iCOM OPC-617 External Terminal Connection Cable Instructions
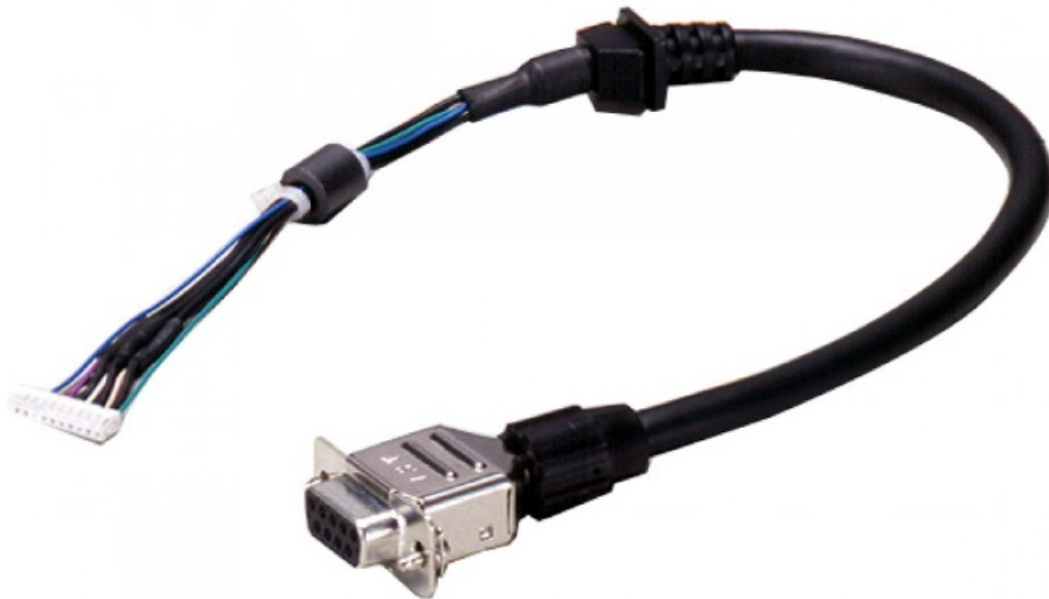
○
iCOM

**OPC-617 External Terminal Connection Cable
Instructions**

Contents [hide]
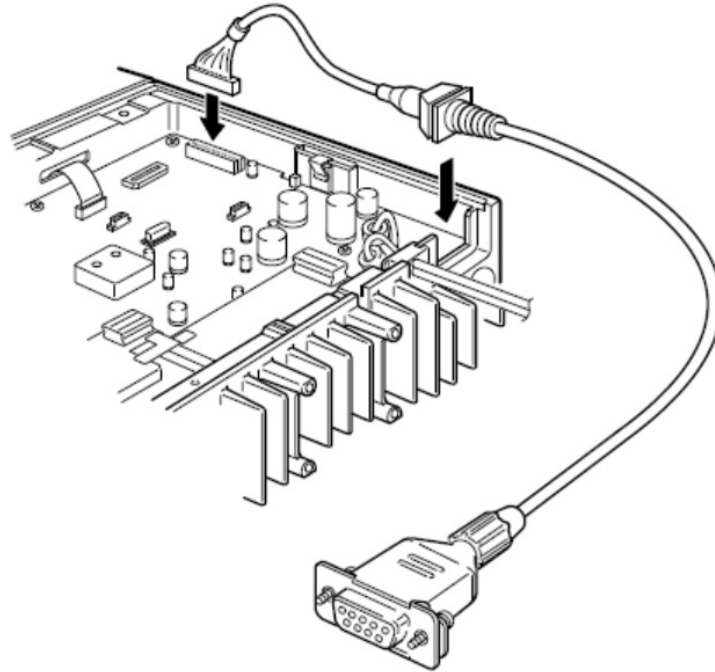
OPC-617 External Terminal Connection Cable

Install the OPC-617 as shown below.

