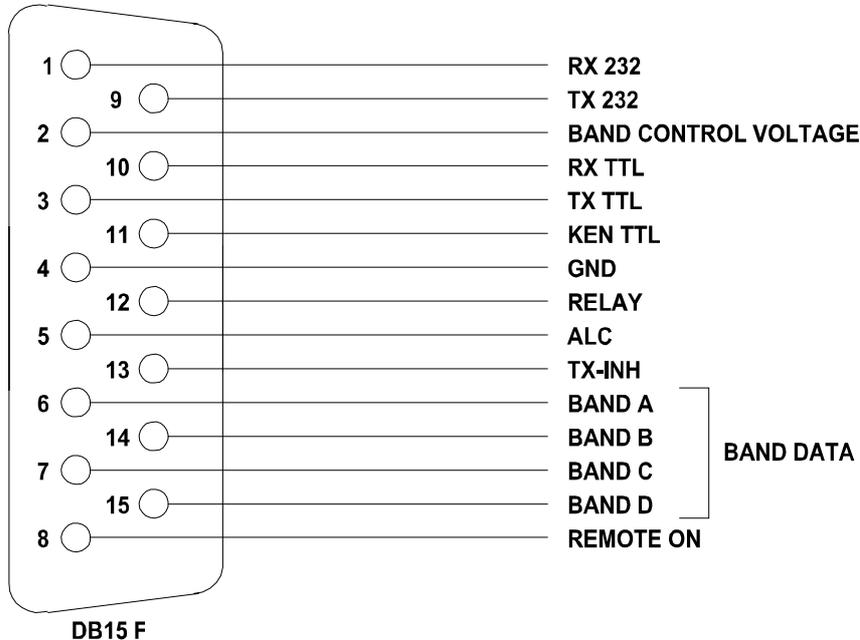


12. CAT CONNECTIONS

12.1 CAT Connector

In this diagram the rear panel CAT connector and pinouts are shown



pin n°	pin name	Description
1	RX 232	Used on KENWOOD and YAESU transceivers for the link with a RS-232 connection.
9	TX 232	
2	BAND CONTROL VOLTAGE	Analog band switch on the Icom transceivers.
10	RX TTL	Used on Icom, KENWOOD and YAESU transceivers for the CAT 5V TTL connection.
3	TX TTL	
11	KEN TTL	Connect to GND if CAT 5V TTL KENWOOD connection.
4	GND	Signal ground.
12	RELAY	Connected in parallel with the RCA phono RELAY connector.
5	ALC	Connected in parallel with the RCA phono ALC connector.
13	TX - INH	Used to improve the receive / transmit switching efficiency.
6	DATA A	Bit A of Band Data (digital switch of band for YAESU).
14	DATA B	Bit B of Band Data (digital switch of band for YAESU).
7	DATA C	Bit C of Band Data (digital switch of band for YAESU).
15	DATA D	Bit D of Band Data (digital switch of band for YAESU).
8	REMOTE ON	Applying a voltage from 9 to 15 Vdc, turns the amplifier ON.

Using the above information, an appropriate cable for your transceiver(s) may be constructed, or you might wish to order a correctly made-up cable when you order your amplifier from your local dealer. The amplifier connector is included with the amplifier and the transceiver connector (called "Radio" in the next diagram) is usually supplied with the transceiver.

