

# The Totally New - Advanced Dual Band Mobile Radio GPS / APRS® / Bluetooth® Features

144/(220)\* /430 MHz 50 W FM Dual Band Transceiver

## FTM-350R

\*220 MHz 1W (USA Version only)



- 5.2"x1.6" (130x40 mm) Large dot matrix (264x64 dots) LCD display for comfortable viewing - night or day. Choose your favorite LCD display from 8 vibrant color options.
- The Ultimate Mobile Communications Tool is packed with the latest advanced communications technology, including a multi-purpose Global Positioning System display, APRS®, Bluetooth®, Event Timer functions, simultaneous Dual Band Receive, and Full-Duplex operation.
- Incredibly flexible Dual Band Display. You can easily set your own individual preference for Dual Receive and Full-Duplex operation.
- 50 Watts of Reliable Power on both 2 m and 70 cm 220 MHz 1W (USA Version)
- Numerous useful displays are available with the optional FGPS-1 GPS Receiver and Antenna. (Optional FGPS-2 External GPS Receiver and Antenna + CT-133 (cable) + CT-136 (adapter) are also available.)



(Optional)

- Compatible with various APRS® information and functions - Receive WX info from other APRS® weather stations, exchange messages (max 67 characters) using the APRS® function, etc.



- SmartBeaconing™ from HamHUD Nichetronix.
- High-speed Band Scope for rapidly checking band activity.



- Built-in Dual Speakers on the rear of the Control Head with Independent Volume Controls for maximum flexibility.
- Optional Voice Guide Unit FVS-2 speaks your operating frequency and records received signals.
- 1200 / 9600 bps packet port (8-pin mini DIN)
- The Display Control Head is designed for easy separation from the main RF Power Unit - 10 ft control cable included. (Optional 20 ft control cable available.)
- Yaesu's renowned high quality Die Cast Aluminum Chassis design allows stable continuous high power operation when you need it most.

- Wideband RX:  
L-band: 0.5 MHz – 1.7 MHz (AM Broadcast band)  
76 MHz – 108 MHz (FM Broadcast band)  
108 MHz-250 MHz / 300-1000MHz  
R-band: 108-250 MHz, 300 MHz-1000 MHz  
(USA : Cellular Blocked)

- Built-in stereo decoder for FM Broadcast: Listen to FM Broadcast in Stereo with dual speakers on the rear of the control head!
- "Line In" input permits playing your favorite stereo music from other devices.



Dual speakers (Control Head - backside)

- Optional FPR-1 Monitor Unit receives your transmission out to about 1,000 ft (300 m) depending on transmit power and other conditions. Give to others to hear your transmissions during emergencies, special events, and so many other operations so that they can follow the situation.



FPR-1  
Monitor Unit

- Available to display your friend APRS® stations (FTM-350R and VX-8R) with their directions, distances and other info.
- Huge memory channel management capability! 500 Independent memory channels with memory name tag function (up to 8 characters) for each L and R band (1000 channels total), + 9 PMS (Programmable Band Limit Memory Scan) channels for each L and R band (18 channels in total), + a rewritable preferred channel for each L and R band, + 31 channels specifically allocated for the Smart Search function.
- DTMF Autodial (Memory) Feature: 16 digits/9 memories.
- Built-in Barometric Pressure Sensor - The radio can monitor and display your altitude and pressure.
- Easier Menu setup - Menu items are associated with the various operations for easier and faster setup modifications.



- Bluetooth® Capabilities - The optional Bluetooth Unit (BU-1) provides hands-free radio operation with the optional Bluetooth headset BH-1A (stereo) or BH-2A (monaural).
- The front panel Built-in Microphone activates PTT transmission. (MH-48A6JA / conventional hand microphone with DTMF included)

\* APRS® is a registered trademark of Bob Brunninga WB4APR. The FTM-350R has not been approved by the FCC. This device may not be sold or leased, or offered for sale or lease, until FCC approval has been obtained.

144/(220)\* /430 MHz 50 W FM Dual Band Transceiver

# FTM-350R

\*220MHz 1W (USA Version only)



