VHF/UHF AMATEUR RADIO EQUIPMENT

- C4FM Digital Transceivers
- C4FM Digital Repeater
- FM Transceivers
Innovation for the Future
The YAESU System Fusion-II leads the way for the Ham Radio digital systems; It provides total integration and compatibility of digital and conventional FM communications.

Fusion of C4FM Digital and Conventional FM
System Fusion-II joins C4FM digital and conventional FM communication into a single, multi-functional integrated system.

With the revolutionary System Fusion-II, users no longer need to choose between the Digital Mode or conventional FM; Use the system best suited for the operations. Also, users can communicate freely between Digital and conventional FM stations.

AMS (Automatic Mode Select)
Thanks to the revolutionary AMS functions, a received signal is instantly recognized as C4FM digital or conventional FM. The transceiver switches operating modes to match the received signal. Even when operating in C4FM digital mode, the transceiver automatically switches to communicate instantly with a received FM station. This unique AMS function enables hassle-free operation by removing the need to manually switch between the communication modes.

Advantages of C4FM digital
Excellent Audio Quality and Reliable Communications
C4FM digital modulation has better BER (Bit Error Rate) characteristics when compared to other Digital modulation, and guarantees reliable long distance communication. The YAESU C4FM digital clear voice technology uses a 12.5kHz bandwidth which permits high quality voice communications.

9600 bps high speed data using 12.5kHz bandwidth
The big advantage of digital communication methods is the ability to convey large amounts of data. C4FM digital attains 9600 bps data transmission speeds by using a 12.5kHz frequency bandwidth. It achieves digital advantages, such as the data transmission of a snapshot, or high-quality voice communication etc., 12.5kHz C4FM modulation is excellent for digital communications, and provides for continued development of amateur-radio communications without sacrificing other valued features.

Comparison of the data transfer speed

FM Friendly Digital Functions Enable Cross-Mode communication
Until now, FM repeaters were only used for conventional FM communication; and digital repeaters were only used for digital communication. There has been no option for cross-communication in a single repeater. System Fusion-II enables interconnection between all users, even with different modes. This is made possible in System Fusion-II by AMS. The AMS function automatically recognizes the signal as a C4FM digital or a conventional FM signal, then the DR-2X retransmits the signal in the preset communication mode.
Enhanced Digital Group ID (DG-ID) and Digital Personal ID (DP-ID) Features

**DG-ID Feature (Digital Group-ID)**
Setting matching two-digit DG-ID numbers (“00” to “99”) separately for Transmit and Receive, enables communications through designated linked DR-2X System Fusion-II digital repeaters. Setting the DG-ID of the DR-2X repeater to “00”, permits the repeater to accept C4FM signals with any DG-ID setting and function as an Open Repeater.

**DP-ID Feature (Digital Personal-ID)**
The DP-ID permits on-air control of the DR-2X Repeater settings. Changes may be limited to controlling stations that are preregistered in the DR-2X Repeater. Also, the DR-2X Digital Repeater may be accessed for emergency operation using an alternate uplink frequency. Consequently, the DR-2X repeater can give precedence to an uplink signal containing a preregistered DP-ID.

Advanced IMRS (Internet-linked Multi-site Repeater System) Operation
When the optional LAN units (LAN-01A) are installed, an IMRS (Internet-linked Multi-site Repeater System) network with multiple DR-2X Digital Repeaters may be configured. Up to 99 repeaters may be linked together via the Internet. Access and control of the linked repeaters, and groups of linked repeaters can be managed using the Digital Group ID (DG-ID) Feature.

<table>
<thead>
<tr>
<th>LOCAL Name</th>
<th>RPT-A</th>
<th>RPT-B</th>
<th>RPT-C</th>
<th>RPT-D</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCAL DG-ID</td>
<td>01</td>
<td>02</td>
<td>03</td>
<td>04</td>
</tr>
<tr>
<td>Default DG-ID</td>
<td>01</td>
<td>02</td>
<td>03</td>
<td>04</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group Name</th>
<th>North CA</th>
<th>10</th>
<th>South CA</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group DG-ID</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Dual Receive Feature provides Flexible Operation**
The unique simultaneous Dual Receive Repeater DR-2X allows the control operator to assign an additional frequency for controlling the repeater, transmitting emergency messages, or simply a second uplink frequency. The control operator may also assign separate Downlink frequencies according to the Up-link frequencies.
WIRES-X Portable Digital Node Function

A WIRES-X portable digital node station may be easily established by setting the C4FM digital transceiver to "HRI mode" and connecting it with a PC. With this function, and an available Internet connection, WIRES-X access via the Internet is possible, even from a location where a fixed WIRES-X node station is not available. A C4FM digital transceiver can be used as a node station transceiver without setting up an Ethernet port. This feature enables easy setup and WIRES-X operation from any location, such as a Hotel room, Airport, in a Vehicle or a Free Wi-Fi space, etc.

* WIRES-X operation in the digital transceiver’s HRI mode is only available in C4FM digital mode.
* Optional PC connection cable (SCU-19) is required for the FT2D PC connection.
* Supplied PC connection cable (SCU-20) is required for the FTM-400XD/FTM-1000 PC connection.
* Digital transceivers that can operate in the HRI mode are the FT2D, FTM-400XD and the FTM-100D.

Connection of WIRES-X Node or Room

In the digital transceiver HRI mode, a digital WIRES-X node station can be easily created to provide access to other node stations via the Internet. Also, a WIRES-X room may be joined for group communication.

Connection of Club Repeater Network with DG-ID

By establishing the WIRES-X portable node station, you can easily connect to a DG-ID controlled IMRS Club Repeater network using the WIRES-X Node Station.

Illustration of WIRES-X operation via Portable digital Node Stations

Three C4FM Digital Modes and the conventional FM Mode

Three System Fusion-II Digital Modes and the analog FM mode can be selected. In digital, effective utilization of the 12.5kHz bandwidth, makes possible combined high-quality voice communication and image data transmission and reception. Many new and unique information and communication functions are made possible.

V/D mode (Voice/Data Simultaneous Communication Mode)

The digital voice signal is transmitted using one half of the bandwidth. Simultaneously the other half of the 12.5kHz bandwidth channel is used for error correction of the voice signal and for other data. The standard C4FM Digital mode provides the ideal balance of error correction and sound quality with the Digital Clear Voice technology developed for C4FM digital.

Voice FR mode (Voice Full Rate Mode)

This mode uses the full 12.5kHz bandwidth to transmit digital voice data. The increased amount of voice data permits high quality voice communication, providing superb sound quality for a “rag chew” with friends.

Data FR mode (High Speed Data Communication Mode)

This high-speed data communication mode uses the full 12.5 kHz bandwidth for data communication. The transceiver automatically switches to Data FR mode when transmitting Snapshot pictures, and can be used to transmit large quantities of data at high speed.

Conventional FM mode

Analog FM is effective when weak signal strength causes audio drop out in the digital mode. The FM mode enables communication up to the borderline of the noise level. Also the use of established Yaesu low power circuit designs provides far less battery consumption than the digital mode.
144/430MHz Dual Band Dual Receive Heavy Duty
C4FM/FM Digital Repeater

YAESU DR-2X is a C4FM digital/Conventional FM dual mode and dual-Receive capable repeater that covers the VHF and UHF amateur radio bands. DR-2X incorporates the use of conventional FM communication integrated with the C4FM digital communication through its unique AMS capability.

DR-2X Advanced Features

- Modulation Modes: C4FM Digital and Conventional FM
- AMS (Automatic Mode Select) function, permits automatic detection of the received C4FM digital or conventional FM signal
- Dual Receive Operation
- Optional IMRS (Internet-linked Multi-site Repeater System) enables expanded area coverage via the internet
- Digital Group ID Feature supports convenient set-up of Groups and uncomplicated Group Operation
- User Friendly 3.5-inch Full Color Touch Panel Display
- Extremely reliable, high RF Output Power: 50W / 20W / 5W
- Stable High-Power Output with Large Heat sink
- Commercial grade components for long-term reliable operation
- Emergency Operation: Supported by auto-switched backup battery power operation (US and Asian versions)
- Front panel microphone connector is provided for repeater transmitter testing and enables base station operation

User Friendly Set-up (3.5-inch Full Color Touch Panel Display)

Advanced Operation

The rear panel Control I/O port is connectable to the “S-COM 7330” repeater controller. This controller can manage up to three (3) DR-2X units, providing control of the programmable beep, the timer, access mode, and other features.

Other Features

- Internal AC power supply (US, Asia)
- 19” Rack Mount Capable
- High Stability ±2.5ppm TCXO
- CTCSS and DCS Signalling
- ID announcement
  (Voice Mode: Requires FVS-2)
- Base Station Operation
- TOT (Time Out Timer)
- Firmware Updates
Advanced C4FM Technology Opens up New Vistas for Amateur Radio
The New Style Handheld Transceiver

C4FM/FM 144/430 MHz DUAL BAND 5W DIGITAL TRANSCEIVER

FT2D
FT2DR-US, Asia and Australia
FT2DE:Europe

(2200 mAh Lithium Ion Battery SBR-14LI,
Battery charger PA-48/SAD-18/SAD-16
Depending on the transceiver version),
USB Cable and Belt clip SHB-13 included)

Easy Operation with
Large Touch Panel Display
A major highlight of the transceiver’s sleek design is
the large display measuring 1.7 x 1.7 inch (43.2 x
43.2mm). With 160 x 160 dots and a bright white
LED backlight, it presents a wealth of information in
superb high resolution. Function keys, numeric keys,
and setup menu items appear on the display as
needed, allowing direct operation without guesswork.
Additional functions may be operated with the knobs
and keys on the front and side of the transceiver.

