

# ALGO

# 8180

## **SIP Audio Alerter** *SIP-Compatible Audible Alerter & Paging Amplifier*



## **Installation & User Guide**

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## Introduction



The 8180 SIP Audio Alerter is a SIP compliant PoE audio device optimized for alerting and voice applications with integrated amplifier and high quality speaker.

Loud Ringer tones are selectable. Users may also record or upload their own tones or voice announcements to the internal memory which is capable of storing four minutes of 16 kHz sampled audio. Alerts can be activated by a telephone ring message or other events depending on configuration and server capability. Output dry contacts may be used to activate visual alerting devices.

For paging, the 8180 can play multicast announcements or be configured as an auto-answer and page SIP telephone using its internal speaker. The internal amplifier may also be connected to an external ceiling speaker or outdoor weatherproof horn speaker. An optional adapter is available for driving a slave amplifier.

Configuration is possible using the feature buttons or web interface capable of managing multiple SIP Audio Alerters.

## Features

- Selectable ring tones
- Play uploaded audio clips or recorded audio
- Outputs for external speaker, slave amplifier, or visual alerter
- LED indication of active speaker
- Supports auto answer and multicast paging
- Wideband audio
- Internal microphone for recording audio or ambient noise sensing

## Applications

- SIP Loud Ringer (when the IP telephone is not loud enough, more coverage is required, or notification is required in a remote location)
- SIP Speaker (using internal speaker or external 8 ohm speaker)
- SIP Visual Alerter (for very loud or very quiet environments when

audible alerting is ineffective or not desirable)

- SIP Paging (auto answer or multicast)

## **Requirements & Compatibility**

- Requires SIP-compliant Server
- SIP Server must support call forking in order for SIP Audio Alerter to detect Ring on another extension
- Available network port with secure network access to SIP Server

# Setting Up

## Preparation

Before setting up and using the 8180 SIP Audio Alerter, it helps to answer a few questions:

### **Extensions**

#### ***Which telephone extensions do you want to monitor?***

If used for Ring detection, knowing beforehand which telephone extensions you want to provide alerting for will make the programming of the unit faster and easier. Call forking must be configured on your SIP Server in order to ring the extension of the SIP Audio Alerter for calls which you wish to receive alerting.

### **PC**

#### ***Which PC are you going to use to program the 8180?***

The SIP Audio Alerter can be programmed through the use of any PC as long as that PC is connected to the same network as the device. All that's required is a CD-ROM drive (to run the SIP Audio Alerter Wizard program) and a web browser (to access the SIP Audio Alerter Control Panel).

**SIP Server**

**What is the IP address of the SIP Server?**

To configure the SIP Audio Alerter, the IP address of the SIP Server will need to be entered.

**Physical Connection to Network**

To connect the SIP Audio Alerter to your network, use a standard ethernet cable, then plug into any available network port. The SIP Audio Alerter includes Power-over-Ethernet (PoE) functionality so this single connection to the network not only provides network connectivity but powers the device as well.

If your network does not have PoE, use a PoE injector (available from Algo). Attach the injector so that one end is connected to the SIP Audio Alerter and the other end to the network port. Then plug the injector power connection into a wall socket.

**Automatic Assignment of IP Address**

To be usable on the network, the SIP Audio Alerter must be allocated an IP address. This is done automatically either through the DHCP Server (if used on the network) or through Zero

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Configuration networking which both Windows and the SIP Audio Alerter support.

## Locating the Device on the Network

Once a SIP Audio Alerter is connected to the network, it needs to be located so it can be configured using the SIP Audio Alerter Control Panel web interface. This can be done automatically using the SIP Audio Alerter Wizard (a program supplied with your SIP Audio Alerter package), or, if you know the IP address, you can also access it manually.

### **Automatic Discovery using the Wizard**

1. Insert the SIP Audio Alerter Installation CD-ROM into any available PC on the network.



Alternatively, if you have already installed the SIP Audio Alerter Wizard program on your PC, you can run it from the Windows Start menu.

