

## Juno™

Learning depends on listening and classrooms are inherently challenging environments for students to hear and for teachers to be heard. Improve your student's comprehension and learning outcomes with Juno.

This intelligent, all-in-one classroom audio solution has integrated Bluetooth® connectivity to provide rich audio amplification for both voice and media while being quick and easy to setup and use. Juno also supports remote and hybrid learning environments by seamlessly integrating with popular video conferencing solutions like Zoom®, Google Meet®, GoToMeeting® and more to bring the classroom to remote students and remote students into the classroom.



**KEY FEATURES** 

- Three-speaker 2.1 stereo line array for 180° horizontal sound coverage
- Consistently rich sound with less volume drop-off over distance
- OptiVoice<sup>™</sup> and Adapto<sup>™</sup> optimize speech intelligibility while reducing feedback
- Voice-command control and automated lesson capture\*
- Easy to move, set up and break down
  - \*Requires FrontRow Teacher Edition™ Software

# Juno Connect™

Juno Connect™ is a scalable solution that can meet the needs of both your classroom and campus. When used with FrontRow Conductor™, Juno Connect enables campus communication functionality like intercom, paging, bell schedules and alerting. During an emergency, educators can speak directly with administrators or activate panic buttons using their smart microphones. Juno Connect lets technologists see, control, and manage not just one projector, but every AV device in the school. From automatic shutdown to bulb-life alerts, Juno Connect takes care of the details so they can focus on the big picture.

## Room Control

Instead of reacting to your technology, it now responds to you. Without a break in instruction, teachers can control projectors, displays, and other devices just with their voice.



## Paging & Intercom

Teachers can talk to the front office just by saying "intercom." And pages come through the Juno Connect system too — much more clearly than through a conventional PA system.



# Juno Tower

## SPECIFICATIONS

Transmission type	Infrared	
Receiving frequencies	2.1MHz, 2.4MHz; (2.8MHz, 3.3MHz, 3.6MHz with Channel Expansion Module)	
Frequency response	50Hz – 20kHz	
Signal-to-noise	>70dB	
THD	<1% @ 1kHz	
Maximum audio output power	40W, peak power	
Power supply	18VDC @ 3.3AMP	
Size (wxhxd)	<b>Tower without base:</b> 19.7 x 68.6 x 16.5cm / 7.75 x 27 x 6.5in <b>Tower with base:</b> 35.6 x 71.8 x 26.7cm / 14 x 28.25 x 10.5in	
Weight	Tower without base: 5.7kg/12.5lbs Tower with base: 6.4kg/14lbs	
Operating range	30.5m/100ft, line of sight (typical)	
Sound Coverage Area	83.6m / 900ft² (up to 148.6m²/1600ft² with speaker expansion)	
IR Reception area	148.6m²/1600f² (typical)	
Inputs	wireless Bluetooth     3.5mm audio (front)     RCA stereo audio in jacks     RCA jacks for external sensor connection	
Outputs	3.5mm audio out jack	



# Smart-IR Teacher Microphone

## **SPECIFICATIONS**

Transmission type	Infrared
Transmitting frequency	2.1MHz, 2.3MHz, 2.4MHz, 2.8MHz, 3.3MHz, 3.6MHz programmable
Frequency response	70Hz – 8kHz
Microphone	Unidirectional cardioid
Battery life	7 hours (typical)
Battery type	Li-lon, 3.7V, 850mAH
Operating range	30.4m/100ft, line of sight (typical)
Inputs	3.5mm aux input Micro USB for charging and programming
Size (wxhxd)	7.4 x 6.6 x 1.3cm / 2.9 x 2.6 x 0.5in
Weight	73.7g/2.6oz (with battery and lanyard)



#### **USER CONTROLS**

When Pendant Mic is in standby mode:

Press momentarily	Wake
When Pendant Mic is active:	
Press momentarily	Mute/Un-mute
Press and hold	Issue Voice Command or trigger an alert or call the front office

