

# Product Specifications

infrastructure systems

**Solutions for teachers,  
administrators, and  
technical directors.**

## Conductor

Efficient network paging & control



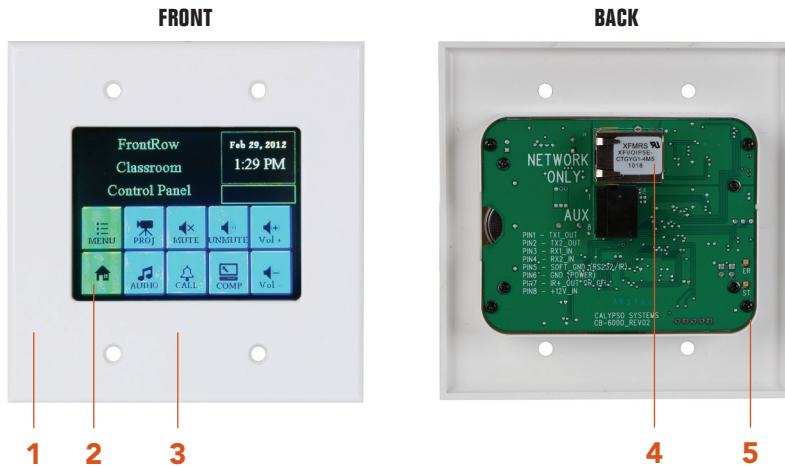
## ezRoom

Classroom audio, AV control  
and connectivity



IP Paging, Bells, & Controls		
Networkable	Yes	Yes
Intercom	Yes	Yes
Paging	Yes	Yes (as endpoint)
Page Override	Yes (IP only)	Yes
Bells/Alerts	Yes	Yes (as endpoint)
Coordinated Emergency Actions	Yes	No
Scheduled Actions	Yes	Yes
Remote Update	Yes	Yes
Customizable via Software	Yes	Yes
Integrated AV Control & Management		
Asset Management Software	Yes	Yes
Network/Serial/IR Device Control	Yes	Yes
Video Inputs	N/A	2-3
Client System Control Software	N/A	Yes
Installed Amplification		
Teacher Voice Priority Feature	N/A	Yes
Audio Inputs	Multiple	3-6 (installer-accessible) 2-3 (user-accessible)
Rack Mountable	Yes (server)	N/A
Audio Output (PFM/Podcasting)	N/A	1
Integrated Speaker Line Array	Available	Available
Features		
Number of Systems per School	1 (250 endpoints)	Unlimited
Touch-Screen Interface	Yes	Available
Lead Free/RoHS Compliance	Yes	Yes
SmartCharge Fail Safe Battery System	N/A	Yes
Simultaneous Mic Channels	N/A	2
Microphone Channel Choices	N/A	2
External Sensor Inputs	N/A	2
Optional Student Microphone	N/A	Yes
Transmission Technology	IP (streaming)	Infrared (microphones)
Platform	Digital	Digital
Warranty	3 Years	3-5 Years



**1 Saves time & money**

Organizes all classroom device control into a single, reliable touch-screen; allows remote/scheduled control of devices over the network — saving potentially thousands of dollars per year in projector bulb life alone.

**2 Customizable and teacher-friendly**

No hunting for the remote, and no button overload. Because the CB6000 is a programmable touch-screen, buttons can be logically grouped and then navigated via automatic page flips.

**Easy to see, easy to use**

Large, 9cm/3.5in color touch-screen with 320x240 resolution. Display information such as room number, course, and teacher's name — even customizable with your school logo.

**Date/time display****Built-in stop watch**

A count-down clock is built in for timing tests and other activities.

**Energy saving**

Sleep mode keeps energy usage low and dims the display when not in use to avoid distractions in dark rooms.

**3 IR learning**

Need to control non-serial devices? The CB6000 has a built-in IR learning sensor to make configuration a snap.

**4 More control**

Simultaneously controls 2 serial devices (bi-directional, 2400 to 115k Baud), numerous network devices, and an infrared device. Easily switch the IR output to GPI for even more automatic action possibilities.

**Networked**

Communicates over standard 10/100Mb/s networks (auto-sensing) using either TCP/IP or UDP protocols.

**Puts even non-networked devices on the network**

The CB6000 accepts network-based "pass through" commands — so FrontRow's Encore™, Maestro™, and Conductor™ network software can control and help you manage devices that are not directly networkable!

**Immediate or scheduled actions**

A single button press can initiate one or more simultaneous or chained actions. What's more, you can program the CB6000 to execute actions based on timed events — for example, shutting down all projectors at 8pm.

**Remote update**

As projectors and other controlled devices change, you can remotely update the configuration software.

**Secure**

The touch-screen can be password-protected; and network access can also be protected against unauthorized use.

**5 Easier installation**

Extremely easy to install either as a standalone controller or as part of a more complete ezRoom® system. Fits in virtually any US-standard double-gang AV box, electrical box, or surface box on a wall, lectern, or any flat surface. Just one UTP Cat 5e cable supplies power and control.

**Easier configuration**

Configuration is as simple and flexible as you need it to be. Use DHCP or static IP addressing and our pre-programmed, downloadable file for the projector you want to control. Modify these as little or as much as you like with the GUI touchscreen layout design software!

**Broad compatibility**

Works with practically any device that allows serial, IR, or network control; all FrontRow ezRoom® hardware, and the FrontRow Encore™, Maestro™, and Conductor™ network software.



Lead Free

**SPECIFICATIONS**

- Network support:** 10/100Mb/s (auto sensing)
- Serial Baud rate:** 2400 to 115k baud
- Power supply:** 12VDC (via UTP Cat 5e)
- Format:** Double-gang
- Size (WxHxD):** 11.4 x 11.4 x 3.3cm/4.5 x 4.5 x 1.3125in
- Weight:** 113g/4oz
- Control/Jump Buttons/Page:** 8
- Pages:** 5

**USER CONTROLS**

- 9cm/3.5in 320x240 resolution color touch-screen

**INPUTS/OUTPUTS**

- RJ45 network
- RJ45 aux:
  - (2) bi-directional serial
  - (1) IR control output or general purpose input (GPI)
  - +12V input

**TEACHER EDITION FOR iOS**

Available on the App Store,  
FrontRow Teacher Edition



for iOS is a dynamic, user-friendly app that works directly with the CB6000 control panel.

