

CyberData SIP Paging Adapter Integration with 8x8 – Serial Numbers 2331



This document covers the integration of CyberData's SIP Paging Adapter with 8x8. This document was written for 8x8 and the following CyberData Products.

- 011233A ADAPTER,V3 SIP PAGING,RoHS COMPLIANT (Ver. 11.7.0)
- Serial Numbers starting with 2331

All support and supporting documentation for CyberData should be obtained from CyberData itself. This document also assumes the reader is familiar with setting up CyberData Paging equipment and/or has access to the Manuals for the CyberData equipment, as several sections are left out of this manual such as setting up the network configuration of the CyberData Equipment and pin outs for relay, and audio out usage.

CyberData devices do integrate with both Yealink and Polycom devices, 8x8 suggests using Yealink devices over Polycom if more than one zone is needed. For more information on the integration process see integration section.

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2 Integration

CyberData SIP Paging Adapter can be integrated in multiple ways with 8x8, each integration option has its unique benefits and draw backs. For the best integration between all types of phones (Polycom, Yealink, and other 3rd party devices) as well as routing and remote devices 8x8 recommends SIP Page and Converted to Multicast.

The CyberData SIP Paging Adapter can listen in to Multicast Streams that are pre-defined and relay this pages to its Audio Out ports to traditional Paging equipment (this does not require

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DTMF input), or it be called directly by using an extension assigned to it, to start the page. This page is only played over the audio out of the CyberData Paging Adapter.

The CyberData Paging Adapter provides a method to integrate Multicast Paging with Traditional Paging equipment by providing a line in of 10K Ohms at 2VPP and Output at 10k Ohms at 2VPP. There is also a Page Port that is 600 Ohms at 5VPP option as well as providing Relay Control.

Starting with CyberData firmware 7.3.0 you can integrate Polycom Group Paging with traditional Multicast paging services. This is accomplished via CyberData firmware enhancements to provide Multicast and Polycom Group Paging features at the same time, for more information see CyberData's website.

2.1 SIP Page

When integrating the 8x8 with the CyberData SIP Page Adapter, 8x8 recommends integrating the CyberData Page Adapter into the existing paging functions of 8x8. This will afford the possibility to integrate the Yealink, Polycom and other 3rd party equipment along with the CyberData Paging equipment.

Traditional paging equipment can be integrated into this solution using CyberData SIP Page Adapter's Audio Out port and Relays.

Users will simply dial the page extension, and make their page. A SIP call will be placed to the CyberData Paging Adapter (and any other device in the page group).

2.2 Pure Multicast

When using CyberData paging equipment you can integrate as a pure multicast solution, in that you will no longer use the paging services of 8x8, and rely purely on Multicast capabilities of the Polycom, Yealink and CyberData equipment. When using CyberData's SIP Page Adapter and Yealink phones you may either dedicate a unique paging button on the phone per page zone. The Yealink phones only support listening to 5 multicast paging zones. If using Polycom phones, you can only use one of the Polycom paging groups.

Traditional paging equipment can be integrated into this solution using CyberData SIP Page Adapter's Audio Out and Relays.

Users will press a predefined paging button on the Polycom and Yealink devices to initiate the page, this will start a multicast from the device to all other devices listening to the same multicast IP address and Port pair.

2.3 Traditional Paging Equipment

Traditional Paging equipment can be integrated into either integration option (SIP or Multicast) by the CyberData SIP Paging Adapter. It is recommended to use the CyberData SIP Paging Adapter to integrate with traditional paging equipment input and offers the ability to include relays. The CyberData Paging Adapter supports a 600 Ohms at 5 VPP output referred to as Page Port and a 10K Ohms at 2 VPP output referred to as Line Out.

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If integrating multiple locations with traditional paging equipment it is recommended to use the CyberData Paging Adapter to integrate additional locations using SIP paging from the 8x8, and the CyberData Paging Adapter to integrate to the traditional paging equipment.

3 Multicast Paging

3.1 How Multicast Paging Works

After a user presses a configured “Paging” key on the phone, the phone sends a page message (which is an RTP stream, hereinafter referred to as a “page”) to a preconfigured multicast address. Any device in the local network listens for the page on the preconfigured multicast address. The device will display the multicast page sent/received address to the user. You can define multiple multicast zones by using a different multicast IP or port number, a single device can listen to multiple IP:Port combinations.

The device uses G711 uLaw CODEC for multicast paging.

The recipient can drop the incoming page if required. The recipient can also press Do Not Disturb (DND) or other “ignore” options on the device to ignore/reject any incoming pages.

3.2 Caveats of Multicast Paging

Multicast paging is designed for Yealink and Polycom devices. There is no guaranteed interoperability with any other 8x8 supported phones. CyberData Paging Equipment is an exception, as it has been tested and certified to work properly with the Yealink and Polycom phones. The Virtual Office Desktop Softphone does not support multicast paging.

This service is typically non-routable, and cannot be used to page across the WAN, complex VLANs, or to remote devices.



Note: Multicast page is one-way only - from sender to the receiver.



Note: For outgoing pages, all other existing calls on the phone are put on hold.

If a page session already exists on the phone, and the phone receives another incoming page, the priority is given to the first multicast session and the second multicast session is ignored. The behavior for the incoming calls in this case is also based on the setting for the “Allow Barge In” parameter. The incoming call is handled as if there were an existing call already on the phone.

3.3 Advantages of Multicast Paging

Multicast paging allows for virtually unlimited paging capability in a local network, does not require a session license to operate, and is almost instantaneous, as it does not require the phones to acknowledge the page request.

