

# AZM4 / AZM8

# Atmosphere™ Zone Master Signal Processor





#### **Features**

- 4 (AZM4) & 8 (AZM8) Independently Controlled Zone Models
- Web UI Works on Any Operating System and Any Web Browser Including: Windows, Mac, Android, iOS, Linux. Optimized for Use on Chrome and Safari.
- Plug and Play Intelligent Wall Plate Accessories
- Daisy Chain up to 8 Accessories per Port, 2 Ports on AZM4, 4 Ports on AZM8
- Adaptive Ambient Noise Compensation
- Accessory Data + Audio Digital Bus RJ45-Cat 5e/6 Wire Runs up to 1000ft
- Input Auto-Gain Audio Control
- Virtual Wall Controllers for Mobile Devices, with QR Code Set-up, no App Required
- Tilter Filter™ Room EQ Adjustment Tool
- AtlasIED Speaker Presets
- Intuitive Calendar Format Event Scheduler
- Integrated .wav File Message Player with Scheduler and GPIO
- Printable Dynamic System Diagram
- Simple, Streamlined Workflow for All Skill Levels

### **Applications**

- · Restaurant / Bars
- · Houses of Worship
- Offices
- Corporate Centers
- Hospitality Suites
- Education

#### **General Description**

The AtlasIED Atmosphere™ Zone Master (AZM) platform was developed to meet the highest standards of design, quality, and value that our customers have come to expect from AtlasIED. We believe you will find this new platform highly flexible to address a variety of applications and refreshingly simple to deploy.

The AZM4 features a 6 input / 4 output configuration with 4 mic / line and 2 RCA stereo summed inputs and 4 output zones. In addition, 2 RJ45 bus ports each allow for 1 audio wall plate accessory, A-XLR, A-RCA, or A-BT, bringing the total input count to 8 by 4 out.

The AZM8 features a 10 input / 8 output configuration with 8 mic / line and 4 RCA stereo summed inputs and 8 output zones. In addition, 4 RJ45 bus ports each allow for 1 audio wall plate accessory, A-XLR, A-RCA, or A-BT, bringing the total input count to 14 by 8 out.

Six Plug and Play smart Wall Plate accessories, unmatched in the industry, expand the AZM capabilities and allow for future scalability. Accessories include 3 x Audio Inputs; balanced Mic / Line XLR, dual RCA stereo summed with 3.5mm, and Bluetooth® audio wall plate inputs, 2 x Controllers; Volume Controls, Volume Controls with Source Select, Scene Recall, and Message Playback, and 1 x Ambient Noise Sensor for Ambient Noise Compensation control. Any control accessory can be daisy chained on a single cable digital bus and assigned to any zone, reducing installation wiring time and complexity.

With a new approach to solving real world customer needs, the AZM line of products sets the new standard for the fixed architecture zone-based processing market.