**Easy to setup**

Pair with a CB6000 to configure the application in seconds.

**Easy to use**

Buttons and actions match the CB6000 to make it easy to learn and switch between mobile device and wall panel.

**Secure**

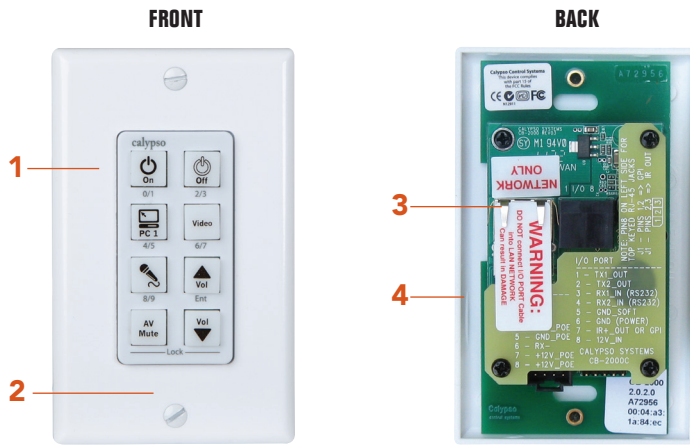
Password protection prevents unauthorized use.

**Customizable**

Allows the teacher to update the text on the app and the control panel simultaneously.

**REQUIREMENTS**

- iPad 2 and later (3, 4th gen, iPad Air)
- iPhone 4 and later (4S, 5, 5S, 5C)
- iOS 6.1 and up
- Works with any CB6000 or firmware in the field
- Works on the school LAN / wireless network



**SPECIFICATIONS**

- Network support:** 10/100Mb/s (auto sensing)
- Serial Baud rate:** 2400 to 115k baud
- Power supply:** 12VDC (via UTP Cat 5e)
- Format:** Single-gang, Decora®
- Size (WxHxD):** 5.1 x 4.4 x 12.7cm/2 x 1.75 x 5in
- Weight:** 102g/3.6 oz
- User controls:** 8 customizable buttons, optional rotary volume control

**INPUTS/OUTPUTS**

- RJ45 network
- RJ45 aux:
  - (2) bi-directional serial
  - (1) IR control output or general purpose input (GPI)
  - +12V input

**CB2000 ACCESSORIES**



Decora® compatible rotary volume control (integrated with CB2000 as CB2050)

**Easier configuration**

Use DHCP or static IP addressing and our pre-programmed, downloadable file for the projector you want to control. Modify these with the onboard GUI configuration software!

**Broad compatibility**

Works with practically any device that allows serial, IR, or network control; all FrontRow ezRoom® hardware, and the FrontRow Encore™, Maestro™, and Conductor™ network software.

**1 Saves time & money**

Organizes all classroom device control into a single, reliable button panel; allows remote/scheduled control of devices over the network — saving potentially thousands of dollars per year in projector bulb life alone.

**Customizable & teacher-friendly**

Customizable, backlit panel greatly simplifies using technology in the classroom.

**2 IR learning**

Need to control non-serial devices? The CB2000 has a built-in IR learning sensor to make configuration a snap.

**3 More control**

Controls 2 serial devices (bi-directional, 2400 to 115k Baud), numerous network devices, and an infrared device. Easily switch the IR output to GPI for even more automatic action possibilities.

**Networked**

Communicates over standard 10/100Mb/s networks (auto-sensing) using either TCP/IP or UDP protocols.

**Puts even non-networked devices on the network**

The CB2000 accepts network-based “pass through” commands — so FrontRow’s Encore™, Maestro™, and Conductor™ network software can control and help you manage devices that are not directly networkable!

**Immediate or scheduled actions**

You can program the CB2000 to execute actions based on timed events — for example, shutting down all projectors at 8pm.

**Remote update**

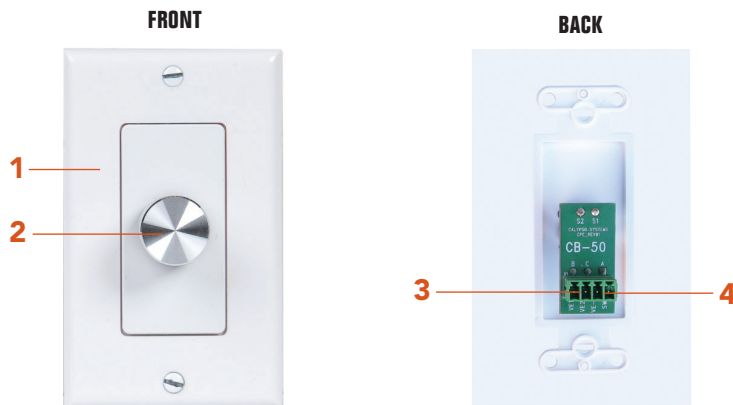
As projectors and other controlled devices change, you can remotely update the configuration software.

**Secure**

The control panel can be password-protected; and network access can also be protected against unauthorized use.

**4 Easier installation**

Fits in virtually any US-standard double-gang AV box, electrical box, or surface box on a wall, lectern, or any flat surface. Just one UTP Cat 5e cable supplies power and control.



- Power supply:** 12VDC (via Cat 5e)
- Format:** Single-gang, Decora®
- Size (WxHxD):** 5.1 x 4.4 x 12.7cm/2 x 1.75 x 5in
- Weight:** 102g/3.6 oz

**1 Decora® panel**

Can be dual-ganged with CB2000, freeing up button for other function.

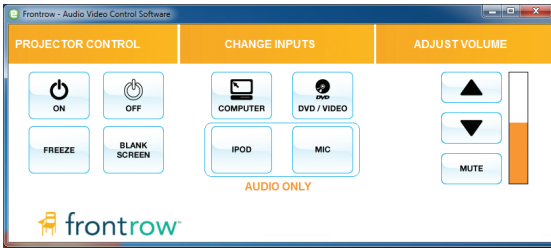
**2 Rotary volume control and push button mute toggle**

**3 4-pin connector**

For bridging to the CB2000.

