



Voice Cards and PIMG Units

This appendix contains the following sections:

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- [Intel Dialogic D/240PCI-T1, page A-8](#)
- [Intel NetStructure PBX-IP Media Gateway \(PIMG\), page A-11](#)

Intel Dialogic D/41EPCI, D/41JCT-LS, and D/41JCT-Euro

The D/41EPCI, D/41JCT-LS, and D/41JCT-Euro voice cards provide four independent voice-processing ports in a single PCI slot. The cards connect four phone-line interface circuits directly to analog loop-start lines by using RJ-11 connectors.

If you are installing cards that have H.100 connectors, you need an H.100 cable that has at least as many connectors as you have cards (you must connect all cards by using a single cable) but no more than five extra connectors.

Figure A-1 D/41EPCI Top and Side Views

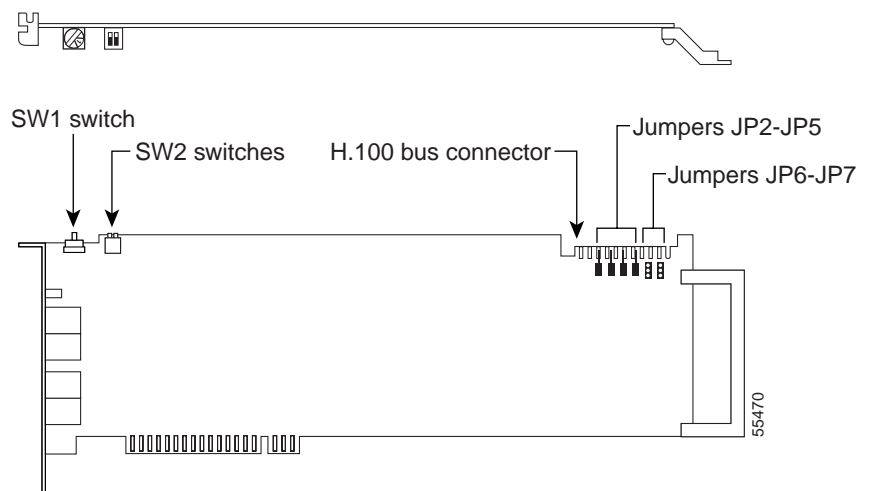


Figure A-2 D/41JCT-LS, and D/41JCT-Euro Top and Side Views

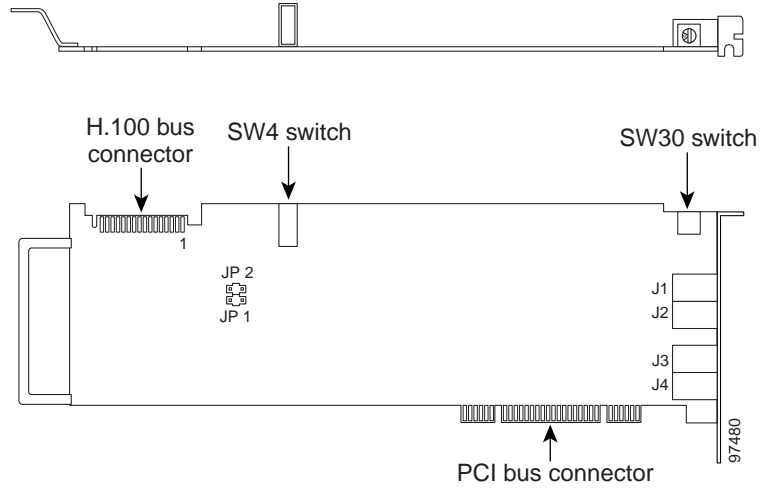
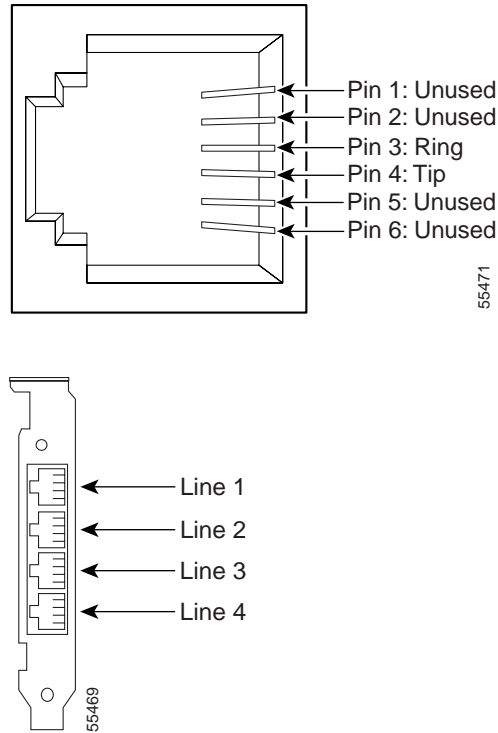


