



CyberData Paging Adapters Operations Guide

SIP Compliant
Part #011233, 011280

Document Part #932061A
for Firmware Version 22.0

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Operations Guide 932061A
SIP Compliant 011233, 011280

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Technical Support

The fastest way to get technical support for your VoIP product is to submit a VoIP Technical Support form at the following website:

<https://support.cyberdata.net/>

Phone: (831) 373-2601, Ext. 333

Email: support@cyberdata.net



Fax: (831) 373-4193

Company and product information is at www.cyberdata.net.

Revision Information

Revision 932061A, which corresponds to firmware version 22.0, was released on November 19, 2024.

Pictorial Alert Icons

	<p>General Alert</p> <p>This pictorial alert indicates a potentially hazardous situation. This alert will be followed by a hazard level heading and more specific information about the hazard.</p>
	<p>Ground</p> <p>This pictorial alert indicates the Earth grounding connection point.</p>

Hazard Levels

Danger: Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This is limited to the most extreme situations.

Warning: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

Caution: Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It may also alert users against unsafe practices.

Notice: Indicates a statement of company policy (that is, a safety policy or protection of property).

The safety guidelines for the equipment in this manual do not purport to address all the safety issues of the equipment. It is the responsibility of the user to establish appropriate safety, ergonomic, and health practices and determine the applicability of regulatory limitations prior to use. Potential safety hazards are identified in this manual through the use of words Danger, Warning, and Caution, the specific hazard type, and pictorial alert icons.

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
13. Prior to installation, consult local building and electrical code requirements.



Warning

Electrical Hazard: This product should be installed by a licensed electrician according to all local electrical and building codes.



Warning

Electrical Hazard: To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.



Warning

The PoE connector is intended for intra-building connections only and does not route to the outside plant.

Abbreviations and Terms

Abbreviation or Term	Definition
A-law	A standard companding algorithm, used in European digital communications systems to optimize, i.e., modify, the dynamic range of an analog signal for digitizing.
AVP	Audio Video Profile
Cat 5	TIA/EIA-568-B Category 5
DHCP	Dynamic Host Configuration Protocol
LAN	Local Area Network
LED	Light Emitting Diode
Mbps	Megabits per second.
NTP	Network Time Protocol
PBX	Private Branch Exchange
PoE	Power over Ethernet (as per IEEE 802.3af standard)
RTFM	Reset Test Function Management
SIP	Session Initiated Protocol
SRTP	Secure Real Time Protocol
u-law	A companding algorithm, primarily used in the digital telecommunication
UC	Unified Communications
VoIP	Voice over Internet Protocol

Contents

Chapter 1 Configure the Device	1
1.1 Log In Page	1
1.1.1 Restoring Defaults and Announcing the IP Address	2
1.2 Home Page	3
1.3 Device	5
1.4 Network	6
1.5 SIP (Session Initiation Protocol)	7
1.5.1 Dial Out Extension Strings and DTMF Tones (using rfc2833)	8
1.5.2 Point-to-Point Configuration	8
1.6 SSL	9
1.7 Multicast	11
1.8 Fault	12
1.9 Audiofiles	13
1.10 Events	16
Example Packets for Events	17
1.11 Terminus	20
1.12 Autoprovisioning	21
1.13 Firmware	22
1.14 Admin	23
1.15 Command Interface	24
1.15.1 Command Interface Post Commands	24
 Appendix A Troubleshooting/Technical Support	 25
A.1 Contact Information	25
A.2 Warranty and RMA Information	25

1 Configure the Device

1.1 Log In Page

1. Open your browser to the device IP address.

Note If the network does not have access to a DHCP server, the device will default to an IP address of 192.168.1.23.

Note Make sure that the PC is on the same IP network as the Paging Adapter.

Note You may also download CyberData's VoIP Discovery Utility program which allows you to easily find and configure the default web address of the CyberData VoIP products.

CyberData's VoIP Discovery Utility program is available at the following website address:

<https://www.cyberdata.net/pages/discovery>

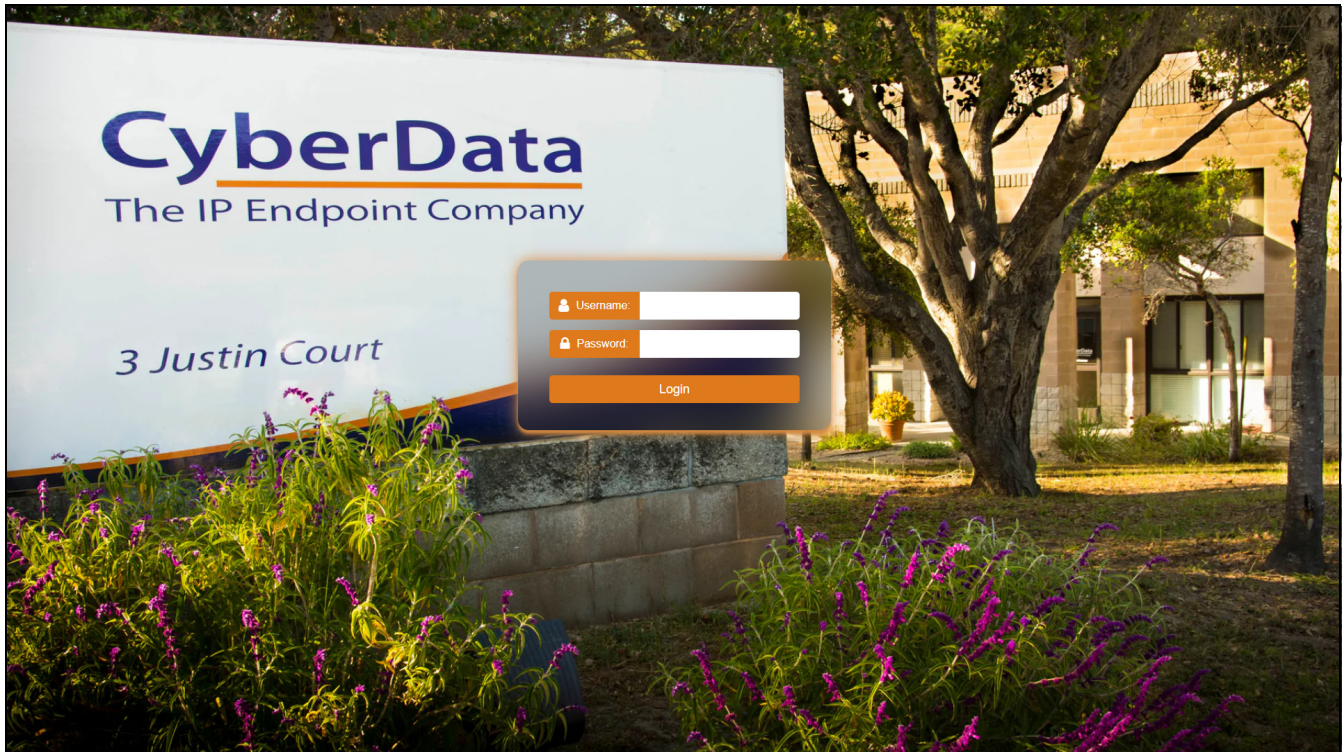
Note The Intercom ships in DHCP mode. To get to the **Home** page, use the discovery utility to scan for the device on the network and open your browser from there.

2. On the Log In Page ([Figure 1-1](#)), use the following default **Web Access Username** and **Web Access Password** to access the **Home Page** ([Figure 1-3](#)):

Web Access Username: **admin**

Web Access Password: **admin**

Figure 1-1. Log In Page



1.1.1 Restoring Defaults and Announcing the IP Address

The RTFM button is located on the back of the device.

Briefly pressing the RTFM button (Figure 1-2), prompts the device to announce its IP address (a speaker or amplified speaker must be connected).

To restore the device to its factory default settings (Table 1-1), hold the RTFM button for approximately seven seconds. After 15-20 seconds, "Restoring defaults, rebooting" is announced (a speaker or amplified speaker must be connected).

The device will default to DHCP to obtain an IP address, or will use 192.168.1.23 if a DHCP server is not present.

