

AS-601U

Automatic Antenna Switch

6 Antennas x 1 Radio

Works from DC to 450 MHz

AS-601U

Operation Manual



V. 1.0

AS-601U

Automatic Antenna Switch
6 Antennas X 1 Radio
Operating from DC to 450 MHz

The **AS-601U** is a six-antenna switch for manual and automatic operation on a radio. It has an RS-232 serial port for remote operation via a personal computer (PC). Manual operation does not require communication with the radio.

It works on all bands, from **LF to HF, VHF and UHF**

The AS-601U supports communication with the following radios:

Icom (CI-V), Kenwood, Flex Radio and Elecraft (RS-232), Yaesu (BCD) or any other radio that uses one of these communication protocols. Manual operation works with radios from any manufacturer.

Remote Operation.

The **AS-601U** has an **RS-232** port for remote operation via a Personal Computer (PC). Remote control software is provided free of charge. The communication speed is 9600 Baud.

Procedure for connecting the AS-601U to the radio:

- 1- Connect the **AS-601U** to the Radio with the appropriate cable.

- 2- For **Icom Radios (CI-V)**
Turn on the **AS-601U** with the **Ant1 Button** pressed.
When you release the **Ant1. Button**, the **Split LED** will flash indicating that the **AS-601U** is configured for **Icom** radios.
Enter the radio menu, activate the CI-V and set the Baud rate to 19200

- 3- For **Yaesu Radios (BCD)**
Turn on the **AS-601U** with the **Ant2 Button** pressed.
When you release the **Ant2 Button**, the **Split LED** will flash indicating that the **AS-601U** is configured for **Yaesu** radios.
Yaesu radios offer BCD output on the connector used to control the Linear Amplifier. On some radios you need to enter the menu and activate it to use the Linear Amplifier.

- 4- For **Kenwood, Elecraft K3, Flex Radio** and other radios in **RS-232** serial mode.
Turn on the **AS-601U** with the **Ant3 Button** pressed.
When you release the **Ant3 Button**, the **Split LED** will flash indicating that the **AS-601U** is configured for radios in **RS-232 mode**.
The Radio should be set to RS-232 with the Baud rate at 4800

- 5- For **Elecraft Radios** connected with **BCD**.
Turn on the **AS-601U** with the **Ant2 Button** pressed.
When you release the **Ant2 Button**, the **Split LED** will flash indicating that the **AS-601U** is configured for **BCD** radios.
Elecraft Radios provide BCD output on 15 pins connector.

Procedure to activate Split mode:

To activate Split mode, the **AS-601U** must be connected to the Radio with the appropriate cable and the **TX Delay** of the radio must be set to **20 ms** or more.

- 1- Press the **PTT** on the radio and watch the **AS-601U's Send LED** light up.
- 2- Then, with the **PTT** still pressed, press and release the button of the antenna that you want to receive. At this moment **Split LED** indicator lights up.
- 3- When **PTT** is released, the **AS-601U** will switch to the chosen receiving antenna. Each time you press the **PTT**, it returns to the transmitting antenna.

Any change of antenna or band on the radio deactivates Split mode.

Testing and using the automatic antenna selection feature of the AS-601U with a connected and selected radio:

NOTE: No computer programming, PC connection or internal changes are required. A connected radio means that it is interfaced to the **AS-601U** with a cable, such as Hamplus **ERC-12, IRC-12, KRC-12, YRC-12, FRC-12**, and the radio set to the correct baud rate (19,200 baud CI-V or 4800 baud CAT and COM) and set up as described in the previous section.

If the **AS-601U** is not interfaced as described, then it may be operated as a Manual Antenna Switch.

When connected, the **AS-601U** is an **Automatic Band Memory Antenna Switch** that may be operated manually. "Programming" automatic antenna selections are made as each different band is selected on the connected radio. The initial manual selection of a specific antenna for that band is made by depressing the desired **Ant button**, which is then automatically memorized. There is no "SAVE" button nor is there a multi-button programming sequence. Just set the antenna by the band on the radio.

Restated, simply assign or reassign any **AS-601U Ant button** number to any band by initial or subsequent manual selection. For every and any band chosen and displayed on the connected radio, every time a different antenna button is manually depressed, that selection is memorized.

Here is an example of antenna memorization by band setting on the transceiver connected to and selected as Radio on the **AS-601U**:

- 1- Select 40 meters on Radio and press **Ant 2** on the **AS-601U** (as if your 40 meters antenna is connected to the **Ant 2** port on the **AS-601U**)
- 2- Select 80 meters on Radio and press **Ant 1** on the **AS-601U** (as if your 80 meters antenna is connected to the **Ant 1** port on the **AS-601U**)
- 3- Select 20 meters on Radio and press **Ant 3** on the **AS-601U** (as if your 20 meters antenna is connected to the **Ant 3** port on the **AS-601U**) ... and so on.

Now, test the automation by changing back to the 40 meters band on your radio. The **AS-601U** should now automatically switch to **Ant 2**.

Then, select 80 meters on your radio and the **AS-601U** automatically switches to **Ant 1**, and so on.

If automatic antenna selection by band or frequency does not occur, then reattempt the **Procedure for connecting the AS-601U to the radio** in the section above.

Supporting the use of a multi-band antenna:

The **AS-601U** provides the ability to assign any single antenna port to any number of bands on the connected radio, also by initial manual selection.

For example:

A 20/15/10 meters tri-band beam coaxial cable is connected to **Ant 3** port on the **AS-601U**.

- 1- Select 20 meters on the connected radio and press **Ant 3** on the **AS-601U** (because your tri-band antenna is connected to **Ant 3** port on the **AS-601U**)
- 2- Select 15 meters on the connected radio and press **Ant 3** on the **AS-601U** (because your tri-band antenna is connected to **Ant 3** port on the **AS-601U**)
- 3- Select 10 meters on the connected radio and press **Ant 3** on the **AS-601U** (because your tri-band antenna is connected to **Ant 3** port on the **AS-601U**)

Now, test the tri-bander automation by selecting any of those bands, 20, 15 and 10 meters, on your radio. The **AS-601U** will now automatically stay on **Ant 3**, or go back to **Ant 3** after selecting a band with a different band memorized.

- 4- Select 80 meters on your radio and the **AS-601U** automatically switches to **Ant 1**,
- 5- Then, select 20 meters on your radio and the **AS-601U** automatically switches back to **Ant 3**... and so on.

IMPORTANT FEATURE: PC interface to this antenna switch controller is not necessary.

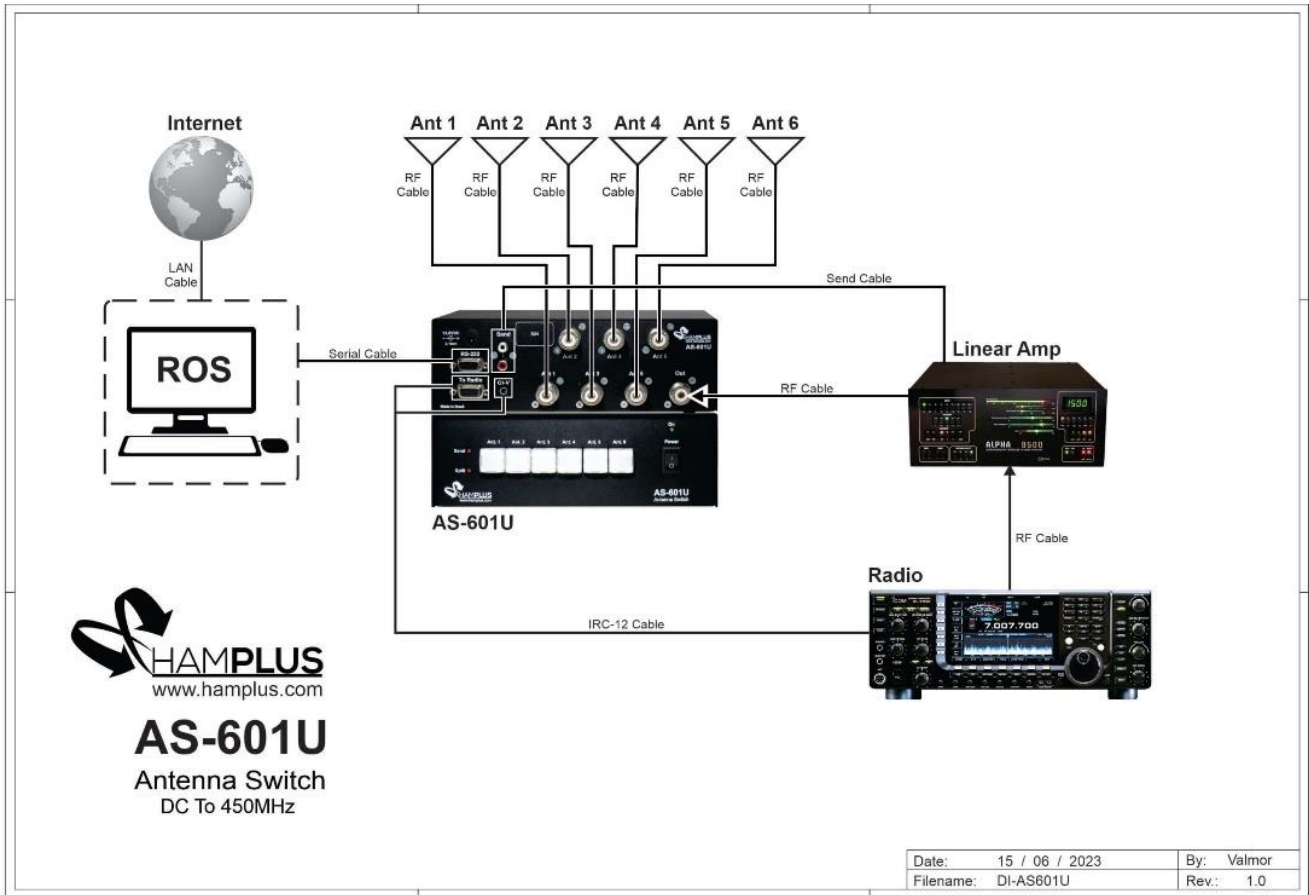
Interfaced transceivers that are also controlled locally or remotely by USB or LAN will continue to benefit from this Automatic Band Memory Antenna Switch. This smart controller method of automatic antenna selection is simply made by band or frequency selection with the radio control program.

