (Receive) 10A (TX, 50W), 6A (TX, 25W), 3A (TX, 5W)
Operating temperature:	-4°F to +140°F (-20°C to +60°C)
Case Size (W×H×D):	6.1" × 1.7" × 5.7" (155 × 42 × 145.5mm) without Knobs and Fan
Weight (Approx.):	2.86lbs (1.3kg)
<b>Transmitter</b>	
RF Power Output:	50W / 25W / 5W
Modulation Type:	F2D, F3E: Variable Reactance Modulation F7W: 4FSK (C4FM)
Maximum Deviation:	±5kHz (Wide) / ±2.5kHz (Narrow)
Spurious Emission:	At least 60dB down
<b>Receiver</b>	
Circuit Type:	Double-Conversion Super-heterodyne
Intermediate Frequencies:	1st: 47.25MHz 2nd: 450kHz
Sensitivity:	1.5µV TYP for 10dB SN (108 - 137MHz, AM) 0.16µV for 12dB SINAD (137 - 174MHz, NFM) 1µV for 12dB SINAD (174 - 222MHz, NFM) 0.5µV for 12dB SINAD (300 - 350MHz, NFM) 0.2µV for 12dB SINAD (350 - 400MHz, NFM) 0.18µV for 12dB SINAD (400 - 470 MHz, NFM) 0.35µV for 12dB SINAD (470-579.995 MHz, NFM) 0.19µV TYP for BER 1% Digital mode
Selectivity:	NFM, AM 12kHz/28kHz (-6dB/-60dB)
AF Output:	3W (4Ω, THD10%, 13.8V)
*1 8.33kHz: Only for Air band	

Options				
				
DTMF Microphone <b>MH-48A6JA</b> *2	Normal Microphone <b>MH-42C6J</b>	AC Power Supply (25A) <b>FP-1030A</b> *3	AC Power Supply (23A) <b>FP-1023</b> *4	High-Power External Speaker <b>MLS-100</b>

\*2 The same as the supplied Accessory \*3 US and Asian versions only \*4 US version only

About this brochure: We have made this brochure as comprehensive and factual as possible. We reserve the right, however, to make changes at any time in equipment, optional accessories, specifications, model numbers, and availability. Precise frequency range may be different in some countries. Some accessories shown herein may not be available in some countries. Some information may have been updated since the time of printing; please check with your Authorized Yaesu Dealer for complete details.

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