4 SIP Paging

4.1 How SIP Paging Works

SIP paging works as follows: the 8x8 places a SIP call to the device with an auto answer flag, the Cyber Data Page Adapter will auto answer when properly configured for auto.

4.2 Caveats of SIP Paging

- Limited to 1 device currently, unless using the Configuration Manager.

4.3 Advantages of SIP Paging

- Works with remote devices.
- Works with the Yealink and Polycom product line.

5 Creating a User Profile on 8x8 for SIP Calls and Night Ring Capabilities

If using the SIP Call and or Night Ring capabilities of the SIP Paging Adapter, a softphone device should be ordered and a user is required to be created on 8x8. Create a user profile and assign the new user profile to the softphone only device ordered. This will be needed to be done for Each Registration required on the CyberData Device. If not using the SIP Call or Night Ring capabilities of the CyberData equipment this section can be skipped.

5.1 Create User Profile

In account manager, click on Accounts and then User Profiles. Click Create New User Profile. Provide the following information:

- First Name (Required)
- Last Name (Required)
- Nickname (Optional)
- Email Address (Required, and must be unique)
- Job Title (Optional)
- Department (Optional)
- Location (Optional)
- User Name (Required)
- Salesforce ID (Ignore)
- Zendesk ID (Ignore)
- NetSuite ID (Ignore)
- Mobile (Ignore)
- Language (Optional, Leave as Default)
- Time Zone (Optional, Leave as default)

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Create a New User Profile

First Name *

Last Name *

Nickname

Email Address *

Job Title

Department

Location

User Name *

SalesForce ID

Zendesk ID

NetSuite ID

Mobile

Language

Time Zone

English (U.S.)

US/Eastern

*=Indicates Required Fields

Save

Save / Add Another

Cancel

Click on Save (or Save / Add Another if going to add a Page user as well).

6 Assign User to the Device

After creating the user profile that will interface with CyberData Equipment, assign the user to the device. In Account Manager select Phone System, and then click on View All Extensions.

HOME | PHONE SYSTEM | BILLING | REPORTING | ORDERS | ACCOUNTS | SUPPORT | VIRTUAL OFFICE ONLINE

Home > Phone System > Extensions

Enter keyword Search

Help

PHONE SYSTEM

Extensions

Auto Attendant

Virtual and Toll-Free Numbers

Ring Groups

Music on Hold

Call Queues

Branches

Switchboard

Paging

Company Settings

Number Transfer Request

Call Recording

Edit Voicemail / Fax Notifications

Group Call Pickup

Call Park Extensions

Cordless Devices

Extensions

Quick Find / Edit Extension

Search Reset

Enter extension number, phone number or caller ID.

View All Extensions

Edit Multiple Extensions

Change Extension Numbers

Download Call Recordings

Line Key Configuration

Outbound Calling Options

From the list of extensions find the extension ordered for the Cyber Data Device, and click Edit.

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Edit	Active	Unlimited Extension			Unassigned	Unassigned	Unassigned
------	--------	---------------------	--	--	------------	------------	------------

Set the following item, the rest can be left as “default”.

- Enable Virtual Office: No/Unchecked
- Enable Virtual Office Mobile: No/Unchecked
- Verify Preferred Codec is set to G.711U (90 kbps)

The screenshot shows the 'Edit Extension' page in a web application. On the left is a sidebar with a 'PHONE SYSTEM' menu containing various options like 'Extensions', 'Auto Attendant', 'Ring Groups', etc. The main content area is titled 'Edit Extension' and includes a 'Help' link. Below the title is a note about expand/collapse icons and a 'Save Changes' button. The page is divided into two main sections: 'Extension Information' and 'Extension Settings'. In the 'Extension Information' section, there's a 'User Profile' dropdown with a 'Select User Profile' link. A callout bubble points to this link with the text 'Click to add the User Profile Created'. Below this are fields for 'External Caller ID' (Phone Number, Caller ID Full Name), 'Internal Caller ID' (First Name, Last Name, Caller ID Full Name), and 'Caller ID Option Locked to User?'. The 'Phone Number' field is set to '6001'. In the 'Extension Settings' section, the 'Preferred Codec' is set to 'G.711U (90 kbps)', highlighted with a yellow box and a callout bubble saying 'Must be G.711'. Other settings include 'Time Zone' (US/Eastern), 'Language' (English (U.S.)), and various checkboxes for features like 'Travelling Outside the Country', 'View Billing Statements', 'Enable Inbound Caller ID', 'Do Not Disturb', and 'Permanent Caller ID Blocking'. Two checkboxes, 'Enable Virtual Office' and 'Enable Virtual Office Mobile', are unchecked, with a callout bubble pointing to them saying 'Uncheck'.

Then click on “Select User Profile to add the appropriate User Profile, by clicking the “select” next to the profile you want to use.

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Select User Profile

Search

Reset

View All

To search for a user profile, type the user profile information and click on the search button. You can also click on the view all button to see all the user profiles.

