# Dialogic®
# JCT Media Boards

### D/240JCT-T1    D/300JCT-E1

### D/160JCT    D/320JCT

**NOTE:** The D/300JCT-E1 boards are available in both 75- and 120-Ohm versions.

# Dialogic®

## 1. Before You Begin

### Protecting the Board from Damage

**CAUTION:** All computer boards are sensitive to electrostatic discharge ("ESD"). Handle all static-sensitive boards and components at a static-safe work area, and observe anti-static precautions at all times.

If you are not familiar with ESD safety precautions, visit http://www.dialogic.com/support/hwinstall to learn more.

### Unpacking the Board

Unpack the Dialogic® JCT Media Board ("board") according to the following steps:
1. Prepare a static-safeguarded work area.
2. Carefully remove the board from the shipping carton and anti-static packaging. Handle the board by the edges and avoid touching the board's components.
3. Lay the board on the static-dissipative work surface.

**NOTE:** Place boards in static-shielding bags when carrying boards from station to station.

**CAUTION**: Do not remove the board from the anti-static packaging until you are ready to install it. Observe proper anti-static precautions at all times.

## 2. Configuring the Hardware

Dialogic® JCT Media Boards allow you to use the factory default hardware settings for quick installation and operation, however, Dialogic recommends that you review the following information and select any options as desired.

### Board Identification Number

Device names are used to identify and to communicate with boards. For example, you need to know a device name to use the **dx_open( )** function. Device names are assigned in the order specified by the board numbering methods described below. The addition or removal of any boards could cause the renumbering of boards in the system. Consequently, the assignment of device names could change during the next system start up.

### Geographical Assignment: Board ID 0

All Dialogic® JCT Media Boards can share the factory default setting of board ID 0 (set with rotary switch SW100). Board numbers are assigned automatically based on the PCI bus and slot number.

**NOTE:** If you add a board to the system, existing board IDs could change in a mixed system, depending upon the PCI bus and slot number where the new board is installed, however it must not conflict with another board ID which is manually assigned.

### Manual Assignment (SW1): Board IDs 1-9, A-F

In addition to the geographical assignment method, the manual assignment method can be used to further identify the boards in your system. If you change the board ID from the factory default of 0 to any other number, the software will use that setting to identify the board.

**NOTE:** When not set to 0, the board ID must be unique (it must not conflict with the board ID of any other Dialogic® ISA or PCI board which has been manually assigned). If you use this method, Dialogic recommends that you assign sequential numbers starting at 1. This method is also used for all ISA bus boards.

### Precedence in Mixed Systems (ISA/PCI)

In systems using both Geographical and Manual assignment methods, or where both ISA and PCI boards exists, PCI boards will take precedence and will be numbered before an ISA bus board that uses board IDs 1-9, A-F.