2. Install the SIP Audio Alerter wizard - the installation program

should start automatically from the CD.



If the SIP Audio Alerter Wizard installation program does not automatically start when you insert the CD, you can manually launch it from Windows Explorer by going to your CD drive and running the program named AudioAlerterWizard.exe. (e.g. f:\AudioAlerterWizard.exe)

3. Click the Configure button for your SIP Audio Alerter in the SIP Audio Alerter Wizard. If there are multiple SIP Audio Alerter devices on the network, the SIP Audio Alerter Wizard will list all of these, complete with their MAC and IP addresses. You can identify the SIP Audio Alerter you want to configure by matching it with the MAC address that is labeled on the back of the device. In addition, you can select the Identify button which will cause the selected SIP Audio Alerter to blink its lights.

**Manual  
Mode**

If you know the IP address of your SIP Audio Alerter device on the network, you can connect directly to it without needing the SIP Audio Alerter Wizard.

1. To do this, first confirm that you are able to access the network where the SIP Audio Alerter is connected to (see “Confirming Network Access” on page 26).
2. In the URL address bar of a web browser, enter the IP address of the SIP Audio Alerter device. For example:

192.168.1.2

## Using the Control Panel

This section describes using the web interface (the “SIP Audio Alerter Control Panel”) to configure your SIP Audio Alerter device. This control panel can be accessed after you have followed the steps in “Locating the Device on the Network” on page 8.

The SIP Audio Alerter Control Panel is comprised of six main pages: Status, Config, Ringtone, Network, Admin, and Upgrade which are described below. Note that to access all pages except the Status page, the system will prompt you to enter a password. The factory default setting for this password is:

algo

For security purposes, make sure to change the password using the Admin page (see “Admin” on page 17) after being logged in.

Be sure to record your new password in a secure location where it will not be lost, as this password cannot be retrieved. If you lose your password, you must use the reset button on the back of the SIP Audio Alerter; this will return all settings to factory defaults, including the password. The SIP Audio Alerter will then need to be reconfigured just as a new unit would.

## Status

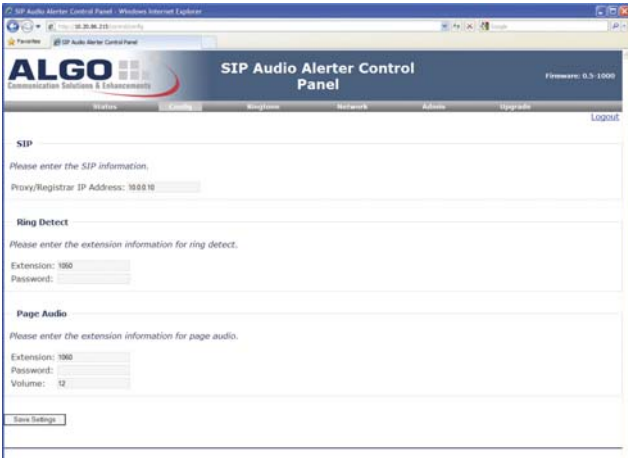


The Status page is the first screen you will see when you access the SIP Audio Alerter Control Panel. This screen provides runtime information (extension and network settings) for the SIP Audio Alerter. This information includes what extensions the SIP Audio Alerter is

configured for. In addition, the SIP Audio Alerter IP and Netmask addresses are listed.

To change the configuration, click the Configure button or select Config, Network, or Admin from the main navigation bar, then enter the password described earlier.

## Config



The Config page allows you to change the SIP Server IP address (the address of the SIP Server), and assign two telephone extensions to

the SIP Audio Alerter: one for Ring Detect, and the other for Page Audio.



*Be sure to click the Save Settings button at the bottom of the page after completing your changes.*

**Set up Ring Detect extension**

When a call is received on the “Ring Detect” extension, the SIP Audio Alerter will play the configured ring sound, until the ring condition ends.