**4 4-pin connector**

Can also be programmed as a button trigger for GPI.



### Desktop user interface for virtually any device

Organizes all classroom device control into a single reliable desktop UI. Works either as a stand-alone interface — steering commands through serial ports or to IP addresses — or with FrontRow network controllers.

### Real-time feedback

Encore™ supports bi-directional communication. With no code-writing, and when used with a FrontRow controller, Encore buttons can be configured to reflect the current state of projectors, AV switches and more.

### Easy to build

The software package provides the tools needed by dealers and system integrators to quickly build Windows-based, graphical control interfaces. Using a standard Windows drag-and-drop environment, developers can create a unique look and feel for each interface, or can create a set of standard templates to be used on any number of projects. You can even import custom graphics and enjoy transparent mode operation. Yet these software tools require little training and no programming skills, while offering remarkable power and flexibility.

## SPECIFICATIONS

**Platform requirements:** Windows XP or higher; Mac OSX

### Immediate or scheduled actions

A single button press can initiate one or more simultaneous or chained actions. What's more, you can program Encore to execute actions based on timed events — for example, shutting down all projectors at 8pm.

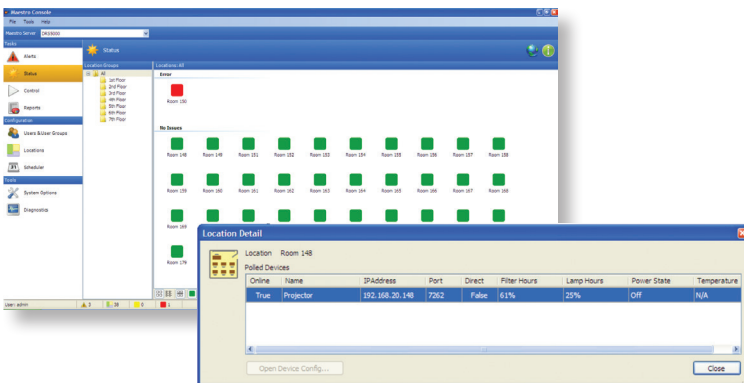
### Remote update

As projectors and other controlled devices change, you can remotely update the software.

### Automatic update and licensing

The DRS5000 server can save hours of work by auto-updating and auto-licensing your Encore copies — for example, when computers are wiped for the new school year.

## MAESTRO MANAGEMENT SOFTWARE



### Centrally monitor hundreds — even thousands — of projectors and more

Track and support projectors, displays, audio and video conferencing systems, audio amplifiers, and more across multiple locations.

### Save money and time

Maestro™ lets you conserve expensive projector bulb hours with scheduled or instantaneous projector shut down from the comfort of your office. And being able to get early warning of problems — and troubleshoot them remotely — saves untold hours in precious administrator labor.

### Windows-based, client-server app

The heart of Maestro resides on the DRS5000 server (see Conductor Administrator Station), with access via any networked web browser. Thanks to ezRoom endpoints like CB6000 and CM3000, even non-networked projectors can be visible and controlled by the administrator via Maestro.

### Real-time data, automated control

The browser-based Maestro console monitors and reports on the real-time status of items like projector lamp and filter hours, power state and input status, while providing an interface for immediate or scheduled, specific or broadcast control of all attached equipment.

### See it the way you want it

Maestro allows user-defined device grouping and detailed room views, all through a clean graphic console with color-coded alerts.

## SPECIFICATIONS

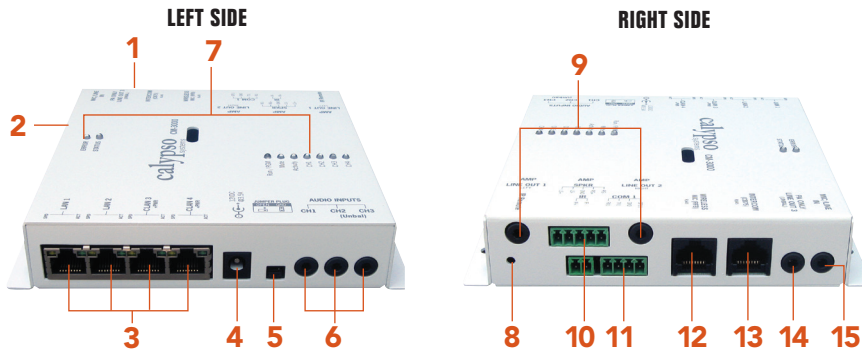
**Platform requirements:** Windows XP or higher

### Email alerts

Get automated email alerts for user-defined exception conditions (e.g., projector bulb life has reached 1000 hours) and usage logs and reports.

### Efficient bandwidth use

Despite giving you a huge amount of powerful real-time data, Maestro minimizes network traffic by transmitting data to the server only when an exception occurs.



**1 Single solution for media and public address audio**

Because it is compatible with the Conductor™ IP-based paging and bell system, the CM3000 is the most efficient choice for audio amplification in the classroom. It easily handles both streaming and analog audio from sources within the classroom or from the office.

**Reduces installation & maintenance costs**

Eliminates redundant amplifiers and speakers as a single solution.

**Easier configuration**

Just use DHCP or static methods to set an IP address, set up your projector baud rate, and you're done. The onboard GUI software makes it easy to adjust audio channel settings and more as needed.

**Schedule actions**

Just like our control panels, you can program the CM3000 to execute actions based on timed events — for example, shutting down all projectors at 8pm.

**Alert priority**

Auto-detects priority messages coming from the office via the Conductor IP-based paging system, or analog system, and mutes media and mic audio.

**Mic priority**

Attenuates media audio whenever teachers or students use FrontRow wireless mics.

**Remote update**

As projectors and other controlled devices change, you can remotely update the configuration software.

**Secure**

Keep out hackers by setting up passwords for network access.

