AtlasIED Atmosphere Physical Input/Output Configuration

Overview

This document provides a detailed reference of the physical inputs and outputs for each AtlasIED Atmosphere audio processor model, based on official specifications and rear panel analysis.

Model Comparison

Input Configuration Summary

Model	Zones	Balanced Inputs	RCA Inputs	Dante Inputs	Matrix Audio	Total Sources
AZM4	4	4 (Phoenix)	2 (RCA)	-	4	10
AZM8	8	6 (Phoenix)	2 (RCA)	-	4	12
AZMP4	4	4 (Phoenix)	2 (RCA)	-	4	10
AZMP8	8	6 (Phoenix)	2 (RCA)	-	4	12
AZM4-D	4	4 (Phoenix)	2 (RCA)	2 (Dante)	4	12
AZM8-D	8	6 (Phoenix)	2 (RCA)	2 (Dante)	4	14

Detailed Model Specifications

AZM4 - 4-Zone Audio Processor

Physical Inputs:
- **Input 1** - Balanced Phoenix (Priority Input) ⚡
- **Input 2** - Balanced Phoenix ⚡
- **Input 3** - Balanced Phoenix ⚡
- **Input 4** - Balanced Phoenix ⚡
- **Input 5** - Unbalanced RCA (Left) 🔊
- **Input 6** - Unbalanced RCA (Right) 🔊

Internal Matrix Audio:
- Matrix Audio 1-4 (Internal routing) 🔄

Outputs:
- Zone 1-4 Line-Level Outputs (Phoenix)

Features:
- Priority control on Input 1
- Web-based control interface

- RS-232 and TCP/IP control
- 4 audio zones with independent mixing

AZM8 - 8-Zone Audio Processor

Physical Inputs:
- **Input 1** - Balanced Phoenix (Priority Input) ⚡
- **Input 2** - Balanced Phoenix ⚡
- **Input 3** - Balanced Phoenix ⚡
- **Input 4** - Balanced Phoenix ⚡
- **Input 5** - Balanced Phoenix ⚡
- **Input 6** - Balanced Phoenix ⚡
- **Input 7** - Unbalanced RCA (Left) 🔊
- **Input 8** - Unbalanced RCA (Right) 🔊

Internal Matrix Audio:
- Matrix Audio 1-4 (Internal routing) 🔄

Outputs:
- Zone 1-8 Line-Level Outputs (Phoenix)

Features:
- Priority control on Input 1
- Web-based control interface
- RS-232 and TCP/IP control
- 8 audio zones with independent mixing

AZMP4 - 4-Zone Signal Processor with 600W Amplifier

Physical Inputs:
- **Input 1** - Balanced Phoenix (Priority Input) ⚡
- **Input 2** - Balanced Phoenix ⚡
- **Input 3** - Balanced Phoenix ⚡
- **Input 4** - Balanced Phoenix ⚡
- **Input 5** - Unbalanced RCA (Left) 🔊
- **Input 6** - Unbalanced RCA (Right) 🔊

Internal Matrix Audio:
- Matrix Audio 1-4 (Internal routing) 🔄

Outputs:
- Zone 1-4 **Amplified** Outputs (150W @ 70V/100V per zone)
- Zone 1-4 **Line-Level** Outputs (Pre-amp)

Features:
- Dual outputs per zone (amplified + line-level)
- 600W total amplification (150W per zone)
- Priority control on Input 1
- 70V/100V transformer-isolated outputs

AZMP8 - 8-Zone Signal Processor with 1200W Amplifier

Physical Inputs:
- **Input 1** - Balanced Phoenix (Priority Input) ⚡
- **Input 2** - Balanced Phoenix ⚡
- **Input 3** - Balanced Phoenix ⚡
- **Input 4** - Balanced Phoenix ⚡
- **Input 5** - Balanced Phoenix ⚡
- **Input 6** - Balanced Phoenix ⚡
- **Input 7** - Unbalanced RCA (Left) 🔊
- **Input 8** - Unbalanced RCA (Right) 🔊

Internal Matrix Audio:
- Matrix Audio 1-4 (Internal routing) 🔄

Outputs:
- Zone 1-8 **Amplified** Outputs (150W @ 70V/100V per zone)
- Zone 1-8 **Line-Level** Outputs (Pre-amp)

Features:
- Dual outputs per zone (amplified + line-level)
- 1200W total amplification (150W per zone)
- Priority control on Input 1
- 70V/100V transformer-isolated outputs

AZM4-D - 4-Zone Audio Processor with Dante

Physical Inputs:
- **Input 1** - Balanced Phoenix (Priority Input) ⚡
- **Input 2** - Balanced Phoenix ⚡
- **Input 3** - Balanced Phoenix ⚡
- **Input 4** - Balanced Phoenix ⚡
- **Input 5** - Unbalanced RCA (Left) 🔊
- **Input 6** - Unbalanced RCA (Right) 🔊

Dante Network Audio:
- Dante Input 1-2 (RJ45 network audio) 🌐

Internal Matrix Audio:
- Matrix Audio 1-4 (Internal routing) 🔄

Outputs:
- Zone 1-4 Line-Level Outputs (Phoenix)
- Dante Output 1-2 (RJ45 network audio)

Network Ports:
- 2x Dante network ports (Primary + Secondary for redundancy)
- 2x Control network ports

