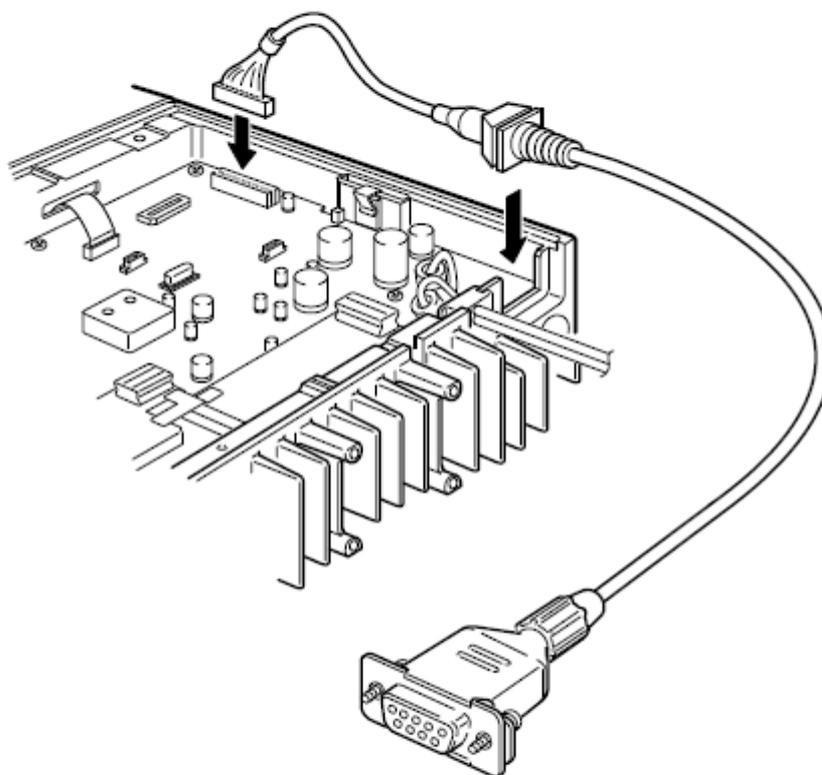
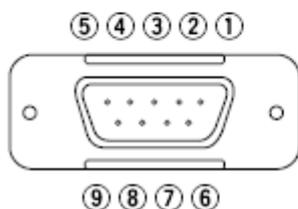


■ Optional OPC-617 installation

Install the OPC-617 as shown below.

