General information

About the Cisco TelePresence IP VCR

The Cisco TelePresence IP VCR 2200 Series uses the latest purpose-built technology to record video and data from standard video conferencing equipment. The recordings can either be streamed live or played back on demand at multiple bit rates to a PC or any video conferencing endpoint.

Package contents

The following items are included with the Video Conferencing Recorder (VCR). Verify that you have these items before installing the device:

- Cisco TelePresence IP VCR unit
- Console cable (blue)
- Power cable
- Rack mounting kit

Port and LED location

Figure 1 shows the position of ports and LEDs on the VCR.

Figure 1: VCR front panel
## LED behavior

Table 1 describes the behavior of the LEDs.

**Table 1: VCR LED behavior**

<table>
<thead>
<tr>
<th>LED</th>
<th>Color</th>
<th>Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact Flash Activity</td>
<td>Flashing green</td>
<td>One of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- the VCR is booting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- a configuration change has been made</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- the configuration is being transferred by FTP</td>
</tr>
<tr>
<td>Status</td>
<td>Green</td>
<td>The VCR is operating normally</td>
</tr>
<tr>
<td>Alarm</td>
<td>Red</td>
<td>The VCR is booting or has developed a fault, for example:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- temperature is outside normal limits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- fan failure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- battery failure of the internal clock</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Refer to the web interface for more information about the problem (go to Status &gt; Health)</td>
</tr>
<tr>
<td>Hard Disk Activity</td>
<td>Flashing green</td>
<td>The VCR is reading from or writing to its hard disk</td>
</tr>
<tr>
<td>Hard Disk Recording</td>
<td>Red</td>
<td>The VCR is recording</td>
</tr>
</tbody>
</table>
The VCR is processing conference data. The LEDs represent the media processing load of the VCR. The column numbered 1 represents audio load. The other columns represent video DSP load. Media processing load is also displayed in the web interface: go to **Status > General**.

<table>
<thead>
<tr>
<th>Ethernet Port Status, for each Ethernet port:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FDX</strong></td>
</tr>
<tr>
<td><strong>Act</strong></td>
</tr>
<tr>
<td><strong>Link</strong></td>
</tr>
<tr>
<td><strong>Power</strong></td>
</tr>
</tbody>
</table>
Connecting the VCR

Before you start

**IMPORTANT**: Before installing the VCR, you must read the safety information at [http://www.cisco.com/go/telepresence/safety](http://www.cisco.com/go/telepresence/safety).

**Step one: Connect power**

Connect the power connector on the rear of the unit to the power supply using the supplied power cable. (There is no On/Off switch.)

**Step two: Connect to Ethernet Port A**

Connect an Ethernet cable from Ethernet Port A to an Ethernet switch (rather than a hub, to minimize interference from other devices on the network). The Ethernet port is a 10/100/1000 Mbps auto-sensing connection.

- Only connect to Ethernet Port B if you need to connect the VCR to a second subnet.

- Do not connect Ethernet Port A and Ethernet Port B to the same subnet.
Initial configuration

Step one: Connect to the console port

1. Ensure power is connected to the VCR and the Status LED is green.
2. Connect the console port of the VCR to the serial port of your PC using the blue RJ45 to DB9 cable supplied.
3. Use a serial terminal program, such as SecureCRT or HyperTerminal, to connect to the VCR. Set your terminal software to the following settings:
   - Baud rate: 38400
   - Data bits: 8
   - Parity: none
   - Stop bits: 1
   - Flow control: none
4. Press Enter and the following command prompt appears on the terminal:
   IPVCR:>

Step two: Configure Ethernet Port A settings

The default setting for the VCR Ethernet ports is auto-sensing mode. If the switch ports to which you connect the VCR are not also set to auto-sensing mode, then you need to configure the VCR Ethernet ports to use the same speed and duplex mode.

- Only connect to Ethernet Port B if you need to connect the VCR to a second subnet.

- Both ends of the Ethernet connection must be configured in the same way. For example, either configure both ends of the link to be auto-sensing or configure both ends to operate at the same speed and duplex.