Features:
- Dante network audio integration
- Redundant Dante network

- Priority control on Input 1
- Web-based control interface

AZM8-D - 8-Zone Audio Processor with Dante

Physical Inputs:
- **Input 1** - Balanced Phoenix (Priority Input) ⚡
- **Input 2** - Balanced Phoenix ⚡
- **Input 3** - Balanced Phoenix ⚡
- **Input 4** - Balanced Phoenix ⚡
- **Input 5** - Balanced Phoenix ⚡
- **Input 6** - Balanced Phoenix ⚡
- **Input 7** - Unbalanced RCA (Left) 🔊
- **Input 8** - Unbalanced RCA (Right) 🔊

Dante Network Audio:
- Dante Input 1-2 (RJ45 network audio) 🌐

Internal Matrix Audio:
- Matrix Audio 1-4 (Internal routing) 🔄

Outputs:
- Zone 1-8 Line-Level Outputs (Phoenix)
- Dante Output 1-2 (RJ45 network audio)

Network Ports:
- 2x Dante network ports (Primary + Secondary for redundancy)
- 2x Control network ports

Features:
- Dante network audio integration
- Redundant Dante network
- Priority control on Input 1
- Web-based control interface

Input Type Definitions

Balanced Inputs (Phoenix Connectors)

- Professional mic/line level inputs
- Phoenix screw terminal connectors
- Differential signal transmission
- Superior noise rejection
- Ideal for: Microphones, professional audio sources, long cable runs
- **Icon:** ⚡

Unbalanced Inputs (RCA Connectors)

- Consumer-level stereo inputs
- Standard RCA jacks (red/white or L/R)

- Single-ended signal transmission
- Good for short cable runs
- Ideal for: Consumer audio devices, media players, background music sources
- **Icon:** 🔊

Dante Network Inputs (RJ45)

- Digital audio over IP network
- Standard Cat5e/Cat6 cabling
- Multi-channel, low-latency audio
- Supports redundant network topology
- Ideal for: Distributed audio systems, integration with other Dante devices
- **Icon:** 🌐
- **Only available on: AZM4-D, AZM8-D**

Matrix Audio (Internal)

- Internal audio routing buses
- Software-configurable mixing
- Can combine multiple inputs
- Useful for complex routing scenarios
- **Icon:** 🔄

Priority Input Feature

Input 1 on all models has a special **Priority** function:

- Can automatically duck (reduce volume of) other inputs
- Ideal for: Paging systems, emergency announcements, important notifications
- Configurable priority level and duck amount
- Can be configured to completely mute other sources

Output Configurations

Line-Level Outputs (Non-Amplified Models)

- AZM4, AZM8, AZM4-D, AZM8-D
- Phoenix screw terminal outputs
- Requires external amplification
- +4dBu balanced output

Amplified Outputs (AZMP Models)

- AZMP4, AZMP8
- **Dual outputs per zone:**
- **Amplified Output:** 150W @ 70V/100V (Phoenix)
- **Line-Level Output:** Pre-amp signal for additional amplification
- Transformer-isolated 70V/100V outputs

- Can drive speakers directly or use line output for external amps

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Rear Panel Images

All rear panel images are available at:
- `/atlas-models/azm4-rear.png`
- `/atlas-models/azm8-rear.png`
- `/atlas-models/azmp4-rear.png`
- `/atlas-models/azmp8-rear.png`
- `/atlas-models/azm4-d-rear.png`
- `/atlas-models/azm8-d-rear.png`

Configuration Verification Checklist

When configuring an AtlasIED Atmosphere processor in the Sports Bar AI Assistant, verify:

- [ ] Correct number of physical inputs for the model
- **4-zone models:** 6 total (4 balanced + 2 RCA)
- **8-zone models:** 8 total (6 balanced + 2 RCA)
- **-D models:** Add 2 Dante inputs
- [ ] All 4 Matrix Audio buses are available
- [ ] Correct number of zone outputs matches zone count
- [ ] AZMP models show both amplified AND line-level outputs
- [ ] Input 1 is marked as Priority Input
- [ ] RCA inputs are labeled as unbalanced (Input 5-6 for 4-zone, Input 7-8 for 8-zone)
- [ ] Dante inputs only appear on -D models

Sports Bar Application Examples

Typical Input Assignments

Sports Bar with AZM8:
- **Input 1 (Balanced):** Paging microphone (priority)
- **Input 2 (Balanced):** DJ mixer
- **Input 3 (Balanced):** Jukebox/music system
- **Input 4 (Balanced):** Sports TV audio feed 1
- **Input 5 (Balanced):** Sports TV audio feed 2
- **Input 6 (Balanced):** Sports TV audio feed 3
- **Input 7 (RCA):** Background music player (L)
- **Input 8 (RCA):** Background music player (R)

Zone Assignment Example

- **Zone 1:** Main bar area
- **Zone 2:** Dining room 1
- **Zone 3:** Dining room 2

- **Zone 4:** Patio
- **Zone 5:** Game room
- **Zone 6:** Private dining
- **Zone 7:** Restroom corridor
- **Zone 8:** Kitchen

Each zone can independently select any input source and control volume/EQ.

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AtlasIED Atmosphere Audio Processors - Physical Configuration Reference