

Conductor School Communication System

Modern schools require a comprehensive, cohesive and reliable solution to manage administrative functions, campus communications and classroom technology.

The Conductor School Communication System is an IP-based, campus-wide communication and control solution that allows administrators to manage their day-to-day operations reliably and cohesively. Our comprehensive solution is built on a client-server architecture that utilizes a school's existing network to seamlessly integrate our ezRoom and Juno Connect classroom systems and other audiovisual equipment.

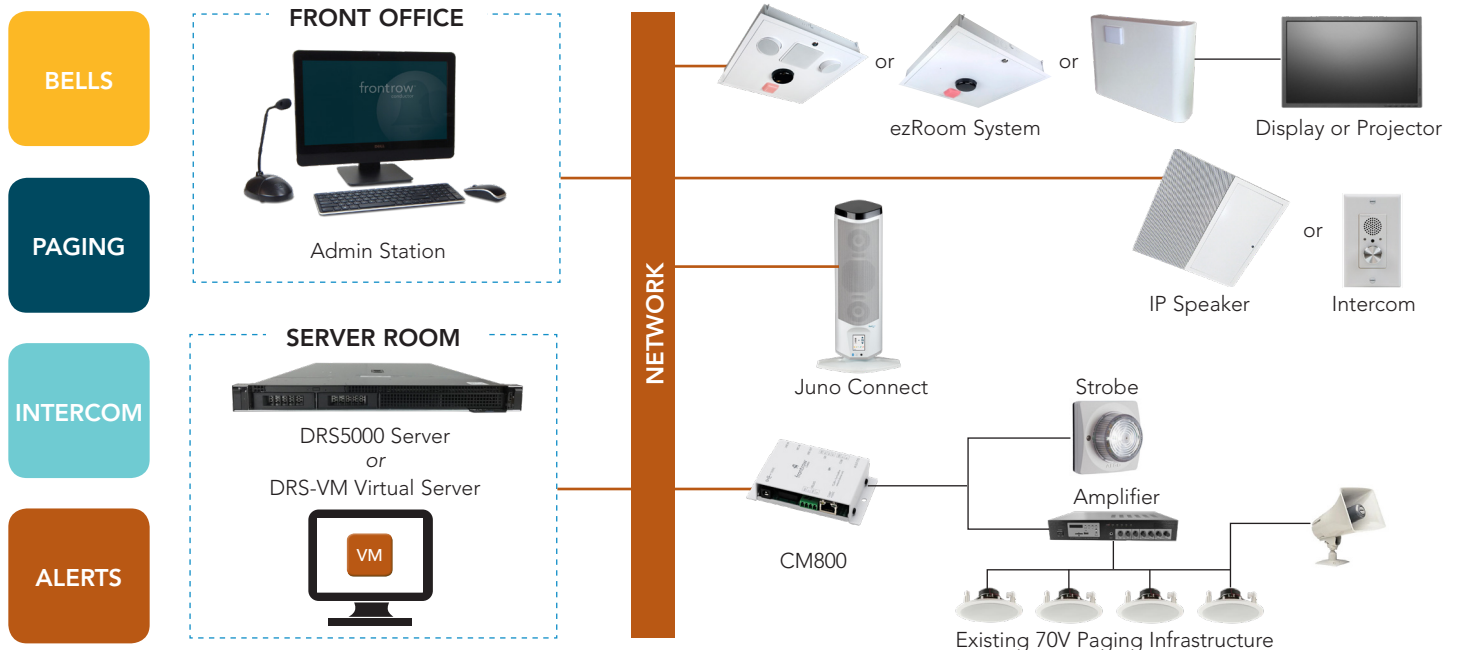
The backbone of our solution is the Conductor DRS Server which can be deployed as a dedicated hardware solution, or as a virtual server residing on a school's existing virtual machines. Day-to-day operations are managed through our dedicated Admin Station while remote monitoring can be done on any PC or Mac connected to the network.