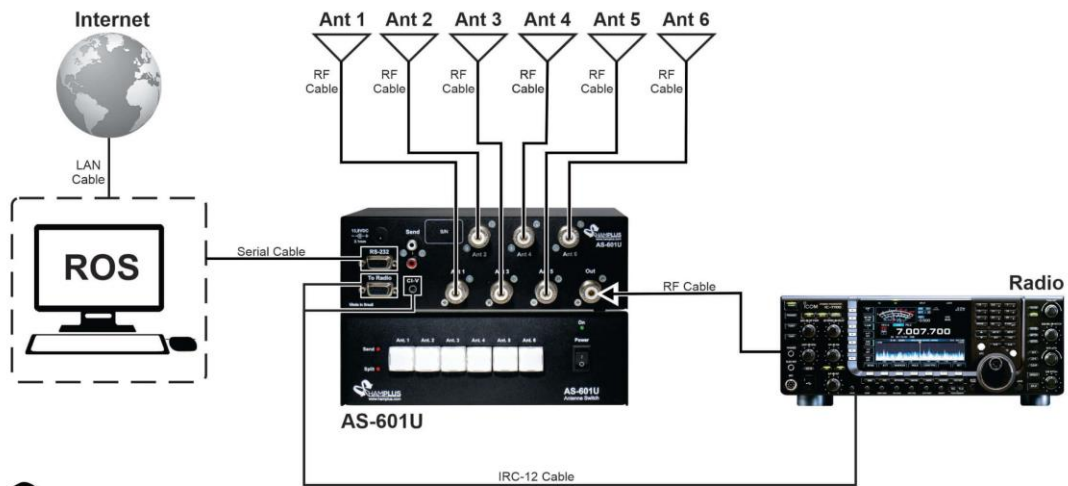
REMINDER: Reassignment of any band or frequency to a different antenna port is simply made by manual reselection of the new antenna port number whenever the connected radio is set on that specific band or frequency. The manual change is automatically updated by the **AS-601U** for only the selected radio. Simply stated, reassign any **Ant #** to any band by manual reselection of the new **Ant #** whenever the radio is set to that band.

For example, let's say that you now want to move your 40 meters antenna to the **Ant 5** port on the **AS-601U**. Simply select 40 meters on the connected radio and press **Ant 5** on the **AS-601U**, and it memorizes this change. Each time you change this radio to 40 meters band, **Ant 5** will now be automatically selected.

NOTE: On any given radio band, any manual antenna selection that is made, even if it happens to be incorrect, will be memorized. So, check and recheck each of your band memorized antenna selections by changing to each of the bands on your connected and selected radio and watching the **AS-601U** automatically change to the correct antenna. Correct any wrong **Ant #** on any band by manual selection.

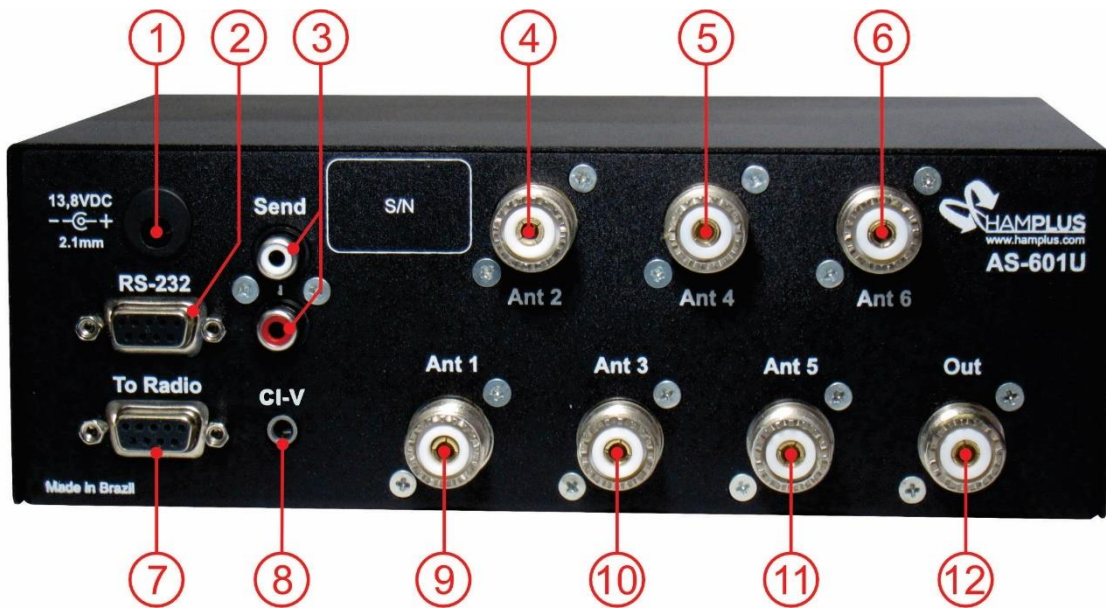
-----x-----






HAMPLUS
 www.hamplus.com
AS-601U
 Antenna Switch
 DC To 450MHz

Date:	15 / 06 / 2023	By:	Valmor
Filename:	DI-AS601U	Rev.:	1.0



- | | |
|--------------------------------------|------------------------|
| 1- Auxiliar Power Supply In 13.8 VDC | 7- Control Radio Cable |
| 2- Remote (RS-232) | 8- CI-V (Icom) |
| 3- Send In / Out | 9- RF to Antenna 1 |
| 4- RF to Antenna 2 | 10- RF to Antenna 3 |
| 5- RF to Antenna 4 | 11- RF to Antenna 5 |
| 6- RF to Antenna 6 | 12- RF In from Radio |

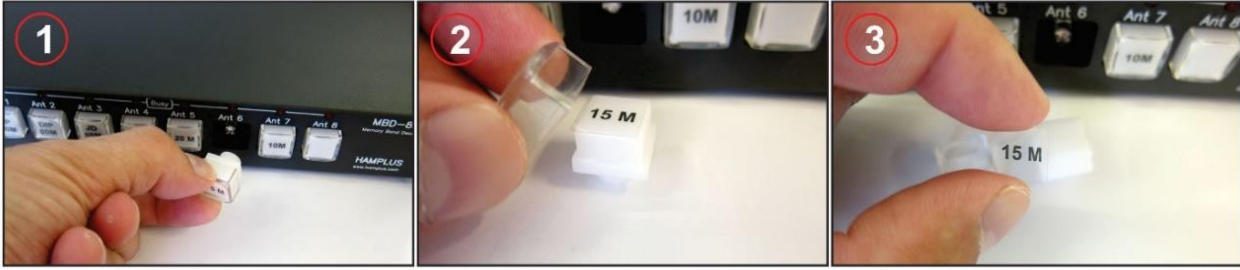
Rótulos para identificação dos botões

160 m	80 m	40 m	30 m	20 m	18 m	17 m	15 m	12 m	10 m	6 m	2 m	70 cm	80 m 160 m	80 m 40 m	20 m 15 m 10 m
LOG	MULTI BANDA	MOS LEY	TA33	YAGI	WARC	FOUR SQUARE	IC 718	IC 756	IC 7100	IC 7300	IC 7600	IC 7610	IC 7700	IC 7800	IC 7850
IC 7851	FT 450	FT 450D	FT 817	FT 817ND	FT 847	FT 857	FT 857D	FT 897	FT 920	FT 950	FT 991	FT 991A	FT 1000	FT 1000MP	FT 2000
FT 2000MP	FTDX 10	FTDX 101D	FTDX 101MP	FTDX 1200	FTDX 3000	FTDX 3000D	FTDX 5000	FTDX 5000MP	FTDX 9000D	K3	K3 1	K3 2	K3 3	YAESU	YAESU 1
YAESU 2	YAESU 3	ICOM	ICOM 1	ICOM 2	ICOM 3	FLEX	FLEX 1	FLEX 2	FLEX 3	KEN WOOD	KEN WOOD 1	KEN WOOD 2	KEN WOOD 3		

Arquivo para impressão disponível no site www.hamplus.com na página do produto em anexos.

