



# *Configuring a Polycom Phone to Listen to Your CyberData SIP Paging Server*

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# 1.0 Introduction

This configuration guide documents the process of configuring Polycom phones to listen to multicast pages from the SIP Paging Server. The SIP Paging Server can send multicast pages to one Polycom Paging Group. The SIP Paging Server's required settings for producing a Polycom page are also documented in this configuration guide.

Before You Start:

## 1. Is the SIP Paging Server running compatible firmware?

The SIP Paging Server supports Polycom's proprietary multicast paging protocol on firmware versions 7.2.0 and greater.

## 2. Are the Polycom phones running compatible software?

Polycom Group Paging is supported on UC Software versions 4.0.0 and greater. CyberData completed testing using software version 5.2.0.8330 on Polycom VVX 300 phones.

## 3. Do you have the admin login and password for the web interfaces of the Polycom phones?

As documented later in this guide, it will be necessary to change the codec for group paging on the Polycom phones. You will need to use the **admin** access to the Polycom phones to change the codec.

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## 1.1 Polycom Channel Explanation

Polycom Channels 1 to 23 are the **General Polycom Channels** and will only be played from the phone if the phone is not in use and if Do Not Disturb (**DND**) is not enabled.

Polycom Channel 24 (**Priority**) will play from any phone that is not in use, regardless of **DND** being enabled.

Polycom Channel 25 (**Emergency**) will play from any phone regardless of it being in use or **DND** being enabled.

## 2.0 Polycom Phone Configuration Procedure

1. Obtain the IP address of the phone. This procedure varies depending on the Polycom phone model, so you may need to consult the Administrator's Guide for the specific model and UC Software version.
2. Enter the IP address of the phone into the address bar of your web browser. If the phone is running HTTPS mode, you may need to enter **https://** before the IP address. For example, if the IP address of the phone was 10.10.1.178, enter **https://10.10.1.178** into the address bar.
3. When prompted, make sure you have selected to login as **Admin** and enter the password.
4. Navigate to **Settings > Paging/PTT Configuration** to access the multicast paging settings.
5. Note the current **Multicast IP Address** and **Port** values under **Settings** on the **Paging/PTT Configuration** page. The default multicast IP address is **224.0.1.116**. The default port is **5001**.
6. Select the option to **Enable Group Paging** under **Group Paging Configuration** on the **Paging/PTT Configuration** page.
7. Note the **Group No.** values. The CyberData SIP Paging Server will be set to page to **Group 1** on default when Polycom paging is enabled. Make sure **Group 1** is selected for the desired **Group Type**, or change the **Group No.** to match the **Polycom Transit Channel** value in the SIP Paging Server configuration.
8. Enter a **Label** for the paging group. For example, "All Page". The **Label** appears on the phone's LCD display when the phone receives a multicast page for this paging group.
9. Make sure **Payload Size (ms)** is set to **20**. This should be the default value.
10. Select **G.711Mu** for the **Codec**. This codec setting only applies to multicast pages.
11. Click the **Save** button to save changes.

Figure 1. Polycom Paging/PTT Configuration

**Paging/PTT Configuration**

**Settings**

Multicast IP Address: 224.0.1.116  
 Port: 5001  
 Emergency Volume (db): -10  
 Call Waiting: ☐ Enable ☒ Disable  
 Compatibility: ☐ Enable ☒ Disable

**Group Paging Configuration**

Group Paging: ☒ Enable ☐ Disable

Group Type	Group No.	Available	Send	Subscribe	Label
Default Group	Group 1	Yes	Yes	Yes	All Page
Priority Group	Group 24	Yes	Yes	Yes	
Emergency Group	Group 25	Yes	Yes	Yes	

Accept While Busy: ☐ Enable ☒ Disable  
 Sender ID:   
 Payload Size (ms): 20  
 Codec: G.711Mu  
 Added Timeout (s): 0  
 Continuation Timeout (s): 60

**PTT Mode Configuration**

**Description**

The PTT paging feature supports two modes of operation: Push-to-Talk (PTT) mode and Page mode. They can be enabled independently and can be used at the same time.

**Field Help**

Label  
 (ptt.pageMode.group.25.label)  
 Descriptive label to use when announcing a page or within a page call appearance to identify the paging group in use.