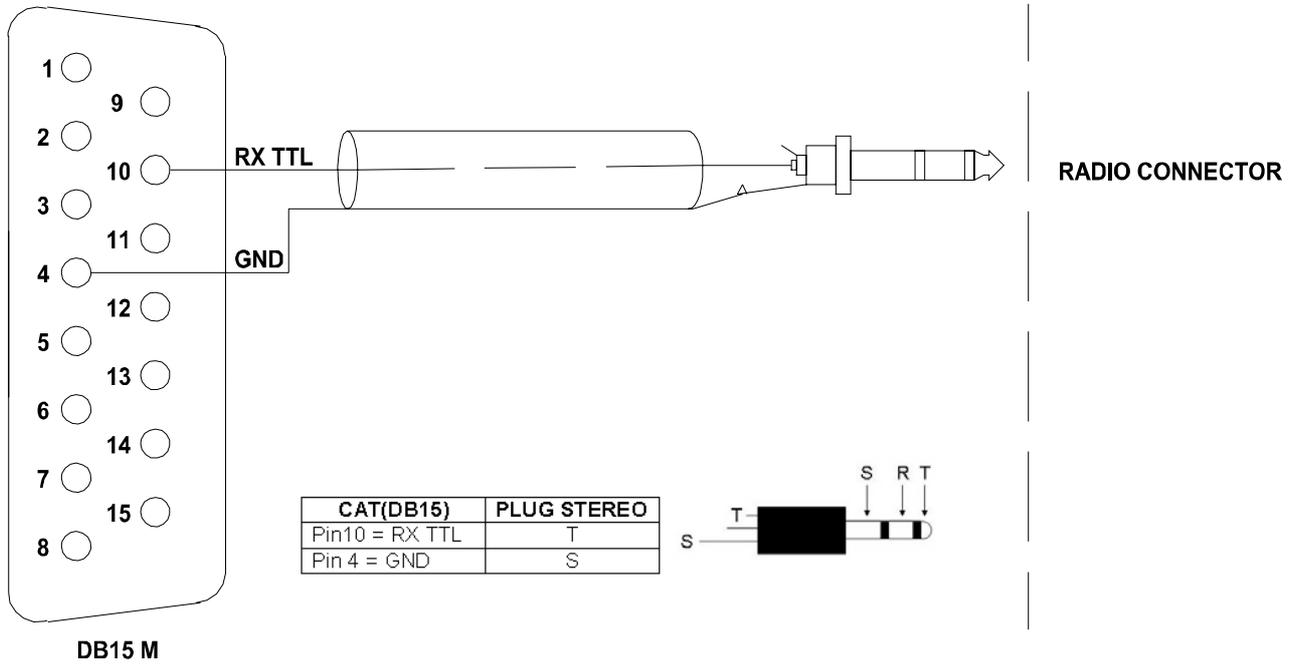
For connections to the Radio connector, refer to the transceiver operating manual.

12.2 SPE

In the case of SPE transceivers, it isn't necessary to make a cable because it is supplied with the transceiver.

12.3 ICOM

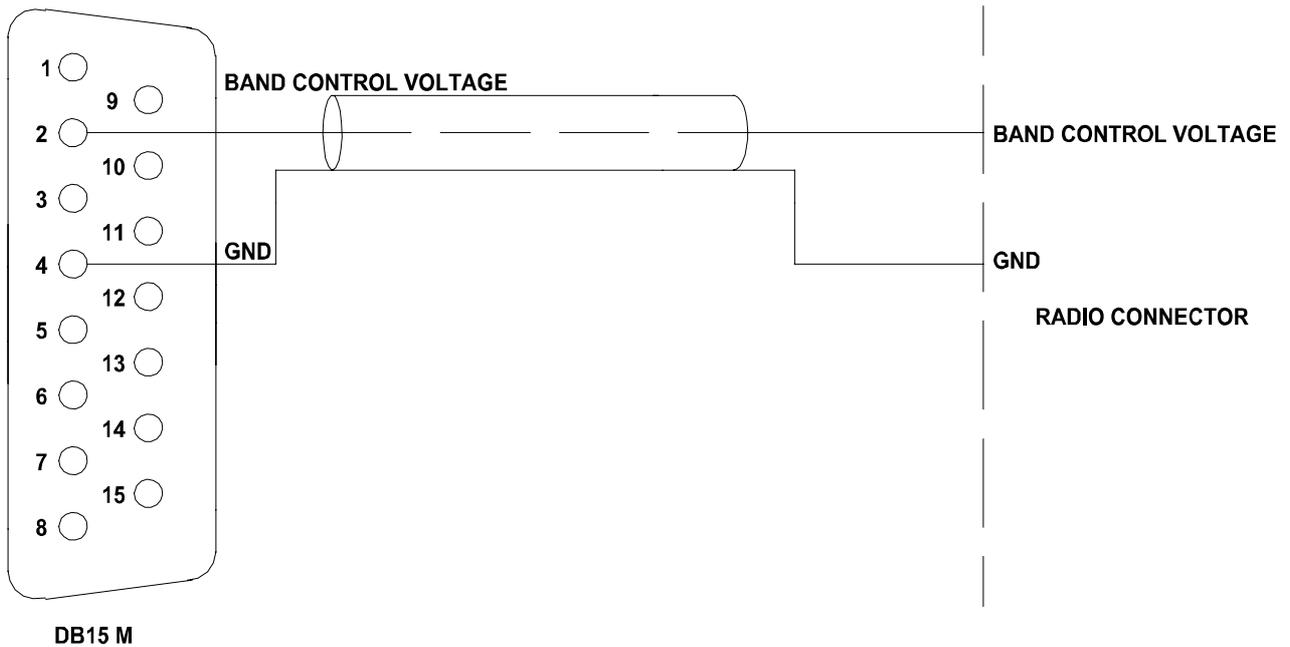
CAT CI-V Interface



It is possible to use a stereo plug according to the figure above.

