

Introducing the C4FM/FM and Repeater System

System Fusion

Leading Amateur Communications Into the Future



System Fusion – Best Solution for the Future

System Fusion joins Digital and Analog FM Communication into a single multiple function system.





Fusion of Analog FM and Digital

The new YAESU System Fusion is the future of Ham Radio Digital Systems; it provides <u>total integration and compatibility</u> of both Digital & Conventional Analog FM communications.

By using the revolutionary System Fusion, the user no longer needs to choose between Digital or Analog FM; instead we can:

- Use whichever system is best suited for the situation
- Communicate freely between Digital and Conventional FM stations



The Choice of C4FM Digital

Compared to other Digital modulations within FDMA, C4FM has excellent communication quality (BER: Bit Error Rate characteristics).

Presently, C4FM is the standard method for professional communication devices in FDMA, and is therefore expected to continue to be the main stream Digital Communication in the future.





Multiple 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







AMS (Automatic Mode Select)

FM Friendly Digital Easy Migration







Digital GM Function (Group Monitor)

Automatically checks whether members registered to a group are within the communication range. Displays information such as the Distance and Orientation for each call sign on the screen.







Snapshot Function (Image Data Transmission)







Smart Navigation Function

Enables Real-time location checking at any time

In digital V/D mode, information such as position data is transmitted together with voice signals so the distance and direction to the other stations can be displayed in real-time while communicating with them.





Backtrack Function

Enables navigation to a registered location at the touch of a button. When hiking or camping, simply register your starting point or campsite before departure. The distance and orientation from the current location is displayed on the screen.





DR-1 Repeater - C4FM/Analog FM AMS Repeater

YAESU DR-1 is a Digital/Conventional Analog FM dual mode Repeater that covers VHF & UHF Amateur Radio bands.

Replace your Conventional Analog FM repeater to (1) provide continued use of Conventional Analog FM communication (2) while integrating the use of Digital Communication functions





DR-1 Repeater - Features

- Modulation Mode: 25 kHz FM, 12.5 kHz C4FM Digital (V/D Mode, VFR Mode, DFR Mode)
- System Fusion is not compatible with D-STAR GMSK digital format
- Output Power: 50 W / 25 W / 10 W
- Large-size Heat-Sink & Cooling Fan to ensure stable Power Output
- Emergency Operation: Supports Emergency Battery



DR-1 Repeater - Features

• AMS (Automatic Mode Select) function automatically recognizes whether the signal is a C4FM digital or analog FM signal, and transmits using the set communication method.



• Built-in large-size monitor speaker with volume control for checking the reception state during setup. The speaker can also be used to constantly monitor the reception state

• A microphone terminal is provided on the front panel for use in repeater transmitter tests and to enable use as a base station



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FT1DR Handheld & FTM 400DR – Available Now DR-1 Repeater – Available in November



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