Figure 1-2. RTFM Button

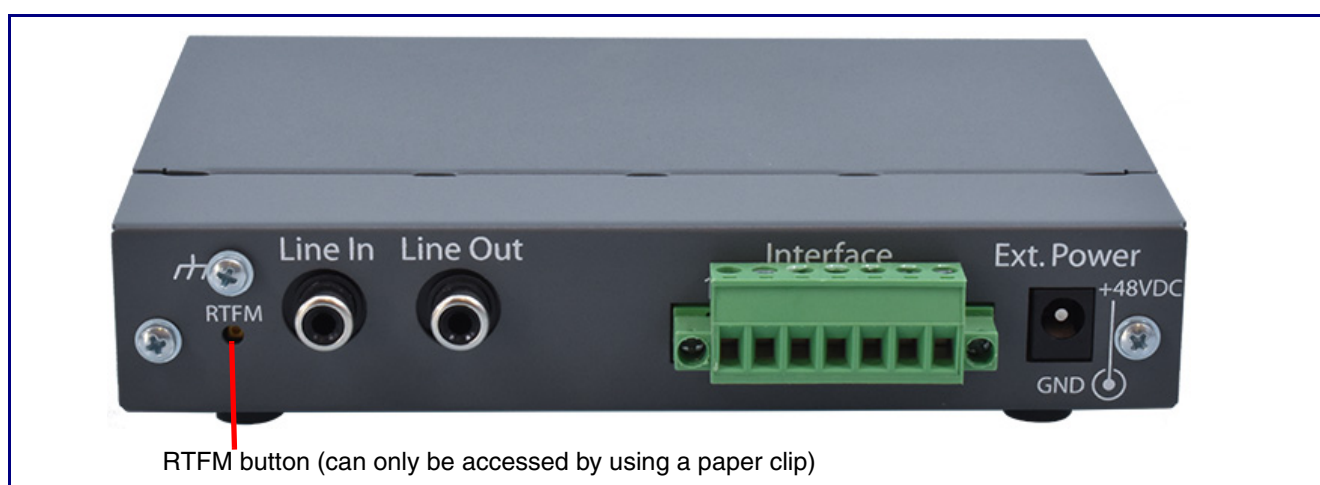


Table 1-1. Factory Default Settings

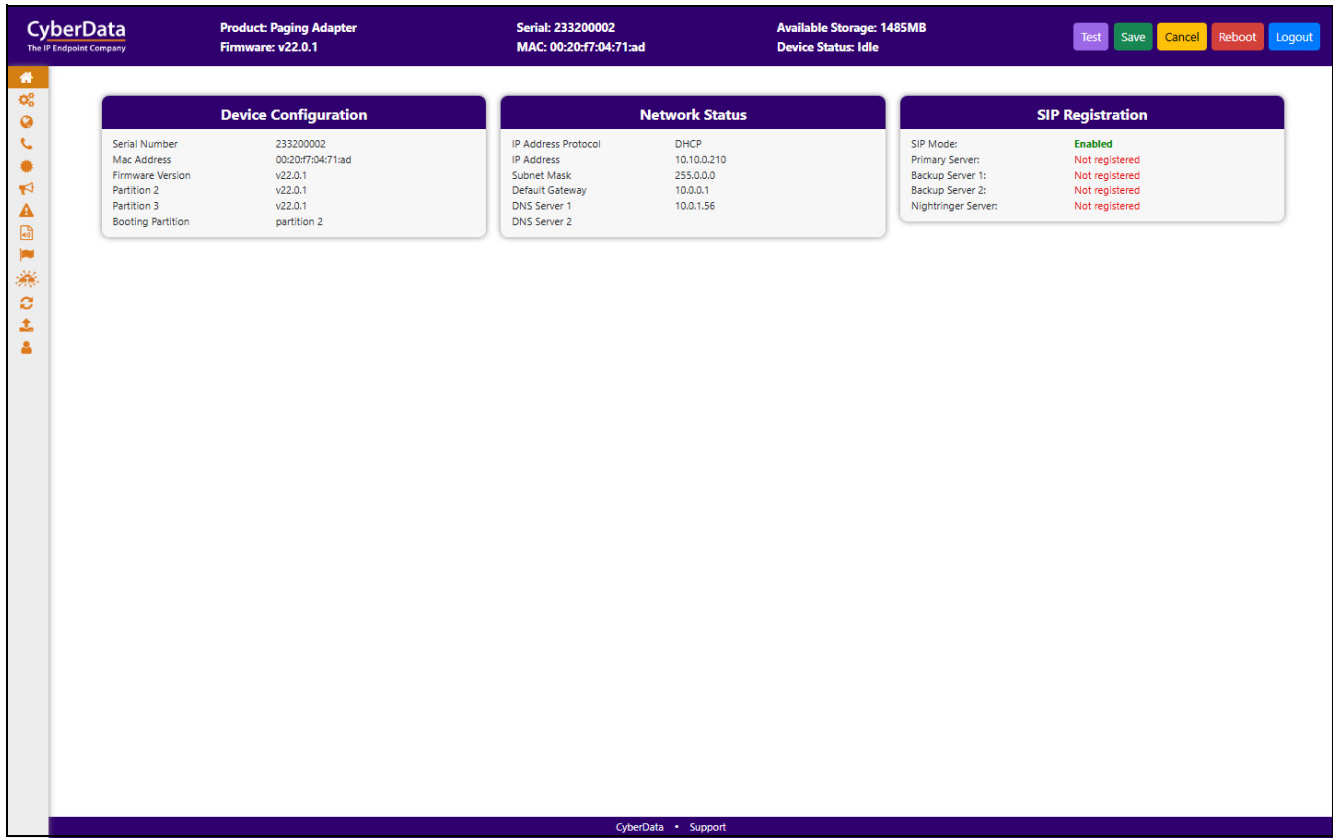
Parameter	Factory Default Setting
IP Addressing	DHCP
IP Address ^a	192.168.1.23
Web Access Username	admin
Web Access Password	admin
Subnet Mask ^a	255.255.255.0
Default Gateway ^a	192.168.1.1

a. Default if there is not a DHCP server present.

1.2 Home Page

The **Home** page provides device specific information such as Serial Number, Mac Address, and Firmware version. This page is designed as an initial landing page to provide general information on the status of the device.

Figure 1-3. Home Page



If you are using an InformaCast enabled device, you will see the following:

Figure 1-4. InformaCast enabled Device

InformaCast Status	
Boot Time	2024/08/05 12:23:27
Current Time	2024/08/05 12:27:28
IC Servers	10.0.1.195
Servers 1	
Servers 2	
Servers 3	
Servers 4	
Servers 5	
Servers 6	
Servers 7	
Servers 8	
Servers 9	
Configuration File	InformaCastSpeaker.cfg
B'casts Accepted	0
B'casts Rejected	0
B'casts Active	0

1.3 Device

The **Device** page allows for adjustment of settings that pertain to the physical device such as relay settings and time zone.

Figure 1-5. Device Configuration Page

CyberData
The IP Endpoint Company

Product: Paging Adapter
Firmware: v22.0.1

Serial: 233200002
MAC: 00:20:f7:04:71:ad

Available Storage: 1485MB
Device Status: Idle

TestSaveCancelRebootLogout

Line-in Settings

Line-in to Line-out Loopback: OFF

Relay Settings

Relay on Local Audio: OFF

Time Settings

NTP Server: north-america.pool.ntp.org

NTP Timezone: America/Los_Angeles (-8)

Current Time: Tue, 19 Nov 2024 09:02:36

Misc Settings

Device Name: Paging Adapter

Bypass DTMF Menu: DISABLED

Beep on Init: OFF

Multicast TTL: 255

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If you are using an InformaCast enabled device, you will see the following:

Figure 1-6. InformaCast enabled Device

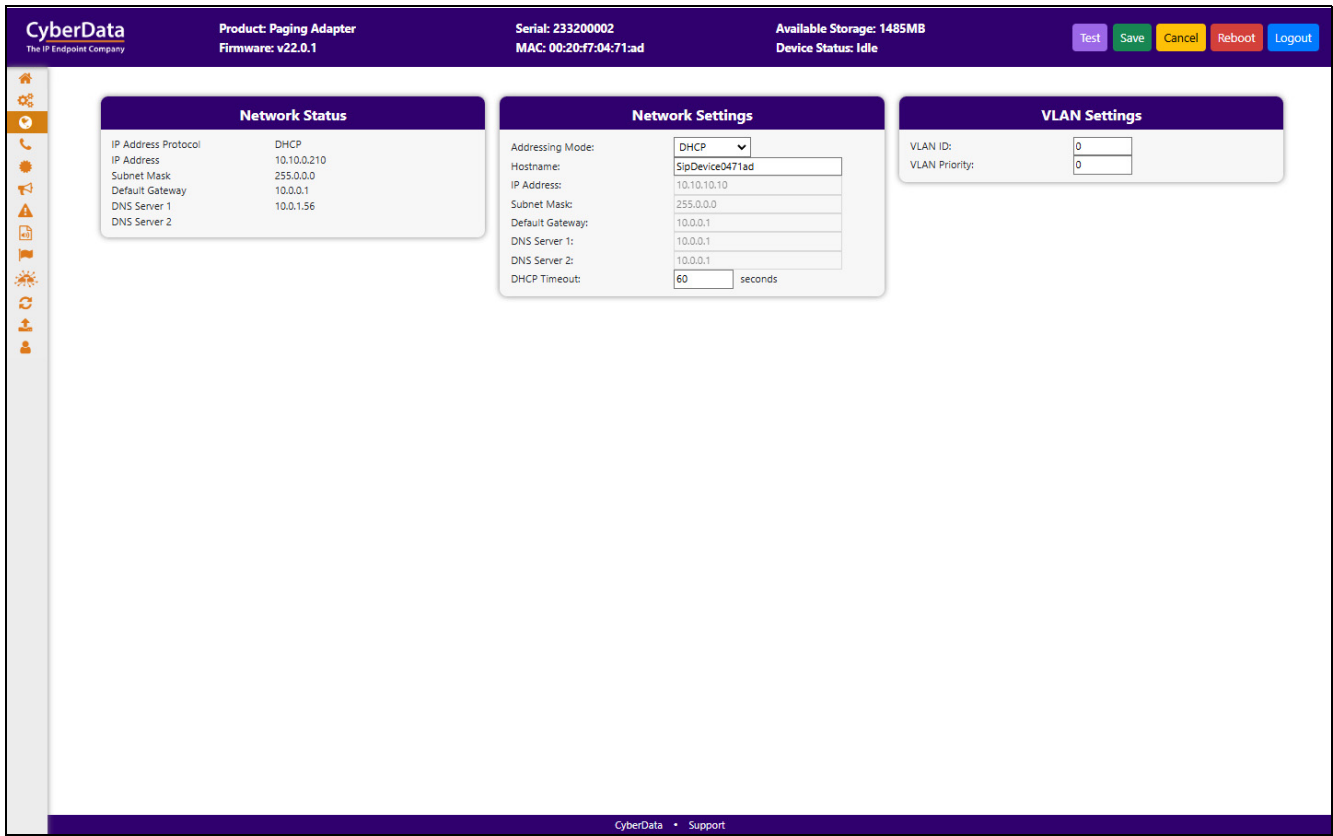
InformaCast Settings

InformaCast Server: http://10.0.1.195:8081/InformaCast/resources

1.4 Network

The **Network** tab provides access to network-related settings. Assigning the device a static IP address or VLAN is done on this page.

Figure 1-7. Network Page



1.5 SIP (Session Initiation Protocol)

This page sets the options for phone calls. Configure up to 3 servers, with 2 acting as backup, and a server for the nightringer. The nightringer is a second sip extension that only rings, never connects to a call. Many customers use the nightringer in a hunt group.

Use this page to configure the options for security, transport, codec, and others.

Note For specific server configurations, go to the following website address:

<https://www.cyberdata.net/pages/connecting-to-ip-pbx-servers>

Figure 1-8. SIP Page

If you are using an InformaCast enabled device, you will see the following:

Figure 1-9. InformaCast enabled Device

InformaCast SIP Config:	DISABLED	▼
-------------------------	----------	---

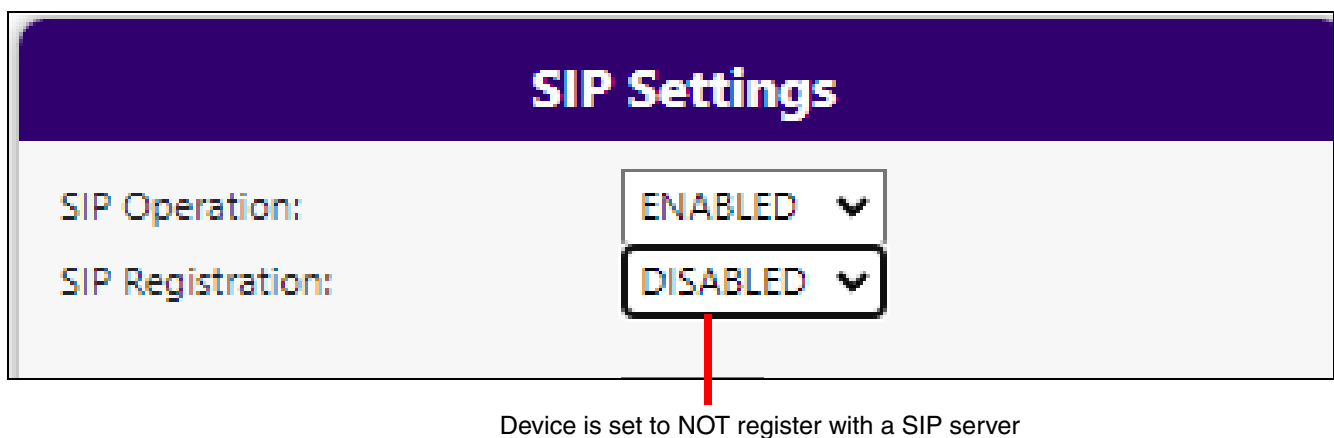
1.5.1 Dial Out Extension Strings and DTMF Tones (using rfc2833)

Outgoing calls support delayed DTMF (rfc2833) with the first comma pausing 2 seconds and subsequent commas pausing 1 second.

1.5.2 Point-to-Point Configuration

Dialing point-to-point allows the device to call and a single endpoint. All CyberData endpoints and many phones can use this option. To do this, enable **SIP Operation**, do not enable **SIP Registration**, and use the endpoint's IP address as the Dial Out extension. Delayed DTMF is supported. See [Figure 1-10](#).

Figure 1-10. SIP Page Set to Point-to-Point Mode



1.6 SSL

The **SSL** tab allows for the adjustment of certificates used by the device. The certificates used for the web server, SIP Client, and Autoprovisioning can be changed here. It is also possible to add additional CA certificates on this page. CA Certificates allow the device to authenticate servers that it contacts.

Figure 1-11. SSL Page (1 of 2)