OPTIONAL CABLE PIN ASSIGNMENT
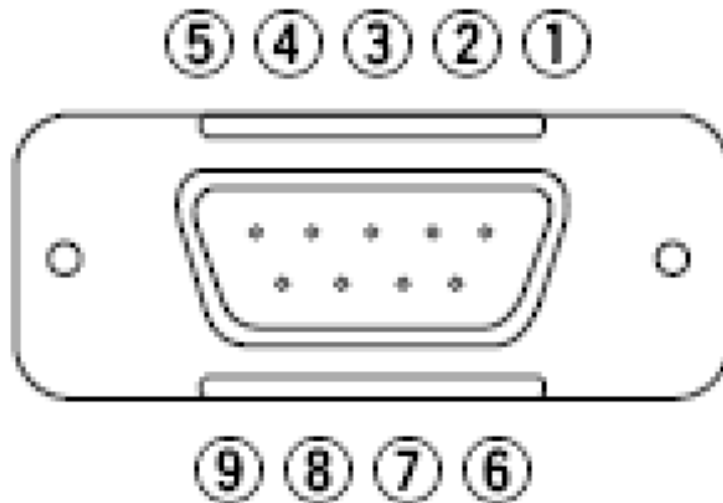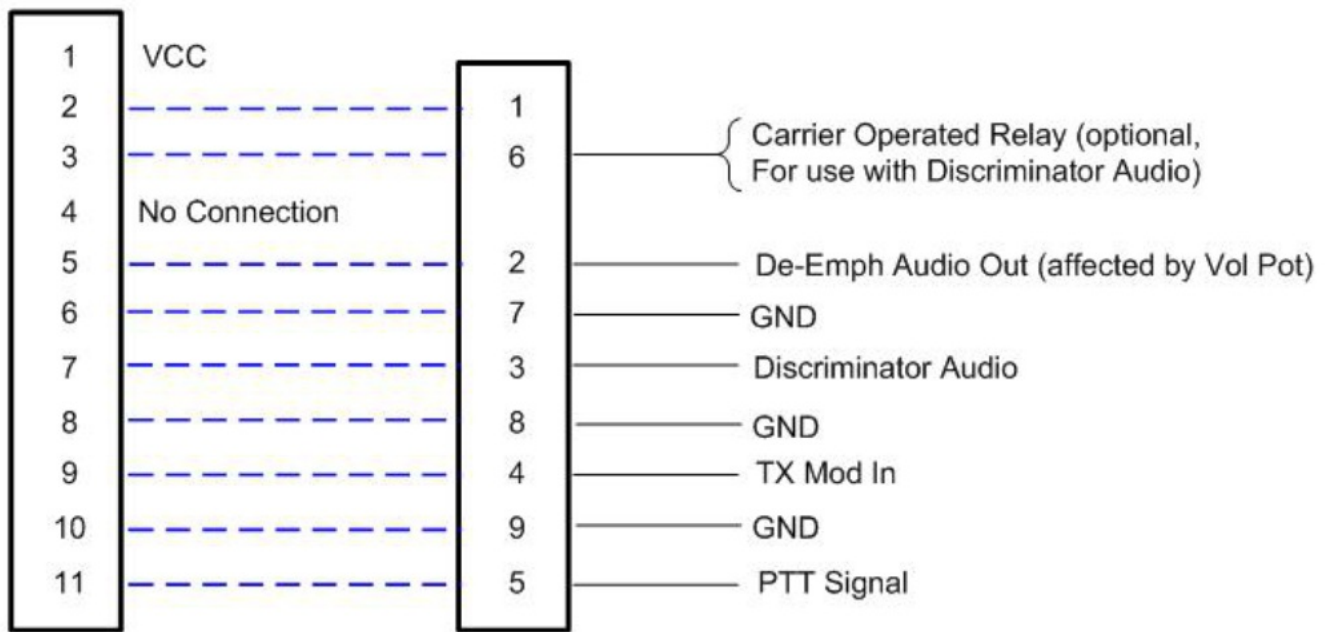
- LCD backlit cont. IN
- AF OUT
- Det. AF OUT
- Mod. IN
- PTT control IN
- Horn drive cont. OUT
- AF GND
- Det. AF GND
- Mod. GND

