



# DIALOG/HD Boards

## Quick Install Card

- D/320SC    ■ D/300SC-E1
- D/240SC-T1

**NOTE:** The D/300SC-E1 board is available in both 75- and 120- Ohm versions.

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## Before You Begin

### Electrostatic Discharge

#### CAUTION

All computer boards are electrostatic sensitive. Handle all static sensitive components, boards and computers at a static-safeguarded work area.

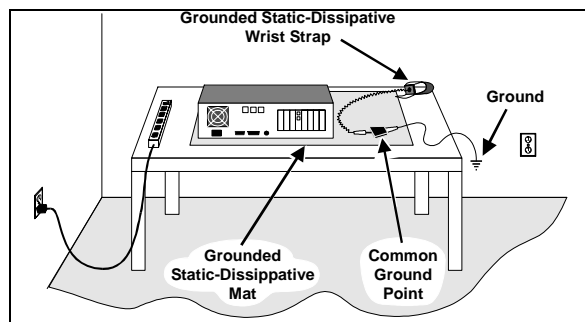
A static-safe work area consists of:

- a grounded, static-dissipative **wrist strap** that drains static charge from the person wearing the strap.
- a **work surface** covered with or composed of a grounded, static-dissipative material that drains electrical charges from conductive materials placed on the surface.

Both items ensure that static charges are drained to a safe rate and current level.

Always observe these practices to maintain a static-safe environment during the entire installation:

- Use the wrist strap to ground yourself to the static-safe work area.
- Remove the board from the shipping carton and static shielding at the static-safe work area.
- Lay the board on the static-dissipative work surface.



**NOTE:** All software should be installed first when running in a Windows NT or UNIX environment.

## Configuring the Hardware

### Setting the Board Identification Number (SW100)

Each DIALOG/HD board in your system must have a unique identification number. Dialogic drivers use the board ID setting to communicate with the board.

Turn the rotary switch (SW100) to select one of 16 board ID settings: 0-9, A-F.

**NOTE:** More than one board with the same board ID setting will not be found by the driver software.

### Attaching the PEB Terminator (XTERM) (PEB Mode Only)

When running in PEB mode, attach the PEB terminator to the XTERM as shown. Terminated voice resource boards use the Resource Module position. Terminated network interface or network/resource combination boards use the Network Module position.

**NOTE:** When running in SCbus mode, do not insert the terminator.

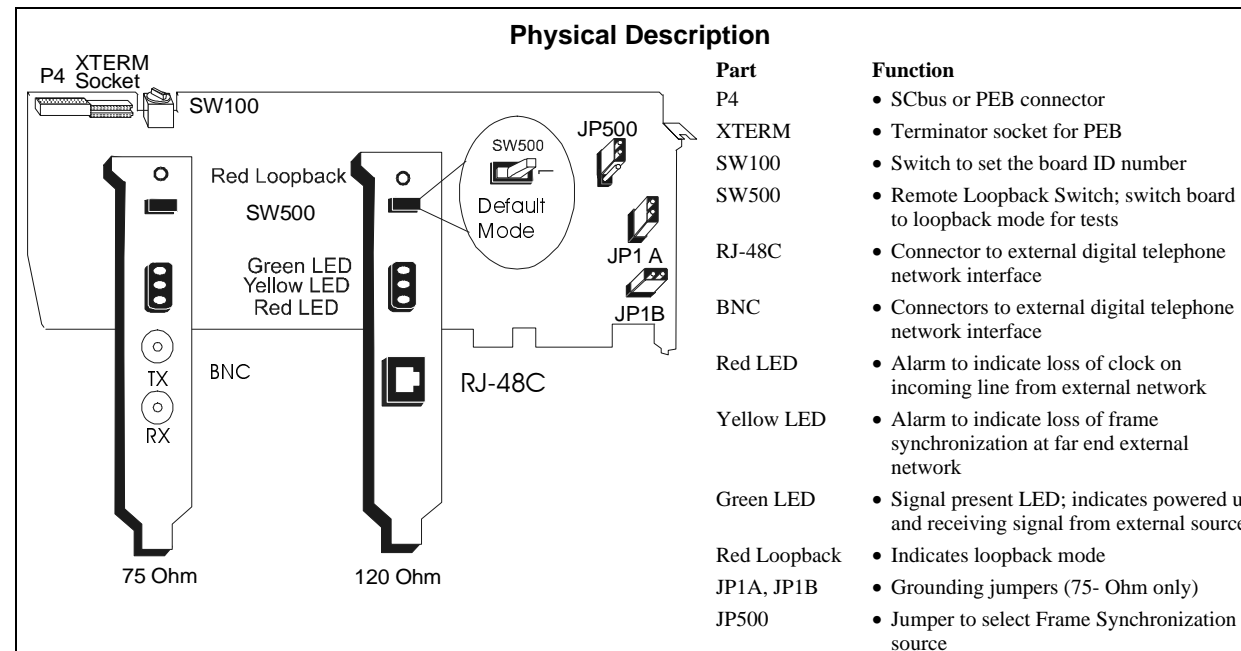
#### Board Types

Resource	Network/Resource
D/320SC	D/240SC-T1 D/300SC-E1

#### Straight PEB cable configuration rules:

One end of the PEB cable must be connected to a Network Module and the other end of the cable must be connected to a Resource Module. Both of these modules must have bus termination resistors installed in the XTERM.