Sophisticated C4FM Digital
Functions are Supported

Expanded Digital Group ID Features
In the C4FM digital mode, a Digital-Group-ID (DG-ID) can be set
by each group member to facilitate communications between the specific
group participants. The Group Monitor function automatically alerts
users when group members are within communication range.
* The DG-ID group operation has compatibility only with the C4FM digital
transceivers that have the DG-ID feature. If your C4FM portables or mobiles
have not yet updated to C4DE, please update the firm ware for the transceivers
before using the DG-ID feature.

Snapshot function
When the optional speaker microphone-camera MHI-85A11U is connected,
you can easily take a snapshot. Captured images as well as received
images can be viewed on the screen.

FM friendly digital realized by
AMS (Automatic Mode Select)
The Automatic Mode Select (AMS) function instantly selects
the received signal mode.

Smart Navigation Function

Digital V/D Mode
Digital V/D Mode communicates the position
and station information simultaneously with the
digitized audio. You can view the distance and
direction of the other station in real time while communicating.

Backtrack
This function allows navigation back to the departure
point, or a point previously added to the GPS memory.

Simultaneous
C4FM/C4FM standby
The FT2D/DE supports simultaneous C4FM Digital
monitoring for both the A Band and B Band. A digital
signal received on either band takes priority of the
transceiver operation. You can respond smoothly and
swiftly to the digital communication. What’s more,
call sign and position information as well as other
data can be received simultaneously on both bands.

| Loud 700 mW audio output |
| Built-in High Sensitivity 66c GPS Antenna |
| 1200/9600 bps APRS® Data communication |
| Micro SD card slot |
| High-resolution band scope with fast display of up to 71 channels |

Standard configuration includes high-capacity Lithium-ion battery good
for 12 hours of continuous operation.

Battery Operating Time
(Approximately)

<table>
<thead>
<tr>
<th>Band-MODE</th>
<th>FT2D</th>
<th>FT2D-70D</th>
</tr>
</thead>
<tbody>
<tr>
<td>144MHz</td>
<td>12h</td>
<td>14h</td>
</tr>
<tr>
<td>430MHz</td>
<td>10h</td>
<td>12h</td>
</tr>
</tbody>
</table>

* Duty Cycle based on Tx 6 sec, Rx 6 sec, Standby 48 sec.
* Power 5 Watts, RF output 10W PEP, Battery save 1.5, Microband receive, and GPS function of.
* Operating time may vary depending on operating conditions.

OPTIONS

<table>
<thead>
<tr>
<th>Speaker Microphone MH-85A11U</th>
<th>Speaker / Microphone MH-34A8</th>
<th>Earphone Microphone SSM-57A</th>
<th>Microphone Adapter GT-44</th>
<th>Li-ion Battery Pack (1300 mAh) 1300-101LI</th>
<th>Li-ion Battery Pack (2200 mAh) SBR-14LI</th>
<th>Li-ion Battery Pack (1900 mAh) SBR-24LI</th>
<th>Battery Charger SAD-19/PA-48 SAD-16</th>
<th>Battery Charger SAD-18</th>
<th>Rapid Charger CD-41</th>
<th>Rapid Charger SAD-28</th>
<th>3x&quot;AA&quot; Cell Battery Tray FBA-39</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT2D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
An Outstanding Choice
Sophisticated Dual Band Digital Transceiver

C4FM/FTM 144/430MHz Dual Band Digital Transceiver

FT-70D

FT-70DR: US, Asia and Australia
FT-70DE: Europe

(7.4V 1800mAH Lithium Ion Battery SBR-24Ll,
Battery Charger SAD-18/SAD-11
(Depending on the transceiver version),
USB Cable and Belt Clip included)

C4FM Digital provides Excellent Audio Quality

Both conventional FM operation, and the advanced Yaesu C4FM Digital Mode are available. C4FM has better BER (Bit Error Rate) characteristics than other Digital modulation systems, and permits stable communications. C4FM digital modulation delivers exceptional audio quality.

FM Friendly Digital Operation with AMS and Large Multi-Color LED Mode Indicator

Conventional FM users and Digital C4FM users can communicate through the magic of AMS (Automatic Mode Select). AMS automatically recognizes the received signal as C4FM Digital or conventional FM, and sets the transceiver to the appropriate operating mode. The AMS function enables hassle-free operation by removing the necessity of manually switching between modes. The MODE indicator LEDs show the transmit/receive mode at a glance.

LOUD 700mW Audio Output

Loud, clear, crisp audio is delivered by 700mW of audio power, and the large 32mm front speaker.

Huge 1,105 Channel Memory

The FT-70D provides maximum operating efficiency and convenience with a wide variety of memory resources, including 900 "regular" memories, six "Home" channels for favorite frequencies, 99 for Skip search memories, and 50 pairs of "Programmable Memory Scan" memories.

Useful Features

- Rugged IP54 Rating (Dust & Water protection) Construction
- Wide Band Receive Coverage 108 - 579.9995MHz
- Versatile Scanning Capabilities:
  (Programmed VFO Scan, Memory Scan, Priority Channel Scan)
  - WX Channels with "Severe Weather" Alert (US version)
  - 7.4V 1,800mAH Lithium Ion Battery pack (SBR-24Ll) Included
  - Equipped with External DC Jack for DC Supply and Battery Charge
  - Equipped with Mini USB port for Convenient Memory Management and Software updates
- GTSS/DCS Operation
- RF Squelch
- Automatic Power Off (APO) Feature
- Transmitter Time Out Timer (TOT)

BATTERY OPERATING TIME (Approximately)

<table>
<thead>
<tr>
<th>Band</th>
<th>Operating Time (SBR-24Ll)</th>
</tr>
</thead>
<tbody>
<tr>
<td>144 MHz</td>
<td>8 hours</td>
</tr>
<tr>
<td>430 MHz</td>
<td>7 hours</td>
</tr>
</tbody>
</table>

* SW: Tx 6 sec., Rx 6 sec., Standby 48 sec. Duty cycle
(Operating time may vary depending on operating conditions)

**Sophisticated Digital-Group-ID Operation**

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

* The DG-ID group operation has compatibility only between the C4FM digital transceivers that have the DG-ID feature. If your C4FM portables or mobiles have not yet updated for DG-ID, please update the firmware for the transceivers before using the DG-ID feature.

**OPTIONS**

<table>
<thead>
<tr>
<th>FT7D</th>
<th>FT-70D</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCU-19</td>
<td></td>
</tr>
<tr>
<td>CT-169</td>
<td></td>
</tr>
<tr>
<td>CT-170</td>
<td></td>
</tr>
<tr>
<td>CT-176</td>
<td></td>
</tr>
<tr>
<td>CT-168</td>
<td></td>
</tr>
<tr>
<td>CT-27</td>
<td></td>
</tr>
<tr>
<td>E-DC-6</td>
<td></td>
</tr>
<tr>
<td>SDD-13</td>
<td></td>
</tr>
<tr>
<td>CN-3</td>
<td></td>
</tr>
<tr>
<td>SHC-24</td>
<td></td>
</tr>
<tr>
<td>SHC-27</td>
<td></td>
</tr>
<tr>
<td>SHB-13</td>
<td></td>
</tr>
</tbody>
</table>
Equipped with advanced touch panel operation and full-color TFT large-scale display

C4FM/FM 144/430 MHz DUAL BAND 50W DIGITAL TRANSCEIVER

FTM-400XD

FTM-400XDR: US, Asia and Australia
FTM-400XDE: Europe

(DTMF Microphone MH-48A6J, Mounting Bracket, Bracket for Controller, Control Cable 10 ft (3m), PC connection Cable SCU-20, Stereo Monaural Plug and DC Power Cable included)

AMS (Automatic Mode Select)

The Automatic Mode Select (AMS) function instantly detects the received signal mode.
- **V/D mode**
  (Voice/Data Simultaneous Communication Mode)
- **Voice FR mode**
  (Voice Full Rate Mode)
- **Data FR mode**
  (High Speed Data Communication Mode)
- **Analog FM mode**

3.5-inch full color touch panel operation

Icon symbols, multi-function key display and pop-up messages are all displayed in high-resolution color thanks to the full-color, high luminance TFT liquid crystal screen. The settings and status of the wireless devices are displayed in an easy-to-read format. You can perform various function operations simply and easily by gently touching the screen.

Snapshot Function
(Image Data Transmission)

Simply connect the optional MH-85A11U microphone with camera, Press the microphone shutter button to take snapshots, and easily send them to other C4FM digital transceivers.

* Micro SD card is required by the snapshot function.

