IP Loudspeakers

Introduction

AtlasIED IP loudspeakers consist of a factory assembled loudspeaker and baffle with PCB amplifier / control board securely mounted to the rear of the baffle. The amplifier / control board is capable of producing 15-watts RMS into the 8Ω loudspeaker with IEEE 802.3at compliant PoE switches. A local 24VDC PSU (TSD-PS24V2500MA) may also be used instead of PoE switches. Interconnection is via a board mounted female RJ-45 connector. All models are compatible with AtlasIED's Global ControlKom©, GCK©, Syn-Apps SA-Announce©, Singlewire's InformaCast© software, and SIP standalone operation. They also include 2 general purpose inputs, 1 relay output, 1 line out, and 1 line input.
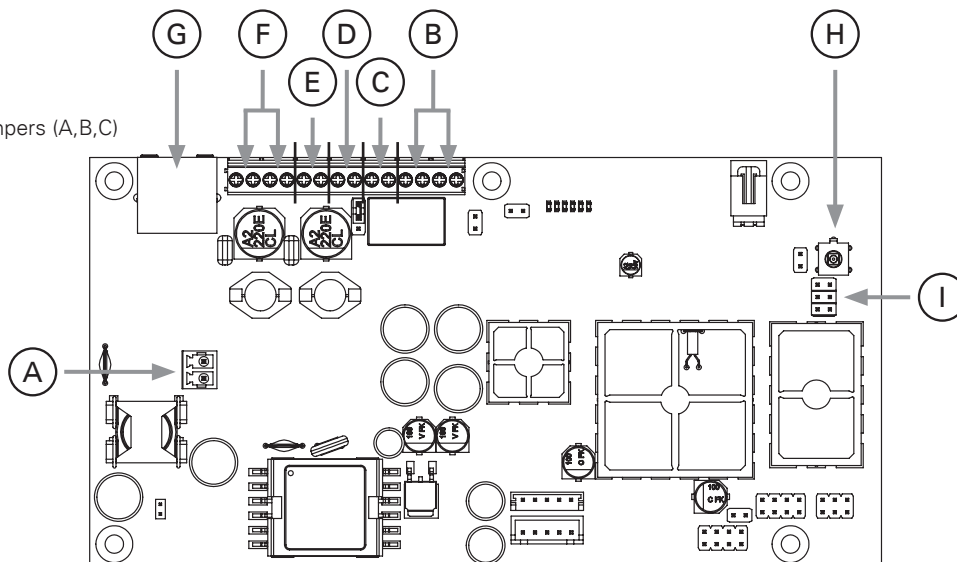
Models may include the following:

- 8" Loudspeaker
- 6" Horn Speaker
- LED Display
- Microphone
- Flasher

Functionality

Before installing, note the unit's MAC address found on the units main circuit board (example 00:02:C1:81:00:00). Once connected to a network and powered, the IP loudspeaker will boot up and automatically obtain an IP address from a DHCP server on the network. Next, the unit will start the registration process to find the controller software. Once the IP loudspeaker identifies the software's location, it will send a registration request to the software and register. The MAC address of the unit will then show in the software. Please refer to the installation manual of the software for additional configuration settings.

After the module has registered with the software, its HTTP page can be accessed by navigating to its IP address with any Internet browser. This page will show its current firmware version and registration information. If unsure about IP address, press the unit's service button for 1 second. The unit's IP address will be announced over the loudspeaker.

A. Power Input (**WARNING:** Do not use in conjunction with PoE)

B. General Purpose Inputs 1 and 2

C. Relay Output

D. Line Level In

E. Line Level Out

F. Loudpeaker Outputs - The primary output is connected to the baffle loudspeaker (or horn). The secondary output may be used to drive another 8Ω loudspeaker or horn.

G. Network Input

H. Service Switch

I. Force Discovery Jumpers (A,B,C)

GPI Interface

General purpose inputs (GPI's) are used to trigger events in the Control software packages. Refer to software manuals for functionality.

Relay Output is Controlled via software packages. Refer to software manuals for functionality.

Mounting

Each model has a specific mounting enclosure that can be Flush Mount, Surface Mount Straight, or Angled Surface Mount. Models include:

Flush Mount Enclosures: FEST-IH, FEST-I8S, FEST-I8SC

Surface Mount Enclosures: SEST-IH, SEST-I8S, SEST-I8SC

Surface Mount Angled Enclosures: SEA-I8S, SEA-I8SC

Note: The I128SYS+ series is sold with an integrated enclosure for drop ceilings.

IP Loudspeaker Connector Block Pin Configuration

A 14 pin screw type connector block (J2) will be used to allow connections to the controller.

Pin Description

1	GPI In 2 +	8	Line-In (+)
2	GPI In 2 Com	9	Line-Out (-)
3	GPI In 1 +	10	Line-Out (+)
4	GPI In 1 Com	11	Primary / Loudspeaker (-)
5	Relay Common	12	Primary / Loudspeaker (+)
6	Relay Normally Open	13	Secondary / Loudspeaker (-)
7	Line-In (-)	14	Secondary / Loudspeaker (+)

Note: Pin 14 is located next to the RJ45 jack.