**Set up Page extension**

When a call is received on the “Page Audio” extension, the SIP Audio Alerter will answer the call, and activate its speaker to allow one-way paging.

**Set up SIP Server IP address**

Contact your SIP system administrator for information on what address to enter into this field.

## Ringtone



The Ringtone page allows you to change the audio tone or file that is played when a Ring condition occurs.

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## Network



The default setting for the SIP Audio Alerter is to accept an address from a DHCP server (if present) on the network. This can be changed by removing the checkbox.

Contact your Network System administrator if you plan to assign a static IP address, Mask, and Gateway to the SIP Audio Alerter device.

## Admin



This page allows you to set up a Device Name and an Administrator Password for the SIP Audio Alerter.

### **Device Name**

If you have more than one SIP Audio Alerter connected to the network, the Device Name will allow you to identify each device when using the SIP Audio Alerter Wizard.

### **Administrator Password**

The Administrator Password helps secure the SIP Audio Alerter against unauthorized changes. The password you choose is saved to the SIP Audio Alerter memory.

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You can also reset all SIP Audio Alerter settings to their factory default. After reset, the password will be set back to **algo**

- Log** The Log section is provided in the event that you require technical support for your SIP Audio Alerter (refer to “Technical Support” on page 26).

## Upgrade



Periodically Algo provides firmware upgrades to its products. You can use this page to upgrade your SIP Audio Alerter to the latest firmware version. To do so, simply follow the instructions provided with the firmware upgrade package.

After upgrade, all the settings will be reset to factory default.

You can learn about whether there is a firmware upgrade for your product by visiting the SIP Audio Alerter web page at [www.algosolutions.com/8180](http://www.algosolutions.com/8180)

## Connecting to Alerter Devices

The SIP Audio Alerter has a relay output which will be activated whenever a Ring Detect or Page Audio condition occurs. Any device that can be triggered by a dry contact (relay) closure can be connected to this output.

The following three Algo Alerter devices can be used:

- 1127 Visual Alerter (for low-intensity desktop/office or near-area visual notification)
- 1126 Strobe Light (for high-intensity wide-area visual notification)
- 1185 Horn Speaker (for additional loudness or outdoor applications).



*For details about using and setting up external alerter devices, please consult the documentation provided with those products.*

# Appendix

## Specifications

<b>IP Interface</b>	SIP/SDP/RTP. RFC: 3261, 3264, 3265 Network DHCP 10/100 MB PoE 802.3af Class 3 G.711 $\mu$ law/Alaw
<b>Outputs</b>	Auxiliary Speaker, 8 Ohm 10W Dry Contact Relay (Max 50mA 30V)
<b>Sound Pressure Level</b>	98 dBA at 1m 500Hz warble internal speaker; 115 dBA at 1m 500Hz warble optional horn speaker
<b>Audio Memory</b>	4 Minutes 16 kHz sampling
<b>Tones</b>	Selectable and reprogrammable Warble – tone adjustable; Chime – tone adjustable; Bell; Barking Dog
<b>Upload Audio Clip Format</b>	WAV, 16 kHz sampling
<b>Hardware Controls</b>	Test, Tone up/dn, Volume up/dn
<b>Web Control</b>	Test, Tone up/dn, Volume up/dn Firmware update / application download Server IP Address Multicast IP Address Relay output function