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

```
11 pin Connector                    DB-9 Connector

  1  | VCC
  2  |- - - - - - - - - - -|  1  ──┐ Carrier Operated Relay.
  3  |- - - - - - - - - - -|  6  ──┤ Connect to horn relay
  4  | No Connection                └ (customer supplied).
  5  |- - - - - - - - - - -|  2
  6  |- - - - - - - - - - -|  7
  7  |- - - - - - - - - - -|  3
  8  |- - - - - - - - - - -|  8
  9  |- - - - - - - - - - -|  4
 10  |- - - - - - - - - - -|  9
 11  |- - - - - - - - - - -|  5
```
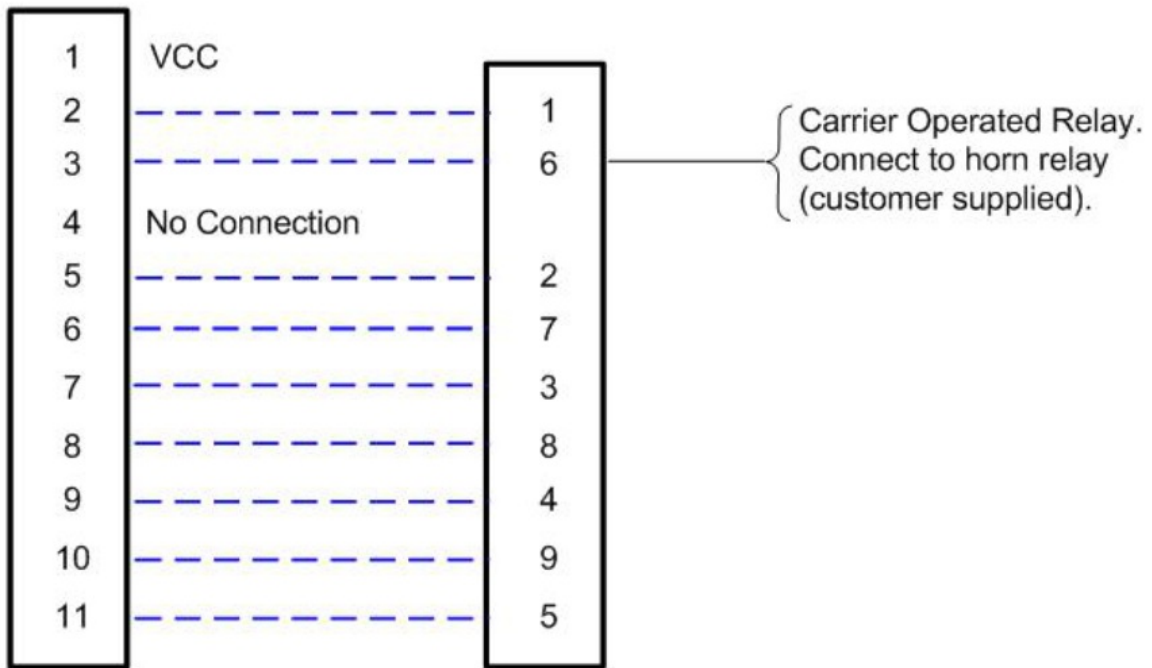
Programming

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

```
11 pin Connector         DB-9 Connector        Remote Adapter

  1  | VCC
  2  |- - - - - - - -|  1  ──── Dimmer. Connect to Headlight Switch Power
  3  |- - - - - - - -|  6  ──── 2/5 tone activated relay
  4  | No Connection
  5  |- - - - - - - -|  2  ──┐ De-Emph Audio Out
  6  |- - - - - - - -|  7    ├ Must jumper to adjacent through-hole
  7  |- - - - - - - -|  3  ──┘ (Affected by Volume Pot)
  8  |- - - - - - - -|  8  ──── Discriminator Audio
  9  |- - - - - - - -|  4  ──── TX Mod In
 10  |- - - - - - - -|  9
 11  |- - - - - - - -|  5  ──── PTT Signal
```