Figure A-3 D/41EPCI, D/41JCT-LS, and D/41JCT-Euro Connection Pinouts and Backplate

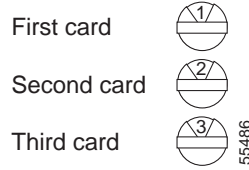


Hardware Settings

To Set the D/41EPCI Card Switches and Jumpers

- Step 1 Set the rotary switch (SW1) to a unique value for each card.

Each Intel Dialogic card in the Cisco Unity server or expansion chassis must have a unique value, starting with **1** and continuing in sequence on subsequent cards. For example, set the rotary switch on the first three voice cards as shown below. This is also the order in which you install the cards in the server or expansion chassis.



Step 2 Set SW2 switches to **Off** on each card.

Step 3 Settings for jumpers JP2 through JP5 depend on the number of D/41EPCI voice cards in the Cisco Unity server or expansion chassis:

One card	Set jumpers JP2 through JP5 to Off (Figure A-4) on the card.
Two cards	Set jumpers JP2 through JP5 to On (Figure A-5) on both cards.
Three or more cards	Set jumpers JP2 through JP5 to On (Figure A-5) on the first and last cards. Set jumpers JP2 through JP5 to Off (Figure A-4) on all other cards.

Figure A-4 D/41EPCI Jumpers JP2 Through JP 5: Off

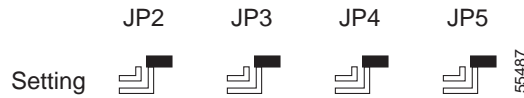
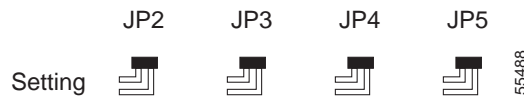
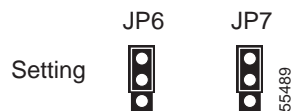


Figure A-5 D/41EPCI Jumpers JP2 Through JP 5: On



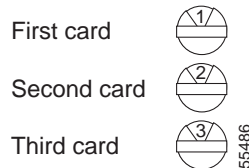
Step 4 On jumpers JP6 and JP7, install shunts on the top two pins (1 and 2).



To Set the D/41JCT-LS and D/41JCT-Euro Card Switches and Jumpers

Step 1 Set the rotary switch (SW30) to a unique value for each card.

Each Intel Dialogic card in the Cisco Unity server or expansion chassis must have a unique value, starting with **1** and continuing in sequence on subsequent cards. For example, set the rotary switch on the first three voice cards as shown below. This is also the order in which you install the cards in the Cisco Unity server or expansion chassis.



Step 2 Set the SW4 hook-state switch to **Off**.

Step 3 Settings for jumpers JP1 and JP2 are as follows:

Jumper JP1 is reserved. Do not install a shunt across the pins of JP1.

Set jumper JP2 according to the number of D/41JCT-LS or D/41JCT-EURO cards in the server or expansion chassis:

One card	Unterminated (the default configuration).
Two or more cards	Install the shunt on the JP2 jumper of a card to terminate the CT bus (H.100 signal) at that card. Terminate only the first and last cards on the CT bus cable.

Intel Dialogic D/120JCT-LS and D/120JCT-Euro

The D/120JCT-LS and D/120JCT-Euro voice cards each provide 12 channels of call-processing and loop-start interfaces in a single PCI slot. The D/120JCT-LS is used in North America, South America, and Japan, and the D/120JCT-Euro is used in Europe, Australia, and New Zealand. The cards connect 12 analog loop-start phone lines to 12 onboard call-processing resources by using RJ-14 connectors.

We recommend using the newer Revision 2 Universal (3.3Vdc or 5Vdc dual voltage) PCI versions of the Intel Dialogic D/120JCT-LS and the D/120JCT-Euro cards, rather than the older single-bus voltage (5Vdc) versions of the cards.

