

SIP Strobe

Operations Guide

Part #011087

Document Part #930425E
for Firmware Version 7.1.7

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SIP Strobe Operations Guide 930425E
Part # 011087

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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:
<http://www.cyberdata.net/support/contactsupportvoip.html>

We have several technical support staff monitoring this form and they will contact you within 12 hours after receiving a submission.

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

Email: support@cyberdata.net



Fax: (831) 373-4193

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



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.

14. WARNING: The SIP Strobe enclosure is not rated for any AC voltages!

 <p>GENERAL ALERT</p>	<p>Warning</p> <p><i>Electrical Hazard:</i> This product should be installed by a licensed electrician according to all local electrical and building codes.</p>
 <p>GENERAL ALERT</p>	<p>Warning</p> <p><i>Electrical Hazard:</i> To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.</p>

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.

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
u-law	A companding algorithm, primarily used in the digital telecommunication
UC	Unified Communications
VoIP	Voice over Internet Protocol

Revision Information

Revision 930425E, which corresponds to firmware version 7.1.7, was released on January 7, 2013 and has the following changes:

- Updates [Figure 2-4, "SIP Strobe Connections"](#).
- Updates [Figure 2-5, "Auxiliary Relay Wiring Diagram"](#).
- Updates [Figure 2-12, "Home Page"](#).
- Updates [Figure 2-13, "Device Configuration Page"](#).
- Updates [Figure 2-14, "Network Configuration Page"](#).
- Updates [Figure 2-15, "SIP Configuration Page"](#).
- Updates [Figure 2-16, "Nightringer Configuration Setup"](#).
- Updates [Figure 2-17, "Sensor Configuration Page"](#).
- Adds [Figure 2-18, "Multicast Configuration Page"](#).
- Updates [Figure 2-19, "Event Configuration Page"](#).
- Updates [Figure 2-20, "Autoprovisioning Configuration Page"](#).
- Updates [Figure 2-21, "Upgrade Firmware Page"](#).
- Updates [Figure 2-22, "Reboot System Section"](#).
- Updates [Table 2-7, "Device Configuration Parameters"](#).
- Updates [Table 2-9, "SIP Configuration Parameters"](#).
- Updates [Table 2-11, "Sensor Configuration Parameters"](#).
- Adds [Table 2-12, "Multicast Configuration Parameters"](#).
- Updates [Table 2-13, "Event Configuration"](#).
- Updates [Table 2-17, "Command Interface Post Commands"](#).
- Updates [Section 1.3, "Product Features"](#).
- Updates [Section 2.1.1, "SIP Strobe Connections"](#).
- Adds [Section 2.3.1, "Firmware Image Usage Instructions and Warnings"](#).

Contents

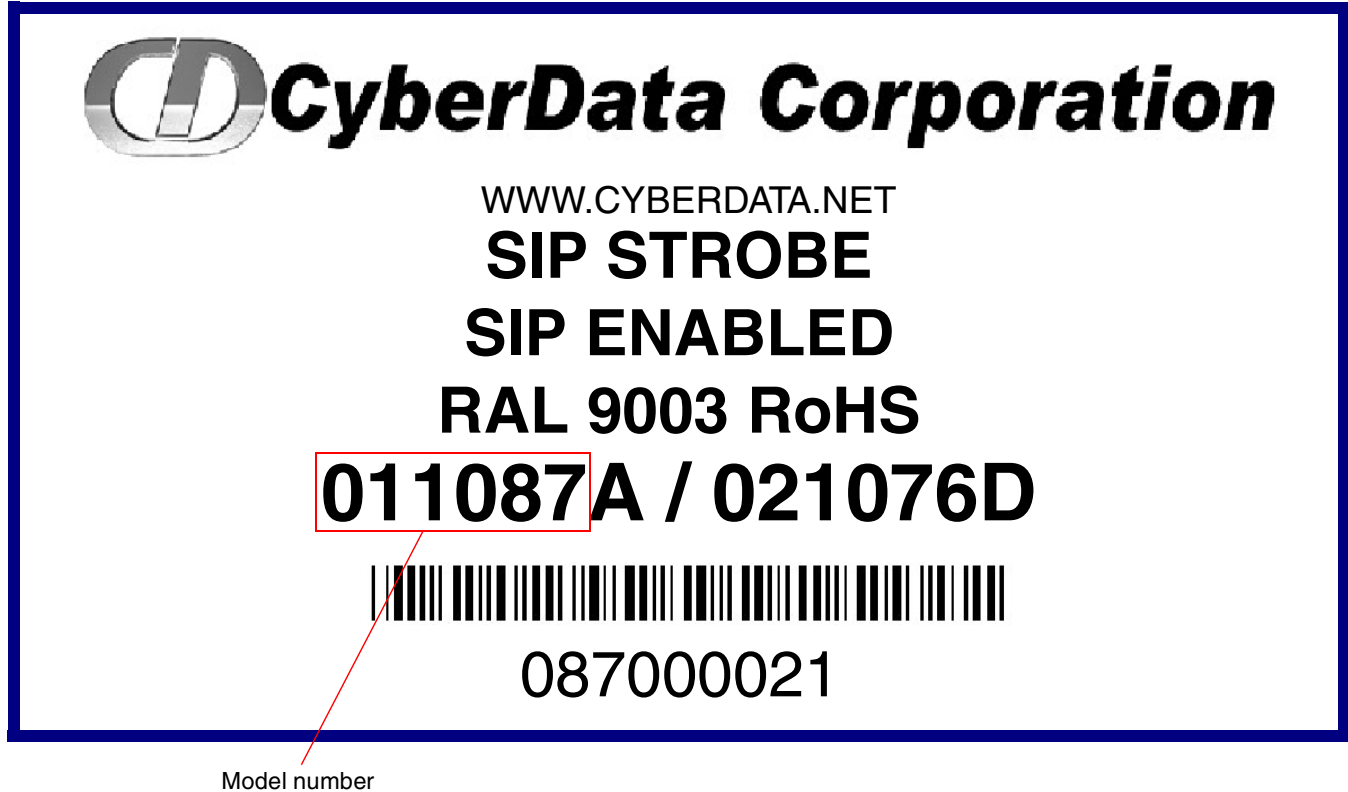
Chapter 1 Product Overview	1
1.1 How to Identify This Product	1
1.2 Typical System Installation	2
1.3 Product Features	3
1.4 Supported Protocols	3
1.5 Supported SIP Servers	3
1.6 Product Specifications	4
1.7 Dimensions	4
Chapter 2 Installing the SIP Strobe	5
2.1 Parts List	5
2.1 SIP Strobe Setup	6
2.1.1 SIP Strobe Connections	6
2.1.2 Connecting the SIP Strobe to the Auxiliary Relay	7
2.1.3 Identifying the SIP Strobe Connectors and Jumpers	9
2.1.4 Network Connectivity, and Data Rate	11
2.1.5 RTFM Switch	13
2.1.6 Restore the Factory Default Settings	14
2.2.1 SIP Strobe Web Page Navigation	16
2.2.2 Log in to the Configuration Home Page	17
2.2.3 Configure the Device	20
2.2.4 Configure the Network Parameters	22
2.2.5 Configure the SIP Parameters	24
2.2.6 Configure the Night Ringer Parameters	27
2.2.7 Configure the Sensor Configuration Parameters	29
2.2.8 Configure the Multicast Parameters	31
2.2.9 Configure the Event Parameters	33
2.2.10 Configure the Autoprovisioning Parameters	38
2.3.1 Firmware Image Usage Instructions and Warnings	42
2.3.2 Uploading the Firmware	43
2.3.3 Reboot the SIP Strobe	45
2.4.1 Command Interface Post Commands	46
Appendix A Mounting the SIP Strobe	47
A.1 Mount the SIP Strobe	47
Appendix B Troubleshooting/Technical Support	51
B.1 Frequently Asked Questions (FAQ)	51
B.2 Documentation	51
B.3 Contact Information	52
B.4 Warranty	53
B.4.1 Warranty & RMA Returns within the United States	53
B.4.2 Warranty & RMA Returns Outside of the United States	53
B.4.3 Spare in the Air Policy	53
B.4.4 Return and Restocking Policy	54
B.4.5 Warranty and RMA Returns Page	54
Index	55

1 Product Overview

1.1 How to Identify This Product

To identify the SIP Strobe, look for a model number label similar to the one shown in [Figure 1-1](#). The model number on the label should be **011087**.

Figure 1-1. Model Number Label

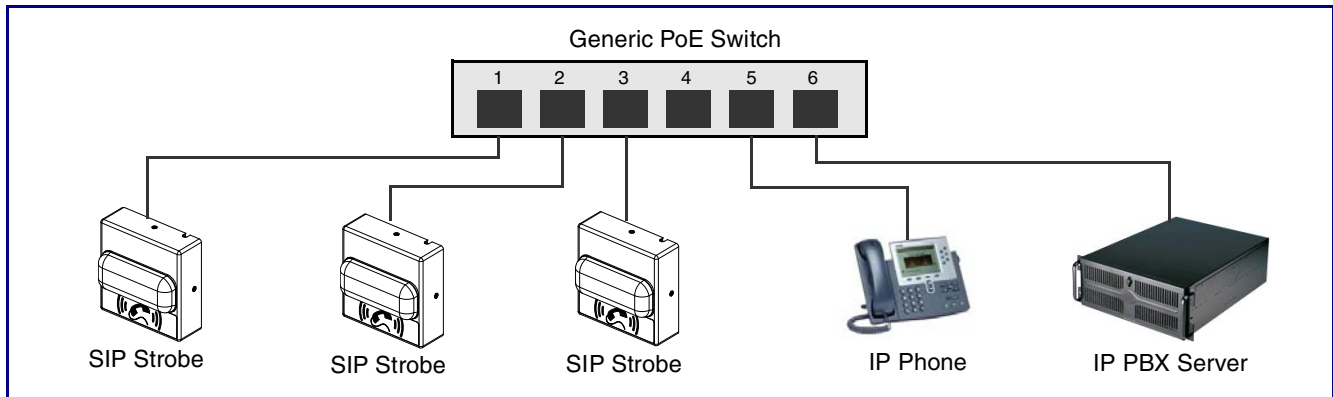





1.2 Typical System Installation

The Session Initiation Protocol (SIP) SIP Strobe is a SIP endpoint designed to provide VoIP phone connectivity in a tamper proof and secure package.