**2 Low profile, easy to mount**

Ordinarily built into ezRoom core enclosures, the CM3000 can also be mounted behind whiteboards or under furnishings as a standalone component.

**3 Networked, without hogging a network drop**

CM3000 includes a 4-port network switch that eliminates the need for an additional network drop and reduces the amount of network cable required in the classroom. Communicates over standard 10/100Mb/s networks (auto-sensing) using either TCP/IP or UDP protocols.

**4 Power jack**

**5 Jumper plug**

Provides a hard ground reference for the unbalanced input.

**6 Balanced and unbalanced stereo audio inputs**

**7 Verification LEDs**

**8 IR remote input window**

For control of the amplifier using legacy infrared remotes.

**9 Audio outputs**

**10 Simple speaker hookup**

Captive screw terminals make speaker connection quick and easy.

**11 IR and serial control outputs**

Routes control signals from CB2000, CB6000, or Encore control panels or from the Maestro and Conductor platforms to serial projectors and other devices.

**12 Wireless mic input**

Connect the Symbio receiver for amazing voice reinforcement quality.

**13 Intercom input**

Connect the CB75 intercom panel or CB85 ceiling mic to build two-way communication with the front office into your integrated classroom.

**14 PA audio output**

Outputs only the audio stream from Conductor.

**15 Analog audio streaming source input**

Can also be used with the TB13 analog page override adapter.

**SPECIFICATIONS**

**Network support:** 10/100Mb/s (auto sensing)

**Serial Baud rate:** 2400 to 57600 baud

**Amplifier type:** Class D

**Frequency response:** 20Hz to 20kHz

**Signal-to-noise:** >84 dB @ 20 Hz to 20 kHz at maximum output (unweighted, with balanced input)

**THD:** 0.1% @ 1kHz, at nominal level

(1 watt, 8 ohm load)

**Maximum audio output power:** 2 x 8w (8Ω), 2 x 16w (4Ω)

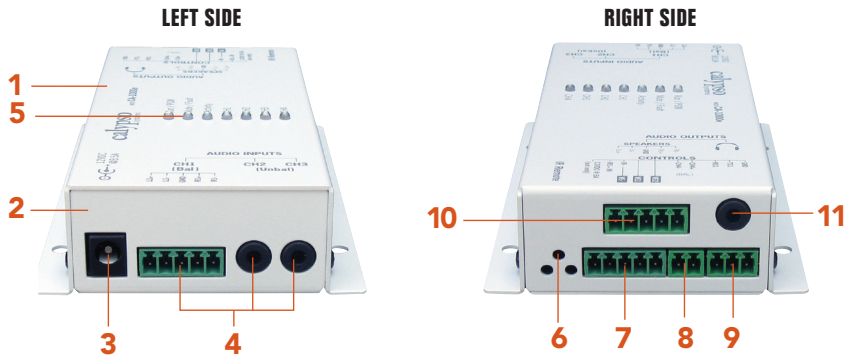
**Power supply:** 12VDC at 3.5A

**Size (WxHxD):** 13 x 14.9 x 2.86cm/  
5.125 x 5.875 x 1.125in

**Weight:** 0.35kg/0.77lbs

**INPUTS/OUTPUTS**

- Input power jack
- (4) RJ45 network jacks (2 supplying 12VDC to power control panels)
- (2) 3.5mm unbalanced inputs and (1) 3.5mm configurable balanced/unbalanced input
- (1) RJ45 mic input jack
- (1) RJ45 intercom input jack
- (3) 3.5mm audio output jacks (2 balanced, 1 unbalanced)
- (1) captive screw loudspeaker terminal left and right (mono output)
- (1) captive screw IR control terminal
- (1) captive screw serial control terminal

**1 Software configuration**

Use a convenient Java-based client app to set preferences for audio channels and communication.

**Page priority**

Mutes media and mic audio whenever an announcement is made over an analog PA system.

**Mic priority**

Attenuates media audio whenever teachers or students use FrontRow wireless mics.

**2 Low profile, easy to mount**

Ordinarily built into ezRoom core enclosures, the CA1000 can also be mounted behind whiteboards or under furnishings as a standalone component.

**3 Power jack****4 Balanced stereo audio input terminal block****4 Balanced/unbalanced 3.5mm stereo audio inputs****5 Verification LEDs****6 IR remote input window**

For control of the amplifier using legacy infrared remotes.

**7 IR control input****8 Balanced/unbalanced mono audio input**

Connect the Symbio wireless mic receiver for amazing voice reinforcement quality.

**9 Serial control input/output**

Connect the FrontRow CB2000 or CB6000 via a TB12 adapter to send RS232 commands and receive data from the amplifier.

**10 Simple speaker hookup**

Captive screw terminals make speaker connection quick and easy.

**11 ALD output**

Use for assistive listening devices or podcast recording.

**SPECIFICATIONS**

**Serial Baud rate:** 2400 to 57600 baud (19.2k default)

**Amplifier type:** Class D

**Frequency response:** 20Hz to 20kHz

**Signal-to-noise:** >84 dB @ 20 Hz to 20 kHz at maximum output (unweighted, with balanced input)

**THD:** 0.1% @ 1kHz, at nominal level (1 watt, 8 ohm load)

**Maximum audio output power:** 2 x 8w (8Ω), 2 x 16w (4Ω)

**Power supply:** 12VDC at 3.5A

**Size (WxHxD):** 13 x 8.3 x 2.86cm / 5.125 x 3.25 x 1.125in

**Weight:** 0.23kg/0.5lbs

**INPUTS/OUTPUTS**

- Input power jack
- (1) captive screw terminal block (balanced stereo audio input)
- (1) captive screw terminal block balanced mono audio input (e.g., for Symbio receiver)
- (2) 3.5mm unbalanced stereo audio input
- (1) IR sensor
- (1) captive screw terminal block (IR control input/repeater/12VDC to power control panels)
- (1) captive screw terminal block (serial control input/output)
- (1) captive screw loudspeaker terminal left and right, (mono output)
- (1) 3.5mm (stereo audio output)