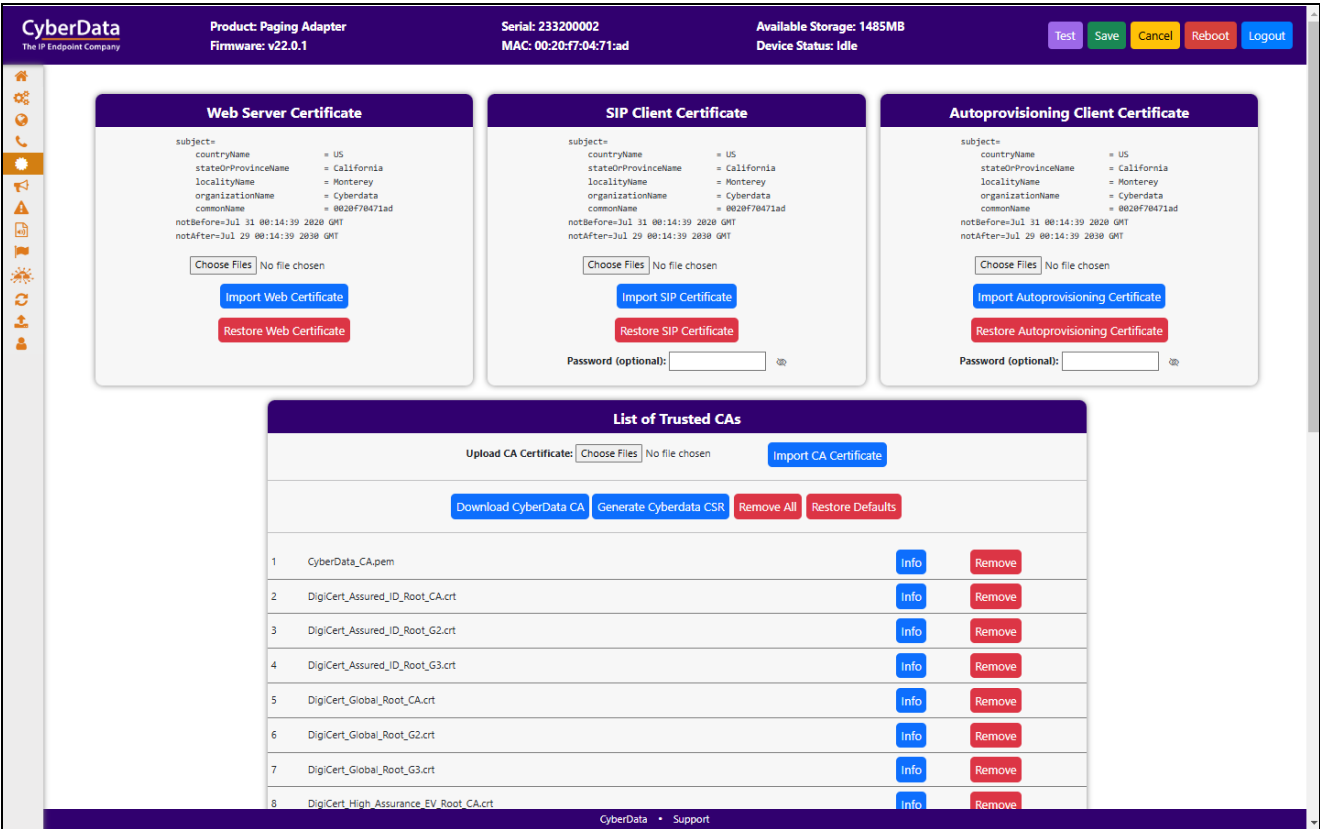


Figure 1-12. SSL Page (2 of 2)

CyberData The IP Endpoint Company		Product: Paging Adapter Firmware: v22.0.1	Serial: 233200002 MAC: 00:20:f7:04:71:ad	Available Storage: 1485MB Device Status: Idle	Test	Save	Cancel	Reboot	Logout
	9	DigiCert_Trusted_Root_G4.crt		Info	Remove				
	10	GeoTrust_Global_CA.crt		Info	Remove				
	11	GeoTrust_Primary_Certification_Authority.crt		Info	Remove				
	12	GeoTrust_Primary_Certification_Authority_-_G2.crt		Info	Remove				
	13	GeoTrust_Primary_Certification_Authority_-_G3.crt		Info	Remove				
	14	GeoTrust_Universal_CA.crt		Info	Remove				
	15	GeoTrust_Universal_CA_2.crt		Info	Remove				
	16	Go_Daddy_Class_2_CA.pem		Info	Remove				
	17	Go_Daddy_Root_Certificate_Authority_-_G2.pem		Info	Remove				
	18	VeriSign_Class_3_Public_Primary_Certification_Authority_-_G4.crt		Info	Remove				
	19	VeriSign_Class_3_Public_Primary_Certification_Authority_-_G5.crt		Info	Remove				
	20	VeriSign_Universal_Root_Certification_Authority.crt		Info	Remove				
	21	Verisign_Class_1_Public_Primary_Certification_Authority.crt		Info	Remove				
	22	Verisign_Class_1_Public_Primary_Certification_Authority_-_G3.crt		Info	Remove				
	23	Verisign_Class_2_Public_Primary_Certification_Authority_-_G2.crt		Info	Remove				
	24	Verisign_Class_2_Public_Primary_Certification_Authority_-_G3.crt		Info	Remove				
	25	Verisign_Class_3_Public_Primary_Certification_Authority.crt		Info	Remove				
	26	Verisign_Class_3_Public_Primary_Certification_Authority_-_G3.crt		Info	Remove				
	27	thawte_Primary_Root_CA.crt		Info	Remove				
	28	thawte_Primary_Root_CA_-_G2.crt		Info	Remove				
	29	thawte_Primary_Root_CA_-_G3.crt		Info	Remove				

1.7 Multicast

The Multicast Configuration page allows the device to join up to ten paging zones for receiving RTP audio streams. A paging zone can consist of one or many CyberData multicast group-enabled products. There is no limit to how many speakers can participate in a given paging zone. Each multicast group is defined by a multicast address and port number.

Each multicast group is assigned a priority, allowing simultaneously arriving pages to be serviced based on importance. Multicast groups are compatible with IGMP through version 3. The device supports simultaneous SIP and Multicast. The device will prioritize simultaneous audio streams according to their priority in the list. 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.

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

To use Polycom Group Paging, configure a multicast group with the IP address and port number of the Polycom phone. The default is 224.0.1.116, port 5001, but can be configured through the phone. Polycom defaults to channels 1, 24, and 25, but can also be configured. The payload should be 20 ms and the codec G711mu.

Figure 1-13. Multicast Page

CyberData
The IP Endpoint Company

Product: Paging Adapter
Firmware: v22.0.1

Serial: 233200002
MAC: 00:20:f7:04:71:ad

Available Storage: 1485MB
Device Status: Idle

TestSaveCancelRebootLogout

Saved Successfully

Multicast Settings

Recieve Multicast Audio:

ENABLED

Polycom Default Channel:

1

Polycom Priority Channel:

24

Polycom Emergency Channel:

25

Priority	Address	Port	Name	Buffer	Beep
0	239.168.3.1	2000	Background Music	<div>DISABLED</div>	<div>DISABLED</div>
1	239.168.3.2	3000	MG1	<div>DISABLED</div>	<div>DISABLED</div>
2	239.168.3.3	4000	MG2	<div>DISABLED</div>	<div>DISABLED</div>
3	239.168.3.4	5000	MG3	<div>DISABLED</div>	<div>DISABLED</div>
4	239.168.3.5	6000	MG4	<div>DISABLED</div>	<div>DISABLED</div>
5	239.168.3.6	7000	MG5	<div>DISABLED</div>	<div>DISABLED</div>
6	239.168.3.7	8000	MG6	<div>DISABLED</div>	<div>DISABLED</div>
7	239.168.3.8	9000	MG7	<div>DISABLED</div>	<div>DISABLED</div>
8	239.168.3.9	10000	MG8	<div>DISABLED</div>	<div>DISABLED</div>
9	239.168.3.10	11000	Emergency	<div>DISABLED</div>	<div>DISABLED</div>