Note that older Revision 1 LS cards are still supported for use with Cisco Unity version 4.0(x), but they cannot be ordered for new Cisco Unity version 4.0(x) installations. In addition, the older LS cards can be used only when they are appropriate for the available slots in the Cisco Unity server or expansion chassis.

If you are installing cards that have H.100 connectors, you need an H.100 cable that has at least as many connectors as you have cards (you must connect all cards by using a single cable) but no more than five extra connectors.

You may need to attach or remove the slot retainer bracket that ships with the card, depending on the mechanical configuration of the Cisco Unity server or expansion chassis.

Figure A-6 D/120JCT-LS and D/120JCT-Euro Rev 1 (Conventional PCI) Top and Side Views

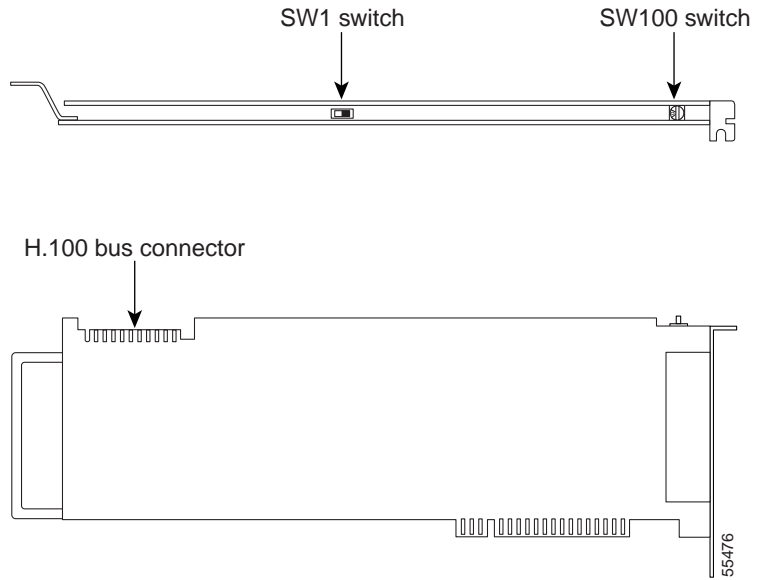


Figure A-7 D/120JCT-LS and D/120JCT-Euro Rev 2 (uPCI) Top and Side Views

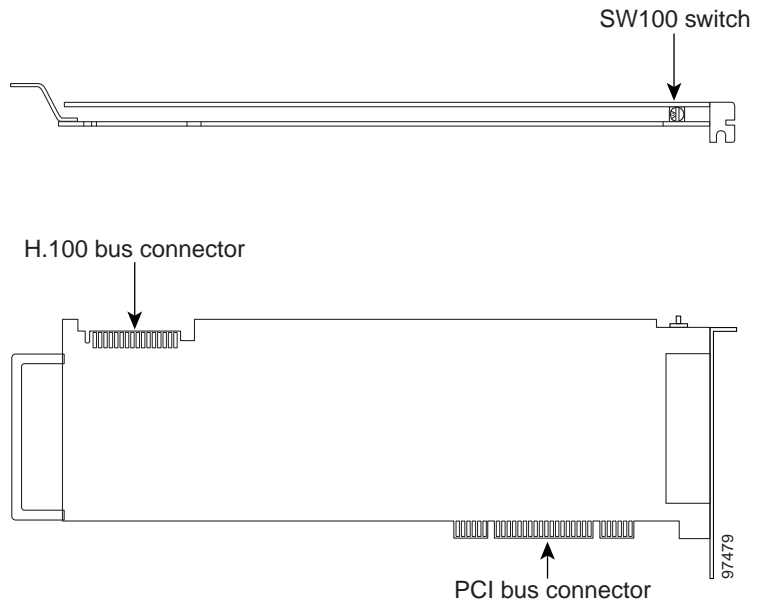
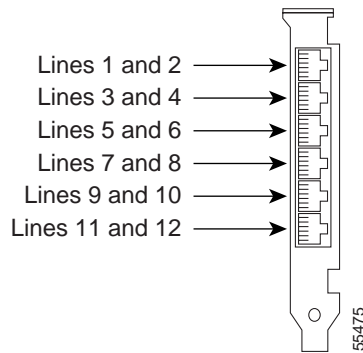
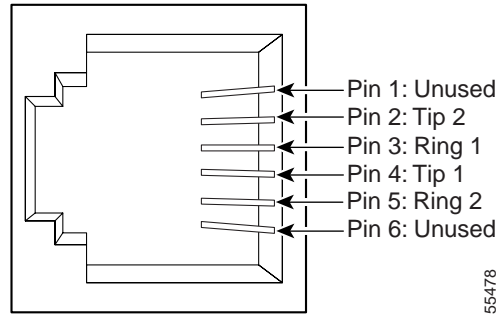