Actions	First Name	Last Name	Email Address	User Name
Select	Agnes	Blackford	agnblackf@hugoboss.com	AGNEBLACKF@HUGOBOSS.COM
Select	Allen	Peri	allenperi@hugoboss.com	ALLENPERI@HUGOBOSS.COM
Select	Ally	THALL, C. J. (CJ)	allythall@hugoboss.com	ALLYTHALL@HUGOBOSS.COM
Select	Amel	Radwan	amelradwan@hugoboss.com	AMELRADWAN@HUGOBOSS.COM
Select	Amel	Geiger	amelgeiger@hugoboss.com	AMELGEIGER@HUGOBOSS.COM
Select	CyberData	PageServer	cyberdata@hugoboss.com	CYBERDATA@HUGOBOSS.COM
Select	CyberData	PageServer	cyberdata@hugoboss.com	CYBERDATA@HUGOBOSS.COM
Select	CyberData	PageServer	cyberdata@hugoboss.com	CYBERDATA@HUGOBOSS.COM
Select	David	Reisat	daudreis@hugoboss.com	DAUDREIS@HUGOBOSS.COM
Select	David	Reisat	daudreis@hugoboss.com	DAUDREIS@HUGOBOSS.COM
Select	David	Reisat	daudreis@hugoboss.com	DAUDREIS@HUGOBOSS.COM
Select	Jane	Reisat	jane@hugoboss.com	JANEREISAT@HUGOBOSS.COM
Select	Jane	Reisat	jane@hugoboss.com	JANEREISAT@HUGOBOSS.COM
Select	Jane	Reisat	jane@hugoboss.com	JANEREISAT@HUGOBOSS.COM
Select	Jane	Reisat	jane@hugoboss.com	JANEREISAT@HUGOBOSS.COM
Select	Jane	Reisat	jane@hugoboss.com	JANEREISAT@HUGOBOSS.COM
Select	Jane	Reisat	jane@hugoboss.com	JANEREISAT@HUGOBOSS.COM

Cancel

It will return you to the previous screen and click on “Save Changes”.

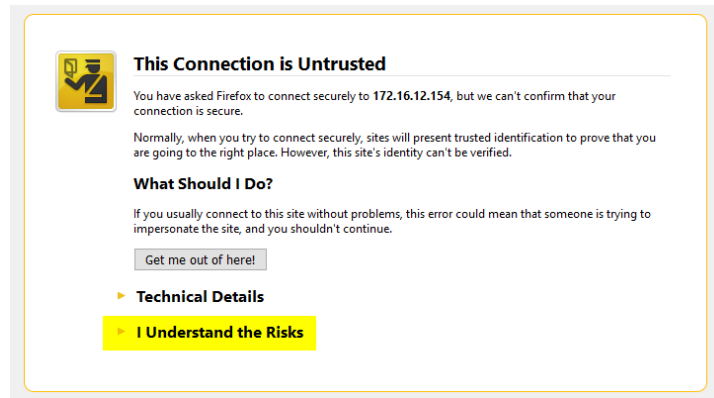
7 CyberData SIP Paging Adapter Setup

When deploying the CyberData SIP Paging Adapter it is recommended to use DHCP. CyberData provides a “Discovery Utility” that can be downloaded from their website (http://www.cyberdata.net/support/voip/discovery_utility.html) to initially discover the IP address of the SIP Paging Adapter. Using the CyberData Discovery Utility to obtain the current IP address of the CyberData SIP Paging Adapter login using a web browser using the default username of “**admin**” and the default password of “**admin**”. For more information on using the discovery utility and basic setup of the CyberData equipment, please refer to the operating manuals from CyberData. If using the pure multicast integration option, the CyberData equipment will not be registering with 8x8, and it is suggested to set static IPs to all CyberData equipment, or use the “Discover Utility” to identify the IP addresses assigned to the CyberData Equipment for future administration.

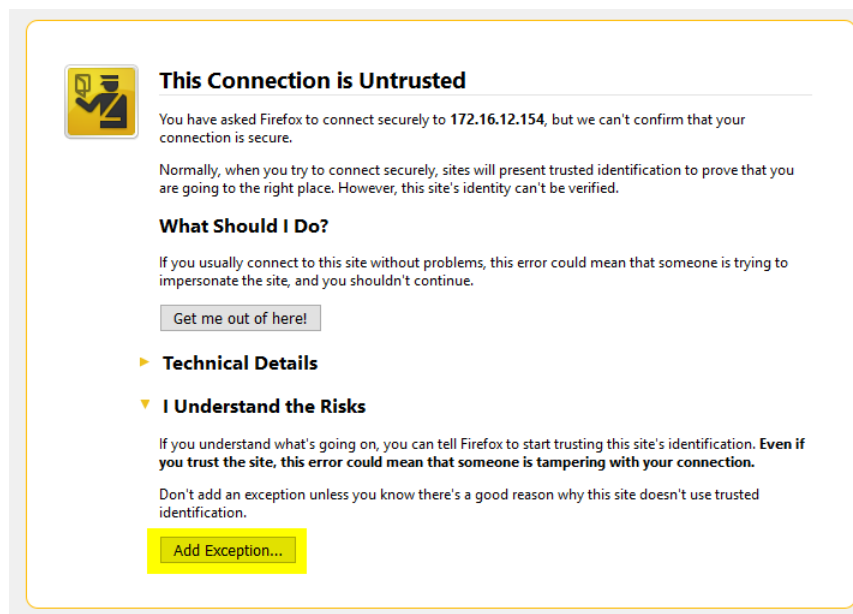
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7.1 Connecting to the CyberData SIP Page Adapter

