High Visibility and Operability with High-Resolution Full-Color TFT & Touch Panel Display
Compact C4FM Digital Transceiver with Dual Simultaneous Receive

Anytime, Anywhere with WIRES-X!
Simpler and Highly-mobile Amateur Radio Internet Communication

Portable Digital Node Function
The Portable Digital Node function enables easy setup and WIRES-X Node operation from any location, such as a Hotel room, Airport, in a Vehicle or a Free Wi-Fi space, etc. A simple and Highly-mobile node operation can be provided.

*Please refer to Yaesu website for the detailed preparation, connection, PC settings and operation of the “Portable Digital Node Function”

FT3D
C4FM/FM 144/430MHz DUAL BAND DIGITAL TRANSCEIVER

Compact & Reliable 5 W RF Power Output
The FT3D provides reliable 5 Watts RF power output in a compact (W2.44”x H3.94”x D1.28”: 62 x 100 x 32.5mm) and light weight (9.95 oz: 282g) body. Four selectable RF output power level settings, 5W/2.5W/1W/0.3W are available individually per frequency bands for battery power-saving choices.

700mW of Exceptional Quality Audio
Even in a compact body the user enjoys loud and clear C4FM voice quality from the 700mW of audio power that has been carefully tuned to enable clear and comfortable communication.

Easy Hands-free Operation with Built-in Bluetooth® unit
A Bluetooth® unit is installed in FT3D enables hands-free operation using either the optional Yaesu Bluetooth® headset SSM-BT10 or a commercially available product. In addition to transmission of the PTT button function from the SSM-BT10 headset, it also supports voice activated transmission (VOX) function, so you can possible to operate FT3D completely hands-free while putting it in a pocket or backpack.

Simultaneous C4FM/C4FM Standby
The FT3D supports simultaneous C4FM Digital monitoring for both the A and B-bands. This means for example that you can listen to WIRES-X communications in other bands and frequencies while waiting for a CQ call in C4FM Digital. Only the voice of the first received C4FM Digital transmission will be heard, but the call sign and position information as well as other data can be received simultaneously.

Real Dual Band Operation (V+V/U+U/V+U/U+V)
With two independent receivers, you may listen to either the same or different bands simultaneously.

Snapshot Feature (Transmit/Receive Image data)
You can easily take a snapshot by connecting the built-in camera microphone MH-85A11U (optional). The captured image is displayed with full color, and you can send the image to other C4FM digital transceivers by pressing the send image button on the microphone. You can also display a snapshot image sent from a friend on a full color display.

Set mode Screen
Frequency Direct Input
In “Direct Operation”, the Portable Node station transceiver is used only for WIRES-X internet communications without transmitting or receiving local “On Air” radio signals.

In “Access Point Operation” the Portable Node station can be used to communicate “On Air” and relay nearby local C4FM digital transceivers, while simultaneously connected with the Internet WIRES-X digital rooms and digital node stations.

**Advanced Features of Portable Digital Node Function**
- Digital Node Operation with an internet connection at remote location
- Easy Connection requires only a C4FM digital transceiver and PC compatible with portable digital node function
- No need to open an Ethernet port
- No fixed or dynamic global IP address is required

**Excellent Features of C4FM Digital Communication**

**Sophisticated Digital Group ID (DG-ID) Operation**
Digital Group ID (DG-ID) “00 to 99”, in the C4FM digital mode, can be easily configured by each group member to facilitate communications between the specific group participants.

**Digital Group Monitor (GM) Function**
The Digital Group Monitor (GM) function automatically checks whether the station operating the GM function on the same frequency and with the same DG-ID is within communication range. The distance and direction for each call-sign (station) information is shown on the screen. This feature allows you to easily check the position up to 24 stations within the communications area.

**FM friendly Digital Communications by AMS (Automatic Mode Select)**
FM friendly digital operation is made possible by AMS (Automatic Mode Select). AMS automatically determines whether the received signal is C4FM Digital or conventional FM, and sets the receiver to the appropriate mode. The AMS function enables hassle-free operation by removing the need for users to manually switch between modes.

**Smart Navigation Function is also Available in Full color**

- **Real Time Navigation Feature**
  Digital V/D Mode communicates additional information such as position data at the same time as the voice signal, allowing you for example to view the distance and direction of the other station in real time while communicating.

- **Backtrack Feature**
  Backtrack feature initiates navigation to a pre-registered starting point. You can constantly check the direction and distance from your current position and it allows navigation back to the departure point, or a point previously added to the memory.

**Advanced Features that Ensures Ease of Operation**

- **Full-fledged wide-band reception with high sensitivity**
  In addition to full operation on the 144MHz and 430MHz Amateur bands, the FT3D provides wide-range coverage from 0.5MHz - 999.99MHz (A Band), 108MHz - 580MHz (B Band), continuous reception.

- **Built-in High Precision GPS Antenna**
  The FT3D comes standard with a high-sensitivity 66 channel GPS antenna (located at the top of the unit). The time required for acquiring position information as well as the accuracy have been further improved. In C4FM digital mode, you can display the position and direction of the partner station in real time.