Additional Notes

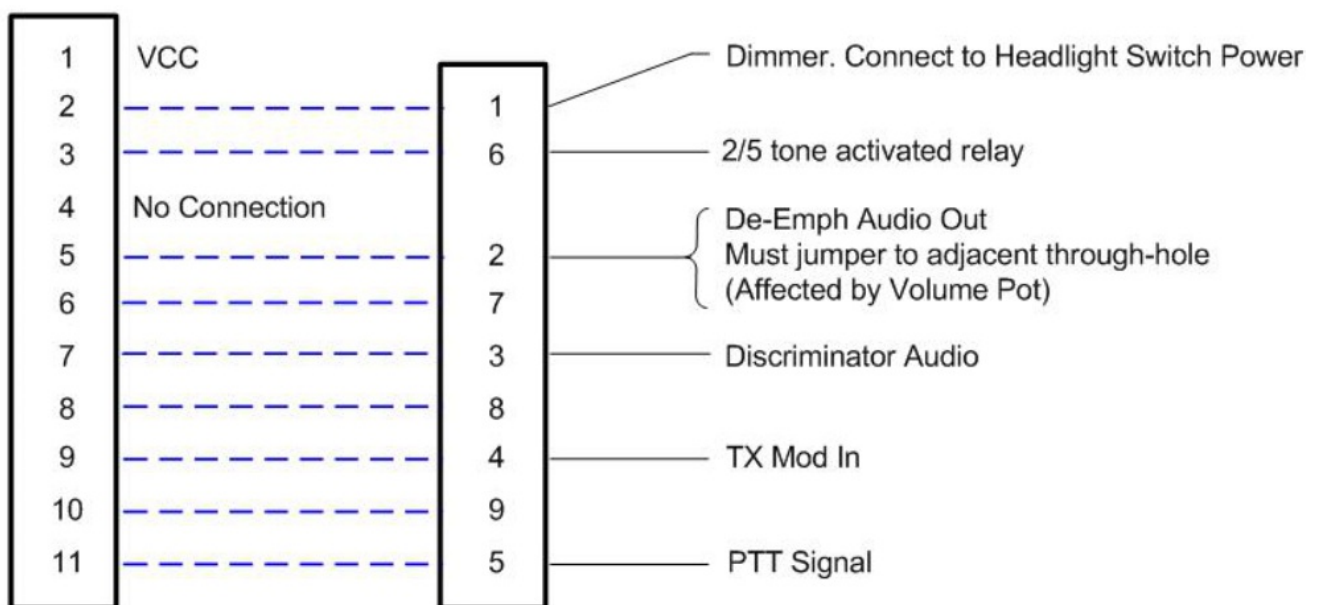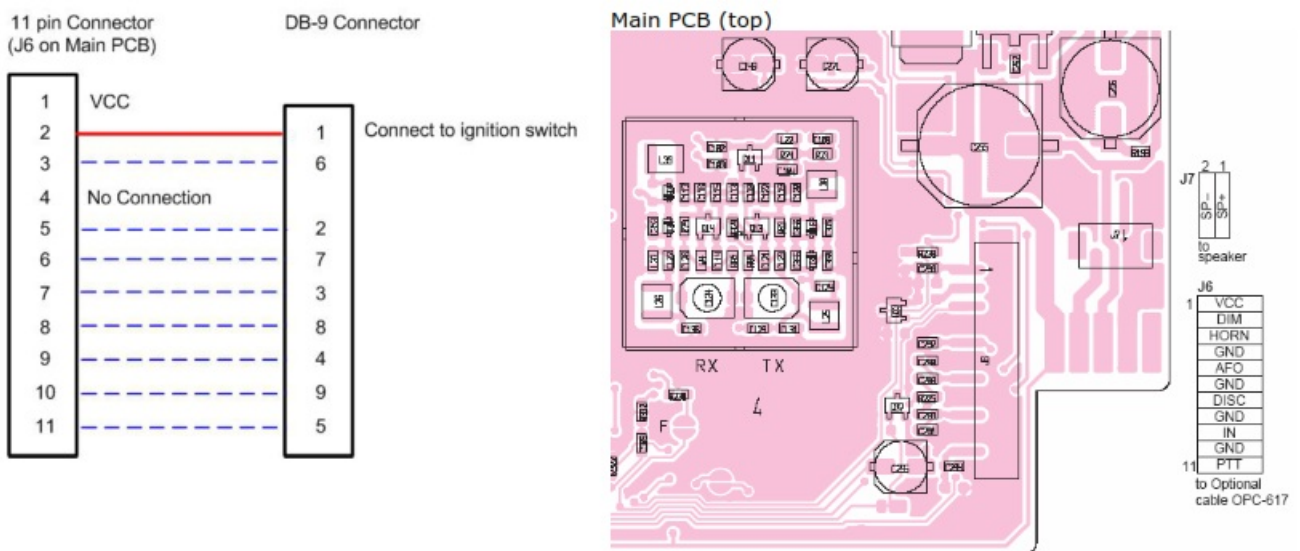| DB-9 Connector Pins	Notes
Pin 2	Program radio as in Pin 6 COR programming. 1. To find a suitable AF level, turn the Volume Knob off. 2. Change the AF