**CA1000 ACCESSORIES**

CB50 Decora® compatible rotary volume control



FRONT



BACK



- 1 Adds voice reinforcement to ezRoom**  
Works with 940TM and 950H infrared microphones to boost comprehension, student performance, and teacher energy and vocal health.
- 2 Power switch**
- 3 Two channels for more dynamic teaching**  
Encourage student participation with a pass-around mic; or amplify two teachers at the same time.
- 4 Microphone indicator lights**  
Offer clear, visual confirmation of signal reception.
- 5 Power on, ready light**

- 6 External sensor ports**  
Get great signal pickup in almost any classroom with convenient ceiling or wall sensors.
- 7 Audio out jack**  
High quality 1/4in jack for connection to practically any standard amplifier.
- 8 Mic/line switch**  
Match your amplifier's level requirements instantly.
- 9 DC input**



**SPECIFICATIONS**

(See Product Specifications for Classroom Amplification Systems for details on microphones, sensors, speakers, and other components)

- Transmission type:** Infrared
- Receiving frequency:** 2.3MHz & 2.8MHz
- Frequency response:** 50Hz to 10kHz
- Signal to Noise:** > 65dB (system)
- THD:** < 1% @ 1kHz
- Power Supply:** 12V @ 500mA

**Size (wxhxd):** 14 x 4 x 19.25cm/5.5 x 1.62 x 7.75in  
**Weight:** 766g/1.7lbs.

**Mic level out:** 0V to 100mVrms at maximum volume & maximum deviation (typical)

**Line level out:** 0V to 1Vrms at maximum volume & maximum deviation (typical)

**USER CONTROLS**

- Power
- Microphone A volume
- Microphone B volume
- Output level

**INPUTS/OUTPUTS**

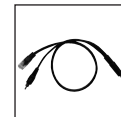
- Input power jack
- 3 RCA jacks for external sensor connection
- 1/4in audio out jack

**SELECTED 5201R ACCESSORIES**

(See Product Specifications for Classroom Amplification Systems for more information)



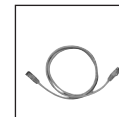
receiver power supply



adapter cable



RJ45-RJ45 adapter



UTP Cat 5e cable



ceiling sensor



940TM teacher microphone



950H student microphone

Connect a computer to the projector and amplifier.



- |   |  |
|---|--|
| <p><b>1 Decora®-compatible wall plate</b><br/>Single-gang wall plate with flying lead to 13-pin DIN connector.</p> <p><b>2 DB15 VGA input</b></p> <p><b>3 3.5mm audio input</b></p> | <p><b>4 15m/50ft AV snake cable</b><br/>Plenum-rated with locking 13-pin DIN connector</p> <p><b>5 2m/7ft fan out of audio/video leads</b></p> |
|---|--|



**AV Cable:** UL Listed, RoHS compliant

**Display resolution:** Up to UXGA (1600x1200)

**Cabling:** Plenum-rated 15.25m/50ft AV cable  
• Fits through 3/4 inch conduit

#### INPUTS/OUTPUTS

**Input:** Female connectors - DB 15 VGA, 3.5mm TRS, RCA composite video coaxial, RCA L/R coaxial

**Output:** Male connectors - DB 15 VGA, 3.5mm TRS, RCA composite video coaxial, RCA L/R coaxial

Connect a computer and video device such as DVD or VCR to the projector and amplifier.



- |  |  |
|--|--|
| <p><b>1 Decora®-compatible wall plate</b><br/>Single-gang wall plate with flying lead to 13-pin DIN connector.</p> <p><b>2 DB15 VGA input</b></p> <p><b>3 3.5mm audio input</b></p> <p><b>4 Composite video input</b></p> <p><b>5 Stereo RCA audio input</b></p> | <p><b>6 15m/50ft AV snake cable</b><br/>Plenum-rated with locking 13-pin DIN connector</p> <p><b>7 2m/7ft fan out of audio/video leads</b></p> |
|--|--|



**AV Cable:** UL Listed, RoHS compliant

**Display resolution:** Up to UXGA (1600x1200)

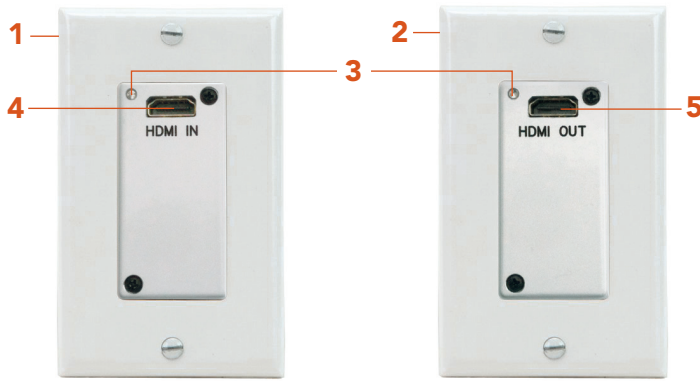
**Cabling:** Plenum-rated 15.25m/50ft AV cable  
• Fits through 3/4 inch conduit

#### INPUTS/OUTPUTS

**Input:** Female connectors - DB 15 VGA, 3.5mm TRS, RCA composite video coaxial, RCA L/R coaxial

**Output:** Male connectors - DB 15 VGA, 3.5mm TRS, RCA composite video coaxial, RCA L/R coaxial

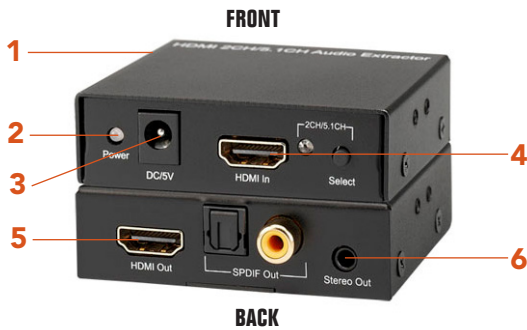




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|---|--|
| <p><b>1 Decora®-compatible HDBaseT HDMI Transmitter wall plate over Cat5e UTP</b><br/>Single-gang wall plate. Connect computers, tablets, Blu-Ray players and more to drive HDMI projectors and digital displays.</p> | <p><b>2 HDBaseT HDMI receiver</b><br/><b>3 LED power/signal indicator</b><br/><b>4 HDMI type A female input</b><br/><b>5 HDMI type A female output</b></p> |
|---|--|



