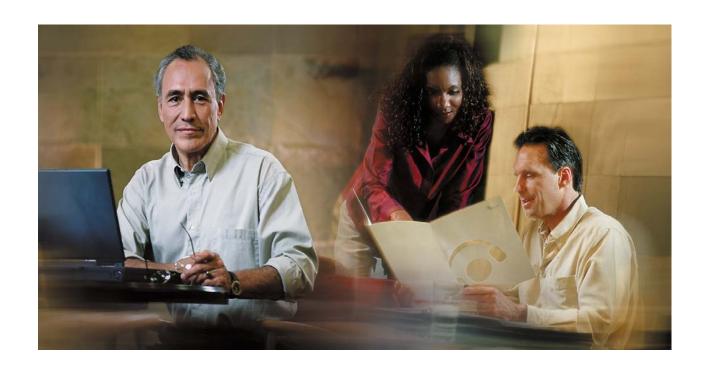
# cisco



Cisco Digital Media Encoder 1000 Quick Start Guide
October 2007

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Any Internet Protocol (IP) addresses used in this document are not intended to be actual addresses. Any examples, command display output, and figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses in illustrative content is unintentional and coincidental.

Cisco Digital Media Encoder 1000 Quick Start Guide © 2006 Cisco Systems, Inc. All rights reserved.

## **Contents**

Saf	ety Warnings	. 1
	Connecting to an Electrical Power Source	
	Connecting to Audio and Video Sources	
	Connecting to an IP Network	
	Initially Starting the Cisco Digital Media Encoder 1000	

## **Safety Warnings**

Before installing The Cisco Digital Media Encoder 1000<sup>™</sup>, read and comply with the following safety warnings to ensure that you do not damage the equipment or cause personal injury.

WARNING: Installation of the equipment must comply with local and national electrical

codes.

WARNING: Read the installation instructions before connecting the system to the

power source.

WARNING: Only trained and qualified personnel should be allowed to install, replace,

or service this equipment.

WARNING: This product requires short-circuit (overcurrent) protection, to be provided

as part of the building installation. Install only in accordance with national

and local wiring regulations.

**WARNING**: The power supply must be placed indoors.

WARNING: The plug-socket combination must be accessible at all times, because it

serves as the main disconnecting device.

**WARNING**: Do not work on the system or connect or disconnect cables during periods

of lightning activity.

WARNING: To avoid electric shock, do not connect safety extra-low voltage (SELV)

circuits to telephone-network voltage (TNV) circuits. LAN ports contain SELV circuits, and WAN ports contain TNV circuits. Some LAN and WAN ports

both use RJ-45 connectors. Use caution when connecting cables.

## 1. Connecting to an Electrical Power Source

Your network must meet the following four requirements to set up the Cisco Digital Media Encoder 1000<sup>™</sup> for streaming or capturing video:

AC power source (100~240v)

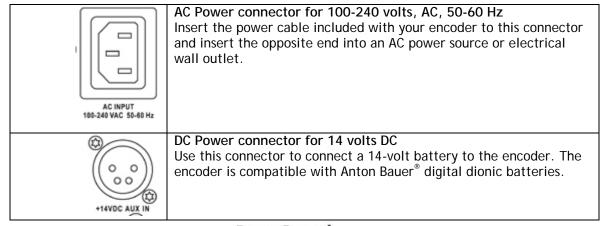
Audio/Video source (camera, video player, or other A/V output device)

IP network and/or Internet connection

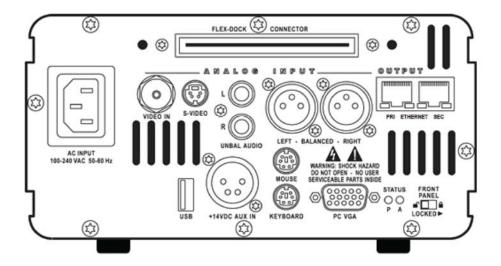
Streaming media server for streaming your content to many viewers

Most of the basic operations you will routinely use are performed from the front panel of the encoder system.

**NOTE**: There are advanced setup options of the encoder you must modify before running an encoder session. You will use the *Niagara SCX Web Interface* to access these options. Refer to *The Cisco Digital Media Encoder 1000 User Guide* for detailed instructions.



### **Rear Panel**



# 2. Connecting to Audio and Video Sources

Table 1 and Table 2 show the audio and video sources on the rear panel of the encoder.

Table 1. Video Sources



#### Composite BNC input

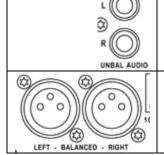
The encoder includes a BNC-to-RCA adapter so you can connect a composite RCA video cable to this BNC connector. Composite RCA connectors are found on most video playback equipment such as video players and video cameras. Composite BNC connectors are found on professional video playback equipment.