Figure 1-2 illustrate how the SIP Strobes can be installed as part of a VoIP phone system.

Figure 1-2. Typical Installation



 GENERAL ALERT	<p>Warning <i>Electrical Hazard:</i> The SIP Strobe enclosure is not rated for any AC voltages.</p>
 GENERAL ALERT	<p>Warning <i>Electrical Hazard:</i> This product should be installed by a licensed electrician according to all local electrical and building codes.</p>
 GENERAL ALERT	<p>Warning <i>Electrical Hazard:</i> To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.</p>

1.3 Product Features

- Meets ADA requirements for telephony signalling and notification
- SIP activation
- Multicast activation
- Cisco SRST support
- Event-controlled relay

Note: The relay contacts are dry and provided for a normally open and momentarily closed configuration. Neither the alternate power input nor PoE power can be used to drive a door strike.

- Tamper sensor
- Web-based setup
- PoE-powered

1.4 Supported Protocols

The SIP Strobe supports:

- SIP
- HTTP Web-based configuration
Provides an intuitive user interface for easy system configuration and verification of SIP Strobe operations.
- DHCP Client
Dynamically assigns IP addresses in addition to the option to use static addressing.
- RTP
- RTP/AVP - Audio Video Profile
- Audio Encodings
PCMU (G.711 mu-law)
PCMA (G.711 A-law)
Packet Time 20 ms

1.5 Supported SIP Servers

Go to the following link to find the SIP Strobe product page which will have information on how to configure the SIP Strobe for various supported SIP servers:

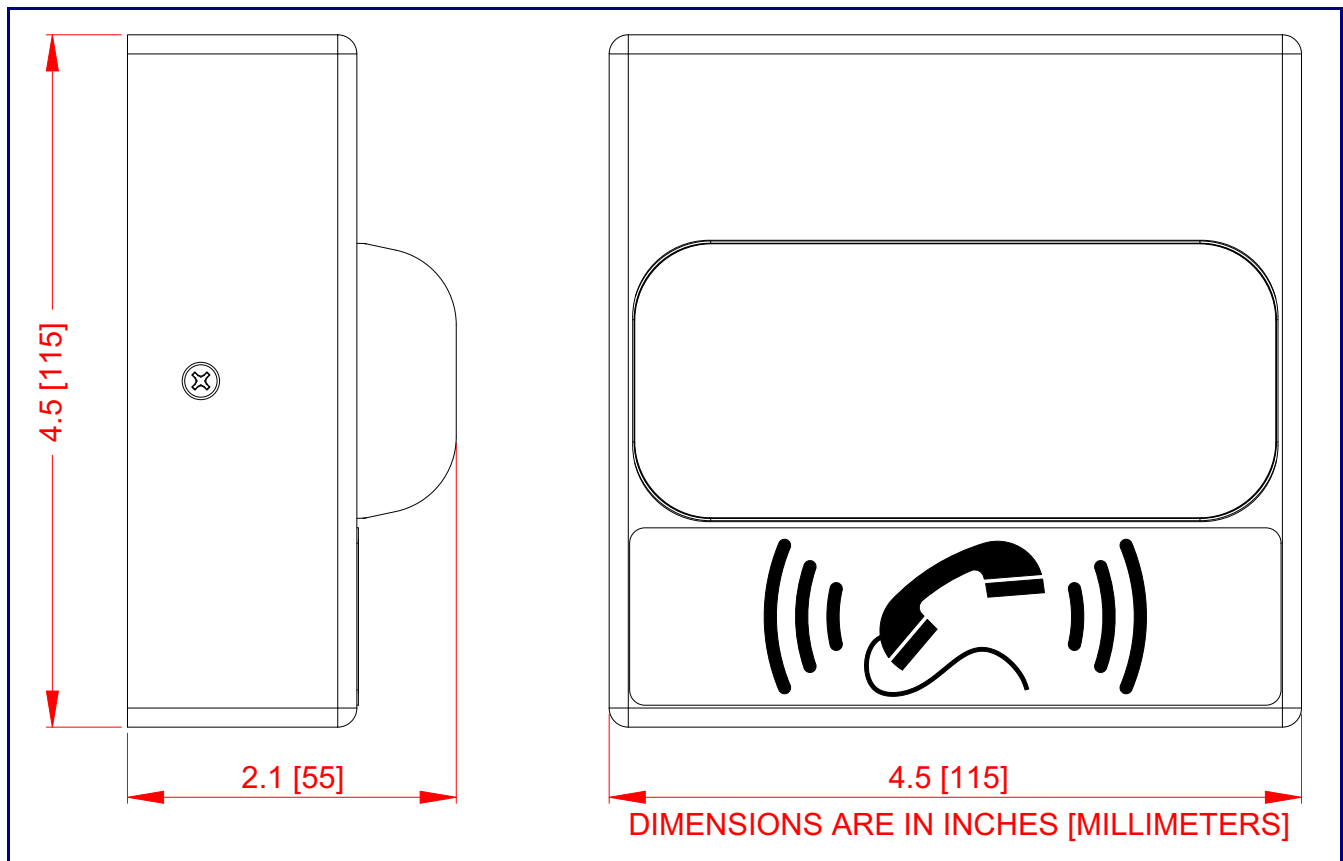
<http://www.cyberdata.net/support/server/index.html>

1.6 Product Specifications

Category	Specification
Network Rate	10/100 Mbps
Power Requirement	802.3af compliant or +12 to 24 VDC at 1000 mA (500 mA minimum)
Protocol	SIP
Part Number	011087
Dimensions	4.5" x 4.5" x 1.5"
Weight	1.6 lbs./shipping weight of 2.2 lbs. (0.7 kg/shipping weight of 1.0kg)
Auxiliary Relay	1A at 30 VDC

1.7 Dimensions

Figure 1-3. Dimensions—Size of Unit with Case

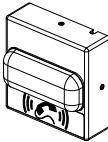




2 Installing the SIP Strobe

2.1 Parts List

Table 2-1 illustrates the SIP Strobe parts.

Table 2-1. Parts List

Quantity	Part Name	Illustration
1	SIP Strobe Assembly	
1	Installation Quick Reference Guide	
1	SIP Strobe Mounting Accessory Kit	

2.1 SIP Strobe Setup

2.1.1 SIP Strobe Connections

Figure 2-4 shows the pin connections on the J3 (terminal block). This terminal block can accept 16 AWG gauge wire.

Note As an alternative to using PoE power, you can supply +12 to 24 VDC at 1000 mA (500 mA minimum) into the terminal block.


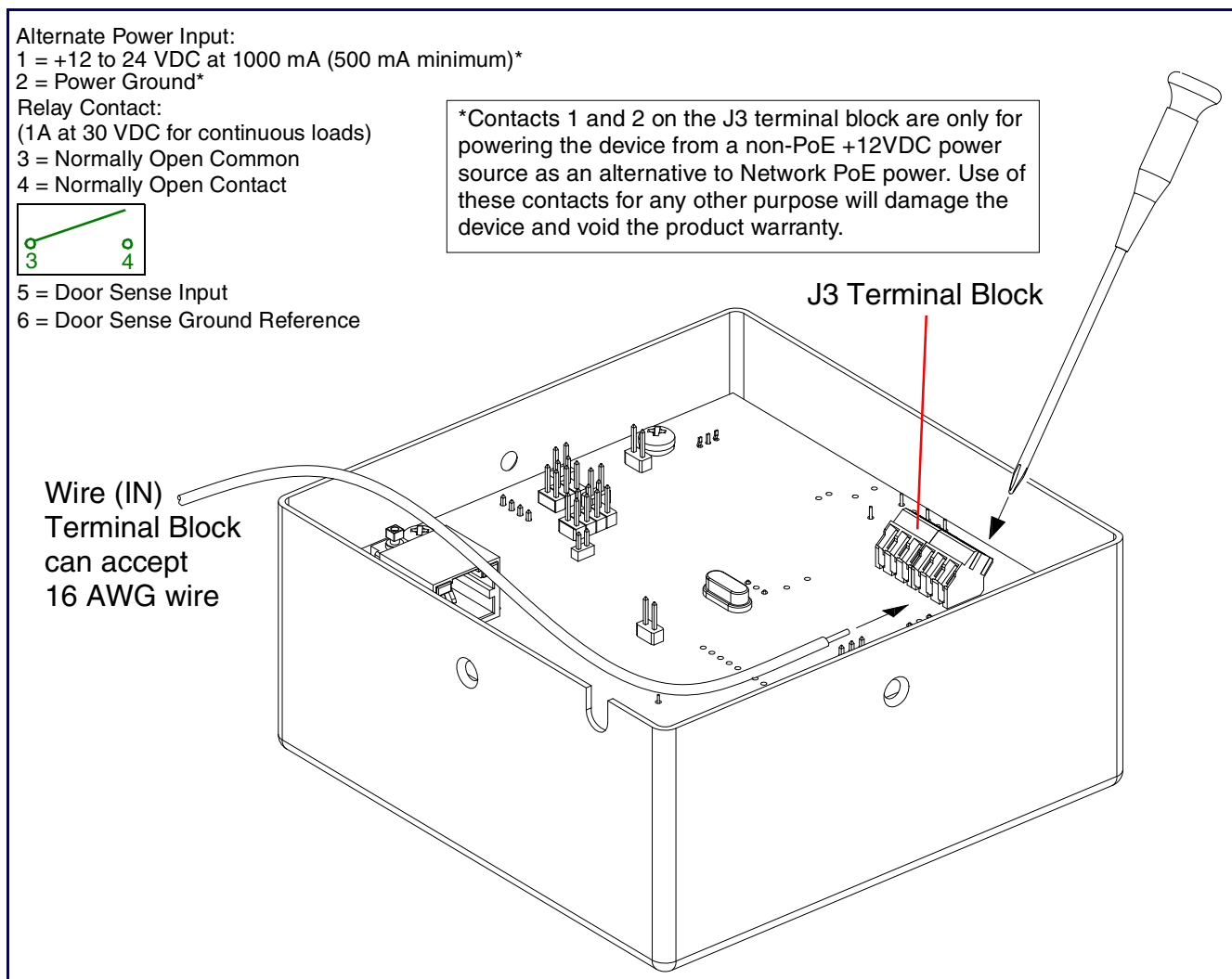




 <small>GENERAL ALERT</small>	<p>Caution</p> <p>Equipment Hazard: Contacts 1 and 2 on the J3 terminal block are only for powering the device from a non-PoE +12VDC power source as an alternative to Network PoE power. Use of these contacts for any other purpose will damage the device and void the product warranty.</p>
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Figure 2-4. SIP Strobe Connections