## Physical Description
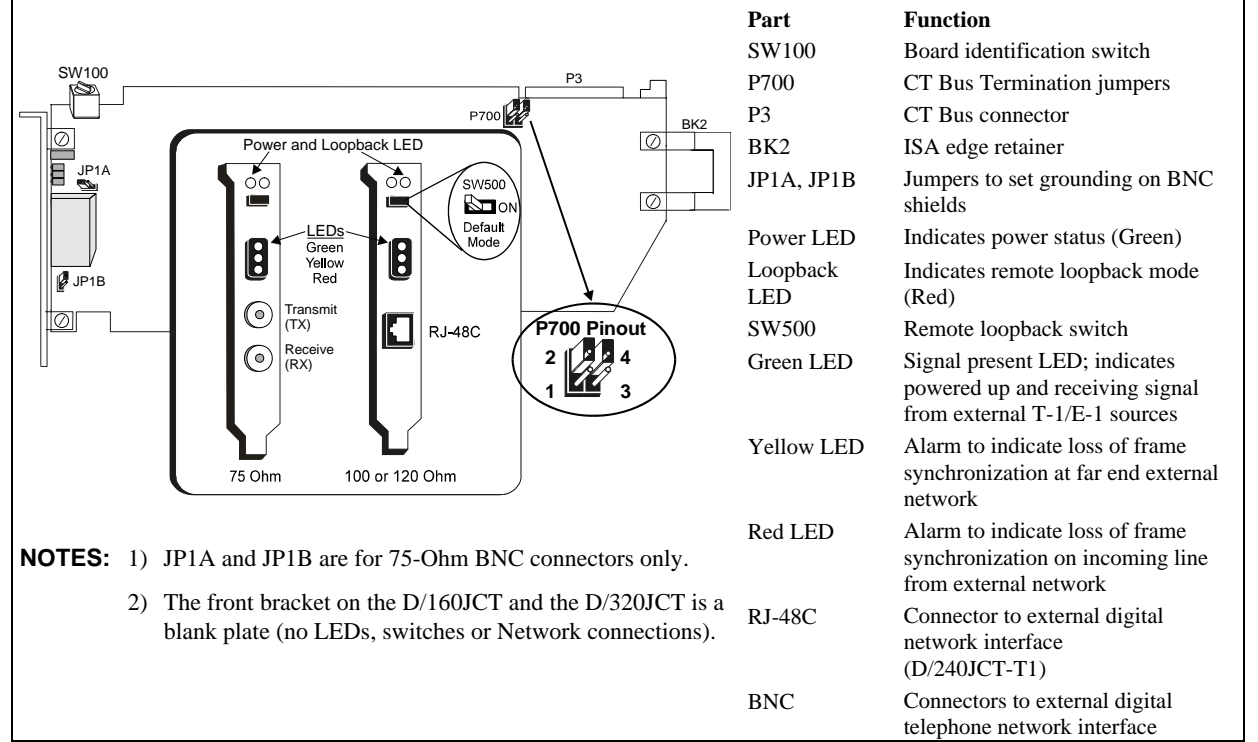


**NOTES:** 1) JP1A and JP1B are for 75-Ohm BNC connectors only.

2) The front bracket on the D/160JCT and the D/320JCT is a blank plate (no LEDs, switches or Network connections).

| Part | Function |
|---|---|
| SW100 | Board identification switch |
| P700 | CT Bus Termination jumpers |
| P3 | CT Bus connector |
| BK2 | ISA edge retainer |
| JP1A, JP1B | Jumpers to set grounding on BNC shields |
| Power LED | Indicates power status (Green) |
| Loopback LED | Indicates remote loopback mode (Red) |
| SW500 | Remote loopback switch |
| Green LED | Signal present LED; indicates powered up and receiving signal from external T-1/E-1 sources |
| Yellow LED | Alarm to indicate loss of frame synchronization at far end external network |
| Red LED | Alarm to indicate loss of frame synchronization on incoming line from external network |
| RJ-48C | Connector to external digital network interface (D/240JCT-T1) |
| BNC | Connectors to external digital telephone network interface |

For more details on board numbering, visit the Dialogic website at *http://www.dialogic.com/support/helpweb/*.

### Grounding the BNC Connectors (D/300JCI-E1 75-Ohm Boards only)

The D/300JCT-E1 board (75-Ohm version) is shipped with jumpers installed so that both the transmit and receive sides of the BNC shields are grounded. If you want to change the grounding configuration, follow the instructions below:
1. Place the board on a static-safe work surface.
2. Configure the jumpers.

| Direction | Ground | Jumper | Setting |
|---|---|---|---|
| Transmit | Grounded | JP1A | IN |
| Transmit | Not Grounded | JP1A | OUT |
| Receive | Grounded | JP1B | IN |
| Receive | Not Grounded | JP1B | OUT |

### P700 Termination

C_2 and C_4* are terminated on boards located at physical ends of bus using pins 1 and 2 of the P700

termination jumpers. This is only required for MVIP(90). Both CT_C8_(A&B) and CT_FRAME_(A&B) are terminated on boards located at physical ends of bus using pins 3 and 4 of the P700 termination jumpers.
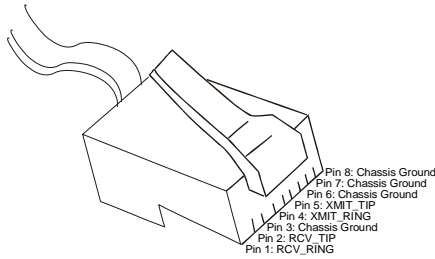
| Shunt | Terminates |
|---|---|
| P700, Pins 1 and 2 | C_2 and C_4* |
| P700, Pins 3 and 4 | CT_FRAME_(A&B) CT_C8_(A&B) |

### Setting the Remote Loopback Switch (SW500)

The default (normal mode) for SW500 is DOWN. Once the firmware is downloaded, set SW500 UP to turn on loopback mode. Turning the switch UP enables you to verify the T-1 or E-1 connection. The UP switch position overrides any board modes set by your application.

**NOTE:** The remote loopback switch is not present on the D/160 JCT or the D/320JCT.

## Pinouts for the RJ-48C



Pin 8: Chassis Ground
Pin 7: Chassis Ground
Pin 6: Chassis Ground
Pin 5: XMIT_TIP
Pin 4: XMIT_RING
Pin 3: Chassis Ground
Pin 2: RCV_TIP
Pin 1: RCV_RING

### Connecting the CT Bus Cable (P3)

Use the CT Bus cable to connect the board with the other boards in the system.