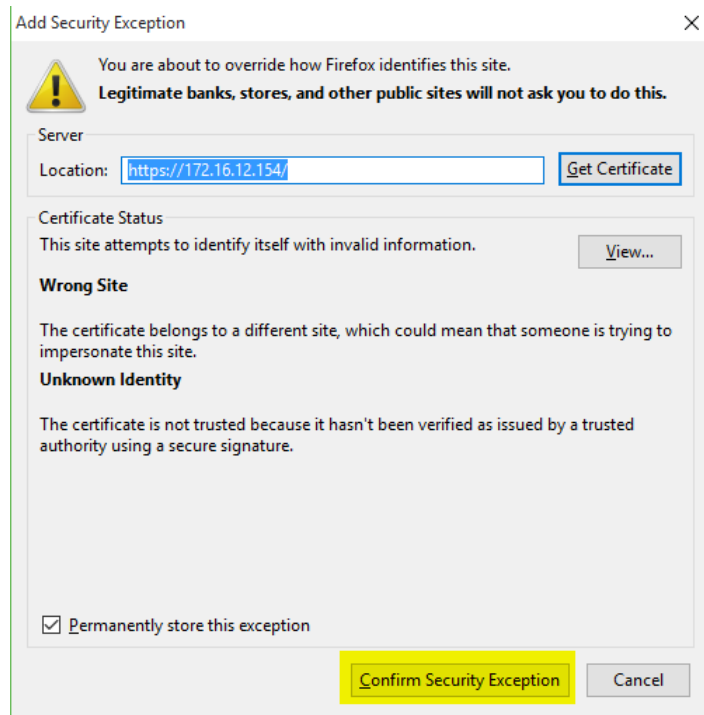
The CyberData SIP Paging Adapter now uses HTTPS to provision the device. When connecting to the CyberData Paging Adapter you will be required to accept the Self Signed certificate by clicking on “I understand the risks” link.



Then click “Add Exception”.



And then click Confirm Security Exception.



7.2 Home Screen

After logging into the CyberData SIP Paging Adapter using your favorite browser you are immediately taken to the Home Screen which will display the following information.

On the Top, you will find your navigation options,

Device Name: Shows the device name (25-character limit).

Change Username: Type in this field to change the username (25-character limit).

- Default: **admin**

Change Password: Type in this field to change the password (19-character limit).

- Default: **admin**

Re-enter Password: Type the password again in this field to confirm the new password (19-character limit).



Current Settings:

Provides you with the current IP addressing of the device, Mac address and serial number.

The home screen will also show the current registration status, and features enabled on the CyberData SIP Paging Adapter.

Import/Export Settings

Allows for Importing and Exporting settings of the CyberData paging Adapter.

 Save

Click on the Save button to save your configuration settings.



Note: You need to reboot for changes to take effect.

 Reboot

Click on the Reboot button to reboot the system.

Current Status

Serial Number:	██████████
Mac Address:	██████████-██████████-██████████
Firmware Version:	v11.7.1b03
IP Addressing:	DHCP
IP Address:	172.16.12.53
Subnet Mask:	255.255.255.0
Default Gateway:	172.16.12.1
DNS Server 1:	209.18.47.61
DNS Server 2:	209.18.47.62
SIP Mode:	Enabled
Multicast Mode:	Enabled
Event Reporting:	Disabled
Nightringer:	Enabled
Primary SIP Server:	Registered
Backup Server 1:	Not registered
Backup Server 2:	Not registered
Nightringer Server:	Not registered

7.3 Device Configuration

On the device configuration screen, you can configure several default options for the Paging Adapter.

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Beep on Initialization: Checked

Beep on Page: Checked

Enable line-in to line-out loopback:
Unchecked

Enable relay on local audio: Unchecked

- When selected, the relay will be closed any time that audio is played out of the line-out/page port. This setting is for legacy analog amplifiers that are often connected to the page port. Analog amplifiers will often have a noticeable hum if they are turned on while there is no audio being played. The relay closure causes these amplifiers to turn on only when audio is sent to them.

Bypass DTMF Menus (Go Straight to page):

When selected, the DTMF menu options are bypassed when a page is sent, and the device begins a live/buffered page (no ability to send stored messages).

Send pre-configured DTMF for Analog Zone:

When selected, a pre-configured DTMF sequence is sent to activate an analog zone when the Bypass DTMF Menus (Go straight to page) setting is enabled.

Zone: Type the pre-configured DTMF sequence for the analog zone.

Note: This setting is only enabled when the Send pre-configured DTMF for Analog Zone setting is enabled.

Manual DTMF for Analog Zone: When selected, the device will prompt the caller to enter a DTMF sequence to activate an analog zone before prompting the caller to press 1

The screenshot displays the configuration web interface for a CyberData SPA. It features five main sections: Line-in Settings, Relay Settings, Clock Settings, DTMF Settings, and Misc Settings. Line-in Settings includes a checkbox for 'Enable Line-in to Line-out Loopback'. Relay Settings includes a checkbox for 'Activate Relay on Local Audio'. Clock Settings includes options for setting time with an NTP server, selecting an NTP server, specifying a Posix Timezone String, and setting a time update period. DTMF Settings includes options for DTMF Duration, bypassing DTMF menus, sending pre-configured DTMF for an analog zone, and manual DTMF entry. Misc Settings includes a device name field and checkboxes for beeping on init, beeping on page, and disabling HTTPS. At the bottom, there are buttons for 'Test Audio', 'Test Relay', 'Save', 'Reboot', and 'Toggle Help'.

This is another screenshot of the same CyberData SPA configuration web interface, showing the same settings as the previous image. The interface is organized into five sections: Line-in Settings, Relay Settings, Clock Settings, DTMF Settings, and Misc Settings. The settings are consistent with the first screenshot, including checkboxes for loopback and relay activation, clock synchronization options, DTMF configuration options, and miscellaneous settings like device name and HTTPS status. The bottom navigation bar contains 'Test Audio', 'Test Relay', 'Save', 'Reboot', and 'Toggle Help' buttons.

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through 9 to send a stored message or press 0 to page.

Note: The user must press the # key after entering the zone.

Requires Security Code: When selected, the user will be prompted to enter a Security Code (entered on this page) before being able to execute a page when calling the device.