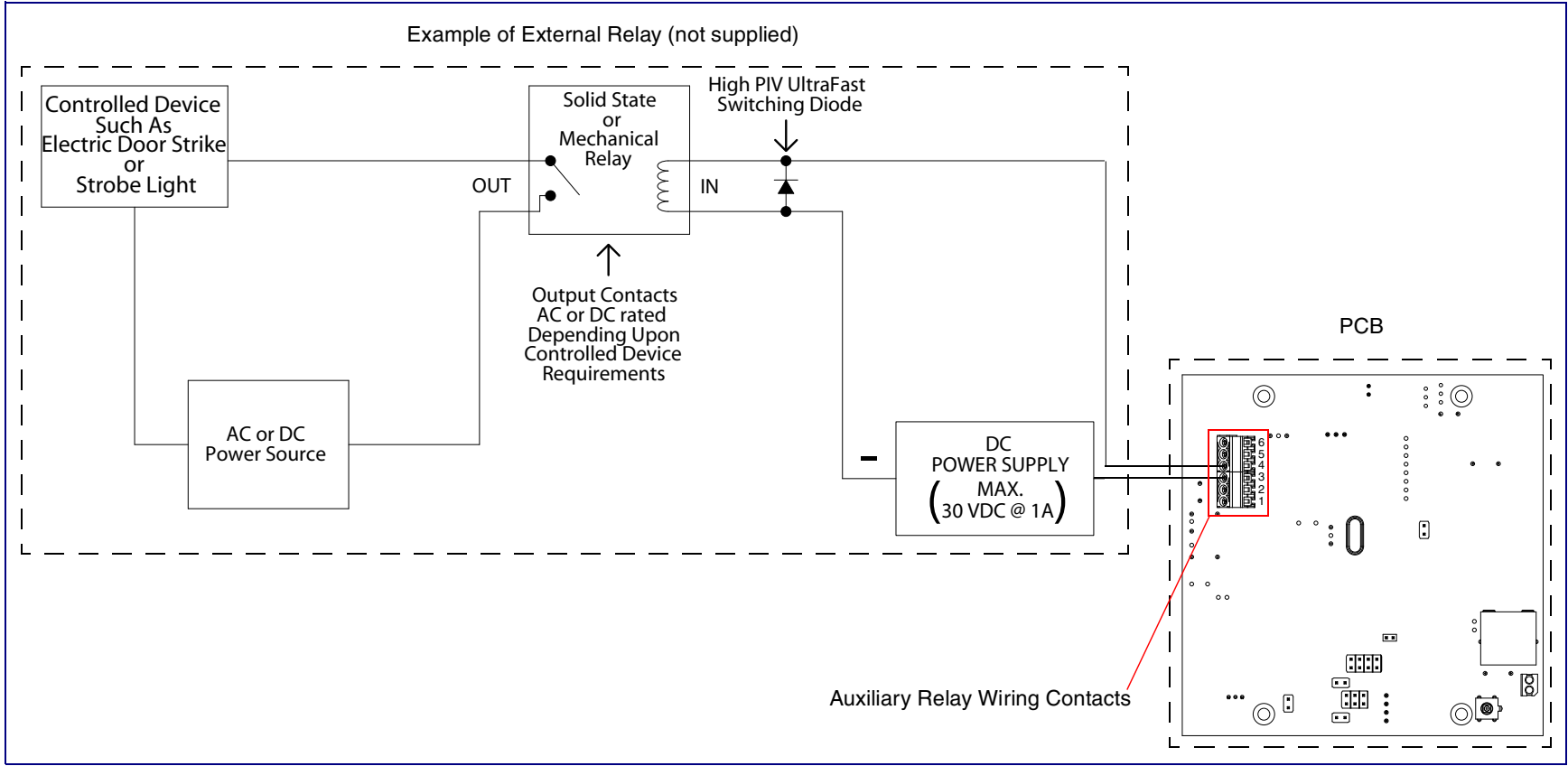
2.1.2 Connecting the SIP Strobe to the Auxiliary Relay

	<p>Warning <i>Electrical Hazard:</i> The SIP Strobe enclosure is not rated for any AC voltages.</p>
	<p>Warning <i>Electrical Hazard:</i> This product should be installed by a licensed electrician according to all local electrical and building codes.</p>
	<p>Warning <i>Electrical Hazard:</i> To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.</p>
	<p>Warning <i>Electrical Hazard:</i> The relay contacts are dry and provided for a normally open and momentarily closed configuration. Neither the alternate power input nor PoE power can be used to drive a door strike.</p>

The device incorporates an on-board relay which enables users to control an external relay for activating an auxiliary device such as an electric door strike (see [Figure 2-5, "Auxiliary Relay Wiring Diagram"](#)).

The relay contacts are limited to 1A at 30 VDC. The relay activation time is selectable through the web interface and is controlled by DTMF tones generated from the phone being called. The DTMF tones are selectable from the web interface as well.

Figure 2-5. Auxiliary Relay Wiring Diagram



2.1.3 Identifying the SIP Strobe Connectors and Jumpers

See the following figures and tables to identify the SIP Strobe connector locations and functions.

Figure 2-6. Connector Locations

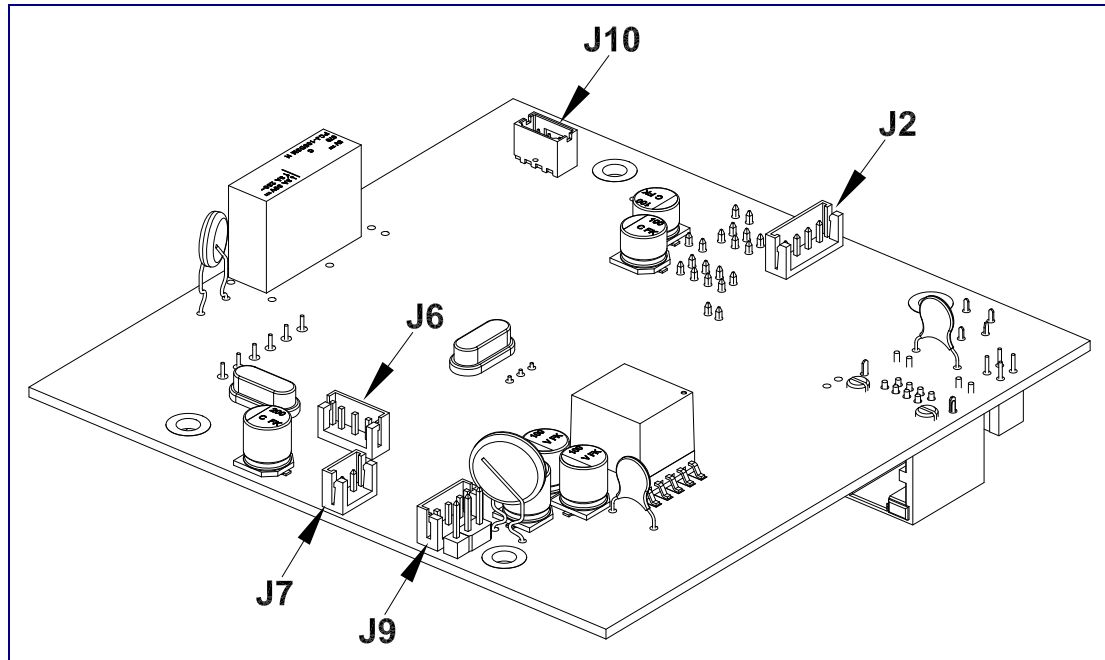


Table 2-2. Connector Functions

Connector	Function
J2	Call Button Interface — Not Used
J6	Microphone Interface — Not Used
J7	Speaker Interface — Not Used
J9	Strobe Power Interface — Not Used
J10	Proximity Sensor Interface — Not Used

