



SOLUTION MANUAL

September 2015 | Rev A

# Paging and Loud Ringing with VVX600 and Algo 8180

Application Note



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# Conventions Used in Polycom Guides

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Polycom guides contain graphical elements and a few typographic conventions. Familiarizing yourself with these elements and conventions will help you successfully perform tasks.

## Information Elements

Polycom guides may include any of the following icons to alert you to important information.

### Icons Used in Polycom Guides

<i>Name</i>	<i>Icon</i>	<i>Description</i>
Note		The Note icon highlights information of interest or important information needed to be successful in accomplishing a procedure or to understand a concept.
User Tip		The User Tip icon highlights techniques, shortcuts, or productivity related tips for users.
Administrator Tip		The Administrator Tip icon highlights techniques, shortcuts, or productivity related tips.
Caution		The Caution icon highlights information you need to know to avoid a hazard that could potentially impact device performance, application functionality, or successful feature configuration.
Warning		The Warning icon highlights an action you must perform (or avoid) to prevent issues that may cause you to lose information or your configuration setup, and/or affect phone, video, or network performance.
Web Info		The Web Info icon highlights supplementary information available online such as documents or downloads on support.polycom.com or other locations.
Timesaver		The Timesaver icon highlights a faster or alternative method for accomplishing a method or operation.
Power Tip		The Power Tip icon highlights faster, alternative procedures for advanced administrators already familiar with the techniques being discussed.
Troubleshooting		The Troubleshooting icon highlights information that may help you solve a relevant problem or to refer you to other relevant troubleshooting resources.
Settings		The Settings icon highlights settings you may need to choose for a specific behavior, to enable a specific feature, or to access customization options.

# Typographic Conventions

A few typographic conventions, listed next, are used in Polycom guides to distinguish types of in-text information.

## Typographic Conventions

<i>Convention</i>	<i>Description</i>
<b>Bold</b>	Highlights interface items such as menus, menu selections, window and dialog names, soft keys, file names, and directory names when they are involved in a procedure or user action. Also used to highlight text to be entered or typed.
<i>Italics</i>	Used to emphasize text, to show example values or inputs (in this form: <i>&lt;example&gt;</i> ), and to show titles of reference documents available from the Polycom Support Web site and other reference sites.
<b>Blue Text</b>	Used for cross references to other sections within this document and for hyperlinks to non-Polycom web sites and documents such as third-party web sites and documentation.
<i>Blue Text in italics</i>	Used for hyperlinks to Polycom resources outside of this document such as the Polycom Support web site, Polycom product web pages, or Polycom documentation.
<code>Courier</code>	Used for code fragments and parameter names.

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# Before You Begin

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This guide covers the steps for using the Algo 8180 SIP Audio Alerter for page and loud ringer applications with Polycom phones. A unique page extension and up to 5 unique ring extensions can be assigned to the Algo 8180 speaker. The ring extensions can be configured via simultaneous ringing to enable a loud ring audio file to be play over an Algo 8180 when a call is made to the Polycom phone. The Algo 8180 can also be called directly at its page extention.



**8180 SIP Audio Alerter**



**Web Info: An Online Version of this Document is Available**

Note that if you are reading this document in PDF format, an online version is available on the Polycom Technet web site.

## Audience, Purpose, and Required Skills

Readers of this guide are assumed to have a basic understanding of SIP and the Polycom infrastructure. Algo 8180 SIP Audio Alerter firmware used in this guide was 2.4.

Users should have functional knowledge of the following third-party products:

- Algo 8180 SIP Audio Alerter

## Frequently Asked Questions

Refer to the frequently asked questions (FAQs) to help answer questions you may have about the solution before you begin.

### **How can I troubleshoot if the Algo 8180 SIP Audio Alerter doesn't ring when the phone rings?**

Check the **Status** page in the Algo web interface to see if the SIP registration have been successful. See step 8 in [Configure the Algo 8180 SIP Audio Alerter](#) for details.

### **How do I obtain the IP address of the 8180 SIP Audio Alerter?**

Directions to obtain the IP address of the SIP device, can be found in [Algo 8180 SIP Audio Alerter User Guide](#) pages 8-9.

## Required Solution Hardware

The hardware needed for group paging is an Algo 8180 SIP Audio Alerter and a Polycom VVX600 phone.