SIP calls: Priority 4.5

Port range: 2000-65535

Priority: 9 is the highest, 0 is the lowest

Audio Streams: Higher priority supersedes lower ones

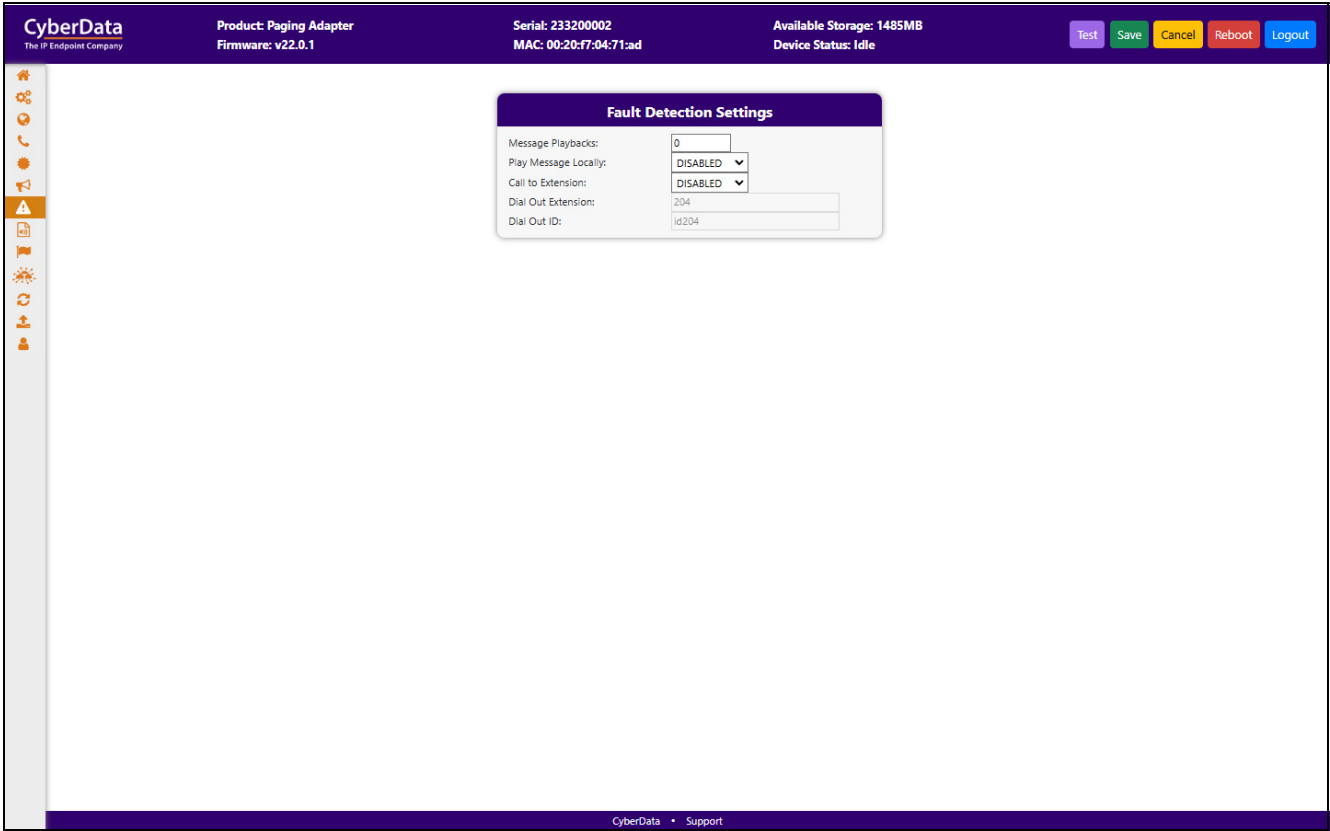
Priority 9: Plays at maximum volume

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1.8 Fault

The **Fault** page controls configuration of all Fault or sensor-related capabilities of the unit. This can include the fault sensor that is used to have the device take action based on a physical input to the device.

Figure 1-14. Fault Page



1.9 Audiofiles

This device supports stored messages. The user will hear “Press 0 to page, press 1 to 9 to play stored message” when calling the device.

To configure stored messages, an audio file must be uploaded, using **Choose File** and **Save**. The number of repeats can be specified or set to infinite (where the message plays until cancelled by the # button during a phone call).

Figure 1-15. Audiofiles Page (1 of 3)

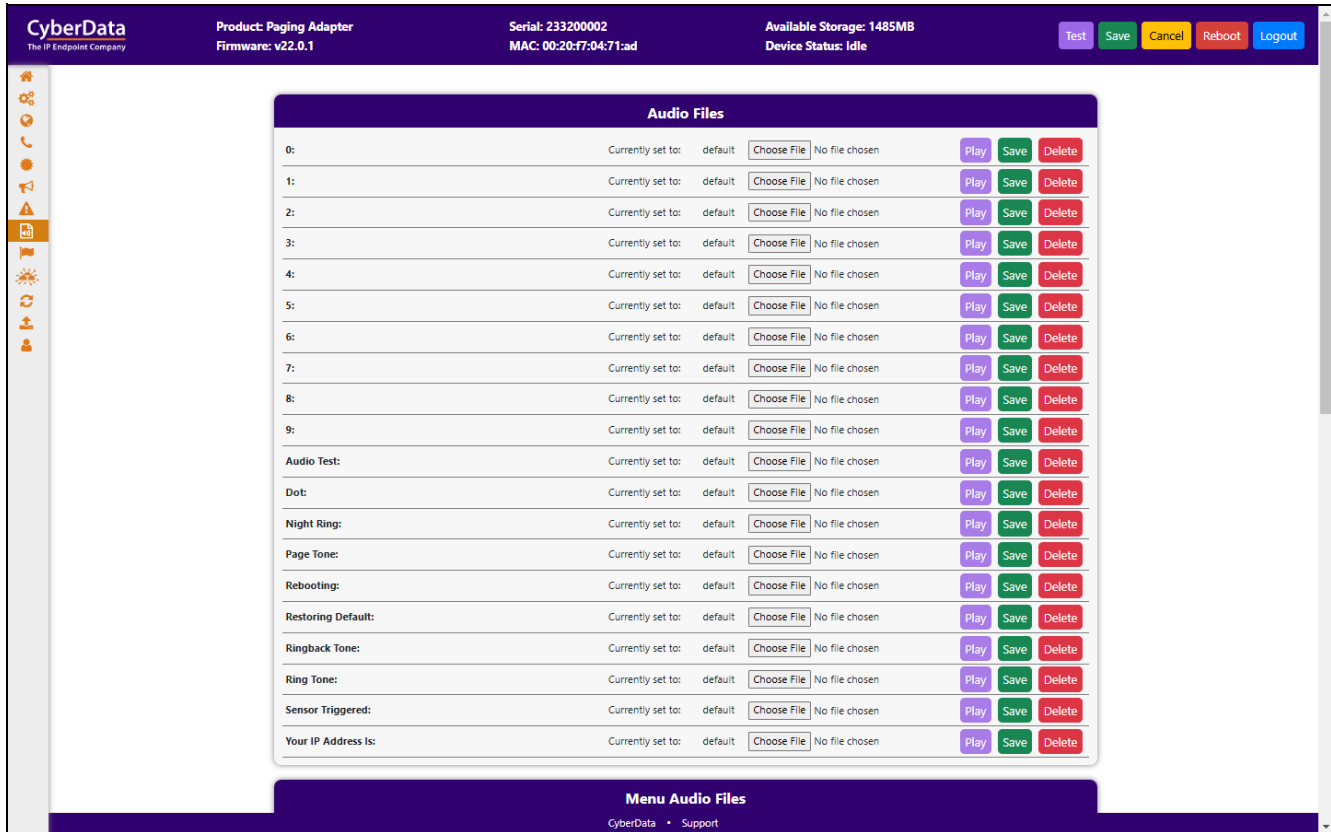


Figure 1-16. Audiofiles Page (2 of 3)

CyberData

The IP Endpoint Company

Product: Paging Adapter

Firmware: v22.0.1

Serial: 233200002

MAC: 00:20:F7:04:71:ad

Available Storage: 1485MB

Device Status: Idle

Test

Save

Cancel

Reboot

Logout

🏠

⚙️

📞

📡

📄

📁

🔍

👤

📄

📁

🔍

👤

Cancel:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Currently Playing:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Invalid Entry:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Page:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Play Stored Message:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Pound (#):	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Press:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Stored Message:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Through:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
To:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Enter Code:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Invalid Code:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Enter Zone:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>

Stored Messages

Stored Message 1:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	Repeat: <input type="text" value="0"/>	Infinite: <input type="button" value="OFF"/>	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Stored Message 2:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	Repeat: <input type="text" value="0"/>	Infinite: <input type="button" value="OFF"/>	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Stored Message 3:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	Repeat: <input type="text" value="0"/>	Infinite: <input type="button" value="OFF"/>	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Stored Message 4:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	Repeat: <input type="text" value="0"/>	Infinite: <input type="button" value="OFF"/>	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Stored Message 5:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	Repeat: <input type="text" value="0"/>	Infinite: <input type="button" value="OFF"/>	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Stored Message 6:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	Repeat: <input type="text" value="0"/>	Infinite: <input type="button" value="OFF"/>	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Stored Message 7:	Currently set to: default	<input type="button" value="Choose File"/>	No file chosen	Repeat: <input type="text" value="0"/>	Infinite: <input type="button" value="OFF"/>	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>

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Support

Figure 1-17. Audiofiles Page (3 of 3)

CyberData
The IP Endpoint Company

Product: Paging Adapter
Firmware: v22.0.1

Serial: 233200002
MAC: 00-20-F7-04-71-ad

Available Storage: 1485MB
Device Status: Idle

Test Save Cancel Reboot Logout

Page:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Play Stored Message:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Pound (#):	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Press:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Stored Message:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Through:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
To:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Enter Code:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Invalid Code:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Enter Zone:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>