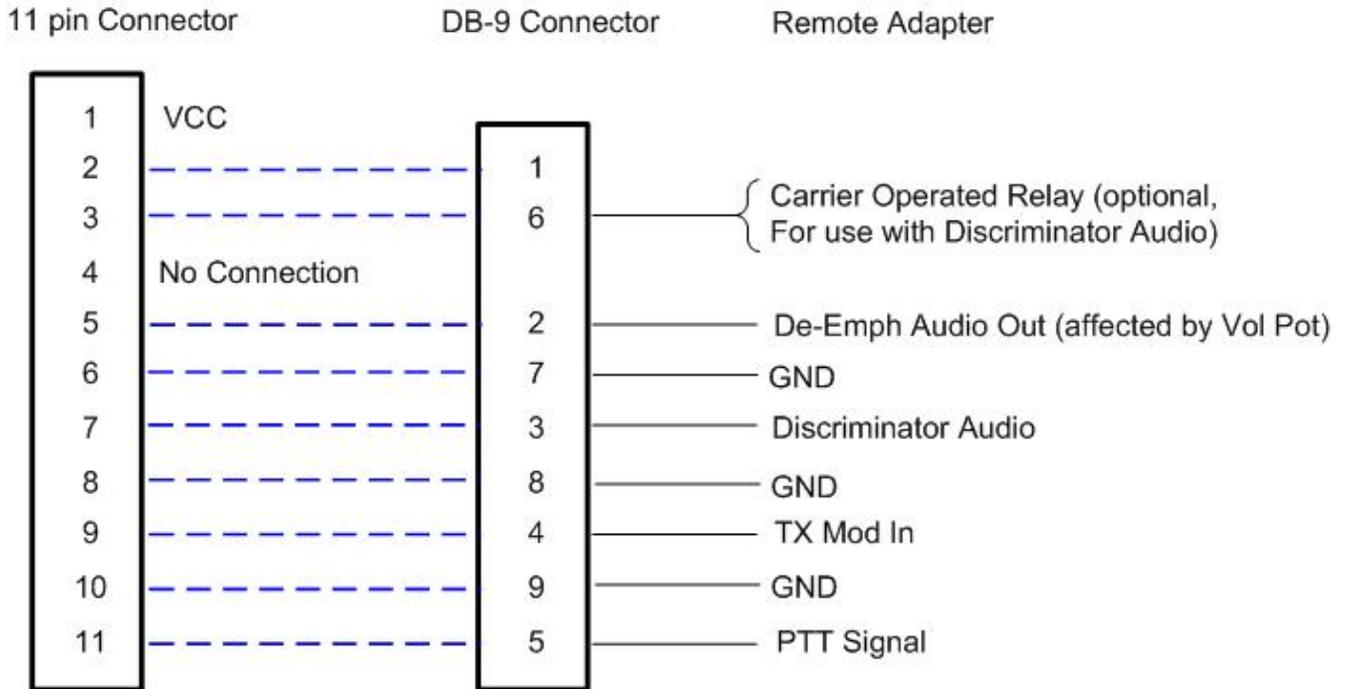


OPTIONAL CABLE PIN ASSIGNMENT



- | | |
|------------------------|------------------------|
| ① LCD backlit cont. IN | ⑥ Horn drive cont. OUT |
| ② AF OUT | ⑦ AF GND |
| ③ Det. AF OUT | ⑧ Det. AF GND |
| ④ Mod. IN | ⑨ Mod. GND |
| ⑤ PTT control IN | |

OPC-617 Connections for the F121/F221 Radio



Additional Notes

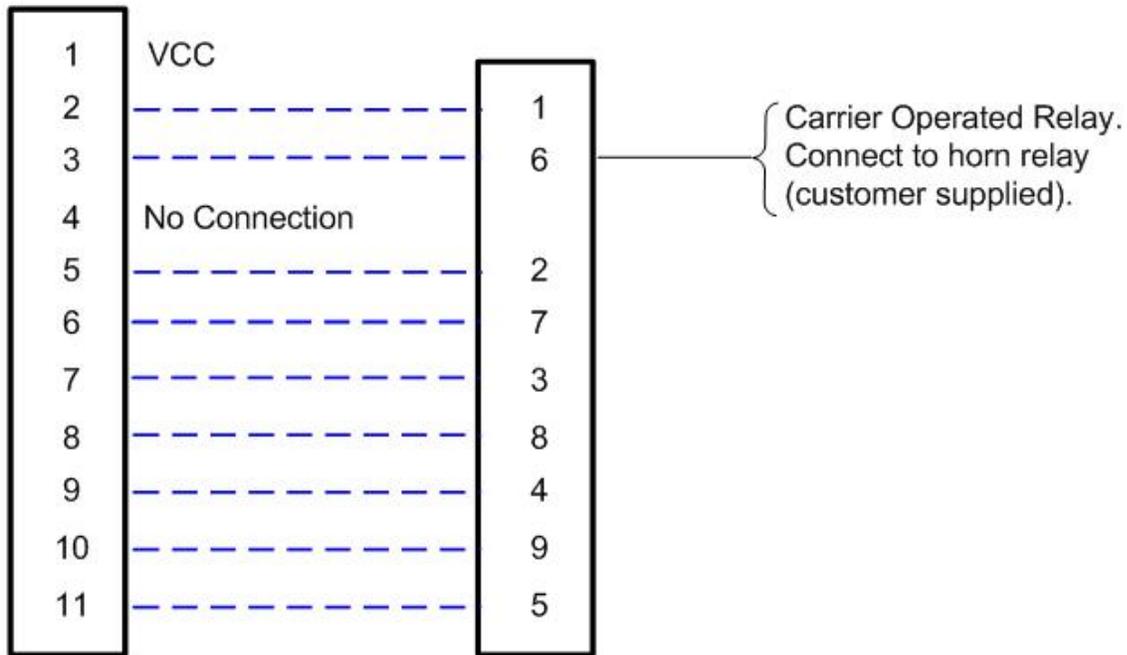
DB-9 Connector Pins	Notes
Pin 2	To find a suitable AF level, turn the Vol Knob OFF Change the AF Min level (in Set Mode) until a suitable level is found.
Pin 4	Solder Bead F for data. Solder Bead D for AF in.
Pin 5	To enable an external PTT: In Common -> Expert , set EPTT/FTSW to EPTT . If you require a delay after releasing PTT, set a value in the EPTT Delay Timer .
Pin 6	To set Pin 6 as a Carrier Operated Relay: Disable the 2/5-tone function for the selected channel. In Common -> Expert , set RX EXO to ON and the Delay Timer to OFF . This enables COR to react instantly to the signal when it switches on and off.

