# Cisco TelePresence ISDN Link



#### Installation guide



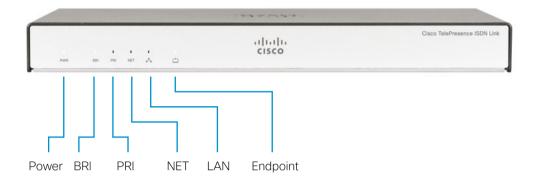
#### Package contents:

- ISDN Link
- Power Adapter
- LAN Cable
- Foot bumpers
- Installation Guide



# Front panel

The LED indicators are located on the front panel of the unit.



#### Power

The LED lights up and remains lit when the ISDN Link is powered up.

When the ISDN Link is not configured correctly this LED will be red. This will typically happen when you power up the unit for the first time.

The LED typically turns red when there is an error with the selected interface (BRI/PRI/NET), or possibly other system errors that require attendance. Check the ISDN Link status information for errors:

- When used in automatic pairing mode the ISDN Link status information is available from the TelePresence system's web interface.
- When used in manual pairing mode, see the user documentation for further details.

#### BRI/PRI/NET

The BRI/PRI/NET LED indicates the activated network interface type. The LED blinks while there is call activity on the selected interface type.

#### LAN

The LED flickers when there is activity on the LAN network.

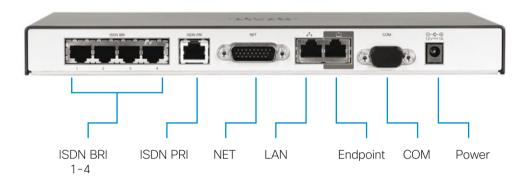
#### Endpoint

The LED flickers when there is activity between the ISDN Link and the endpoint (codec / video system).



# Rear panel

The connectors are located on the rear panel.



#### Select one of the three options

- ISDN BRI S/T (RJ45) 512 kbps (4 × 128 kbps)
- ISDN PRI (RJ45) 1920 kbps (E1) / 1472 kbps (T1)
- NET (External Network, V.35/RS449/RS366/RS530) 1920 kbps

#### LAN (Ethernet 10/100/1000 Mbps, RJ45)

Connect to the IP network.

#### Endpoint (Ethernet 10/100/1000 Mbps, RJ45)

Connect to the endpoint (codec / video system).

#### COM/Serial port (RS-232)

Connect to a PC/laptop for configuration. Use: 115200 bps, 8 data bits, 1 stop bit, no parity.

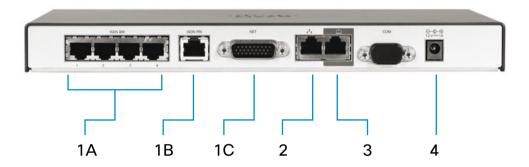
#### Power

External power adapter with 12 V/1.25 A DC output supports 100/240 VAC and 50/60 Hz inputs.



### Installation

Connect the cables as described in step 1 to 4.



- 1. Select **one** of the three options for the ISDN line connection:
  - A. Connect the ISDN cable(s) between the ISDN BRI port(s) and the ISDN line(s),
  - B. or, connect the ISDN cable between the ISDN PRI port and the ISDN line,
  - C. or, connect the V.35 cable between the NET port and the external network line.
- For system configuration, connect a Category 5e Ethernet cable between the Ethernet port on the ISDN Link and the LAN network.
- Connect a Category 5e Ethernet cable between the Endpoint port on the ISDN Link and the Ethernet port on the endpoint.
- Connect the supplied power adapter between the power connector and an electrical outlet.

CAUTION: Always use the AC-DC adapter shipped with the product.



# Automatic pairing mode

Pairing is a process in which the ISDN Link and endpoint communicate with each other in order to establish a connection. The ISDN Link is shipped with pairing mode set to *Auto*, which enables the ISDN Link to be discovered by an endpoint. When pairing is completed the ISDN Link is dedicated to the endpoint it has been paired with. The automatic pairing mode provides an improved user experience, but requires that the endpoint supports this feature.

### Supported versions

Automatic pairing mode is supported in software version IL1.1, and later, for Cisco TelePresence MX-, SX-, EX-, and C-Series running TC6.0, and later. If using software earlier than TC6/IL1.1 see the *About manual pairing mode* section.

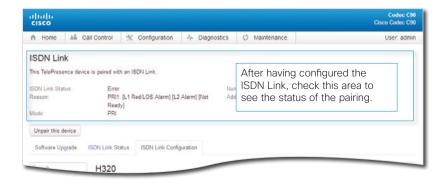
NOTE: The endpoint and ISDN Link must be on the same subnet. The Ethernet cable should be directly connected between the Endpoint port, on the ISDN Link, and the Ethernet 1 port, on the endpoint.

