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Group Page with VVX600
and
Algo 8301 Paging Adapter
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

Name	Icon	Description
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.
Blue Text in italics	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

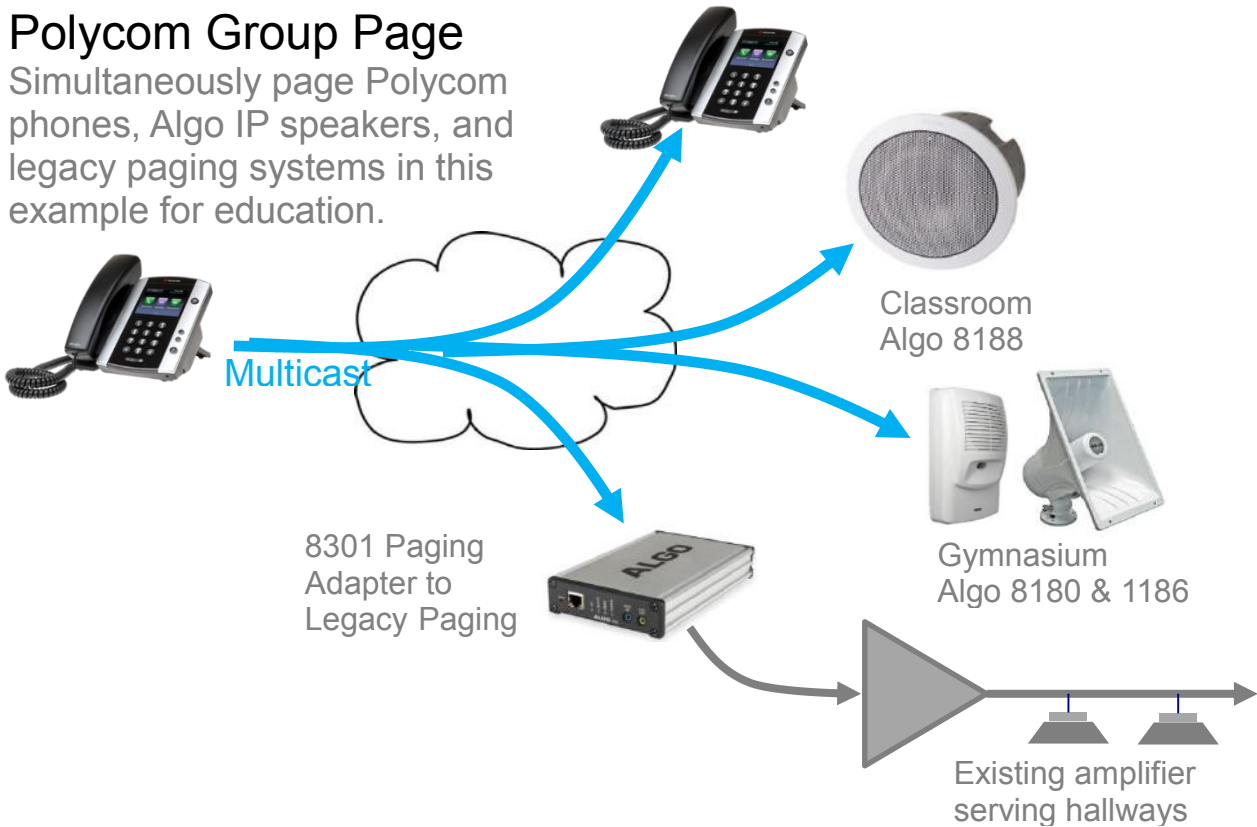
This guide covers the steps for using the Algo 8301 Paging Adapter to page existing amplifiers from Polycom VVX600 phone. Neither SIP registration nor SIP licensing will be required for this setup.



8301 Paging Adapter

Polycom Group Page

Simultaneously page Polycom phones, Algo IP speakers, and legacy paging systems in this example for education.



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 legacy paging amplifier and the Polycom infrastructure. The Algo 8301 Paging Adapter firmware used in this guide is 1.0.4. Users should have functional knowledge of the following third-party products:

- Algo 8301 Paging Adapter
- Legacy paging amplifier with speakers

Frequently Asked Questions

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

Why do I need an Algo 8301 Paging Adapter?

The Algo 8301 Paging Adapter enables users to connect and page legacy paging amplifiers from a Polycom VVX600 phone.

Why does the 8301 does not power on?

When connecting the Ethernet cable, make sure that a PoE port is used to provide power.