Custom			
System	Circul Processor		
Type Output Power (Note 1)	Signal Processor  AZM4	AZM8	
Mic / Line Inputs	4 (Euroblock)	6 (Euroblock)	
RCA	2 (mono-summed)	4 (mono-summed)	
Line Outputs	4 (Euroblock)	8 (Euroblock)	
General Purpose Inputs	6 (Euroblock)	6 (Euroblock)	
High Priority Inputs	1 (Euroblock)	1 (Euroblock)	
General Purpose Outputs	2 (Euroblock)	2 (Euroblock)	
Accessory Ports	2 (RJ45)	4 (RJ45)	
Network Port	1 (RJ45)	1 (RJ45)	
Power Requirements			
Main Requirements	100 - 240 VAC, 50 - 60 Hz (C14 Mains Inlet Connector)		
Audio Inputs			
Balanced Mic / Line Inputs	Connector Type: 3.5mm Pitch Euroblock Color: Green Sensitivity: +4dBu with Gain Set to 0dB Input Gain: 0 - 60dB in 6dB Steps Phantom Power Voltage: +48VDC 10mA Accepts Unbalanced Inputs: Yes Maximum Input Level: +20dBu (7.72 Vrms) with Gain Set to 0dB Input Impedance: 3.9kΩ EIN: -125dBu with 150Ω Source Impedance and 20kHz BW CMRR: Typically 65dB at 1kHz Maximum Cable Size: 18AWG Minimum Cable Size: 24AWG		
RCA	Right Channel Color: Red Left Channel Color: White Type: Mono-summed Pairs Sensitivity: -10dBV Maximum Input: 2.4 Vrms (7.6dBV / 9.8dBu) for Both Inputs Driven and 4.78 Vrms (13.6dBV / 15.8dBu) for a Single Input		
Audio Outputs			
Balanced Line Outputs	Connector Type: 3.5mm Pitch Euroblock Color: Orange Maximum Output Level: +20dBu (7.75 Vrms) Maximum Cable Size: 18AWG Minimum Cable Size: 24AWG		
Audio Performance			
THD+N	<0.01% at 0dBu Input / Output with 0dB Gain at 1kHz		
Frequency Response	±0.5dB 20Hz - 20kHz		
Dynamic Range (S/N)	>108dB Unweighted 20Hz - 20kHz, > 110dB "A" Weighted		
Crosstalk	>-78dB at 1kHz		
Latency	Euroblock Input or RCA Input to Euroblock Output: 4.33msec Accessory Input A/C to Euroblock Output: 5.38msec Accessory Input B/D to Euroblock Output: 6.71msec		
Maximum Hardware Gain	60dB		
Input Processing			
EQ	24dB/oct HP, PEQ, Low / High Shelf, Notch, LP / HP (BW 6, 12, 24, 48dB/oct)		
Dynamics	Gate, De-Esser, Compressor, Auto Gain		
Other	Gain, Mixer, Priority Router		
Output Processing			
EQ	PEQ, Tilter Filter, Low / High Shelf, Notch, LP / HP (BW 6, 12, 24, 48dB/oct) Speaker Tuning EQ Presets		
Dynamics	Ambient Noise Compression, Limiter		
Other	Delay (100ms), Gain		
0.0101	Delay (1001115), Galii		







Other Connections			
Other Connections			
General Purpose Inputs	Contact Closure: Normally Open Capable of Internal Pull-up to 5VDC via User Interface Voltage Input: 0 - 12VDC (1.3VDC Trigger Voltage)		
High Priority Input	Contact Closure: Normally Open Capable of Internal Pull-up to 5VDC via User Interface Voltage Input: 0 - 12VDC (1.3VDC Trigger Voltage)		
General Purpose Outputs	Source Current: 10mA at 2VDC Maximum Sink Current: 180mA Maximum Sink Voltage: 24VDC		
Accessory Ports	Maximum Accessories per Port: 8 Maximum Accessories per AZM: 16 (10 for AZM4) Maximum Bus Length: 1000ft Maximum Audio Wall Plates per Port: 1		
Ethernet	10/100mB		
Mechanical			
Airflow	Front to Back		
Operating Ambient Temperature Range	0° - 40°C		
Cooling System	Forced Air with Side and Back Panel Venting		
Energy Consumption	AZM4	AZM8	
Max	130 BTU / Hr	256 BTU / Hr	
No Accessories	75 BTU / Hr	127 BTU / Hr	
Front Panel			
Screen	128 x 128 Color TFT Normally White, 1.45"		
Encoder	24 Detent, Push Button		
Light Bar	RGB (Blue = On, Red = Live Fault)		
WiFi			
Туре	802.11 b/g/n 2.4GHz		
Free Air Range	60ft		
Dimensions and Weight	AZM4	AZM8	
Rack Mount Requirements	1 RU, 19"		
Dimensions (with Rack Ears) - Unit	W 19" x H 1.75" x D 11.7" (483mm x 45mm x 297mm)		
Dimensions - Shipping	W 13.5" x H 4.75" x D 14" (343mm x 121mm x 356mm)	W 22" x H 4.75" x D 14" (559mm x 121mm x 356mm)	
Weight - Unit	4.735 lbs (2.148kg)	8.330 lbs (3.778kg)	
Weight - Shipping	7.3 lbs (3.3kg)	10.67 lbs (4.8kg)	
Agency Approvals			
Safety	Conforms to: ANSI / UL 62368-1 Certified to: CAN / CSA C22.2 #62368-1		
FCC / ISED	Part 15 (Class B) (US), ICES-003 (Canada)		
Optional Accessories			
C-V	Control Type: 24 Detents 360° Continuous Push Button Encoder Light Ring: RGB (Mute, Signal, Locate) Dimensions: 1.78" x 4.2" x 1.9" Minimum Box Depth: 2.25"		
C-ZSV	Control Type: 24 Detents 360° Continuous Push Button Encoder Light Ring: RGB (Mute, Signal, Locate) Screen: 128 x 128 Color TFT Dimensions: 1.78" x 4.2" x 1.9" Minimum Box Depth: 2.25"		