Plug the CT Bus Cable into the P3 Connector
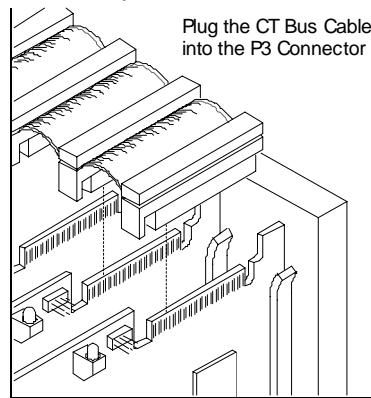
Plug the CT Bus cable into the P3 connector.  To connect to the SCbus, use the CT Bus to SCbus adapter (Part Number 882-757-xx) and follow the instructions included with the adapter.

### Install the CT Bus/SCbus Adapter

Locate the board that will be used to connect the CT Bus/SCbus Adapter.  It will be the card inserted in the first PCI slot adjacent to the ISA slot.

Align pin 1 of the adapter with pin 1 of the edge connector on the board and press the CT Bus to SCbus Adapter onto the board with the SCbus cable connector facing the rear edge of the board.  Note that the adapter is not labeled.

Connect the CT Bus and SCbus cables as per the installation instructions for your Dialogic® board(s).

## 3.  Install the Boards in the PC

**⚠ WARNING!** To reduce the risk of electric shock:
   Switch off the power and remove power cords before opening the computer case.
   Do not re-attach power cords or switch on power to the computer while the computer case is removed.

Install each board in the PC chassis using adjacent PCI slots according to the following instructions.

1. Turn off all power to the system, and disconnect the system's power cords from electrical outlets.
2. Remove the PC cover.
3. Select an empty PCI expansion bus slot, and remove the slot's retaining screw and access coverplate.



Retaining Screw

Metal Coverplate for Slot

ISA Slots        PCI Slots
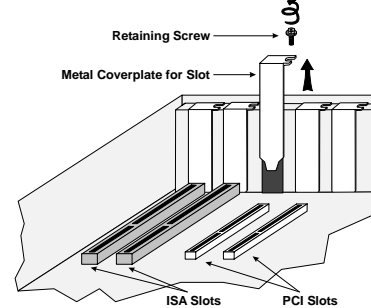
4. Insert the board's edge connector into the bus slot. Apply pressure only to the top edge of the board, and gently rock the board forward and backward to seat the edge connector into the slot.
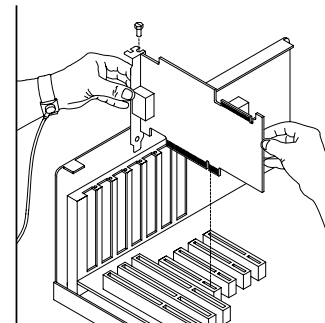


5. Install the retaining screw.
6. Select a new slot and repeat steps 3 through 5 for each board you are installing.  Replace the PC cover when finished.

## 4.  Install Software, Configure and Test

Install the Dialogic® software release and configure the Dialogic® boards as described in the software installation documentation.

Your application software or Dialogic software release may have special installation or configuration instructions or requirements. Be sure to read this information before you install the software.

## 5.  Warranty and Return Information

### Warranty Period

For specific warranty information for this board, refer to the Warranty section of the Products page, located at this URL: http://www.dialogic.com/warranties/.

### Contacting Technical Support

Dialogic provides technical support for its products through a network of value added distributors who are trained to answer technical questions on installing and configuring Dialogic® products.  If you are unsure how to contact your support channel, please call Dialogic in the United States at 973-967-6600 (9am-5pm EST) and we will assist in obtaining the appropriate support channel.

Outside the United States please refer to http://www.dialogic.com/support/contact to obtain local contact information. Dialogic also provides direct support via Dialogic® Pro™ Services agreements.  For more details of direct support from Dialogic please refer to: http://www.dialogic.com/support/DialogicPro.

### Returning a Product

To return a board for warranty repair or any other returns, please refer to the following: http://www.dialogic.com/support/hwfaults.

## 6.  Sales Assistance

If you have a sales question, please contact your local Sales Representative or the Regional Sales Office for your area. Address, telephone and fax numbers, are available at the Dialogic website located at: http://www.dialogic.com/contact.htm.

To purchase Dialogic® products, please refer to the following website to locate the appropriate supplier: http://www.dialogic.com/purchase.htm.