Min Level (in Set Mode) until a suitable level is found.
Pin 4	Solder Bead F for data. Solder Bead D for AF in.
Pin 6	To set Pin 6 as a 2/5 tone operated 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.
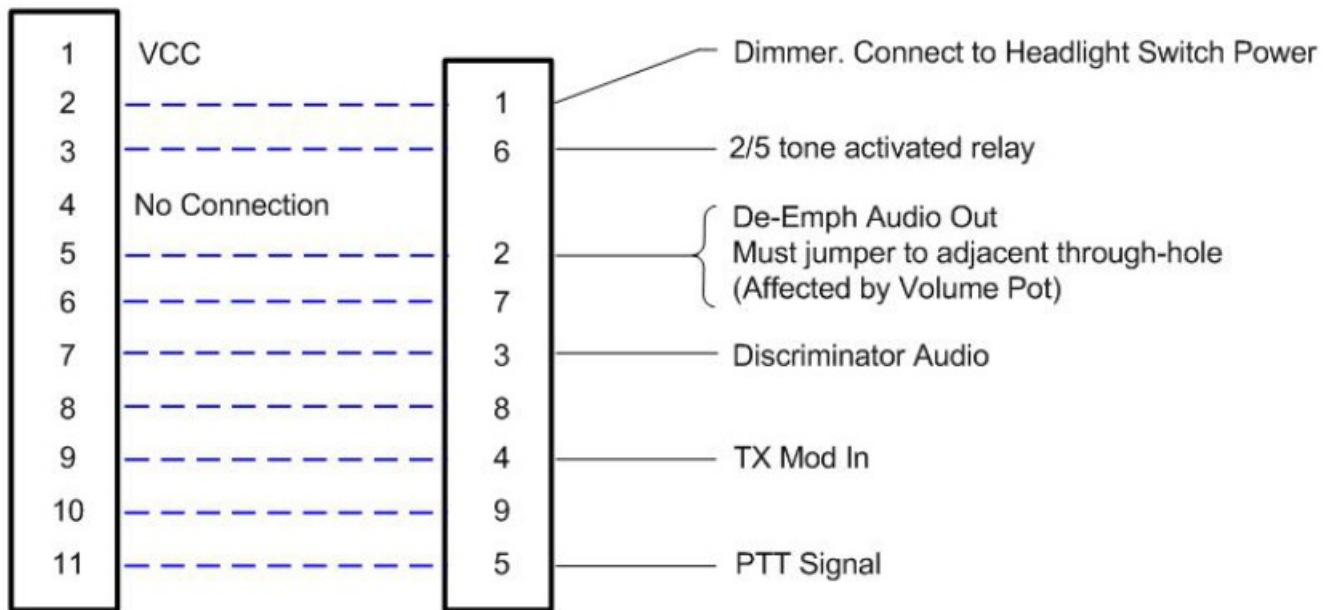

