

ALGO 8180

ALGO 8180 IP Audio Alerter Instruction Manual

Model: 8180

1. OVERVIEW

The ALGO 8180 IP Audio Alerter is a network-connected speaker designed for voice paging, emergency alerting, and loud ringing applications. This device integrates with SIP-compatible phone systems and supports multicast for wide-area notifications, making it suitable for various environments requiring clear and effective audio communication.

ALGO 8180 SIP AUDIO ALERTER

This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received,
including interference that may cause undesired operation.

SN#: 1634AO027F85



MAC ADDR: 0022EE027F85



Made in Canada
Algo Communication Products Ltd.

RIs 12

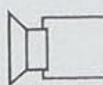
LR95233



RoHS

67-00047D

Speaker Output
To External Speaker(s)
8Ω 8 Wrms



Audio Output
To Slave Amplifier
0 dbm 600Ω



Dry Contact Relay
Max 30V 50mA



1 2 3 4 5 6
Speaker Audio Relay



Figure 1: Front view of the ALGO 8180 IP Audio Alerter.

2. PRODUCT FEATURES

- **Wideband Audio (G.722 codec):** Provides clear and intelligible speech for effective communication in various settings.
- **Dynamic Volume Control:** Automatically adjusts speaker volume based on ambient noise levels, ensuring messages are heard clearly without being overly loud or too quiet.
- **Talkback Capability:** Features an embedded microphone for two-way communication, allowing for interactive responses.
- **Multicast Support:** Enables simultaneous broadcasting of live voice pages or ringtones over the network to other Algo IP speakers and visual alerters, either individually or in zone groups.
- **Customizable WAV Files:** Supports custom audio files for emergency notifications and telephone loud ringing, allowing for tailored alerts.
- **Easy Installation:** Designed for wall mounting with an included bracket, simplifying the setup process.



Intelligible Audio



Multicast Capable



Embedded Microphone



Wide UC Compatibility

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x ALGO 8180 IP Audio Alerter
- 1 x Mounting Bracket
- Instruction Manual (this document)

4. INSTALLATION

4.1 Mounting the Device

The ALGO 8180 is designed for easy wall mounting. Use the provided mounting bracket to secure the device in a desired location. Ensure the mounting surface is stable and can support the device's weight. Allow sufficient space around the device for cable connections and ventilation.

4.2 Network and Power Connection

The 8180 IP Audio Alerter is powered via Power over Ethernet (PoE). Connect a standard Ethernet cable from your network switch (which must support PoE) to the RJ45 port on the device. This single connection provides both power and network connectivity.





Figure 2: Side view showing the Ethernet port and terminal block connections.

4.3 External Connections (Optional)

The device includes a terminal block for optional external connections:

- **Speaker Output:** Connect an optional external 8 Ohm speaker to terminals 1 and 2 for extended audio coverage.
- **Audio Output:** Provides a 0 dBm, 600 Ohm audio output for connection to a slave amplifier.
- **Dry Contact Relay:** Terminals 5 and 6 provide a dry contact relay output (Max 30V, 50mA) for integration with external systems, such as strobe lights or door locks.





Figure 3: Back view displaying connection labels and serial information.

5. CONFIGURATION

The ALGO 8180 is configured via a web-based interface. Once connected to the network and powered on, the device will obtain an IP address (either via DHCP or a static IP if pre-configured).

1. **Access Web Interface:** Open a web browser and enter the device's IP address into the address bar.
2. **Login:** Enter the default username and password (refer to the ALGO documentation for default credentials).
3. **SIP Registration:** Configure the SIP registration details (SIP server address, user ID, password) to integrate the 8180 with your IP PBX system.
4. **Multicast Settings:** Set up multicast addresses and zones for group paging and alerting.
5. **Audio Settings:** Adjust volume levels, enable/disable dynamic volume control, and configure talkback

sensitivity.

6. **Upload WAV Files:** Upload custom audio files for specific alerts, ringtones, or announcements.
7. **Firmware Update:** Check for and apply any available firmware updates to ensure optimal performance and security.

6. OPERATION

The ALGO 8180 supports various operational modes for effective communication:

- **Voice Paging:** Initiate a live voice page by dialing the 8180's extension from a SIP phone. Your voice will be broadcast through the speaker.
- **Emergency Alerting:** Trigger pre-configured emergency alerts or announcements via SIP or multicast. These can be custom WAV files for specific situations.
- **Loud Ringing:** Configure the device to play a loud ringtone for incoming calls to a specific extension, useful in noisy environments.
- **Talkback Functionality:** When enabled, the embedded microphone allows for two-way communication. After a page, users near the speaker can respond, and their voice will be transmitted back to the paging source.
- **Dynamic Volume Control:** The device continuously monitors ambient noise and adjusts its output volume to ensure messages are audible without manual intervention.

7. MAINTENANCE

7.1 Cleaning

To clean the ALGO 8180, gently wipe the exterior with a soft, dry cloth. Do not use liquid cleaners, aerosols, or abrasive materials, as these can damage the device.

7.2 Firmware Updates

Periodically check the official ALGO website for available firmware updates. Firmware updates can provide new features, performance improvements, and security enhancements. Follow the instructions provided with the firmware package for a safe and successful update process.

8. TROUBLESHOOTING

If you encounter issues with your ALGO 8180, refer to the following common troubleshooting steps:

- **No Power/Indicator Light Off:** Ensure the Ethernet cable is securely connected and that your network switch is providing Power over Ethernet (PoE). Test with a known working PoE port or injector.
- **No Audio Output:** Verify that the volume settings in the web interface are not set to zero. Confirm that the SIP registration is active and that the device is receiving audio streams. If using multicast, check multicast group settings.
- **Network Connectivity Issues:** Check the device's IP address, subnet mask, and gateway settings in the web interface. Ensure there are no firewall rules blocking communication to or from the device. Ping the device's IP address from a computer on the same network.
- **Poor Audio Quality:** Ensure sufficient network bandwidth is available. Check the audio codec settings (G.722 is recommended for wideband audio). Verify that the microphone is not obstructed if talkback quality is poor.
- **Device Not Registering with SIP Server:** Double-check the SIP server address, user ID, and password.

Ensure the SIP server is reachable from the device's network location.

9. SPECIFICATIONS

Feature	Specification
Brand	ALGO
Model Number	8180
Connectivity Technology	Ethernet
Connectivity Protocol	SIP
Power Source	Ethernet Powered (PoE)
Speaker Maximum Output Power	24 Watts
Audio Output Mode	Wideband
Speaker Type	Multimedia, Wideband
Additional Features	Wideband Speaker, Two-Way Talk, Ambient Noise Detection, Embedded Microphone
Mounting Type	Wall Mount
Enclosure Material	Plastic
Color	Black
Item Weight	1.5 Pounds
Number of Microphones	1
Specific Uses For Product	Classroom, factory, warehouse, utility plant, machine shop, garage, lunch room, kitchen, emergency/safety/security notification and alerting, Voice over IP (VoIP) paging, IP loud ringing

9.1 Application Examples



Classroom



Hospital



Warehouse

10. WARRANTY INFORMATION

The ALGO 8180 IP Audio Alerter comes with a limited warranty. The warranty period is 12 months from the date of purchase, not to exceed 18 months from the date of manufacture. Please retain your proof of purchase for warranty claims.

11. SUPPORT

For additional support, technical assistance, or to access the latest documentation and firmware, please visit the official ALGO website or contact your authorized ALGO reseller. You can find more information at [ALGO Communication Products Store](#).

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question

and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question