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INCORPORATED

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## INSTALLATION/OPERATION INSTRUCTIONS U3812 DUAL RADIO INTERFACE MODULE

### DESCRIPTION

The U3812 Dual Radio Interface Module is designed to interface two separate radiosystemsto a David Clark Company Series U3800 Intercom System. A priority reception feature enablesthe user to select which radiosystem reception will have precedence by simply connectingthe priority radio to the priority radio input connector.

A push-to-talk (PTT) button for each radiosystem and a priority reception override button, which allows these secondary radio reception to be received uninterrupted, are located on the U3812.

A remote PTT connector is also provided for each radiosystem so that a user may connect a remote PTT switch for either or both radiosystems.

### INSTALLATION

1. Select a mounting position where the headset cord will not interfere with the operator's job function or otherwise force a reaction that may jeopardize safe operation when using the module's PTT buttons.
2. Mount the U3812 by placing one grommet between each of the four mounting brackets and the mounting surface. Grommets are provided with the module while fasteners are not. The type of fasteners selected should be based on mounting location.
3. All cords have military type screw-on connectors. Install cords as follows:
  - a. Align key-ways slot on cord connector with key in threaded connector on module.
  - b. Insert pins into socket until firmly seated.
  - c. Hand tighten swivel nut on cord connector.
4. C3821 Radio Interface cords are required to connect the primary and secondary radiosystemsto the U3812. Following the schematics supplied with the C3821, install each cord to its respective radio. Connect the primary radio's interface cord to the "Primary Radio" connector on the back of the U3812. Connect the secondary radio's interface cord to the "Secondary Radio" connector on the back of the U3812.
5. AC38-XX Jumper Cord, of desired length, is required to connect the U3812 to a U3800 Master Station. Connect one end of the C38-XX to the "System Input" connector on the U3812 and the other end to the "Remote Output" on the U3800.

6. If a customer furnished remote PTT switch is being used, install the cord to its respective "Remote PTT" connector on the U3812. Customer furnished PTT switches may be connected to the two pin primary and secondary remote PTT connectors. Note that pin A is grounded in the U3812, and pin B is PTT high.

**OPERATION**

1. Thereceive audio of both the primary and secondary radios will be heard in all the U3800 system headsets. Should audio from both radios occur simultaneously, the priority feature in the U3812 will automatically reduce the secondary radio audio to an almost inaudible level while allowing the primary radio audio through at its normal level.

2. Should uninterrupted reception from these secondary radios be desired, depress and hold the priority reception override button on the U3812. To return the U3812 to the priority mode, release the override button and reception on the primary radio will resume.

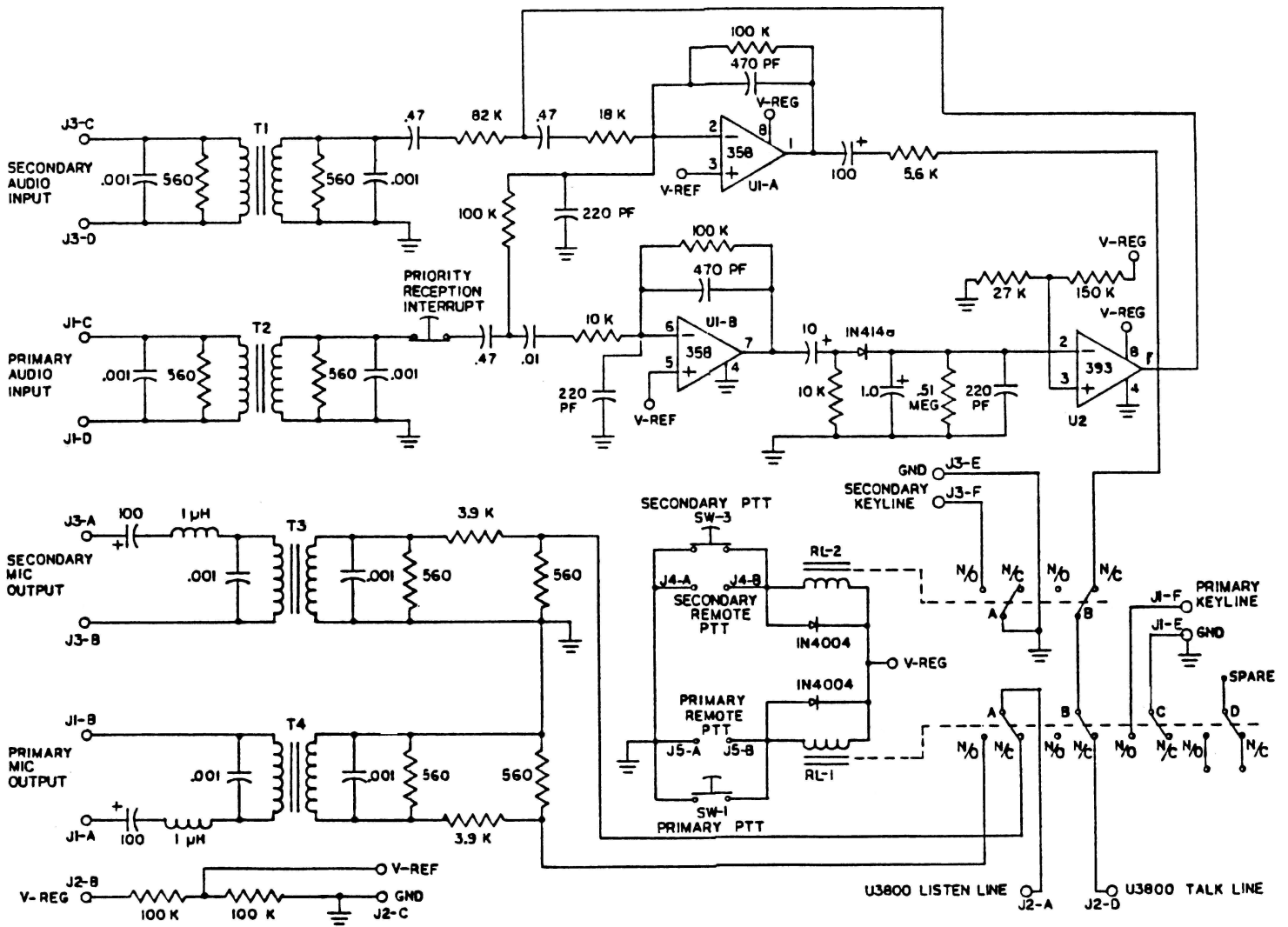
**NOTE:** The priority override feature affects the intercom system audio only, it does not affect any external radio speaker that may be installed in the vehicle.

3. To transmit over the priority radio, depress and hold the priority radio PTT button and talk into the headset microphone. Release the button to listen.

4. To transmit over the secondary radio, depress and hold the secondary radio PTT button and talk into the headset microphone. Release the button to listen.

**NOTE:** Radio speakers mounted near the headset may produce feedback, causing a squeal when transmitting. If this occurs, measures may have to be taken to reposition speakers or to add a cut-off switch to the speaker line.

5. To transmit using a customer furnished remote PTT switch, depress and hold the remote PTT button and talk into the headset microphone. Release the button to listen.



NOTES: 1. All resistor values are in ohms, 1/4W, 5% tolerance unless otherwise specified  
 2. All capacitor values are in microfarads unless otherwise specified.

Figure 1. Model U3812 Dual Radio Interface Module Schematic Diagram.