PRESENTATION RECORDER™ HD EXTREME

Rackmount: PR-HD-EXTREME-R
Dual Rackmount: PR-HD-EXTREME-D

PRESENTATION RECORDING AND STREAMING

The PR-HD-EXTREME-R/D captures video, audio and computer feeds together into a combined HD video that records the entire presentation to the very popular H.264/MP4 open standard. The PR-HD-EXTREME-R/D may also simultaneously stream the resulting file either locally within a network or across the internetwith the NCast Presentation Server or other content delivery services.The rackmount unit may be configured with a single encoder (-R) or with dual encoders (-D).

The PR-HD-EXTREME-R/D fully automates this recording and streaming by offering a dedicated hardware solution with a powerful set of features.

The PR-HD-EXTREME-R/D allows users to:
- Capture—several multimedia feeds: graphics, video, and audio,
- Compose—these feeds with PiP into a single multimedia stream,
- Encode—the stream into a standard MP4 (H.264) file,
- Cast—that file on the Internet using realtime streaming protocols,
- Archive—the stream for on-demand viewing.

The PR-HD-EXTREME-R/D introduces support for up to WUXGA (1920x1200) input resolutions with up to WXGA (1280x720) capture resolutions and PiP (Picture-in-Picture) video and graphics overlay. The unit is a dedicated hardware solution that combines simple operation with a powerful set of features. Enjoy universal interoperability with any RGB/DVI source: laptops, PCs, MACs, document cameras, diagnostic equipment, etc.

APPLICATIONS

The PR-HD-EXTREME-D is a unique dual encoder unit which enables four different application solutions:

1. Two independent encoders – With identical inputs, one encoder may be setup to stream and record a high-bandwidth, high-resolution stream and the second encoder provides for a reduced resolution, reduced bandwidth stream.

2. Dual wide-screen delivery - Each encoder is capable of recording and streaming a full hi-def image independently. While one encoder transmits a 1080p hi-def camera stream, the other encoder transmits a wide-screen presentation. Telepresence at a budget price!

3. Synchronized Encoders - Two HD 1920x1080 wide-screens side by side.

4. Fail-Safe System – Each encoder independently transmitting the same material. Should one fail, the receivers can switch to the other.

FEATURED HIGHLIGHTS

INTEGRATED VIDEO AND GRAPHICS
PR-HD technology integrates high resolution graphics and video sources into a PiP (Picture-in-Picture) or Picture-by-Picture format for H.264 playback.

PiP CUSTOMIZATION
Robust control set available for Picture-in-Picture technology, logo insertion and textual description. Graphical and dynamic text overlays add details.

CHANNEL/SESSION TEMPLATES
User-defined preset templates simplify session setup.

SCHEDULING
Schedule one or more Recorders using Google Calendar or other iCalendar based tools.

ROBUST
Embedded Linux kernel for secure, crash-free operation. Diskless operation for ultra-reliability. Green design, very low power.

SCALABLE
NCast technology allows for maximum scalability with remote users if streamed through multicast.

GRAPHICS RESOLUTION
Supports up WUXGA (1920x1200) input and HD (1920x1080) record or stream, simultaneous WXGA (1280x720) stream and record capabilities.

GRAPHICS QUALITY
Retain full integrity of original image using motion adaptive de-interlacing.

AUDIO CAPABILITIES
Audio input is fully synchronized with the video and graphics presentation for flawless playback.

RECORD CAPABILITIES
Archiving feature captures any source for later download or remote viewing.

PLAYBACK OPTIONS
Recorded archives auto-upload to a VOD server. H.264 encoding is compatible with Flash Media players.

COMPLETELY AUTOMATED
Automated scheduling, recording, work-flow processing, and distributing.

DESKTOP PLAYERS
Anyone connected to the network may view a presentation via a web browser or media player (Flash, Quicktime, VLC, HTML5 etc.) Playback by Windows Media Player and more.

© 2013 NCast Corporation. All rights reserved. NCast, the NCast logo, Telepresenter, Presentation Server, Presentation Recorder, NWay, Distribution Server, Work-flow Clusters and Excellence in Capture and Streaming are trademarks or service marks of NCast Corporation. Patents. All other trademarks herein are the property of their respective owners.

