

# PRESENTATION RECORDER™ HD ULTRA

Mobile: PR-HD-ULTRA-M

Podium: PR-HD-ULTRA-P



## PRESENTATION RECORDING AND STREAMING

The PR-HD-ULTRA-M/P 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-ULTRA-M/P may also simultaneously stream the resulting file either locally within a network or across the internet with the NCast Presentation Server or other content delivery services.

The PR-HD-ULTRA-M/P fully automates this recording and streaming by offering a dedicated hardware solution with a powerful set of features.

The PR-HD-ULTRA-M/P 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-ULTRA-M/P 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.

The unit is easy to operate, simply plug in RGB (laptop, document camera, etc), DVI, video, and audio sources. Start and stop sessions using the web interface, serial commands or the ubiquitous Google calendar. The input signals will be automatically detected by the system and combined dynamically in a PiP (Picture-in-Picture) format. At the start of a session, this combined signal will be encoded as an MP4 file, and will then be available for streaming, recording and collaborating.

## APPLICATIONS

- Presentation and Lecture Capture
- Corporate and Medical Training
- Simulations
- Events, Seminars, Conferences
- Focus Groups
- Interview Recordings
- Government Meetings



## 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. The PR-HD-ULTRA supports 3G-SDI input.

### 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.

# TECHNICAL SPECIFICATIONS

**Mobile: PR-HD-ULTRA-M**  
**Podium: PR-HD-ULTRA-P**

## GRAPHIC AND VIDEO INPUTS

DVI-I (Laptops, HD Video)  
RGB (DB15), Y-Pr-Pb  
HDMI  
Display Port  
Composite Video  
3G-SDI  
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

## 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-ULTRA SERIES MODELS

PR-HD-ULTRA-M Mobile Recorder  
PR-HD-ULTRA-P Podium Recorder (Flange mount, any orientation)

## ARCHIVE FEATURES – SOLID STATE DISK

Archive and record options – 32/64/128 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

Mobile: 7.3" W (186.0mm) x 10.2" L (259.0mm)  
x 2.3" H (58.5mm), 4 lbs (1.8 kg)  
Podium: 8.25" W (209.6mm) x 10.25" L (260.3mm)  
x 2.5" H (63.5mm), 3 lbs (1.4 kg)

## POWER – GREEN DESIGN

Power Consumption: 30 Watts, 12V DC In  
Power Supply: External AC Adapter 100-240V 50/60 Hz—60W

## 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

