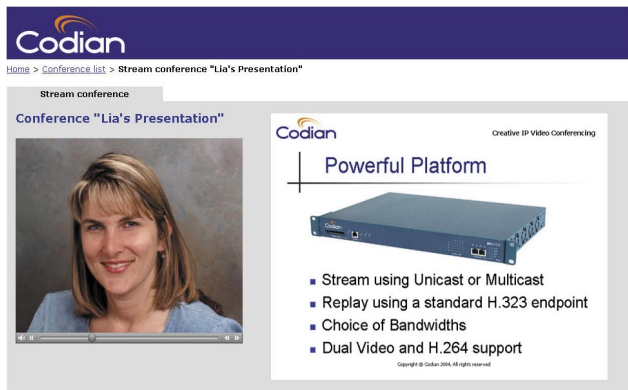


## IP Video Conference Recorder and Streaming Server

The IP VCR 2200 series of IP Video Conference Recorders allow you to record video and slides from standard video conferencing equipment. The content can be streamed live or played back on demand at multiple speeds to a PC or any video conferencing endpoint



The IP VCR 2200 series is unique - using the latest purpose-built video technology to deliver a powerful and versatile video appliance which is exceptionally easy to install and use.

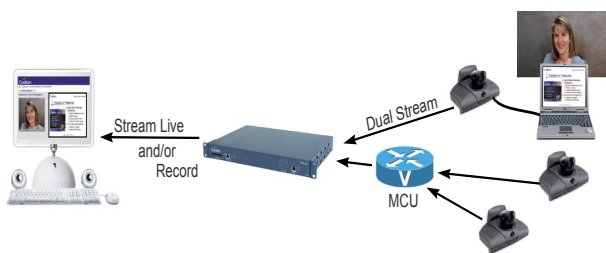
### Create content

The IP VCR 2200 makes it easy to create content by capturing Video and Data from your standard H.323 video conferencing equipment:

- Call the IP VCR direct to record a presentation
- Connect the IP VCR to your MCU to record a conference
- Record both sides of a point to point call simply by dialling a prefix before the number - both sides will be recorded in a single stream using picture in picture or a side by side layout.

Data content can be anything displayed on a computer screen, not just slides, and it does not need to be uploaded in advance:

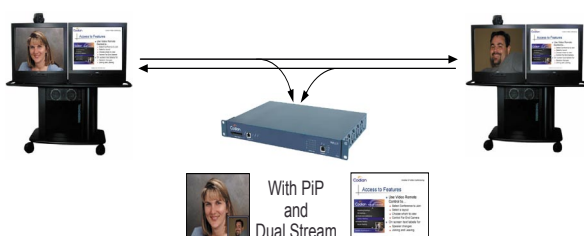
- Capture live from your video conference endpoint using Dual Video



### Record calls

The video is recorded in industry standard H.263 or MPEG format and the data content is recorded as JPEG images; this allows easy streaming to any browser, in real time or at a later date. Use the built in storage, export to an external streaming server or burn onto a CD.

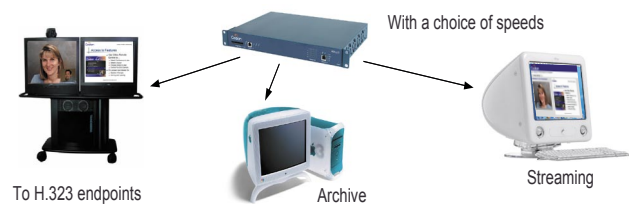
For efficient storage and playback the video can be recorded simultaneously at multiple speeds, independent of the speed of the conference.



### Stream live or playback later

The IP VCR 2200 gives you complete flexibility over how you view your video and data:

- Stream live to reach a wider audience - at multiple speeds to ensure everyone can watch the action
- Playback on demand, at multiple speeds, through any PC with a web browser using QuickTime, RealPlayer or Windows Media Player®
- Playback on demand using any H.323 video conferencing endpoint



### Applications

- Record lectures and presentations, along with the slides to allow later viewing or archive onto a DVD
- Conventions and company meetings can now be stored and streamed using your existing equipment
- Broadcast and record important video conversations from a guest presenter
- Record board meetings for absent directors
- Allow remote interviews of job applicants or patients to be replayed
- Allow remote depositions and record both ends of the video
- Record quality based meetings for archiving under ISO 900X
- Turn concerts into webcasts without needing a professional camera crew
- Product demonstrations can now take place without having to use an expensive on-line meeting provider
- Record video conversations to establish an audit trail for financial transactions