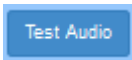
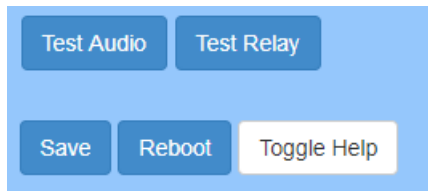
Code: Type the security code in this field.



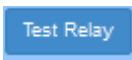
Click on the Save button to save your configuration settings.



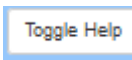
Note: You need to reboot for changes to take effect.



When the Test Audio button is pressed, you will hear a voice message for testing the device audio quality and volume.



Click on the Test Relay button to do a relay test.



Click on the Toggle Help button to see a short description of some of the web page items. First click on the Toggle Help button, and you will see a question mark (?) appear next to some of the web page items. Move the mouse.

7.4 Network Configuration

Addressing Mode Select either DHCP IP Addressing or Static Addressing by marking the appropriate radio button. DHCP Addressing mode is enabled on default and the device will attempt to resolve network addressing with the local DHCP server upon boot. If DHCP Addressing fails, the device will revert to the last known IP address or the factory default address if no prior DHCP lease was established.

Hostname This is the hostname provided by the DHCP server. See the DHCP/ DNS server documentation for more information. Enter up to 64 characters.

IP Address Enter the Static IPv4 network address in dotted decimal notation.

Subnet Mask Enter the Subnet Mask in dotted decimal notation.

Default Gateway Enter the Default Gateway IPv4 address in dotted decimal notation.

DNS Server 1 Enter the primary DNS Server IPv4 address in dotted decimal notation.

DNS Server 2 Enter the secondary DNS Server IPv4 address in dotted decimal notation.

DHCP Timeout in seconds Specify the desired time-out duration (in seconds) that the device will wait for a response from the DHCP server before reverting to the stored static IP address. The stored static IP address may be the last known IP address or the factory default address if no prior DHCP lease was established. Enter up to 8 characters. A value of -1 will retry forever.

The screenshot displays a network configuration interface with two main sections: 'Stored Network Settings' and 'Current Network Settings'. The 'Stored Network Settings' section includes fields for 'Addressing Mode' (Static and DHCP), 'Hostname' (SipDevice033b7e), 'IP Address' (10.10.10.10), 'Subnet Mask' (255.0.0.0), 'Default Gateway' (10.0.0.1), 'DNS Server 1' (10.0.0.1), 'DNS Server 2' (10.0.0.1), and 'DHCP Timeout in seconds' (60). A note below states '* A value of -1 will retry forever'. The 'VLAN Settings' section includes 'VLAN ID (0-4095)' (0) and 'VLAN Priority (0-7)' (0). At the bottom right of the 'Stored Network Settings' section are buttons for 'Save', 'Reboot', and 'Toggle Help'. The 'Current Network Settings' section displays the following values: 'IP Address: 172.16.12.154', 'Subnet Mask: 255.255.255.0', 'Default Gateway: 172.16.12.1', 'DNS Server 1: 172.16.12.11', and 'DNS Server 2:'.

Stored Network Settings		VLAN Settings	
Addressing Mode:	<input type="radio"/> Static <input checked="" type="radio"/> DHCP	VLAN ID (0-4095):	0
Hostname:	SipDevice033b7e	VLAN Priority (0-7):	0
IP Address:	10.10.10.10		
Subnet Mask:	255.0.0.0		
Default Gateway:	10.0.0.1		
DNS Server 1:	10.0.0.1		
DNS Server 2:	10.0.0.1		
DHCP Timeout in seconds:	60		
* A value of -1 will retry forever			

Current Network Settings

IP Address:	172.16.12.154
Subnet Mask:	255.255.255.0
Default Gateway:	172.16.12.1
DNS Server 1:	172.16.12.11
DNS Server 2:	

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Save

Click on the Save button to save your configuration settings.



Note: You need to reboot for changes to take effect.

Reboot

Click on the Reboot button to reboot the system.

Toggle Help

Click on the Toggle Help button to see a short description of some of the web page items. First click on the Toggle Help button, and you will see a question mark (?) appear next to some of the web page items. Move the mouse pointer to hover over a question mark to see a short description of a specific web page item.

Stored Network Settings

Addressing Mode: ☐ Static ☒ DHCP
Hostname: SipDevice033b7e
IP Address: 10.10.10.10
Subnet Mask: 255.0.0.0
Default Gateway: 10.0.0.1
DNS Server 1: 10.0.0.1
DNS Server 2: 10.0.0.1
DHCP Timeout in seconds: 60
* A value of -1 will retry forever

VLAN Settings

VLAN ID (0-4095): 0
VLAN Priority (0-7): 0

Current Network Settings

IP Address: 172.16.12.154
Subnet Mask: 255.255.255.0
Default Gateway: 172.16.12.1
DNS Server 1: 172.16.12.11
DNS Server 2:

Save Reboot Toggle Help

7.5 SIP Configuration

SIP configuration screen is used to configure the SIP registration parameters used by the CyberData SIP Page Adapter to register with 8x8 for paging purposes. The SIP User ID and Authentication ID are the same values which is the GUN ID provided by your 8x8 for the device and assigned to the user created previously. Authentication Password is provided by your 8x8 Engineer.

Enable SIP Operation:

Checked

SIP Server: unsbc.8x8.com

Backup SIP Server 1: Not Used

Backup SIP Server 2: Not Used

Remote SIP Port: 5299

Local SIP Port: 5060

Outbound Proxy: must be left blank.

Outbound Proxy Port: 0

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SIP User ID: the GUN ID provided by your 8x8 Engineer.

Authentication ID: Same as User ID.