F121/F221, F121S/F221S OPC-617 Horn Honk Connections

For 2-Tone and 5-Tone Signaling

11 pin Connector

DB-9 Connector

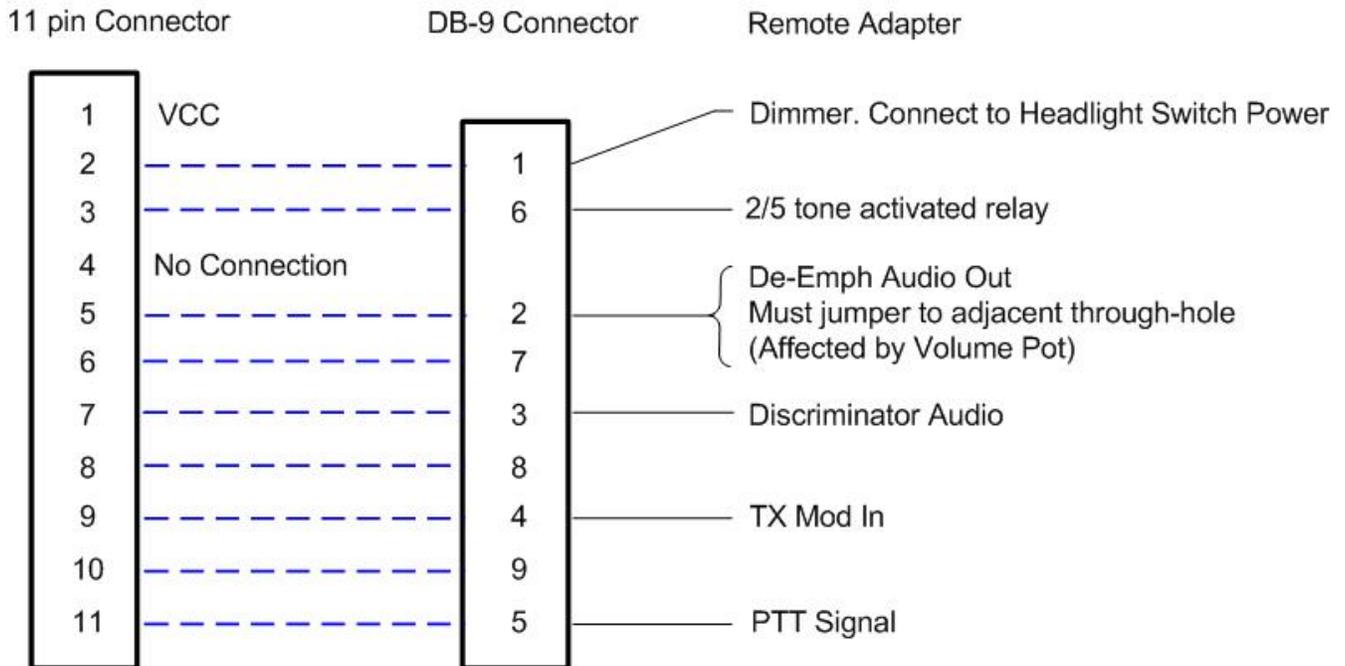


Programming

For both 2-Tone and 5-Tone:

1. Navigate to **RX Code CH** and set the **EXO** to **ON**.
2. Navigate to **Common** -> **Expert** and set **RX EXO** to **OFF**.

