



# Instruct. Announce. Alert.

The first device of its kind to unify classroom audio, instructional technology, campus communication, and emergency notification and response. UNITY<sup>™</sup> is the ed-tech device that everyone can agree on — making the work of admins, IT, and teachers more efficient and effective.



## Upgrade at anytime

The removable faceplate allows for in-field upgrade to UNITY Campus in seconds!



## Key Features



**Intercom**  
Need something?  
Call the office.



**Ready, set...action!**  
Customizable buttons to control instructional technology (e.g. on/off displays, change camera presets, etc.)



**Bluetooth®**  
Play audio from your phone, tablet, or PC



**Classroom control**  
Controlled directly from your interactive display



**Campus communication**  
Becomes part of your campus communication system when used with FrontRow Conductor



**Security lock-down**  
Lock-down procedure with a single command from anywhere



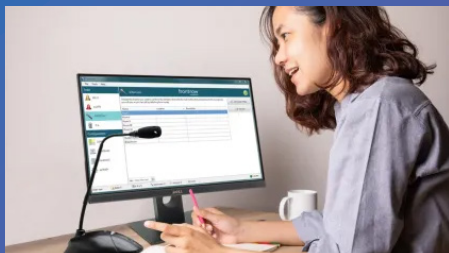
**Get help**  
Initiate an Alert to administrators



**Remote management**  
Remotely deploy scheduled firmware updates

# All together in UNITY

Unite your classrooms, campus, and school district.  
Unite your team.



## Powered by FrontRow ELEVATE

Decades of research prove the benefits of classroom audio — improvement in phonemic development, comprehension, student behavior, and engagement. UNITY is powered by ELEVATE, the latest technology for highly intelligible classroom audio. When paired with other Boxlight solutions, UNITY unlocks unparalleled student engagement for in-person and online learners.

## Be heard as you like

With the ELEVATE-powered Action! Teacher Microphone, teachers can speak normally, eliminating vocal fatigue, and control instructional devices anywhere in the room. FrontRow’s portfolio of built-in smart technologies — OptiVoice+, PrivaSee, Solo, PrioriTeach+, and Adapto+ — ensures teachers are heard when they want.

## Effortless control

Create a seamless flow of instruction with UNITY. Switch effortlessly between tasks, lessons, and devices with control buttons on the teacher’s microphone or UNITY itself. For classrooms with Boxlight interactive panels, MyFrontRow app can be used to control the UNITY system and instructional technology in the classroom. Instructors love UNITY’s ease of use and the next-level capabilities to empower their instruction.

## Your Emergency Operations Plan

FrontRow Conductor is a powerful platform for campus-wide communications and networked device management. A simple button push on the FrontRow Conductor Admin Station or FrontRow Conductor app initiates an alert and automated actions per your emergency operations plan.

## Attention!

Boxlight offers Attention!, an unprecedented capability for simultaneous audio and display messaging and alerting. Attention! is a native integration between FrontRow Conduct, CleverLive, Mimio and Clevertouch displays, and networked FrontRow audio system, including UNITY Campus.

# Fully capable, expandable and scaleable

More control and audio inputs and outputs than any other classroom audio system. No other solution does more!



**2 powerful new ports**  
StreamLine and ZipLine for future expansion



**Power from anywhere**  
Built-in PowerLine and connect up to 100ft away



**Power Over Ethernet**  
The only system to support full time or backup PoE+ or PoE++



**Audio**  
Bring in all your audio sources. Send out a balanced mix.

UNITY Base Unit Specifications

Physical Device

|            |                                                                                                                                                |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimensions | 45mm tall (1 - 49/64")<br>175.7mm wide (6 - 59/64")<br>203.6mm deep w/o faceplate (8 - 1/64")<br>222.6mm deep w/ faceplate & Knob (8 - 49/64") |
| Weight     | 0.760kg / 1.68lbs                                                                                                                              |

Network

|                 |                            |
|-----------------|----------------------------|
| Network Support | 10/100 Mb/s (auto sensing) |
|-----------------|----------------------------|