KEY FEATURES

- Daily bell schedules and audio communications to the entire campus, preconfigured school zones, or to any individual classroom
- Robust emergency alert communications with audio instructions, visual messaging, mass email and phone alerts, fire alarm and access control integration
- Dedicated Admin Station, all-in-one touchscreen PC
- IP-based, client-server platform
- Seamless integration with FrontRow devices and other networked technology
- Two server options; DRS5000 hardware-based server or DRS-VM virtual server
- Centrally monitor and support thousands of devices with real-time data and automated control
- Optional ATA phone integration
- iOS and Android mobile apps

HOW IT WORKS



BELLS

PAGING

INTERCOM

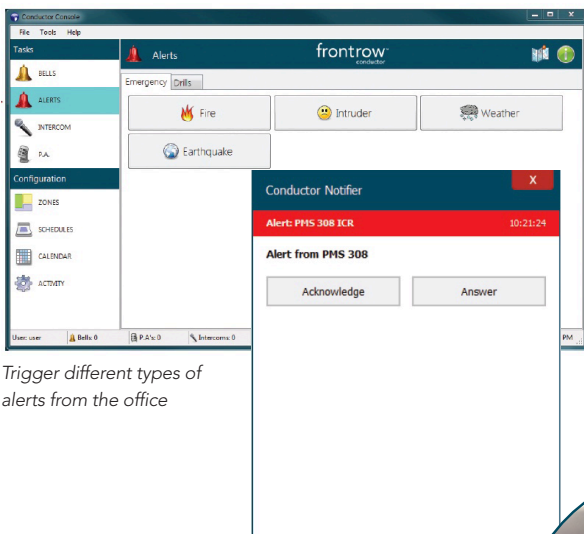
ALERTS

Conductor School Communication System

Administrators can manage school-wide audio communications (manage alerts, make announcements, intercom calls, set bell schedules, stream music) and remotely monitor and control a wide variety of FrontRow devices and other networked AV technologies to ensure classrooms are operating correctly.

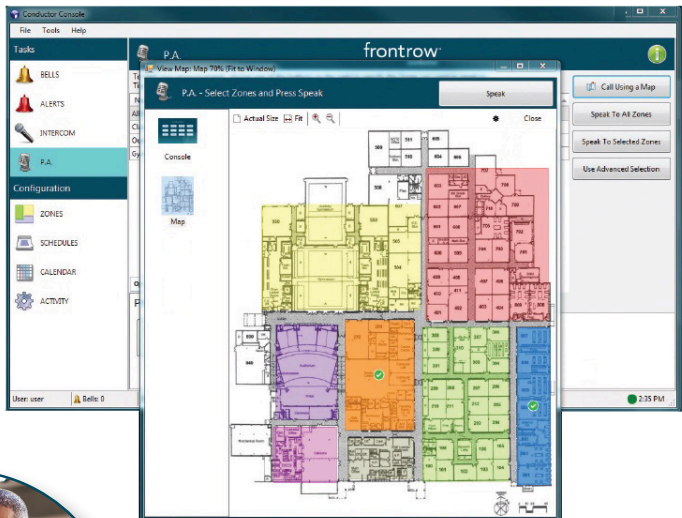


CONDUCTOR CONTROLS



Trigger different types of alerts from the office

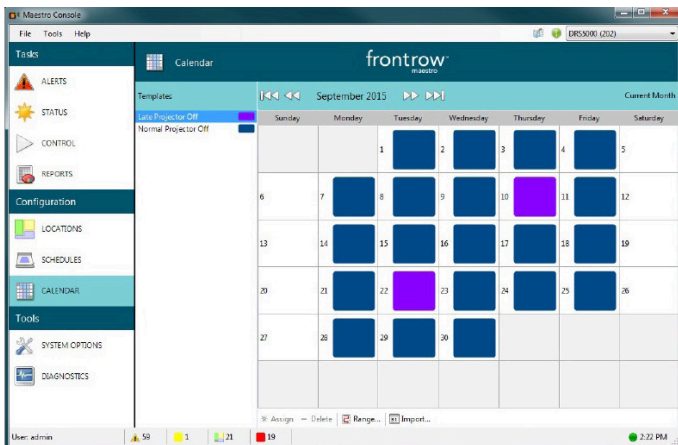
Acknowledge and answer calls from specific classrooms



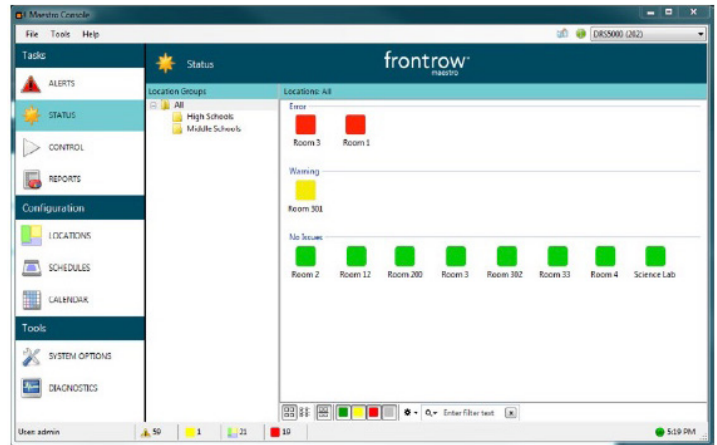
Create a map of your school to enable zone notifications

The Conductor app lets you remotely access and manage all the features in the Conductor system.