Figure 2-7. Connector Locations

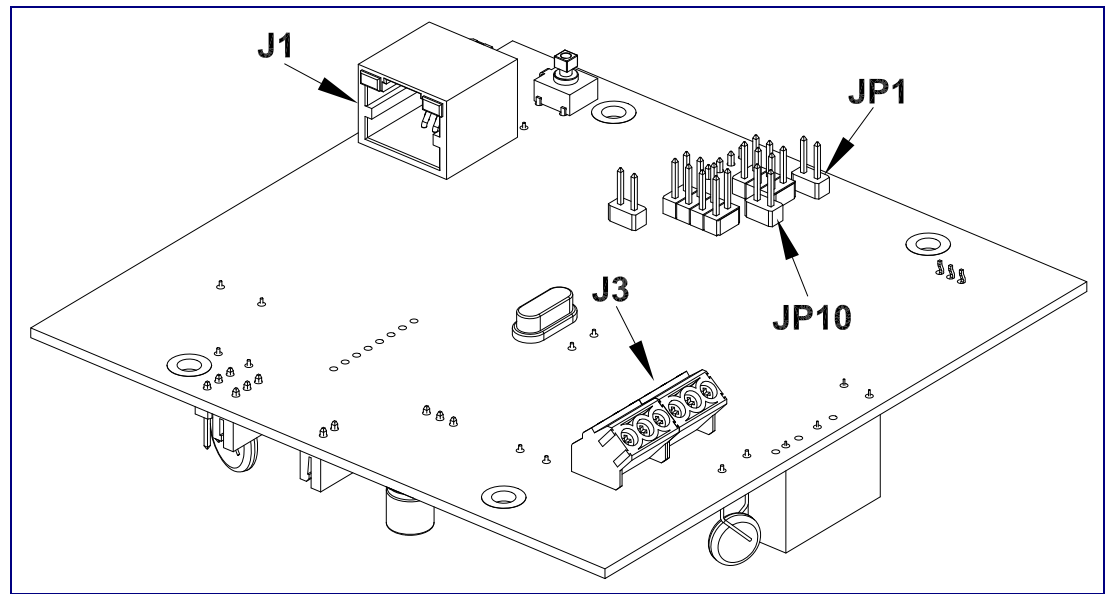


Table 2-3. Connector Functions

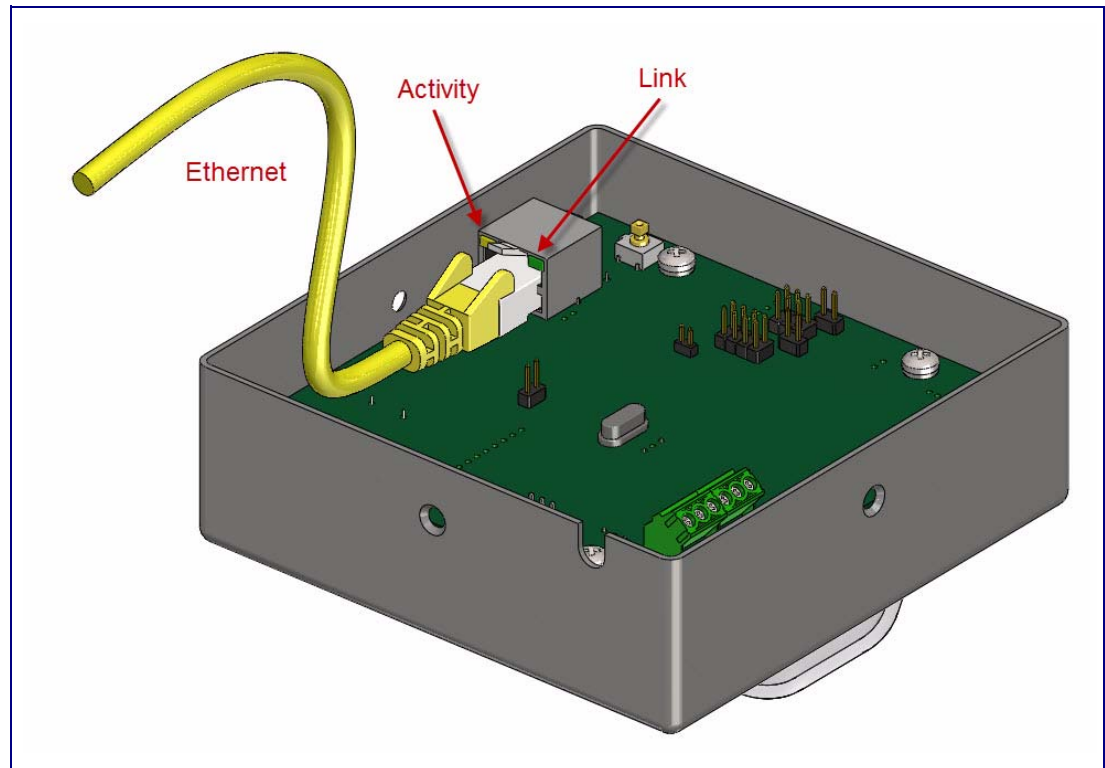
Connector	Function
J1	Ethernet Connector
J3	User Terminal Block Interface
JP1	Manual Reset — Factory only
JP10	Intrusion Sensor Disable. Place jumper on to disable.

2.1.4 Network Connectivity, and Data Rate

When you plug in the Ethernet cable or power supply:

- The square, green **Link** light above the Ethernet port indicates that the network connection has been established (see [Figure 2-8](#)).

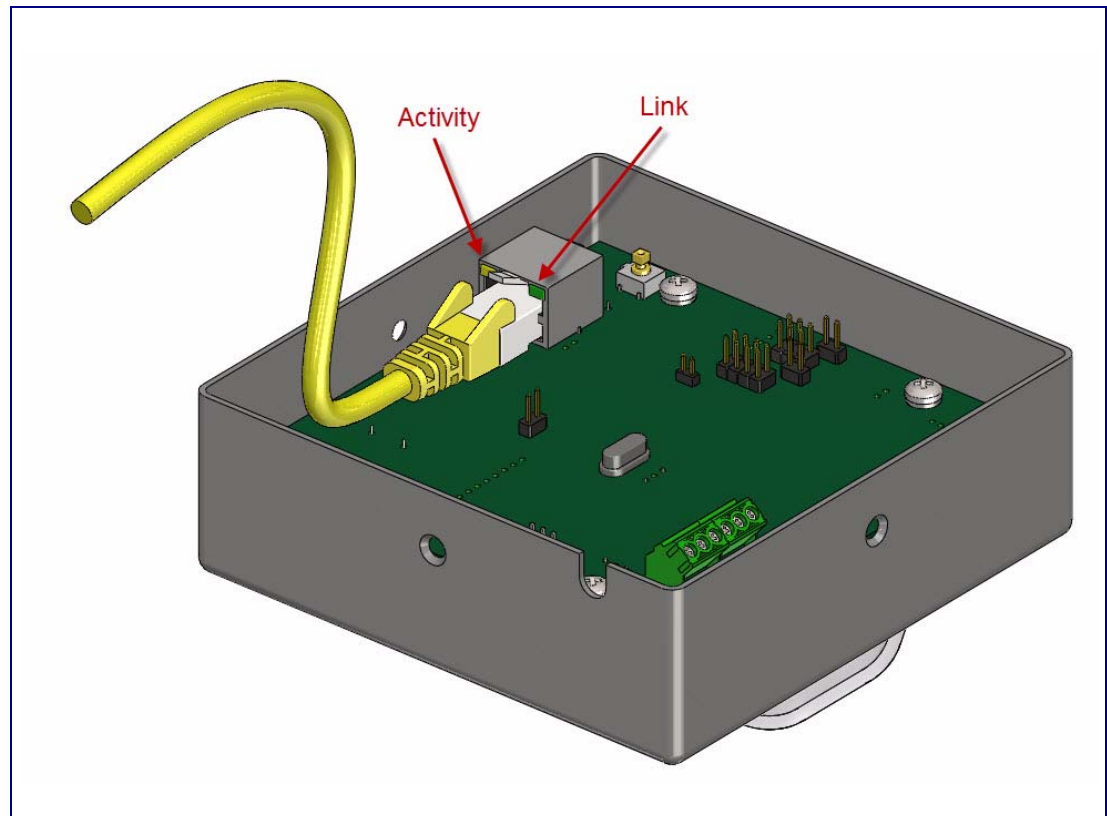
Figure 2-8. Network Connector Prior to Installation



2.1.4.1 Verify Network Activity

The square, yellow **Activity** light blinks when there is network activity.

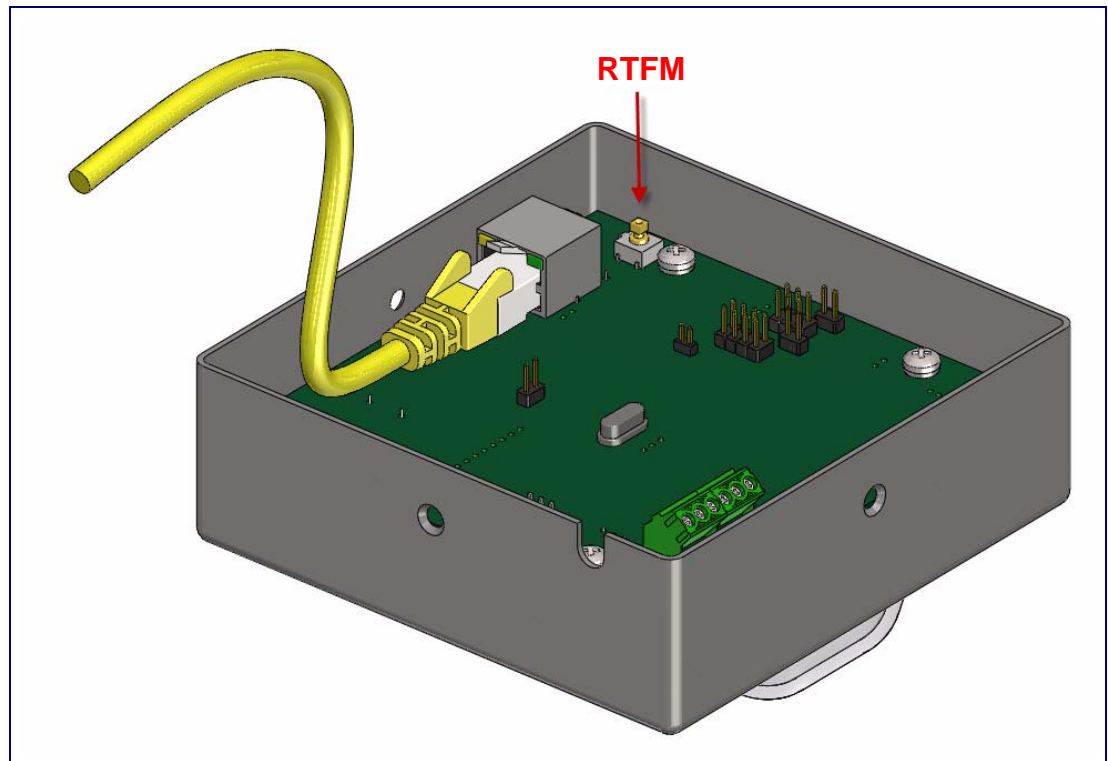
Figure 2-9. Network Connector



2.1.5 RTFM Switch

When the SIP Strobe is operational and linked to the network, use the Reset Test Function Management (**RTFM**) switch (Figure 2-10) on the SIP Strobe board to restore the unit to the factory default settings.