Required Solution Hardware

The hardware needed for group paging is an Algo 8301 Paging Adapter, a Polycom VVX600 phone, and a paging amplifier with speakers.

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 8301 Paging Adapter 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](#).

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

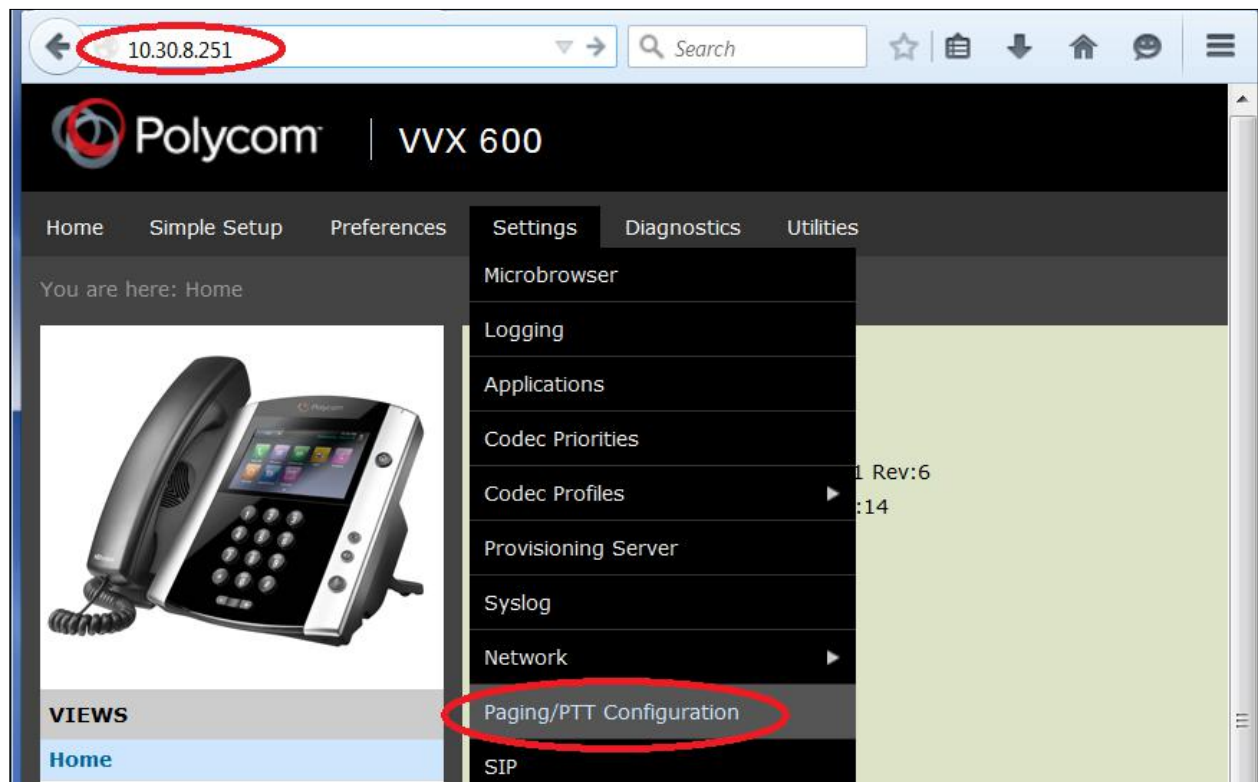
The primary Polycom Group Paging settings can be setup either directly on a Polycom phone or via the web. To setup the configurations on directly on the phone, refer to the Polycom's [Broadcasting Audio Messages with Group Paging and Push-to-Talk](#) user guide. For detailed information on configuring 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 8301 Paging Adapter.*
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 8301 Paging Adapter.*
9. Set the **Codec** to be either **G.711** or **G.722**.