- To establish a 1000Mbps connection, both ends of the link must be configured as auto-sensing.
To configure Ethernet Port A, enter the following for auto-sensing mode:
```
etertype auto
```
or to configure a speed and duplex, use the following command:
```
etertype <10|100> <half|full>
```
To display the current configuration and status of the Ethernet ports, enter:
```
status
```
For example, to configure a full-duplex 100Mbps link, enter:
```
etertype 100 full
```

To establish a 1000Mbps connection, both ends of the link must be configured as auto-sensing.

**Step three: Assign an IP address to the VCR (optional)**

The default setting for the VCR is to use DHCP to obtain an IP address. You can assign a static IP address if you prefer or if a DHCP server is not available.

If you want the IP address of the VCR to be assigned by your DHCP server, omit this step.

- To assign a static IP address, use the following command:
  
  ```
  static <IP address> <netmask> <default gateway address> <DNS server address>
  ```

  If you do not have a DNS server, use 0.0.0.0 as the DNS server IP address.

  For example, to assign an address of 192.168.1.2 where the default gateway is at 192.168.1.1, enter:
  
  ```
  static 192.168.1.2 255.255.255.0 192.168.1.1 0.0.0.0
  ```

- To return to using DHCP after setting a static address, use the following command:
  ```
  dhcp
  ```

**Step four: Discover the IP address of the VCR**

1. To display the current status of the IP address, enter: `status`
   
   If you have DHCP enabled on your network and you are allowing the VCR to acquire its address using DHCP, the IP address that has been acquired by Ethernet Port A will be shown; if you have assigned a static IP address, that is the address that will be shown.

2. Make a note of the IP address. You will use this to access the web interface of the unit.
Configuring the VCR

Step one: Log in to the VCR

All administration of the VCR is performed via the web interface.

To log in to the web interface of the VCR:

1. Use your browser to navigate to the IP address of the VCR (to discover the IP address, refer to the previous section).
2. Click **Click here to log in**, and then click **Change log in** and enter the user name **admin** with no password.

Caution: Cisco recommends that you change the admin account to use a password as soon as possible. To do that, go to **Users**, click the **admin** link, and provide the required user information.

Step two: Using an H.323 gatekeeper or SIP registrar (optional)

Using an H.323 gatekeeper makes it easier for H.323 end-users to watch and make recordings using directory numbers rather than requiring them to know the IP address or host name of the VCR. Likewise, a SIP registrar makes it easier for SIP users to watch and make recordings.

To configure the VCR to use an H.323 gatekeeper:

1. In the web interface of the VCR, go to **Settings > Gatekeeper**.
2. Enable **H.323 gatekeeper usage** and configure the settings you require, using the online help for further assistance.
3. Click **Apply changes**.

To configure the VCR to use a SIP registrar:

1. In the web interface, go to **Settings > SIP**.
2. Configure the settings you require, using the online help for further assistance.
3. Click **Apply changes**.

Before you configure the VCR to use, and register recordings to, a SIP registrar, you must set up the VCR and its recordings on that SIP registrar.
Step three: Add endpoints (optional)

You can define pre-configured endpoints. This means that when an end-user calls in to the VCR from an endpoint to watch a recording, the VCR will use the correct settings for that endpoint. It also means that when calling out to endpoints from the VCR, you choose the pre-configured endpoints from a list, rather than entering endpoint details every time.

To define pre-configured endpoints:

1. In the web interface of the VCR, go to **Endpoints**:
   - To add a H.323 endpoint, click **Add H.323**
   - To add a SIP endpoint, click **Add SIP**

2. Configure the endpoint settings you require, using the online help for further assistance.

3. Click **Add endpoint**.
Using the VCR

There are a number of ways to create a recording:

- Call in to the VCR’s auto attendant and select **Record this session** to record yourself. Refer to the online help for information on calling the auto attendant.
- Call out and record. The VCR, via its web interface, calls out to an H.323 or SIP endpoint and records its media streams.
- Call in to the VCR after it has been configured to record incoming calls by default. The setting for the default incoming call action is in **Settings > Connections**.
- Call a specific gatekeeper ID or registered SIP extension that has been configured to trigger recording.
- Call another endpoint through the VCR (a point-to-point call) via a prefix the VCR has registered with a gatekeeper or with a SIP registrar. This has the same effect as calling that endpoint directly, except that the VCR is also in the call and records both endpoints’ media streams.