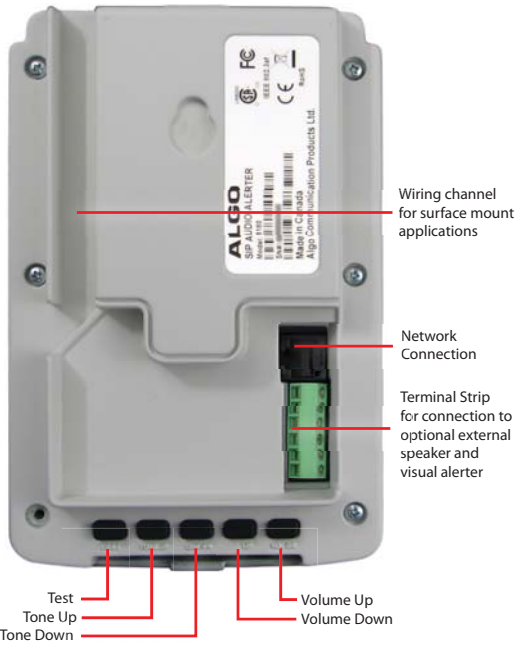
<b>Environmental</b>	0-40° C; 10-95% RH non-condensing Indoor use only (horn speaker may be located outdoors)
<b>Regulatory</b>	FCC, CSA/UL, CE, RoHS
<b>Power</b>	IEEE 802.3af Class 3 48V 1.6W Idle, 13W Maximum
<b>Accessories</b>	1185 Horn Speaker 1127 Visual Alerter 1126 Strobe Light 8181 Slave amplifier adapter (isolating)

**Note:**

*Specifications are subject to change without notice.*

# Back View

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Wiring channel for surface mount applications

Network Connection

Terminal Strip for connection to optional external speaker and visual alerter

Test  
Tone Up  
Tone Down

Volume Up  
Volume Down

## Hardware Warranty and Repair

Each 8180 SIP Audio Alerter is warranted to be free of defects in material and workmanship for a period of 18 months from the date of manufacture. A label on the bottom of the unit identifies the manufacturing code in the year and week format (0920YYXXXX for the twentieth week of 2009).

If you need to return the product for repair, please contact Algo Communication Products Ltd for a Return Merchandise Authorization (RMA) number and instructions prior to shipment. All products returned for repair should be shipped freight prepaid with the RMA# clearly visible on the package. Products will be returned freight collect for out-of-warranty repairs or returned prepaid for warranty repairs in Canada or the USA.

In North America, ship product for repair with RMA# to:

**Algo Communication Products Ltd.**

Repair Centre  
4500 Beedie Street  
Burnaby, BC  
Canada, V5J 5L2

Outside of North America, please contact Algo for the name of the nearest repair centre.

## Technical Support

Support for your 8180 SIP Audio Alerter is available from the supplier that you purchased the product from, or by contacting Algo directly:

Support Hours: 7am to 4pm Pacific Time

support@algosolutions.com

Toll-free: 1-877-884-2546

(Canada & USA only)

Tel: (604) 454-3790

Fax: (604) 437-5726

You can also access resources on the Algo website ([www.algosolutions.com/supportcenter](http://www.algosolutions.com/supportcenter)) where you will find a Knowledge Base section, Application Notes, the latest version of this guide, software updates, and other information.

If you experience any trouble installing or using the 8180 SIP Audio Alerter, we are certainly interested in hearing about it and hope that you will let us know.

## Confirming Network Access

Network access to a connected SIP Audio Alerter can be confirmed by pinging the device. For example, if

the IP address of the device is 192.168.1.2, you can ping it by accessing the command line of a PC and typing in the following command:

```
ping 192.168.1.2
```

A reply should be returned.

## Optional Enhancement Products

### Alerters and Speakers

#### 1127P Visual Alerter



A desktop or mountable visual indicator for message waiting, in-use or ring. Visible from all angles. Available in red, green, or blue.  
[www.algosolutions.com/1127](http://www.algosolutions.com/1127)

#### 1126P Strobe Light



A highly visible strobe light indicator available with clear, red, amber, or blue lens.  
[www.algosolutions.com/1126](http://www.algosolutions.com/1126)

#### 1185 Horn Speaker



Weatherproof, 8 Ohm horn speaker can be used to significantly increase the volume of the internal speaker.  
[www.algosolutions.com/1185](http://www.algosolutions.com/1185)