Additional Network Extension Modules and/or additional Resource Modules can populate the PEB cable anywhere except for an end position. These



modules must not have bus termination resistors installed in the XTERM.

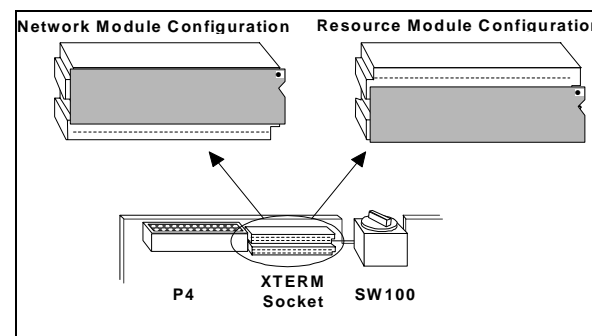
#### Drop-and-insert Configuration rules:

Both ends of the PEB drop-and-insert (crossover) cable must be connected to Network Modules. Both of these Network Modules must have bus termination resistors installed.

Any number of Network Extension Modules and/or Resource Modules can populate the PEB crossover cable anywhere except at an end position. These modules must not have bus termination resistors installed.

#### Stand-alone Configuration rules:

All boards in stand-alone configurations (no PEB cable) must use the Resource Module position.



### Grounding the BNC Connectors

The D/300SC-E1, boards (75- Ohm version only) is shipped with jumpers JP1A and JP1B installed so that both the transmit and receive sides of the BNC shields are grounded. If you do not want them grounded, remove the jumpers.

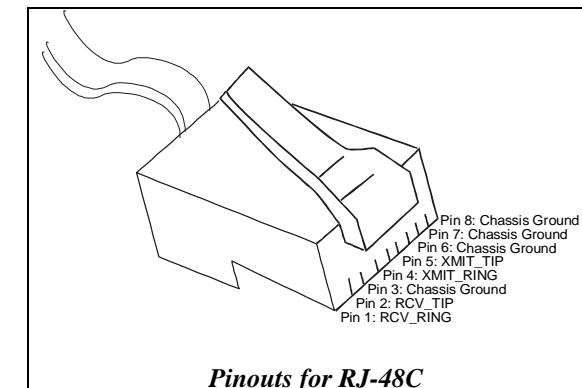
#### Setting JP500

Make sure that shunt pins 1-2 are connected for use in PEB or SCbus mode. Shunt pins 2-3 are reserved for future use.

### Setting the Remote Loopback Switch (SW500)

The default (normal mode, loopback disabled) for SW500 is DOWN. Once the firmware is downloaded, turn SW500 UP to set 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.

### Connecting to the RJ-48C Jack



## Installing the Hardware

1. With your computer on the static-safe work area, switch off the power and disconnect all power cords from the electrical outlets.
2. Remove the cover, select an empty expansion bus slot, and remove the slot's retaining screw and access cover plate.
3. Use the slot's board guides as you insert the board edge connector into the slot. Press firmly until the board is securely seated in the slot.
4. Replace and tighten the retaining screw to secure the board.
5. Select a new slot and repeat steps 3 and 4 for each board you are installing.
6. Use the SCbus/PEB cable to connect the DIALOG/HD board to other SCbus/PEB boards in the system.
7. Replace the computer cover when finished and reconnect the power cords.

## After Installing the Hardware

Install the software as described in the installation instructions included with your Dialogic system software.

For technical specifications and product information, see the Dialogic *WorldView* website, <http://www.dialogic.com>, or use the Dialogic On-Line Information Retrieval System (fax-on-demand), 800-755-5599 or 973-993-1063.

## Warranty Period

The DIALOG/HD boards come with a three year warranty. See the *Hardware Limited Warranty* information for coverage details.

## Return Material Authorization (RMA) Process

If you suspect you have a problem board, you can return the board for servicing. Before you return your board, you must contact your board distributor (your local Dialogic Sales office, Dialogic Corporate Sales in New Jersey, or another board distributor).

**NOTE:** You may return the board to Dialogic for repair as outlined below, even if you did not purchase your board through the Dialogic Corporate Sales Office. However, if the repairs are not authorized by your local distributor or local Dialogic Sales office, the board is considered “out of warranty” and a flat fee is charged for repair services.