#### S-Video input

This is a standard consumer video connector found on most video players and video cameras.

Table 2. Audio Sources



#### **Unbalanced Audio input**

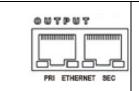
These RCA connectors provide left and right stereo input. RCA connectors are a standard consumer stereo audio connection found on most video players and video cameras.

## Balanced Audio input

These XLR connectors provide left and right balanced stereo input. XLR connectors are used by professional audio engineers and are found on high-end audio and video playback equipment.

**NOTE:** A BNC-to-RCA adapter is included with your encoder. This will convert the Composite BNC connector to a common RCA connector found on most consumer video cameras and video players.

## 3. Connecting to an IP Network



#### **RJ-45 Ethernet connector**

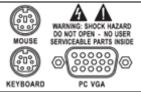
The encoder provides two network connections: a 1GB and a 100MB Ethernet network connection. These connectors are also referred to as output connectors because the encoder sends video and audio over an IP network which these connections provide.

**NOTE**: If you are not familiar with network protocols, please contact your network administrator for assistance.

The encoder network settings for both its 1GB and 100MB network interface default to dynamically obtain an IP address from a DHCP server on the network. If a DHCP server is not available or cannot be found on the network, the encoder assigns its own IP address.

For most network environments, it is not necessary to modify these default settings. However, if you wish to assign a static IP address to the encoder's Network Interface Cards (NICs), you can change the network setting using the encoder front panel menu. For detailed instructions, refer to the *Cisco Digital Media Encoder 1000 User Guide*.

#### **Maintenance Connectors**



The mouse, keyboard, and VGA connections are only used for service and maintenance by a qualified ViewCast field technician. Note: Using a mouse, keyboard and VGA monitor for operation is not recommended. Third-party software installation or hardware modifications will void warranty.

Lock Switch - NOTE: The encoder will not power on if the Lock Switch is in the "LOCKED" position.



#### Lock Switch

If the encoder is powered on, the front panel buttons are inactive when the Lock Switch is in the "locked" position. If the encoder is off, the front panel Power button is deactivated if the Lock Switch is in the "locked" position. This prevents the encoder from inadvertently being powered on if connected to a battery during transport.

## 4. Initially Starting the Cisco Digital Media Encoder 1000

The first time the encoder is powered, the LCD display are presented with a series of menus that will assist in setting up the time zone, system clock, date, and video input format (NTSC—North America/Japan—or PAL).

1. To start the encoder, press the <POWER> button located on the front panel.



2. During the power up process, the encoder LCD readout displays the following message:



3. After the encoder powers up for the first time, it displays the following message:



4. Press **<ENTER>** to begin the initial setup.



5. The encoder now asks you to set the date.



6. To set the date, use the <UP> and <DOWN> arrows to increment the numerical value of the month.



7. Once you set the numerical value for the month, press <STREAM> to move to the day field.



8. Use the <UP> and <DOWN> arrows to increment the numerical value of the day.



9. Press <STREAM> to enter the value and move to the year field.



- 10. Use the same process for setting the month and day so that you may set the year.
- 11. If you want to change a previous setting, you can continue pressing **<STREAM>** until the cursor cycles around to the month.



12. Once you are satisfied with your settings, press <ENTER> to accept the settings and move to the next screen to set the system clock.



13. The encoder uses Military Time (24-hour clock format) for its system clock entries.



14. Use <UP>, <DOWN>, <STREAM>, and <ENTER> to set the hour and minute of the system clock.



15. The last setting is the selection of the video input format that you enter into the encoder.

You will see the following prompt message.



16. Press **<ENTER>** to continue.



17. Select your video source format from either NTSC or PAL.



18. Press **<ENTER>** to set the format; the final screen appears confirming you have successfully set up your encoder.





19. Press **<ENTER>** to exit the setup menu and begin using your encoder.



WARNING: Installation of the equipment must comply with local and national electrical

codes.

WARNING: Read the installation instructions before connecting the system to the

power source.

WARNING: Only trained and qualified personnel should be allowed to install, replace,

or service this equipment.

WARNING: This product requires short-circuit (overcurrent) protection, to be provided

as part of the building installation. Install only in accordance with national

and local wiring regulations.

**WARNING**: The power supply must be placed indoors.

WARNING: The plug-socket combination must be accessible at all times, because it

serves as the main disconnecting device.

WARNING: Do not work on the system or connect or disconnect cables during periods

of lightning activity.

WARNING: To avoid electric shock, do not connect safety extra-low voltage (SELV)

circuits to telephone-network voltage (TNV) circuits. LAN ports contain SELV circuits, and WAN ports contain TNV circuits. Some LAN and WAN ports

both use RJ-45 connectors. Use caution when connecting cables.