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Group Page with VVX600 & Algo 8180/8186/8188

Application Note



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Conventions Used in Polycom Guides

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>
Bold	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><example></i>), and to show titles of reference documents available from the Polycom Support Web site and other reference sites.
Blue Text	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.
Courier	Used for code fragments and parameter names.

Before You Begin

This guide covers the steps for using the Algo 8180 SIP Audio Alerter, 8186 SIP Horn Speaker, and 8188 SIP Ceiling Speaker for group paging applications with the Polycom VVX600 phones. The setup discussed here enables the Algo devices to act as additional multicast speakers in common areas or where sound re-enforcement is needed, like warehouses, educational facilities, or healthcare centers. Neither SIP registration nor SIP licensing is required when configuring the 8180, 8186, and/or 8188 to join the Polycom Group Page discussed here.



Algo 8180 SIP Audio Alerter



Algo 8188 SIP Ceiling Speaker



Algo 8186 SIP Horn Speaker



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. Users should have functional knowledge of one or more of the following third-party products:

- Algo 8180 SIP Audio Alerter
- Algo 8186 SIP Horn Speaker
- Algo 8188 SIP Ceiling Speaker

Required Solution Hardware

One or more Algo paging devices (Algo 8180 SIP Audio Alerter, 8186 SIP Horn Speaker, or 8188 SIP Ceiling Speaker) are needed for group paging with 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 audio devices contact Algo support: at 604-454-3792 or support@algosolutions.com.

Polycom and Partner Resources

To find all Polycom partner solutions, see [Strategic Global Partner Solutions](#). For more information about the Algo paging devices, refer to

- [Algo 8180 SIP Audio Alerter User Guide](#)
- [Algo 8186 SIP Horn Speaker User Guide](#)
- [Algo 8188 SIP Ceiling Speaker 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 Group Paging

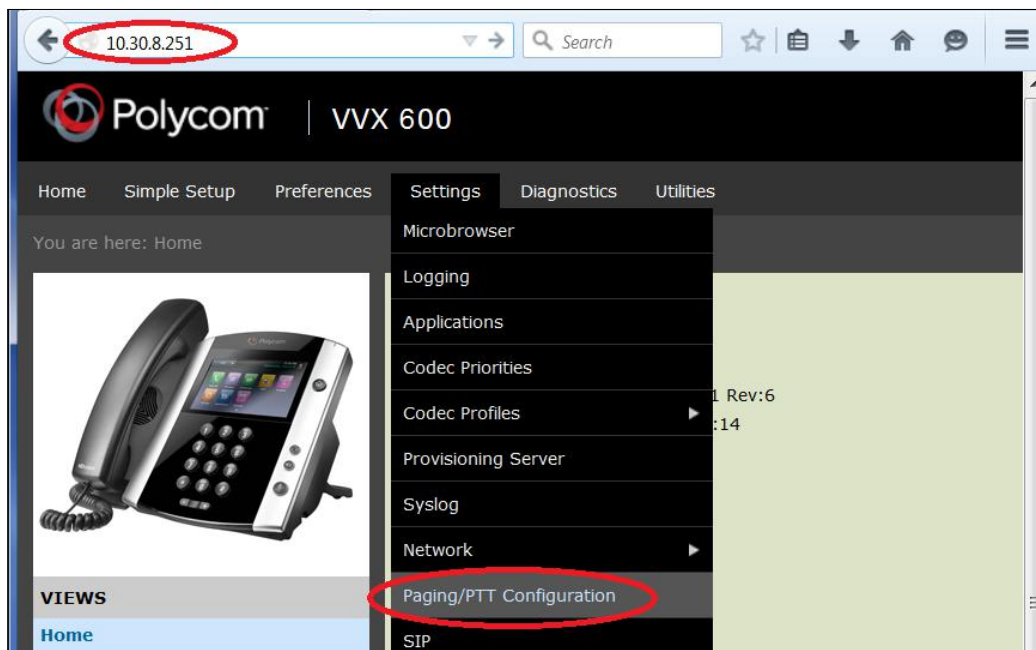
The primary Polycom Group Paging settings can be setup either directly on a Polycom phone or via the web. To setup the configurations on directly on the phone, refer to the Polycom's [Broadcasting Audio Messages with Group Paging and Push-to-Talk](#) user guide. For detailed information on configuring Polycom phones online, refer to [Polycom Web Configuration Utility User Guide](#). For further information about the Polycom VVX600 phone and other Group Paging settings, refer to [Polycom VVX 500 and Polycom VVX 600 Business Media Phones User Guide](#).