Authentication Password: the SIP Proxy Password provided by your 8x8 engineer.

Register with a SIP Server: Checked

Re-registration Interval: 360

Unregister on Reboot: Unchecked



Note: if checked will create an issue on registration, and the device will fail to register.

Buffer SIP Calls: Optional, if checked the CyberData SIP Server will buffer the page, and once the call is disconnected, it will make the page.

SIP Settings	Nightringer Settings
Enable SIP operation: <input checked="" type="checkbox"/>	Enable Nightringer: <input checked="" type="checkbox"/>
Register with a SIP Server: <input checked="" type="checkbox"/>	SIP Server: unsrc.8x8.com
Use Cisco SRST: <input type="checkbox"/>	Remote SIP Port: 5299
Primary SIP Server: unsrc.8x8.com	Local SIP Port: 5061
Primary SIP User ID: [redacted]	Outbound Proxy: [redacted]
Primary SIP Auth ID: [redacted]	Outbound Proxy Port: 0
Primary SIP Auth Password: [redacted]	User ID: [redacted]
Backup SIP Server 1: [redacted]	Authenticate ID: [redacted]
Backup SIP User ID 1: [redacted]	Authenticate Password: [redacted]
Backup SIP Auth ID 1: [redacted]	Re-registration Interval (in seconds): 360
Backup SIP Auth Password 1: [redacted]	Relay rings to multicast: <input type="checkbox"/>
Backup SIP Server 2: [redacted]	Multicast Address: 224.1.2.32
Backup SIP User ID 2: [redacted]	Multicast Port: 2020
Backup SIP Auth ID 2: [redacted]	
Backup SIP Auth Password 2: [redacted]	
Remote SIP Port: 5299	
Local SIP Port: 5060	
Outbound Proxy: [redacted]	
Outbound Proxy Port: 0	
Disable rport Discovery: <input type="checkbox"/>	
Buffer SIP Calls: <input type="checkbox"/>	
Re-registration Interval (in seconds): 360	
Unregister on Boot: <input type="checkbox"/>	
Keep Alive Period: 10000	

Call Disconnection
Terminate Call after delay: 0

Codec Selection
Force Selected Codec: <input checked="" type="checkbox"/>
Codec: PCMU (G.711, u-law)

7.6 Nightringer Configuration

Nightringer configuration screen is used to configure the SIP registration parameters used by the CyberData SIP Page Adapter to register with 8x8 for Night Bell or Nightringer purposes. The SIP User ID and Authentication ID are the same values which is the GUN ID provided by your 8x8 for the device and assigned to the user. Authentication Password is provided by your 8x8 Engineer.

Technical Publications

Enable Nightringer: Checked

SIP Server: unsbc.8x8.com

Remote SIP Port: 5299

Local SIP Port: 5061, must be Port 5061.

User ID: the GUN ID provided by your 8x8 engineer.

Authentication ID: Same as User ID.


Authentication Password: The SIP Proxy Password for the Device as provided by your 8x8 engineer.


Re-registration Interval: 360

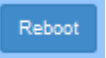
Relay rings to multicast: If you wish all multicast devices to receive the ringer page, CHECK this check box.

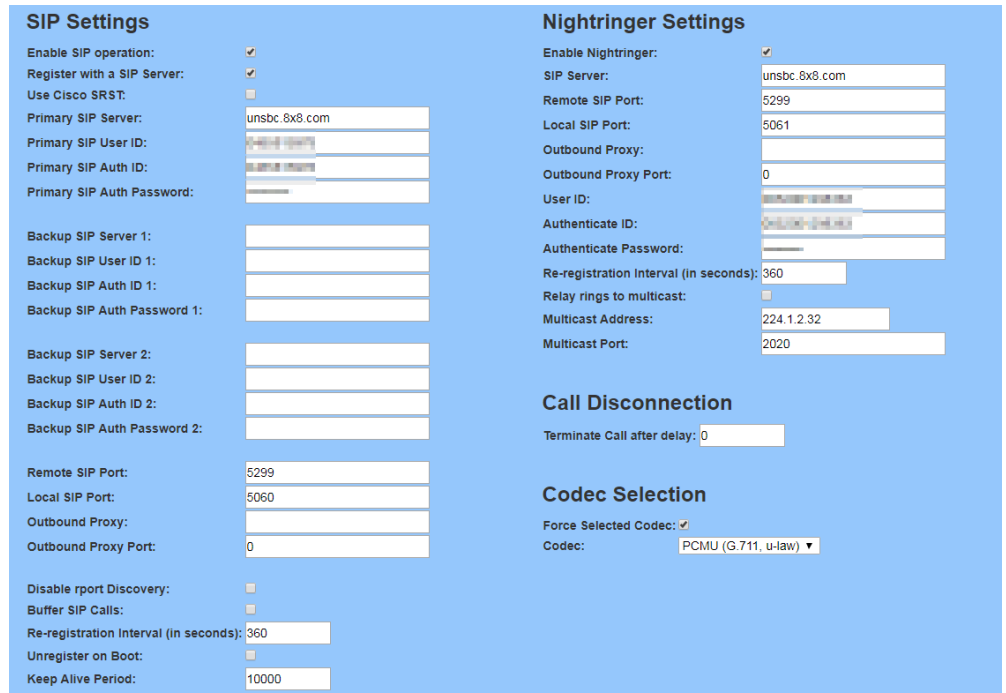
Multicast Address: the IP Address to send the nightringer page to.

Multicast Port: The Port Address to send the nightringer page to.

 Click on the Save button to save your configuration settings.

 **Note:** You need to reboot for changes to take effect.

 Click on the Reboot button to reboot the system.



