

NOHV Repeater

AMS USE

Configuration summary for the membership

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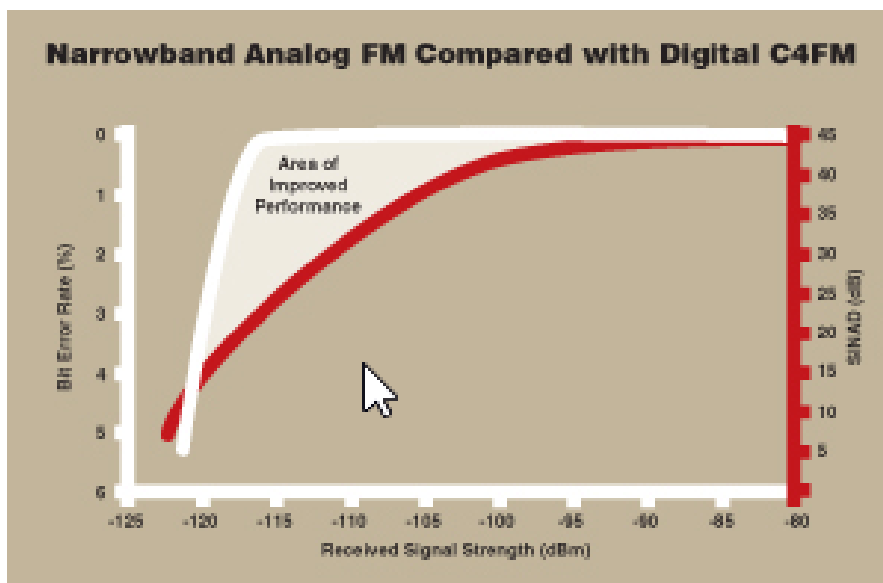
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Introduction

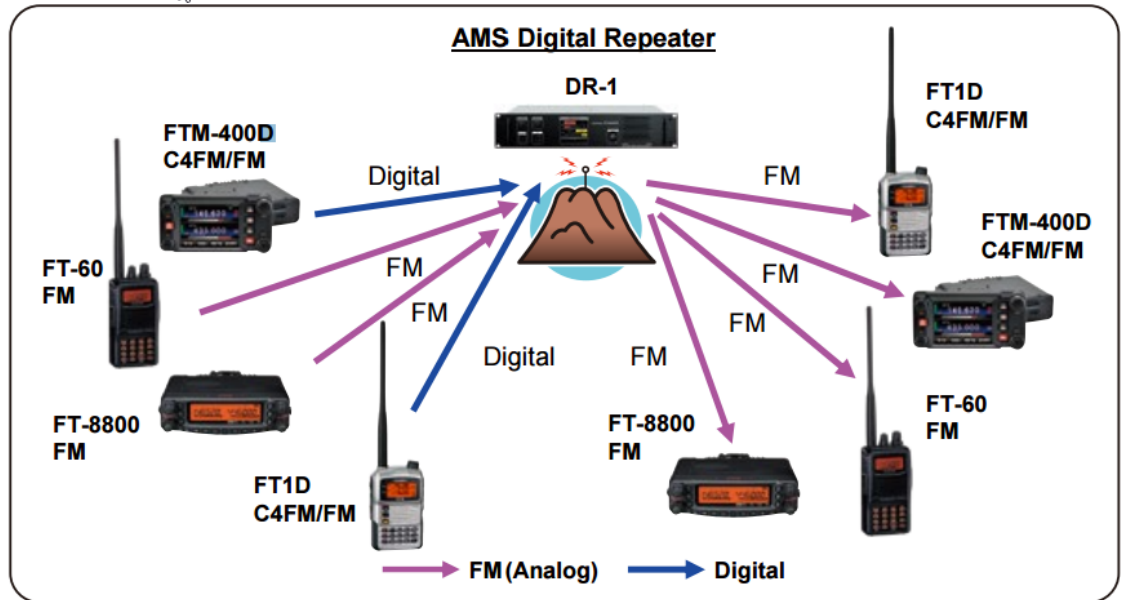
The Yaesu DR1X Repeater is capable of operating in both digital and analog modes. It is also equipped with an automatic mode select feature which will allow it to receive analog FM and Fusion C4FM digital.

Referring to the chart below C4FM does offer improved performance under certain conditions.



To allow users of Yaesu Fusion gear to take advantage of this capability the input of the repeater has been put into automatic mode select or AMS mode. In this mode Analog or C4FM digital signals are output as Analog FM.

If you are using an analog transceiver with the repeater no changes are needed on your part.



Another snippet from marketing material showing the repeater front end configured for RX AMS.

AMS receive → FM transmit

Installation Example 1: Replacing Existing Analog FM Repeater

When replacing an existing conventional FM repeater, AMS on the receiver side is set to AUTO mode and AMS on the transmitter side is set to FM FIX mode. If the DR-1 repeater receives C4FM Digital signals, it converts them, and retransmits them in conventional FM automatically. When receiving conventional FM signals it retransmits them unchanged as the FM repeater.

