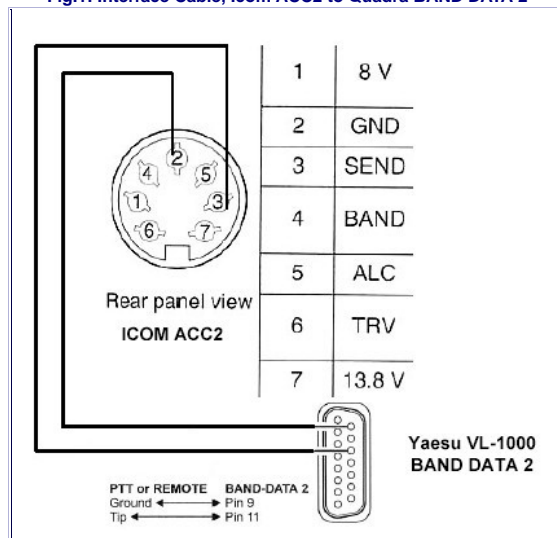


Connecting the Yaesu Quadra (VL-1000) to an Icom or Kenwood* Exciter

(*Kenwood TS-590S/SG or TS-990S)

1. Connecting the Quadra to an Icom Exciter:

Fig.1: Interface Cable, Icom ACC2 to Quadra BAND DATA 2



Procedure:

1. Reprogram the Quadra amplifier per [Yaesu's instructions](#), to activate 10 and 12m; this reconfigures the amplifier as the "International" model.
2. On the exciter, set the RF POWER control to 100W. The VL-1000 requires at least 75W of drive for correct auto-tuning or bandswitching.
3. Set the **REMOTE** switch on the VL-1000 rear panel to **OFF** (down).
4. If remote power on/off switching from the exciter is desired, connect Band Data 2, Pin 1 (+13.6V) to ACC2 Pin 7 (13.8V) as illustrated [here](#). Set the **REMOTE** switch on the VL-1000 rear panel to **ON** (up).
5. Connect the Quadra to the Icom exciter, via 4 cables: RF, ALC (**mandatory**), PTT and remote keying interface. The latter allows the Quadra to key the exciter for tuning when the **F.SET** or **TUNE** button is pressed. The remote keying interface cable is a shielded cable which connects VL-1000 Amplifier Band Data 2 (DB15) to Icom ACC2 (7-pin DIN). Connect Band Data 2, Pin 9 (F SET COMMON) via shield to ACC2 Pin 2 (GND). Connect Band Data 2, Pin 11 (F SET 2) via center conductor to ACC2 Pin 3 (SEND). See [Figure 1](#) above.
6. Connect the ALC cable from the ALC 1 jack on the VL-1000 to the ALC jack on the Icom exciter. Connect the PTT cable from the PTT 1 jack on the VL-1000 to the SEND or RELAY jack on the Icom exciter. (*Note: If the exciter is an IC-7600, IC-7700 or IC-7800, set SEND Relay Type to MOS-FET in ACC set menu.*)
7. Prior to pressing **F.SET** or **TUNE**, set the exciter to RTTY or FM mode to transmit a continuous carrier to the Quadra. When the bandswitching or auto-tuning cycle is complete, select the desired operating mode.
8. **ALC calibration:** Set the Quadra's ALC level to limit power output to 1 kW, corresponding to approximately 80W of drive. It is sufficient to calibrate the ALC on one band; the power output is almost constant across all HF bands. (*Note: If the exciter power output can exceed 100W, as is the case for the IC-775, IC-781, IC-7700 and IC-7800, the input attenuator ATT should be enabled*). Refer to [VL-1000 User Manual](#), p. 12. *The Quadra's ALC line is compatible with that of an Icom exciter (0 to -10V DC). The typical ALC voltage for 1 kW output is about -4V DC.*
9. The RF input impedance of the Quadra is 50 ohms resistive (frequency-independent). It is therefore **unnecessary** to engage the transceiver's autotuner when driving the Quadra.
10. **Note:** As Icom exciters do not support the Yaesu Band Data 1 cable, the following Quadra features are not available in this configuration:
 - a. remote power on/off switching from the exciter (*but refer to Paragraph 4 above*)
 - b. automatic antenna selection by band
 - c. the transmit-inhibit line (for QSK operation)
 - d. automatic generation of an 80 ~ 100W CW tuning carrier by the exciter (irrespective of current operating mode) when pressing **F.SET** or **TUNE** (*refer to Paragraph 6 above*)