## Get Help

For more information about installing, configuring, and administering Polycom products, refer to Documents and Downloads at [Polycom Support](#). For technical questions about the Algo 8180 SIP Audio Alerter contact Algo support: at 604- 454-3792 or [support@algosolutions.com](mailto:support@algosolutions.com).

## Polycom and Partner Resources

To find all Polycom partner solutions, see [Strategic Global Partner Solutions](#).

For more information about the SIP 8180 Audio Alerter, refer to the [Algo 8180 SIP Audio Alerter User Guide](#).

## The Polycom Community

The [Polycom Community](#) gives you access to the latest developer and support information. Participate in discussion forums to share ideas and solve problems with your colleagues. To register with the Polycom Community, simply create a Polycom online account. When logged in, you can access Polycom support personnel and participate in developer and support forums to find the latest information on hardware, software, and partner solutions topics.

# Setting up Configurations

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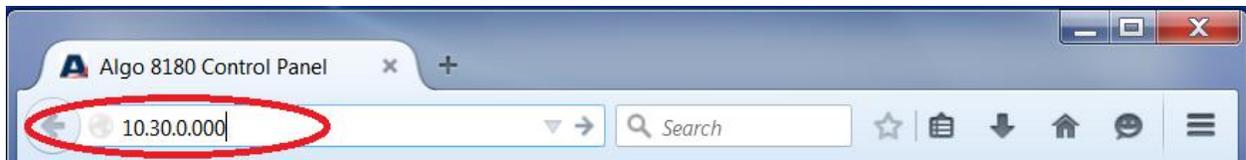
This guide assumes that the Polycom phone already has configured phone lines and corresponding extensions. For information about the Polycom VVX600 phone, refer to [Polycom VVX 500 and Polycom VVX 600 Business Media Phones User Guide](#).

This guide also assumes that the Polycom phone has been configured to allow simultaneous ringing via the unique extensions assigned to the Algo 8180 ring function.

## Configuring the Algo 8180 SIP Audio Alerter

Once the IP address of the target 8180 is known, the device can be configured from the web interface. Directions to obtain the the IP address of the SIP device, can be found in [Algo 8180 SIP Audio Alerter User Guide](#) pages 8-9.

1. To configure 8180 Intercom online, open an empty web browser, enter the device's IP address in the address field, and press *Enter*



2. In the web interface, enter the password to log in (default password is **algo**)
3. Click on the **Basic Settings** tab and then the **SIP** tab
4. In the **SIP Account** section, enter the SIP Server Name or IP address in the **SIP Domain (Proxy Server)** field
5. Enter a unique **Ring Extension**, **Authentication ID** and **Authentication Password** to register the 8180 with the SIP Server.
6. Enter another unique **Page Extension**, **Authentication ID** and **Authentication** to register the 8180 with the SIP Server.
7. At the bottom of the screen click **Save** to save the settings

### SIP Settings

Here you can configure the basic SIP settings.

**SIP**

SIP Domain (Proxy Server)   
Default port is 5060. To specify a different port, enter PROXY:PORT, e.g. my\_proxy.com:5070, or 192.168.1.10:5080.

Ring/Alert Mode  
 Monitor "Ring" event on registered SIP extension  
 Use "Subscribe/Notify" dialog event (RFC 4235) to monitor event on different extension  
 Use "Subscribe/Notify" presence event (RFC 3856/3863 PIDF) to monitor event on different extension  
 Call to Cancel (start activation upon Ring event on Ring Extensions 2-5 [or relay input], and latch until main Ring Extension is called)  
 None  
Server support required on "Subscribe/Notify" events

Page Function  Enabled  Disabled

Allow SIP REGISTER  Enabled  Disabled  
Disable it when connected in trunk mode

Ring Extension

Authentication ID

Authentication Password

Page Extension

Authentication ID

Authentication Password

Different Ports for Extensions  Enabled  Disabled  
Turn this option on for certain proxies, e.g. Cisco Communication Manager 7, to send ring and page SIP requests through different port numbers.

8. To check if the **SIP Registration** was successful, you can check the **Status** tab

**Status**

Device Name	sipalerter
SIP Registration	Ring #1 - Successful Ring #2 - Successful Page - Successful
Call Status	Idle

## Setting 8180 Paging Audio Delay

The Polycom phones have an interoperability setting for about 200 millisecond audio delay. To ensure synchronicity during a Polycom Group Page, audio delay can be adjusted in the 8180 web configurations.