### Start pairing

- 1. Open a web browser, enter the address of the endpoint, and login.
- 2. From the top menu, go to Configuration > Peripherals.
- 3. Click the Manage ISDN Link button. This will open the ISDN Link page.
- 4. Click the Search for devices button.
- Choose your ISDN Link from the list and Click the Pair! button.
   During the pairing process a message will display: Pairing with device: <MAC address>.
   The ISDN Link is identified by the MAC Address, which is found on a label underneath the unit.
- 6. When sucessfully paired the following text will appear on the ISDN Link page: This TelePresence device is paired with an ISDN Link.

### Checking the status of the ISDN Link

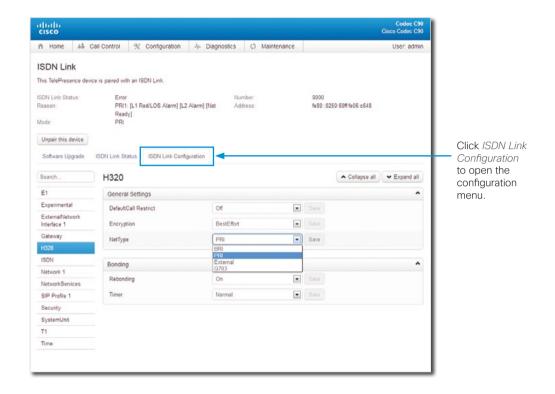
Navigate to Configuration > Peripherals > Manage ISDN Link > ISDN Link Configuration.





# Configuring the ISDN Link

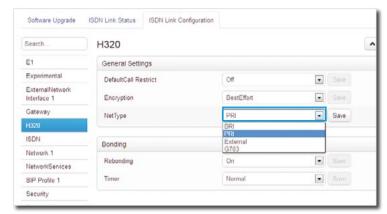
Navigate to Configuration > Peripherals > Manage ISDN Link > ISDN Link Configuration.





### Configuration example with PRI E1 mode

First choose from the list of menus to the left, then configure the parameters.

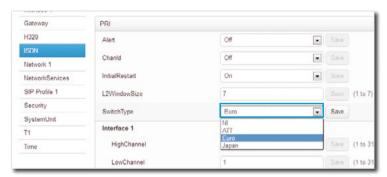


Navigate to H320 > General Settings > NetType.

In this example the H320 Net Type is:

PRI

Click the Save button.

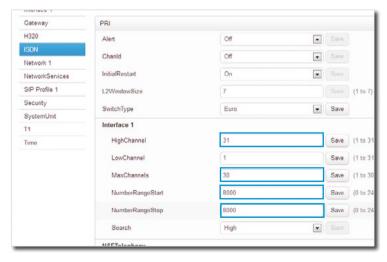


Navigate to ISDN > PRI > SwitchType.

In this example the ISDN PRI Switch Type is:

Euro

Click the Save button.



Navigate to ISDN > PRI > Interface 1.

Enter the number of high and maximum channels for the PRI Euro switch:

- · HighChannel: 31
- MaxChannels: 30

Enter your ISDN PRI number:

- NumberRangeStart: xxx
- NumberRangeStop: xxx

Click the Save buttons.

Go to Configuration > Peripherals and check the ISDN status information to confirm there are no errors before proceeding. If any errors, or if the power LED is red, please check your configuration.



### A few more configuration examples for the ISDN Link

You can skip this page if you already have configured the ISDN Link.

On this page you can see a few more configuration examples for the ISDN Link. The ISDN Link is configured from the TelePresence system's web interface. Navigate to *Configuration > Peripherals > Manage ISDN Link > ISDN Link Configuration*. See the previous pages for guideance on how to access the menus.

The examples on this page are from the web interface of the TelePresence endpoint.

#### Example with PRI T1 mode

H320 > General Settings > NetType: PRI (Set the net type)

ISDN > PRI > SwitchType: NI (Set the PRI switch type)

ISDN > PRI Interface 1 > MaxChannels: 23 (Set the number of PRI channels)

ISDN > PRI Interface 1 > HighChannel: 23 (Set the number of the high PRI channel)

ISDN > PRI Interface 1 > NumberRangeStart: xxx (Enter your PRI number)

ISDN > PRI Interface 1 > NumberRangeStop: xxx (Enter your PRI number)

#### Example with BRI Euro type

H320 > General Settings > NetType: BRI (Set the net type)

ISDN > BRI > SwitchType: Euro (Set the BRI switch type)

ISDN > BRI Interface [1 to 4] > Mode: On (Enable the BRI interfaces in use)

ISDN > BRI Interface [1 to 4] > DirectoryNumber Number [1 and 2]: xxx (Enter the BRI numbers according to assigned numbers for each interface in use.)