Stored Messages

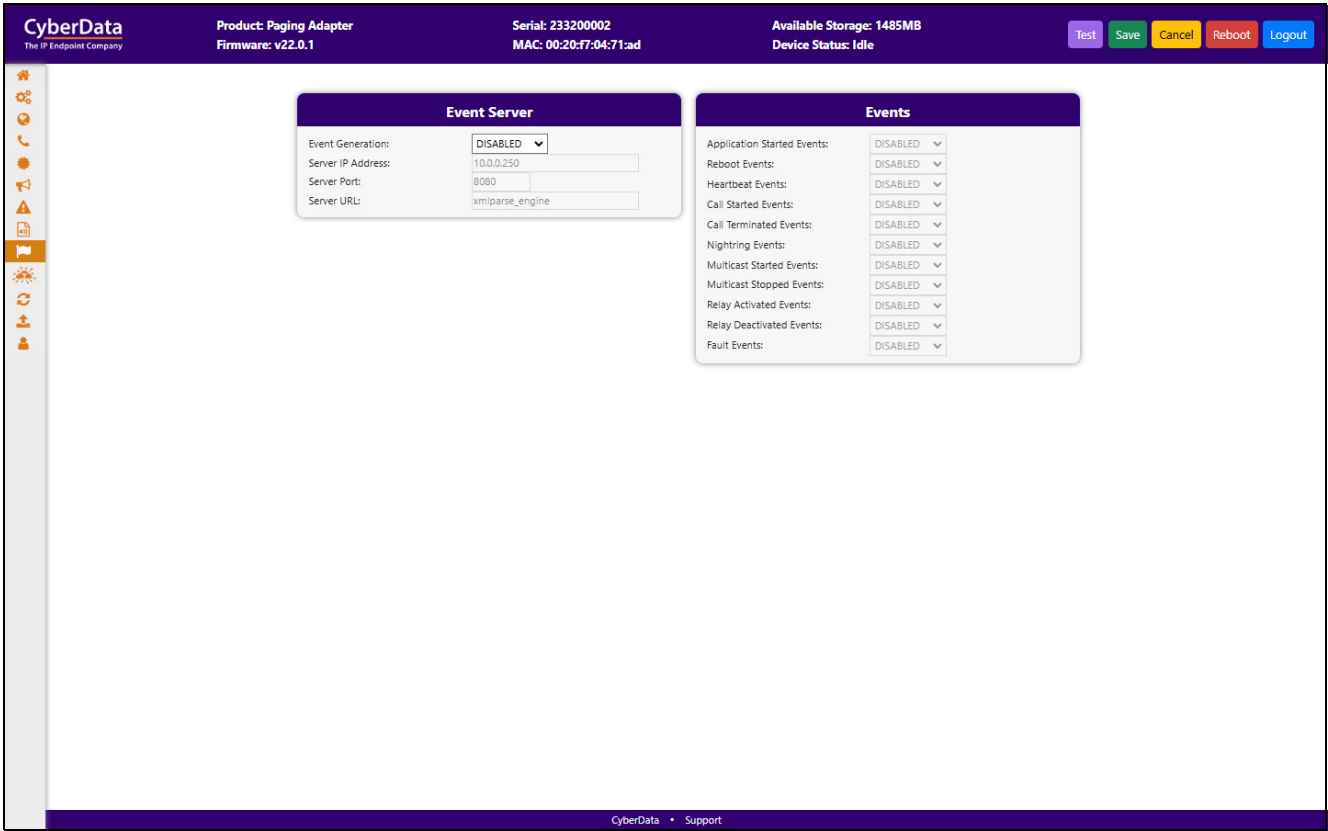
Stored Message 1:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	Repeat: <input type="text" value="0"/>	Infinite: <input type="button" value="OFF"/>	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Stored Message 2:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	Repeat: <input type="text" value="0"/>	Infinite: <input type="button" value="OFF"/>	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Stored Message 3:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	Repeat: <input type="text" value="0"/>	Infinite: <input type="button" value="OFF"/>	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Stored Message 4:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	Repeat: <input type="text" value="0"/>	Infinite: <input type="button" value="OFF"/>	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Stored Message 5:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	Repeat: <input type="text" value="0"/>	Infinite: <input type="button" value="OFF"/>	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Stored Message 6:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	Repeat: <input type="text" value="0"/>	Infinite: <input type="button" value="OFF"/>	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Stored Message 7:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	Repeat: <input type="text" value="0"/>	Infinite: <input type="button" value="OFF"/>	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Stored Message 8:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	Repeat: <input type="text" value="0"/>	Infinite: <input type="button" value="OFF"/>	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>
Stored Message 9:	Currently set to:	default	<input type="button" value="Choose File"/>	No file chosen	Repeat: <input type="text" value="0"/>	Infinite: <input type="button" value="OFF"/>	<input type="button" value="Play"/>	<input type="button" value="Save"/>	<input type="button" value="Delete"/>

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1.10 Events

The **Events** page specifies a remote server that can be used to receive HTTP POST events when actions take place on the device.

Figure 1-18. Events Page



If you are using an InformaCast enabled device, you will see the following:

Figure 1-19. InformaCast enabled Device



1.10.0.1 Example Packets for Events

The server and port are used to point to the listening server and the 'Remote Event Server URL' is the destination URL (typically the script running on the remote server that's used to parse and process the POST events).

Note The XML is URL-encoded before transmission so the following examples are not completely accurate.

Here are example packets for every event:

```
POST xmlparse_engine HTTP/1.1
Host: 10.0.3.79
User-Agent: CyberData/1.0.0
Content-Length: 197
Content-Type: application/x-www-form-urlencoded

<?xml version="1.0" encoding="ISO-8859-1"?>
<cyberdata NAME='CyberData VoIP Device' MAC='0020f70015b6'>
<event>POWERON</event>
</cyberdata>
```

```
POST xmlparse_engine HTTP/1.1
Host: 10.0.3.79
User-Agent: CyberData/1.0.0
Content-Length: 199
Content-Type: application/x-www-form-urlencoded

<?xml version="1.0" encoding="ISO-8859-1"?>
<cyberdata NAME='CyberData VoIP Device' MAC='0020f70015b6'>
<event>HEARTBEAT</event>
</cyberdata>
```

```
POST xmlparse_engine HTTP/1.1
Host: 10.0.3.79
User-Agent: CyberData/1.0.0
Content-Length: 196
Content-Type: application/x-www-form-urlencoded

<?xml version="1.0" encoding="ISO-8859-1"?>
<cyberdata NAME='CyberData VoIP Device' MAC='0020f70015b6'>
<event>BUTTON</event>
</cyberdata>
```

```
POST xmlparse_engine HTTP/1.1
Host: 10.0.3.79
User-Agent: CyberData/1.0.0
Content-Length: 201
Content-Type: application/x-www-form-urlencoded

<?xml version="1.0" encoding="ISO-8859-1"?>
<cyberdata NAME='CyberData VoIP Device' MAC='0020f70015b6'>
<event>CALL_ACTIVE</event>
</cyberdata>
POST xmlparse_engine HTTP/1.1
```

```
Host: 10.0.3.79
User-Agent: CyberData/1.0.0
Content-Length: 205
Content-Type: application/x-www-form-urlencoded

<?xml version="1.0" encoding="ISO-8859-1"?>
<cyberdata NAME='CyberData VoIP Device' MAC='0020f70015b6'>
<event>CALL_TERMINATED</event>
</cyberdata>

POST xmlparse_engine HTTP/1.1
Host: 10.0.3.79
User-Agent: CyberData/1.0.0
Content-Length: 197
Content-Type: application/x-www-form-urlencoded

<?xml version="1.0" encoding="ISO-8859-1"?>
<cyberdata NAME='CyberData VoIP Device' MAC='0020f70015b6'>
<event>RINGING</event>
</cyberdata>

POST xmlparse_engine HTTP/1.1
Host: 10.0.3.79
User-Agent: CyberData/1.0.0
Content-Length: 234
Content-Type: application/x-www-form-urlencoded

<?xml version="1.0" encoding="ISO-8859-1"?>
<cyberdata NAME='CyberData VoIP Device' MAC='0020f70015b6'>
<event>MULTICAST_START</event>
<index>8</index>
</cyberdata>

POST xmlparse_engine HTTP/1.1
Host: 10.0.3.79
User-Agent: CyberData/1.0.0
Content-Length: 233
Content-Type: application/x-www-form-urlencoded

<?xml version="1.0" encoding="ISO-8859-1"?>
<cyberdata NAME='CyberData VoIP Device' MAC='0020f70015b6'>
<event>MULTICAST_STOP</event>
<index>8</index>
</cyberdata>

POST xmlparse_engine HTTP/1.1
Host: 10.0.3.79
User-Agent: CyberData/1.0.0
Content-Length: 234
Content-Type: application/x-www-form-urlencoded
<?xml version="1.0" encoding="ISO-8859-1"?>
<cyberdata NAME='CyberData VoIP Device' MAC='0020f70015b6'>
<event>RELAY_ACTIVATED</event>
</cyberdata>
POST xmlparse_engine HTTP/1.1
```

```
Host: 10.0.3.79
User-Agent: CyberData/1.0.0
Content-Length: 234
Content-Type: application/x-www-form-urlencoded
<?xml version="1.0" encoding="ISO-8859-1"?>
<cyberdata NAME='CyberData VoIP Device' MAC='0020f70015b6'>
<event>RELAY_DEACTIVATED</event>
</cyberdata>
```

```
POST xmlparse_engine HTTP/1.1
Host: 10.0.3.79
User-Agent: CyberData/1.0.0
Content-Length: 234
Content-Type: application/x-www-form-urlencoded
<?xml version="1.0" encoding="ISO-8859-1"?>
<cyberdata NAME='CyberData VoIP Device' MAC='0020f70015b6'>
<event>NIGHTRINGING</event>
</cyberdata>
```