Amplifier

|                 |                                                                                                                                                                                                                                     |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power           | 32W continuous (2 channels x 16W @ 4Ω)<br>Use four(4) - 8 Ohm FrontRow Lay-In or Cut-In Speakers wired in parallel for 32W, for complete classroom coverage. Use two(2) - 8 Ohm FrontRow Lay-In speakers for 16W for smaller rooms. |
| THD             | 1kHz, at nominal level (1 watt, 8-ohm load)                                                                                                                                                                                         |
| Type            | Class D                                                                                                                                                                                                                             |
| Signal-to-Noise | >84 dB @ 20 Hz to 20 kHz at maximum output (unweighted, with balanced input)                                                                                                                                                        |

Audio

|              |                                                                                                                                                                                                  |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Speaker Out  | Left / Right channel - Phoenix connector                                                                                                                                                         |
| Line Out     | 1, 3.5 mm line level output (TRS Stereo Unbalanced)                                                                                                                                              |
| ALD Line Out | 1, 3.5 mm line level output (TRS - Mono Unbalanced) with rotary volume control for assistive listening devices (Headworn microphone 1000-00235 with teacher mic recommended for best experience) |
| USB-C In/Out | 1, USB-C bidirectional audio (USB-2.0)                                                                                                                                                           |
| Line In      | 2, 3.5 mm line level inputs (TRS Stereo Unbalanced)                                                                                                                                              |

Control

|                  |                                                                                                |
|------------------|------------------------------------------------------------------------------------------------|
| RS 232           | 1, RS 232 connection – 500mA – Phoenix connector                                               |
| Serial Baud Rate | 2400 to 115200                                                                                 |
| GPI              | 2, General Purpose Inputs – Phoenix connectors                                                 |
| Relay            | 1, Normally open / Normally closed – Phoenix connector<br>1, Normally open – Phoenix connector |
| Alarm Input      | 1, Alarm input – Phoenix connector                                                             |
| Analog Page Mute | 1, Page Override (PGO) – Phoenix connector                                                     |
| IR Output        | 1, IR out – Phoenix connector                                                                  |

Power

|           |                                                                                                                                                                                                                                 |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power Out | 1, 24 VDC – Phoenix connector (Trio Speaker Power)<br>1, 12 VDC (1.5 Amp) – Phoenix connector<br>1, 12 VDC (0.5 Amp) – Phoenix connector<br>1, 5 VDC - USB-A connector (For Charging 1 Microphone)                              |
| Power In  | Fulltime or backup PoE+ Type 2 / Class 4 (25.5W) 802.3at<br>Fulltime or backup PoE++ Type 3 / Class 6 (51W) and Type 4 / Class 8 (71W) (802.3bt)<br>See PoE Chart on next page<br>FrontRow PowerLine – 90W, 48VDC, up to 100ft. |

Other Connections

|            |                                                                |
|------------|----------------------------------------------------------------|
| ClassLight | Multi-color LED beacon for paging, intercom, bells, and alerts |
| Zipline    | Future accessory expansion port                                |
| StreamLine | Future accessory expansion port                                |

Microphone Reciever

|                                                    |                                                             |
|----------------------------------------------------|-------------------------------------------------------------|
| Frequency Response                                 | 150hz to 7.5Khz +/-3db                                      |
| Carrier Frequency                                  | 1.9GHz Band (1.92-1.93 GHz US/CAN, 1.88-1.90 GHz UK/EU/AUS) |
| Number of simultaneous active microphones          | 4                                                           |
| Number of base stations each mic can register with | 1 Base stations per mic                                     |
| Operating Range                                    | (open field) 250ft (Line of sight)                          |
| Maximum number per school                          | No limit                                                    |
| DECT Standard                                      | 6.0/EU selectable                                           |
| Wireless Communication                             | ELEVATE™ technology                                         |
| Operating Territories                              | US/CAN - EU/UK/AUS, selectable                              |

Bluetooth

|                    |                                                          |
|--------------------|----------------------------------------------------------|
| Bluetooth Standard | 4.1 BR/EDR                                               |
| Profile            | A2DP for high quality stereo audio                       |
| Codecs             | SBC, MP3, FastStream                                     |
| Multipoint support | Connect up to 2 devices at once (1 can stream at a time) |
| Typical range      | Up to 18.2m/60ft depending on transmitter                |
| Latency            | 40ms - 200ms depending on codec and environment          |

Remote Management

|                  |                                                                                                                                  |
|------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Web Interface    | Complete control of all UNITY settings via device IP address access                                                              |
| Control Commands | Remotely trigger soft and hard resets, ClassLight colors, audio levels, mic and Bluetooth pairing, control I/O commands and more |
| Rollout App      | Network device discovery, device data, configuration file updates, firmware updates. Windows 10 or later.                        |