The following section will give a quick outline of the Polycom Group Paging setup via the web interface.

Configuring Polycom VVX600

Once the IP address of the target VVX600 is known, the device configurations can be accessed via the web configuration utility.

1. To obtain the phone's IP address, press the **Menu** button on the phone, then **Settings > Status > Platform > Phone**. Scroll down to view the IP address
2. Enter the Polycom phone's IP address in an empty browser, press *Enter*
3. Log into the interface, the default password is **456**.
4. In the drop-down menu, go to **Settings** and **Paging/PTT Configurations**



5. On the **Paging/PTT Configuration**, in **Settings**, note the **Multicast IP Address** and **Port** number. *The same Multicast IP address and port number will be used when configuring the Algo device(s).*

6. **Disable** the **Compatibility** settings. This is required in order for the Codec settings to be applied.
7. In **Group Paging Configuration**, make sure **Enable** is chosen in the **Group Paging Configuration**.
8. If you need specific group settings, in **Group Type** configuration area choose a **Group No.** and **Label** of choice for **Default Group**, **Priority Group**, and **Emergency Group**. *The same Group No. settings should be used when configuring the 8180/8186/8188.*
9. Set the **Codec** to be either **G.711** or **G.722**.
10. Click **Save** at the bottom right corner of the page and click **yes** to save the settings.

Paging/PTT Configuration

Settings
Multicast IP Address
Port
Emergency Volume (dB)
Call Waiting Enable Disable
Compatibility Enable Disable

Group Paging Configuration
Group Paging Enable Disable

Group Type	Group No.	Available	Send	Subscribe	Label
Default Group	<input type="text" value="Group 1"/>	Yes ▾	Yes ▾	Yes ▾	<input type="text"/>
Priority Group	<input type="text" value="Group 24"/>	Yes ▾	Yes ▾	Yes ▾	<input type="text"/>
Emergency Group	<input type="text" value="Group 25"/>	Yes ▾	Yes ▾	Yes ▾	<input type="text"/>

Accept While Busy Enable Disable
Sender ID
Payload Size (ms)
Codec
Added Timeout (s)
Continuation Timeout (s)

PTT Mode Configuration

Configuring the 8180

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

1. To access the 8180 web interface, enter the device's IP address in an empty browser and log in (the default password is **algo**).
2. In the **Basic Settings > Multicast** tab, select **Slave/Receiver** for the **Multicast Mode**, if you want the 8180 to listen to pages on the network.

*Note: It is possible to use the 8180 in **Master/Sender** mode to originate voice pages to the Polycom phones, as opposed to being a receiving device. For this application, configure the 8180 with a SIP account in the **Basic Settings > SIP** tab (**Page Extension** field), and then place a phone call to the 8180. It will automatically answer and broadcast the audio to the Polycom phones (as well as any other Algo devices configured in Slave Mode). For configuration details, see the 8180 user guides.*

