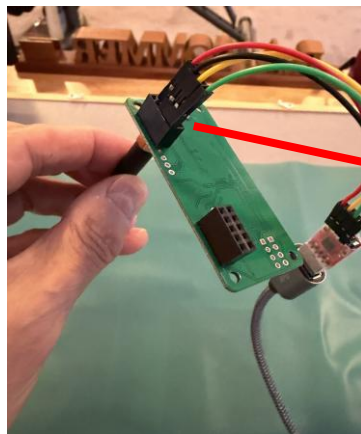
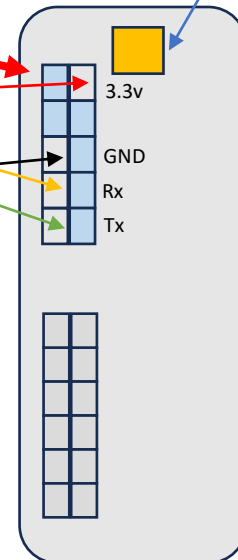


Understanding the USB/MMDVM Pin-Outs



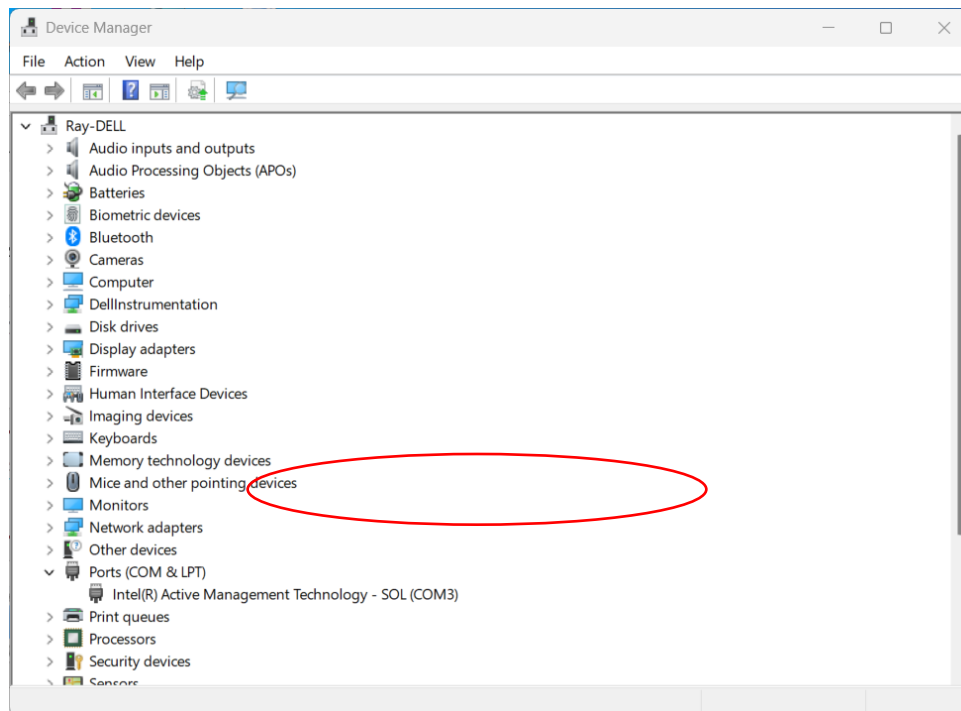
Wire Legend:
Red = 3.3v
Black = GND
Yellow = TXD
Green = RXD