This interface is standard for all the Icom models equipped with CAT. The cable always terminates to a 3.5 mm plug

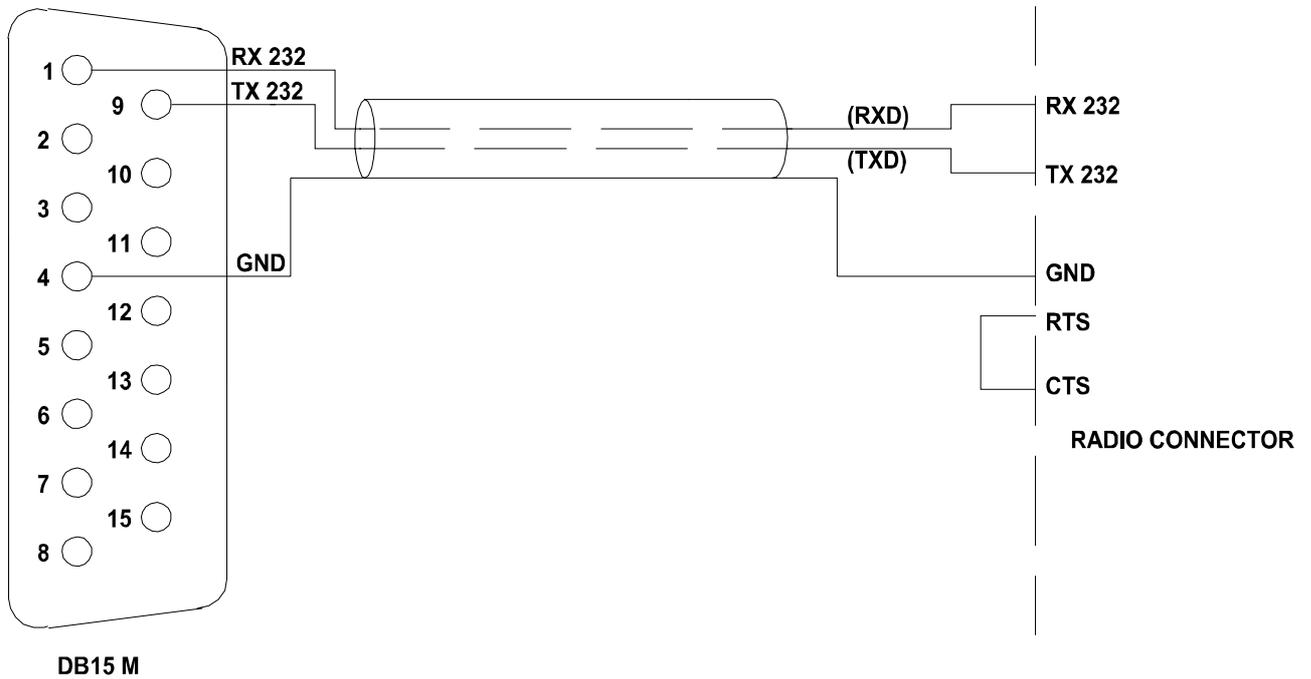
BAND CONTROL VOLTAGE Interface



This interface is standard for all the Icom models not equipped with CAT. The change of a voltage determines the change of band.