### Three High Performance Versions

Model	H.323 recording ports	H.323 playback ports	Video streaming Unicast / Multicast	Recorded hours High quality / Low quality
IP VCR 2210	1	5	100 / unlimited	50 / 200
IP VCR 2220	5	10	200 / unlimited	100 / 400
IP VCR 2240	10	20	400 / unlimited	200 / 800

#### Video Standards

H.261, H.263, H.263+, H.263++, H.264, MPEG-1, MPEG-4

#### Video Resolution

QCIF, QSIF, CIF, SIF

All recordings are stored at CIF resolution

#### Frame Rates

Up to 30 frames per second in all modes.

#### Audio Standards

G.711, G.722, G.722.1<sup>α</sup>, G.728, G.729, MPEG-1 layer II

#### Protocols

H.323 v4, H.239 (dual video)<sup>α</sup>, ftp, Telnet, RTP, RTSP, HTTP, DHCP, SIP<sup>α</sup>

#### Bandwidth

From 128kbit/s to 2 Mbit/s

#### Transcoding and Transrating

Video and audio recorded, streamed or played back via H.323, using a bandwidth or codec that is different than the source. Recording, streaming and playback at multiple bandwidths - eg can record single stream at two or more bandwidths. IP VCR will transcode and transrate as required.

#### Recording

From H.323 end point, MCU or Gateway  
From two H.323 end points in a conference call - video recorded side by side or PIP (voice activated)  
H.323 dial in, or dial out from web server  
Data from Dual Video / H.239 compatible endpoints<sup>α</sup>  
Record video at multiple bandwidths  
Archive to external servers using ftp

#### Streaming Video

Stream live or recorded content  
Slides presented alongside video  
Pause, rewind and fast forward for recorded playback  
Embedded via web interface or standalone via URL  
Stream at multiple bandwidths  
Viewed using RealPlayer<sup>™</sup>, QuickTime<sup>™</sup> or Windows Media Player<sup>β</sup>  
Support for 3rd party streaming servers (eg Apple)  
Unicast and Multicast

#### H.323 playback

To H.323 end point, MCU or Gateway  
Select using E.164 address, using Auto Attendant or dialout from web server  
Replay of data / slides using Dual Video / H.239<sup>α</sup>  
Pause, rewind and fast forward using remote control  
Bandwidth / codec adjusted to match endpoint and network

#### Embedded Web Server

Complete configuration, control and monitoring of the system and conferences

#### System Management

Management via embedded web server  
RS-232 for local control and diagnostics  
Telnet and Syslog for diagnostics  
Configurable event logs and full H.323 decoding  
Configuration backup to network or Compact Flash  
Secure upgrades through Ethernet or Compact Flash  
SNMP, XML API<sup>α</sup>

#### Quality of Service

DSCP, IP Precedence, TOS

#### Security Features

Administrator, User and Guest passwords  
Password protected streaming and content playback  
DTMF passwords for H.323 endpoints  
Secure non PC hardware and operating system  
AES encryption, 128 bit key, H.235<sup>α</sup>

#### Interfaces

1 (or 2) RJ45 Ethernet, 10/100/1000 Mbit/s full/half duplex, manual or auto sensing  
RJ45 serial port  
Compact Flash socket  
37 status LEDs

#### Environmental Data

Operating temperature 0°C to 35°C ambient  
Relative humidity below 90%

#### Physical Dimensions

Height 1.73", 44 mm (1U), Width 17.2", 437 mm  
Depth 12.3", 312 mm, Weight 9 lbs, 4kg  
19" rack mountable (kit supplied) or stand-alone  
Power 100-240 VAC, 50/60Hz  
110W max power consumption

#### Approvals and Compliance

European safety: EN 60950-1:2001  
USA safety: UL 60950-1 First Edition  
Canada safety: CSA 60950-1-03  
EMC: EN55022 class B, EN61000-6-2,  
EN61000-4-2,-3,-4,-5,-6,-11, FCC Part 15 class A  
CE marked



<sup>α</sup> Not available in initial release, will require a software update

<sup>β</sup> Live streaming to Windows Media Player not available in initial release, will require a software update