1. In the **Basic Settings** tab, click on the **Page** tab
2. At the bottom of the **Page** settings, enter an **Audio Delay** of around 200 milliseconds. *The exact delay setting will require some testing, as it depends on the Polycom phone used and the overall setup.*
3. At the bottom of the screen click **Save**

The screenshot displays the web configuration interface for a Polycom 8180 phone. At the top, there are navigation tabs: Status, **Basic Settings** (highlighted with a red circle), Advanced Settings, System, and Logout. Below these are sub-tabs: SIP, Ring, **Page** (highlighted with a red circle), and Multicast. The main content area is titled "Page Settings" and contains several configuration fields:

- Page Volume: 4 (with an Apply button)
- Page Mode:  One-way  Talkback. A note below states: "Talkback mode allows bidirectional half-duplex communication. G.722 support should be disabled if using talkback mode."
- Page Timeout: None
- Page Tone: page-notif.wav
- G.722 Support:  Enabled  Disabled. A note below states: "Only for playback."
- Automatic Gain Control (AGC):  Enabled  Disabled
- Audio Delay (milliseconds, 0 ~ 1000): 200 (highlighted with a red circle)

At the bottom right of the configuration area, there is a **Save** button with a green checkmark icon, also highlighted with a red circle.

## Multiple Ring Extensions

One Algo 8180 device can register with 5 additional ring extensions.

1. Go to the **Advanced Settings** and **Advanced Ring/Alert** tab.
2. **Enable** the additional ring extensions in the **More Ring Extensions** section
3. Enter a unique **Extension**, **Authentication ID** and **Authentication Password** to register the 8180 with the SIP Server.
4. At the bottom of the screen click **Save**

The screenshot shows the 'Advanced Ring/Alert Settings' page. At the top, there are tabs for 'Status', 'Basic Settings', 'Advanced Settings', 'System', and 'Logout'. Below these are sub-tabs for 'Network', 'Admin', 'Provisioning', 'Tones', 'Advanced Ring/Alert', 'Input/Output', and 'Advanced SIP'. The 'Advanced Ring/Alert' sub-tab is selected and circled in red. The main heading is 'Advanced Ring/Alert Settings'. Below this is a paragraph explaining that the Rule-based Ring Tone uses 'Extended POSIX Regular Expression'. The 'More Ring Extensions' section contains five rows, each for a ring extension. The first row, '#2 Ring Extension', has the 'Enabled' radio button selected and circled in red. Below it, the 'Extension' and 'Authentication ID' text boxes both contain '2346' and are also circled in red. The 'Authentication Password' field contains four dots. The 'Ring Tone' dropdown menu is set to 'bell-na.wav'. The other four rows (#3, #4, and #5) have their 'Disabled' radio buttons selected.

\* For more information about 8180 SIP Audio Alerter settings, see [Algo 8180 SIP Audio Alerter User Guide](#).

# Troubleshoot Issues

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Use the following list as a guide to resolving issues, problems, or common difficulties you may encounter while deploying this solution.

## **The Algo 8180 SIP Audio Alerter is not ringing when the Polycom phone rings.**

This guide assumes that the Polycom phone has been configured to allow simultaneous ringing and/or paging via the unique extensions that will be assigned to the Algo 8180 ring and/or page functions. Check that the correct extensions have been configured with the 8180 ring and/or page functions.

Check the **Status** page in the Algo web interface to see if the SIP registration have been successful. See step 8 in [Configure the Algo 8180 SIP Audio Alerter](#) for details.

## **There is a discrepancy in the sounds that come from the speakers.**

The Polycom phones have an interoperability setting for about 200 millisecond audio delay. To ensure synchronicity, Audio Delay can be adjusted in the 8180 and/or 8188 web configurations. Some delay testing (around 200 milliseconds) may be required.

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# References

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For information about the Polycom VVX600 phone, refer to [Polycom VVX 500 and Polycom VVX 600 Business Media Phones User Guide](#).

For more information about the SIP 8180 Audio Alerter, see [Algo 8180 SIP Audio Alerter User Guide](#).