Equipped with micro SD Card Slot
Built-in Improved 66ch GPS with Antenna

(micro SD card not included)

Data communication Terminal micro SD card slot

Built-in GPS with antenna

OPTIONS

<table>
<thead>
<tr>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microphone with Snapshot camera</td>
<td>MH-85A11U</td>
</tr>
<tr>
<td>DTMF Microphone</td>
<td>MH-48A6J</td>
</tr>
<tr>
<td>Normal Microphone</td>
<td>MH-4206J</td>
</tr>
<tr>
<td>Bluetooth® Adapter Unit</td>
<td>BU-2</td>
</tr>
<tr>
<td>Voice Guide Unit</td>
<td>VFS-2</td>
</tr>
<tr>
<td>High-Power External Speaker</td>
<td>MLS-200-M10</td>
</tr>
<tr>
<td>Vacuum Cup Mount Bracket for Controller</td>
<td>MMB-98</td>
</tr>
<tr>
<td>PC Connection Cable</td>
<td>SCU-20</td>
</tr>
<tr>
<td>Separation Cable</td>
<td>CT-162</td>
</tr>
<tr>
<td>Mic Extension Kit</td>
<td>MEK-2</td>
</tr>
<tr>
<td>Mic Extension Cable</td>
<td>SCU-23</td>
</tr>
<tr>
<td>Cabling Cable</td>
<td>CT-166</td>
</tr>
<tr>
<td>AC Power Supply (25 A)</td>
<td>FP-1030A2</td>
</tr>
<tr>
<td>AC Power Supply (23 A)</td>
<td>FP-1023A2</td>
</tr>
<tr>
<td>Desktop Cooling Fan</td>
<td>SMB-201</td>
</tr>
<tr>
<td>AC Adapter for SMB-201</td>
<td>SAD-11†</td>
</tr>
</tbody>
</table>

*1 Depending on the transceiver version *2 US and Asian versions only *3 US version only
A digital mobile transceiver for a new age, with a wide variety of mobile operations made possible through advanced C4FM technology

C4FM/FM 144/430 MHz DUAL BAND 50W DIGITAL TRANSCEIVER

FTM-100D
FTM-100D/US, Asia and Australia
FTM-100D/DE: Europe
(DTMF Microphone MH-48A6JA, Mounting Bracket, Bracket for Front panel, Control Cable 10 ft (3m), PC connection Cable SCU-20, Stereo Monaural Plug and DC Power Cable included)

Sophisticated C4FM Digital Functions are Supported

- Expanded Digital Group ID Features: In the C4FM digital mode, a Digital-Group-ID (DG-ID) can be set by each group member to facilitate communications between the specific group participants. The Group Monitor function automatically alerts users when group members are within communication range.
  - The DG-ID group operation is compatible only between the C4FM digital transceivers that have the DG-ID feature. If your C4FM portable or mobile has not yet updated for DG-ID, please update the firmware for the transceivers before using the DG-ID feature.

- Image Data Transmission*: Snapshots received from other stations, or images downloaded from the WIRE-X News Station, are stored on a high-capacity microSD card. Image data stored on a microSD can be viewed and edited using a personal computer.
  - The optional MH-91ATU Camera Speaker Microphone cannot be connected.

- Smart Navigation Function: Real-time navigation
  - Digital mode transmits the location and station information data simultaneously with the digitized audio signal. You can view the distance, direction, and call sign of received signals in real-time while communicating in the Yaesu C4FM digital mode.

The FTM-100DR/DE supports WIRE-X

- WIRE-X node stations and easily enjoy long-distance communications over VHF/UHF bands via the Internet. Furthermore, you can connect the FTM-100DR/DE to the optional HR-200 WIRE-X Internet Linking Kit to quickly establish a WIRE-X node station. The FTM-100DR/DE is ideally suited for use in node stations, and the display backlight can be completely turned off.

A variety of features that ensures ease of use
- 50 W of power output sufficient for communication on the VHF/UHF bands
- 1200/9600bps APRS® Data communication
- microSD card slot
- Built in high sensitivity 66 channel GPS antenna
- GPS logging capability
- High sensitivity and full-fledged wideband reception
- Dual Watch Function
- Powerful 3W speaker output, 8W output for optional MLS-200-M10 External Speaker

*Simultaneous reception on A band and B band is not supported.
High-Performance C4FM/FM Dual-Band Mobile

C4FM/FM 144/430MHz DUAL BAND
50W DIGITAL TRANSCEIVER

FTM-7250D
FTM-7250DR: US, Asia and Australia
FTM-7250DE: Europe
(DTMF Microphone MH-48A6JA, USB cable, Mounting Bracket and DC Power Cable included)

Operates C4FM Digital and Conventional FM modes
Both conventional FM operation, and the advanced C4FM Digital mode 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.

Effortless AMS, FM and C4FM Operation with Multi-colored LED Mode-Indicator
FM friendly digital operation is made possible by AMS (Automatic Mode Select)
AMS automatically recognizes the received signal as C4FM Digital or conventional FM, and switches the receiver to the appropriate mode. The MODE indicator shows the Transmit/Receive mode and status at a glance.

Sophisticated Digital-Group-ID Operation
Digital-Group-ID (DG-ID) Feature
In the C4FM digital Mode, a Digital-Group-ID (DG-ID) can be set by each group member to facilitate communications between the specific group participants. The Group Monitor function automatically alerts users when group members are within communication range.

DG-ID Memory feature
DG-ID memories can store up to 10 DG-ID pairs with alpha tags. The registered DG-ID numbers in the memory can be quickly recalled using the P1/P2 key buttons on the DTMF microphone.

50 Watts (VHF and UHF) Stable High-Power Output with FACC
The FTM-7250D offers the Yaesu legendary mechanical toughness and stable high output power. The FACC (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 continuous long-distance communications.

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 supports noisy field operation.

User-Programmable Microphone Keys
Four Programmable key buttons (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 button functions:

Available Key functions:
- Recall HOME channel
- Select communication Mode (DTM/FM/AM)
- Scan operation
- Activate the Group Monitor function
- Set the TX Power
- DG-ID registration and Recall
- Open the Squelch
- WRES-X Node access
- TX channel access
- Quick access for Setup Menu

* Fixed the functions as P1/P2 key
* Only for US version

Useful Features
- 22S Memory Channels with 8-character alpha-numeric tags
- Versatile Scan features: Preferential Memory Scan, Programmable memory scan, VFO scan, Priority Channel Scanning (Dual-watch), and Weather Alert Scan (USA version only)
- Supports WRES-X features (Does not support operation as the WRES-X Node Station)
- Memory Only Operating Mode
- CTCSS & DCS Encode/Decode Operation, with split Tone and DCS Encode-only ability

<table>
<thead>
<tr>
<th>OPTIONS</th>
<th>O/TMF Microphone MH-48A6JA</th>
<th>Normal Microphone MH-420DU</th>
<th>AG Power Supply (25 A) FP-1000A*1</th>
<th>AG Power Supply (23 A) FP-1023*1</th>
<th>High-Power External Speaker MLS-100</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTM-7250D</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>FTM-3200D</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>FTM-3207D</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

*1 US and Asian versions only  *2 US version only
C4FM/FM High Power Mobile

144MHz
65W High Power Mobile

- Operate C4FM Digital and Conventional FM modes
- Effortless AMS, FM and C4FM Operation with Multi-colored LED Mode-Indicator
- Enhanced Digital Group ID Feature
- DG-ID Memory Feature

65W (55W) Stable High-Power Output with FACC
- 3W powerful Front Speaker
- User Programmable Microphone Key buttons
- 220 Memory Channels with 8-character alpha-numeric tags

FTM-3200D
FTM-3200DR: US, Asia and Australia
FTM-3200DE: Europe
(DTMF Microphone MH-48A6JA, USB Cable, Mounting Bracket and DC Power Cable included)

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

Sophisticated Digital-Group-ID Operation
Digital-Group-ID (DG-ID) Feature
Digital-Group-ID (DG-ID) in the C4FM Digital Mode, can be set separately for each group member to facilitate communications between the specific group participants.

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 DTMF microphone.

430MHz
55W High Power Mobile

C4FM/FM 430MHz SINGLE BAND 55W DIGITAL TRANSCEIVER

FTM-3207D
FTM-3207DR: US, Asia and Australia
FTM-3207DE: Europe
(DTMF Microphone MH-48A6JA, USB Cable, Mounting Bracket and DC Power Cable included)

Dependable High-Power Output with FACC
The FTM-3200D/FTM-3207D provides reliable and true high output power with FACC (Funnel Air-Convection Conductor) Wind Tunnel cooling system. The efficient cooling system ensures stable high performance for continuous long-distance communications.

Loud Audio with 3W Front Speaker
The front facing speaker provides 3 watts of loud audio. The FTM-3200D/FTM-3207D speaker audio has been tuned for even better sound quality.