1.11 Terminus

Terminus Cloud Control™ allows users to configure, monitor, and manage notification functions for CyberData's extensive VoIP product line, all from a single, easy-to-use platform. To learn more about Terminus Cloud Control™, go to <https://www.cyberdata.net/pages/terminus>.

The **Terminus** page allows for configuration of settings related to Terminus Cloud Control™.

Figure 1-20. Terminus Page

The screenshot displays the Terminus configuration interface. At the top, a purple header bar contains the CyberData logo, product details (Paging Adapter, v22.0.1), serial and MAC addresses, available storage (1485MB), and device status (Idle). Action buttons (Test, Save, Cancel, Reboot, Logout) are on the right. A vertical sidebar on the left shows various system icons. The main area features two settings panels: 'Discovery Setting' with input fields for Multicast Address (239.27.32.4), Time to Live (255), and Discovery Interval (60 seconds); and 'Lockdown Settings' with a dropdown for Lock Down Mode (set to Disabled) and a dropdown for Relay (set to No Action). The footer is a purple bar with 'CyberData • Support'.

1.12 Autoprovisioning

Enabling autoprovisioning allows the device to download provisioning files from a server. It defaults to using DHCP, with options configured in `dhcpd.conf` on the DHCP server. The file name is `<mac address>.xml` and if not found, `000000cd.xml`.

If a server is named, DHCP is bypassed, and the device will look for a file on the named server..

If a file is named, it will be downloaded instead of `<mac address>.xml`.

If a server is named, **Use tftp** searches for the file on a tftp server instead of http. If the server is secured (with a password), use **Verify Server Certificate** (username/password) to access it. When using DHCP, these options are configured in `dhcpd.conf`.

Autoprov autoupdate, **Autoprov at time**, and **Autoprov when idle** options are available with either DHCP or a named server.

The template is an xml file with all options set to default values.

Figure 1-21. Autoprovisioning Page

The screenshot displays the CyberData Autoprovisioning configuration interface. At the top, a header bar contains the CyberData logo, product information (Paging Adapter, v22.0.1), serial and MAC addresses, available storage (1485MB), and device status (Idle). Action buttons (Test, Save, Cancel, Reboot, Logout) are on the right. A left sidebar shows navigation icons. The main content area is divided into two panels: 'Autoprov Settings' and 'Autoprov Log'.

Autoprov Settings:

- Autoprov: **ENABLED** (dropdown)
- Autoprov Server:
- Autoprov Filename:
- Use tftp: **DISABLED** (dropdown)
- Verify Server Certificate: **DISABLED** (dropdown)
- Username:
- Password:
- Autoprov autoupdate: minutes
- Autoprov at time:
- Autoprov when idle: minutes
- [Download Template](#) button

Autoprov Log:

```

2024-11-19 09:08:18 Autoprov: no autoprov triggers. Exiting...
2024-11-19 09:08:23 Autoprovisioning on boot
2024-11-19 09:08:23 Autoprov found server='http://10.0.0.242' in dhcp option 43
2024-11-19 09:08:23 Autoprov looking for 0020f70471ad.xml at http://10.0.0.242
2024-11-19 09:08:23 Autoprov downloading http://10.0.0.242/0020f70471ad.xml
2024-11-19 09:08:23 Got autoprov file. Parsing "0020f70471ad.xml"
2024-11-19 09:08:24 Autoprov: Processing ssl certificates
2024-11-19 09:08:24 No certificate elements in SSLCertificates
2024-11-19 09:08:24 Autoprov: Processing audio files
2024-11-19 09:08:25 Autoprov: FirmwareSettings config not found
2024-11-19 09:08:25 DeviceConfig: error = False
2024-11-19 09:08:25 SSLCertificates: error = None
  
```

The footer of the page includes 'CyberData • Support'.

1.13 Firmware

Note CyberData strongly recommends that you do not upgrade the firmware when the device is likely to be in use.

To upgrade the firmware of your device:

1. Download the latest firmware from the following CyberData web site, and locate your device:

<https://www.cyberdata.net/collections/sip>

2. Unzip the firmware version file. This file may contain the following:

- Firmware file
- Release notes
- Autoprovisioning template


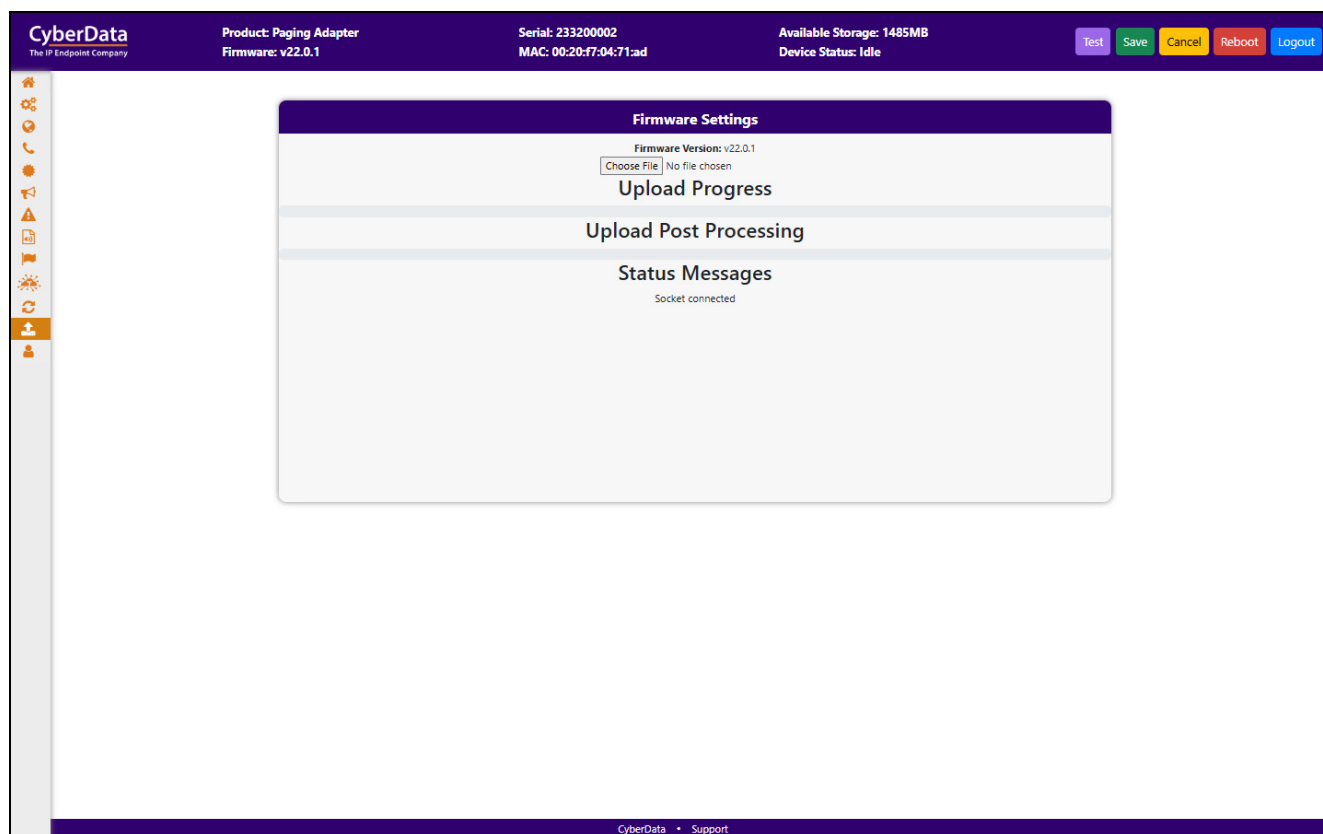
 GENERAL ALERT	Caution Equipment Hazard: Do not reboot the device. It will reboot automatically when the process is complete.
--	---