**HDMI:** 3D, Deep Color  
**HDMI Extender Distance:** Up to 30m/100ft with Cat5e UTP. Use Cat6 STP (shielded) if extending 30m/100ft – 70m/230ft.  
**Input/Output:** HDMI Type A female connector  
**Digital video:** Up to 1080p @ 60Hz/50Hz  
**PC Resolution:** Up to 1920x1200 WUXGA  
**Audio:** Analog stereo output from audio de-embedder  
**Power:** +12VDC (WP-HD) +5VDC (audio de-embedder)  
**HDCP Compliant**  
**HDBaseT Class B Compliant**  
**EDID Support**

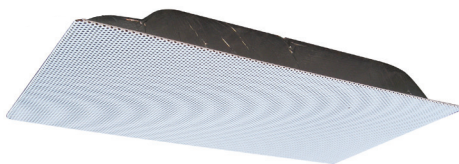


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|--|---|
| <p><b>1 HDMI audio de-embedder</b><br/>Stereo analog audio or S/PDIF digital audio output. Installed in HDMI-equipped ezRooms as part of the amplification system.</p> <p><b>2 LED power indicator</b></p> | <p><b>3 +5VDC power input</b><br/><b>4 HDMI type A female input</b><br/><b>5 HDMI type A female output</b><br/><b>6 3.5mm mini-TRS audio output</b></p> |
|--|---|



**Power consumption (max):** 1W  
**Power:** +5VDC, 200mA  
**Regulatory:** RoHS compliant, FCC, CE

**INPUTS/OUTPUTS**  
**Input:** HDMI type A female  
**Output:** Stereo 3.5mm analog, HDMI type A female



- Great sound coverage
- Cable clamp is included
- Mounts flush with ceiling for neat installation
- Rated for plenum spaces
- No assembly required



**SPECIFICATIONS**

**Average sensitivity:** 92dB-SPL 1W/1M  
**Speaker type:** 8in full range cone  
**Impedance:** 8Ω nominal  
**Loudspeaker power rating:** 12W-RMS EIA 426A Standard  
**Calculated maximum system output:** 103dB-SPL, 12W/1M  
**Magnet type:** 4.8oz BeFe Ceramic  
**Size (WxHxD):** 32.5 x 9.7 x 29.9cm/12.81 x 3.81 x 11.81in  
**Frequency response:** 65Hz – 17kHz EIA 426A standard  
**Nominal coverage angle:** 100° included angle -6dB/2kHz half space  
**Audio connection:** Pre-cut 17.8cm/7in  
**Mounting:** Replaces existing ceiling tile, mounts in tile grid, built for Plenum spaces



**SPECIFICATIONS**

**PUSH-TO-TALK MICROPHONE**

**Input power:** +12V (ITC port on CM-3000)

**Connector:** RJ45

**Microphone Modes:**

- PTT (push-to-talk)
- PTM (push-to-mute)
- On-Off toggle

**Sensitivity:** 5.6 Mv/Pa (millivolt/Pascal)

**Size (HxWxD):** 344 x 114 x 178mm/  
13.54 x 4.49 x 7.01in

**Weight:** Net 690g/24.34oz

**DRS5000 SERVER**

**OS:** Linux: Ubuntu Server 8.04 LTS

(I) Rack Unit

**CONDUCTOR**

**Bandwidth/stream:** <1% of a typical  
100 Mbps network

**NETWORK REQUIREMENTS**

**Streaming Devices/Server:** 250, in single  
Class C range

**Subnet:** Primary (attached) server network port  
requires 255.255.255.0 Class C subnet regardless  
of the network architecture. No restrictions on  
secondary (non-attached) network port, except  
that it must not be part of the same network as the  
primary network port.

**1 Push-to-talk all-call mic with pre-amp**

**2 Dedicated touch-screen PC running Conductor client**

Easy Windows-based GUI for creating communication zones, bell tones, schedules, and cascading emergency action scripts.

**Full school-year scheduling with customizable exceptions**

**Multi-user support**

**Efficient use of bandwidth**

An active Conductor audio-over-IP stream occupies less than 1% of the bandwidth on a typical 100 Mbps network. Accordingly, 10 simultaneous streams would take up about 3% of the bandwidth, and 100 such streams would only take up about 29%.

**Coordinated emergency response**

Set up scripts for audio alerts, email notifications, and media control for visual response displays. Receive alerts from classroom control panels or relay buttons.

**Auto-detect of highest priority audio source**

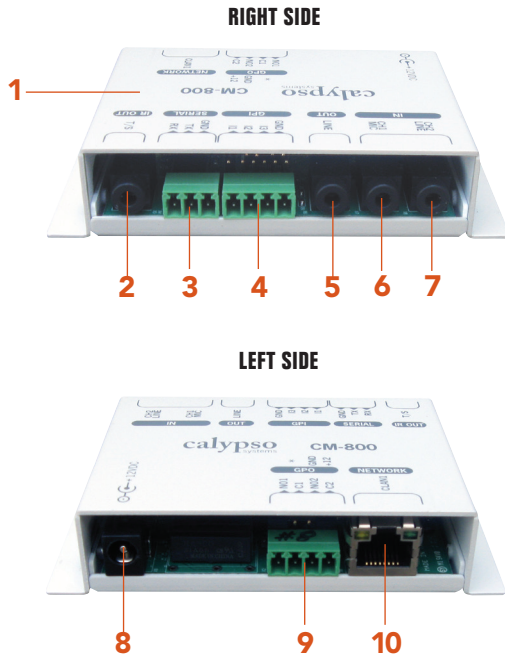
Reduces potential for audio conflict during classroom instruction.