Useful Features
- Versatile Scanning features: Preferential Memory Scan, Programmable memory scan, VFO scan, Priority Channel Scanning (Dual watch), and Weather Alert Scan (USA version only)
- Supports WIRES-X features (does not support operation as the WIRES-X Node Station)

Convenient and easy-to-use digital functions, advanced VoIP wireless WIRES-X

AMATEUR RADIO INTERNET LINKING KIT
HRI-200
USB Cable CT-174 (MDIN 10 pin to MDIN 10 pin), and Data Cable CT-175 (MDIN 10 pin to MDIN 6 pin) included

Features
- High quality voice communication using C4FM digital
- Advanced features made possible by C4FM digital functions
- Digital/Analog mutual communication
- Easy Set-up of HRI-200 with USB connection
High Performance
Commercial Grade Specifications

- Commercial Grade Specifications: IP54/MIL-STD 810 C, D and E
- 1 Watt of Powerful, Clear Audio
- High Power 5 Watts Output and selectable setting 5W / 2.5W / 0.5W
- QRK (Four Quick Recall Key buttons: P1-P4) for Easy Operation
- Emergency Signaling, Bright white LED Flashlight, One-touch Alarm, and Quick HOME Channel Access
- Included 1950mAh Li-ion Battery Pack capable of over 17 hours of operation
- FM Broadcast Receiver Equipped

144/430 MHz
DUAL BAND 5W
FM TRANSCEIVER

FT-65
FT-65R: US and Asia
FT-65E: Europe

144 MHz
SINGLE BAND 5W
FM TRANSCEIVER

FT-25
FT-25R: US and Asia
FT-25E: Europe

FT-65/FT-25 Supplied Accessories
(7.4V 1950mAh Li-Ion battery SBR-25LI, Battery Charger SBH-22, AC Adapter SAD-20 and Belt Clip included)

Ultimate Compact
High Performance FM Handheld

- Ultimate Compact Design: W 2.1” x H 3.5” x D 1.2” (52 x 90 x 30 mm)
- 1 Watt of Powerful, Clear Audio
- High Power 5 Watts Output and selectable setting 5W / 2.5W / 0.5W
- QRK (Two Quick Recall Keys: P1-P2) for Easy Operation
- Emergency Signaling, One-touch Alarm, and Quick HOME Channel Access
- Included 1750mAh Li-ion Battery Pack capable of over 15 hours of operation
- FM Broadcast Receiver Equipped

144/430MHz
DUAL BAND 5W
FM TRANSCEIVER

FT-4X
FT-4XR: US and Asia
FT-4XE: Europe

FT-4/FT-4V Supplied Accessories
(7.4V 1750mAh Li-Ion battery SBR-28LI, Battery Charger SBH-22, AC Adapter SAD-20 and Belt Clip included)

VALUABLE FEATURES
FT-65/FT-25

- 223 Memory Channels with 8-character alpha tags
- Versatile Scanning Capabilities: VFO Scan, Memory Scan, Programmable memory scan (PMS), Memory bank scan, and Dual receive
- WX Channels with “Severe Weather” Alert
  (only available in NOAA weather service areas)
- VOX Operation with Optional VOX Earpiece Microphone (S5-128)
- 3.5-Hour Rapid Charger (SBH-22) Included
- PC Programmable with Optional Programming Cable (SCU-35)
- Transceiver-to-Transceiver Cloning with Optional Cloning Cable (SCU-36)
- ARTS (Automatic Range Transponder System) function
- DTMF Operation + CTCSS / DCS Operation
- Busy Channel Lock Out (BCL0)
- Battery Saver function + Automatic Power Off (APO)
- Transmitter Time Out Timer (TOT)

VALUABLE FEATURES
FT-4X/FT-4V

- 223 Memory Channels with 6-character alpha tags
- Versatile Scanning Capabilities: VFO Scan, Memory Scan, Programmable memory scan (PMS), Memory bank scan, and Dual receive
- WX Channels with “Severe Weather” Alert
  (only available in NOAA weather service areas)
- VOX Operation with Optional VOX Earpiece Microphone (S5-128)
- 3.5-Hour Rapid Charger (SBH-22) Included
- PC Programmable with Optional Programming Cable (SCU-35)
- Transceiver-to-Transceiver Cloning with Optional Cloning Cable (SCU-36)
- FM Broadcast Receiver Equipped
- ARTS (Automatic Range Transponder System) function
- DTMF Operation + CTCSS / DCS Operation
- Busy Channel Lock Out (BCL0)
- Battery Saver function + Automatic Power Off (APO)
- Transmitter Time Out Timer (TOT)

OPTIONS

Speaker Microphone
SSM-16B

VOX Earpiece Microphone
SSM-128B

7.4 V, 1.950 mAh Li-Ion Battery
SBR-25LI

7.4 V, 2.500 mAh Li-Ion Battery
SBR-26LI

7.4 V, 1.750mAh Li-Ion Battery
SBR-28LI

Rapid Charger SBH-22

AC Adapter SAD-20

Programming cable SCU-35

Cloning Cable SCU-36

*1 Depending on the transceiver version
Ultra-rugged, Submersible Dual Band Transceiver

144/430 MHz (220MHz) DUAL BAND 5W FM TRANSCEIVER (220MHz FM: 1.5W (US version Only))

VX-6

VX-6R: US, Asia and Australia
VX-6E: Europe

(7.4V 1250mAh* Lithium-ion battery FNB-80U and battery charger PA-48/SAD-16/SAD-16 (Depending on the transceiver version excluded)
* Indicated Battery capacity based on EU DIRECTIVE 2006/66/EC

Outdoor-ready Features including Waterproof Rating!

Compact Poly carbonate Resin and Aluminum Die-Cast Case with Solid Waterproofing Seal

The VX-6 is rated to IPX7 specifications for submersion (up to 30 minutes at a depth of up to three feet).

One-Touch Stored Frequencies Access

The VX-6 adopts a one-touch DMR (Direct Memory Recall) system that operates just like your car stereo memory.

Wide Band Receiver Coverage

In addition to full operation on the 144 and 430MHz Amateur bands, the VX-6 provides a wide range of monitoring excitement, thanks to the incredible receiver frequency coverage of 504KHz to 998.99MHz.

Additional Features

- Emergency Automatic ID system (E4A)
- Channel counter function
- Smart Search
- RF Squelch
- Automatic Repeater Shift (ARS)

Power Output/Power Source Chart (Approximately)

<table>
<thead>
<tr>
<th>Power Level</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW1</td>
<td>1.0W</td>
</tr>
<tr>
<td>LOW2</td>
<td>0.5W</td>
</tr>
<tr>
<td>LOW3</td>
<td>0.25W</td>
</tr>
<tr>
<td>HIGH</td>
<td>5W</td>
</tr>
</tbody>
</table>

Battery Operating Time (Approximately)

<table>
<thead>
<tr>
<th>Band</th>
<th>FNB-80U Battery Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>144 MHz</td>
<td>7 hours</td>
</tr>
<tr>
<td>430 MHz</td>
<td>6 hours</td>
</tr>
<tr>
<td>Receiving</td>
<td>15 hours</td>
</tr>
</tbody>
</table>

Note: Operating times may vary depending on operating conditions, and are based on a duty cycle of 5 seconds of transmission at 5 Watts, 6 seconds of reception at 50% audio level, and 45 seconds of standby operation.

Commercial Grade Field Radio Submersible Construction

144 MHz SINGLE BAND 5W FM TRANSCEIVER

FT-270R

US, and Australia

(7.2V 1400mAh Ni-MH battery FNB-83, Desktop Rapid Charger SBH-13 (US) and battery charger PA-48/SAD-16 (Depending on the transceiver version included)

- Commercial Grade Performance
- Submersible Construction IPX7 (3ft/1m for 30 min)
- Large Backlit LCD Display for easy Operation
- 5 Watts of Stable RF Power
- 800mW Loud Audio
- 200 Memory Channels
- Hands free VOX Operation with Optional SSM-64A

Options:

- Compact Speaker / Microphone MH-57A
- Compact Speaker / Microphone MH-57Aa
- Earpiece / Microphone SSM-55A
- Compact Mic with Earpiece SSM-57A
- Lightweight VOX Headset SSM-63A
- Lightweight VOX Headset SSM-64A
- DTMF Paging Unit FTO-7
- Barometric Pressure Sensor SU-1
- External Battery Pack 18V/1200mAh FNB-80U
- External Battery Pack 18V/1200mAh FNB-80U
- Large Backlit LCD Display for easy Operation
- 5 Watts of Stable RF Power
- 800mW Loud Audio
- 200 Memory Channels
- Hands free VOX Operation with Optional SSM-64A

VX-6

FT-60R

FT-270R

Options:

- Rapid Charger (1.5W) VAC-370*
- Desktop Rapid Charger (2.5W) BR-16*
- Rapid Charger CD-15A
- Rapid Charger CD-26
- AC Adapter PA-48/SAD-16/SAD-16*
- DC Cable with Audio Plug SOD-13
- DC Cable with VOX Only E-DC-6
- Headset CT-27
- Microphone Adaptor CT-91
- Battery Charger FBA-23
- Battery Tray PBA-25A

* Depending on the transceiver version
Ruggedly-Built, High quality
29/50/144/430 MHz Quad Band
FM Transceiver

29/50/144/430MHz 50W/35W (430MHz)
FM QUAD BAND TRANSCEIVER

FT-8900R

US, Asia, Australia and Europe

(DTMF Microphone MH-48A6JA, Mounting Bracket, Separation Kit YSK-8900 and DC Power Cable included)

Independent Two-Channel,
Dual Receive and Full Duplex Operation

Operating as two radios in one, the FT-8900R may be configured in a number of ways. For example, it can be set up on the "left" side for operation on 29, 50, 144, or 430 MHz operation, while setting the "right" side to 430 MHz. Or set up the left side on 29/50/144/430 MHz, and the right side on 144 MHz. The FT-8900R may also be configured for 144-440 MHz or 430-430 MHz dual receive operation—so you never miss out on the action! The left and right sides have their own Volume and Squelch controls, as well as separate S-meters, so operating preferences are never compromised.