Figure 2-10. RTFM Switch



2.1.6 Restore the Factory Default Settings

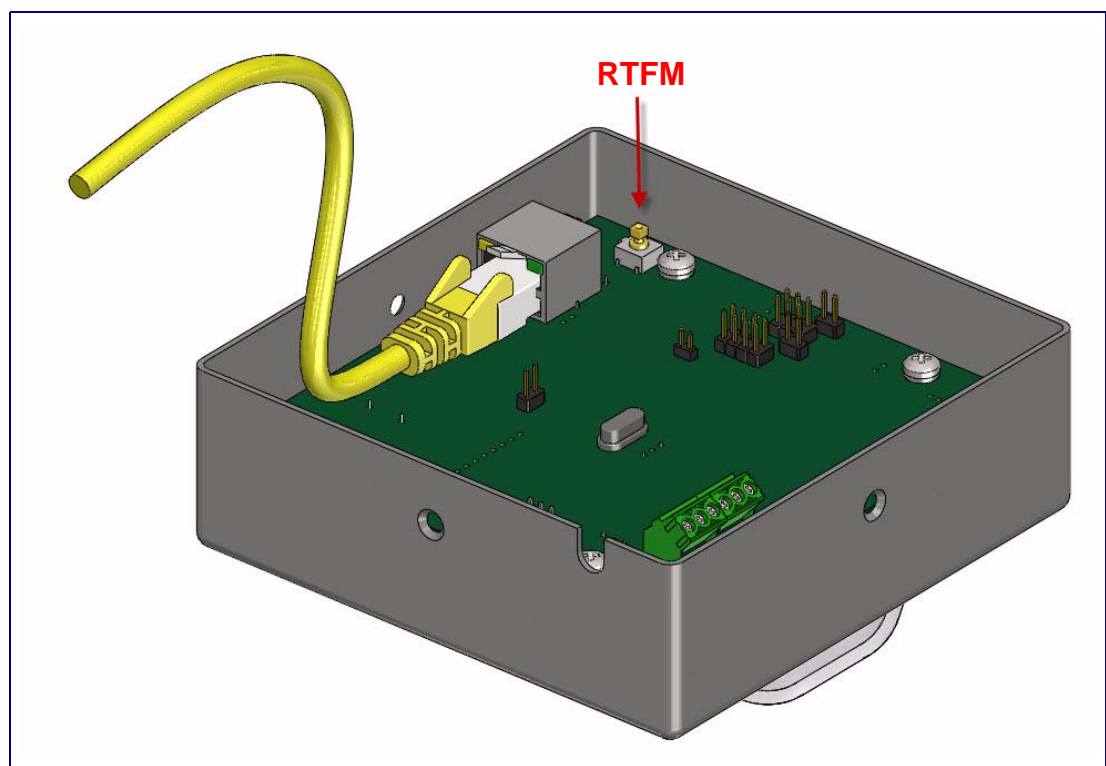
2.1.6.1 RTFM Switch

When the SIP Strobe is operational and linked to the network, use the Reset Test Function Management (RTFM) switch (Figure 2-11) to set the factory default settings.

Note Each SIP Strobe is delivered with factory set default values.

Note The SIP Strobe will use DHCP to obtain the new IP address (DHCP-assigned address or default to 10.10.10.10 if a DHCP server is not present).

Figure 2-11. RTFM Switch



To set the factory default settings:

1. Press and hold the RTFM switch for seven seconds, and then release the RTFM switch.

2.2 Configure the SIP Strobe Parameters

To configure the SIP Strobe online, use a standard web browser.

Configure each SIP Strobe and verify its operation *before* you mount it. When you are ready to mount an SIP Strobe, refer to [Appendix A, "Mounting the SIP Strobe"](#) for instructions.

All SIP Strobes are initially configured with the following default IP settings:

When configuring more than one SIP Strobe, attach the SIP Strobes to the network and configure one at a time to avoid IP address conflicts.

Table 2-4. Factory Default Settings











Parameter	Factory Default Setting
IP Addressing	DHCP
IP Address ^a	10.10.10.10
Web Access Username	admin
Web Access Password	admin
Subnet Mask ^a	255.0.0.0
Default Gateway ^a	10.0.0.1

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

2.2.1 SIP Strobe Web Page Navigation

Table 2-5 shows the navigation buttons that you will see on every SIP Strobe web page.

Table 2-5. Web Page Navigation

Web Page Item	Description
	Link to the Home page.
	Link to the Device Configuration page.
	Link to the Networking page.
	Link to go to the SIP Configuration page.
	Link to go to the Nightringer page.
	Link to the Sensor Configuration page.
	Link to the Multicast Configuration page.
	Link to the Event Configuration page.
	Link to the Autoprovisioning Configuration page.
	Link to the Update Firmware page.

2.2.2 Log in to the Configuration Home Page

1. Open your browser to the SIP Strobe IP address.

Note If the network does not have access to a DHCP server, the device will default to an IP address of 10.10.10.10.

Note Make sure that the PC is on the same IP network as the SIP Strobe.

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:

http://www.cyberdata.net/support/voip/discovery_utility.html

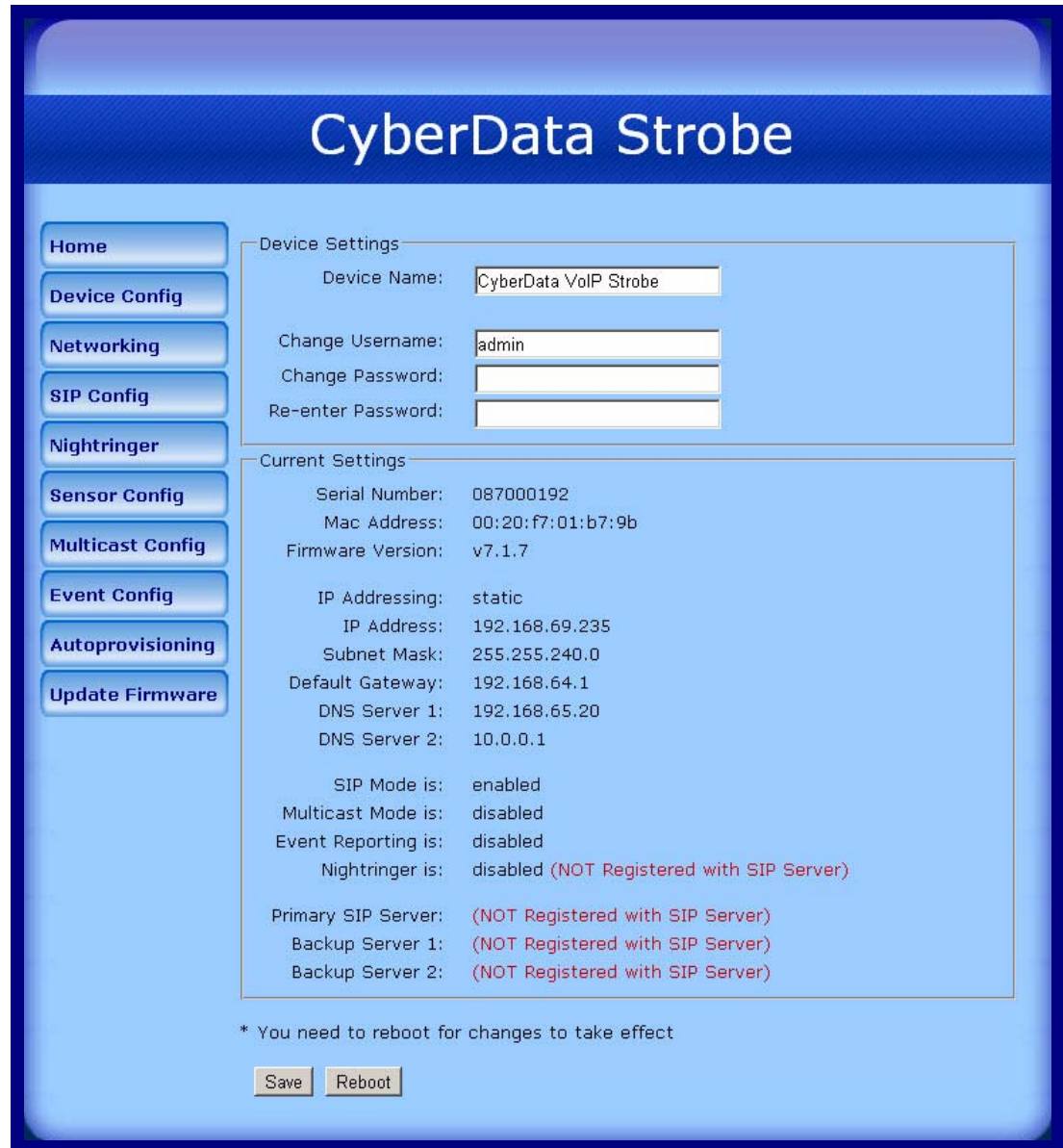
Note The SIP Strobe ships in DHCP mode. To get to the **Home** page, use the discovery utility to scan for the device on the network and open your browser from there.