**Remote administration from any networked browser**

**3 1RU server running Conductor and Maestro applications**

**4 Verification speakers**

**5 CM3000 amplifier/controller**



**SPECIFICATIONS**

**Network support:** 10/100Mb/s (auto sensing)  
**Serial Baud rate:** 2400 to 57600 baud  
**Power supply:** 9V 500mA  
**Size (WxHxD):** 9.8 x 6.4 x 2.3cm/3.84 x 2.5 x .913in  
**Weight:** 0.35kg/0.77lbs

**INPUTS/OUTPUTS**

- (1) input power jack
- (1) RJ45 network jack
- (1) 3.5mm unbalanced stereo audio input jack
- (1) 3.5mm mic input jack
- (1) 3.5mm amplifier balanced/unbalanced stereo/mono line output jack
- (2) captive screw general purpose output (GPO) relay terminals (4 position)
- (3) captive screw general purpose input (GPI) relay terminals (4 position)
- (1) 3.5mm infrared control output jack
- (1) captive screw RS232 serial control input/output terminal (3 position)

**1 Brings Conductor IP-based paging to 70V amps and speakers**

This audio decoder accepts streaming audio input and delivers line level audio output. Makes it easy to connect a Conductor™ IP-based paging platform to standard 70v amplifier/speaker infrastructure in common or outdoor areas.

**Converts your analog PA system to an IP-based streaming solution**

Mixes and samples line-level audio and plays it over the network.

**Puts even non-networked devices on the network**

Accepts network-based “pass through” commands — so FrontRow’s Encore™, Maestro™, and Conductor™ network software can control and help you manage devices that are not directly networkable.

**Easier configuration and update**

Onboard GUI software makes it easy to set IP address and adjust other settings. Remotely updatable as needed.

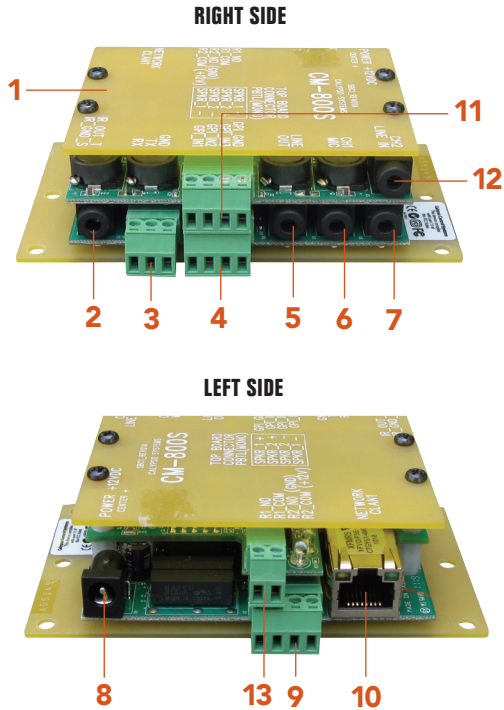
**Triggered actions**

You can program the CM800 to execute actions based on relay/GPI or streamed events.

**Secure**

Password-protected for network access.

- 2 IR control output**
- 3 Serial control input/output**
- 4 General purpose input (GPI) relay**
- 5 Amplifier line out**
- 6 Mic audio in**
- 7 Line audio in**
- 8 Power jack**
- 9 General purpose output (GPO) relay**
- 10 Network jack**



**1 Brings Conductor IP-based paging to small common areas and office spaces**

This audio decoder accepts 8kHz streaming audio input and drives up to four 8-ohm speakers, conveniently bringing IP paging to small common areas and shared office spaces.

**Converts your analog PA system to an IP-based streaming solution**

Mixes and samples line-level audio and plays it over the network.

**Easier configuration and update**

Onboard GUI software makes it easy to set IP address and adjust other settings. Remotely updatable as needed.

**Triggered actions**

You can program the CM800S to execute actions based on relay/GPI or streamed events — for example, shutting down all projectors at 8pm.

**Secure**

Keep out hackers by setting up passwords for network access.

**2 IR control output**

**3 Serial control input/output**

**4 General purpose input (GPI) relay**

**5 Amplifier line out**

**6 Mic audio in**

**7 Line audio in**

**8 Power jack**

**9 General purpose output (GPO) relay**

**10 Network jack**

**11 Simple speaker hookup**

Captive screw terminals make speaker connection quick and easy.

**12 Line audio out**

**13 Power adapter terminal**

**SPECIFICATIONS**

**Network support:** 10/100Mb/s (auto sensing)

**Serial Baud rate:** 2400 to 57600 baud

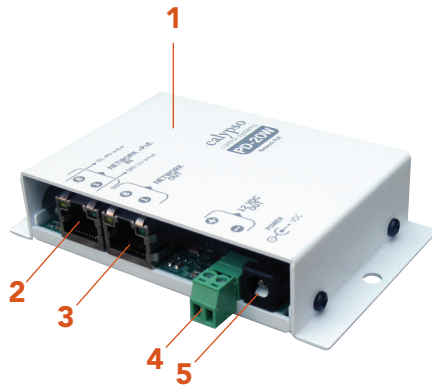
**Power supply:** 12VDC at 3.5A

**Size (WxHxD):** 9.8 x 6.4 x 3.1cm/3.84 x 2.5 x 1.2in

**Weight:** 0.35kg/0.77lbs

**INPUTS/OUTPUTS**

- (1) input power jack
- (1) RJ45 network jack
- (1) 3.5mm unbalanced stereo audio input jack
- (1) 3.5mm mic input jack
- (1) 3.5mm amplifier balanced/unbalanced stereo/mono line output jack
- (2) captive screw general purpose output (GPO) relay terminals (4 position)
- (3) captive screw general purpose input (GPI) relay terminals (4 position)
- (1) 3.5mm infrared control output jack
- (1) captive screw RS232 serial control input/output terminal (3 position)
- (1) captive screw loudspeaker terminal left and right, (mono output)
- (1) 3.5mm (audio output)
- (1) captive screw power adapter terminal