MAESTRO CONTROLS



Schedule automated device management for the entire school year



Monitor the status of projectors and other devices across campus

Conductor DRS Server

Network administrators need flexibility when deploying school technology. The Conductor DRS server can be deployed as a dedicated hardware solution, or as a virtual server residing on a school's existing virtual machine environment. Our Linux-based solutions are extremely stable, reliable and are dedicated to running Conductor, Maestro and FrontRow devices. Scheduled software backups and UPS battery backup** make it easy for IT professionals to plan for, and recover from, almost any situation.



KEY FEATURES

- Linux Ubuntu operating system
- Conductor & Maestro preloaded
- Webmin remote admin preloaded
- Browser-based interface
- Easy discovery of connected FrontRow devices
- Configurable backup and time sync options

SPECIFICATIONS

Conductor DRS5000 Server

Dimensions (HxWxD)	1U rack server 4.3 x 43.4 x 59.6cm/1.69 x 17.1 x 23.5in
Weight	13.6kg/30lb
Memory	8GB UDIMM, 2666MT/s, DDR4 ECC
Processor	Intel Celeron G4900 3.1GHz
RAID	RAID1 hard drive pair
Mounting	1U/2U static rails for 2 post/4 post racks

Network Requirements

Streaming Devices with Conductor	253 (static IP addresses recommended)
Controllable Devices with Maestro	16M+
Subnet	Requires 255.255.255.0 Class C subnet (Conductor only)
Internet access	Optional - only required if using outside domain for network time
Bandwidth/stream	<1% of a typical 100 Mbps network (during audio streaming)

Conductor DRS-VM Virtual Server

Host Requirements	Must support VM requirements Host OS* already installed VM software already installed
VM Minimum Requirements	2GB RAM dedicated to the VM 1 core dedicated to the VM 160GB disk space available for the VM
VMM Options	VMware ESXi 6.x VMware Workstation Pro 15.x* VirtualBox 6.x with extension pack* Microsoft Hyper-V*

*On Windows Server 2016 or 2019

**FrontRow recommends and sells UPS battery backup for DRS5000

Admin Station

School administrators need a reliable, simple interface to manage day-to-day communications and manage alert situations. The Conductor Admin Station is the “head-end” of the Conductor School Communication Platform, consisting of an all-in-one Windows PC touch screen, push-to-talk microphone and FrontRow endpoint connected to a DRS server over the network.

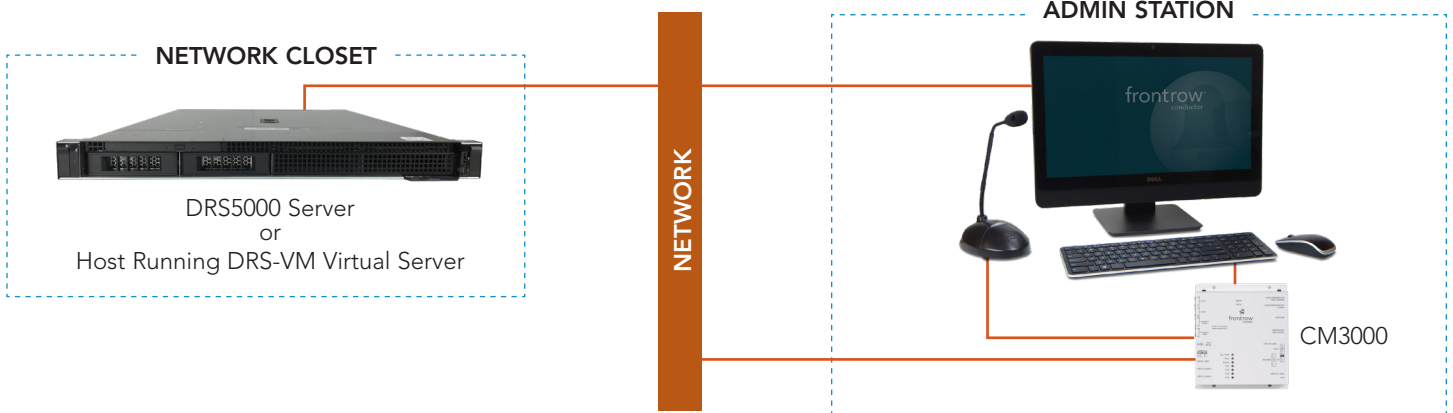
The Conductor Admin Station gives administrators the freedom and flexibility to efficiently manage daily school-wide audio communications, bell schedules and alert communications from one location. An optional strobe light can be mounted in the immediate vicinity to alert administrators, so every inbound communication and alert is noticed.