#### **Example with External Network**

H320 > General Settings > NetType: External (Set the net type)

ExternalNetwork > Interface 1 > CallControl: RS366 (Set call control protocol)

ExternalNetwork > Interface 1 > Clocking: Dual (Set clocking mode)

ExternalNetwork > Interface 1 > DtrPulse: On (If using RS530, set DTRPulse to On; else set to Off).

See the ISDN Link Administrator Guide for further details. Go to: http://www.cisco.com/go/isdnlink-docs and navigate to the *Maintain and Operate > Maintain and Operate Guides* section.



# Configuring the endpoint for ISDN (H320)

When paired to ISDN Link, the default call settlings for the TelePresence endpoint can be configured for ISDN (H320), or you can set the call protocol and call rate each time you make a call

### Configuring the default call settings to ISDN (H320)

- 1. Open a web browser and log in to the TelePresence endpoint.
- 2. Navigate to Configuration > System configuration > Conference 1 > DefaultCall and set the Protocol to H320, and click the Save button.

### Configuring the call settings to ISDN (H320) by each call

- If using a Touch device, see the section: Making a call using the Touch controller.
- If using a remote control, see the section: Making a call using the remote control.



# Making a call using the Touch controller

Touch the panel gently to wake up the system.

 Tap DialPad or Contacts and enter the ISDN number you want to call.

If your the default call protocol is set to ISDN (H320), proceed to *Step 6*, else proceed to *Step 2*.



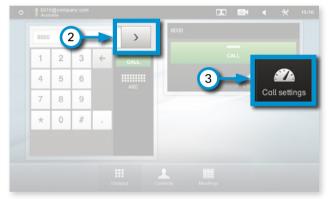
#### Navigate to Call settings:

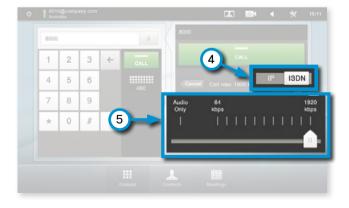
- 2. Tap the *right arrow* button to open the call dialog.
- Tap Call settings button to open the ISDN call settings.
- In the Call settings menu, move the call protocol slider and choose ISDN.
- 5. In the *Call settings* menu, move the bandwidth slider to set the appropriate *call rate*.

If dialing a telephone number, use the slider to choose *Audio Only*.

6. Tap the green *Call* button to make the call.

Connecting the call may take up to 30 seconds.







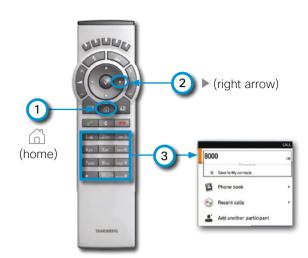


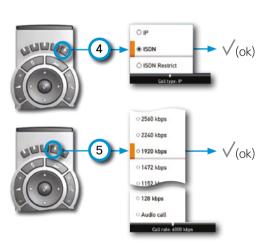
# Making a call using the remote control

Press any button on the remote control to wake up the system.

- 1. Press (home) button to open the *Home* menu.
- 2. Press ▶ (right arrow) to open the Call menu.
- 3. Use the numeric pad and enter the *ISDN number* you want to call.

If your the default call protocol is set to ISDN (H320), proceed to Step 6, else proceed to Step 4.





- 4. Press the fifth soft button to display the Call Type menu. Use the arrow keys to navigate and choose ISDN. Press √(ok) to confirm your selection.
- Press the fourth soft button to display the Call Rate menu. Use the arrow keys to navigate and choose the call rate.

If dialing a telephone number, choose Audio Only. Press  $\sqrt{(\text{ok})}$  to confirm your selection.

- 6. Press (call) to connect the call. Tap the green *Call* button to make the call.
  - Connecting the call may take up to 30 seconds. A message will show on screen while the call is connecting.





# About manual pairing mode

You can skip this page if using the ISDN Link in automatic pairing mode.

Manual pairing mode of the ISDN Link is managed from a command line interface. Connect to the ISDN Link through the serial port (COM) or through SSH over the network.