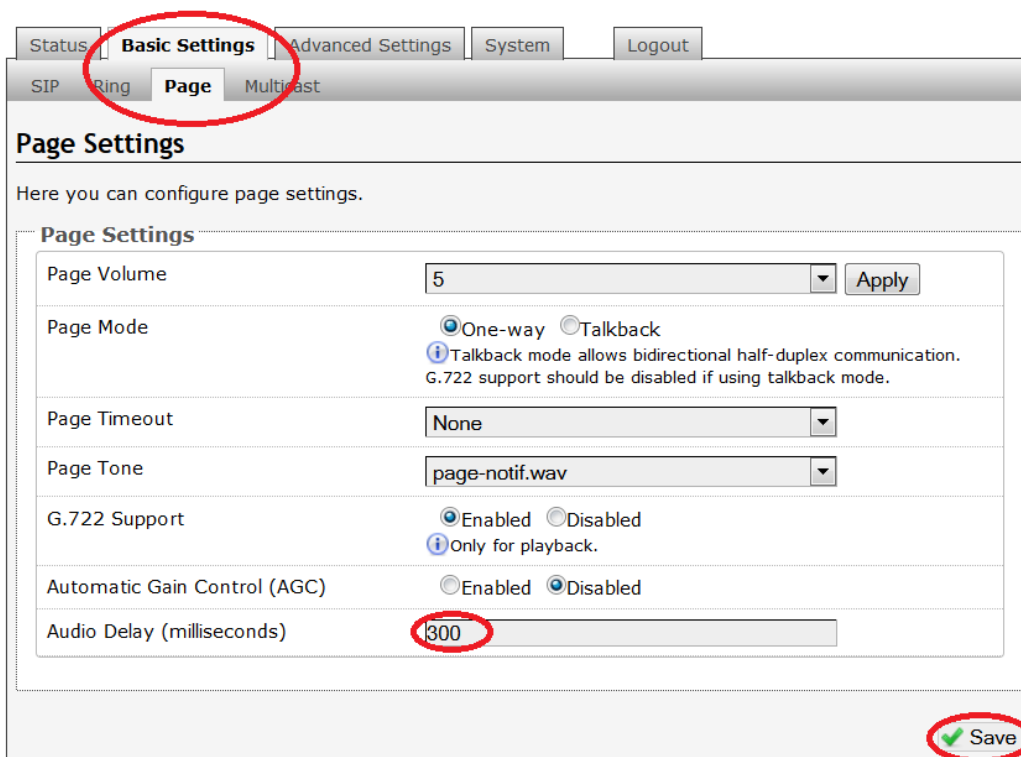
3. For **Paging/PTT Mode**, select **Polycom Group Page**.
4. In the Polycom **Zone** field, enter the Multicast IP address of the Polycom VVX600 phone, followed by a colon and the port number. (The configuration settings *must* match those of the Polycom phone).
5. Make sure the **Polycom Default**, **Priority**, and **Emergency Channel** match those of the VVX600.
6. At the bottom of the screen click **Save**.

The screenshot shows the 'Multicast Settings' page in the web interface. The 'Basic Settings' tab is active. The 'Multicast Mode' section has three radio buttons: 'None', 'Master/Sender', and 'Slave/Receiver', with 'Slave/Receiver' selected. Below this is a link: 'Multicast Zone Definitions can be found in Advanced Settings > Advanced Multicast*'. The 'Polycom Group Paging/Push-to-Talk' section has three radio buttons: 'Disabled', 'Group Paging', and 'Push-to-Talk', with 'Group Paging' selected. The 'Zone' text input field contains '224.0.1.116:5001'. Below the Zone field is a note: 'Enter the same Multicast IP Address & Port number as configured on the Polycom phones.' There are three dropdown menus: 'Default Channel' (Group 1), 'Priority Channel' (Group 24), and 'Emergency Channel' (Group 25). At the bottom right, there is a 'Save' button with a green checkmark icon.

Setting 8180 Audio Delay

By default the Polycom phones have about 250 to 350 millisecond audio delay. To match the delay during a Polycom Group Page, the Algo devices can be configured via the web interface.

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 300 milliseconds. *The exact delay settings will require some testing, as the delay depends on the Polycom phone used and the overall setup.*
3. At the bottom of the screen click **Save**.



Configuring the 8186/8188

Once the IP address of the target 8186/8188 is known, the device can be configured from the web interface. Directions to obtain the IP address can be found in the [8186 SIP Ceiling Speaker User Guide](#) or [8188 SIP Ceiling Speaker User Guide](#).

1. To access the 8186/8188 web interface, enter the device's IP address in an empty browser and log in (the default password is **algo**).
2. In the **Basic Settings > Multicast** tab, select **Slave/Receiver** for the **Multicast Mode**, if you want the device to listen to pages on the network.

*Note: It is possible to use the 8186/8188 in **Master/Sender** mode to originate voice pages to the Polycom phones, as opposed to being a receiving device. For this application, configure the 8186/8188 with a SIP account in the **Basic Settings > SIP** tab (**Page Extension** field), and then place a phone call to the 8186/8188. It will automatically answer and broadcast the audio to the Polycom phones (as well as any other Algo devices configured in Slave Mode). For configuration details, see the 8186/8188 user guides.*

3. For **Multicast Type**, select **Polycom Group Page**.
4. In the Polycom **Zone** field, enter the Multicast IP address of the Polycom VVX600 phone, followed by a colon and the port number. (The configuration settings *must* match those of the Polycom phone).
5. Make sure the **Polycom Default**, **Priority**, and **Emergency Channel** match those of the VVX600.
6. Click **Save** at the bottom right corner.