After making connections, enable in the EXPERT window by setting the DIM / IGSW field to IGSW.
OPC-617 Remote Connections for 2-Tone/5-Tone For the F521/F621 Radio
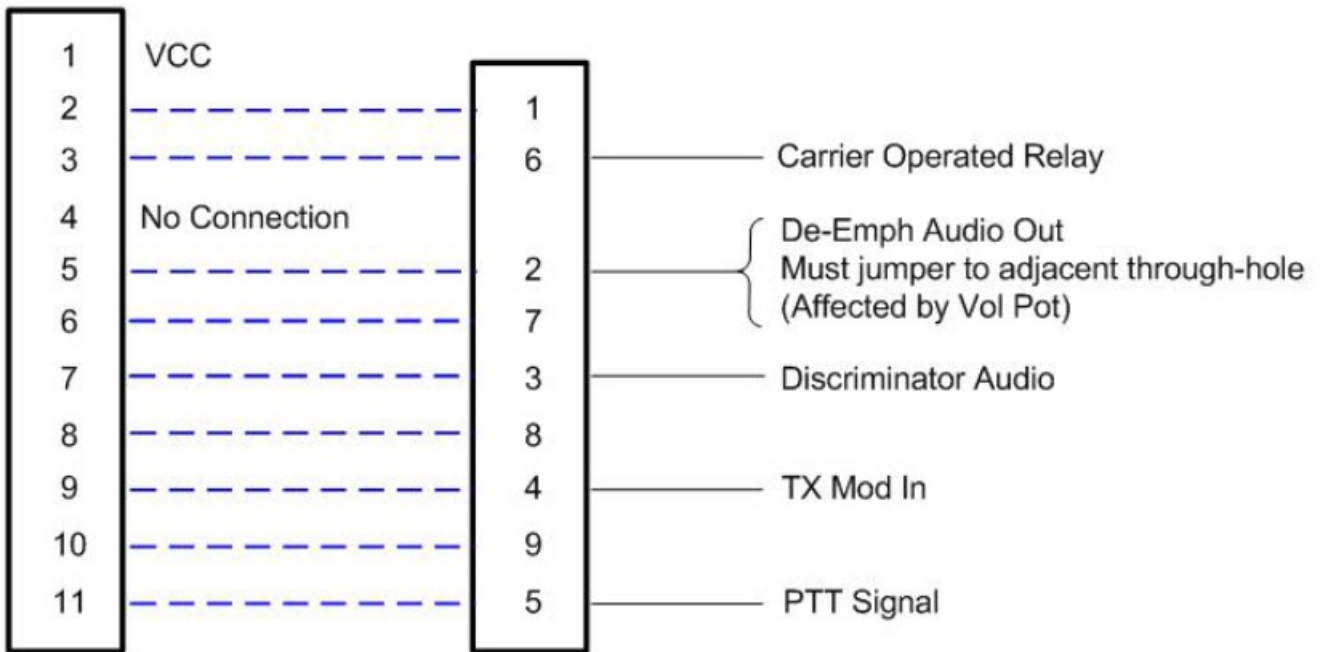
Additional Notes

DB-9 Connector Pins	Notes
Pin 2	Program radio as in Pin 6 COR programming. 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 set to OFF. 4. The Common -> EXO Delay Timer sets how long Pin 6 stays low after signal.