Classroom Control

|                |                                                                                                            |
|----------------|------------------------------------------------------------------------------------------------------------|
| MyFrontRow App | Available for Boxlight displays, MacOS, Android tablets, iPad, and Windows PC. (see MyFrontRow datasheet). |
|----------------|------------------------------------------------------------------------------------------------------------|

Mounting Options

|                                    |                                                                                                                                                                                                             |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tower Holder                       | For UNITY tower (vertical) model, drop-in flexible holder with rubberized grips (Included)                                                                                                                  |
| Wall Mount Bracket (Sold Seperate) | Mount on the wall behind an interactive display panel. Articulated spring-hinge arm with 90 degree rotation for easy cable access and management. Dual cable posts for wrapping cables for a clean install. |
| M6 threaded insert                 | Bottom of unit. For securing to shelves for theft prevention.                                                                                                                                               |
| Shelf                              | Shelf (horizontal model) can be placed directly on a desk or shelf.                                                                                                                                         |

Elevate Microphone Specifications

General Spec

|                                  |                                                                                                                      |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Battery Type/Voltage/Am-perage   | LiPo 3.7V, 650mA                                                                                                     |
| Battery Life (hours) - talk time | 8+hrs US / 7+ EU/AUS                                                                                                 |
| Recharge Time                    | 3.5 hrs                                                                                                              |
| RF Power (dBm)                   | 19dbm peak (teacher only), 6dbm average - US/CAN, 24/10 in UK/EU/AUS                                                 |
| Weight                           | 44.3g / 1.5oz (teacher)<br>89.7g / 3.16oz (student)                                                                  |
| Size (HxWxD)                     | 68 x 36 x 22mm / 2.7 x 1.4 x 0.9 inches (teacher)<br>118 x 36 x 22mm / 4.6 x 1.4 x 0.9 inches (student)              |
| Headset in                       | 3.5mm TRRS (T=left, R1=Right, R2=Mic, S=Gnd), use with FrontRow headworn mic (1000-00235) or plug in an audio source |
| Wireless Communication           | ELEVATE™                                                                                                             |
| Operating Territories            | US/CAN - EU/UK/AUS, selectable                                                                                       |

FlipCharger

|                  |                                      |
|------------------|--------------------------------------|
| Size (HxWxD)     | 127 x 71 x 38 mm / 5 x 2.8 x 1.5 in  |
| Weight           | 110g/3.9oz                           |
| Power Supply     | 5.9V / 700mA                         |
| Mounting Options | Wall Mount (frame included), Desktop |

Statement

Size and weight vary by configuration and manufacturing process, please refer to the actual product. The product images are for illustrative purposes only and may be slightly different in appearance, color, size, etc. from the actual product. The description, illustrations, etc. in this document may be subject to change in accordance with the latest product specifications and performance. Should the above-mentioned change in the document become necessary, the document may be updated without written notice.

Power Over Ethernet Compatibility

PoE+

|                   |                                                                                                                                          |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Standard          | 802.3at                                                                                                                                  |
| Type              | 2                                                                                                                                        |
| Class             | 4                                                                                                                                        |
| Power Sent        | 30W                                                                                                                                      |
| Power at Endpoint | 25.5W                                                                                                                                    |
| Cabling           | Cat5e                                                                                                                                    |
| UNITY Support     | Maximum amp power may be limited to 25.5W (same as any device running PoE+) ClassLight not supported. Supports fulltime or backup power. |

PoE++

|                   |                                                                                                                                                                  |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard          | 802.3bt                                                                                                                                                          |
| Type              | 3                                                                                                                                                                |
| Class             | 6                                                                                                                                                                |
| Power Sent        | 60W                                                                                                                                                              |
| Power at Endpoint | 51W                                                                                                                                                              |
| Cabling           | Copper Cat6a or better recommended. Cable compatibility test kits available from Boxlight.                                                                       |
| UNITY Support     | All UNITY features supported, including ClassLight. Recommended for new construction or campus communication with ClassLight. Supports fulltime or backup power. |