Equally there are a number of ways to play back a recording:

- Call out and play. The VCR, via its web interface, calls out to a H.323 or SIP endpoint and plays back a recording to it.
- Stream the recording to a user’s desktop via a player application such as QuickTime.
- Call in to the VCR’s auto attendant and select the recording for play back.
- Register the recording with a gatekeeper or SIP registrar and play it back by calling its registered gatekeeper ID or SIP extension.

For further information about creating and viewing recordings, refer to the online help which is accessible from the VCR web interface and to the documentation on the web site.
Checking for updates

It is a good idea to regularly check for updates to the main VCR software image. This section describes how to upgrade the VCR using the web. Note that you can also upgrade the VCR using FTP; this can be more reliable if you are upgrading the device remotely. Upgrading your device via FTP is described in the release notes that are available alongside the software images in the support section of the web site.

To check for, and download, updates:

1. Log in to the VCR web interface and go to Status > General.
2. Make a note of the software version that is currently installed.
3. Go to the support section of the web site and check if a more recent release is available for the VCR.
4. If a more recent release is available, download it and save it locally.

To upgrade the VCR:

1. Unzip the software release file that you downloaded.
2. In the VCR web interface, go to Settings > Upgrade.
3. In the Main software image section, click Browse and locate the unzipped file.
4. Click Upload software image. The browser begins uploading the file to the VCR, and a new browser window opens to indicate the progress of the upload. When finished, the browser window refreshes and indicates that the software upgrade is complete.
5. Go to Settings > Shutdown and shut down and restart the VCR.
Troubleshooting and technical support information

Using the event log to help solve a problem

You can use the event log to produce debugging information to assist technical support in solving any problems. Event logging capture filter topics are set by default to **Errors, warnings and information**. Do not change the capture filter topic level without the guidance of technical support.

Getting more help

Cisco recommends registering your product at http://www.tandberg.com/services/video-conferencing-product-registration.jsp in order to receive notifications about the latest software and security updates. New feature and maintenance releases are published regularly, and we recommend that the VCR’s software is always kept up to date.

If you experience any problems when configuring or using the VCR, consult the online help (available within the UI of your VCR) for an explanation of how its individual features and settings work. If you cannot find the answer you need, check on the web site at http://www.tandberg.com/support to make sure that the VCR is running the most up-to-date software and for further relevant documentation.

You or your reseller can get help from our support team by raising a case at http://www.tandberg.com/support/video-conferencing-online-support.jsp. Make sure you have the following information ready:

- The serial number and product model number of the unit
- The software build number which can be found on the product user interface
- Your contact email address or telephone number
- A full description of the problem
Technical specifications

Power requirements

Table 2: VCR ratings

<table>
<thead>
<tr>
<th>Rating</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage</td>
<td>115V to 230V 50/60 Hz</td>
</tr>
<tr>
<td>Current rating</td>
<td>2A Maximum</td>
</tr>
<tr>
<td>Supply voltage range</td>
<td>100 to 240V 50/60 Hz</td>
</tr>
</tbody>
</table>

Over-current protection

Ensure the supply to this unit is protected by a branch circuit protector rated by a maximum of 20A.

⚠️ Caution — over-current devices must meet applicable national and local electrical safety codes and be approved for the intended application.

Operating environment

The VCR must only be used within the following environmental conditions:

Table 3: Operating environment

<table>
<thead>
<tr>
<th>Environment</th>
<th>Temperature</th>
<th>Humidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating environment</td>
<td>0°C to 35°C</td>
<td>10% to 95% (non-condensing)</td>
</tr>
<tr>
<td>Non-operating environment</td>
<td>-10°C to 60°C</td>
<td>10% to 95% (non-condensing)</td>
</tr>
<tr>
<td>Optimum operating environment</td>
<td>21°C to 23°C</td>
<td>45% to 50% (non-condensing)</td>
</tr>
</tbody>
</table>

Antistatic precautions

When servicing or removing components or connections, first attach an antistatic wrist strap to an appropriate Earth point.
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