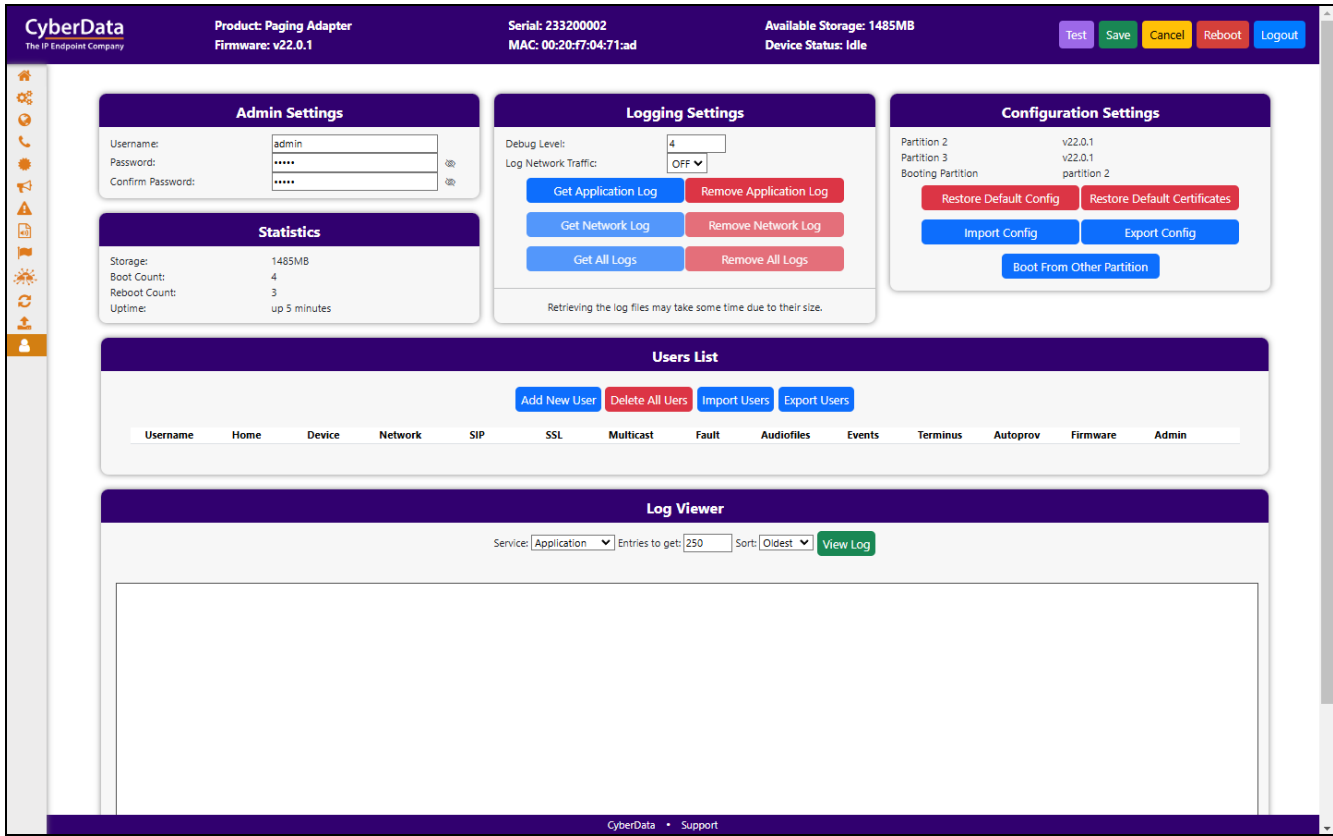
Figure 1-22. Firmware Page



1.14 Admin

The administrator uses the Users List to create new accounts, assigning user names and passwords, and granting access to specific web pages.

Figure 1-23. Admin Page



1.15 Command Interface

Some functions on the device can be activated using simple POST commands to the web interface. The examples in [Table 1-2](#) use the free unix utility, **wget** commands. However, any program that can send HTTP POST commands to the device should work.

1.15.1 Command Interface Post Commands

The commands in [Table 1-2](#) require an authenticated session (a valid username and password to work).

Table 1-2. Command Interface Post Commands

Device Action	HTTP Post Command ^a
Reboot	wget --user admin --password admin --auth-no-challenge --quiet -O /dev/null --no-check-certificate "https://10.10.1.247/command" --post-data "request=reboot"
Place call to extension (example: extension 600)	wget --user admin --password admin --auth-no-challenge --quiet -O /dev/null --no-check-certificate "https://10.10.1.247/command" --post-data "request=call&extension=600"
Terminate a call	wget --user admin --password admin --auth-no-challenge --quiet -O /dev/null --no-check-certificate "https://10.10.1.247/command" --post-data "request=terminate"
Test Relay	wget --user admin --password admin --auth-no-challenge --quiet -O /dev/null --no-check-certificate "https://10.10.1.247/command" --post-data "request=test_relay"
Activate Relay	wget --user admin --password admin --auth-no-challenge --quiet -O /dev/null --no-check-certificate "https://10.10.1.247/command" --post-data "request=activate_relay"
Deactivate Relay	wget --user admin --password admin --auth-no-challenge --quiet -O /dev/null --no-check-certificate "https://10.10.1.247/command" --post-data "request=deactivate_relay"
Speak IP Address	wget --user admin --password admin --auth-no-challenge --quiet -O /dev/null --no-check-certificate "https://10.10.1.247/command" --post-data "request=speak_ip_address"
Test Audio	wget --user admin --password admin --auth-no-challenge --quiet -O /dev/null --no-check-certificate "https://10.10.1.247/command" --post-data "request=test_audio"
Swap Boot partitions	wget --user admin --password admin --auth-no-challenge --no-check-certificate --quiet -O /dev/null "https://10.10.1.81/command" --post-data "request=swap_boot_partition"

a. Type and enter all of each http POST command on one line.

Appendix A: Troubleshooting/Technical Support

A.1 Contact Information

Contact	CyberData Corporation 3 Justin Court Monterey, CA 93940 USA www.cyberdata.net Phone: 831-373-2601 Fax: 831-373-4193
Sales	Sales 831-373-2601, Extension 334
Technical Support	<p>The fastest way to get technical support for your VoIP product is to submit a VoIP Technical Support form at the following website:</p> <p>https://support.cyberdata.net/</p> <p>The Support Form initiates a ticket which CyberData uses for tracking customer requests. Most importantly, the Support Form tells us which PBX system and software version that you are using, the make and model of the switch, and other important information. This information is essential for troubleshooting. Please also include as much detail as possible in the Comments section of the Support Form.</p> <p>Phone: (831) 373-2601, Extension 333</p>

A.2 Warranty and RMA Information

The most recent warranty and RMA information is available at the following website address:

<https://support.cyberdata.net/>

Index

A

Admin 23
Audiofiles 13
Autoprovisioning 21

C

Command Interface 24
Command Interface Post Commands 24
Contact Information 25

D

Device 5
Dial Out Extension Strings and DTMF Tones 8
Discovery Utility program 1

E

Events 16

F

Fault 12
Firmware 22

H

Home Page 3

L

Log In Page 1

M

Multicast 11

N

Network 6

P

Point-to-Point Configuration 8

S

SIP (Session Initiation Protocol) 7
SSL 9

T

Terminus 20
Troubleshooting/Technical Support 25

W

Warranty and RMA Information 25