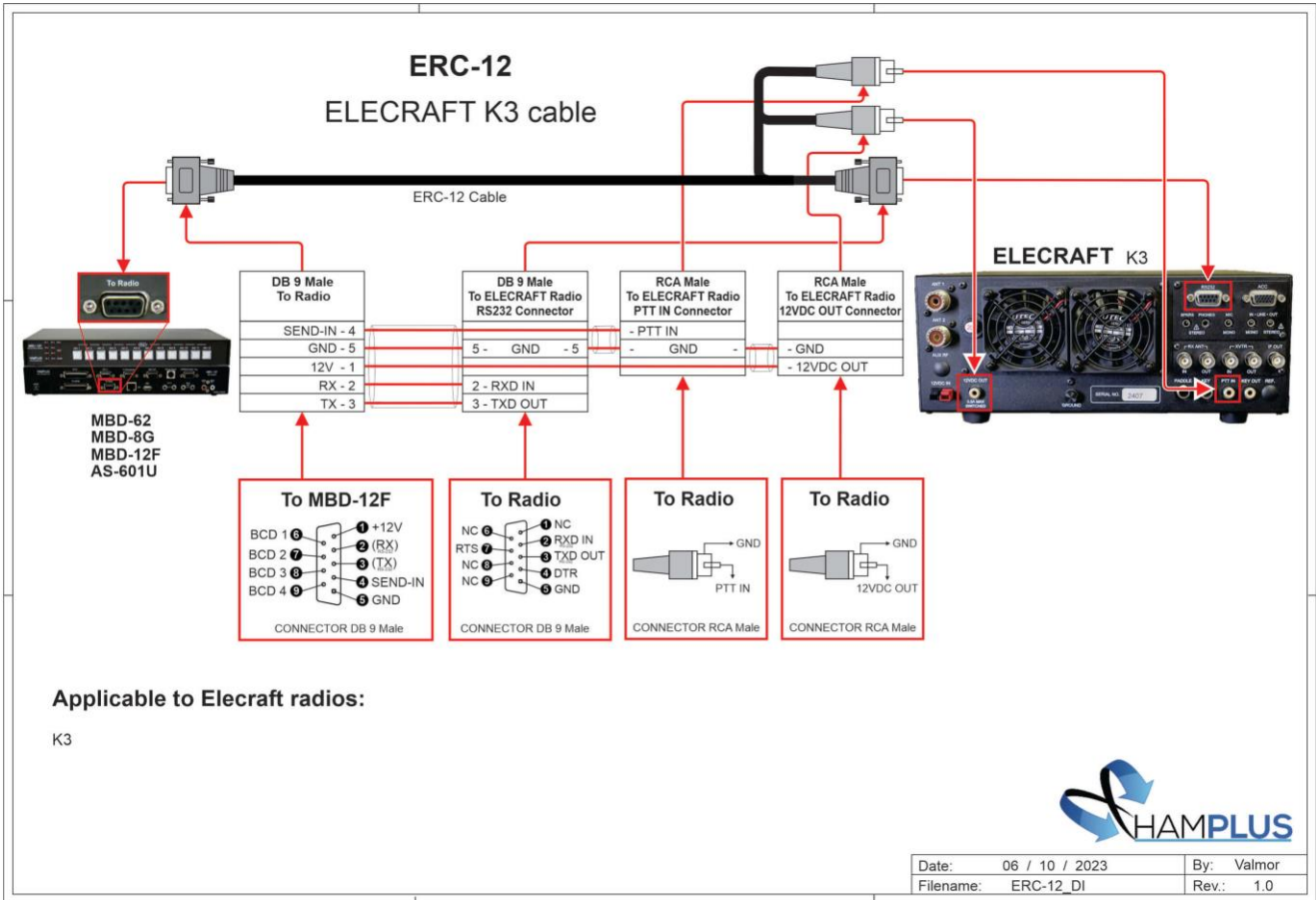
Procedure to place labels on the keys

Push Button Labels

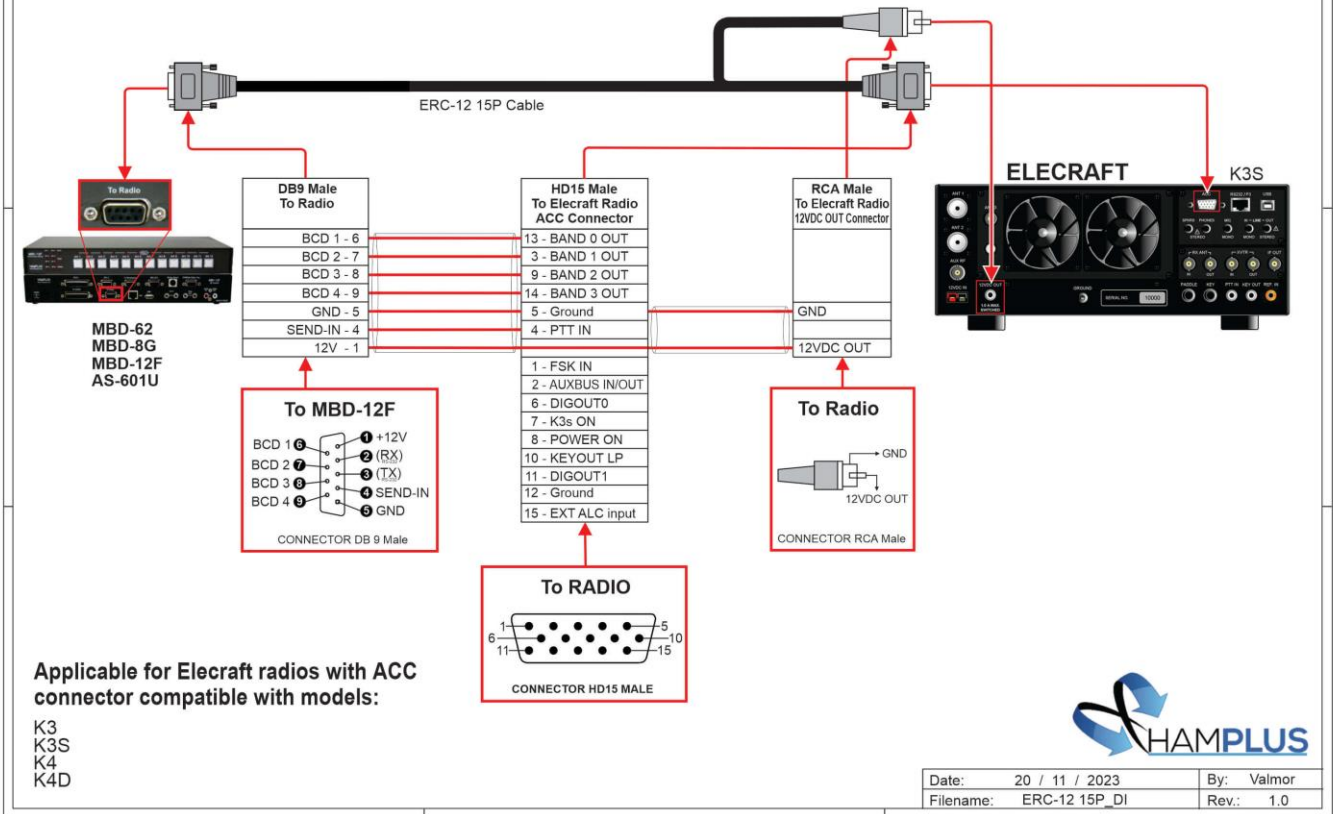


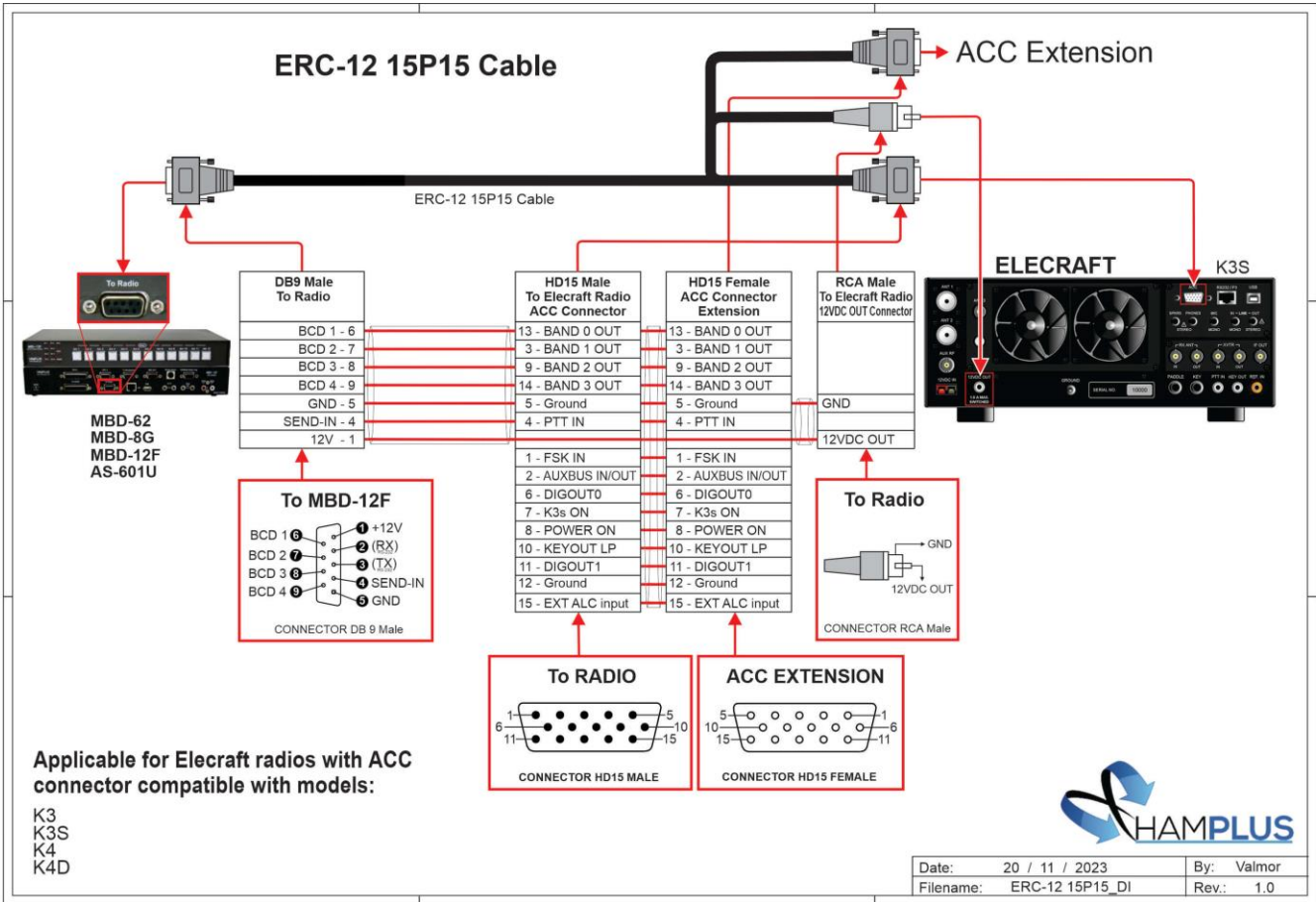
The image illustrates the three-step process of applying labels to push buttons. Step 1 shows a hand holding a white key with a label. Step 2 shows a hand peeling a clear protective film from a '15 M' label. Step 3 shows a hand placing the '15 M' label onto a white key.