OPC-617 Remote Connections for 2-Tone/5-Tone For the F521/F621 Radio



Additional Notes

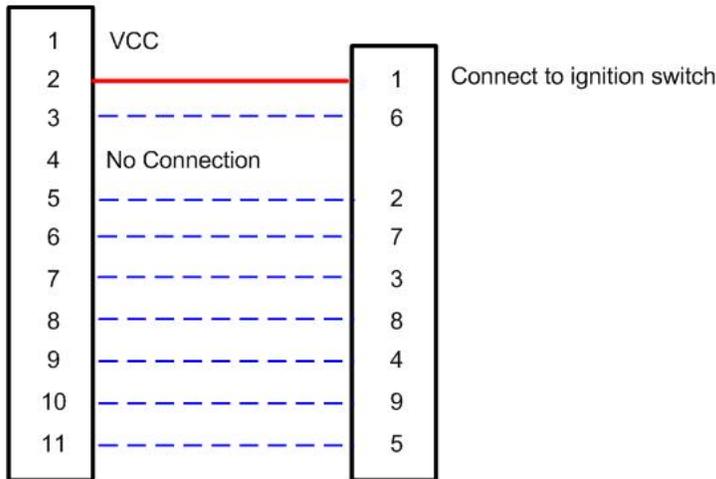
DB-9 Connector Pins	Notes
Pin 2	Program radio as in Pin 6 COR programming. 1. To find a suitable AF level, turn the Volume Knob off. 2. Change the AF Min Level (in Set Mode) until a suitable level is found.
Pin 4	Solder Bead F for data. Solder Bead D for AF in.
Pin 6	To set Pin 6 as a 2/5 tone operated relay: 1. Set the 2-Tone or 5-tone RX Code Ch EXO to ON . 2. Set Mode -> Horn to ON . 3. Common -> EXO setting doesn't matter. 4. The Common -> EXO Delay Timer sets how long Pin 6 stays low after signal.

OPC-617 Ignition Connections for F121/F221 Series Radios

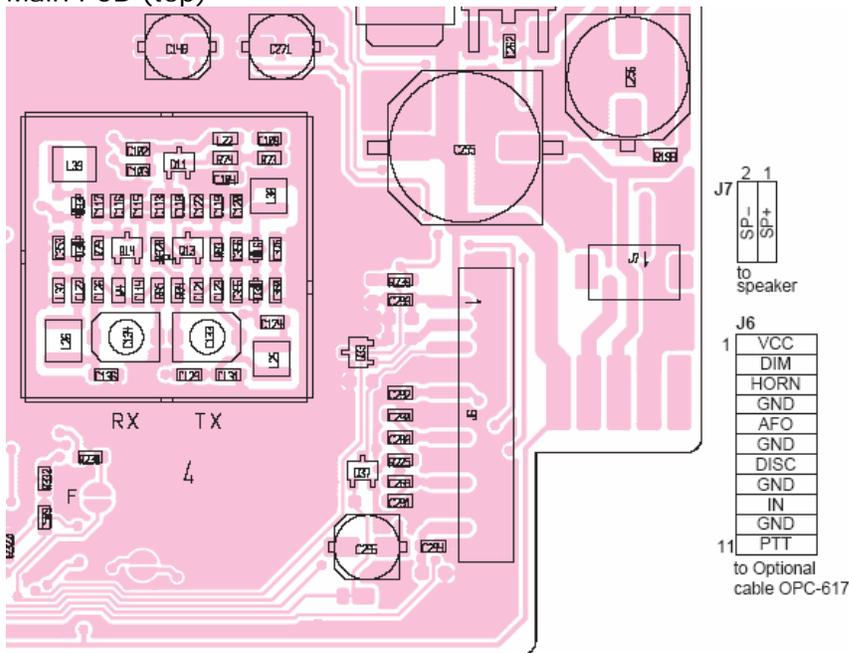
To enable the radio to turn on when the ignition switch is turned on, connect the OPC-617 11 pin connector to J6 on the main PCB. Then connect DB-9 pin 1 to the ignition switch. Be sure to connect DB-9 pin 1 to a switched-on high contact on the ignition switch.

