Spectrum™ IMA-840

AUDIO AMPLIFIER/RECEIVER/MIXER

TeachLogic™
The Voice of Learning.

Specifications

Amplifier Output Power	100 W RMS, 4 x 25 W channels
Receiver Input	Infrared FM, 2 wireless mic channels
Modulation	Wide-band FM
Reception Frequencies	Ch. A: 2.08 MHz | Ch. B: 2.54 MHz
Deviation	10 kHz Nominal, 25 kHz Maximum
De-emphasis	50 μs
Tone Key	32.768 kHz
Infrared Wavelength	850 nm
External Sensor Input	2, RCA, powered ports
Connectivity Coverage	1,600 sq ft per sensor, up to 3 sensors supported
Total Harmonic Distortion	<1% @ 1 kHz
Frequency Response	20 Hz - 20 kHz, ± 3 dB
Line Level Inputs	4: 1 x dual RCA, 3 x 3.5 mm
Anti-Hum Balun	Present on 1 Aux input for computer
Wired Mic Input	1 aux input switchable to mic input
Line Outputs	Conferencing: 3.5 mm with gain control - front panel
	Assistive Listening System: 3.5 mm with gain control - rear panel
Page Input	2-pin Phoenix; 4 V, 25 V or 70 V normal
Page Input Sensitivity	51 mV min
Security Alert	Contact Closure (COM, N/O, N/C)
Fire Alarm	Contact Closure by fire panel mutes audio
Output Impedance	Rated Load: 4 Ω minimum impedance
Equalization	5-band, ±10 dB
S/N Ratio	65 dB
Speaker Connection	4-pin Phoenix Connectors
Charger Output	5 VDC, USB
Power Supply	19 VDC / 6.3 A CE, CSA and UL Listed
Dimensions	8 1/2"W x 1 3/4" H x 7 1/2" D
Weight	1.95 lb

Features

- Amplifier: digital hybrid class D
- Powers up to eight (8 Ω) classroom speakers
- Video Conference Sync w/ EchoGuard™
    - Front panel "Conference" input & output: connects to host computer to synchronize classroom audio w/ video conference application
    - EchoGuard™ prevents remote audio from being looped back into conference audio
- 4 line inputs:
    - Rear panel: 3.5 mm auxiliary input (mic or line level switch) Rear panel: 3.5 mm computer input w/ anti-hum (On/Off switch) | Front panel: 3.5 mm auxiliary (Conference) input | Rear panel: DVD input, dual RCA
- Assistive Listening System (ALS) output with level control on rear panel (3.5mm)
- Connection to building paging system
    - Mutes all audio inputs to allow page to be heard (Page Muting)
    - Passes page signal to classroom speakers (Page Pass Through)
    - Feature can be turned off w/ a selector switch. Note: not intended as a life-safety audio transmission feature
    - Pages pass through to Assistive Listening System and Conferencing outputs
- Supports teacher security alerting function from wireless microphone (IRT-60)
- Fire Alarm connection: mutes all audio sources when fire alarm sounds
- May be controlled by third-party RS-232 devices for all input levels (volume up, down, and mute)
- Digital Feedback Guard (DFG): reduces chances for audio feedback
- Remote teacher control over line inputs (enabled by Sapphire microphone)
- Low-power standby mode (both automatic and manual activation)
- Drop-in microphone charger connection 5 VDC USB