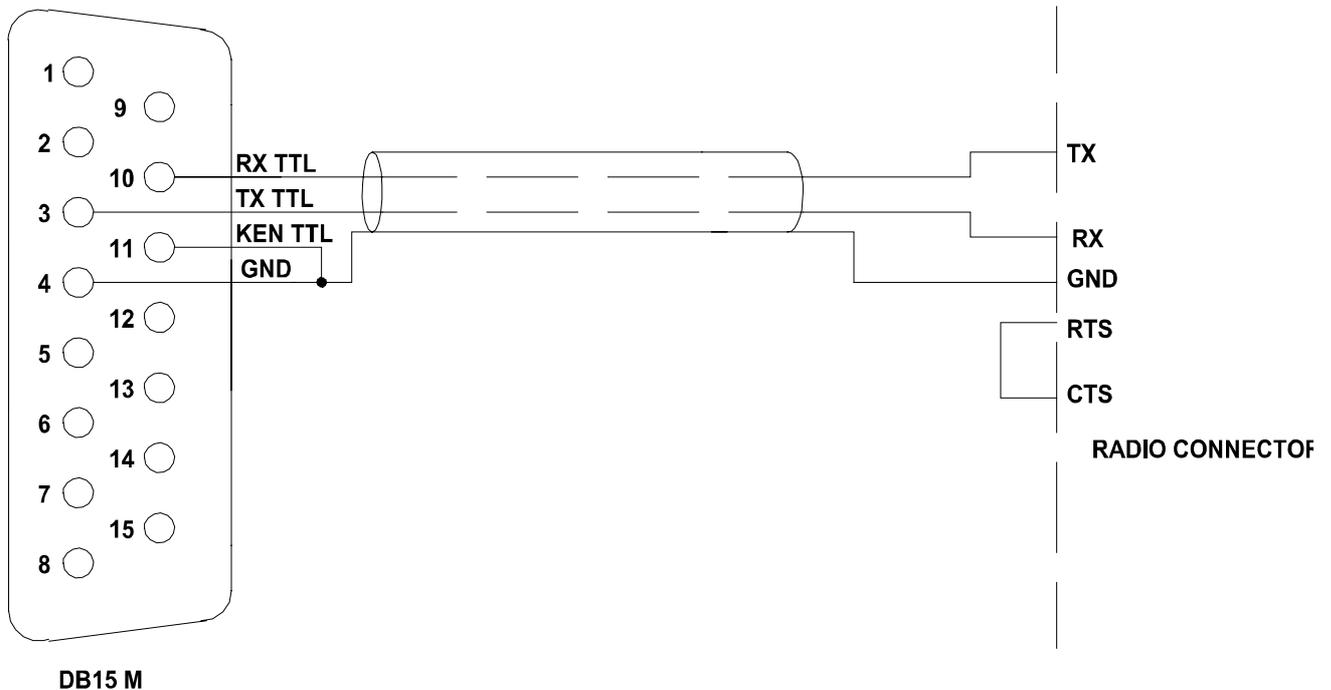
1.4 KENWOOD

CAT RS232 Interface



The Radio connector could be DB-9 or DB-25 male connector or female connector (read the specific manual). In the manual, also verify if the RTS–CTS link is necessary.