*C4FM digital signals are converted to FM signals in the repeater. Therefore, digital information such as GPS data included in the C4FM digital signals is not transmitted.

Radio Config

From the factory Yaesu radios will transmit using the mode which was last received. As the repeater is set for fixed Analog transmit, the radio would use the same mode on transmit.

To take advantage of the C4FM repeater receive capability, a configuration change in the radio is needed. The following sections contain snips from the section in the operator's manual covering this area of operation.











The key is you want to select "TX DN" or "TX VW" as your TX Mode when operating in AMS mode.

Remember DN mode has increased forward error correction in the stream and is best when mobile or on a handheld. When signal strength is not an issue and maximum fidelity is desired Voice Wide or VW mode may be more appropriate.

FT1D

Setting the AMS transmission mode

When operating in the AMS function, the transmit mode may be selected:

- 1 Press and hold  for over 1 second.
- 2 Turn  to select [2 TX/RX].
- 3 Press .
- 4 Turn  to select [2 DIGITAL].
- 5 Press .
- 6 Turn  to select [1 DIGITAL MODE].
- 7 Press .
- 8 Turn  to select [AMS MODE].
- 9 Press .
- 10 Turn  to select the AMS transmit mode.

TX M: The operating mode is automatically selected from four communication modes to match the received signal. Pressing the Microphone [PTT] momentarily, toggles between the Digital and Analog communication modes.

TX FM: The RX mode is automatically selected from the four communication modes to match the received signal. The TX mode is automatically changed to the "FM" mode.

TX DN: The RX mode is automatically selected from the four communication modes to match the received signal. The TX mode is automatically changed to the "DN" mode.

TX VW: The RX mode is automatically selected from the four communication modes to match the received signal. The TX mode is automatically changed to the "VW" mode.


AUTO: The RX and TX operating mode is automatically selected from the four communication modes to match the received signal.

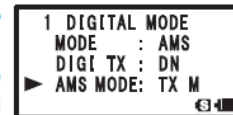
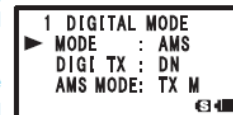
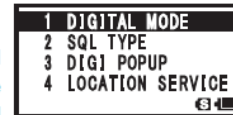
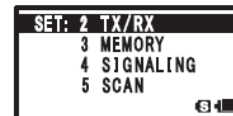
Remarks • Default: TX M

• Blink "I": TX M

Blink "IOO": TX FM / TX DN / TX VW

The OO symbol display differs according to the received signal.

- 11 Press  to save the setting and exit the Set mode.

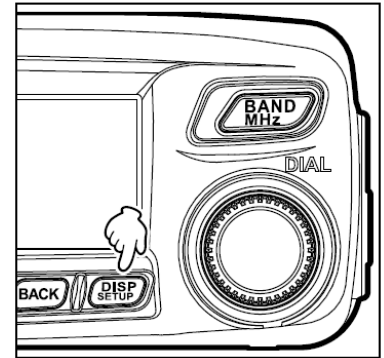


FTM-100D

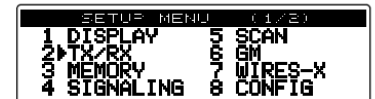
Setting the transmission mode when using the AMS function (3 AMS TX MODE)

You can select the transmission mode when using the AMS function.

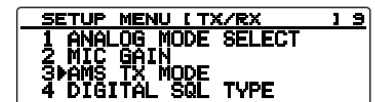
- 1 Press and hold **DISP SETUP** for over one second.
The Setup menu appears.



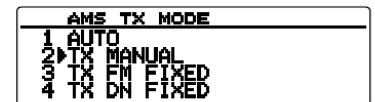
- 2 Rotate the DIAL to select **[2 TX/RX]**, then press **DISP SETUP**.



- 3 Rotate the DIAL to select **[3 AMS TX MODE]**, then press **DISP SETUP**.



- 4 Rotate the DIAL to select the desired transmission mode.



FTM-400DR

- 4 Touch [1 AMS TX MODE] to select the AMS transmit mode.

The AMS transmit mode changes in the following order each time the symbol is touched.

TX M: The operating mode is automatically selected from four communication modes to match the received signal. Pressing the Microphone [PTT] momentarily, toggles between the Digital and Analog communication modes.

TX FM FIXED: The RX mode is automatically selected from the four communication modes to match the received signal. The TX mode is automatically changed to the "FM" mode.

TX DN FIXED: The RX mode is automatically selected from the four communication modes to match the received signal. The TX mode is automatically changed to the "DN" mode.

TX VW FIXED: The RX mode is automatically selected from the four communication modes to match the received signal. The TX mode is automatically changed to the "VW" mode.

AUTO: The RX and TX operating mode is automatically selected from the four communication modes to match the received signal.

- Tips**
- Factory default value: TX M
 - Blink "M": TX M
 - Blink "FM": TX FM FIXED / TX DN FIXED / TX VW FIXED
 - Blink "VW": AUTO
 - * The "VW" symbol display differs according to the received signal.

- 5 Press [PTT] for one second or longer

The AMS transmit mode will be set and the display will return to the previous screen.