KEY FEATURES

- Easily adjust bell-schedules for standard or irregular days
- Clear IP audio communications to all school end points
- Flexible zones for efficient school-wide communications
- Robust emergency communications capability includes audio, visual, and mass notification

CONDUCTOR SETUP



SPECIFICATIONS

Windows PC

Controls	Wireless Keyboard and Mouse
Hard Drive	128GB SSD
RAM	2400 MHz DDR4
OS	Windows 10
Screen	19" capacitive touch screen
Processor	Intel Dual Core i3 processor

UPS Battery Backup (U.S./CAN only)

Input voltage	92 - 139V (120V nominal)
Outlets	9 NEMA 5-15 (6 battery, 3 surge only) 2 USB-A
Output	850 VA, 450 Watts
Dimensions (LxWxH)	14 x 33 x 10.7cm/5.5 x 13 x 4.2in
Weight	4.1kg/9lb
Battery Life	1 Hour of performance for FR-ADMIN

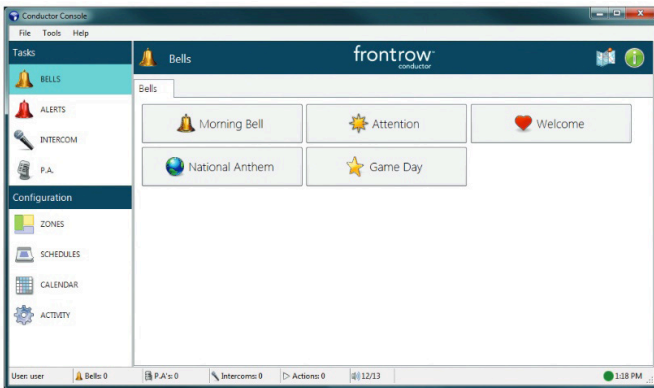
Push-to-talk Microphone

Input power	+12V (ITC port on CM3000)
Connector	RJ45
Sensitivity	5.6 Mv/Pa (millivolt/Pascal)
Size (WxDxH)	114 x 344 x 178mm/4.49 x 13.54 x 7.01in
Weight	690g/24.3oz

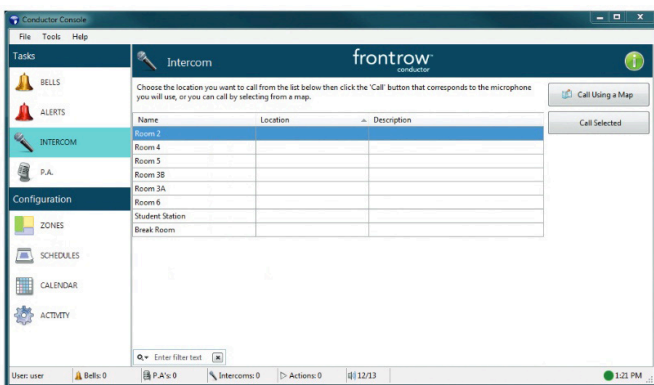
Conductor Software

Campus-wide communication is an integral part of any school's day-to-day operation. Conductor allows office managers and administrators to efficiently manage school-wide audio communications - make announcements, intercom calls, set bell schedules, stream music, create communication zones and more.

Customized alert sequences may be created to coordinate audio alarms, strobe lights, digital signage, classroom LED beacons and access controls to accommodate a wide array of alert communications.



Conductor bell options



Conductor intercom controls



KEY FEATURES

- Setup a single admin station or multiple admin stations*
- Page (one-way) to any zone, multiple zones, or to the entire campus
- Intercom (two-way) communication with FrontRow network equipped classrooms
- Stream music or pre-recorded audio
- Create unlimited zones and zone groups
- Page or intercom using school maps and images using touchscreen
- Assign schedules to the entire calendar year at once
- Easily change the weekly or daily bell schedule as needed
- Create customized bells, tones, and music sequences for special events
- Create control buttons to remotely manage projectors, access controls and more
- Receive calls and alerts on any PC or Mac with the Conductor Notifier application
- Works directly with FrontRow networked devices.