Figure A-8 D/120JCT-LS and D/120JCT-Euro Connection Pinouts and Backplate

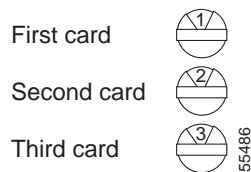


Hardware Settings

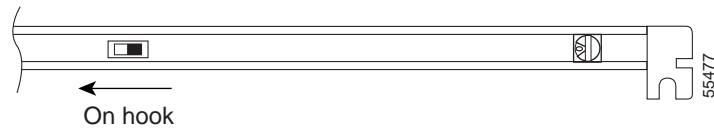
To Set the D/120JCT-LS and D/120JCT-Euro Card Switches

Step 1 Set the rotary switch (SW100) to a unique value for each card.

Each Intel Dialogic card in the Cisco Unity server or expansion chassis must have a unique value, starting with **1** and continuing in sequence on subsequent cards. For example, set the rotary switch on the first three voice cards as shown below. This is also the order in which you install the cards in the server.



- Step 2** Set the SW1 switch to **On Hook** on each card.



Software Settings

Do the following procedure only if the Cisco Unity server contains D/120JCT-Euro voice cards. There are no software settings for D/120JCT-LS voice cards.

To Select the Country for D/120JCT-Euro Voice Cards

- Step 1** Exit the Cisco Unity software, if it is running. For more information, see [Appendix B, “Exiting and Starting the Cisco Unity Software and Server.”](#)
- Step 2** Click **Programs > Administrative Tools > Services**.
- Step 3** In the right pane of the Services dialog box, right-click **Telephony**, and click **Stop**.
- Step 4** If you are prompted to stop other services, click **Yes**.
- Step 5** On the Windows Start menu, click **Programs > Dialogic System Software > Dialogic Configuration Manager–DCM**.
- Step 6** When the message “DCM could not detect devices...” appears, click **OK**.
- Step 7** In the DCM toolbar, click the red button to stop the Dialogic service.
- Step 8** When the Dialogic service has stopped, click **Close**.
- Step 9** In the Dialogic Configuration Manager dialog box, in the list of installed cards, double-click a D/120JCT-Euro card.
- Step 10** In the Dialogic Configuration Manager Properties dialog box, click the **Country** tab.
- Step 11** In the Country list, click the applicable value:

Euro (CTR-21)	For all countries that require CE conformity, including Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hong Kong, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.
Australia	For Australia.
New Zealand	For New Zealand.

- Step 12** If you chose Australia or New Zealand in the Country list, then in the Frequency Resolution list, click **FREQRES_LOW**.
- Step 13** Click **OK**.
- Step 14** Repeat Steps 9 through 13 for each D/120JCT-Euro card installed in the system.

- Step 15** Close the DCM.
- Step 16** Restart the Cisco Unity server.
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Intel Dialogic D/240PCI-T1

The Dialogic D/240PCI-T1 voice card provides one T1 span with 24 channels of voice processing in a single PCI slot. The card connects directly to a channel-service unit, digital-service unit, or to other phone-network terminating equipment by using an RJ-48C connector.

If you are installing cards that have H.100 connectors, you need an H.100 cable that has at least as many connectors as you have cards (you must connect all cards by using a single cable) but no more than five extra connectors.