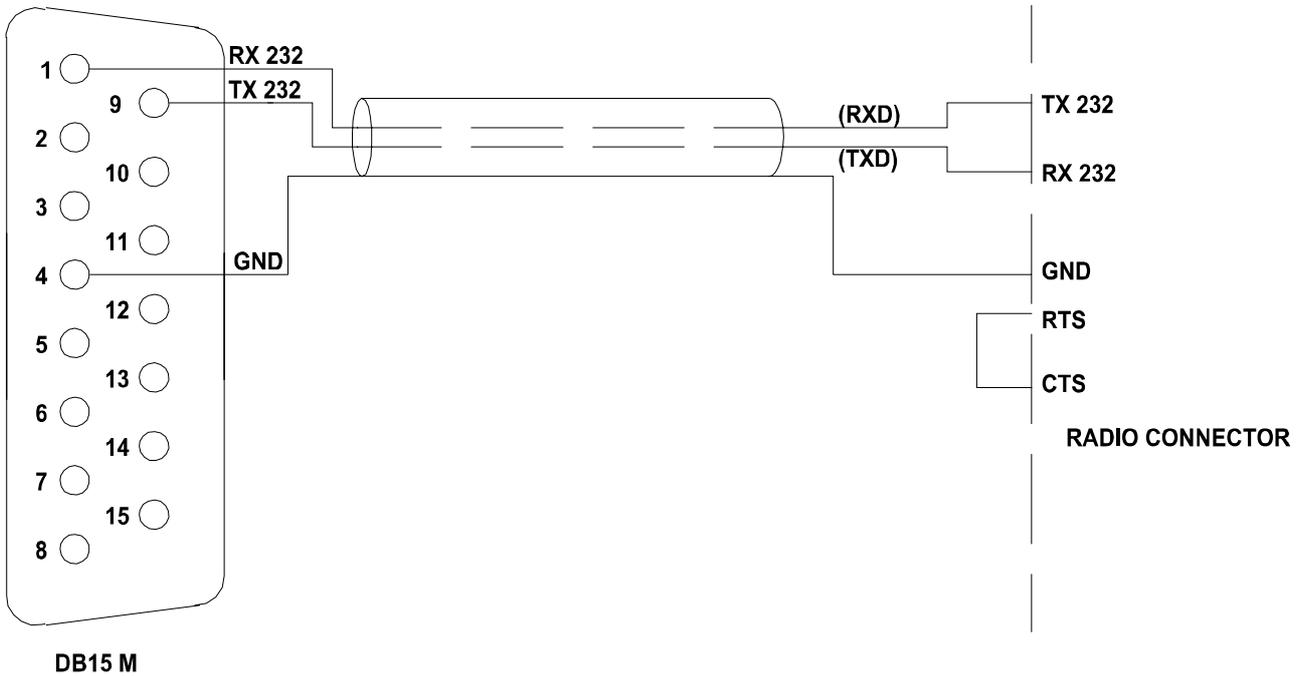
CAT 5V TTL Interface



The connector is described in the specific manual. Verify if the RTS–CTS link is necessary.

