FTM-100D on Wires-X, by Jeremiah Puhek

If you look a the manual it takes about 10 pages for Yaesu to explain it, so I figured I would condense that down to something a bit easier to understand.
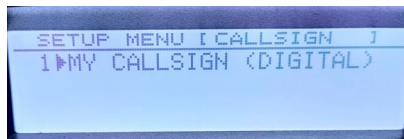
Step 0-Setup:

Before you start, make sure you have your call sign programmed into the radio. While transmitting in Fusion (the Yaesu digital Mode) the call sign you program into the radio will be put into the ID header.

To program this in press and hold "DISP/Setup", then use the right hand knob to move the cursor to menu item 14, "CALLSIGN".

Use the "DISP/Setup" to select that item. Then select "1 MY CALLSIGN (DIGITAL)"

Then enter your call sign using the software defined buttons.

Use the "DISP/Setup" button to set the call sign once you have it entered. You can then use the back button to back out of the menu system.

Connecting to the Local Node:

Step 1: Set your frequency and offset to your local WIRES-X repeater. For example, the 444.90 MHz repeater is one of the VHF Club's resources. When you do this make sure your radio is in DN or VW* mode. If you don't have this info you can find it on https://www.yaesu.com/jp/en/wires-x/id/active_node.php
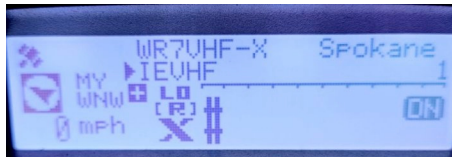
Step 2: Connect to the Local node. Once you are on the frequency for your local Wire-X repeater press and hold the DX button for more than 1 second.

An "X" symbol will appear next to the frequency. Flashing means it's trying to connect. Solid means it has connected.

Step 3: Connect to a Room. Press and hold the # key on your mic. It will bring up a # on the screen, you can now enter the room number with the DTMF pad on your mic.You can get a list of active rooms here

https://www.yaesu.com/jp/en/wires-x/id/active_room.php

Step 4: Talk. Once your connected it will play a set of rising tones and display the room name on the second from the top line on the display.
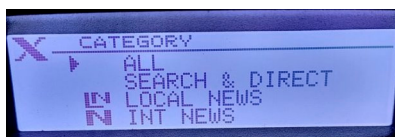

You can now talk on the room.

Step 5: Disconnect from the room. To disconnect from the room press and hold the * key on your mic. The radio will play a repeating low tone and flash the room name. It will take a few seconds for the local node to return to normal operation.
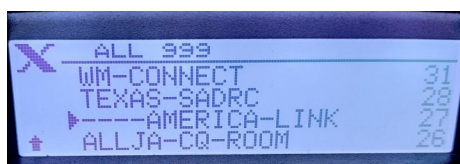
Step 6: Disconnect from the local node. To do this press and hold the Dx key. The "X" will disrepair from the screen and you are back to normal operation.

More advanced stuff:

If you don't know the room number or name you can search it with this radio. To start connect to your local node. Then Press and hold the "BAND/MHz" Button.
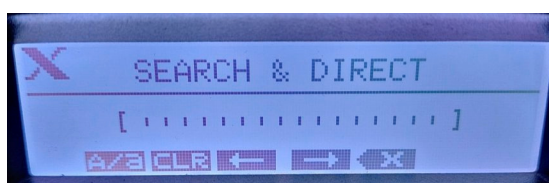

All: This will give you a full list of all of the rooms your local nodes is aware of. You can use the right hand knob to scroll, and the "DISP/Setup" button to select the room.
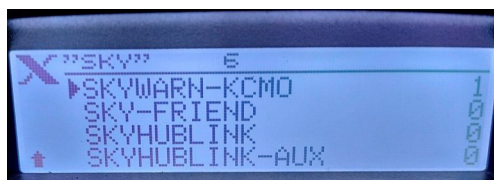
The room name will flash as it's trying to connect and will play the connect tones once it has finished connecting. It will bring you to another menu, but I haven't been able to make that menu work. You can use the "Back" button to return to the main screen.

Search & Direct: Here you can search by alphanumeric name for rooms. It uses the same software defined buttons as the buttons the call sign screen. You can also use the right hand knob to scroll through the options.

After entering the partial room name use the "DISP/Setup" button to select it. The local node will return a list you can select from.

Use the right hand knob to scroll and the "DISP/Setup" button to select the room.

Other stuff: There are the news functions that also show up under the "Band/MHz" button menu, but I have yet to get those to work. If I figure them out I'll post an update.

If you are looking for a Wires-X for another radio; the FT-70D, K9MS, has a very good one on their site here.
https://radiok9kms.blogspot.com/2019/09/ft-70d-and-wires-x.html

Editor's notes: Fusion is a protocol (layer 2 ?) that works with C4FM, being layer 1. There are several radios running C4FM but Yaesu only runs "Fusion" under that.

DN and VW are Yeasu terms for digital narrow and voice (digital wide) respectively.

Note: This document has been created based on Jeremiah Puhek's efforts. Compatible viewing format and most spelling corrections have been performed by Karl Shoemaker on July 20, 2025.