11 pin Connector
 (J6 on Main PCB)

DB-9 Connector

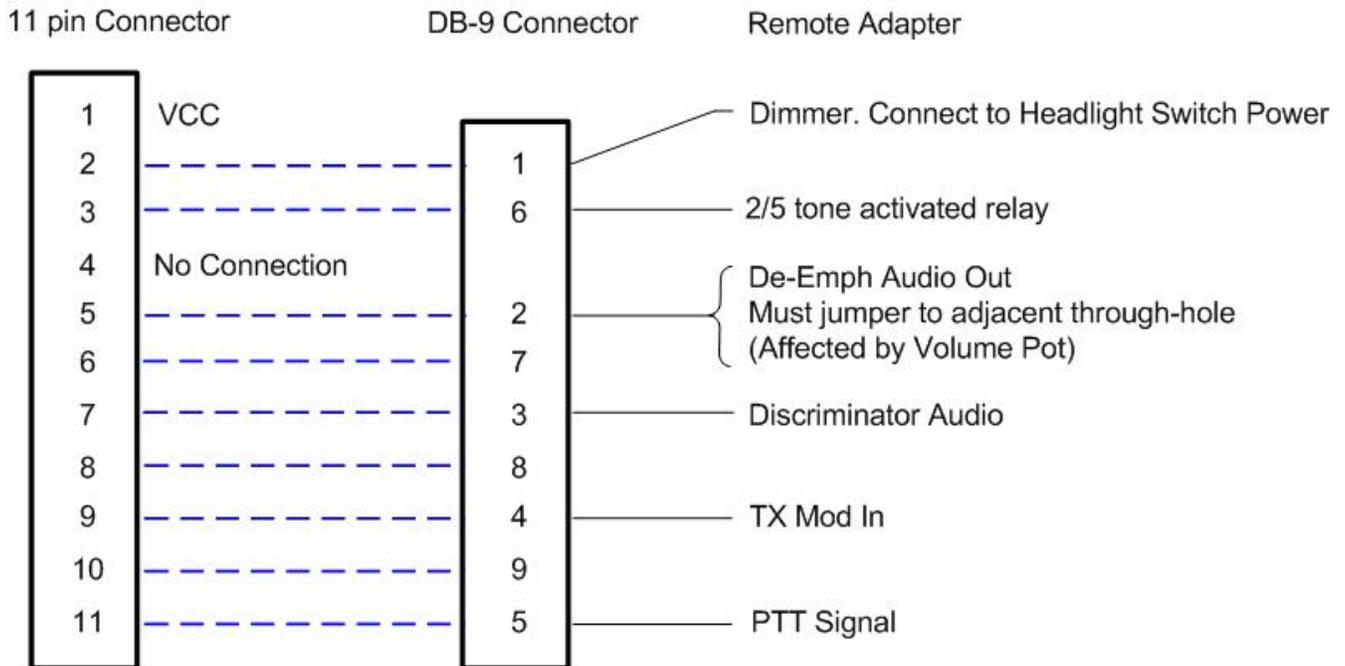


Main PCB (top)



After making connections, enable in the **EXPERT** window by setting the **DIM / IGSW** field to **IGSW**.