Quad Band Operation

The FT-8900R combines the "traditional" 144/430MHz local-communications concept with the exciting capability of Sporadic-E or F2 DX on the 29 MHz and 50 MHz bands, for nationwide or worldwide FM communications from your car! The first Amateur Radio FM mobile transceiver providing this capability, the FT-8900R, will make you wonder how you ever got by without this two-band transceiver until now.

High Power Output

The FT-8900R puts out a full 50 Watts of RF power on the 29/50/144/430MHz bands, and 35 Watts on the 430 MHz band. To ensure thermal stability during long transmissions, a thermal sensor monitors heat sink temperature, engaging the rear panel cooling fan when needed.

<table>
<thead>
<tr>
<th>Mode</th>
<th>High</th>
<th>Mid1</th>
<th>Mid2</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>50W/35W</td>
<td>50W</td>
<td>35W</td>
<td>10W</td>
<td>5W</td>
</tr>
</tbody>
</table>

Over 800 Memory Channels

The FT-8900R provides a wide variety of memory resources, including 799 "regular" memories, six "Home" channels for favorite frequencies, five pairs of band-edge memories, and six "Hyper Memory" memories, which store complete transceiver operating status, for maximum operating efficiency and convenience.

One-Touch Band-Pattern
"HYPER MEMORY" Feature

To save valuable time while operating a transceiver with the versatility of the FT-8900R, the "Hyper Memory" feature allows the storage of a complete set of configuration data for the two operating bands. Besides the usual storage of frequency and tone data, Hyper Memory will store such setup parameters as Automatic Repeater Shift status, Packet parameters, Scanning mode, and VFO tracking, avoiding the need to change each of these functions manually on a regular basis.

Built-In Duplexer

Utilizing a single antenna jack, the FT-8900R's leading-edge design includes a high-performance dupplexing system, with extensive filtering to allow cross-band full duplex operation.

Cross-Band Repeat Capability

For emergency work, or to extend the range of a hand-held unit, the FT-8900R includes Cross-Band Repeat capability.

Additional Features

- Convenient Remote-Head Mounting Capability (YSK-8900 : Supplied Accessory)
- 50-Tone CTSS/104-Tone DCS (Digital Code Squelch) Tone Systems
- User-Programmable Microphone Keys
- Easy Setup for FM Satellite Operation
- 1200/9600bps Packet Capability: Connect your TNC using the optional CT-39A Packet Cable.
- RF Squelch: Opens the squelch at a user-defined S-Meter level.
- Battery Voltage Meter
- DTMF Auto-Dial Memory: 16 Memories of up to 16 tones each.
- Lock Feature for Front Panel Keys & PTT Switch: Prevents accidental transmission or frequency change.

<table>
<thead>
<tr>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand Microphone MH-420U</td>
<td></td>
</tr>
<tr>
<td>DTMF Microphone MH-48A6JA</td>
<td></td>
</tr>
<tr>
<td>High-Powered External Speaker</td>
<td></td>
</tr>
<tr>
<td>Quick-Release Mounting</td>
<td></td>
</tr>
<tr>
<td>Separation Kit YSK-8900</td>
<td></td>
</tr>
<tr>
<td>Mic Extension Kit MEK-2</td>
<td></td>
</tr>
<tr>
<td>Packet Interface Cable CT-39A</td>
<td></td>
</tr>
<tr>
<td>AC Power Supply (25 A)</td>
<td></td>
</tr>
<tr>
<td>AC Power Supply (5 A)</td>
<td></td>
</tr>
<tr>
<td>Desiccants Cooling Fan SMB-201</td>
<td></td>
</tr>
<tr>
<td>AC Adapter for 24V-201 SAD-11*</td>
<td></td>
</tr>
</tbody>
</table>

*1 US and Asian versions only
*2 US version only
*3 Depending on the transceiver version
Heavy-Duty
FM Dual Band Mobile
with Wide-Receiver Coverage

144/430MHz 50W/45W (430MHz)
FM DUAL BAND TRANSCEIVER

FT-7900

FT-7900R: US, Asia and Australia
FT-7900E: Europe
(DTMF Microphone MH-48A6JA, Mounting Bracket,
Separation Kit YSK-7800 and DC Power Cable included)

- Large Backlit LCD Display for easy operation
- Stable RF Power (50 Watts VHF / 45 Watts UHF)
- Reliable performance in harsh environments
- 1000 memory channels with 20 Memory Groups
- Remote Front Panel Design
(Separation Kit YSK-7800: Supplied Accessory)

Advanced Features
- One-Touch Hyper Memories Feature
- 4 Power output levels: 50,45W/20W/10W/5W
- Wide RX Frequency Coverage: 108 - 520MHz, 700 - 999.990MHz (Cellular Blocked)
- 50-Tone CTCSS/104-Tone DCS Tone System
- 16 DTMF memories
- Versatile Scanning Capability
- Smart Search Operation
- 1200 or 9600bps Packet Operation
- ARTS (Auto-Range Transponder System)
- Radio to Radio Cloning

Genuine 65W High Power
144MHz FM Mobile

144MHz 65W
FM SINGLE BAND TRANSCEIVER

FTM-3100

FTM-3100R: US, Asia and Australia
FTM-3100E: Europe
(DTMF Microphone MH-48A6JA, USB Cable,
Mounting Bracket and DC Power Cable included)

- 65W Stable Output Power with FACC
- Loud Audio output with 3W front speaker
- Expanded receiver coverage: 136-174MHz
- 220 Memory channels with 8 alpha-numeric characters
- User-Programmable Microphone Keys (4 keys)

Advanced Features
- Memory-Only Mode
- 50-Tone CTCSS/104-Tone DCS Tone System
- Versatile Scanning Capability
- TX/RX Split frequency memory
- RF squelch (only passes signals exceeding the programmed squelch level)
- DTMF Auto dialer (10 channel) Operation
- Large LED Mode indicator for easy operation

The King of Mobile,
80W High Power Output

144MHz 80W
FM SINGLE BAND TRANSCEIVER

FTM-2980

FTM-2980R: US, Asia and Australia
FTM-2980E: Europe
(DTMF Microphone MH-48A6JA, Mounting Bracket and DC Power Cable included)

- Massive Heatsink guarantees 80 Watts of RF Power with No Cooling Fan Needed
(Four selectable power output levels are provided: 80/30/10/5 Watts)
- Loud 3 Watts of Audio Output for noisy environments
- Expanded receiver coverage: 136-174MHz
- 200 Memory Channels for serious users

Advanced Features
- CTCSS and DCS Encode/Decode Built In
- Versatile Scanning Capability
- Dual Receive
- WX Channels with “Severe Weather” Alert (US Version)
- Smart Search Operation
- DTMF Direct Access Microphone Included
- Alpha-Numeric Channel Display
- RF-Squelch
- Interactive Programming Menu

<table>
<thead>
<tr>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand Microphone MH-42S8J</td>
</tr>
<tr>
<td>DTMF Microphone MH-48A6JA</td>
</tr>
<tr>
<td>High-Power External Speaker MLS-100</td>
</tr>
<tr>
<td>Quick Release Mobile Mounting Bracket MMB-60</td>
</tr>
<tr>
<td>MIC Extension Kit YSK-7800</td>
</tr>
<tr>
<td>Packet Interface CT-39A</td>
</tr>
<tr>
<td>AG Power Supply 25A</td>
</tr>
<tr>
<td>AG Power Supply 25A</td>
</tr>
<tr>
<td>Desktop Joint SMY-201</td>
</tr>
<tr>
<td>AG Adapter for SMY-201</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FT-7900</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT-2980</td>
</tr>
</tbody>
</table>

*1 US and Asian versions only
*2 US version only
*3 Depending on the transceiver
### Handheld Transceivers

<table>
<thead>
<tr>
<th>Programming Kit</th>
<th>C4FM/FM Dual Band</th>
<th>FM Dual / Single Band</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FT2D</td>
<td>FT-70D</td>
</tr>
<tr>
<td><strong>ADMIS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows™ PC Programming Kit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADMIS-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADMIS-10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADMIS-20V6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microphone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADMIS-1U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADMIS-270</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Soft Case & Belt Clip

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSG/SHC</td>
<td>Soft Vinyl Case</td>
</tr>
<tr>
<td>SHB-13</td>
<td>Belt Clip</td>
</tr>
<tr>
<td>CLIP-17D</td>
<td>Swivel Belt Clip</td>
</tr>
</tbody>
</table>