MMDVM Hat
Antenna Port Bottom View



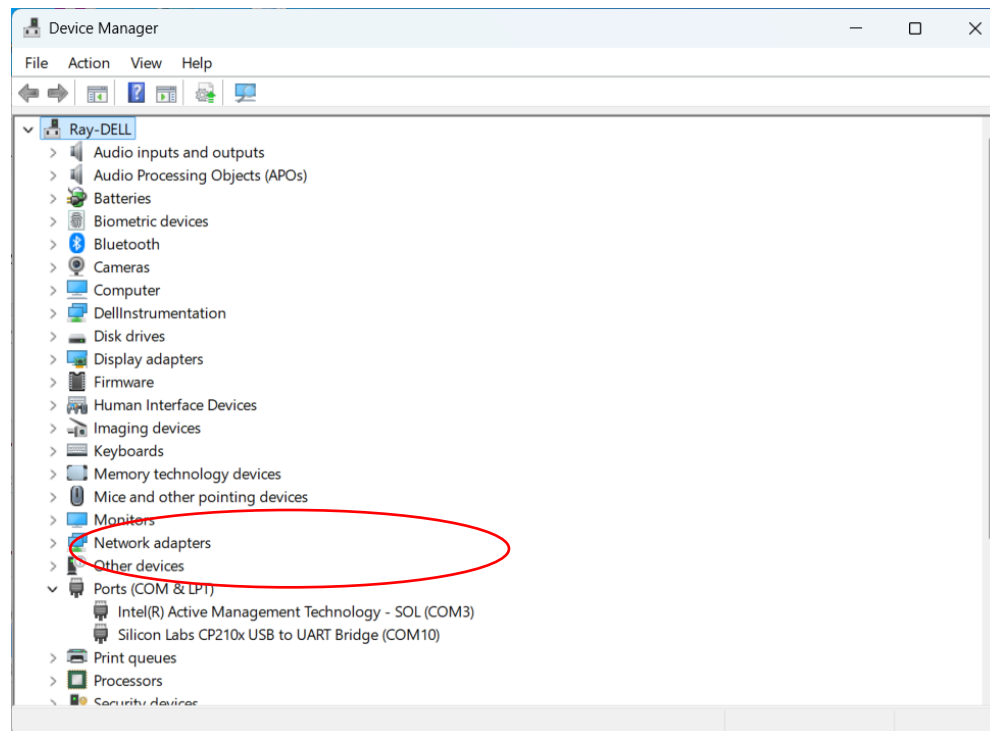
First Step: Open Windows Device Manager

- Before plugging in the USB connection, open Device Manager and scroll down to “Ports (COM & LPT). You should see something like this