- When prompted, use the following default **Web Access Username** and **Web Access Password** to access the **Home Page** (Figure 2-12):

Web Access Username: **admin**

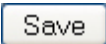

Web Access Password: **admin**

Figure 2-12. Home Page



3. On the **Home Page**, review the setup details and navigation buttons described in [Table 2-6](#).

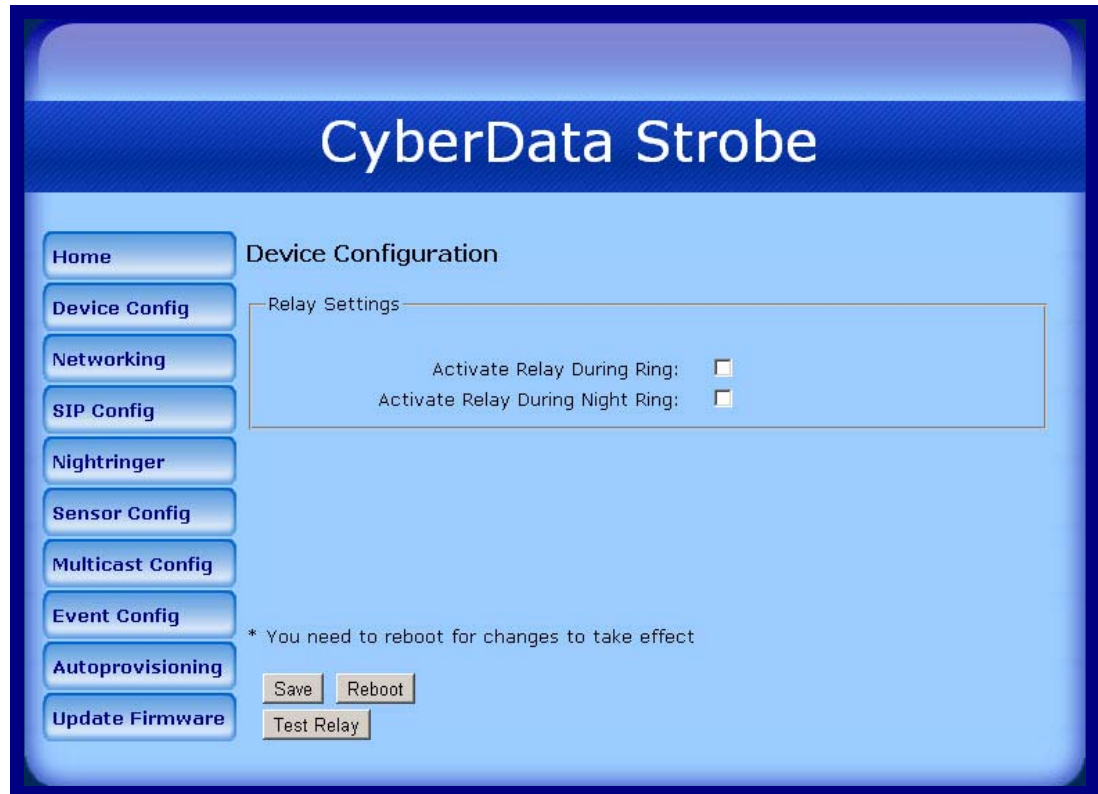
Table 2-6. Home Page Overview

Web Page Item	Description
Device Settings	
Device Name	Shows the device name.
Change Username	Type in this field to change the username.
Change Password	Type in this field to change the password.
Re-enter Password	Type the password again in this field to confirm the new password.
Current Settings	
Serial Number	Shows the device serial number.
Mac Address	Shows the device Mac address.
Firmware Version	Shows the current firmware version.
IP Addressing	Shows the current IP addressing setting (DHCP or static).
IP Address	Shows the current IP address.
Subnet Mask	Shows the current subnet mask address.
Default Gateway	Shows the current default gateway address.
DNS Server 1	Shows the current DNS Server 1 address.
DNS Server 2	Shows the current DNS Server 2 address.
SIP Mode is	Shows the current status of the SIP mode.
Multicast Mode is	Shows the current status of the Multicast mode.
Event Reporting is	Shows the current status of the Event Reporting mode.
Nightringer is	Shows the current status of the Nightringer mode.
Primary SIP Server	Shows the current status of the Primary SIP Server.
Backup Server 1	Shows the current status of Backup Server 1.
Backup Server 2	Shows the current status of Backup Server 2.
	Click 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.

2.2.3 Configure the Device

1. Click the **Device Configuration** button to open the **Device Configuration** page. See [Figure 2-13](#).

Figure 2-13. Device Configuration Page



2. On the **Device Configuration** page, you may enter values for the parameters indicated in [Table 2-7](#).

Table 2-7. Device Configuration Parameters

Web Page Item	Description
Relay Settings	
Activate Relay During Ring	When selected, the relay will be activated for as long as the call is active.
Activate Relay During Night Ring	Check this box to activate the relay for as long as a Night Ring tone is ringing.
<input data-bbox="370 583 477 625" type="button" value="Save"/>	Click the Save button to save your configuration settings. Note: You need to reboot for changes to take effect.
<input data-bbox="370 674 493 716" type="button" value="Reboot"/>	Click on the Reboot button to reboot the system.
<input data-bbox="370 747 526 789" type="button" value="Test Relay"/>	Click on the Test Relay button to do a relay test.

3. After changing the parameters, click the **Save** button.

2.2.4 Configure the Network Parameters

1. Click the **Networking** button to open the **Network Configuration** page (Figure 2-14).

Figure 2-14. Network Configuration Page

CyberData Strobe

Home **Device Config** **Networking** **SIP Config** **Nightringer** **Sensor Config** **Multicast Config** **Event Config** **Autoprovisioning** **Update Firmware**

Network Configuration

Stored Network Settings

IP Addressing: Static DHCP

IP Address:

Subnet Mask:

Default Gateway:

DNS Server 1:

DNS Server 2:

DHCP Timeout

DHCP Timeout in seconds*:

* A value of -1 will retry forever

Current Network Settings

IP Address: 192.168.69.235

Subnet Mask: 255.255.240.0

Default Gateway: 192.168.64.1

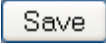
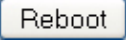
DNS Server 1: 192.168.65.20

DNS Server 2: 10.0.0.1

* You need to reboot for changes to take effect

2. On the **Network Configuration** page, enter values for the parameters indicated in [Table 2-8](#).

Table 2-8. Network Configuration Parameters

Web Page Item	Description
IP Addressing	Select either DHCP IP Addressing or Static IP Addressing by marking the appropriate radio button. If you select Static , configure the remaining parameters indicated in Table 2-8 . If you select DHCP , go to Step 3 .
Stored Network Settings	
IP Address	Enter the Static IP address.
Subnet Mask	Enter the Subnet Mask address.
Default Gateway	Enter the Default Gateway address.
DNS Server 1	Enter the DNS Server 1 address.
DNS Server 2	Enter the DNS Server 2 address.
DHCP Timeout	
DHCP Timeout in seconds	Enter the desired timeout duration (in seconds) that the device will wait for a response from the DHCP server before defaulting back to the stored static IP address. Note: A value of -1 will cause the device to retry indefinitely and a value of 0 will cause the device to reset to a default of 60 seconds.
Current Network Settings	
IP Address	Shows the current Static IP address.
Subnet Mask	Shows the current Subnet Mask address.
Default Gateway	Shows the current Default Gateway address.
DNS Server 1	Shows the current DNS Server 1 address.
DNS Server 2	Shows the current DNS Server 2 address.
	Click 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.

3. After changing the parameters, click **Save Settings**. This updates the changed parameters and reboots the SIP Strobe if appropriate.
4. Connect the SIP Strobe to the target network.
5. From a system on the same network as the SIP Strobe, open a browser with the new IP address of the SIP Strobe.

2.2.5 Configure the SIP Parameters

1. Click **SIP Config** to open the **SIP Configuration** page (Figure 2-15).

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

<http://www.cyberdata.net/support/server/index.html>

Figure 2-15. SIP Configuration Page

CyberData Strobe

SIP Configuration

Home | **Device Config** | Networking | **SIP Config** | Nightringer | Sensor Config | Multicast Config | Event Config | Autoprovisioning | Update Firmware

Enable SIP operation:

SIP Settings

Primary SIP Server (NOT Registered): 10.0.0.253
 Primary SIP User ID: 199
 Primary SIP Auth ID: 199
 Primary SIP Auth Password: *****

Backup SIP Server 1 (NOT Registered):
 Backup SIP User ID 1:
 Backup SIP Auth ID 1:
 Backup SIP Auth Password 1:

Backup SIP Server 2 (NOT Registered):
 Backup SIP User ID 2:
 Backup SIP Auth ID 2:
 Backup SIP Auth Password 2:

Use Cisco SRST:

Remote SIP Port: 5060
 Local SIP Port: 5060
 Outbound Proxy:
 Outbound Proxy Port: 0

Register with a SIP Server:
 Re-registration Interval (in seconds): 360

RTP Settings

RTP Port (even): 10500

* You need to reboot for changes to take effect

Save Reboot

2. On the **SIP Configuration** page, enter values for the parameters indicated in [Table 2-9](#).

Table 2-9. SIP Configuration Parameters

Web Page Item	Description
Enable SIP Operation	Enables or disables SIP operation.
SIP Settings	
Primary SIP Server	Use this field to set the address (in dotted decimal notation or as a canonical name) for the Primary SIP Server. This field can accept canonical names of up to 255 characters in length.
Primary SIP User ID	Type the SIP User ID for the Primary SIP Server (up to 64 alphanumeric characters).
Primary Auth ID	Type the Authenticate ID for the Primary SIP Server (up to 64 alphanumeric characters).
Primary Auth Password	Type the Authenticate Password for the Primary SIP Server (up to 64 alphanumeric characters).
Backup SIP Server 1 Backup SIP Server 2	<ul style="list-style-type: none"> • If all of the Primary SIP Server and Backup SIP Server fields are populated, the device will attempt to stay registered with all three servers all of the time. You can leave the Backup SIP Server 1 and Backup SIP Server 2 fields blank if they are not needed. • In the event of a registration failure on the Primary SIP Server, the device will use the next highest priority server for outbound calls (Backup SIP Server 1). If Backup SIP Server 1 fails, the device will use Backup SIP Server 2. • If a higher priority SIP Server comes back online, the device will switch back to this server.
Backup SIP User ID 1 Backup SIP User ID 2	Type the SIP User ID for the Backup SIP Server (up to 64 alphanumeric characters).
Backup SIP Auth ID 1 Backup SIP Auth ID 2	Type the SIP Authenticate ID for the Backup SIP Server (up to 64 alphanumeric characters).
Backup SIP Auth Password 1 Backup SIP Auth Password 2	Type the SIP Authenticate Password for the Backup SIP Server (up to 64 alphanumeric characters).
Use Cisco SRST	When selected, the backup servers are handled according to Cisco SRST (Survivable Remote Site Telephony).
Remote SIP Port	Type the Remote SIP Port number (default 5060) (8 character limit).
Local SIP Port	Type the Local SIP Port number (default 5060) (8 character limit).
Outbound Proxy	Type the Outbound Proxy as either a numeric IP address in dotted decimal notation or the fully qualified host name (255 character limit [FQDN]).
Outbound Proxy Port	Type the Outbound Proxy Port number (8 character limit).
Register with a SIP Server	Check this box to enable SIP Registration.
Re-registration Interval (in seconds)	Type the SIP Registration lease time (in seconds)


Table 2-9. SIP Configuration Parameters (continued)

Web Page Item	Description
Re-registration Interval (in seconds)	Type the SIP Registration lease time in minutes (default is 60 minutes) (8 character limit). Re-registration Interval (in seconds)
RTP Settings	
RTP Port (even)	Specify the port number used for the RTP stream after establishing a SIP call. This port number has to be an even number and defaults to 10500.
<input data-bbox="375 541 480 590" type="button" value="Save"/>	Click the Save button to save your configuration settings. Note: You need to reboot for changes to take effect.
<input data-bbox="375 630 500 678" type="button" value="Reboot"/>	Click on the Reboot button to reboot the system.