### Microphone/Headset

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MH-344B</td>
<td>Compact Speaker / Microphone</td>
</tr>
<tr>
<td>SSM-57A</td>
<td>Compact Lapel Mic with Earpiece</td>
</tr>
<tr>
<td>MH-57A4B</td>
<td>Compact Speaker / Microphone</td>
</tr>
<tr>
<td>MH-73A4B</td>
<td>Waterproof Speaker / Microphone</td>
</tr>
<tr>
<td>SSM-16B</td>
<td>Speaker / Microphone</td>
</tr>
<tr>
<td>MH-85A11U</td>
<td>Speaker Microphone with Snaphelmet</td>
</tr>
<tr>
<td>SSM-64A</td>
<td>Lightweight VOX (Voice-Operated) Headset</td>
</tr>
<tr>
<td>SSM-63A</td>
<td>Lightweight VOX (Voice-Operated) Headset</td>
</tr>
<tr>
<td>SSM-55A</td>
<td>Earpiece / Microphone</td>
</tr>
<tr>
<td>SSM-52B</td>
<td>VOX Earpiece Microphone</td>
</tr>
</tbody>
</table>

### Cables & Adapters

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-DC-6</td>
<td>2C Cable (Plug &amp; Wire Only)</td>
</tr>
<tr>
<td>SDO-19</td>
<td>2C Cable with Cigarette-Lighter Plug</td>
</tr>
<tr>
<td>ON-3</td>
<td>Adapter for use with BNC Connector</td>
</tr>
<tr>
<td>CT-27</td>
<td>Clipping Cable</td>
</tr>
<tr>
<td>CT-44</td>
<td>Microphone Adapter</td>
</tr>
<tr>
<td>CT-91</td>
<td>Microphone Adapter</td>
</tr>
<tr>
<td>CT-168</td>
<td>Clipping Cable</td>
</tr>
<tr>
<td>CT-169</td>
<td>PC Connection Cable (Double)</td>
</tr>
<tr>
<td>CT-370</td>
<td>Data Cable</td>
</tr>
<tr>
<td>CT-176</td>
<td>Data Cable</td>
</tr>
<tr>
<td>SCU-19</td>
<td>PC Connection Cable</td>
</tr>
<tr>
<td>SCU-35</td>
<td>Programming Cable</td>
</tr>
<tr>
<td>SCU-36</td>
<td>Clipping Cable</td>
</tr>
</tbody>
</table>

### Battery Pack & Battery Tray

<table>
<thead>
<tr>
<th>Battery Pack</th>
<th>Battery Tray</th>
</tr>
</thead>
<tbody>
<tr>
<td>FNB-83</td>
<td>Ni-MH Battery Pack</td>
</tr>
<tr>
<td>FNB-90L</td>
<td>Lithium-Ion Battery Pack</td>
</tr>
<tr>
<td>FNB-101L</td>
<td>Lithium-Ion Battery Pack</td>
</tr>
<tr>
<td>SBR-14L</td>
<td>Lithium-Ion Battery Pack</td>
</tr>
<tr>
<td>SBR-24L</td>
<td>Lithium-Ion Battery Pack</td>
</tr>
<tr>
<td>SBR-25L</td>
<td>Lithium-Ion Battery Pack</td>
</tr>
<tr>
<td>SBR-26L</td>
<td>Lithium-Ion Battery Pack</td>
</tr>
<tr>
<td>SBR-28L</td>
<td>Lithium-Ion Battery Pack</td>
</tr>
</tbody>
</table>

### Battery Chargers

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-15A</td>
<td>Rapid Charger</td>
</tr>
<tr>
<td>CD-26</td>
<td>Charger Cradle</td>
</tr>
<tr>
<td>CD-41</td>
<td>Rapid Charger</td>
</tr>
<tr>
<td>SBH-15</td>
<td>Desktop Rapid Charger</td>
</tr>
<tr>
<td>SBH-22</td>
<td>Rapid Charger</td>
</tr>
<tr>
<td>SBH-29</td>
<td>Rapid Charger</td>
</tr>
<tr>
<td>VAC-370*</td>
<td>Rapid Charger</td>
</tr>
<tr>
<td>PA-68*</td>
<td>AC Adapter</td>
</tr>
<tr>
<td>SAD-16*</td>
<td>AC Adapter</td>
</tr>
<tr>
<td>SAD-11*</td>
<td>AC Adapter</td>
</tr>
<tr>
<td>SAD-18*</td>
<td>AC Adapter</td>
</tr>
<tr>
<td>SAD-20*</td>
<td>AC Adapter</td>
</tr>
</tbody>
</table>

### Others

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SU-1</td>
<td>Barometric Pressure Sensor</td>
</tr>
<tr>
<td>FTD-7</td>
<td>DTMF Paging Unit</td>
</tr>
</tbody>
</table>

*1 Indicated Battery Capacity based on EU DIRECTIVE 2006/66/EC.
*2 Depending on the transceiver version.

### Mobile Transceivers

<table>
<thead>
<tr>
<th>Programming Kit</th>
<th>C4FM/FM Dual Band</th>
<th>C4FM/FM Dual Band</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FTM-400XD</td>
<td>FTM-100D</td>
</tr>
<tr>
<td><strong>ADMIS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows™ PC Programming Kit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADMIS-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADMIS-10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADMIS-20V6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microphone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADMIS-1U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADMIS-270</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Microphones/Speaker

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MH-42C4J</td>
<td>Hand Microphone</td>
</tr>
<tr>
<td>MH-44A74A</td>
<td>DTMF Microphone</td>
</tr>
<tr>
<td>MH-85A11U</td>
<td>Microphone with Snaphelmet</td>
</tr>
<tr>
<td>MLB-100</td>
<td>High-Power External Speaker</td>
</tr>
<tr>
<td>MLB-200-M</td>
<td>High-Power External Speaker</td>
</tr>
</tbody>
</table>

### Bracket

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMB-60</td>
<td>Quick-Release Mobile Mounting Bracket</td>
</tr>
<tr>
<td>MMB-98</td>
<td>Vacuum Cup Mount Bracket for Controller / Front Panel</td>
</tr>
</tbody>
</table>

### Cables

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YSK-8900</td>
<td>Separation Kit</td>
</tr>
<tr>
<td>YSK-7800</td>
<td>Separation Kit</td>
</tr>
<tr>
<td>MEK-2</td>
<td>Mic Extension Kit</td>
</tr>
<tr>
<td>CT-39A</td>
<td>Packet Interface Cable</td>
</tr>
<tr>
<td>CT-162</td>
<td>Separation Cable 20R (Rel)</td>
</tr>
<tr>
<td>CT-163</td>
<td>Data Cable</td>
</tr>
<tr>
<td>CT-164</td>
<td>Data Cable</td>
</tr>
<tr>
<td>CT-165</td>
<td>Data Cable</td>
</tr>
<tr>
<td>CT-166</td>
<td>Clipping Cable</td>
</tr>
<tr>
<td>CT-167</td>
<td>Data Cable</td>
</tr>
<tr>
<td>SCU-20</td>
<td>PC Connection Cable</td>
</tr>
<tr>
<td>SCU-23</td>
<td>Microphone Extension Cable for MH-85A11U</td>
</tr>
</tbody>
</table>

### Programming Kit

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP-1030A</td>
<td>AC Power Supply (25 A)</td>
</tr>
<tr>
<td>FP-1023X</td>
<td>AC Power Supply (23 A)</td>
</tr>
<tr>
<td>SMB-201</td>
<td>Deskstop Cooling Fan</td>
</tr>
<tr>
<td>SAD-193</td>
<td>AC Adapter for SMB-201</td>
</tr>
<tr>
<td>BU-2</td>
<td>Kebbe11 Adapter Unit</td>
</tr>
<tr>
<td>FVS-2</td>
<td>Voice Guide Unit</td>
</tr>
</tbody>
</table>

* US and Asian versions only. *2 US version only.
*3 Depending on the transceiver version.
### Handheld Transceivers