**SPECIFICATIONS**

**Network support:** 10/100Mb/s (auto sensing)

**Power supply:** 12VDC at 3.5A

**Size (WxHxD):** 10.8 x 6.4 x 2.3cm/4.25 x 2.5 x .91in

**INPUTS/OUTPUTS**

- (1) RJ45 network input jack
- (1) RJ45 network output jack
- (1) captive screw power output terminal
- (1) power input jack input/output terminal (3 position)

**MIDSPAN INJECTOR REQUIREMENTS**

**POE Type:** High Power Midspan Injector

**POE Standard:** POE IEEE 802.3af

**Device Pin-out:** 1pins 4,5 DC power (+), pins 7, 8 DC power (-)

**POE Protection:** Over Temp, Over Current, Over/Under Voltage

**Shielded RJ-45 Ports:** 16 or 24 Ports

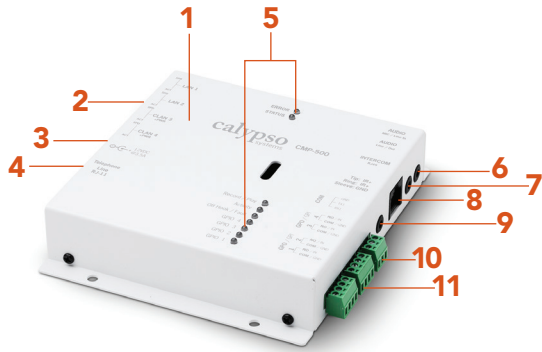
**Power:** > 15W per Port (e.g., Tycon 16.8E, 350mA @48V)

- 1 Keeps paging and other emergency alert functions running during a power outage**
- 2 Network power/data input**
- 3 Network pass-through output**
- 4 11.2V / 1.34A (15W) output**
- 5 12VDC input**

Unlike typical POE extractors, the PD-20W supplies amplifiers with the higher peak power levels they require. Offers 12VDC pass-through power for amplifier support when POE is not required, then automatically and instantly switches to POE if mains power fails.

**Works with any qualified third-party POE midspan injector and POE-enabled network switch**

Supports variable POE requirements and network connectivity for CM3000, CM800 and CM800S. Installs as a bridge between the POE cable and the network endpoint, and breaks out both network and power signals from the incoming cable, sending them on as needed for amplifier support.



**1 Adds all-call paging from any phone**  
Users simply dial a unit extension or hotkey and enter a security code to start an all-call page from any phone — even cell phones.

**Dial-in device control and automated actions**

In addition to simple all-call paging, you can designate up to 999 keycodes to take even more powerful actions — for example, narrow your live page to a specific zone, play a pre-recorded message over the speakers, turn projectors on or off, trigger door locks, or change digital signage content.

**Universal phone compatibility**

Works with cell phones, analog PBX, and any SIP phone system via a standard ATA bridge.

**No programming required**

An onboard browser-based interface lets you easily assign actions to key codes, set up custom outbound messaging and ring delays, and define passwords.

**Built-in intelligence**

Includes essential features like telephone line fault monitoring, Calling Party Control/Open Loop Disconnect detection, and silence timeout.

- 4-port network switch
- Custom audio prompting for incoming calls
- Serial control
- LED indicators

- 2 4-port network switch**
- 3 12VDC input**
- 4 RJ11 telephone line input**
- 5 Monitoring LEDs**
- 6 Mic/line audio input**
- 7 Line audio output**
- 8 Intercom**
- 9 IR remote output**
- 10 Serial control**
- 11 GPO/GPI relay terminals**



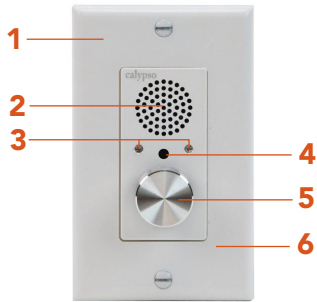
**SPECIFICATIONS**

**Network support:** 10/100Mb/s (auto sensing)  
**Compatibility:** Analog (PBX) with DTMF tone decoding, SIP (via ATA bridge), mobile  
**Power supply:** 12VDC at 3.5A  
**Size (WxHxD):** 13 x 14.9 x 2.86cm/  
 5.125 x 5.875 x 1.125in

**INPUTS/OUTPUTS**

- (4) RJ45 network input jacks
- (1) 12VDC power jack
- (4) RJ11 phone jack
- (1) 3.5mm mic/line audio input jack
- (1) 3.5mm line audio output jack
- (1) RJ45 intercom input jack
- (1) 3.5mm infrared remote output jack
- (1) captive screw serial control terminal
- (4) captive screw GPO/GPI relay terminals





- 1 Fits standard single-gang enclosure**  
Easy to add to hallways, gymnasiums or auditoriums for emergency communications where phones are not always available. Can also be used in outdoor areas with a standard weather proof enclosure case. Compatible with Leviton Decora® plates.
- 2 Integrated speaker**
- 3 Status LEDs for power and mic activity**
- 4 Integrated mic**
- 5 Push-to-talk button with rotary volume**
- 6 Easy RJ45 power/signal connection to CM3000**



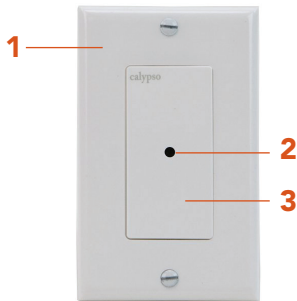
**SPECIFICATIONS**

**Power supply:** +12V, 100mA, over UTP Cat 5e from CM3000

**Size (WxHxD):** Fits standard North American single-gang electrical boxes

**INPUTS/OUTPUTS**

- (1) RJ45 input jack



- 1 Fits standard single-gang enclosure**  
Ceiling-mounted, hands-free, talk-back microphone that allows a teacher to answer an intercom call from anywhere in the classroom. Compatible with Leviton Decora® plates.
- 2 Integrated omnidirectional mic**
- 3 Easy RJ45 power/signal connection to CM3000**



**SPECIFICATIONS**

**Power supply:** +12V, 20mA, over UTP Cat 5e from CM3000

**Size (WxHxD):** Fits standard North American single-gang electrical boxes

**INPUTS/OUTPUTS**

- (1) RJ45 input jack