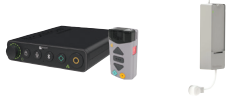
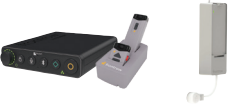
PoE++

|                   |                                                                                            |
|-------------------|--------------------------------------------------------------------------------------------|
| Standard          | 802.3bt                                                                                    |
| Type              | 4                                                                                          |
| Class             | 8                                                                                          |
| Power Sent        | 90W                                                                                        |
| Power at Endpoint | 71W                                                                                        |
| Cabling           | Copper Cat6a or better recommended. Cable compatibility test kits available from Boxlight. |
| UNITY Support     | All UNITY features, including ClassLight, plus future accessories.                         |

PoE Power Draw

|                                                      | Idle<br>(powered on but no audio) | Typical<br>(normal volume settings and usage) | Max<br>(inputs and outputs at full power with active signal) |
|------------------------------------------------------|-----------------------------------|-----------------------------------------------|--------------------------------------------------------------|
| UNITY only<br>(no ClassLight or powered accessories) | 8W                                | 25W                                           | 42W                                                          |
| UNITY + ClassLight                                   | 8-9W<br>(ClassLight off)          | 32W                                           | 49W                                                          |

## UNITY Options

|            |                                 |                                                                                     |                                                                                                                                                                                                                                                     |
|------------|---------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1000-00284 | UNITY Essentials Kit (V)        |    | FrontRow UNITY classroom audio system. Includes UNITY with vertical controls, Flex Stand, Action! Mic, and PowerLine + 10ft Cat5e Cable.                                                                                                            |
| 1000-00285 | UNITY Essentials Kit (H)        |    | FrontRow UNITY classroom audio system. Includes UNITY with horizontal controls, Action! Mic, and PowerLine + 10ft Cat5e Cable.                                                                                                                      |
| 1000-00286 | UNITY Complete Kit (V)          |    | FrontRow UNITY classroom audio system. Includes UNITY with vertical controls, Flex Stand, Action! Mic, Bravo! mic, FlipCharger, Headworn Mic + Belt Clip, and PowerLine + 10ft Cat5e Cable.                                                         |
| 1000-00287 | UNITY Complete Kit (H)          |    | FrontRow UNITY classroom audio system. Includes UNITY with horizontal controls, Action! Mic, Bravo! mic, FlipCharger, Headworn Mic + Belt Clip, and PowerLine + 10ft Cat5e Cable.                                                                   |
| 1000-00288 | UNITY Campus Essentials Kit (V) |    | FrontRow UNITY classroom audio and campus communication system. Includes UNITY with vertical controls, Flex Stand, Action! Mic, ClassLight + 50ft Cat5e Cable, and PowerLine + 10ft Cat5e Cable.                                                    |
| 1000-00289 | UNITY Campus Essentials Kit (H) |    | FrontRow UNITY classroom audio and campus communication system. Includes UNITY with horizontal controls, Action! Mic, ClassLight + 50ft Cat5e Cable, and PowerLine + 10ft Cat5e Cable.                                                              |
| 1000-00290 | UNITY Campus Complete Kit (V)   |  | FrontRow UNITY classroom audio and campus communication system. Includes UNITY with vertical controls, Flex Stand, Action! Mic, Bravo! Mic, FlipCharger, Headworn Mic + Belt Clip, ClassLight + 50ft Cat5e Cable, and PowerLine + 10ft Cat5e Cable. |
| 1000-00291 | UNITY Campus Complete Kit (H)   |  | FrontRow UNITY classroom audio and campus communication system. Includes UNITY with horizontal controls, Action! Mic, Bravo! Mic, FlipCharger, Headworn Mic + Belt Clip, ClassLight + 50ft Cat5e Cable, and PowerLine + 10ft Cat5e Cable.           |
| 1000-00298 | UNITY Campus Upgrade (V)        |  | Upgrade from UNITY to UNITY Campus, providing support for Conductor (Bells, Paging, Intercom, Alerts). Includes faceplate with vertical controls and ClassLight with 50ft plenum Cat5e cable.                                                       |
| 1000-00299 | UNITY Campus Upgrade (H)        |  | Upgrade from UNITY to UNITY Campus, providing support for Conductor (Bells, Paging, Intercom, Alerts). Includes faceplate with horizontal controls and ClassLight with 50ft plenum Cat5e cable.                                                     |

All kits include 4m USB-C cable, USB-C to USB-A adapter, and mic charge USB cable.