### Accessories

# Smart-IR Student Microphone

#### **SPECIFICATIONS**

Transmission type	Infrared
Transmitting frequency	2.1MHz, 2.3MHz, 2.4MHz, 2.8MHz, 3.3MHz, 3.6MHz programmable
Frequency response	70Hz – 8kHz
Microphone	Unidirectional cardioid
Battery life	7 hours (typical)
Battery type	Li-lon, 3.7V, 850mAH
Operating range	21.3m/70ft, line of sight (typical)
Input	3.5mm aux input Micro USB for charging and programming
Size (wxhxd)	3.8 x 14.7 x 2.2cm / 1.5 x 5.8 x 0.85in
Weight	70.8g/2.5oz



#### **PUSH-TO-TALK SWITCH**

Press and hold	Push-to-talk
Press and slide up	Power on

# Microphone Charger

#### **SPECIFICATIONS**

Size (wxhxd)	8.9 x 4.6 x 11.4cm/3.5 x 1.8 x 4.5in
Weight	226.7g/8oz
Power supply	5.9V dc



# Optional Modules for Added Features

# Channel Expansion Module

Expands participation by adding three additional microphone channels, so up to five microphones can be used with a single Juno.

#### **SPECIFICATIONS**

Receiver Frequencies	2.8MHz, 3.3MHz, 3.6MHz	
Signal-to-noise	>70dB	
THD	<1% @ 1kHz	



Ensures important announcements are heard in the classroom by automatically muting Juno.

#### **SPECIFICATIONS**

P.A. Input	Captive screw terminal magnetic coupling	
Sensitivity	70mVrms (minimum)	
Delay	<500mSec to >5Sec	

#### **INPUTS**

Time Delay Control Sensitivity Control Captive Screw Terminal Inductive Coupler





# Speaker Expansion Module

Expands speaker coverage by allowing the addition of two external speakers.

#### **SPECIFICATIONS**

Frequency Response	50Hz – 20kHz
THD	<1%
Maximum audio output power	2x8W (8Ω), 2x16W (4Ω) peak power

#### **INPUT**

**Captive Screw Terminal** 



## Communication Module

### (Required for Juno Connect)

Enables teachers to control or communicate with practically any device or person by voice commands given using the teacher microphone.

#### **SPECIFICATIONS**

LAN Interface	for Conductor	
Intercom Interface	for Conductor	
Serial Control	RS-232	Intercom

# LessonCam<sup>™</sup> Camera Option

## LessonCam™ Camera and Mounting Bracket

#### **SPECIFICATIONS**

Sensor	1/2.8" HD CMOS sensor, 2.0MP	
Resolution	Up to 1920 xx1080p 30/25/20/15	
Compression	H.264, H.265	
Video Interface	USB 2.0	
LAN Interface	VISCA, ONVIF, RTSP & RTMP supported	
Control Signal Interface	RS-232, RS-485	
Control Protocol	VISCA/Pelco-D/Pelco-P; Baud Rate: 115200/9600/4800/2400bps	
Zoom	12x lossless true optical zoom	
Field of view	Horizontal 72.5° (wide) ~ 6.3° (tele)	
Mechanical pan	±170°	
Mechanical tilt	-30°~+90°	
Control	FrontRow LessonCam app	
Dimensions (wxhxd)	150 x 167.5 x 150mm / 5.9 x 6.6 x 5.9in	
Weight	1.4kg / 3lbs	
Power	12VDC, converted from Juno power supply	
Software	FrontRow LessonCam Control software	



## How it works

The LessonCam mounts to the Juno and connects to the USB port on the teacher's computer and the teacher wears the pendant microphone. When the teacher speaks or plays a video from the computer, their voice and audio are amplified in the classroom and heard by the remote students.

#### All students can see the teacher or other media equally

Using "Screen Share", teachers can share content from their interactive panel, live video from the FrontRow LessonCam, document camera or computer video.

#### All students can participate equally

When remote students are unmuted by the teacher, their voices are distributed in the classroom. When classroom students use the student microphone, their voices are amplified in the classroom and streamed online to remote students.

#### All students can stay caught up

Using remote conferencing recording functions or FrontRow's Teacher Edition, lessons can be recorded, shared and archived so students can access lessons for review at their convenience.