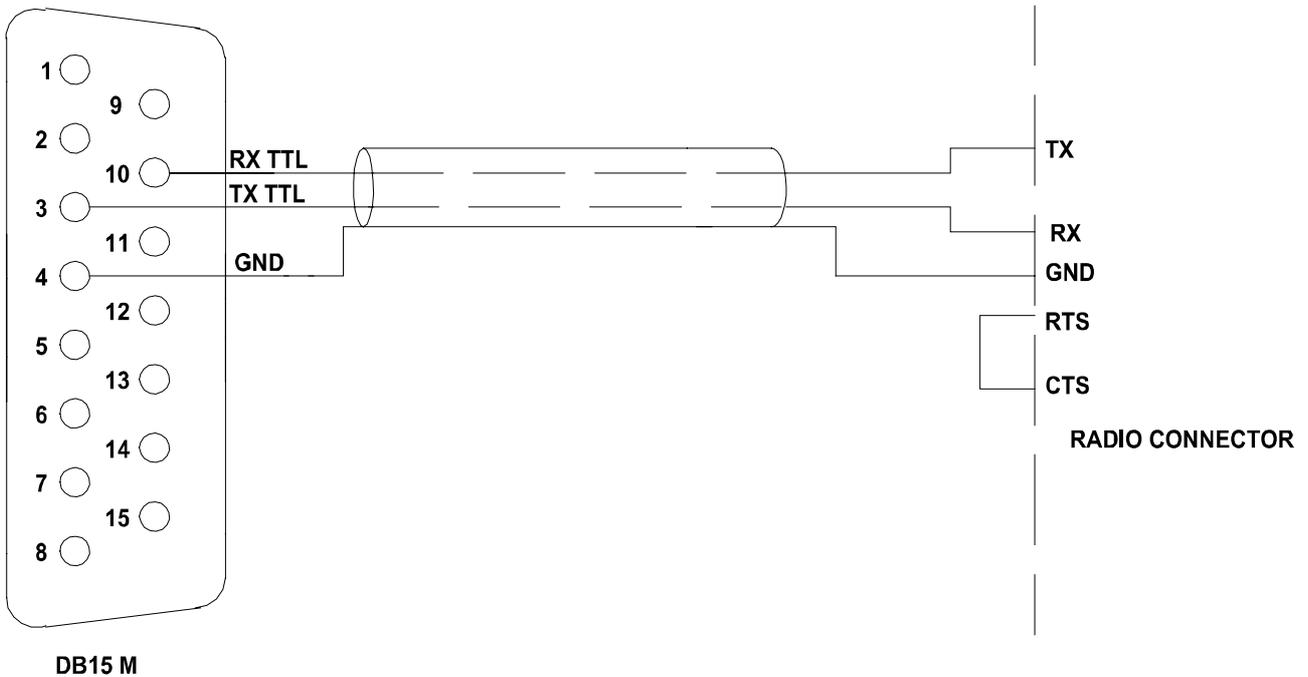
12.5 YAESU

CAT RS232 Interface



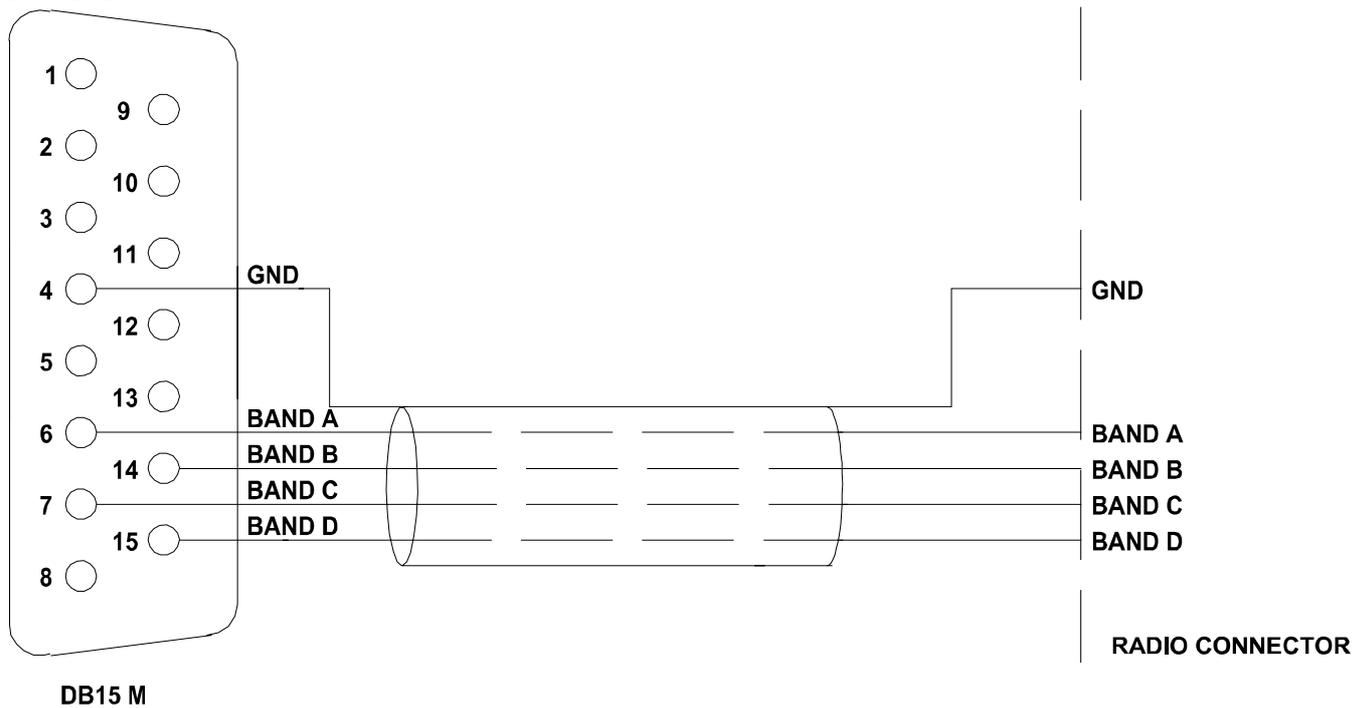
The radio connector may be a DB-9 or DB-25 male connector or female connector (read the specific manual). Verify from the manual if the RTS–CTS link is necessary.

CAT 5V TTL Interface



The connector is described in the manual. Verify if the RTS–CTS link is necessary.