Figure A-9 D/240PCI-T1 Top and Side Views

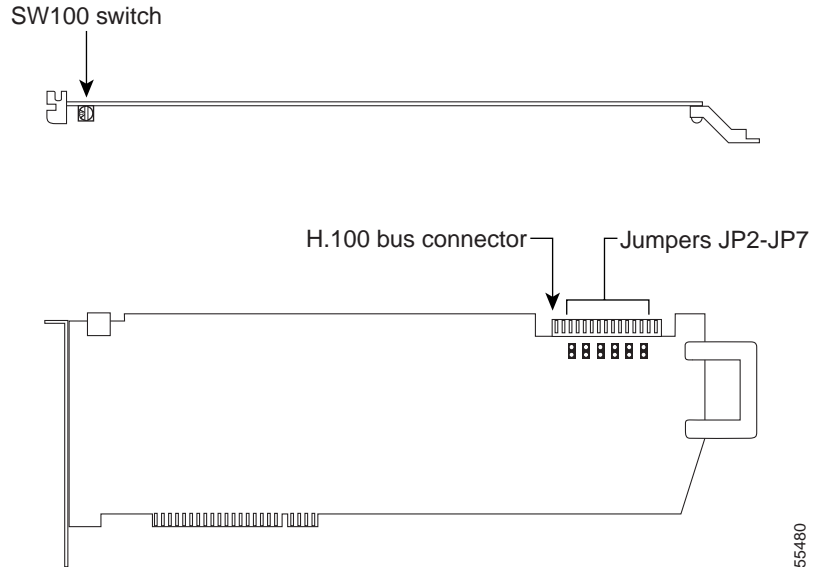
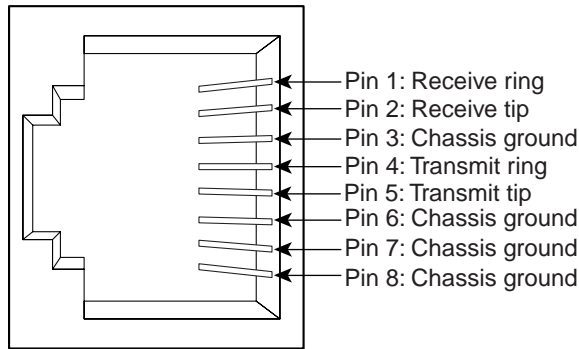
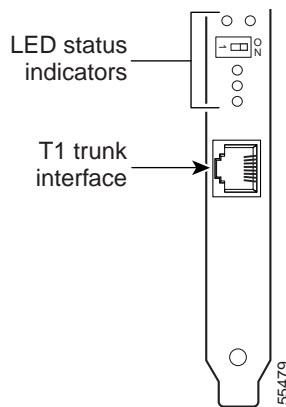


Figure A-10 D/240PCI-T1 Connection Pinouts and Backplate



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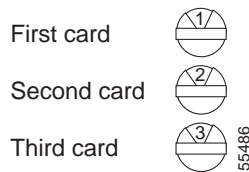
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Hardware Settings

To Set the D/240PCI-T1 Card Switches and Jumpers

Step 1 Set the rotary switch (SW100) to a unique value.

Each Intel Dialogic card in the Cisco Unity server or expansion chassis must have a unique value, starting with **1** and continuing in sequence on subsequent cards. For example, set the rotary switch on the first three voice cards as shown below. This is also the order in which you install the cards in the server.



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- Step 2** Settings for jumpers JP2 through JP5 depend on the number of D/240PCI-T1 voice cards in the Cisco Unity server:

One card	Set jumpers JP2 through JP5 to Off (Figure A-11) on the card.
Two cards	Set jumpers JP2 through JP5 to On (Figure A-12) on both cards.
Three or more cards	Set jumpers JP2 through JP5 to On (Figure A-12) on the first and last cards. Set jumpers JP2 through JP5 to Off (Figure A-11) on all other cards.

Figure A-11 D/240PCI-T1 Jumpers JP2 Through JP 5: Off

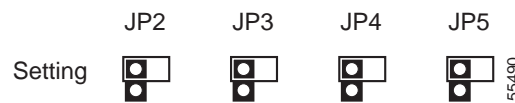
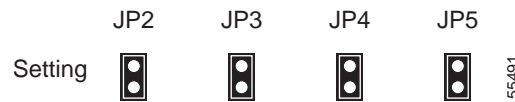
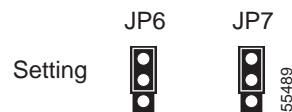


Figure A-12 D/240PCI-T1 Jumpers JP2 Through JP 5: On



- Step 3** On jumpers JP6 and JP7, install shunts on the top two pins (1 and 2).



Software Settings

For a D/240PCI-T1 voice card, set the protocol manually after the Cisco Unity Setup program is finished.