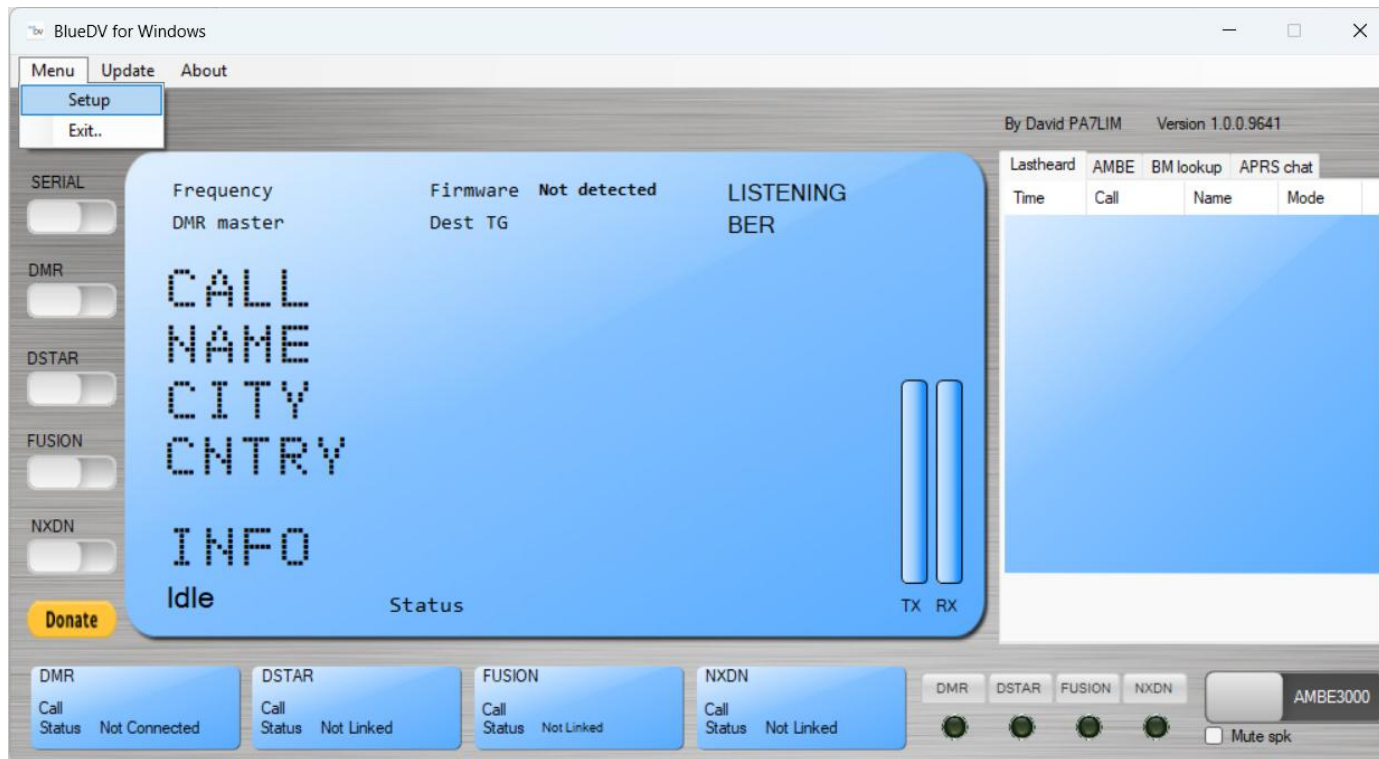


...now plug in your USB Interface board.

- Now you should see another COM port appear along with hearing a Windows connection tone. **Write down the new COM port #**



BlueDV Setup Screen



BlueDV Setup Screen

Pull down to find the CP2102 "COM" port number (the # you wrote down)

Enter your DMR ID Twice

Enter your BM passwd

BlueDV for Windows

General

Your Call: W2AUS

Serial Port Radio: Enable DTR

Save QSO Log:

RX/TX Colors: Invert RXTX screen:

Frequency: 440912500

Mode Timer: 10 Seconds

Radio TX power:

Latitude: + 37.5024 in decimals

Longitude: - 778.9817 in decimals

Always on top:

Language: English (Active after restart)

DSTAR

DSTAR Module: D

APRS:

Enable at start:

Default reflector: (Empty is not connect)

NXDN

NXDN ID: 9999 [Help!](#)

DMR

DMR ID hotspot: 320229505

DMR ID simple: 3202295

QRG: -100, -50, 0

Enable at start:

DMR type: BM

No inband data:

Brandmeister

DMR Master: 3102 US

Master Password:

DMR+

Master:

TGIF

Password:

FUSION

QTH Location: FM17BM

Enable at start:

Default reflector: YSF FCS

YSF: US-Kansas-City

FCS: FCS004 01

Use AMBE: ThumbDV/DVStick3X

Model AMBE: AMBE3000

Serial Port:

DMR ID: 2043000

Baud rate: 230400

Use AMBEServer:

Host/IP: 192.168.1.10

Port: 2468

Start/Stop Beep:

Kill timer (min): 5

DSTAR/C4FM text: BlueDV by PA7LIM

PTT keying

Enable:

Serial port:

RX Indicator: Enable

RTS DTR

High Low

PTT Button: CTS DSR

High Low

Save Cancel

Connecting to YSF via DMR/YSF Gateway

Codeplug Editor by David MM7DBT

File Tools Import/Export Help

New Open Save Read From Radio Write To Ra

Device Info Radio Settings Menu Settings Other Settings

Contact ID	Contact Name	DMR ID	Call Type
45	VA Tidewat	31515	Group
46	VA Peninsu	31516	Group
47	HEARS Link	43277	Group
48	NASA	316272	Group
49	VA CALL	3151225	Group
50	COMM 1	3777215	Group
51	COMM 2	3777216	Group
52	TG91	91	Group
53	TG4000	4000	Private
54	BM PARROT	9990	Private
55	PiStar OFF	9999996	Private
56	GW AMInk	7032592	Group
57	GW DISC	7004000	Private
58	TAC C Chat	27503	Group
59	GW KCWide	7032453	Group
60	APRS Dig	310000	Private
61	KD4JLY	3219946	Private
62	POW Local	27510	Group

Contacts: 62 | RX Groups: 57 | Scan Lists: 19 | Zones: 42 | Channels: 589 | Space Used: 631/4000