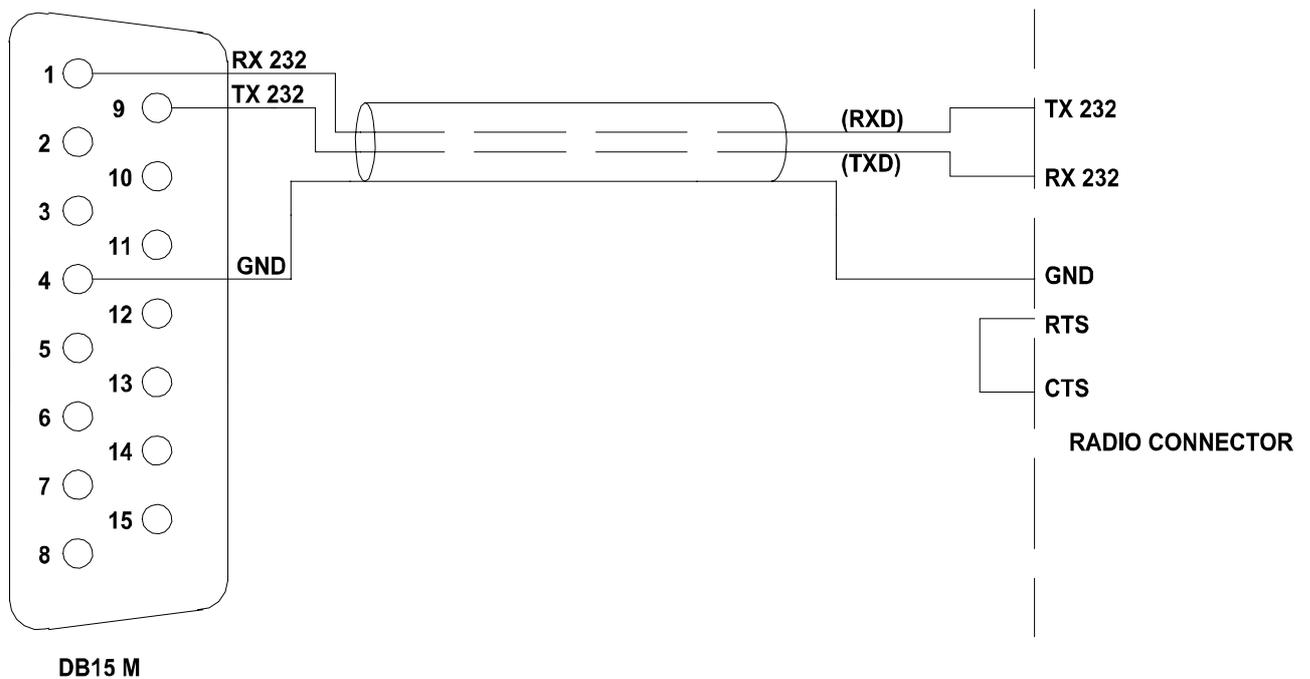
BAND DATA Interface



Without the CAT, the band is commanded by four digital signals (Band A, Band B, Band C, Band D). Refer to the specific manual.

12.6 TEN-TEC, FlexRadio, ELECRAFT

CAT RS232 Interface



The radio connector may be a DB-9 or DB-25 male connector or female connector (read the specific manual). Verify from the manual if the RTS-CTS link is necessary.

12.7 TRANSCEIVERS OF OTHER BRANDS

A special link is not necessary as the internal amplifier frequency counter will measure the input frequency and will control the amplifier.

