









# CLASSROOM AUDIO SOLUTION COMPARISON

		
<b>Product</b>	<b>LightSPEED RedCAT Access</b>	<b>FrontRow Juno</b>
<b>SUMMARY</b>		
<b>Overall Score</b>	<b>60%</b> Flat-panel speaker design sacrifices sound quality and coverage for setup speed	<b>97%</b> Incomparable sound quality, connectivity, and labor-saving advantages in an installation-free solution
<b>List Price</b>	\$1,367	\$1,249
<b>Limited Warranty</b>	5 years	5 years
<b>Ease of Installation</b>	<b>Excellent</b> Very easy to hang; although lack of feedback suppression can make it challenging to choose a location	<b>Excellent</b> Installation-free digital multi-speaker 2.1 stereo array with active digital feedback suppression
<b>Integration</b>	<b>Poor</b> Not suitable for multimedia playback due to insufficient low frequency response. No integration with paging, bells, alerting, or control systems.	<b>Excellent</b> Four true-stereo inputs plus Bluetooth; supports true multimedia integration with stereo output. Allows voice command of other classroom technology and full integration with paging, intercom, and alerting.





		
<b>Product</b>	<b>LightSPEED RedCAT Access</b>	<b>FrontRow Juno</b>
<b>Ease of Use</b>	<b>Average</b> Basic system is simple because it offers few features. Managing Activate functions with phone app can complicate usage.	<b>Excellent</b> Easy touch-screen; voice command for volume, starting recording, initiating intercom call, controlling displays, and more.
<b>Teacher Comfort</b>	<b>Excellent</b> Small lightweight mic	<b>Excellent</b> Small lightweight mic
<b>Sound Quality</b>	<b>Poor</b> Speaker is designed for convenience rather than sound quality; same technology used in greeting cards. Very susceptible to acoustic feedback	<b>Excellent</b> Two mid-range HF drivers and one woofer plus digital crossover network provide full, rich stereo sound. Digital feedback suppression lets teachers move close to speaker without squealing.
<b>Sound Coverage</b>	<b>Poor</b> Single speaker design does not cover the classroom evenly	<b>Excellent</b> Digital speaker array covers classroom evenly; expandable with ceiling or wall speakers for very large learning spaces
<b>Durability</b>	<b>Average</b>	<b>Excellent</b> Rigorous reliability and safety testing
<b>Feature Set</b>	<b>Average</b> Basic system has very few features; adding Activate allows teacher to listen to student conversations.	<b>Excellent</b> Huge variety of labor-saving and connectivity features. Expandable as needs grow.





		
<b>Product</b>	<b>LightSPEED RedCAT Access</b>	<b>FrontRow Juno</b>
<b>SYSTEM-LEVEL SPECIFICATIONS</b>		
<b>Transmission Type</b>	Modified DECT	Infrared
<b>Subcarrier Frequency</b>	1.9 GHz	2.1MHz, 2.4MHz; (2.8MHz, 3.3MHz, 3.6MHz with Channel Expansion Module)
<b>Available Channels</b>	12	5
<b>Possible Systems/School</b>	Unknown	Unlimited
<b>Simultaneously Usable Mics</b>	2	5
<b>Energy Star Qualified</b>		Energy-saving standby mode
<b>Lead-Free/RoHS</b>		✓
<b>Digital Signal Processing</b>		✓
<b>Feedback Suppression</b>		✓
<b>One-Touch Operation</b>		✓
<b>Speech Clarification</b>		✓ Patented OptiVoice technology boosts consonant sounds which carry 70% of meaning in speech; critical to listening activities like tests, directions, second-language instruction.





		
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Automated Lesson Capture		✓ Voice-activated lesson capture records, titles, and posts screen and audio content for students to access.
Bluetooth	✓ Only with purchase of full Activate System (MSRP \$2,185)	✓ Bluetooth module built-in
Distance Learning Support		✓ Makes conferencing more audible without echo.
Voice Command		✓
Teacher Voice Priority		✓
Output Power	15W	40W
Total Harmonic Distortion	<1%	<1% @ 1kHz
Signal-to-Noise	>70dB	>70dB
Mic Frequency Response	120 Hz - 13 kHz	50Hz – 20kHz
Sound Coverage		274.3m <sup>2</sup> /900ft <sup>2</sup> (up to 487.6m <sup>2</sup> /1600ft <sup>2</sup> with speaker expansion)
Portable Indoors	✓	✓
Portable Outdoors	✓	



		
<b>Product</b>	<b>LightSPEED RedCAT Access</b>	<b>FrontRow Juno</b>
<b>RECEIVER SPECIFICATIONS</b>		
<b>Reference</b>	RCA	ITR-01
<b>Inputs</b>	1 3.5mm	2 RCA extra sensors (optional); 3 RCA stereo; 1 3.5mm stereo; 2 Bluetooth pairings; 2 serial microphone charging/programming jacks; 1 serial communications port
<b>Outputs</b>	1 3.5mm	1 3.5mm
<b>Speaker Type</b>	Flat panel (same technology used in greeting cards)	3-driver 2.1 stereo line array, expandable to up to 6 additional fixed speakers
<b>Possible to Add Speakers</b>		✓
<b>Stereo</b>		✓
<b>User Controls</b>	Power, Tone, Volume	Power, master volume, individual mic volume, individual audio input volume, audio out volume, tower settings (Master volume and other functions also controllable via voice command)
<b>Desktop Control Software</b>		✓
<b>Touch Screen</b>		✓



		
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<b>Built-in Mic Charging</b>		✓
<b>Reception Area</b>	Unknown	487.6m <sup>2</sup> /1600ft <sup>2</sup>
<b>Page Override</b>		✓
<b>MIC SPECIFICATIONS</b>		
<b>Reference</b>	FM	ITM-02
<b>Battery Life</b>	8 hours	7 hours
<b>Battery Type</b>	NiMH	Li-ion
<b>Weight with Batteries</b>	51g	74g
<b>System Control from Mic</b>	Manual volume	Alert/action trigger or voice command for volume (in Connect version, also allows switching inputs, starting intercom call, etc.)
<b>Mute Switch</b>		✓ Large, easy-to-find. Teachers report needing to use for private conversations up to 30 times/day
<b>Audio Inputs</b>	1 3.5mm	1 3.5mm
<b>Student Mic</b>	✓	✓