The screenshot displays two configuration panels. The 'SIP Settings' panel on the left includes fields for enabling SIP operation, registering with a SIP server, and configuring primary and backup SIP servers, user IDs, authentication IDs, and passwords. It also features options for remote SIP port, local SIP port, outbound proxy, and proxy port, along with checkboxes for disabling rport discovery and buffering SIP calls. The 'Nightringer Settings' panel on the right includes fields for enabling Nightringer, SIP server, remote and local SIP ports, outbound proxy and proxy port, user ID, authentication ID, and password. It also features a re-registration interval, a checkbox for relaying rings to multicast, a multicast address, and a multicast port. Below these panels are sections for 'Call Disconnection' (terminate call after delay) and 'Codec Selection' (force selected codec and codec type).

SIP Settings	
Enable SIP operation:	<input checked="" type="checkbox"/>
Register with a SIP Server:	<input checked="" type="checkbox"/>
Use Cisco SRST:	<input type="checkbox"/>
Primary SIP Server:	unsbc.8x8.com
Primary SIP User ID:	
Primary SIP Auth ID:	
Primary SIP Auth Password:	
Backup SIP Server 1:	
Backup SIP User ID 1:	
Backup SIP Auth ID 1:	
Backup SIP Auth Password 1:	
Backup SIP Server 2:	
Backup SIP User ID 2:	
Backup SIP Auth ID 2:	
Backup SIP Auth Password 2:	
Remote SIP Port:	5299
Local SIP Port:	5060
Outbound Proxy:	
Outbound Proxy Port:	0
Disable rport Discovery:	<input type="checkbox"/>
Buffer SIP Calls:	<input type="checkbox"/>
Re-registration Interval (in seconds):	360
Unregister on Boot:	<input type="checkbox"/>
Keep Alive Period:	10000

Nightringer Settings	
Enable Nightringer:	<input checked="" type="checkbox"/>
SIP Server:	unsbc.8x8.com
Remote SIP Port:	5299
Local SIP Port:	5061
Outbound Proxy:	
Outbound Proxy Port:	0
User ID:	
Authenticate ID:	
Authenticate Password:	
Re-registration Interval (in seconds):	360
Relay rings to multicast:	<input type="checkbox"/>
Multicast Address:	224.1.2.32
Multicast Port:	2020

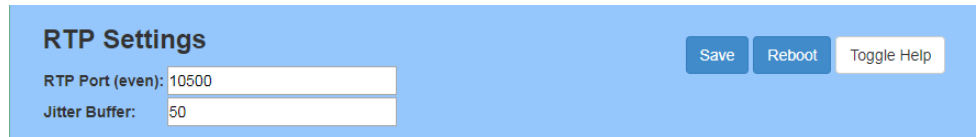
Call Disconnection

Terminate Call after delay: 0

Codec Selection




Force Selected Codec: ☒

Codec: PCMU (G.711, u-law)



The screenshot displays the 'RTP Settings' panel, which includes fields for RTP Port (even) and Jitter Buffer. Below the fields are 'Save', 'Reboot', and 'Toggle Help' buttons.

RTP Settings	
RTP Port (even):	10500
Jitter Buffer:	50

Toggle Help

Click on the Toggle Help button to see a short description of some of the web page items. First click on the Toggle Help button, and you will see a question mark (?) appear next to some of the web page items. Move the mouse pointer to hover over a question mark to see a short description of a specific web page item.

7.7 Multicast Configuration

Multicast Configuration is used to create multiple zones that the CyberData SIP Paging Adapter will listen to and relay pages that are received, configure each multicast zone to match the multicast Zone. If you are not using Multicast Paging, or do not want to include the Paging Adapter in the paging zone this section can be skipped.

When playing multicast streams, audio on different streams will preempt each other according to their priority in the list. An audio stream with a higher priority will interrupt a stream with a lower priority.

If both SIP and Multicast is enabled, SIP audio streams are considered priority 4.5. SIP audio will interrupt multicast streams with priority 0 through 4 and will be interrupted by multicast streams with priority 5 through 9.

During priority 9 multicast streams, the analog volume control is bypassed and the volume level is set to maximum.

Ringtones all play at the same priority level. This means that it is possible to have a night ring tone and a normal ringtone playing at the same time.

Priority 9 will play the announcement at maximum volume.

Polycom will use a Default IP of 224.0.1.116 and a port of 5001 for its paging functions. 8x8 recommends that when using Polycom phones to set Priority 0 to be your Polycom Paging group by entering the IP of 224.0.1.116 and Port 5001 into Priority 0.

Technical Publications

Enable Multicast operation: Checked

Address: Enter the IP address of the Multicast Group.

- **Note:** To disable a relay on a group, use an IP address of 0.0.0.0.

Port: Enter the port number of the Multicast Group.

- **Note:** The port range can be from 2000 to 65534.

Name: Enter a name for the Multicast Group.

Beep: Should a beep be played before page.

Relay: Should the relay be engaged with this page.