<table>
<thead>
<tr>
<th>Band</th>
<th>CAFM/FM Single Band</th>
<th>PM Quad Band</th>
<th>FM Dual/Single Band</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT-7200D</td>
<td>FT-3200D</td>
<td>FT-3207D</td>
<td>FT-8900R</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>General</strong></th>
<th>FT2DR</th>
<th>FT2SE</th>
<th>FT-7200D</th>
<th>FT-7400</th>
<th>FT-7600</th>
<th>FT-7800</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (Main Band RX)</td>
<td>0.07 - 35 MHz (RF Only)</td>
<td>0.07 - 35 MHz (RF Only)</td>
<td>0.07 - 35 MHz (RF Only)</td>
<td>0.07 - 35 MHz (RF Only)</td>
<td>0.07 - 35 MHz (RF Only)</td>
<td>0.07 - 35 MHz (RF Only)</td>
</tr>
<tr>
<td>B (Main Band RX)</td>
<td>0.07 - 35 MHz (RF Only)</td>
<td>0.07 - 35 MHz (RF Only)</td>
<td>0.07 - 35 MHz (RF Only)</td>
<td>0.07 - 35 MHz (RF Only)</td>
<td>0.07 - 35 MHz (RF Only)</td>
<td>0.07 - 35 MHz (RF Only)</td>
</tr>
<tr>
<td>Frequency Ranges</td>
<td>0.07 - 35 MHz (Main Band RX)</td>
<td>0.07 - 35 MHz (Main Band RX)</td>
<td>0.07 - 35 MHz (Main Band RX)</td>
<td>0.07 - 35 MHz (Main Band RX)</td>
<td>0.07 - 35 MHz (Main Band RX)</td>
<td>0.07 - 35 MHz (Main Band RX)</td>
</tr>
<tr>
<td>Channel Step</td>
<td>25, 50, 100 kHz, 1 MHz</td>
<td>25, 50, 100 kHz, 1 MHz</td>
<td>25, 50, 100 kHz, 1 MHz</td>
<td>25, 50, 100 kHz, 1 MHz</td>
<td>25, 50, 100 kHz, 1 MHz</td>
<td>25, 50, 100 kHz, 1 MHz</td>
</tr>
<tr>
<td>Frequency Stability</td>
<td>±2.5 ppm (operating temperature: 0°C to 60°C)</td>
<td>±2.5 ppm (operating temperature: 0°C to 60°C)</td>
<td>±2.5 ppm (operating temperature: 0°C to 60°C)</td>
<td>±2.5 ppm (operating temperature: 0°C to 60°C)</td>
<td>±2.5 ppm (operating temperature: 0°C to 60°C)</td>
<td>±2.5 ppm (operating temperature: 0°C to 60°C)</td>
</tr>
<tr>
<td>Emission Type</td>
<td>F3D, F3D, F3E, F7W</td>
<td>F3D, F3E, F7W</td>
<td>F3D, F3E, F7W</td>
<td>F3D, F3E, F7W</td>
<td>F3D, F3E, F7W</td>
<td>F3D, F3E, F7W</td>
</tr>
<tr>
<td>Current Consumption</td>
<td>305 mA (Single Band Receiver)</td>
<td>305 mA (Single Band Receiver)</td>
<td>305 mA (Single Band Receiver)</td>
<td>305 mA (Single Band Receiver)</td>
<td>305 mA (Single Band Receiver)</td>
<td>305 mA (Single Band Receiver)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C to 55°C</td>
<td>-40°C to 55°C</td>
<td>-40°C to 55°C</td>
<td>-40°C to 55°C</td>
<td>-40°C to 55°C</td>
<td>-40°C to 55°C</td>
</tr>
<tr>
<td>Case Size (WxHxD)</td>
<td>220 x 173 x 50 mm</td>
<td>220 x 173 x 50 mm</td>
<td>220 x 173 x 50 mm</td>
<td>220 x 173 x 50 mm</td>
<td>220 x 173 x 50 mm</td>
<td>220 x 173 x 50 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>1.13 kg (2.49 lbs) with SSB/AM &amp; antenna</td>
<td>1.13 kg (2.49 lbs) with SSB/AM &amp; antenna</td>
<td>1.13 kg (2.49 lbs) with SSB/AM &amp; antenna</td>
<td>1.13 kg (2.49 lbs) with SSB/AM &amp; antenna</td>
<td>1.13 kg (2.49 lbs) with SSB/AM &amp; antenna</td>
<td>1.13 kg (2.49 lbs) with SSB/AM &amp; antenna</td>
</tr>
</tbody>
</table>

**Transmitter**

<table>
<thead>
<tr>
<th>RF Power Output</th>
<th>3.8 W (4.0 V)</th>
<th>3.8 W (4.0 V)</th>
<th>3.8 W (4.0 V)</th>
<th>3.8 W (4.0 V)</th>
<th>3.8 W (4.0 V)</th>
<th>3.8 W (4.0 V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spurious Emission</td>
<td>0.5 W (30 dB below peak)</td>
<td>0.5 W (30 dB below peak)</td>
<td>0.5 W (30 dB below peak)</td>
<td>0.5 W (30 dB below peak)</td>
<td>0.5 W (30 dB below peak)</td>
<td>0.5 W (30 dB below peak)</td>
</tr>
<tr>
<td>Microphone Impedance</td>
<td>2 kΩ</td>
<td>2 kΩ</td>
<td>2 kΩ</td>
<td>2 kΩ</td>
<td>2 kΩ</td>
<td>2 kΩ</td>
</tr>
</tbody>
</table>

**Receiver**

<table>
<thead>
<tr>
<th>Circuit Type</th>
<th>NFM, AM, AM, AM &amp; FSK</th>
<th>NFM, AM, AM &amp; FSK</th>
<th>NFM, AM, AM &amp; FSK</th>
<th>NFM, AM, AM &amp; FSK</th>
<th>NFM, AM, AM &amp; FSK</th>
<th>NFM, AM, AM &amp; FSK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate Frequencies</td>
<td>2.0 to 12.5 MHz (NFM, AM, AM), 2.0 to 12.5 MHz (NFM, AM)</td>
<td>2.0 to 12.5 MHz (NFM, AM, AM), 2.0 to 12.5 MHz (NFM, AM)</td>
<td>2.0 to 12.5 MHz (NFM, AM, AM), 2.0 to 12.5 MHz (NFM, AM)</td>
<td>2.0 to 12.5 MHz (NFM, AM, AM), 2.0 to 12.5 MHz (NFM, AM)</td>
<td>2.0 to 12.5 MHz (NFM, AM, AM), 2.0 to 12.5 MHz (NFM, AM)</td>
<td>2.0 to 12.5 MHz (NFM, AM, AM), 2.0 to 12.5 MHz (NFM, AM)</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>0.01 µV (minimum)</td>
<td>0.01 µV (minimum)</td>
<td>0.01 µV (minimum)</td>
<td>0.01 µV (minimum)</td>
<td>0.01 µV (minimum)</td>
<td>0.01 µV (minimum)</td>
</tr>
<tr>
<td>Selectivity</td>
<td>2.5 kHz at 10 kHz IM</td>
<td>2.5 kHz at 10 kHz IM</td>
<td>2.5 kHz at 10 kHz IM</td>
<td>2.5 kHz at 10 kHz IM</td>
<td>2.5 kHz at 10 kHz IM</td>
<td>2.5 kHz at 10 kHz IM</td>
</tr>
<tr>
<td>AF Output</td>
<td>300 mV @ 10% THD, 1500 mV @ 10% THD, 750 mW</td>
<td>300 mV @ 10% THD, 1500 mV @ 10% THD, 750 mW</td>
<td>300 mV @ 10% THD, 1500 mV @ 10% THD, 750 mW</td>
<td>300 mV @ 10% THD, 1500 mV @ 10% THD, 750 mW</td>
<td>300 mV @ 10% THD, 1500 mV @ 10% THD, 750 mW</td>
<td>300 mV @ 10% THD, 1500 mV @ 10% THD, 750 mW</td>
</tr>
<tr>
<td>AF Output Impedance</td>
<td>8 Ω</td>
<td>8 Ω</td>
<td>8 Ω</td>
<td>8 Ω</td>
<td>8 Ω</td>
<td>8 Ω</td>
</tr>
</tbody>
</table>
## Handheld Transceivers Specifications

<table>
<thead>
<tr>
<th>Field</th>
<th>VX-6R</th>
<th>VX-6E</th>
<th>FT-65R</th>
<th>FT-66E</th>
<th>FT-6XR</th>
<th>FT-6XE</th>
<th>FT-6OR</th>
<th>FT-2SR</th>
<th>FT-2SE</th>
<th>FT-4XR</th>
<th>FT-4VE</th>
<th>FT-270R</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency Ranges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>T</strong></td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
</tr>
<tr>
<td><strong>CVR</strong></td>
<td>440 MHz</td>
<td>440 MHz</td>
<td>440 MHz</td>
<td>440 MHz</td>
<td>440 MHz</td>
<td>440 MHz</td>
<td>440 MHz</td>
<td>440 MHz</td>
<td>440 MHz</td>
<td>440 MHz</td>
<td>440 MHz</td>
<td>440 MHz</td>
</tr>
<tr>
<td><strong>TX</strong></td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
</tr>
<tr>
<td><strong>RX</strong></td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
<td>544 MHz</td>
</tr>
<tr>
<td><strong>Channel Steps</strong></td>
<td>25 kHz</td>
<td>25 kHz</td>
<td>25 kHz</td>
<td>25 kHz</td>
<td>25 kHz</td>
<td>25 kHz</td>
<td>25 kHz</td>
<td>25 kHz</td>
<td>25 kHz</td>
<td>25 kHz</td>
<td>25 kHz</td>
<td>25 kHz</td>
</tr>
<tr>
<td><strong>Frequency Duality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RF Power Output</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sensitivity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Intermodulation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Selectivity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AF Output</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AF Output Interface</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Channel Steps
- 25 kHz, 25 kHz, 25 kHz, 25 kHz, 25 kHz, 25 kHz, 25 kHz, 25 kHz, 25 kHz, 25 kHz, 25 kHz, 25 kHz