OPC-617 Remote Connections for 2-Tone/5-Tone For the F521/F621 Radio



Additional Notes

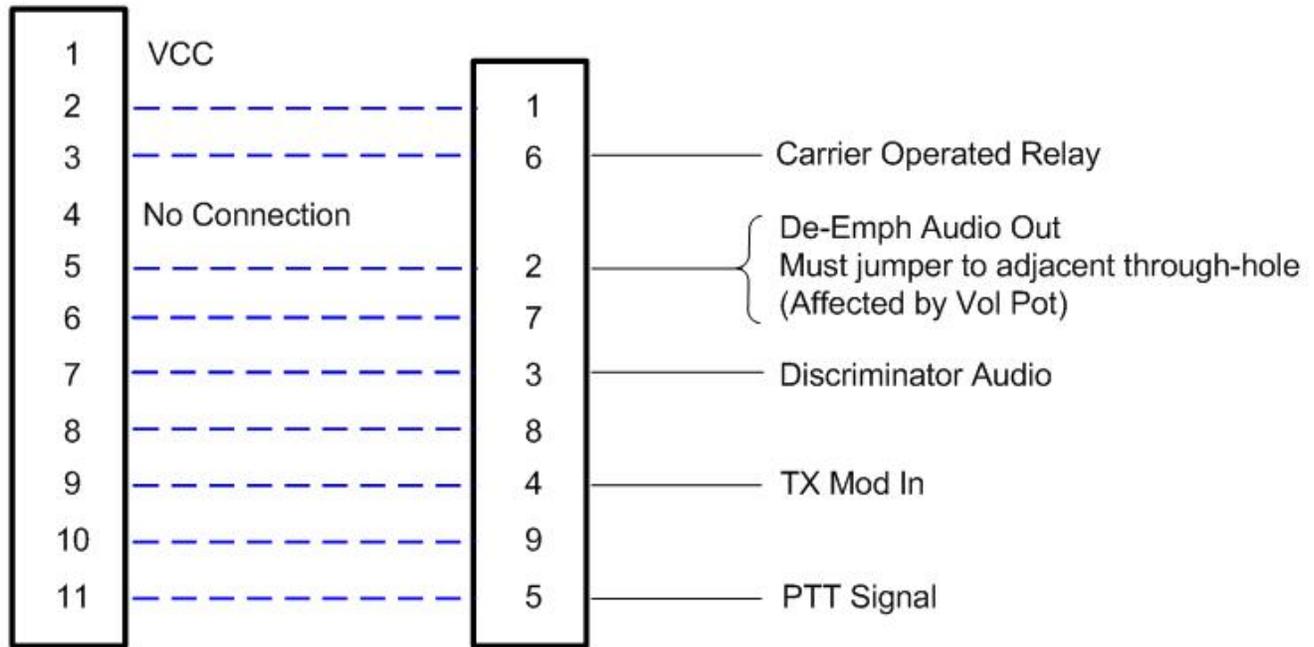
DB-9 Connector Pins	Notes
Pin 2	Program radio as in Pin 6 COR programming. <ol style="list-style-type: none"> 1. To find a suitable AF level, turn the Volume Knob off. 2. Change the AF Min Level (in Set Mode) until a suitable level is found.
Pin 4	Solder Bead F for data. Solder Bead D for AF in.
Pin 6	To set Pin 6 as a 2/5 tone operated relay: <ol style="list-style-type: none"> 1. Set the 2-Tone or 5-tone RX Code Ch EXO to ON. 2. Set Mode -> Horn to ON. 3. Common -> EXO set to OFF. 4. The Common -> EXO Delay Timer sets how long Pin 6 stays low after signal.