MMDVMHost Configuration

Setting	Value
DMR Mode:	<input checked="" type="checkbox"/> RF Hangtime: 20 Net Hangtime: 20
D-Star Mode:	<input type="checkbox"/> RF Hangtime: 20 Net Hangtime: 20
M17 Mode:	<input type="checkbox"/> RF Hangtime: 20 Net Hangtime: 20
YSF Mode:	<input type="checkbox"/> RF Hangtime: 20 Net Hangtime: 20
P25 Mode:	<input type="checkbox"/> RF Hangtime: 20 Net Hangtime: 20
NXDN Mode:	<input type="checkbox"/> RF Hangtime: 20 Net Hangtime: 20
YSF2DMR:	<input type="checkbox"/>
YSF2NXDN:	<input type="checkbox"/>
YSF2P25:	<input type="checkbox"/>
DMR2YSF:	<input checked="" type="checkbox"/> Uses 7 prefix on DMRGateway
DMR2NXDN:	<input type="checkbox"/> Uses 7 prefix on DMRGateway
POCSAG:	<input type="checkbox"/> POCSAG Paging Features
MMDVM Display Type:	OLED Type 3 v Port: /dev/ttyNextionDriver v Nextion Layout: ON7LDS L2 v

Apply Changes

Find the server ID.

Ex: YSF-32453 KC-Wide

W2AUS - Digital Voice Dashboard

Not Secure http://192.168.10.55/admin/

Pi-Star Digital Voice Dashboard for W2AUS

Dashboard | Admin | Live Logs | Power | Update | Configuration

Gateway Hardware Information

Hostname	Kernel	Platform	CPU Load	CPU Temp
pi-star1	5.10.17+	Raspberry Pi Model B Plus Rev 1.2	1.71 / 0.95 / 0.70	41.2°C / 106.2°F

Service Status

MMDVMHost	DStarRepeater	ircDDBGateway	TimeServer	PiStar-Watchdog	PiStar-Remote
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Modes Enabled

D-Star	DMR
M17	NXDN
P25	YSF
DMR XMode	YSF XMode
FM	POCSAG

Network Status

D-Star Net	DMR Net
M17 Net	NXDN Net
P25 Net	YSF Net
DMR2NXDN	DMR2YSF
YSF2DMR	YSF2NXDN
YSF2P25	POCSAG Net

Radio Info

Trx	
Tx	439.912500 Mhz
Rx	434.912500 Mhz
FW	HS_Hat:v1.4.7
TXC0	14.7456 Mhz

YSF Network

Not Linked

YSF2DMR

DMR ID	320229501
YSF2DMR Master	
BM	3103 United St..

YSF Link Manager

Reflector	Link / Un-Link	Action
None ^	<input checked="" type="radio"/> Link <input type="radio"/> UnLink	<input type="button" value="Request Change"/>

KC

YSF28054 - US-ALX456 - KCWide Backup		
YSF32453 - US-KCWide - KansasCityWide		
YSF40538 - US-KC6GF - Inland Empire		
YSF43444 - US-KC8I - KC8I Chat Room		
YSF62238 - US-MD-KC3YGF - Middle River		
YSF81669 - US-Kc2abv-DR2X - Kc2abv RPT		
FCS31169 - IRN-KC1MUV		

Activity

Target	Src	Dur(s)	Loss	BER
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Activity

Target	Src	Dur(s)	BER	RSSI
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YSF/FCS databases are found and searchable online, or from within PiStar of WPSD.
FCS = Fusion Communication Server

Pi-Star / Pi-Star Dashboard, © Andy Taylor (M0W0WZ) 2014-2026.
ircDDBGateway Dashboard by Hans-J. Barthen (DL5DI),
MMDVMdash developed by Kim Huebel (DG3VH),
Need help? Click here for the Facebook Group
or Click here to join the Support Forum
Get your copy of Pi-Star from here

Difference between access points

What is a YSF Reflector

- YSF (Yaesu System Fusion) reflectors are:
- Decentralized — anyone can host one on their own server.
- Individually named — e.g., YSF32453 US-KCWide.
- Open-source based — built on G4KLX's YSFReflector software.
- Used by hotspots and MMDVM repeaters (Pi-Star, OpenSpot, etc.).
- Not part of Yaesu's WIRES-X network — no direct WIRES-X access without a bridge.

What is a FCS Reflector

- FCS reflectors are:
- Centrally hosted — only a few FCS servers exist (FCS001, FCS002, etc.).
- Structured into 99 modules per server — e.g., FCS00390 (server 003, module 90).
- Originally created for DV4* hardware, later opened to other hotspot software.
*** Early German effort to interconnect multiple digital networks**
- Also not part of WIRES-X — hotspot-only access.
- FCS is more “organized” and uniform than YSF, but less flexible.