11 pin Connector   **DB-9 Connector**   **Remote Adapter**
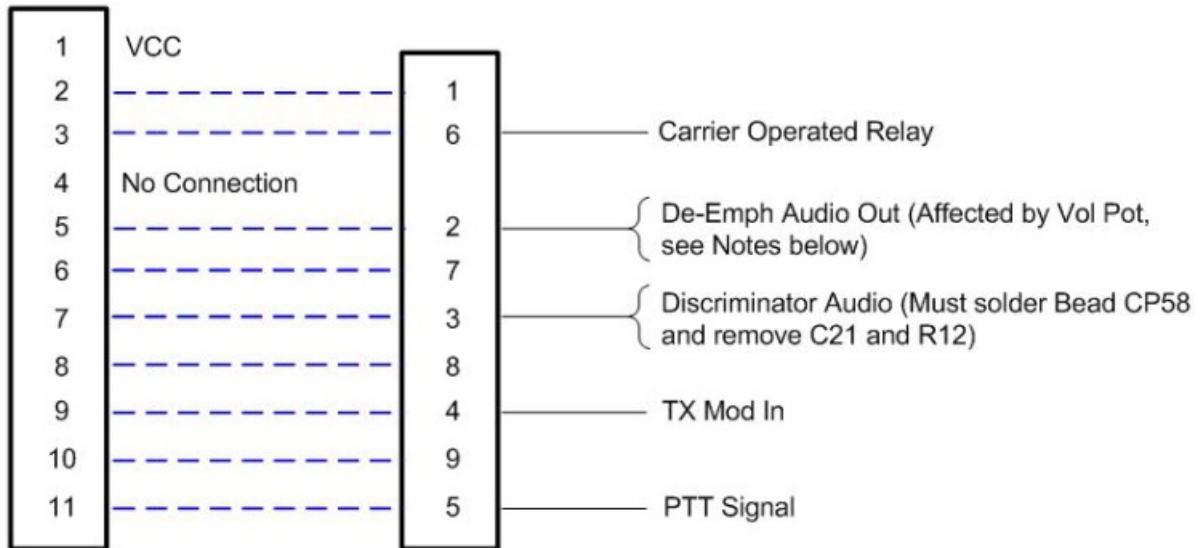
1 — VCC
2 ------- 1
3 ------- 6 — Carrier Operated Relay
4 — No Connection
5 ------- 2 — De-Emph Audio Out
6 ------- 7   Must jumper to adjacent through-hole (Affected by Vol Pot)
7 ------- 3 — Discriminator Audio
8 ------- 8
9 ------- 4 — TX Mod In
10 ------- 9
11 ------- 5 — PTT Signal

Additional Notes

DB-9 Connector Pins	Notes
Pin 2	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: 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**

```
11 pin Connector              DB-9 Connector

  1  VCC
  2 -----------------  1
  3 -----------------  6 ------- Carrier Operated Relay
  4  No Connection
  5 -----------------  2  { De-Emph Audio Out (Affected by Vol Pot,
  6 -----------------  7  {  see Notes below)
  7 -----------------  3  { Discriminator Audio (Must solder Bead CP58
  8 -----------------  8  {  and remove C21 and R12)
  9 -----------------  4 ------- TX Mod In
 10 -----------------  9
 11 -----------------  5 ------- PTT Signal
```

Additional Notes

DB-9 Connector Pins	Notes
Pin 2	• 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	• 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	**To set Pin 6 as a 2-Tone or 5-Tone relay:** 1. Set 2Tone/5Tone -> RX Code -> EXO to ON. 2. Set the Set mode -> Horn to ON. 3. Set Common -> EXO to OFF. 4. Set Common -> EXO Delay Timer to the desired delay time. **To set Pin 6 as a Carrier Operated Relay:** 1. Set 2Tone -> RX Code -> EXO to OFF. 2. Set the Set mode -> Horn to ON. 3. Set Common -> EXO to ON. 4. The Common -> EXO Delay Timer sets how long Pin 6 stays low after receiving the signal. 5. Disable 2Tone in Memory CH.

Documents / Resources

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OPC-617, OPC-617 External Terminal Connection Cable, External Terminal Connection Cable, Terminal Connection Cable, Connection Cable, Cable