Thank you very much for purchasing our products.
The IC-EX309 is an interface unit that is required to connect the optional communication terminal (CT-10) with other ICOM products such as IC-751, IC-271A/E/H, IC-471A/E/H, or IC-R71A/E/D.
Please read all the instructions so that you can install it into the transceiver/receiver correctly to get maximum performance and full value from each set.

**CONNECTION OF EACH TERMINAL AND ITS FUNCTION**

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Function</th>
<th>Pin No.</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Data bus D0 input/output</td>
<td>13</td>
<td>Not used</td>
</tr>
<tr>
<td>2</td>
<td>Data bus D1 input/output</td>
<td>14</td>
<td>Not used</td>
</tr>
<tr>
<td>3</td>
<td>Data bus D2 input/output</td>
<td>15</td>
<td>Not used</td>
</tr>
<tr>
<td>4</td>
<td>Data bus D3 input/output</td>
<td>16</td>
<td>Not used</td>
</tr>
<tr>
<td>5</td>
<td>Data bus D4 input/output</td>
<td>17</td>
<td>Not used</td>
</tr>
<tr>
<td>6</td>
<td>Data bus D5 input/output</td>
<td>18</td>
<td>Not used</td>
</tr>
<tr>
<td>7</td>
<td>Data bus D6 input/output</td>
<td>19</td>
<td>Not used</td>
</tr>
<tr>
<td>8</td>
<td>Data bus D7 input/output</td>
<td>20</td>
<td>Not used</td>
</tr>
<tr>
<td>9</td>
<td>Remote Control (controlling) RP input</td>
<td>21</td>
<td>Remote Control (controlling) WP input</td>
</tr>
<tr>
<td>10</td>
<td>Remote Control (interrupt) SRQ input</td>
<td>22</td>
<td>Remote Control (controlling) DAV input</td>
</tr>
<tr>
<td>11</td>
<td>SQUELCH SOLS output</td>
<td>23</td>
<td>Transmission Control SEND input</td>
</tr>
<tr>
<td>12</td>
<td>13.8V DC Output</td>
<td>24</td>
<td>Ground</td>
</tr>
</tbody>
</table>

- **D0 ~ D7**
  Data bus that functions at bi-directional 8 bit parallel. It is set at TTL level.

- **RP (Read Pulse)**
  Controlling data is sent from the transceiver/receiver to the remote controller when this line is at H level (+5V). It is usually at L level.

- **SRQ (Service Request)**
  Line shows that data is being exchanged between the transceiver/receiver and the controller, while the data is being exchanged, this line is L level (0V). Usually, the line is H level (+5V).

- **13.8V**
  Power supply for the controller. Maximum current is 100mA.

- **SQUELCH (Squelch Signal)**
  Terminal for a signal that automatically stops the frequency scanning. Voltage is +8V when the squelch is closed, and 0V when it is opened.

- **WP (Write Pulse)**
  Controlling data are sent from the remote controller to the transceiver/receiver when this line is at H level (+5V). It is usually at L level (0V).

- **DAV (Data Valid)**
  This line shows data has been received. It is valid at L level (0V).

- **SEND**
  When this line is grounded, the transceiver changes to in transmit mode.

**INSTALLATION PROCEDURE**

- **Installation to IC-751**
  1) Remove the top and bottom covers.
  2) Remove the plate attached to the rear panel and run the cables inward.
  3) Install the connector onto where specified, and connect the cables from the connector to the unit.
  4) Plug the cables into J10 and J15 of the LOGIC unit.
  5) Replace the top and bottom covers.

- **Installation to IC-271A/E/H or IC-471A/E/H**
  1) Remove the top and bottom covers.
  2) Remove the plate attached to the rear panel and pass the cables inward onto the bottom side. The connector is to be attached with the supplied screws.
  3) Install the unit onto where it is specified and connect the cables from the connector.
  4) Plug the cables from the unit into J1 and J3 of the LOGIC unit.
  5) Replace the top and bottom covers.

**For installation to IC-R71**, refer to the Instruction Manual of the IC-R71 receiver.