- **1200/9600bps APRS® Data communication**
  APRS® information display, received station list display, message transfer as well as SmartBeaconing™ are all supported. You will be able to display the APRS information, station list; and use the message, SmartBeaconing™ function and, also you can track your APRS® movement on the Internet websites.

- **High-resolution Band scope with Fast display of up to 79 channels**
  The FT3D band scope function displays up to 79 channels centered around the current VFO frequency in real time with high speed.

- **CAM (Club channel Activity Monitor) function**
  Club registered memory channels can be scanned and signal strength can be monitored in real time. Byghosting the signal strength of past peaks, it is possible to monitor the current receiving status. In addition, it is very convenient because it can be adjusted to the receiving frequency with one touch of the channel bar. (Up to 5 channels can be registered / displayed)

**Includes 2,200mAh High-capacity Lithium-ion battery**
The high-capacity lithium-Ion battery pack SBR-14LI (2,200mAh) comes standard with the Transceiver.

**Simultaneous AM/FM broadcast Reception and 2-channel Monitoring**
You can listen to AM or FM radio stations while monitoring two frequency channels.
Two independent receivers will allow you to listen to your favorite AM or FM broadcast station and monitor two different bands (“A band” and “B band”) at the same time.

**micro SD Card Slot**
The FT3D accepts commercially available micro SD cards (up to 32 GB) for storage of GPS logger data (recorded track information can be displayed later by using map software on your PC). Backing up the memory of the unit and storing image data and other useful information on the card is also possible.

By using the SD card, it is also possible to clone the radio data to other compatible radios.
### Other Practical Features

- Large-capacity 1256ch memory and twenty-four 100ch memory banks
- Illuminated keyboard that will permit easy operation in dark or poor lighting
- Easy to use dual-knob allows convenient volume control and dial operation
- Memory ALPHA TAG up to 16 characters
- Built-in CTCSS, DCS, Pager (EPCS) function encode/decode enables Selective call features
- DTMF Encode
- DTMF Memory
- ARS/Automatic Repeater Shift
- Built-in On/Off Timer, Automatic Power Off (APO) and Time-out Timer (TOT)
- Versatile Scanning
- NOAA Weather alert: available in-service area
- GPS data output feature
- External DC input
- Password Lock function
- Water Protection IPX5 Rating

### Specifications

#### General

- **Frequency Ranges**
  - A (Main) Band RX: 0.5 - 1.8 MHz (AM Radio)
  - F (Sub) Band RX: 137 - 174 MHz (AM Ham Radio)
  - B (Sub) Band RX: 174 - 220 MHz (AM Ham Radio)

- **Intermediate Frequencies**
  - 58.05 MHz (AM, NFM A Band)
  - 88.2 MHz (50 MHz HAM)
  - 107.95 MHz (144 MHz HAM)
  - 136.95 MHz (220 MHz HAM)

- **Operating Temperature**:
  - -4°F to +140°F (-20°C to +60°C)

- **Supply Voltage**: Nominal:
  - 7.2V DC, Negative Ground (SBR-14LI)
  - 10.5 - 16V DC, Negative Ground (EXT DC JACK)
  - 5.5 - 8.4V DC, Negative Ground (Li-ion Battery pack)
  - 3.6 - 4.5V DC, Negative Ground (with FBA-39)

#### Transmitter

- **RF Power Output**: 5W/2.5W/1W/0.3W (@ Battery pack or EXT DC)
- **AF Output**: 700mW (16Ω)

#### Receiver

- **Circuit Type**: AM, NFM: Direct-Conversion
- **Selectivity**: NFM, AM 12kHz / 35kHz (-6dB / -60dB)

#### Channel Steps

- 5, 6.25, 8.33, 10, 12.5, 15, 20, 25, 50, 100kHz

#### Modulation Types

- F1D, F2D, F3E, F7W
- Variable Frequency modulation
- F7W: 4FSK (C4FM)

#### Spurious Emission

- At least 60dB below (≤RX Power Hl. L3)
- At least 50dB below (≤RX Power L2, L1)

#### Transmitter Options

- MH-8SA11U: Speaker Microphone with Snapshot camera
- MH-34B4B: Speaker / Microphone
- SSM-57A: Earpiece Microphone
- SSM-63A: VOX Headset
- SSM-BT10: Bluetooth® Headset
- CT-44: Microphone Adapter
- FNB-101LI: Lithium Ion Battery Pack (1100 mAh)
- SBR-14LI: Lithium Ion Battery Pack (2200 mAh)
- SAD-25: Battery Charger
- CD-41: Rapid Charger
- CT-169: PC Connection Cable (Double)
- CT-170: Data Cable (2.5 p)
- CT-168: Cloning Cable
- SHB-13: Belt Clip
- E-DC-6: DC Cable
- SDD-13: DC Cable with Cigarette-Lighter Plug
- SHC-34: Soft Case

### Note

* Check local regulations for availability in your region.