* Requires Windows 10 or later (.NET Framework 4.5 included in the installer), 100MB hard disc space, DRS5000 or DRS-VM server and a master CM3000 or CM900 controller.

CONDUCTOR IOS AND ANDROID APPS ALSO AVAILABLE.



Maestro Software

Classrooms today are multi-media environments with sophisticated and expensive audiovisual equipment that needs to work reliably and cohesively. Maestro is a time and money-saving software solution that allows school administrators to remotely monitor and control a wide variety of FrontRow devices and other networked AV technologies.

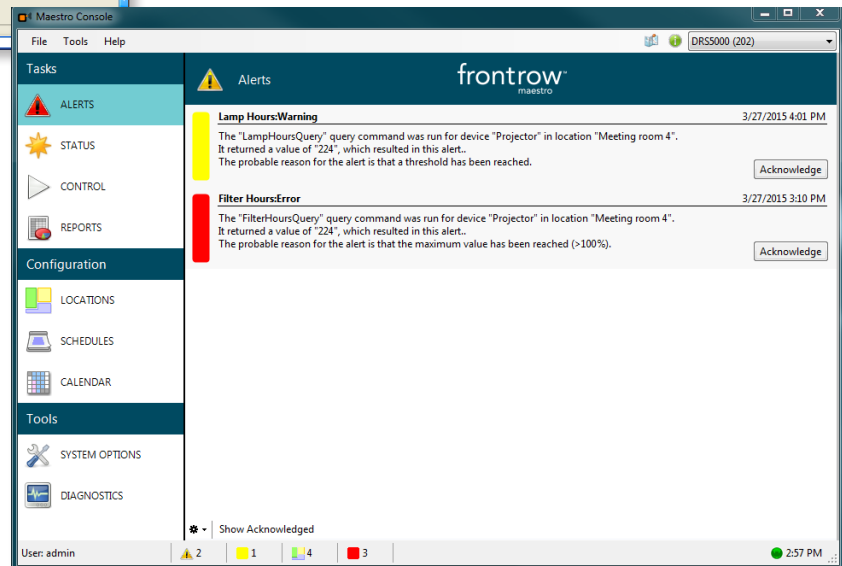
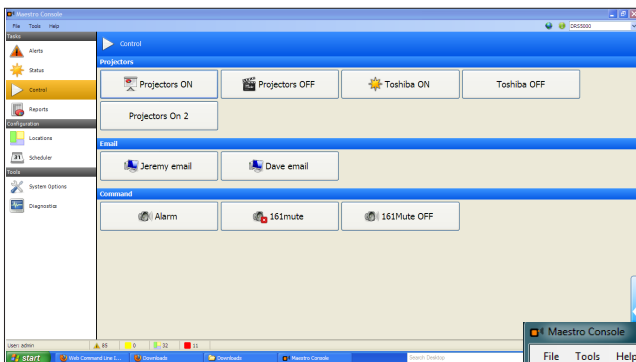
Administrators can monitor everything from a single projector in one classroom to real-time monitoring of thousands of HD displays, audio amplifiers and other network devices campus-wide. Maestro maximizes classroom uptime so teachers can focus on educating students, not managing classroom technology.



KEY FEATURES

- Deploy on any PC or Mac connected to the school or district network*
- Monitor and support devices school and district-wide
- Monitor projectors, HD displays, audio amplifiers, FrontRow devices and more
- Track projector power, bulb hours, filter hours and input status
- Schedule campus-wide shutdowns or turn off individual devices immediately
- Receive immediate notification if a device goes offline or is disconnected
- Create customized zone and device grouping and detailed room views
- Create and export reports to identify trends and estimate budgets for maintenance.
- Works directly with FrontRow networked devices

* Requires Windows 10 or later (.NET Framework 4.5 included in the installer), 100MB hard disc space and a DRS5000 or DRS-VM server.



ENDPOINT DEVICE REQUIREMENTS

- Controllable via network commands or via serial (RS-232), IR, GPI or relays when used with FrontRow devices. A driver is required for full Maestro integration, especially for status queries.
- Many manufacturer drivers are available on the FrontRow website. New drivers can be purchased from FrontRow. Contact FrontRow Customer Service at 1-800-227-0735 to purchase custom drivers.

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1520-0001 Rev A 0420