frontrow™

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.**

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.

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™ and Adapto™ 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 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)	**Tower without base:** 19.7 x 68.6 x 16.5cm / 7.75 x 27 x 6.5in **Tower with base:** 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	1 wireless Bluetooth 1 3.5mm audio (front) 3 RCA stereo audio in jacks 2 RCA jacks for external sensor connection
Outputs	3.5mm audio out jack

JUNO CONNECT ADDS

LAN Interface	for Conductor
Serial Control	RS-232

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-Ion, 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

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-Ion, 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

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

Page Override Module

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

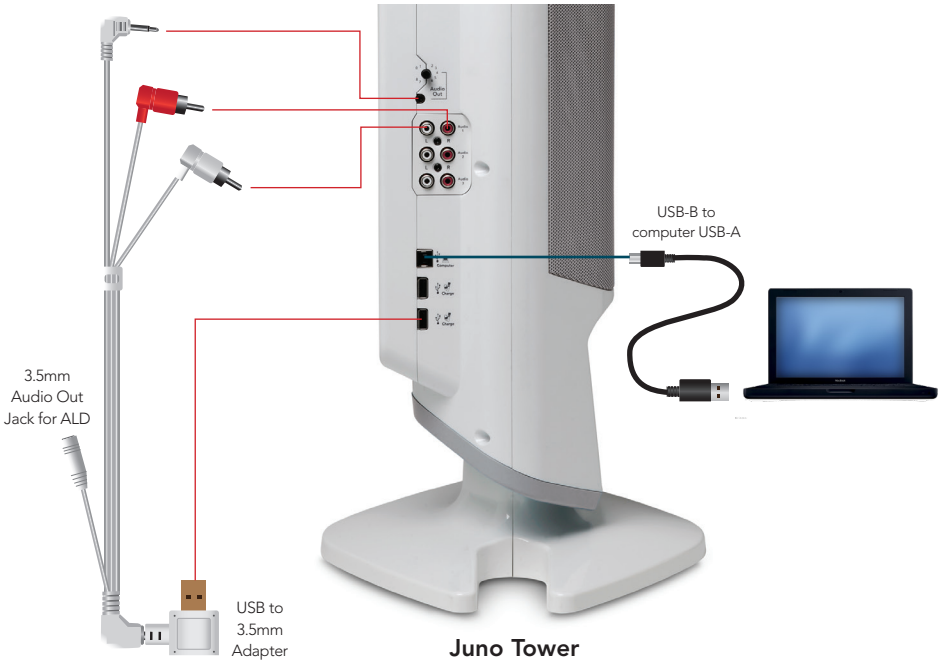
Frequency Response	50Hz – 20kHz
THD	<1%
Maximum audio output power	2x8W (8Ω), 2x16W (4Ω) peak power

INPUT

Captive Screw Terminal

Video Conference Cable Kit

Connects Juno inputs and outputs to integrate classroom voice and media audio with video conferencing platforms like Zoom, Google Meet, GoToMeeting and more. Only a single USB cable to the teacher's computer is required.



Juno Tower

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

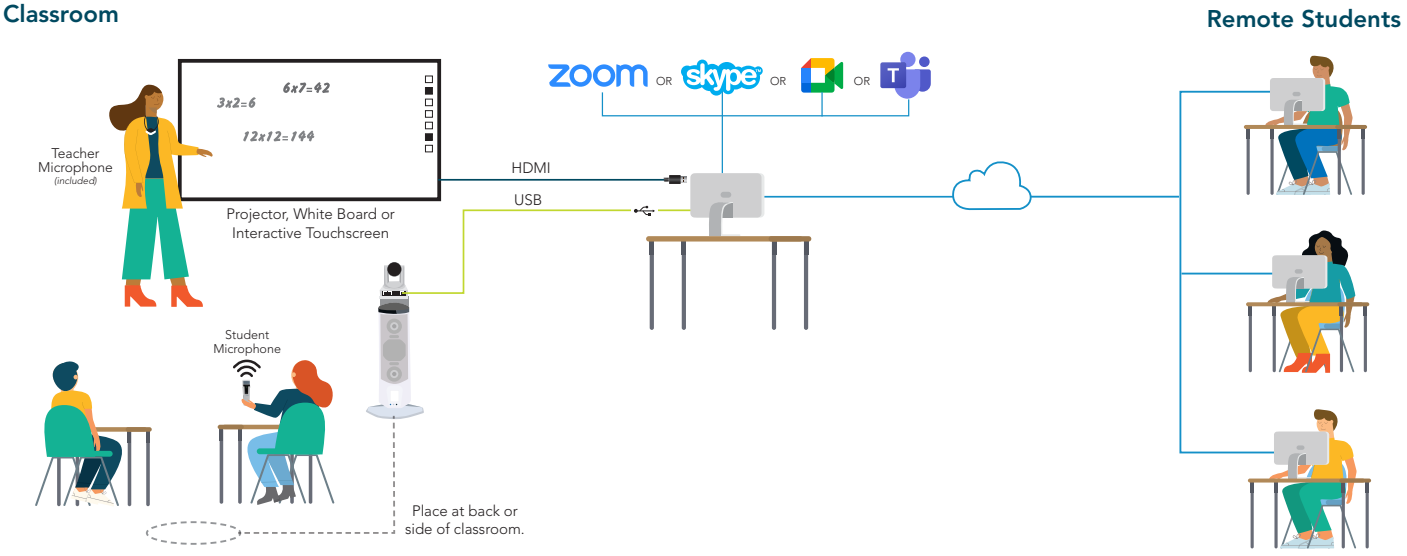
How it works

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.



© 2021 FrontRow Calypso LLC FrontRow, Calypso and the names of Juno, Conductor, OptiVoice, Adapto and Teacher Edition are trademarks or registered trademarks of FrontRow Calypso LLC in the U.S. and other countries. All other brand or product names are trademarks or registered trademarks of their respective owners.
1520-00018 RevB 0321