#### Supported versions

Manual pairing mode is supported from software version IL1.0, and later, for TelePresence EX-, MX-. SX-, and C-Series running TC5. If you have TC6/IL1.1 please use automatic pairing mode as described in the *Automatic pairing mode* section.

#### Manual pairing of the ISDN Link

See the ISDN Link API Reference Guide (IL1.1) for further details on manual pairing mode. Go to: http://www.cisco.com/go/isdnlink-docs and navigate to the *Reference Guides > Command References* section.

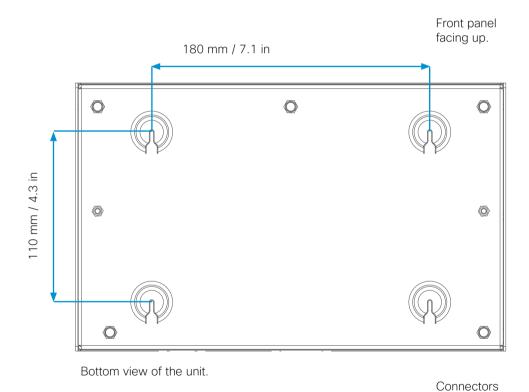


# Wall mounting

If you want to mount the ISDN Link on a wall, follow the instructions below. The unit must be mounted with the front panel facing up.

It is of great importance that the wall mount unit is safely installed, that the wall is able to support the product and that the screws or mounting means used are suitable for the wall and the weight of the product.

This type of equipment is to be installed by the submittor's/dealer's qualified installer. Installer is responsible for obtaining safety inspection of the structural integrity of the installation by the local authority/inspection department.



# Table stand

Mount the the four foot bumpers on its feets if you would like to place the ISDN Link on a table.

facing down.



# Where to find additional support and information for your Cisco TelePresence product

### ISDN Link documentation

For more information about configuring and using your Cisco TelePresence ISDN Link, see the user documentation that is available on our web site:

http://www.cisco.com/go/isdnlink-docs



### Safety Information

Before connecting the power supply, read the Regulatory Compliance and Safety Information (RCSI) document that is available on our web site:

http://www.cisco.com/en/US/docs/telepresence/endpoint/isdn-link/compliance\_safety\_guide/isdn-link\_compliance\_and\_safety\_guide.pdf

## Support

For support, go to: http://www.cisco.com/support



#### 产品中有毒有害物质或元素的名称及含量

部件名称	有毒有害物质或元素					
	铅	汞	镉	六价鉻	多溴联苯	多溴二苯醚
金属部件 (包括紧固件)	×	0	0	0	0	0
印刷电路板组件和元件	×	0	0	0	0	0
缆线和缆线组件	×	0	0	0	0	0
塑料和聚合物部件	0	0	0	0	0	0
显示器,包含灯泡	×	×	0	0	0	0
除印刷版电路板外的其他电子组件	×	0	0	0	0	0
光学玻璃材料	×	0	×	0	0	0
干电池	0	0	0	0	0	0

○ : 代表此种部件的所有均质材料中所含的该种有毒有害物质均低于中华人民共和国信息产业部所颁布的《电子信息产品中有毒有害物质的限量要求》(SJ/T 11363-2006)规定的限量。

★ :代表此种部件所用的均质材料中,至少有一类材料其所含的有毒有害物质高于中华人民 共和国信息产业部所颁布的《电子信息产品中有毒有害物质的限量要求》(SJ/T 11363-2006) 规定的限量。

以销售日期为准,此表显示在"思科系统公司"的电子信息产品部件中何处存在这些有毒有害物质。请注意,并非上列所有部件都包有含在内装产品中。

除非产品上另有标记,所有内附产品及其部件的'环保使用期限'均由此显示的符号表示。此环保使用期限只适用于产品手册中所规定的使用条件。

**Note** This Table is a regulatory document required for products shipped to the People's Republic of China.

### EMC Class A declaration for China

Applies to the systems that complies with the EMC Directive Standard EN 55022, Class A.

#### 声明

此为A级产品,在生活环境中,该产品可能会造成无线电干扰。在这种 情况下,可能需要用户对其干扰采取切实可行的措施。

#### WARNING:

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.





On our web site you can find an overview of the worldwide Cisco contacts.

Go to: http://www.cisco.com/web/siteassets/contacts

Corporate Headquarters
Cisco Systems, Inc.
170 West Tasman Dr.
San Jose, CA 95134 USA

Cisco, Cisco Systems, the Cisco logo, and the Cisco Systems logo are registred trademarks or trademarks of Cisco Systems, Inc. and/or its affiliates in the Unites States and certain other countries. All other trademarks mentioned in this document or web site are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0705R)