To Set the D/240PCI-T1 Protocol

- Step 1** On the Windows Start menu, click **Settings > Control Panel > Phone and Modem Options**.
- Step 2** In the Phone and Modem Options dialog box, click the **Advanced** tab.
- Step 3** Click **Dialogic Generation 2 Service Provider for NT**.
- Step 4** Click **Configure**.
- Step 5** In the Dialogic TSP Configuration dialog box, click **Advanced**.
- Step 6** In the Configuration Service dialog box, click the **Digital Protocols** tab.
- Step 7** In the Currently Assigned Protocols list, click **DtiB1 Undefined Protocol**.

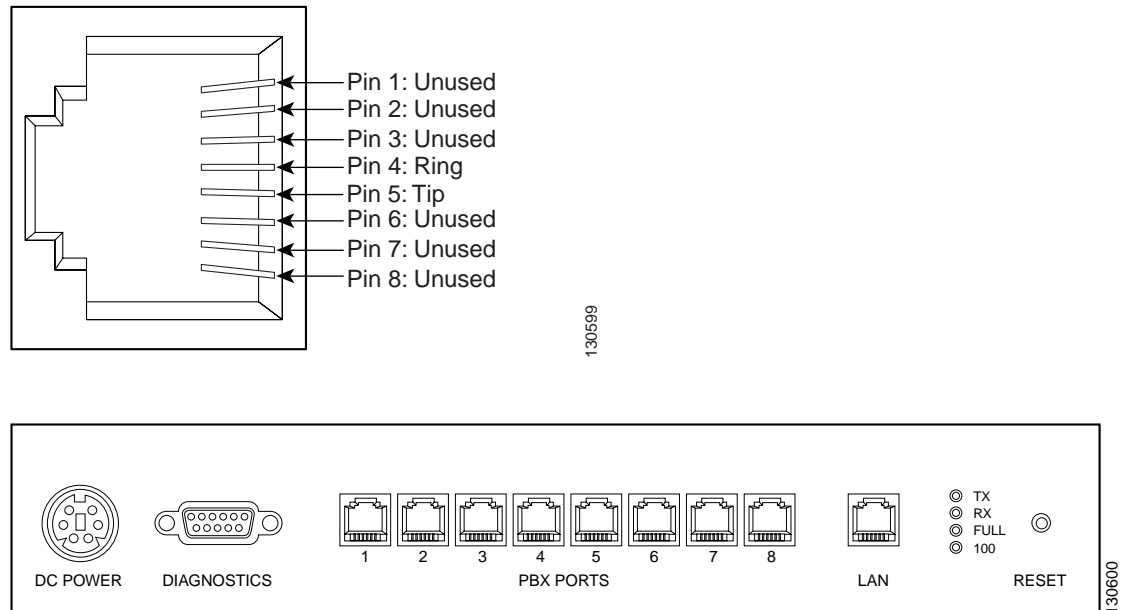
- Step 8** In the Available Protocols list, click **Us_ls_fxs_io**.
- Step 9** Click **Set Protocol**. DtiB1 Undefined Protocol changes to Us_ls_fxs_io.
- Step 10** If the Currently Assigned Protocols list contains more than one item (when the Cisco Unity server contains more than one D/240PCI-T1 card), repeat Steps 7 through 9 to change the remaining items from DtiB1 Undefined Protocol to Us_ls_fxs_io.
- Step 11** Click **OK** to close the Configuration Service dialog box.
- Step 12** Click **OK** to close the Dialogic TSP Configuration dialog box.
- Step 13** Click **Close** to close the Phone and Modem Options dialog box.
- Step 14** Close Control Panel.

Intel NetStructure PBX-IP Media Gateway (PIMG)

The Intel NetStructure PBX-IP Media Gateway (PIMG) units each connect to eight ports from a circuit-switched phone system (either analog or digital phone lines, depending on the model of the PIMG unit). The PIMG units communicate with the Cisco Unity server through the LAN by using Session Initiation Protocol (SIP).

The lines from the phone system attach to a PIMG unit with RJ-45 connectors, though it is possible to use RJ-11 connectors on these lines instead.

Figure A-13 PIMG Unit Connection Pinout and Port Connections



We recommend that the lines connect to the ports on the PIMG units in the same order as the ports on the phone system. For example, the first phone system port connects to the first port on the PIMG unit, the second phone system port connects to the second port on the PIMG unit, and so on.

Software Settings

Instructions for configuring PIMG units for integrating a phone system with Cisco Unity are found in the applicable Cisco Unity integration guide, available at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_installation_and_configuration_guides_list.html.