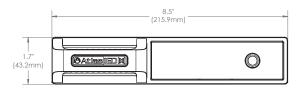
A-RCA	Right Channel Color: Red Left Channel Color: White Sensitivity: -10dBV (Same as AZM) Maximum Input Voltage: +8dBu Type: Mono-summed Pair Indicator: Green = Signal Presence, Red = Clip, Blue = Locate Dimensions: 1.78" x 4.2" x 1.5" Minimum Box Depth: 2.25"	
A-XLR	Sensitivity: +4dBu (Same as AZM Balanced Inputs) Connector Type: XLR (Female) Retaining Clip: Yes Phantom Power Voltage: +48VDC 10mA Accepts Unbalanced Inputs: Yes Input Gain: 0 - 60dB Maximum Voltage Input: +2-dBu Input Impedance: 3.4kΩ EIN: 117dBu at 150Ω, 20kHz BW CMRR: Typically 50dB at 1kHz Indicator: Green = Signal Presence, Red = Clip, Blue = Locate Dimensions: 1.78" x 4.2" x 2.1" Minimum Box Depth: 2.25"	
A-BT	BT Standard: V4.2 Audio Profile: A2DP Open Air Range: 100ft NFC: Tap-to-Pair Indicator: Green = Paired, Red = Error, Blue = Pairing Mode Button: Pairs and Unpairs Devices Dimensions: 1.78" x 4.2" x 1.4" Minimum Box Depth: 2.25"	
X-ANS	Data Returned to AZM: Non-audio Calibration: RMS, A-weighted, SPL Range: 30 - 110dBSPL Indicator: Blue = Locate Dimensions: 1.78" x 4.2" x 1.4" Minimum Box Depth: 2.25"	

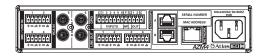


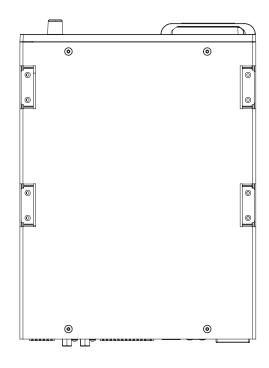


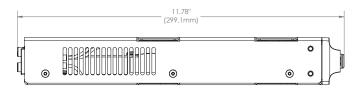
# **Dimensional Drawings**

AZM4







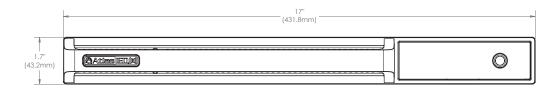


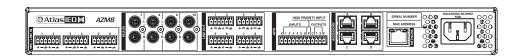


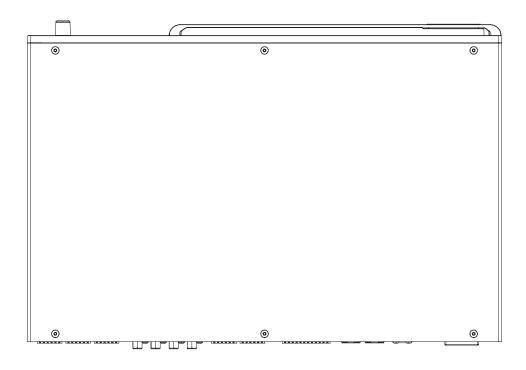


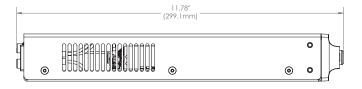
## **Dimensional Drawings**

AZM8





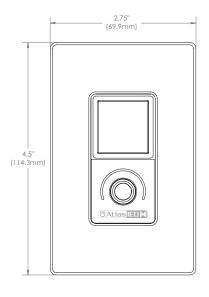


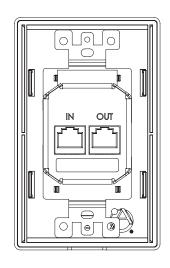


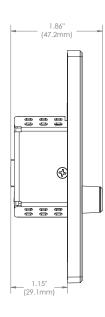


## **Dimensional Drawings**

C-V, C-ZSV, A-RCA, A-BT, and X-ANS share the same dimensions







A-XLR