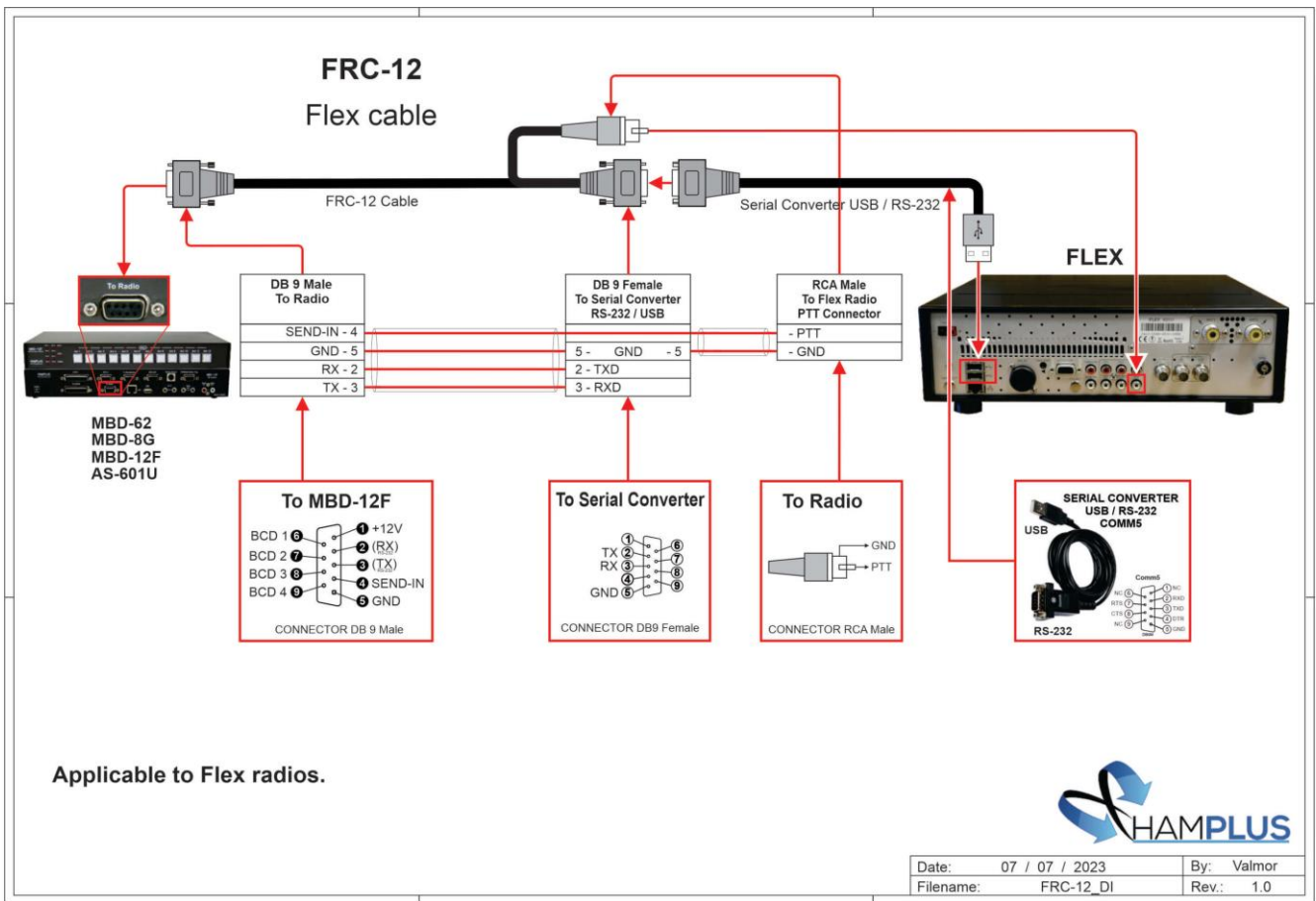
HAMPLUS		
Size:	Number:	Rev:
A4	Push Button Labels	1.0
Date:	By:	
25 / 04 / 2019	Vielmor	
Filename: Labels	Page:	1 / 1