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**

10. Click **Save** at the bottom right corner of the page and click **yes** to save the settings

Connecting the 8301 Paging Adapter

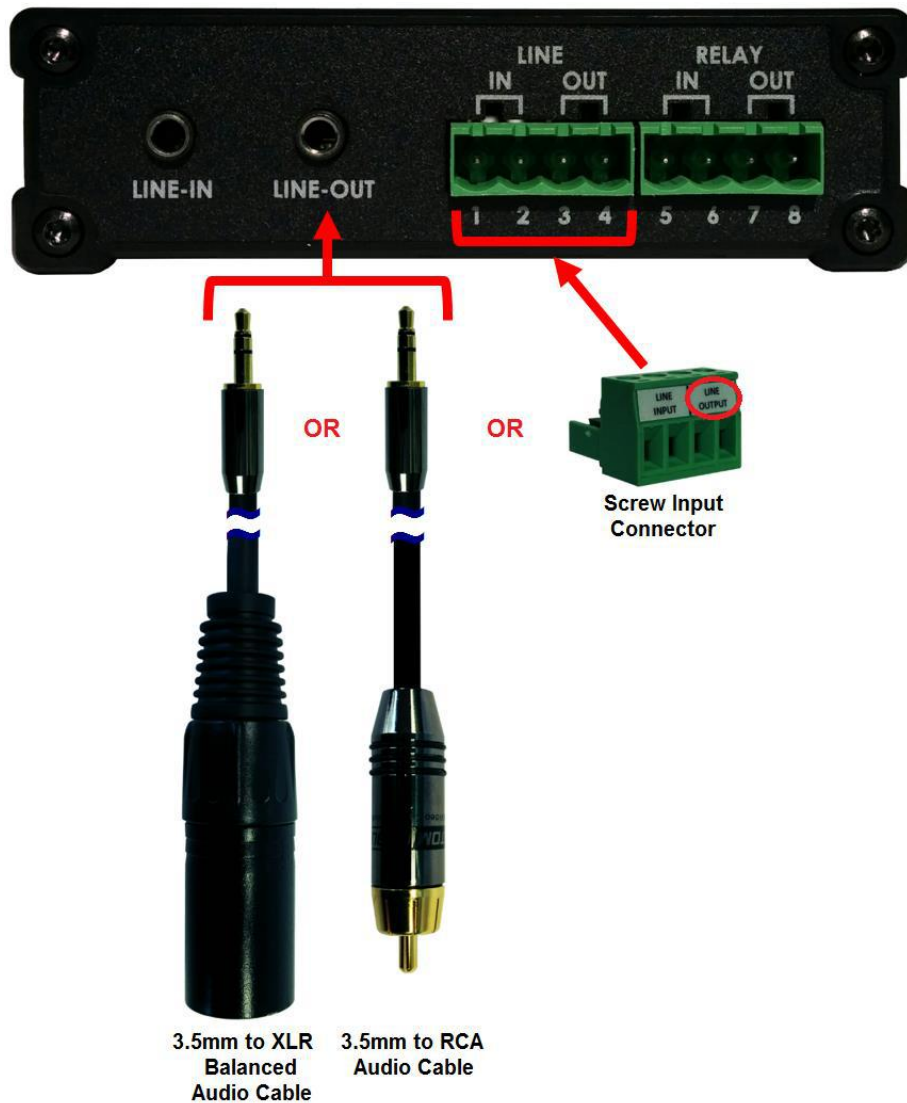
Front Panel: Connecting to the Network

Connect the 8301 to the network via an Ethernet cable at the front of the device. Ensure that a PoE port is used to provide power and that the 8301 is connected to the same subnet and VLAN as the VVX600 phone.



Back Panel: Connecting to the Amplifier

Using the provided audio cables, connect the 8301 to the amplifier via the XLR balanced audio cable, RCA cable, or screw input connector. A relay output terminal is also provided if required by an amplifier. The diagram below illustrates the sockets on the back panel of the 8301 device:



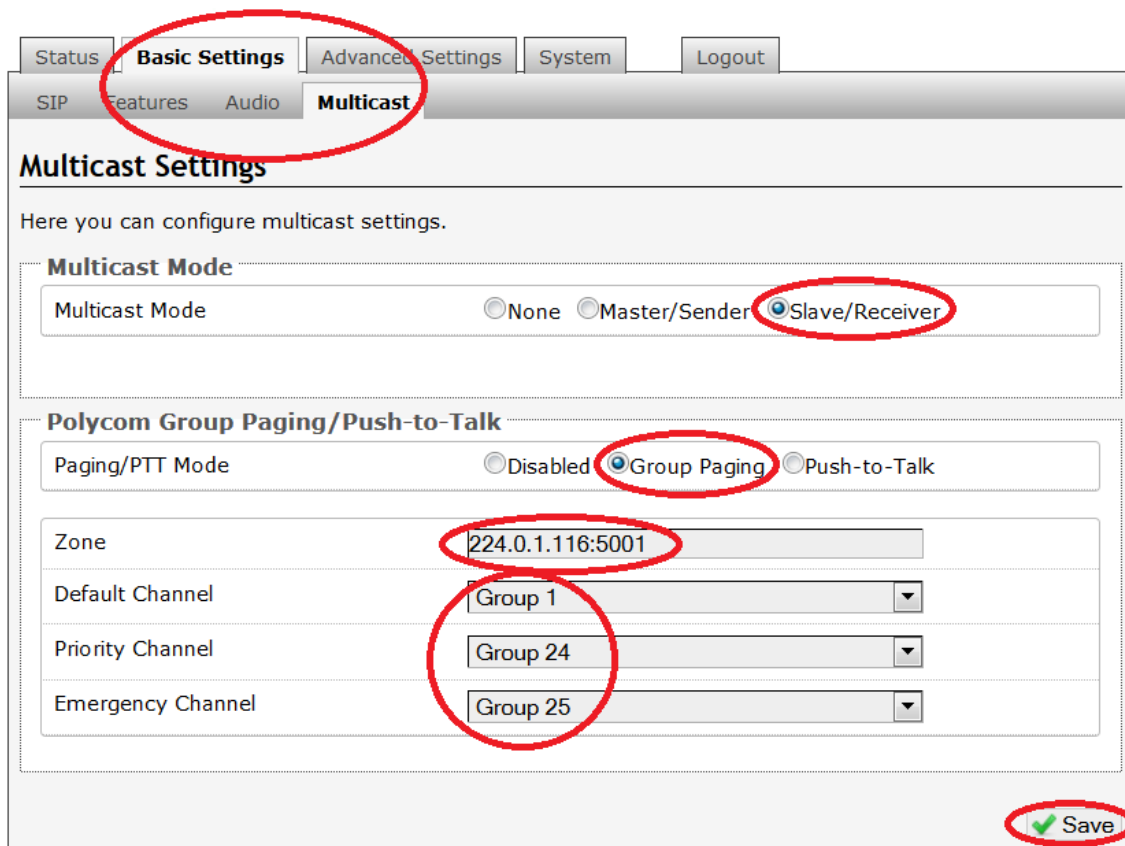
Configuring Algo 8301 Paging Adapter

Once the IP address of the target 8301 is known, the device can be configured from the web interface. The IP address can be found via the [Algo Device Locator](#) application.

1. Open an empty web browser and enter the device's IP address in the address field and press *Enter*



2. In the web interface, enter the password to log in. The default password is **algo**
3. Click on the **Basic Settings** tab and then the **Multicast** tab
4. In the **Multicast Settings** choose **Slave/Receive** for the **Multicast Mode**. Additional configurations will appear below.
5. Scroll down to **Polycom Group Paging/Push-to-Talk** and choose **Group Paging** for **Paging/PTT Mode**. The other configurations should disappear, as they are not required for Group Paging.
6. In the **Polycom Group Paging/Push-to-Talk**, choose the **Group Paging** for the **Paging/PTT Mode**
7. The **Default**, **Priority**, and **Emergency Channel** will appear below. Make sure that their settings match those of the Polycom VVX600 settings and click **Save** at the bottom right corner.



Setting 8301 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 8301 web configurations.

1. In the **Basic Settings** tab, click on the **Audio** tab
2. At the bottom of the **Audio** 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 shows the Polycom 8301 web configuration interface. At the top, there are tabs for 'Status', 'Basic Settings', 'Advanced Settings', 'System', and 'Logout'. The 'Basic Settings' tab is selected, and within it, the 'Audio' sub-tab is active. Below the tabs, there are sub-tabs for 'SIP', 'Features', 'Audio', and 'Multicast'. The main content area is titled 'Audio' and contains the following sections:

- Volume:** Two rows with dropdown menus for 'Ring Speaker Volume' and 'Page Speaker Volume', both set to '4'. Each row has an 'Apply' button.
- Input/Output:** A dropdown menu for 'Audio Input Port' set to 'Front Blue 3.5mm Port'.
- Advanced Functions:** Three rows with radio buttons for 'Enabled' and 'Disabled'.
 - 'Ambient Noise Compensation' is set to 'Disabled'.
 - 'Automatic Gain Control (AGC)' is set to 'Disabled'.
 - 'Audio Delay (milliseconds, 0 ~ 1000)' is set to '200'.

At the bottom right of the form, there is a 'Save' button with a green checkmark icon, which is circled in red.

Troubleshoot Issues

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

The speakers are 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.

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 8301 web configurations. Some delay testing (around 200 milliseconds) may be required.

The 8301 does not power on.

When connecting the Ethernet cable, make sure that a PoE port is used to provide power.

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](#).