TECHNICAL SPECIFICATIONS

Rackmount: PR-HD-EXTREME-R
Dual Rackmount: PR-HD-EXTREME-D

GRAPHIC AND VIDEO INPUTS
DVI-I (Laptops, HD Video)
RGB (DB15), Y-Pr-Pb
HDMI
Display Port
Composite Video
Supports: WUXGA, WXGA, XGA, SVGA, 720p, and 1080p

GRAPHICS RESOLUTIONS & PERFORMANCE
Simultaneously records and streams up to 720p (1280x720) at 30 fps
Records or streams up to 1080p (1920x1080) at 25 fps

GRAPHICS OUTPUTS
720p (1280x720) / 1080i (1920x1080)
Y-Pb-Pr or RGB (DB15) 16.7 M colors, wide-screen displays
HDMI output connector

GRAPHICAL OVERLAYS
Add JPEG, PNG, and GIF images to the final screen composition
Dynamic text overlays add real-time titles and text

GRAPHICS COMPRESSION
H.264 (ISO/IEC 14496-10)

AUDIO
MP4, AAC (ISO 14496-3), Low Complexity Profile
Input Sampling, 16 Bits, 44.1 kHz
Input, Stereo, Line-In & Mic-In on 3.5mm Jack (PC Audio type)
Output, Stereo, Line Out, 3.5mm Jack (PC Audio type)
XLR Audio Line-Level Input Support, Mono only

NETWORK INTERFACE
RJ-45 (LAN, DSL, Cable Modem), Ethernet 10/100 Mbps, DHCP

COMMUNICATION PROTOCOLS
Multicast, Unicast, HTTP, HTTPS, UDP, TCP/IP, RTP, RTCP, RTSP, RTMP, DHCP, NTP, FTP, SFTP, Telnet, SMTP, SNMP

EXTERNAL INTERFACES
Serial RS-232 port on DB-9 connector, USB, Power Connector

ENCODING BITRATES
Graphics 128 Kbps to 5 Mbps
Audio 16 Kbps to 128 Kbps

ENTERPRISE SYSTEM MANAGEMENT
Serial Crestron/AMX compatibility (Serial, Telnet, HTTP)
iCalendar support (Google Calendar)
Optional Java or Python Systems Manager
NCast Management Dashboard

PR-HD-EXTREME SERIES MODELS
PR-HD-EXTREME-R Rackmount Recorder (1U)
PR-HD-EXTREME-D Rackmount Dual Stream Recorder (1U)

ARCHIVE FEATURES – SOLID STATE DISK
Archive and record options – 32/64 GB storage
Archives stored as MP4 files or H.264 files (ISO 14496-14)
Playback using Windows Media Player, Quicktime, VLC, etc
Audio using MP4 AAC (ISO 14496-3)
Metadata index files with title, author, and subject
Saves to USB
Automated FTP and SSH FTP file push
Upload to NCast Presentation Server or Kaltura
Closed Caption SRT files

SETUP
USB Stick for IP Settings

USER INTERFACE CONTROLS
Capture size, Resolution and Aspect ratio
Graphics overlay positioning (vertical, horizontal)
PiP size, location (Overlap or Side-by-side)
Brightness, contrast, sharpness, saturation, hue
Audio Input Gain, Audio Output Volume
Dynamic text overlays, Closed Caption controls and Chapters
User-defined channel preset templates

STREAMING CAPABILITIES
Multicast, RTSP or RTMP Unicast to a Streaming Server
Flash Player, Quicktime, HTML5, DivX, VLC, and others supported

SECURITY
Embedded Linux OS, HTTPS, SSL Certificate, SSH FTP

DIMENSIONS AND WEIGHT
Rackmount: 19.0" W (482.6mm) x 10" L (254.0mm) x 1.75" H (44.5mm), 10 lbs (4.55 kg)
Dual Rackmount: 19.0" W (482.6mm) x x 15" L (381.0mm) x 1.75" H (44.5mm), 15 lbs (6.8 kg)

POWER – GREEN DESIGN
Power Consumption: 30 W (Rackmount)/60 (Dual)
Power Supply: Internal AC 100-240V 50/60 Hz—80/160W

ENVIRONMENTAL OPERATION
Operating Temperature: 10° to 35°C (50° to 95°F)
Non-operating Temperature: -40° to 70°C (-40° to 158°F)
Operating Relative Humidity: 8% to 90% (non-condensing)
Non-operating Relative Humidity: 5 to 95% (non-condensing)

REGULATORY
FCC Part-15 Class A
EMC Directive 2004/108/EC
EMD Low Voltage Directive 2006/95/EC
RoHS Compliant 2002/95/EC

NCAST CORPORATION 568 E. Weddell Drive, Suite 8, Sunnyvale, CA 94089 USA
Voice: +1 408-541-9230 Fax: +1 408-541-9231 http://www.ncast.com

© 2013 NCast Corporation. All rights reserved. NCast, the NCast logo, Telepresenter, Presentation Server, Presentation Recorder, NWay, Distribution Server, Work-flow Clusters, and Excellence in Capture and Streaming are trademarks or service marks of NCast Corporation. Patents. All other trademarks herein are the property of their respective owners