Actual Size

Control Head Rear Panel



← New Suction Cup Mounting Bracket

Rear Panel



### Specifications

<b>General</b> Frequency Ranges Radio 0.5-1.8 MHz (AM Radio) 76-108 MHz (FM Radio) A / B Band RX 108-137 MHz (Air Band) 137-174 MHz (144 MHz HAM) 174-250 MHz (GR1 VHF TV) 300-420 MHz (GR2) 420-470 MHz (430 MHz HAM) 470-800 MHz (GR1 UHF TV) 800-1000 MHz (GR2 USA Cellular Blocked) TX 144-146 (148) MHz (Ham Band) 222-225 MHz (Type USA) 430-440 (450) MHz (Ham Band) Channel Steps 5, 6.25, 8.33, 10, 12.5, 15, 20, 25, 50, 100, 200 kHz Frequency Stability ±5 ppm (14°F to +140°F [-10°C to +60°C]) Repeater Shift ±600 kHz (144 MHz) ±1.6 / 5.0 / 7.6 MHz (430 MHz) Emission Type F1D, F2D, F3E, Antenna Impedance 50 Ω Supply Voltage Nominal 13.8 V DC, Negative Ground Operating 11.7~15.8 V, Negative Ground Current Consumption 0.5 A (Receive) 10 A (TX, 144 MHz 50W) 10 A (TX, 430 MHz 50W)		Operating Temperature -4°F to +140°F (-20°C to +60°C) Case Size (WxHxD) 6.3" x 2.6" x 1.3" (157 x 66 x 33.5 mm) (Panel W/O knob & connectors) 5.6" x 1.8" x 6.0" (140 x 46 x 150 mm) (Rear chassis W/O connectors) Weight 4.6 lbs (2.1 kg) <b>Transmitter</b> RF Power Output 50 / 20 / 5 W Modulation Type Variable Reactance F1D, F2D, F3E Maximum Deviation ±5 kHz Spurious Emission At least 60 dB below Microphone Impedance 2 kΩ <b>Receiver</b> Circuit Type FM / AM Double-Conversion Super heterodyne Intermediate Frequencies 1st: 47.25 MHz (A Band) 2nd: 450 kHz (A Band) 1st: 44.85 MHz (B Band) 2nd: 450 kHz (B Band) Circuit Type WFM Triple-Conversion Super heterodyne 1st: 45.8 MHz (A Band) 1st: 44.0 MHz (B Band) 2nd: 10.7MHz 3rd: 1 MHz (A Band) 3rd: 400 kHz (B Band)		Circuit Type Radio Single-Conversion Super heterodyne Intermediate Frequencies 1st: 130 kHz FM Radio 1st: 50 kHz AM Radio Sensitivity Radio Band 5 μV TYP for 10 dB SN (0.5-1.7 MHz, AM) 2 μV TYP for 12 dB SINAD (76-108 MHz, WFM) L & R Band 0.8 μV TYP for 10 dB SN (108-137 MHz, AM) 0.2 μV for 12 dB SINAD (137-140 MHz, FM) 0.2 μV for 12 dB SINAD (140-150 MHz, FM) EXP 0.25 μV for 12 dB SINAD (150-174 MHz, FM) 1 μV TYP for 12 dB SINAD (174-222 MHz, WFM) 0.8 μV TYP for 10 dB SN (300-336 MHz, AM) 0.25 μV TYP for 12 dB SINAD (336-420 MHz, FM) 0.2 μV for 12 dB SINAD (420-470 MHz, FM) EXP 5 μV TYP for 12 dB SINAD (470-540 MHz, WFM) 5 μV TYP for 12 dB SINAD (540-800 MHz, WFM) 0.4 μV TYP for 12 dB SINAD (800 ~899.99 MHz, FM) 0.8 μV TYP for 12 dB SINAD (800 ~999.99 MHz, FM) USA Version Cellular Blocked Squelch Sensitivity 0.16 μV (144 / 430 MHz Band) Selectivity NFM, AM 12 kHz / 30 kHz(-6 dB / -60 dB) AF Output 8 W @ 4 Ω for 10 % THD (@ 13.8 V) BTL EXP SP 4 W @ 4 Ω for 10 % THD (@ 13.8 V) Normal EXP SP / CH AF Output Impedance 4-16 Ω Technical specifications are subject to change without notice.	
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### Accessories & Options

**Supplied Accessories**

- DTMF Microphone MH-48A6JA
- Mounting Bracket for Front Panel (Suction Cup Type)
- Mounting Bracket
- DC Power Cable w/Fuse
- 10 ft (3 m) Control Cable
- Speaker Cable
- Spare Fuse x2
- Operating Manual
- Warranty Card

**Optional Accessories**

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|---|--|--|---|
| <ul style="list-style-type: none"> <li>• DTMF Microphone MH-48A6JA</li> <li>• Normal Microphone MH-42C6J</li> <li>• Separation Cable (20 ft / 6 m) CT-132</li> <li>• Bluetooth Head Set BH-1A (Stereo Type)</li> <li>• Bluetooth Head Set BH-2A (Monaural Type)</li> <li>• Bluetooth Adapter Unit BU-1</li> <li>• Charger Sleeve for BH-1A, BH-2A or FPR-1 CAB-1</li> </ul> | <ul style="list-style-type: none"> <li>• Ear Phone for BH-1A</li> <li>• High-Power External Speaker</li> <li>• AC Power Supply (25 A)</li> <li>• AC Power Supply (30 A)</li> <li>• Voice Guide Unit</li> <li>• Monitor Unit</li> <li>• Internal GPS Receiver Unit</li> <li>• External GPS Receiver Unit</li> </ul> | <ul style="list-style-type: none"> <li>FEP-4</li> <li>MLS-200-M10</li> <li>FP-1025A</li> <li>FP-1030A</li> <li>FVS-2</li> <li>FPR-1</li> <li>FGPS-1</li> <li>FGPS-2</li> </ul> | <ul style="list-style-type: none"> <li>• External GPS Adapter (for FGPS-2) CT-136</li> <li>• GPS Extension Cable (for FGPS-2) CT-133</li> <li>• Clone Cable CT-135</li> <li>• Packet Cable(DIN8 to Din6+Dsub9) CT-140</li> <li>• Packet Cable(DIN8 to Din6) CT-141</li> <li>• Packet Cable(DIN8 to Dsub9) CT-142</li> </ul> |
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