### Frequency Duality
- 25 kHz, 25 kHz, 25 kHz, 25 kHz, 25 kHz, 25 kHz, 25 kHz, 25 kHz, 25 kHz, 25 kHz, 25 kHz, 25 kHz

### RF Power Output
- 0.2 W, 0.2 W, 0.2 W, 0.2 W, 0.2 W, 0.2 W, 0.2 W, 0.2 W, 0.2 W, 0.2 W, 0.2 W, 0.2 W

### Sensitivity
- 0.2 µV for 1 db S/N (100 kHz), 0.2 µV for 1 db S/N (400 kHz), 0.2 µV for 1 db S/N (400 kHz), 0.2 µV for 1 db S/N (400 kHz), 0.2 µV for 1 db S/N (400 kHz), 0.2 µV for 1 db S/N (400 kHz), 0.2 µV for 1 db S/N (400 kHz), 0.2 µV for 1 db S/N (400 kHz), 0.2 µV for 1 db S/N (400 kHz), 0.2 µV for 1 db S/N (400 kHz), 0.2 µV for 1 db S/N (400 kHz), 0.2 µV for 1 db S/N (400 kHz)
### Mobile Transceivers

<table>
<thead>
<tr>
<th>General</th>
<th>C4FM/FM Dual Band</th>
<th>C4FM/FM Single Band</th>
<th>In/Out</th>
<th>FM Dual Band</th>
<th>FM Single Band</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency Ranges</strong></td>
<td><strong>DR-2X</strong></td>
<td><strong>DR-2XE</strong></td>
<td><strong>DR-2X</strong></td>
<td><strong>DR-2XE</strong></td>
<td><strong>DR-2X</strong></td>
</tr>
<tr>
<td><strong>Channel Steps</strong></td>
<td>62.5 GHz, 125 MHz, 250 MHz</td>
<td>62.5 GHz, 125 MHz</td>
<td>62.5 MHz</td>
<td>62.5 MHz</td>
<td>62.5 MHz</td>
</tr>
<tr>
<td><strong>Frequency Stability</strong></td>
<td>±1 ppm (±27 MHz)</td>
<td>±1 ppm (±27 MHz)</td>
<td>±1 ppm</td>
<td>±1 ppm</td>
<td>±1 ppm</td>
</tr>
<tr>
<td><strong>Supply Voltage</strong></td>
<td>±17 V, ±17 V, ±17 V</td>
<td>±17 V, ±17 V, ±17 V</td>
<td>±17 V</td>
<td>±17 V</td>
<td>±17 V</td>
</tr>
<tr>
<td><strong>Current Consumption</strong></td>
<td>50 mA (max)</td>
<td>50 mA (max)</td>
<td>50 mA</td>
<td>50 mA</td>
<td>50 mA</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>+40°C to +60°C</td>
<td>+40°C to +60°C</td>
<td>+40°C to +60°C</td>
<td>+40°C to +60°C</td>
<td>+40°C to +60°C</td>
</tr>
<tr>
<td><strong>Case Size (WxHxD)</strong></td>
<td>100 x 90 x 30 mm</td>
<td>100 x 90 x 30 mm</td>
<td>100 x 90 x 30 mm</td>
<td>100 x 90 x 30 mm</td>
<td>100 x 90 x 30 mm</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>1.2 kg (2.6 lbs)</td>
<td>1.2 kg (2.6 lbs)</td>
<td>1.2 kg</td>
<td>1.2 kg</td>
<td>1.2 kg</td>
</tr>
</tbody>
</table>

### Transmitter

| **RF Power Output** | 60 / 30 / 15 W | 60 / 30 / 15 W | 60 / 30 / 15 W | 60 / 30 / 15 W | 60 / 30 / 15 W | 60 / 30 / 15 W |
| **Spurious Emission** | 60 dBc at 10 MHz | 60 dBc at 10 MHz | 60 dBc at 10 MHz | 60 dBc at 10 MHz | 60 dBc at 10 MHz | 60 dBc at 10 MHz |
| **Microphone Impedance** | 3.3 kg (7.3 lbs) | 3.3 kg (7.3 lbs) | 3.3 kg | 3.3 kg | 3.3 kg | 3.3 kg |

### Receiver

<table>
<thead>
<tr>
<th><strong>Sensitivity</strong></th>
<th><strong>Measurement Method</strong></th>
<th><strong>FM Mode</strong></th>
<th><strong>Digital Mode</strong></th>
<th><strong>BER</strong>%</th>
<th><strong>AF Output</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impedance</strong></td>
<td>62.5 kHz, 25 MHz</td>
<td>62.5 kHz, 25 MHz</td>
<td>62.5 kHz</td>
<td>62.5 kHz</td>
<td>62.5 kHz</td>
</tr>
</tbody>
</table>

### Digital Repeaters

<table>
<thead>
<tr>
<th><strong>General</strong></th>
<th><strong>C4FM/FM Dual Band</strong></th>
<th><strong>DR-2X</strong></th>
<th><strong>DR-2XE</strong></th>
<th><strong>C4FM/FM Dual Band</strong></th>
<th><strong>DR-2X</strong></th>
<th><strong>DR-2XE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency Ranges</strong></td>
<td>144 + 448 MHz</td>
<td>144 + 448 MHz</td>
<td>144 + 448 MHz</td>
<td>144 + 448 MHz</td>
<td>144 + 448 MHz</td>
<td>144 + 448 MHz</td>
</tr>
<tr>
<td><strong>Emission Type</strong></td>
<td><strong>Modulation</strong></td>
<td><strong>DR-2X</strong></td>
<td><strong>DR-2XE</strong></td>
<td><strong>DR-2X</strong></td>
<td><strong>DR-2XE</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Power Output</strong></td>
<td><strong>10 dBm</strong></td>
<td>10 dBm</td>
<td>10 dBm</td>
<td>10 dBm</td>
<td>10 dBm</td>
<td>10 dBm</td>
</tr>
<tr>
<td><strong>Spurious Emission</strong></td>
<td>At least 60 dB below</td>
<td>At least 60 dB below</td>
<td>At least 60 dB below</td>
<td>At least 60 dB below</td>
<td>At least 60 dB below</td>
<td>At least 60 dB below</td>
</tr>
<tr>
<td><strong>RF Power Output</strong></td>
<td>50 / 30 / 15 W</td>
<td>50 / 30 / 15 W</td>
<td>50 / 30 / 15 W</td>
<td>50 / 30 / 15 W</td>
<td>50 / 30 / 15 W</td>
<td>50 / 30 / 15 W</td>
</tr>
<tr>
<td><strong>Spurious Emission</strong></td>
<td>60 dBc at 10 MHz</td>
<td>60 dBc at 10 MHz</td>
<td>60 dBc at 10 MHz</td>
<td>60 dBc at 10 MHz</td>
<td>60 dBc at 10 MHz</td>
<td>60 dBc at 10 MHz</td>
</tr>
</tbody>
</table>

### Digital Repeaters

<table>
<thead>
<tr>
<th><strong>General</strong></th>
<th><strong>C4FM/FM Dual Band</strong></th>
<th><strong>DR-2X</strong></th>
<th><strong>DR-2XE</strong></th>
<th><strong>C4FM/FM Dual Band</strong></th>
<th><strong>DR-2X</strong></th>
<th><strong>DR-2XE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency Ranges</strong></td>
<td>144 + 448 MHz</td>
<td>144 + 448 MHz</td>
<td>144 + 448 MHz</td>
<td>144 + 448 MHz</td>
<td>144 + 448 MHz</td>
<td>144 + 448 MHz</td>
</tr>
<tr>
<td><strong>Emission Type</strong></td>
<td><strong>Modulation</strong></td>
<td><strong>DR-2X</strong></td>
<td><strong>DR-2XE</strong></td>
<td><strong>DR-2X</strong></td>
<td><strong>DR-2XE</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Power Output</strong></td>
<td><strong>10 dBm</strong></td>
<td>10 dBm</td>
<td>10 dBm</td>
<td>10 dBm</td>
<td>10 dBm</td>
<td>10 dBm</td>
</tr>
<tr>
<td><strong>Spurious Emission</strong></td>
<td>At least 60 dB below</td>
<td>At least 60 dB below</td>
<td>At least 60 dB below</td>
<td>At least 60 dB below</td>
<td>At least 60 dB below</td>
<td>At least 60 dB below</td>
</tr>
<tr>
<td><strong>RF Power Output</strong></td>
<td>50 / 30 / 15 W</td>
<td>50 / 30 / 15 W</td>
<td>50 / 30 / 15 W</td>
<td>50 / 30 / 15 W</td>
<td>50 / 30 / 15 W</td>
<td>50 / 30 / 15 W</td>
</tr>
<tr>
<td><strong>Spurious Emission</strong></td>
<td>60 dBc at 10 MHz</td>
<td>60 dBc at 10 MHz</td>
<td>60 dBc at 10 MHz</td>
<td>60 dBc at 10 MHz</td>
<td>60 dBc at 10 MHz</td>
<td>60 dBc at 10 MHz</td>
</tr>
</tbody>
</table>
http://www.yaesu.com

*Bluetooth® name and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such trademarks by Yaesu Co., Ltd. is under license. Other trademarks and trade names are those of their respective owners.

*APRS® is a registered trademark of Bob Bruninga, WB4APR. SmartBeaconing™ from HamHUD Nichelonix.