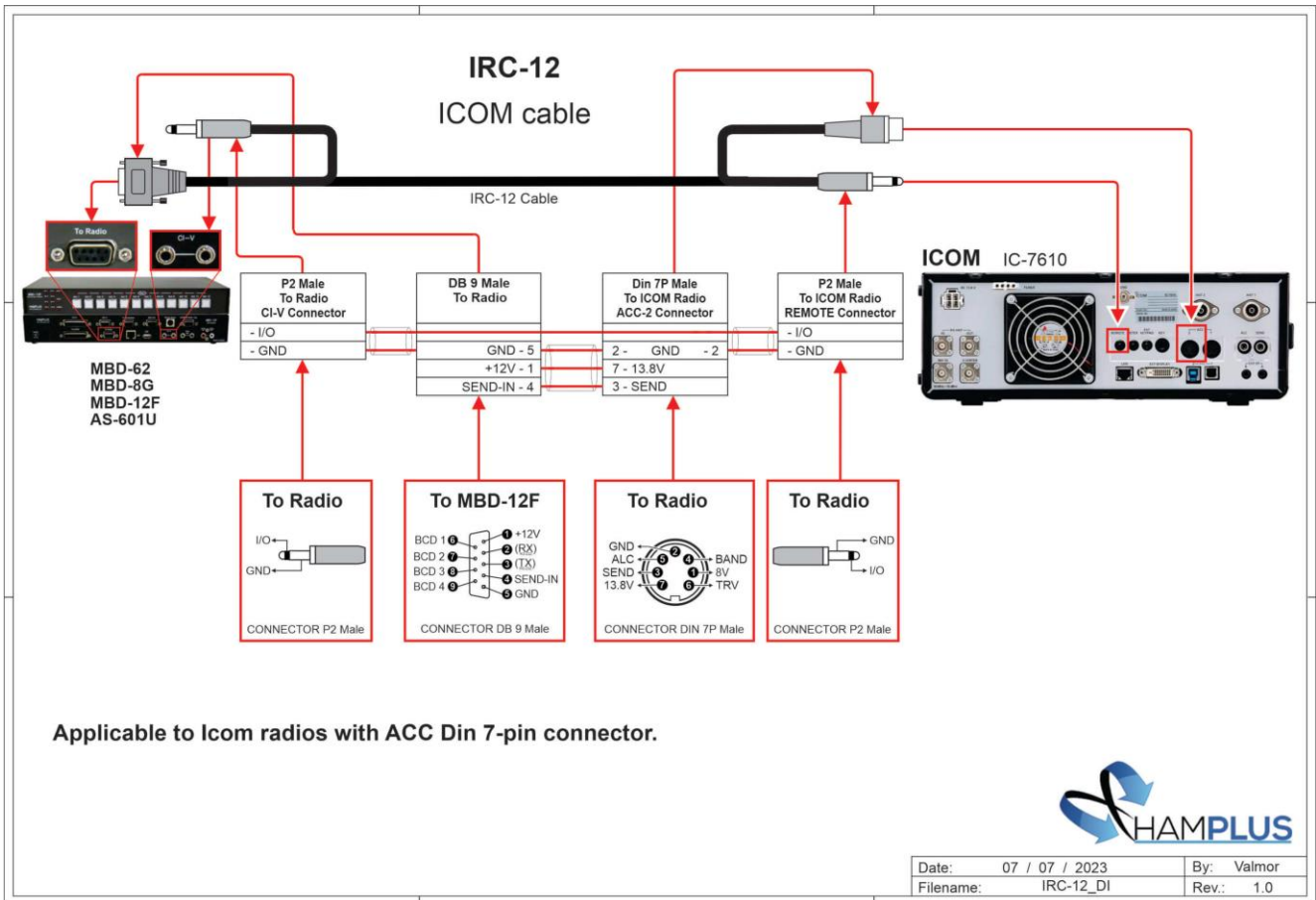


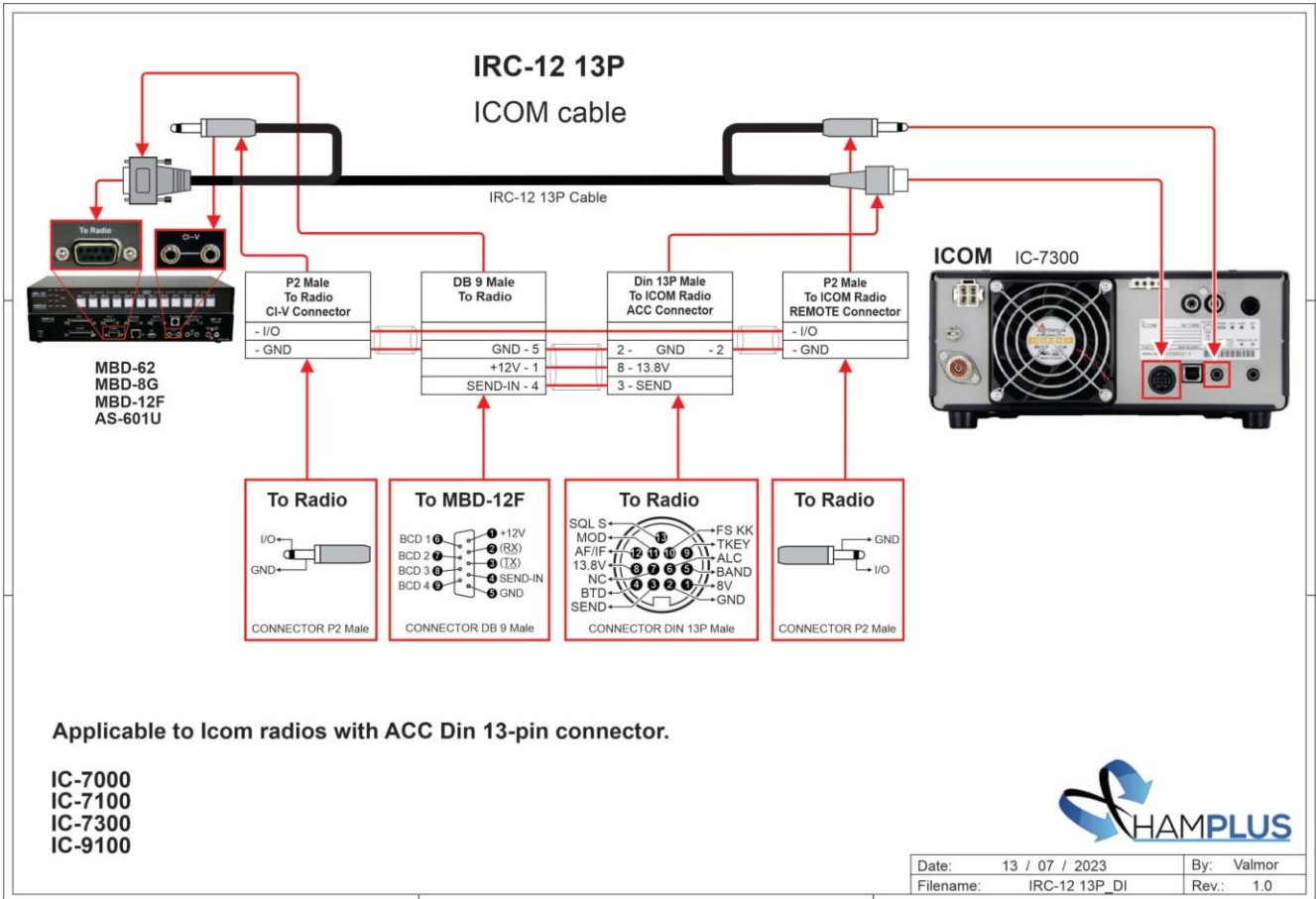
ERC-12 15P Cable

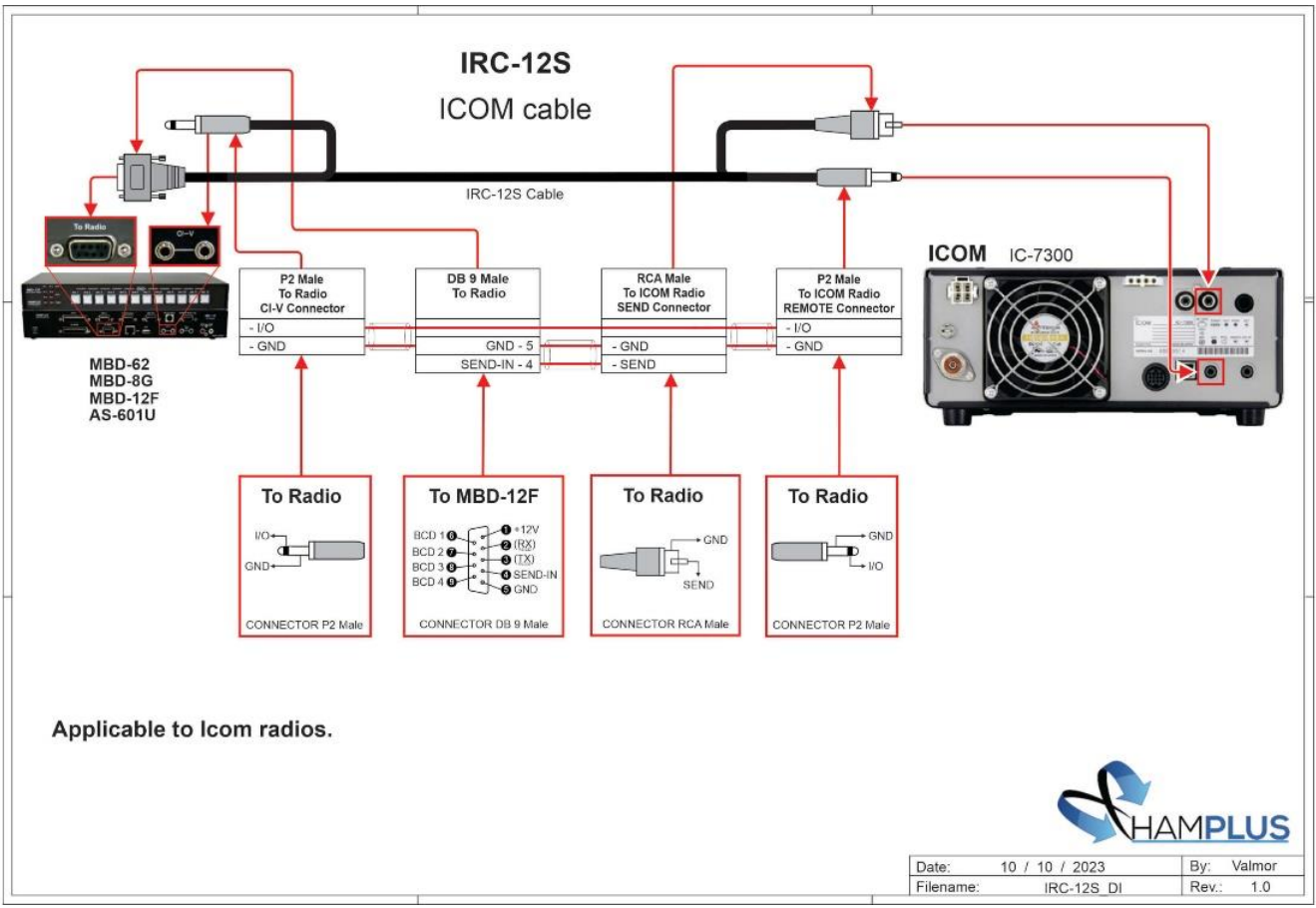




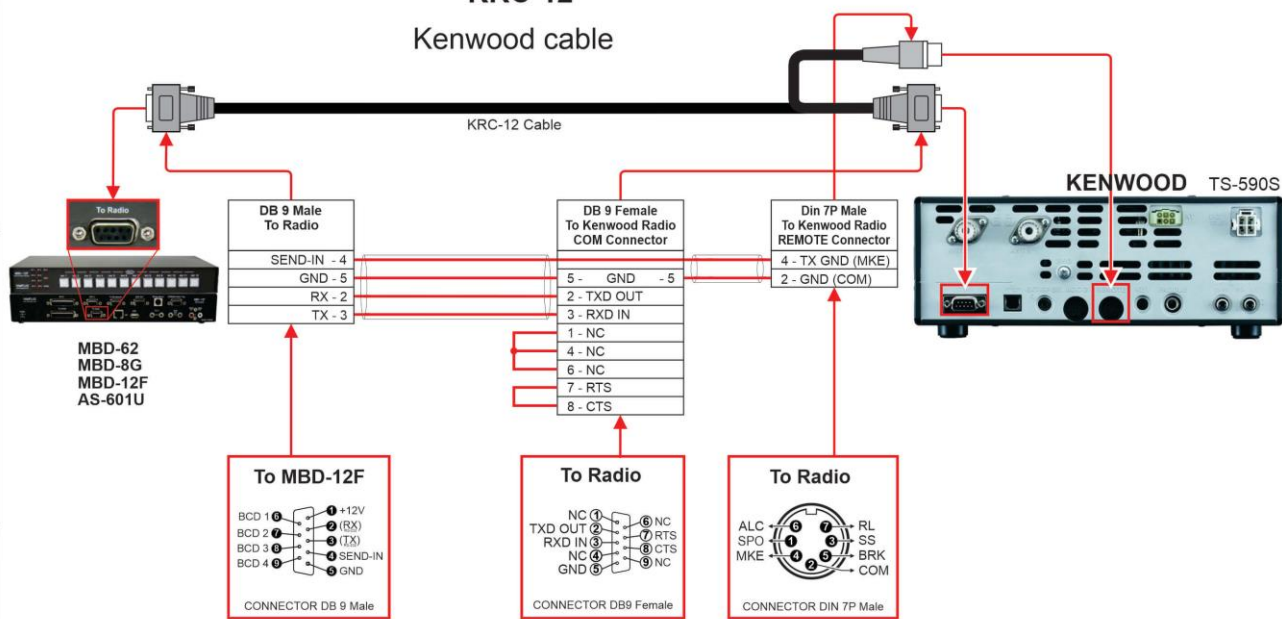








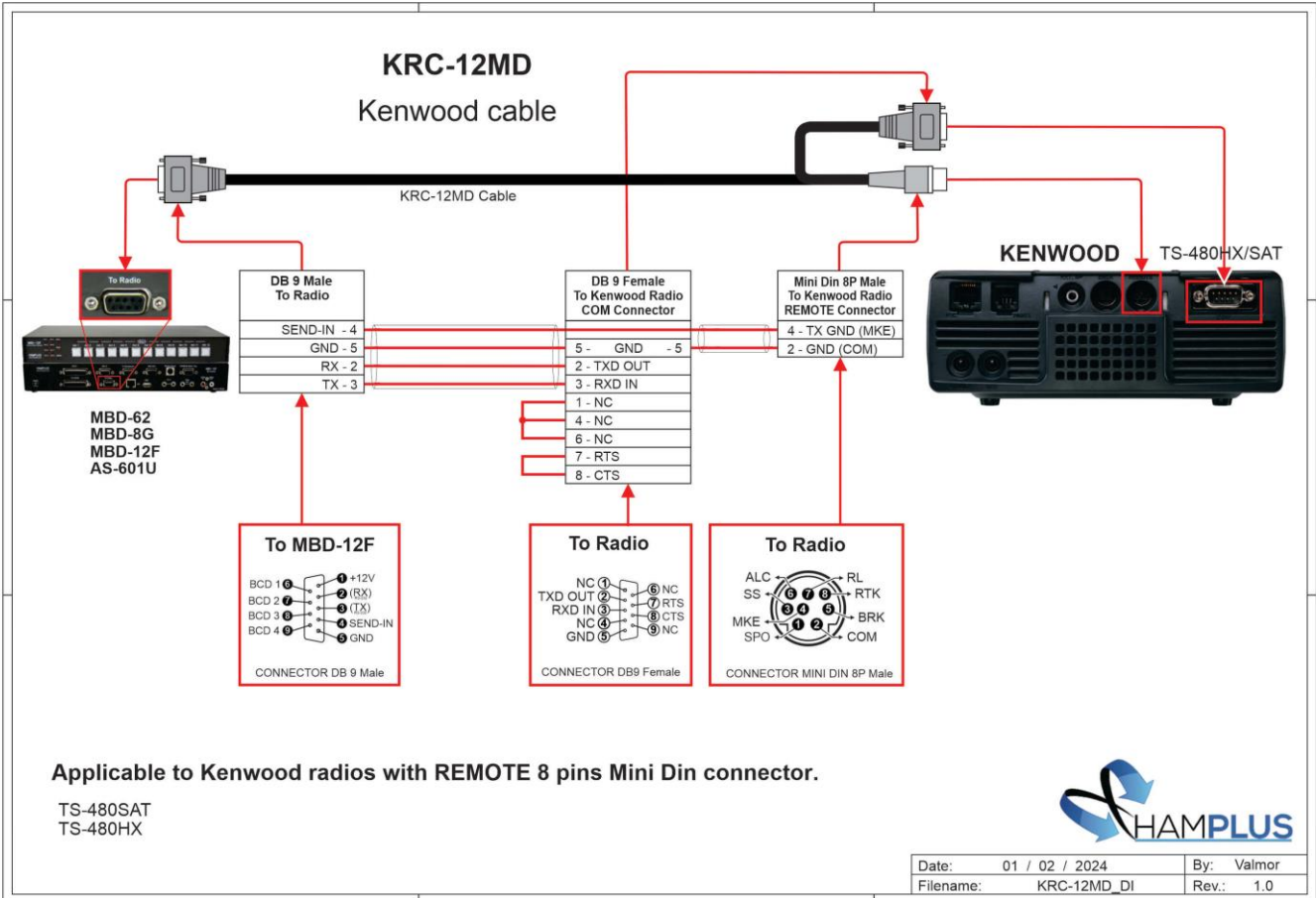
KRC-12 Kenwood cable



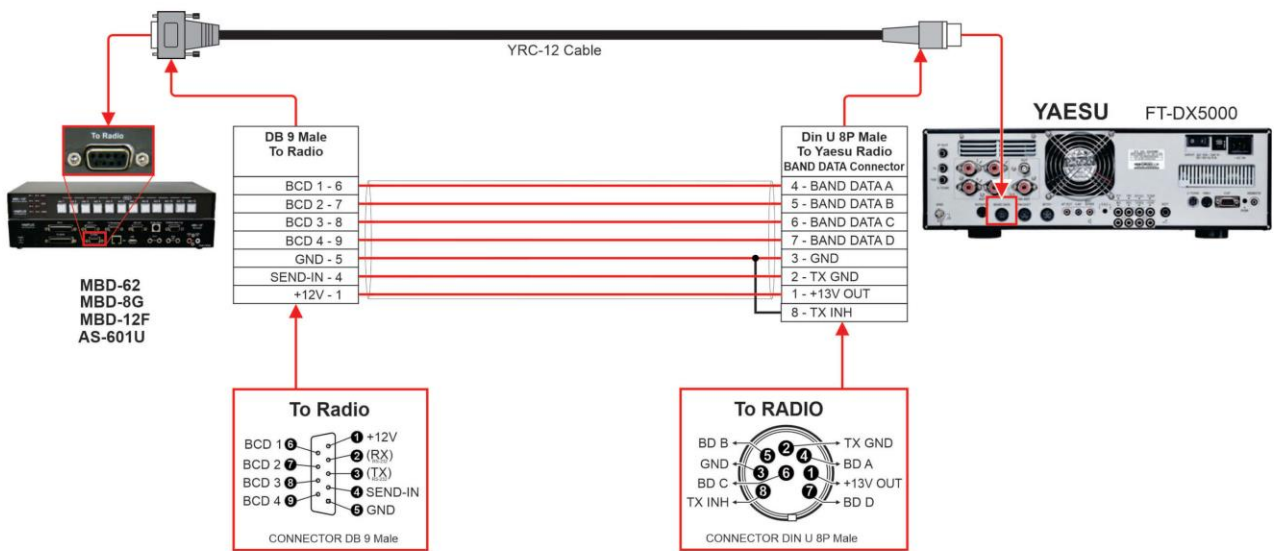
Applicable to Kenwood radios with REMOTE 7 pins Din connector.



Date:	01 / 02 / 2024	By:	Valmor