1. Check to see if the problem is due to a mistake or oversight in the installation process.
2. Call your local sales office or Dialogic Technical Support (U.S. Corporate Headquarters: 973-993-1443) to confirm that it is a problem board.
3. While observing correct static-safe handling procedures, disconnect power, cables, and remove the board from the chassis. While the board is out, make a note of the serial number (it begins with two letters and is located on a bar code label attached to the board).
4. Once you have called for local Technical Support, you may be instructed to call the Dialogic RMA coordinator (973-993-3000 x6374). Telephone lines are open from 9 a.m. to 5:30 p.m. EST. Give the board’s serial number (it begins with two letters and is located on a bar code label attached to the board) and a brief description of the problem to the RMA coordinator. The RMA coordinator gives you an RMA number and an estimated return date.
5. Repack the board, observing correct static-handling procedures. Place the board in an anti-static container and then put it in a shipping carton using appropriate packing material. Use the original shipping materials if possible. Include diagnostic printouts (for example, D40CHK) when applicable.
6. Write the RMA number on the outside of the box you are shipping (for example, RMA #2201) and send the package to the attention of the RMA number assigned.
7. Ship the board to Dialogic at the following address. Dialogic is not responsible for risk of loss or damage in transit.  
Dialogic Corporation  
1515 Route 10  
Parsippany, New Jersey 07054 USA

## Regulatory Notices

### United States

#### Federal Communications Commission (FCC)

##### FCC Part 15 Rules, Subpart B § 15.105

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

##### FCC Part 68 Rules, Subpart § 68.218

The D/240SC-T1 and D/320SC boards are registered with the Federal Communications Commission, which places several restrictions on their use.

1. Connection of this equipment to party lines is subject to state tariffs. Contact your state public service commission for information.
2. This equipment cannot be connected to a coin service (Central Office implemented systems).
3. This equipment complies with Part 68 of the FCC rules. On the mounting bracket (or enclosure) of this equipment is a label that contains, among other information, the FCC Registration Number.  
If requested, the FCC Registration Number and REN must be provided to the telephone company.
  - The FCC Registration Number for the D/320SC boards is EBZUSA-23891-CE-E.
  - The FCC Registration Number for the D/240SC-T1 boards is EBZUSA-20078-XD-N.
  - The Universal service order code (USOC) for the D/240SC-T1boards is 6.0P.
  - The Facility Interface Code (FIC) for the D/240SC-T1 boards is 04DU9-BN/DN/1KN/1SN/1ZN.
  - The USOC jack required for the D/240SC-T1 boards is the RJ-48C jack.
4. These devices are registered with the Federal Communications Commission under Part 68 as a component devices for use with other SCSA or PEB compatible equipment. The D/240SC-T1 boards provide a network interface.

In order for FCC registration of this product to be retained, all other products used in conjunction with this product to provide your telephony function must also be FCC Part 68 registered for use with SCSA and/or PEB hosts. All Dialogic PEB and SCSA resource and network devices which are FCC registered are compatible and approved for use with each other.

Some non-Dialogic devices may be compatible and approved for use with SCSA and PEB devices. In determining if your particular component device is appropriately approved, look for the FCC Registration number on all components and ensure that the classification code "CE" or "CN" is part of that number.

**NOTE:** The non-Dialogic host or resource equipment used in conjunction with this product may bear an FCC Registration number with other than the "CE" or "CN" classification.

Classification code "CN" is for devices which provide a network interface and code "CE" is for devices which do not have a network interface.

Therefore it is recommended that only other Dialogic FCC Part 68 registered devices or other FCC Part 68 registered devices bearing the "CE" or "CN" Classification be used in providing your telephony function. If any of these components are not registered, then you are required to seek FCC Part 68 registration of the assembled equipment prior to connection to the telephone network. Part 68 registration specifies that you are required to maintain this approval and as such become responsible for the following:

- any component device added to your equipment, whether it bears component registration or not, will require that a Part 68 compliance evaluation is done and possibly that you have testing performed and make a modification filing to the FCC before that new component can be used;
  - any modification/update made by a manufacturer to any component device within your equipment, will require that a Part 68 compliance evaluation is done and possibly that you have testing performed and make a modification filing to the FCC before the new component can be used;
  - if you continue to assemble additional quantities of this compound equipment, you are required to comply with the FCC’s Continuing Compliance requirements.
5. The telephone company may make changes that affect the use of this equipment. The telephone company is required to give you advance notice.
  6. If you experience any trouble with the telephone line during or after installing this equipment, disconnect the equipment from the telephone line to determine if the equipment is causing difficulties. Once the equipment has been disconnected, by either you or the telephone company, do not reconnect it until the problem has been corrected or the Dialogic equipment has been repaired by Dialogic Corporation as defined below.
  7. Any repairs to this equipment must be carried out by Dialogic Corporation or our designated agent. This stipulation is required by the FCC and applies during and after the warranty period. If you suspect the equipment is malfunctioning, check the appropriate part of the manual to see that all installation procedures have been followed correctly. If checking the installation procedures does not locate the problem, contact your field service representative or our home office. The home office address is:

Dialogic Corporation  
1515 Route 10  
Parsippany, NJ 07054 USA  
(973) 993-3000

### Canada

#### Canadian Department of Communications CS-03:

##### EQUIPMENT ATTACHMENT LIMITATIONS

###### CP-01, Part 1, Section 10.1

**NOTICE:** The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements. The Department does not guarantee the equipment will operate to the user’s satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company’s inside wiring associated with a single line individual service may be extended by means of a certified

connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

**CAUTION:** Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

##### Industry Canada ICES-003 Issue 2:

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

### Europe

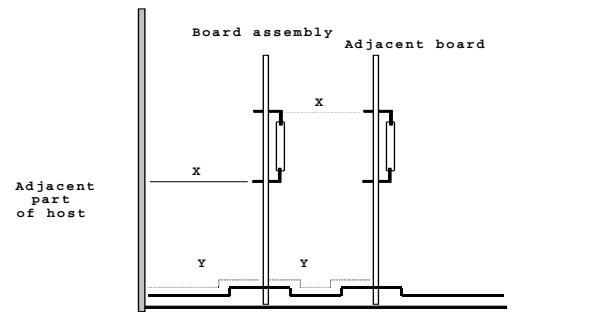
1. This Quick Install Card must always be included with the board assembly. Failure to provide this card when supplying one of the covered board assemblies will invalidate the approval for the network interface module.
2. The network interface module in this assembly is approved only for installation in a host, and with host attachments, which are either covered by a relevant type approval of their own, or in the United Kingdom, eligible for the General Approval NS/G/1234/J/100003.
3. It is a condition of approval that the power required by the host and the total of all adapter cards installed within the host environment, together with any auxiliary apparatus, does not exceed the power specification as stated in the Technical Reference Manual of the host apparatus. The power requirement for this board assembly (including the network interface module) is:
  - 2.8 A @ +5Vdc
  - 0.2 A @ +12Vdc
  - 0.2 A @ -12Vdc
4. In order to maintain the host-independent approval for the network interface module, it is essential that, when other option cards are introduced which use or generate a hazardous voltage (as defined in EN60950:1992), the minimum creepages and clearances specified in the table below are maintained.
5. The board assembly holding the network interface module must be installed such that, with the exception of the connections to the host, clearance and creepage distances shown in the table below are maintained between the board assembly holding the module, and any part of the host, including other option cards or assemblies. Failure to maintain these minimum distances will invalidate the approval.

Clearance		Voltage used or generated by other parts of the host, including other cards or assemblies
X mm	Y mm	
2.0	2.4	<50 Vrms or Vdc
2.6	3.0	<125 Vrms or Vdc
4.0	5.0	<250 Vrms or Vdc
4.0	6.4	<300 Vrms or Vdc

The above creepage distances apply in a normal office environment. In presence of conductive pollution, or

voltages greater than 300 V(rms or dc), or if you have any doubt, seek advice from a competent telecommunication safety engineer before the installation.

Creepage and clearance distances can be checked by measuring between the adjacent parts as shown below. Clearance distance X is the shortest distance in air between two parts. Y is the length of the creepage path between the same two parts.



### CE 168X

#### CE Compliance

The D/320SC and D/300SC-E1 boards meet the following European Directives:

98/13/EC	Terminal Directive
89/336/EEC	EMC Directive
73/23/EEC	Low Voltage Directive

To achieve CE compliance, be sure to select a host that already meets the EMC and Low Voltage Directives before the addition of any optional board.

**NOTE:** Jumpers, JP1A and JP1B, may need to be installed to meet class B emission requirements for the E1-75.

A shielded cable may be required to meet class B emission requirements for the E1-120.

#### Australia and New Zealand

##### D/300SC-E1 (120-Ohm versions)

1. **These boards must be installed and serviced by suitably qualified personnel.**  
These boards must only be installed by personnel that understand the electrical safety implications of connecting the card to other equipment. In particular the installer must understand the definition of a “telecommunications network” and “safety extra low voltage circuits.”
2. **Do not connect these boards directly to a telecommunications network.**  
These boards must be connected to a network terminating unit (NTU) or some other device that provides line isolation. This allows the carrier’s telecommunications network to be electrically isolated from the card and host PC.
3. **These boards are only to be connected to safety extra low voltage circuits.**

These boards should only be connected to the safety extra low voltage (SELV) port of the network termination unit (NTU) or PBX that is providing the E1 interface.