Polycom Default Channel: 1

Polycom Priority Channel: 24

Polycom Emergency Channel: 25

Multicast Settings

Enable Multicast Operation: ☒

Priority	Address	Port	Name	Beep	Buffer
9	239.168.3.10	11000	MG9	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	239.168.3.9	10000	MG8	<input type="checkbox"/>	<input type="checkbox"/>
7	239.168.3.8	9000	MG7	<input type="checkbox"/>	<input type="checkbox"/>
6	239.168.3.7	8000	MG6	<input type="checkbox"/>	<input type="checkbox"/>
5	239.168.3.6	7000	MG5	<input type="checkbox"/>	<input type="checkbox"/>
4	239.168.3.5	6000	MG4	<input type="checkbox"/>	<input type="checkbox"/>
3	239.168.3.4	5000	MG3	<input type="checkbox"/>	<input type="checkbox"/>
2	239.168.3.3	4000	MG2	<input type="checkbox"/>	<input type="checkbox"/>
1	239.168.3.2	3000	MG1	<input type="checkbox"/>	<input type="checkbox"/>
0	234.2.1.1	5001	Polycom Default	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Polycom Default Channel

1

Polycom Priority Channel

24

Polycom Emergency Channel

25

SIP calls are considered priority 4.5

Port range can be from 2000-65535

Priority 9 is the highest and 0 is the lowest

A higher priority audio stream will always supersede a lower one

** You need to reboot for changes to take effect*

Save

Reboot



Click on the Save button to save your configuration settings.



Note: You need to reboot for changes to take effect.



Click on the Reboot button to reboot the system.

7.8 Fault Configuration

The fault sensor (pins 5 and 6) on the header can be used to monitor a connection. The fault alarm will be activated when sensor parameter has been met.

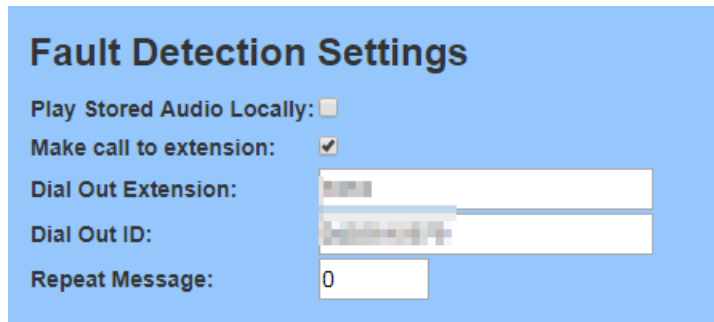
Technical Publications

Play Audio Locally: Check this box to loop an audio file out of the Paging Adapter speaker until the sensor is deactivated.

Make call to extension: Check this box to call a preset extension (once).

Dial Out Extension: Enter the desired dial-out extension number.

Dial Out ID: Enter in the GUN number associated with the User (64-character limit).



Fault Detection Settings

Play Stored Audio Locally: ☐

Make call to extension: ☒

Dial Out Extension:

Dial Out ID:

Repeat Message:

Test Fault Detection

Test Intrusion sensor

Save

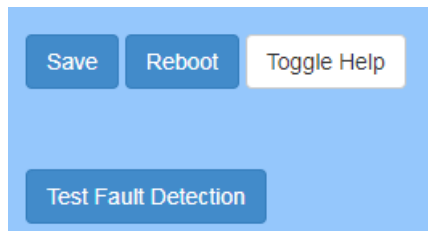
Click on the Save button to save your configuration settings.



Note: You need to reboot for changes to take effect.

Reboot

Click on the Reboot button to reboot the system.



Save Reboot Toggle Help

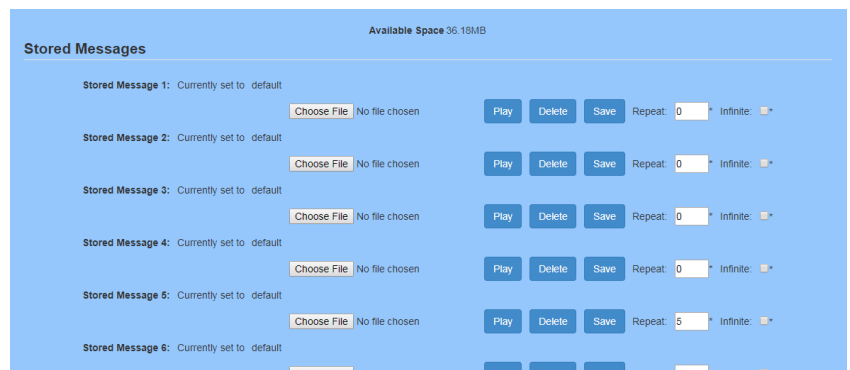
Test Fault Detection

7.9 Audio Configuration

CyberData SIP Paging Adapter allows you to replace all the prompts used by the Paging Adapter with your own custom paging prompts. Custom prompts must be saved as

WAVE audio, Microsoft PCM, 16 bit, mono 8000 Hz

Custom files may be uploaded for all prompts played by the CyberData SIP Paging Adapter.



Available Space 36.18MB

Stored Messages

Stored Message 1: Currently set to default	Choose File No file chosen	Play Delete Save	Repeat: 0 Infinite: *
Stored Message 2: Currently set to default	Choose File No file chosen	Play Delete Save	Repeat: 0 Infinite: *
Stored Message 3: Currently set to default	Choose File No file chosen	Play Delete Save	Repeat: 0 Infinite: *
Stored Message 4: Currently set to default	Choose File No file chosen	Play Delete Save	Repeat: 0 Infinite: *
Stored Message 5: Currently set to default	Choose File No file chosen	Play Delete Save	Repeat: 5 Infinite: *
Stored Message 6: Currently set to default	Choose File No file chosen	Play Delete Save	Repeat: 0 Infinite: *

Technical Publications

A blue rectangular button with the word "Save" in white text.

Click on the Save button to save your configuration settings.



Note: You need to reboot for changes to take effect.

A blue rectangular button with the word "Reboot" in white text.

Click on the Reboot button to reboot the system.

** If repeat/infinite values are changed, device must be rebooted for those changes to take effect*

A blue rectangular button with the word "Save" in white text.A blue rectangular button with the word "Reboot" in white text.