

## **Connection to Antenna & Power Supply**

The 418 is designed for use with any antenna system providing 50 Ohm resistive impedance at the desired operating frequency. Every effort should be made to ensure the impedance of the antenna system is as close as possible to the specified 50-Ohm value.

The 418 requires a source of well-filtered and regulated DC voltage. The supply voltage on the 418 is 13.8 Vdc nominal +/- 15% to allow for mobile and battery operation. The voltage source must be capable of supplying 23 amperes continuous duty.

We recommend using the included DC power cable (P/N 46214). Use of #12 stranded wire is recommended for mobile and in home use to accommodate the required current demand during transmit.

**Note:** Always enable the power source first and then the amplifier. If a generator or battery connected to a charger is used to supply the DC source, always turn off the amplifier before starting or shutting off the DC source equipment. These recharging devices often generate large voltage spikes that can damage the amplifier.

## **A word about grounding**

A good ground system is essential for optimum operation of any HF transmitter. The best solution is to connect all the station equipment to a single ground connection. Refer to Local and National Electrical Codes before making any connections with the 418. Another source of information on grounding can be found in the ARRL Handbook.

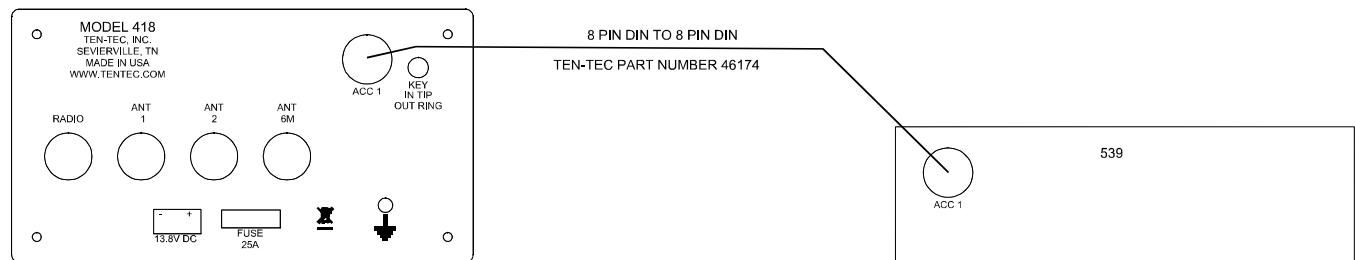
A good ground system can contribute to the station efficiency in a number of ways including minimizing the possibility of electrical shock, and minimizing RF currents flowing on the shield of the coax cable causing interference to electrical equipment and transceiver accessories.

It is critical that the power supply, the 418, and other equipment in the station be properly grounded to an Earth ground. Improper grounding can lead to various issues, including RFI, ground loops, or even death. Therefore it is extremely important to refer to the Local and National Electrical Codes and ARRL Handbook with regards to grounding.

## Amplifier Hookup

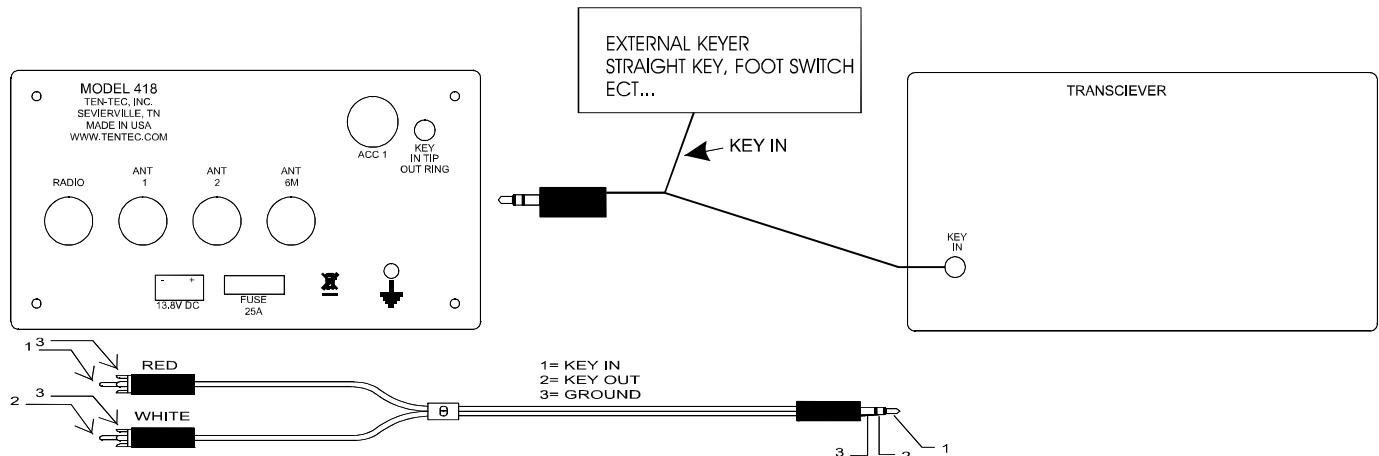
### 418 to 539

The 418 can be interfaced to the 539 using only the 8 pin din cable. The 539 will control band changes and keying the amplifier

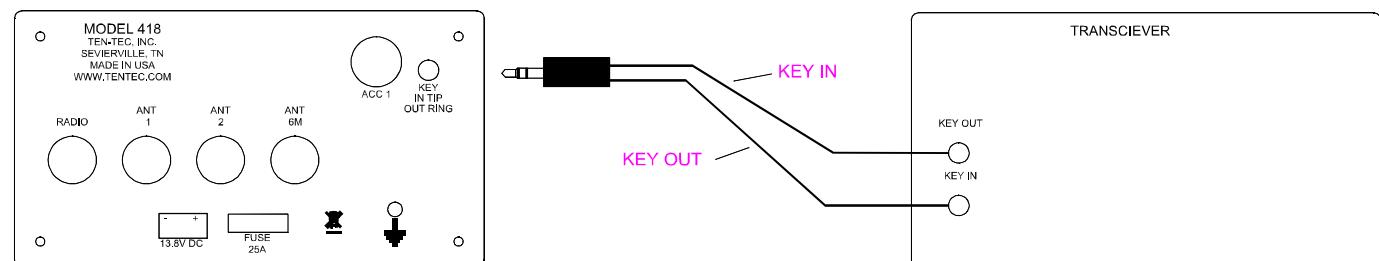


### 418 to other

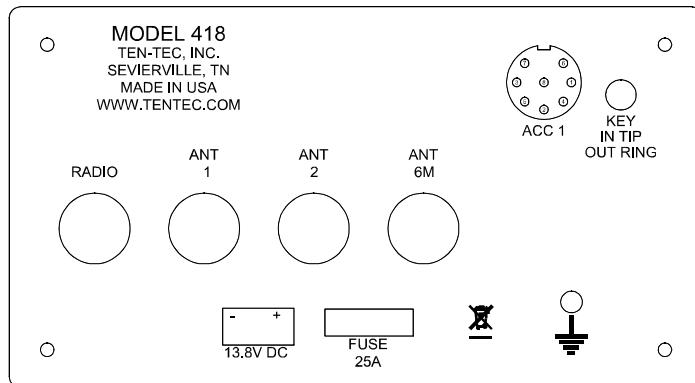
The 1/8" key jack provides a key input on the tip and a key output on the ring to allow the 418 to key other transceiver. Some methods are shown below.



Cable number 46216



## KEYING FROM ACC1



CLOSURE FROM PIN  
8 TO GROUND WILL  
KEY 418