3. After changing the parameters, click **Save Settings**.

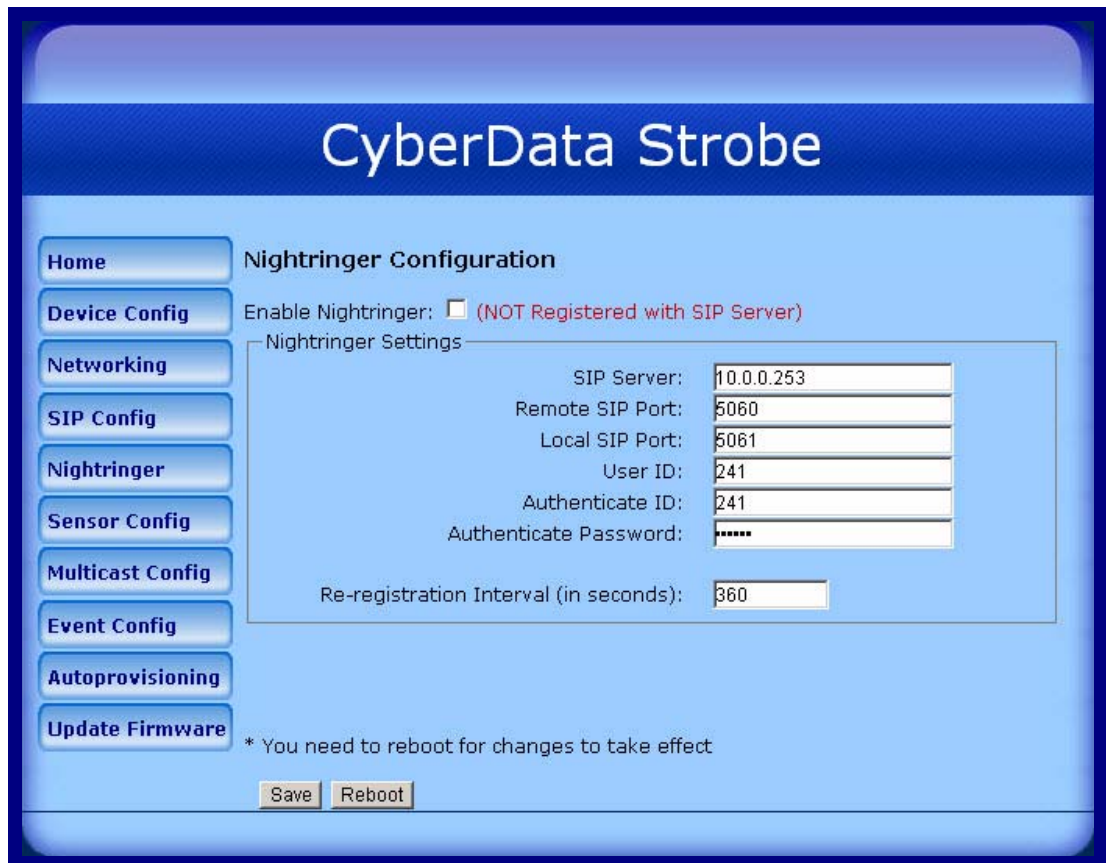
2.2.6 Configure the Night Ringer Parameters

When the Nightringer is enabled, the device will register as a second SIP extension. Registration does not have to be to the same server as the primary SIP registration. Any calls made to the Nightringer extension will cause the device to play a ring tone. There is no way to answer this call. The Nightringer is designed to be used in buildings where calls made after hours are directed to a ring group.

 GENERAL ALERT	Caution Nightringer requires SIP Registration.
--	--

1. Click on the **Nightringer** button to open the **Nightringer Configuration** page. See [Figure 2-16](#).

Figure 2-16. Nightringer Configuration Setup



CyberData Strobe

Home **Nightringer Configuration**

Device Config Enable Nightringer: (NOT Registered with SIP Server)

Networking Nightringer Settings

SIP Server: 10.0.0.253

Remote SIP Port: 5060

Local SIP Port: 5061

User ID: 241

Authenticate ID: 241

Authenticate Password: *****



Re-registration Interval (in seconds): 360

* You need to reboot for changes to take effect

Save Reboot

- On the **Nightringer Configuration** page, enter values for the parameters indicated in [Table 2-10](#).

Table 2-10. Nightringer Configuration Parameters

Web Page Item	Description
Enable Nightringer	When the nightringer is enabled, the SIP Strobe will attempt to register a second extension with the SIP server. Any calls made to this extension will cause the strobe to flash.
Nightringer Settings	
SIP Server	Type the SIP server represented as either a numeric IP address in dotted decimal notation.
Remote SIP Port	Type the Remote SIP Port number (default 5060) (8 character limit).
Local SIP Port	Type the Local SIP Port number (default 5060) (8 character limit). Note: This value cannot be the same as the Local SIP Port found on the SIP Configuration Page .
User ID	Type the User ID (up to 64 alphanumeric characters).
Authenticate ID	Type the Authenticate ID (up to 64 alphanumeric characters).
Authenticate Password	Type the Authenticate Password (up to 64 alphanumeric characters).
Re-registration Interval (in seconds)	Type the SIP Registration lease time in minutes (default is 60 minutes) (8 character limit). Re-registration Interval (in seconds)
	Click 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.

- After changing the parameters, click on the **Save** button.

2.2.7 Configure the Sensor Configuration Parameters

The sensor (pins 5 and 6) on the header can be used to monitor the open or closed state of a switch. There is an option on the **Sensor Configuration** page to trigger on an open or short condition on these pins.

The intrusion sensor is an optical sensor installed on the SIP Strobe board and will be activated when the SIP Strobe is removed from the case.

For each sensor there are two actions the SIP Strobe can take:

- Flash the LED until the sensor is deactivated (roughly 10 times/second)
- Activate the relay until the sensor is deactivated

1. Click **Sensor Config** to open the **Sensor Configuration** page (Figure 2-17).

Figure 2-17. Sensor Configuration Page

CyberData Strobe

Sensor Configuration

Home
Device Config
Networking
SIP Config
Nightringer
Sensor Config
Multicast Config
Event Config
Autoprovisioning
Update Firmware

Sensor Settings

Sensor Normally Closed: Yes No

Activate Relay:

Blink Strobe:

Test Sensor

Intrusion Sensor Settings

Activate Relay:

Blink Strobe:

Test Intrusion Sensor

* You need to reboot for changes to take effect

Save Reboot

2. On the **Sensor Configuration** page, enter values for the parameters indicated in [Table 2-11](#).

Table 2-11. Sensor Configuration Parameters

Web Page Item	Description
Sensor Settings	
Sensor Normally Closed	Select the inactive state of the sensors.
Activate Relay	Check this box to blink the strobe light until the sensor is deactivated.
Blink Strobe	Check this box to activate the blinking strobe until the sensor is deactivated.
<input type="button" value="Test Sensor"/>	Use this button to test the sensor.
Intrusion Sensor Settings	
Activate Relay	Check this box to activate the relay until the sensor is deactivated.
Blink Strobe	Check this box to blink the strobe light until the sensor is deactivated.
<input type="button" value="Test Intrusion Sensor"/>	Use this button to test the Intrusion sensor.
<input type="button" value="Save"/>	Click the Save button to save your configuration settings. Note: You need to reboot for changes to take effect.
<input type="button" value="Reboot"/>	Click on the Reboot button to reboot the system.

3. After changing the parameters, click **Save Settings**.

2.2.8 Configure the Multicast Parameters

Multicast groups use multicasting to create public address paging zones. Multicasting is based on the concept of a group. Multicast addresses specify an arbitrary group of IP hosts that have joined the group and want to receive traffic sent to the group. Group members send IGMP messages to their local multicast routers, allowing the group traffic traversal from the source.

The **Multicast Configuration** page allows the device to join up to 10 paging zones for receiving ulaw/alaw encoded RTP audio streams. A paging zone can consist of one or many CyberData multicast group-enabled products. There is no limit to how many devices can be 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 three. The device supports simultaneous SIP and Multicast.

1. Click on the **Multicast Configuration** button to open the **Multicast Configuration** page. See [Figure 2-18](#).

Figure 2-18. Multicast Configuration Page

CyberData Strobe

Multicast Configuration

Enable Multicast operation:

Device Settings

priority	Address	port	Multicast Group Name
9	239.168.3.10	11000	Emergency
8	239.168.3.9	10000	MG8
7	239.168.3.8	9000	MG7
6	239.168.3.7	8000	MG6
5	239.168.3.6	7000	MG5
SIP calls are considered priority 4.5			
4	239.168.3.5	6000	MG4
3	239.168.3.4	5000	MG3
2	239.168.3.3	4000	MG2
1	239.168.3.2	3000	MG1
0	239.168.3.1	2000	Background Music

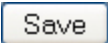
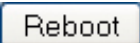
Port range can be from 2000-65535
Ports must be even numbers
Priority 9 is the highest and 0 is the lowest
A higher priority audio stream will always supercede a lower one
Priority 9 streams will play at maximum volume

* You need to reboot for changes to take effect

Save Reboot

2. On the **Multicast Configuration** page, enter values for the parameters indicated in [Table 2-12](#).

Table 2-12. Multicast Configuration Parameters

Web Page Item	Description
Enable Multicast Operation	Enables or disables multicast operation.
Device Settings	
Priority	Indicates the priority for the multicast group. Priority 9 is the highest (emergency streams). 0 is the lowest (background music). SIP calls are considered priority 4.5 . See Section 2.2.8.1, "Assigning Priority" for more details.
Address	Enter the multicast IP Address for this multicast group (15 character limit).
Port (range can be from 2000 to 65535)	Enter the port number for this multicast group (5 character limit). Note: The multicast ports have to be even values. The webpage will enforce this restriction.
Multicast Group Name	Assign a descriptive name for this multicast group (25 character limit).
	Click 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.