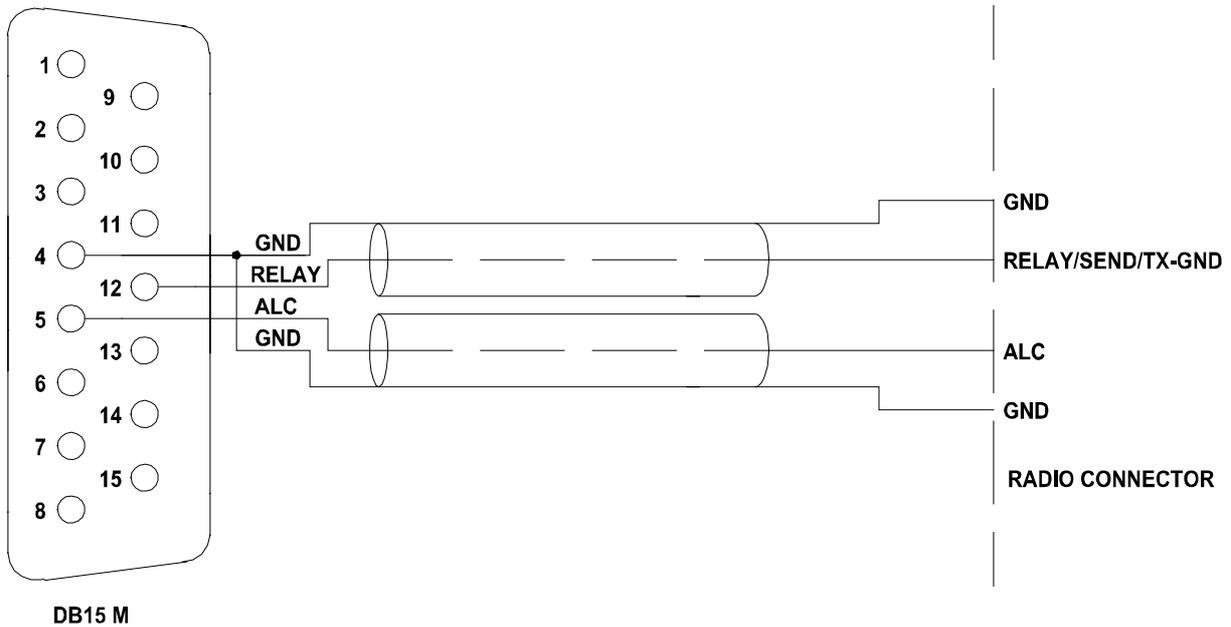
13 OTHER CONNECTIONS

On the 15-pin connector, in addition to the CAT signals, the ALC and RELAY signals are repeated, REMOTE ON and TX – INH (inhibit) are also available. If you use this connector, in some cases, separate ALC and RELAY cables may not be necessary, or it may be possible to turn the amplifier on / off by turning on / off the transceiver (REMOTE ON).

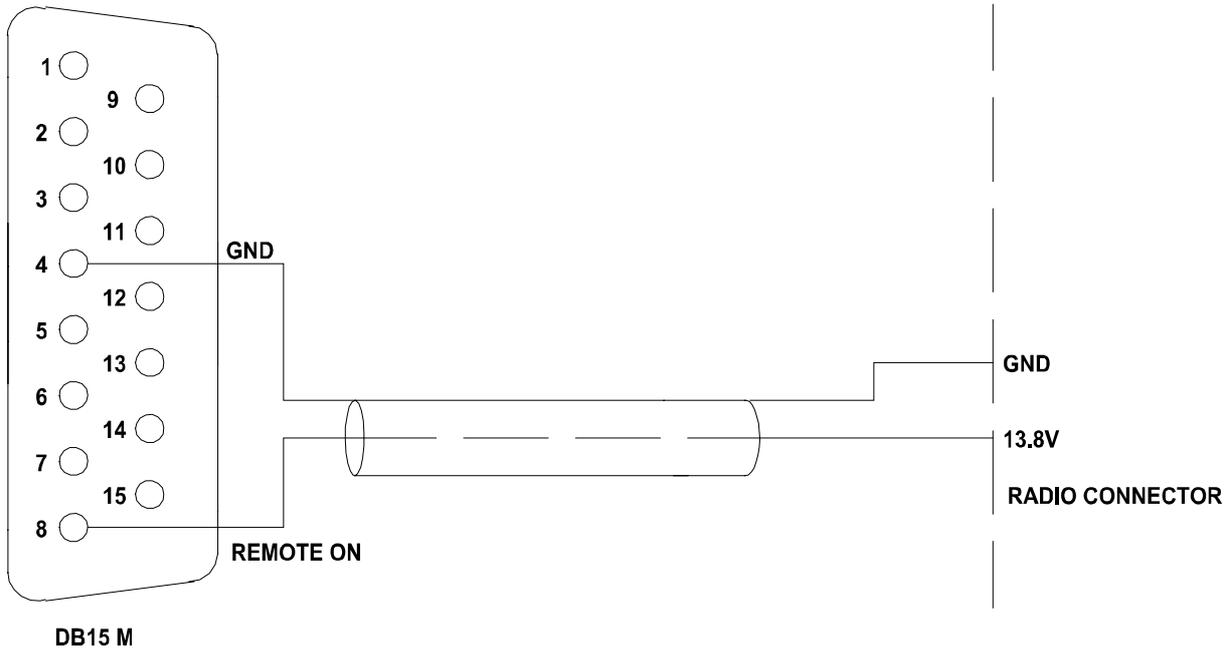
The following diagram shows how to integrate all transceiver control connections to the 15-way amplifier connector.

Check the transceiver handbooks for terminating that end of the cable.

13.1 ALC, RELAY CONNECTIONS



13.2 REMOTE ON LINK



13.3 TX INH LINK

Some transceivers have a suitable input (called TX – INHIBIT, LINEAR, MUTE, etc.) that disables transmission. To improve the receive / transmit switching efficiency it is highly recommended, but not mandatory, to connect this input with the pin 13 of the linear connector (TX – INH).