OPC-617 Remote Connections for Carrier Operated Relay For the F521/F621 Radio

11 pin Connector

DB-9 Connector

Remote Adapter



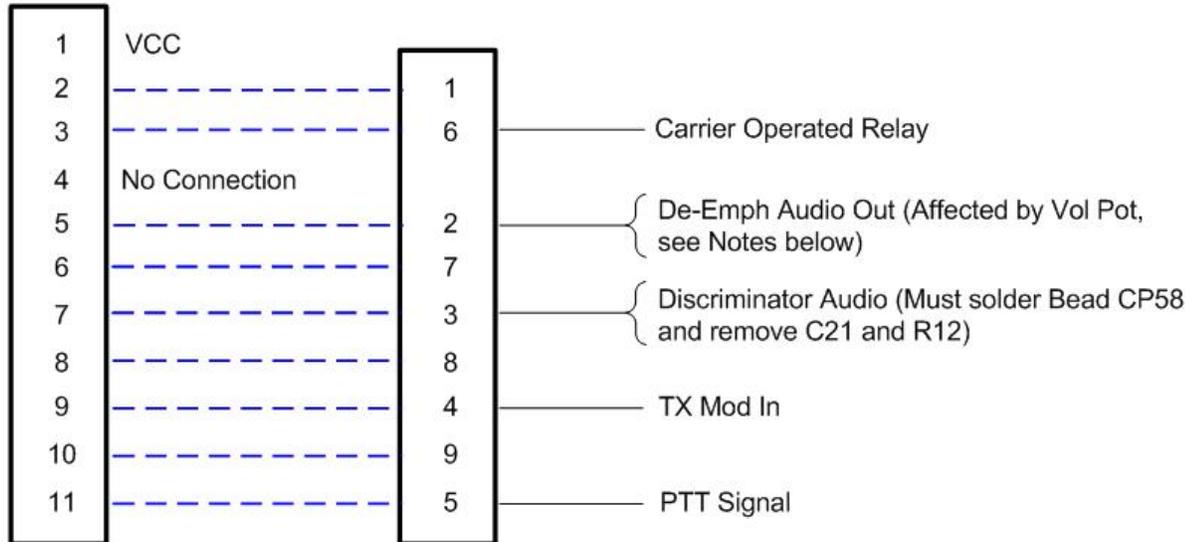
Additional Notes

DB-9 Connector Pins	Notes
Pin 2	<ol style="list-style-type: none"> 1. Program radio as in Pin 6 COR programming (below). 2. Assign 1 key as RX Speaker and turn on. 3. To find a suitable AF level, turn the Volume Knob off. 4. Change the AF Min Level (in Set Mode) until a suitable level is found.
Pin 4	Solder Bead F for data. Solder Bead D for AF in.
Pin 6	To set Pin 6 as a Carrier Operated Relay: <ol style="list-style-type: none"> 1. Set the 2-Tone RX Code Ch EXO to ON or OFF. 2. Set Mode -> Horn to ON. 3. Common -> To EXO to ON. 4. Common -> EXO Delay Timer sets how long Pin 6 stays low after signal. 5. Disable 2-Tone in the Memory CH.

Remote OPC-617 Connections for the F1721/F1821 Radio

11 pin Connector

DB-9 Connector



Additional Notes

DB-9 Connector Pins	Notes
Pin 2	<ul style="list-style-type: none"> Program radio as in Pin 6 COR programming. Assign a key as RX Speaker in programming. Key must be activated for COR. In Key & Display, set the Amp to OFF. To find a suitable AF level, turn the Volume Knob OFF and change the AF Min Level (in Set Mode) until a suitable level is found.
Pin 4	<ul style="list-style-type: none"> Solder Bead F for tones and data (generally, a data line or frequencies greater than 300Hz). Solder Bead Sig for signals of 300Hz or less (sub-audible tones or low speed data and low-level voice).
Pin 6	<p>To set Pin 6 as a 2-Tone or 5-Tone relay:</p> <ol style="list-style-type: none"> Set 2Tone/5Tone -> RX Code -> EXO to ON. Set the Set mode -> Horn to ON. Set Common -> EXO to OFF. Set Common -> EXO Delay Timer to the desired delay time. <p>To set Pin 6 as a Carrier Operated Relay:</p> <ol style="list-style-type: none"> Set 2Tone -> RX Code -> EXO to OFF. Set the Set mode -> Horn to ON. Set Common -> EXO to ON. The Common -> EXO Delay Timer sets how long Pin 6 stays low after receiving the signal. Disable 2Tone in Memory CH.