The screenshot shows the 'Multicast Settings' page in a web browser. The 'Basic Settings' and 'Multicast' tabs are highlighted with red circles. The 'Multicast Mode' section has the 'Slave/Receiver' radio button selected and circled in red. The 'Polycom Group Paging/Push-to-Talk' section has the 'Polycom Group Page' radio button selected and circled in red. The 'Polycom Zone' text input field contains '224.0.1.116:5001' and is circled in red. Below it, three dropdown menus for 'Polycom Default Channel', 'Polycom Priority Channel', and 'Polycom Emergency Channel' are set to 'Group 1', 'Group 24', and 'Group 25' respectively, with the first two dropdowns circled in red. At the bottom right, a 'Save' button with a green checkmark is circled in red.

Setting 8186/8188 Audio Delay

By default the Polycom phones have about 250 to 300 millisecond audio delay. To match the delay during a Polycom Group Page, Algo devices can be configured via the web interface.

1. Click on the **Advanced Settings** and then **Advanced Multicast** tab.
2. In the **Audio Sync** field, enter a delay of around 300 milliseconds. *The exact delay settings will require some testing, as the delay depends on the Polycom phone used and the overall setup.*
3. Click **Save** at the bottom right corner.

The screenshot shows the 'Advanced Multicast Settings' page. At the top, the 'Advanced Multicast' tab is selected and circled in red. Below the navigation bar, the 'Slave Settings' section contains the 'Audio Sync (milliseconds, 0 ~ 1000)' field, which is set to '300' and circled in red. A tooltip explains that this delay is used to synchronize audio with other devices. Below this is the 'Basic Zone Definition' table, followed by an 'Expanded Zone Definition' section with a downward arrow pointing to a 'Zone 50' entry. At the bottom right, a 'Save' button is circled in red.

Zone	IP Address and Port	Page Tone	Page Volume
Priority Call (DTMF:9)	224.0.2.64:50000	<None>	<Use Default Page Volume>
All Call (DTMF:0)	224.0.2.64:50001	<None>	<Use Default Page Volume>
Zone 1 (DTMF:1)	224.0.2.64:50002	<None>	<Use Default Page Volume>
Zone 2 (DTMF:2)	224.0.2.64:50003	<None>	<Use Default Page Volume>
Zone 3 (DTMF:3)	224.0.2.64:50004	<None>	<Use Default Page Volume>
Zone 4 (DTMF:4)	224.0.2.64:50005	<None>	<Use Default Page Volume>
Zone 5 (DTMF:5)	224.0.2.64:50006	<None>	<Use Default Page Volume>
Zone 6 (DTMF:6)	224.0.2.64:50007	<None>	<Use Default Page Volume>
Music (DTMF:7)	224.0.2.64:50008	<None>	<Use Default Page Volume>

Zone	IP Address and Port	Page Tone	Page Volume
Zone 10 (DTMF: *10)	224.0.2.110:50000	<None>	<Use Default Page Volume>
Zone 11 (DTMF: *11)	224.0.2.111:50000	<None>	<Use Default Page Volume>

Zone 50 (DTMF: *50)	224.0.2.150:50000	<None>	<Use Default Page Volume>
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Troubleshoot Issues

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

The Algo SIP device is not receiving a page.

Double check that the Multicast settings in the web configurations are the same for the phone as well as the speakers.

Check that the **Compatibility** setting is disabled in the Polycom web interface, as the Codec settings will not work otherwise.

Ensure that the Polycom phones and the Algo devices are on the same network.

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

By default the Polycom phones have a 250 to 350 millisecond audio delay. The audio delay can be adjusted in the SIP web configurations. Some delay testing (around 300 milliseconds) may be required.

References

To setup the configurations on directly on the phone, refer to the Polycom's [Broadcasting Audio Messages with Group Paging and Push-to-Talk](#) user guide. For detailed information on configuring Polycom phones online, refer to [Polycom Web Configuration Utility User Guide](#). For further information about the Polycom VVX600 phone and other Group Paging settings, refer to [Polycom VVX 500 and Polycom VVX 600 Business Media Phones User Guide](#).

More information about Algo 8180 SIP Audio Alerter, 8186 SIP Horn Speaker, and/or 8188 SIP Ceiling Speaker can be found in [8180 SIP Audio Alerter User Guide](#), [8186 SIP Audio Alerter User Guide](#), and [8188 SIP Ceiling Speaker User Guide](#).