**Configured Source Values**

The parameter values from different sources are listed here. If a parameter value is configured from multiple sources, the phone will use the value from the highest-priority source.

Local: Not Applicable  
 Web: Not Applicable  
 Config: Not Applicable  
 SIP: Not Applicable

Cancel Reset to Default View Modifications Save

## 3.0 SIP Paging Server Configuration Procedure

The SIP Paging Server assumes the Polycom phones will be using the default multicast IP address **224.0.1.116** and port number **5001**. In addition to enabling Polycom paging and verifying the **Polycom Transit Channel** value matches the Polycom phone's **Group No.** value for the desired **Group Type**, you will need to configure the Polycom multicast IP address and port in the SIP Paging Server configuration.

The procedure and screenshots documented in this section correspond to the Polycom phone configuration using the earlier documented procedure.

1. Assuming you have already configured the SIP parameters and registered the SIP Paging Server to your VoIP phone system, navigate to the **Device Configuration** page (Figure 2) in the SIP Paging Server's web interface.

Figure 2. SIP Paging Server Device Configuration Page

Home Device Network SIP PGROUPS SSL Schedules Fault Audiofiles Events Autoprovisioning Firmware

# CyberData Paging Server

### Line-in Settings

Enable Line-in to Line-out Loopback: ☐

Enable Line-in to Multicast: ☐

Multicast Address:

Multicast Port:

Detect Line-in Silence: ☐

### Relay Settings

Activate Relay on Local Audio: ☐

### Clock Settings

Enable NTP: ☒

NTP Server:

Timezone:

Current Time: Wed, 14 Sep 2022 09:21:53

### Misc Settings

Device Name:

Bypass DTMF Menus: ☐

Beep on Init: ☐

Beep Before Page: ☐

Enable Polycom Paging on Multicast: ☒

Polycom Transmit Channel:

Disable HTTPS (NOT recommended): ☐

Test Audio Test Relay Test Multicast

Save Reboot Toggle Help

2. Check the box to **Enable Polycom Paging on Multicast**.
3. Verify the **Polycom Transmit Channel** value matches the Polycom phone's **Group No.** value for the desired **Group Type**.
4. Click **Save** before leaving the **Device Configuration** page.
5. Navigate to the **PGROUPS Configuration** page (Figure 3).

**Figure 3. SIP Paging Server PGROUPS Configuration Page**

Home	Device	Network	SIP	PGROUPS	SSL	Schedules	Fault	Audiofiles	Events	Autoprov	Firmware
CyberData Paging Server											
Paging Groups											
#	Address	Port	Name	Code	TTL	Lineout					
0	224.0.1.116	5000	PagingGroup00		255	Yes	Edit				
1	234.2.1.2	2002	PagingGroup01		255	Yes	Edit				
2	234.2.1.3	2004	PagingGroup02		255	Yes	Edit				
3	234.2.1.4	2006	PagingGroup03		255	Yes	Edit				
4	234.2.1.5	2008	PagingGroup04		255	Yes	Edit				
5	234.2.1.6	2010	PagingGroup05		255	Yes	Edit				
6	234.2.1.7	2012	PagingGroup06		255	Yes	Edit				
7	234.2.1.8	2014	PagingGroup07		255	Yes	Edit				
8	234.2.1.9	2016	PagingGroup08		255	Yes	Edit				
9	234.2.1.10	2018	PagingGroup09		255	Yes	Edit				

6. Enter the Polycom Multicast IP Address **224.0.1.116** (noted in step 5 of the Polycom Phone Configuration procedure) into the **Address** field under **Paging Groups**.

7. Determining the port number requires a bit of math. When Polycom paging is enabled in the SIP Paging Server configuration, the SIP Paging Server will send a Polycom multicast page to the specified paging group address and [port number+1]. This allows the SIP Paging Server to maintain conformance with RFC 1889 for standard multicast transmissions while also supporting Polycom's proprietary paging protocol.

So, enter the number **5000** into the *Port* field under Paging Groups for your desired paging group. Note that the configured port number 5000 is the next lower even-numbered port from port number 5001 used by the Polycom phones.

8. Be sure to click **Save** and **Reboot** to store changes.