Filename:	KRC-12_DI	Rev.:	1.0



YRC-12 Cable



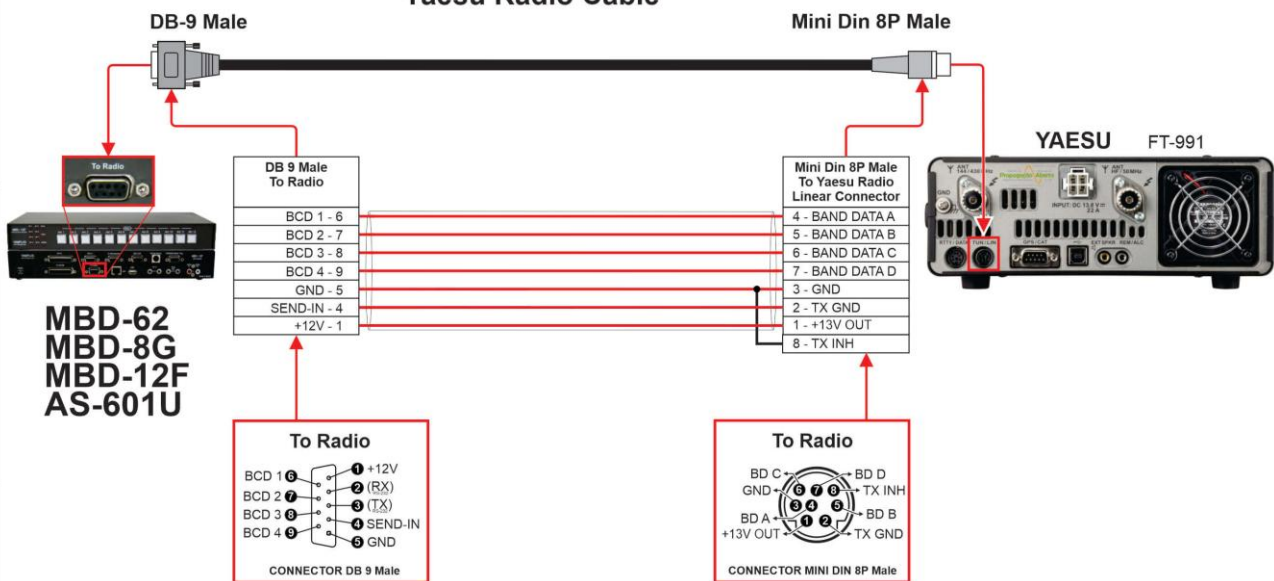
Applicable for Yaesu radios with Band Data connector compatible with models:

FT-DX5000
FT-2000
FT-1000MP
FT-990



Date: 09 / 10 / 2023	By: Valmor
Filename: YRC-12_DI	Rev.: 1.0

YRC-12 8P Yaesu Radio Cable



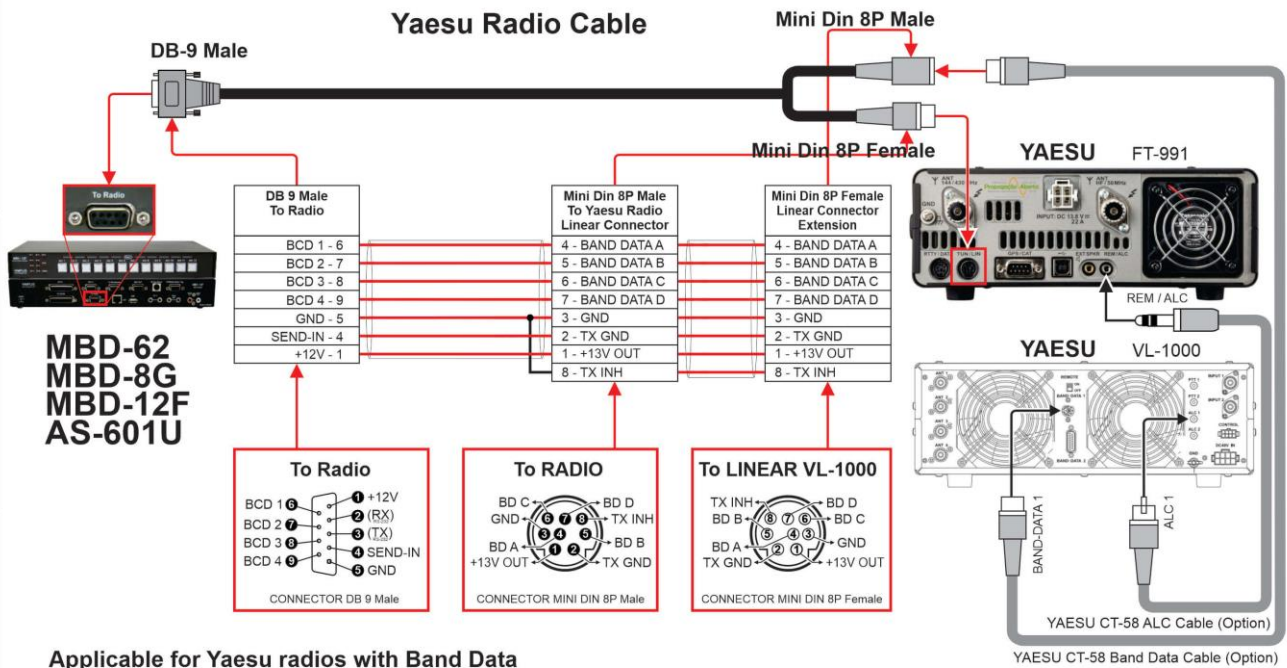
Applicable for Yaesu radios with Band Data connector compatible with models:

FT-710
FT-991
FT-991A

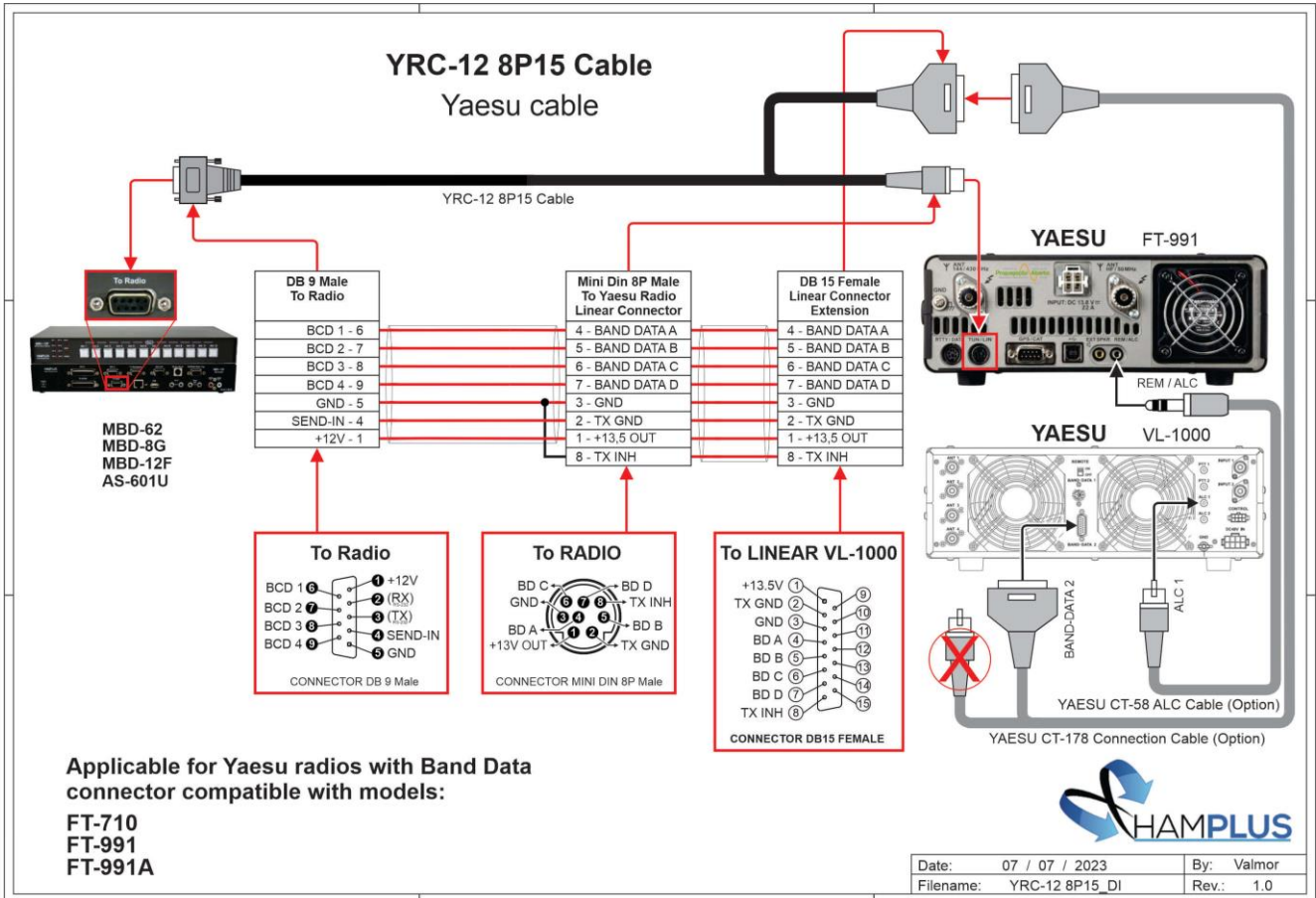


Date: 16 / 12 / 2024	By: Valmor
Filename: YRC-12 8P_DI	Rev.: 1.0

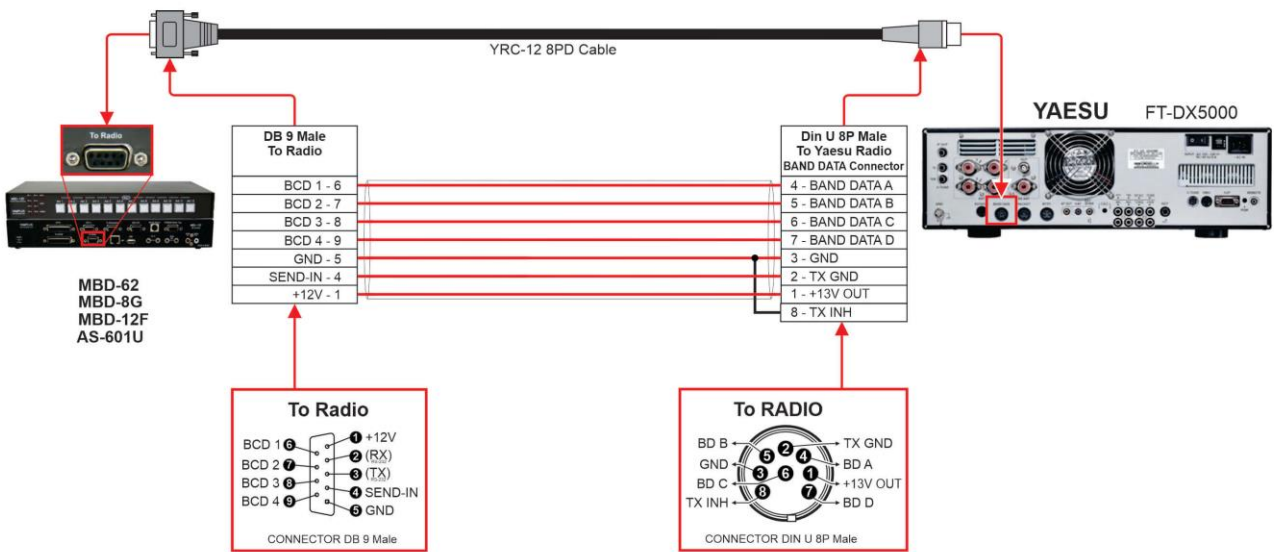
YRC-12 8P8 Yaesu Radio Cable



Date: 16 / 12 / 2024 By: Valmor
Filename: YRC-12 8P8_DI Rev.: 1.0



YRC-12 8PD Cable



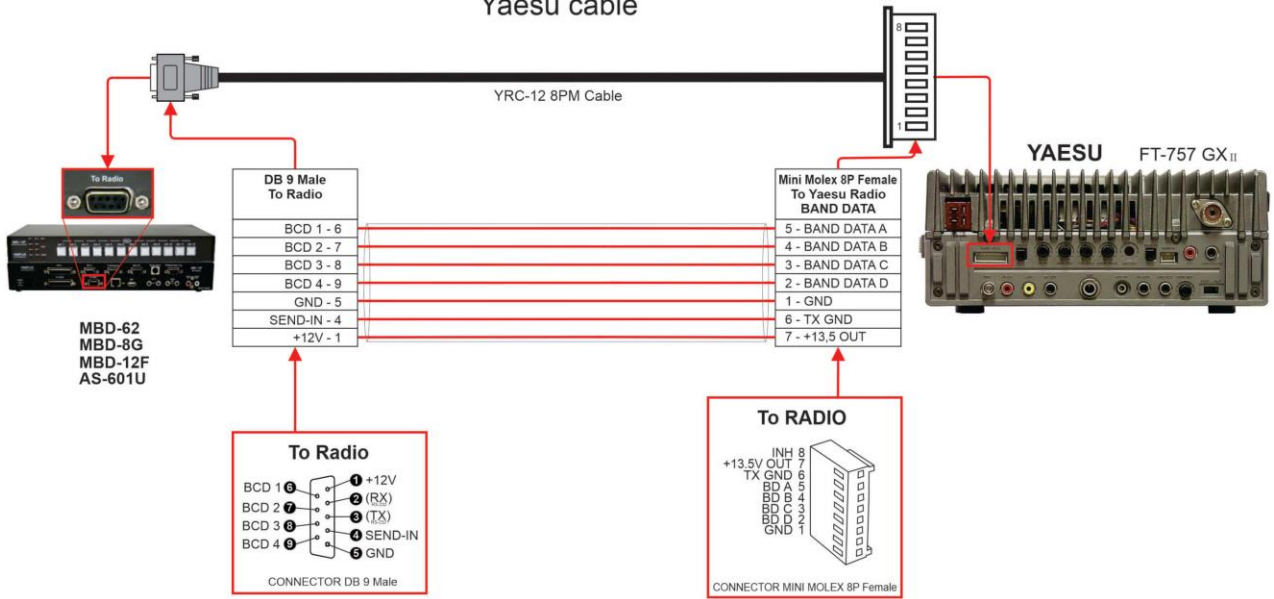
Applicable for Yaesu radios with Band Data connector compatible with models:

FT-DX5000
FT-990



Date: 07 / 07 / 2023	By: Valmor
Filename: CE-YRC-12 8PD	Rev.: 1.0

YRC-12 8PM Yaesu cable



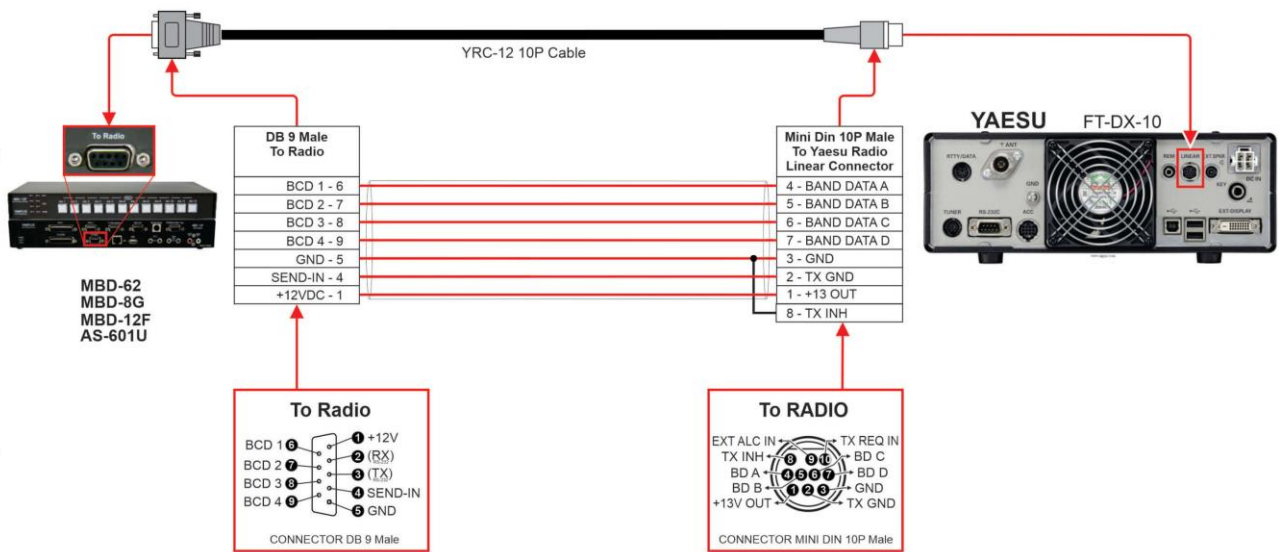
Applicable for Yaesu radios with Band Data connector compatible with models:

FT-757GX
FT-757GXII



Date:	07 / 07 / 2023	By:	Valmor
Filename:	YRC-12 8PM_DI	Rev.:	1.0

YRC-12 10P Cable

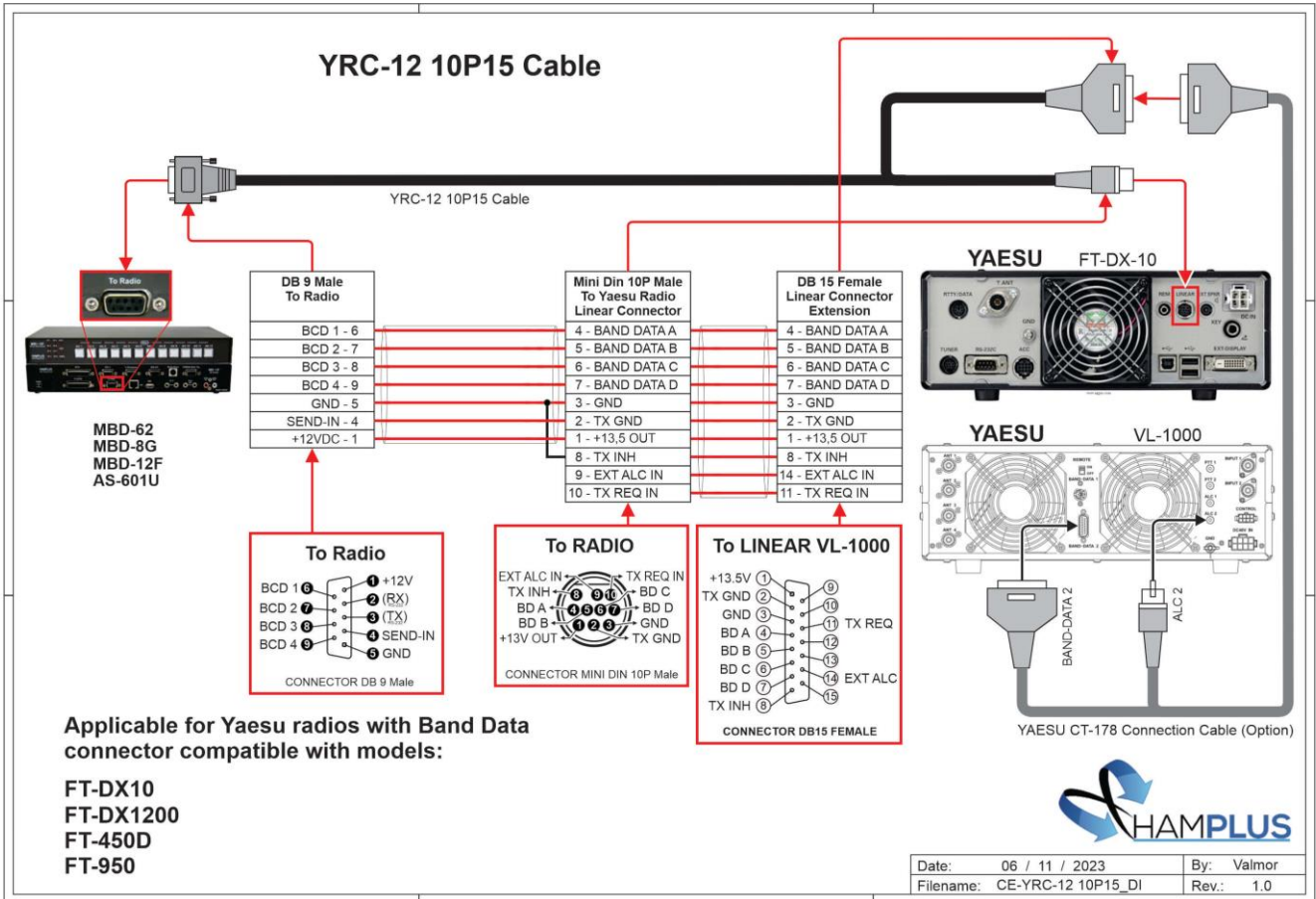


Applicable for Yaesu radios with Band Data connector compatible with models:

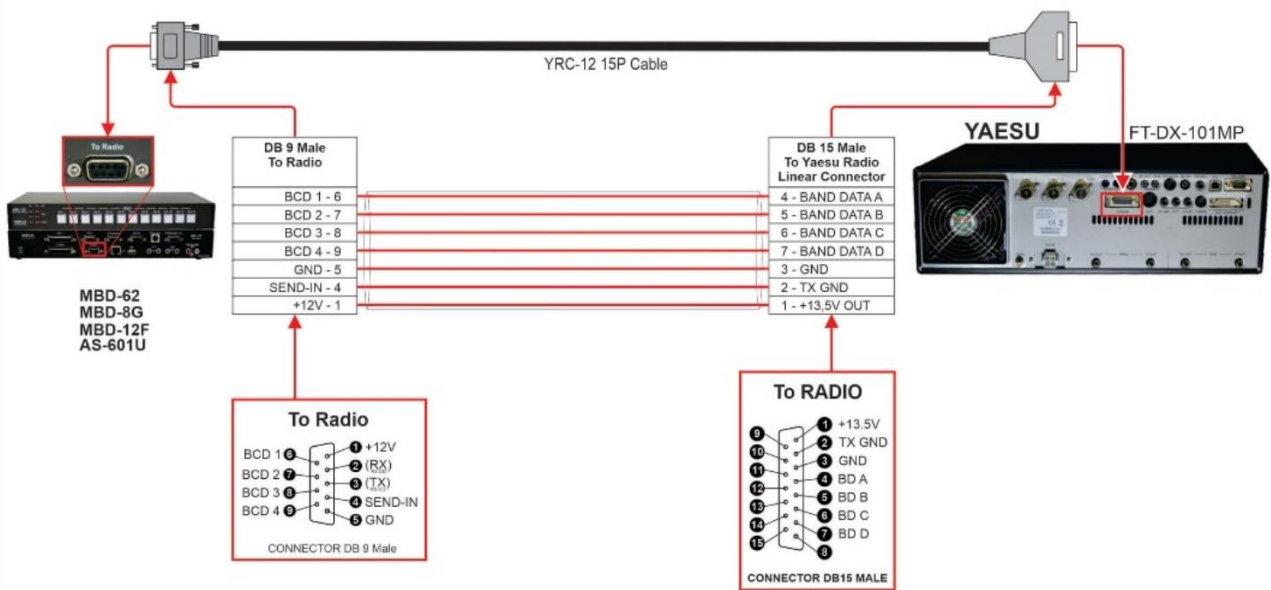
FT-DX10
FT-DX1200
FT-450D
FT-950



Date: 07 / 07 / 2023	By: Valmor
Filename: YRC-12 10P_DI	Rev.: 1.0



YRC-12 15P Cable

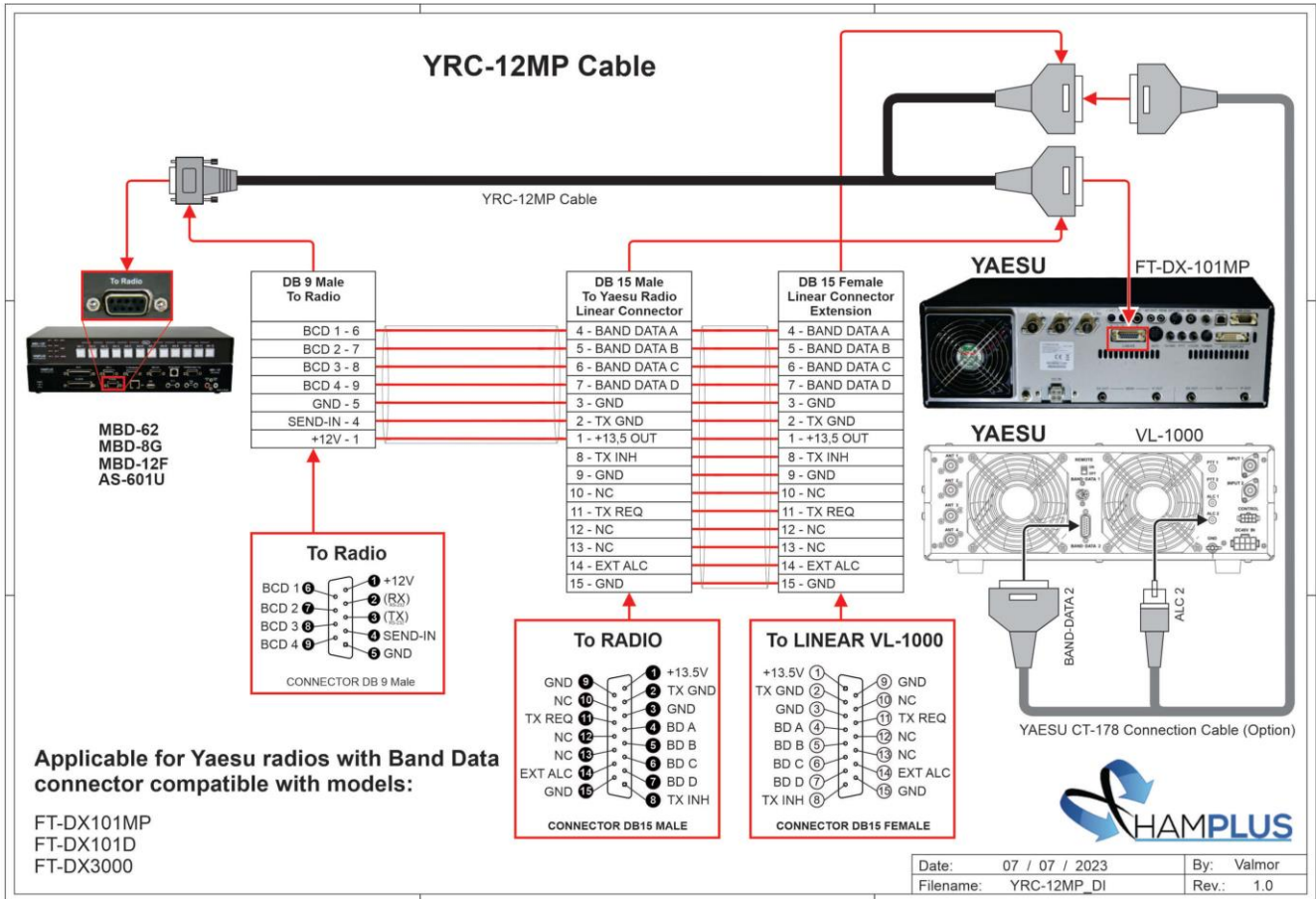


Applicable for Yaesu radios with Band Data connector compatible with models:

FT-DX101MP
FT-DX101D
FT-DX3000



Date: 07 / 07 / 2023	By: Valmor
Filename: YRC-12 15P_DI	Rev.: 1.0





AS-601U

January 20, 2025

www.hamplus.com

Rua Joe Collaco, 954 - Florianopolis - Brazil