Misc Settings

1. Service Button - The only push switch located on the main circuit board.

- Press 1 sec - The current IP address will be spoken (in English) through the 8Ω loudspeaker

- Press 10 sec - Factory reset

- Press and hold while applying power - Hold the button until the Status LED on the circuit board starts blinking rapidly to perform a factory reset without any servers present

2. Force Discovery - In some cases, auto discovery may not work correctly. In these cases, the A, B, and C jumper located under the service button may be enabled.

- Jumper A - Singlewire

- Jumper B - Syn-Apps

- Jumper C - GCK

General Specifications

Weight	
	I8S+, I8SM+ – 4.8 lbs
	I8SC+, I8SCM+ – 6 lbs
	I128SYS+, I128SYSM+ – 12.9 lbs
	IHVP+ - 6.1 lbs

Loudspeaker Specifications (IHVP+, I8SCH+)

Power Handling	15-watts Continuous
Sensitivity	120dB / 15-watts (peak)
	114dB / 15-watts (avg) 700Hz - 5.5kHz
	104dB 1W/1M (avg) 700Hz - 5.5kHz
Frequency Response	600Hz - 14kHz (nominal)
	700Hz - 5.5kHz (±5dB)
Dispersion	95° (-6dB, 2kHz Octave Band)

Loudspeaker Specifications (All Other Models)

Loudspeaker Size	8" (203mm)
Power Handling	15-watts Continuous Sensitivity (SPL @ 1W/1M) 94dB
Frequency Response	86Hz - 8kHz (±5dB)
Dispersion	105°
Cone Material	Treated Paper

Amplifier / Control Specifications

Power Rating	15-watts RMS into an 8Ω Load with 802.3at
Inputs	RJ-45 Female
Outputs	10k Ω Line Out, 8Ω Loudspeaker
Power Source	IEEE 802.3af or 802.3at PoE Network Switches / Local 24VDC PSU
Network Control	Multicast Enabled Networks
Line Output	1V 10k Ω
Line Input	1V 10k Ω

GPI Specifications

Relay Output	30V at 2A Max
Input Minimum	1mA to Run on 30V Max

Microphone Specifications (Included on "M" Models - Example: I8SCM+)

Type	Electret Condenser Microphone
Sensitivity	-35 (±4dB) (0db = 1V/pa, 1kHz)
Impedance	Less than 2.2k Ω
Directivity	Omnidirectional
Frequency	20Hz - 20kHz
Max. Operation Voltage	10V
Standard Operation Voltage	2V
Current Consumption Max.	0.5 mA
Sensitivity Reduction Within	-3dB @ 1.5V
S/N Ratio	More than 62dB

Limited Warranty

All products manufactured by AtlasIED are warranted to the original dealer / installer, industrial or commercial purchaser to be free from defects in material and workmanship and to be in compliance with our published specifications, if any. This warranty shall extend from the date of purchase for a period of three years on all AtlasIED products, including SOUNDOLIER brand, and ATLAS SOUND brand products except as follows: one year on electronics and control systems; one year on replacement parts; and one year on Musician Series stands and related accessories. Additionally, fuses and lamps carry no warranty. AtlasIED will solely at its discretion, replace at no charge or repair free of charge defective parts or products when the product has been applied and used in accordance with our published operation and installation instructions. We will not be responsible for defects caused by improper storage, misuse (including failure to provide reasonable and necessary maintenance), accident, abnormal atmospheres, water immersion, lightning discharge, or malfunctions when products have been modified or operated in excess of rated power, altered, serviced or installed in other than a workman like manner. The original sales invoice should be retained as evidence of purchase under the terms of this warranty. All warranty returns must comply with our returns policy set forth below. When products returned to AtlasIED do not qualify for repair or replacement under our warranty, repairs may be performed at prevailing costs for material and labor unless there is included with the returned product(s) a written request for an estimate of repair costs before any nonwarranty work is performed. In the event of replacement or upon completion of repairs, return shipment will be made with the transportation charges collect.

EXCEPT TO THE EXTENT THAT APPLICABLE LAW PREVENTS THE LIMITATION OF CONSEQUENTIAL DAMAGES FOR PERSONAL INJURY, ATLASIED SHALL NOT BE LIABLE IN TORT OR CONTRACT FOR ANY DIRECT, CONSEQUENTIAL OR INCIDENTAL LOSS OR DAMAGE ARISING OUT OF THE INSTALLATION, USE OR INABILITY TO USE THE PRODUCTS. THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

AtlasIED does not assume, or does it authorize any other person to assume or extend on its behalf, any other warranty, obligation, or liability. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

Service

Should your IP Loudspeaker require service, please contact the AtlasIED warranty department at

1-877-689-8055, ext. 277 or support.atlasied.com to obtain an RA number.

AtlasIED Tech Support can be reached at 1-800-876-3333 or support.atlasied.com.

Visit our website at www.AtlasIED.com to see other AtlasIED products.