3. After changing the parameters, click on the **Save** button.

2.2.8.1 Assigning Priority

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 volume level is set to maximum.

Note SIP calls, multicast streams, ring tones, ringback tones, and nightring tones are all prioritized.

Ringtones and Nightringtones

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.

2.2.9 Configure the Event Parameters

Click the **Event Config** button to open the **Event Configuration** page (Figure 2-19). The **Event Configuration** page specifies a remote server that can be used to receive HTTP POST events when actions take place on the board.

Figure 2-19. Event Configuration Page

CyberData Strobe

Event Configuration

Enable Event Generation:

Remote Event Server

Remote Event Server IP: 10.0.0.250

Remote Event Server Port: 8080

Remote Event Server URL: xmldata_engine

Events

Enable Relay Activated Events:

Enable Relay Deactivated Events:

Enable Ring Events:

Enable Night Ring Events:

Enable Multicast Start Events:

Enable Multicast Stop Events:

Enable Power on Events:

Enable Security Events:

Enable 60 second Heartbeat Events:

* You need to reboot for changes to take effect

Save Test Event Reboot

Table 2-13 shows the web page items on the **Event Configuration** page.

Table 2-13. Event Configuration

Web Page Item	Description
Enable Event Generation	When selected, Event Generation is enabled.
Remote Event Server	
Remote Event Server IP	Type the Remote Event Server IP address. (64 character limit)
Remote Event Server Port	Type the Remote Event Server port number. (8 character limit)
Remote Event Server URL	Type the Remote Event Server URL. (127 character limit)
Events	
Enable Relay Activated Events	When selected, Relay Activated Events are enabled.
Enable Relay Deactivated Events	When selected, Relay Deactivated Events are enabled.
Enable Ring Events	When selected, Ring Events are enabled.
Enable Night Ring Events	When selected, there is a notification when the device receives a night ring.
Enable Multicast Start Events	When selected, Multicast Start Events are enabled.
Enable Multicast Stop Events	When selected, Multicast Stop Events are enabled.
Enable Power On Events	When selected, Power On Events are enabled.
Enable Security Events	When selected, Security Events are enabled.
Enable 60 Second Heartbeat Events	When selected, 60 Second Heartbeat Events are enabled.
<input data-bbox="375 1199 480 1245" type="button" value="Save"/>	Click the Save button to save your configuration settings. Note: You need to reboot for changes to take effect.
<input data-bbox="375 1291 557 1337" type="button" value="Test Event"/>	Click on the Test Event button to test an event.
<input data-bbox="375 1383 513 1430" type="button" value="Reboot"/>	Click on the Reboot button to reboot the system.

2.2.9.1 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 SIP 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 SIP 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 SIP 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 SIP 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 SIP 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 SIP 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 SIP 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 SIP 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 SIP 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 SIP 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 SIP Device' MAC='0020f70015b6'>
<event>NIGHTRINGING</event>
</cyberdata>
```

2.2.10 Configure the Autoprovisioning Parameters

1. Click the **Autoprovisioning** button to open the **Autoprovisioning Configuration** page. See [Figure 2-20](#).

Figure 2-20. Autoprovisioning Configuration Page

CyberData Strobe

Autoprovisioning

Autoprovisioning

Enable Autoprovisioning:

Get Autoprovisioning from DHCP:

Autoprovisioning Server (IP Address):


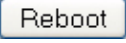
Autoprovisioning autoupdate (in minutes):

* Autoprovisioning file name: 0020f701b79b.config

* You need to reboot for changes to take effect

2. On the **Autoprovisioning Configuration** page, you may enter values for the parameters indicated in [Table 2-14](#).

Table 2-14. Autoprovisioning Configuration Parameters

Web Page Item	Description
Autoprovisioning	
Enable Autoprovisioning	See Section 2.2.10.1, "Autoprovisioning" .
Get Autoprovisioning from DHCP	See Section 2.2.10.1, "Autoprovisioning" .
Autoprovisioning Server (IP Address)	See Section 2.2.10.1, "Autoprovisioning" (15 character limit).
Autoprovisioning Autoupdate (in minutes)	Type the desired time (in minutes) that you want the Autoprovisioning feature to update (6 character limit).
Autoprovisioning file name	Displays the current autoprovisioning file name.
	Click 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.

3. After changing the parameters, click the **Save** button.

2.2.10.1 Autoprovisioning

Enable Autoprovisioning Option With autoprovisioning enabled, the board will get its configuration from a remote TFTP server on startup or periodically on a scheduled delay. Autoprovisioned values will override values stored in on-board memory and will be visible on the web page. The board gets its autoprovisioning information from an XML-formatted file hosted from a TFTP server. CyberData will provide a template for this XML file and the user can modify it for their own use.

To use autoprovisioning, create a copy of the autoprovisioning template with the desired settings and name this file with the mac address of the device to configure (for example: **0020f7350058.config**). Put this file into your TFTP server directory and manually set the TFTP server address on the board.

It is not necessary to set every option found in the autoprovisioning template. As long as the XML is valid, the file can contain any subset. Options not autoprovisioned will default to the values stored in the on board memory. For example if you only wanted to modify the device name, the following would be a valid autoprovisioning file:

```
<?xml version="1.0" encoding="utf-8" ?>
<specific>
  <MiscSettings>
    <DeviceName>auto SIP Strobe</DeviceName>
  </MiscSettings>
</specific>
```

Networking The board will only apply networking settings or firmware upgrades after a reboot.

Get Autoprovisioning from DHCP When this option is checked, the device will automatically fetch its autoprovisioning server address from the DHCP server. The device will use the address specified in **OPTION 150** (TFTP-server-name) or **OPTION 66**. If both options are set, the device will use **OPTION 150**.

Refer to the documentation of your DHCP server for setting up **OPTION 150**.

To set up a Linux DHCPD server to serve autoprovisioning information (in this case using both option 66 and 150), here's an example dhcpd.conf:

```
# dhcpd.conf
#
# Configuration file for ISC dhcpd (see 'man dhcpd.conf')
#
ddns-update-style ad-hoc;

option option-150 code 150 = ip-address;

subnet 10.0.0.0 netmask 255.0.0.0 {
    max-lease-time 120;
    default-lease-time 120;

    option routers                10.0.0.1;
    option subnet-mask            255.0.0.0;

    option domain-name            "voiplab";
    option domain-name-servers    10.0.0.1;

    option time-offset            -8;      # Pacific Standard Time

    option tftp-server-name       "10.0.0.254";

    option option-150             10.0.0.254;

    range 10.10.0.1 10.10.2.1;}

```

Autoprovisioning Server (IP Address) Instead of using DHCP to provide the autoprovisioning tftp server address, you can specify an address manually.

Autoprovisioning Autoupdate If **Autoprovisioning** is enabled and the **Autoprovisioning Autoupdate** value is something other than **0** minutes, a service is started on startup that will wait the configured number of minutes and then try to re-download its autoprovisioning file. It will compare its previously autoprovisioned file with this new file and if there are differences, it will reboot the board.

Autoprovisioned Firmware Upgrades An Autoprovisioned firmware upgrade only happens after a reboot, will take roughly three minutes, and the web page will be unresponsive during this time.

The '**FirmwareVersion**' value in the xml file *must* match the version stored in the '**FirmwareFile**'.

```
<FirmwareVersion>v5.0.5b01</FirmwareVersion>
<FirmwareFile>505b01-uImage-SIP Strobe</FirmwareFile>


```

If these values are mismatched, the board can get stuck in a loop where it goes through the following sequence of actions:

1. The board downloads and writes a new firmware file.
2. After the next reboot, the board recognizes that the firmware version does not match.
3. The board downloads and writes the firmware file again.

CyberData has timed a firmware upgrade at 140 seconds. Therefore, if you suspect the board is stuck in a loop, either remove or comment out the **FirmwareVersion** line in the XML file and let the board boot as it normally does.


2.3 Upgrade the Firmware and Reboot the SIP Strobe


	<p>Caution</p> <p>Equipment Hazard: A new firmware signature prevents users from loading firmware intended for one device to a different device. Make sure that you follow all of the instructions and warnings that are indicated in Section 2.3.1, "Firmware Image Usage Instructions and Warnings".</p>
---	--

2.3.1 Firmware Image Usage Instructions and Warnings

Table 2-15. Firmware Image Usage Instructions

Firmware Image File Name	Usage
717-ulmage-strobe	This image must be used to <u>upgrade</u> to v7.1.7 from v1.0.1 or <u>older</u> .
717-ulmage-d-strobe	This image must be used to <u>downgrade</u> from v7.1.8 or <u>later</u> to v7.1.7.
101-ulmage-d-strobe	This image must be used to <u>downgrade</u> from v7.1.7 or <u>later</u> to v1.0.1.

	<p>Caution</p> <p>Equipment Hazard: When upgrading the firmware, it is not possible to do any of the following:</p> <ul style="list-style-type: none"> • It is not possible to <u>upgrade</u> v1.0.1 or <u>older</u> with the 717-ulmage-d-strobe file. • It is not possible to <u>downgrade</u> from future revisions to v7.1.7 with the 717-ulmage-strobe file. • It is not possible to <u>downgrade</u> from v7.1.7 or newer to v1.0.1 with the existing v1.0.1 on our Downloads web page. You must use the 101-ulmage-d-strobe file.
---	---

	<p>Caution</p> <p>Equipment Hazard: In the future, there will not be multiple images released for each firmware revision. Customers wishing to upgrade from v1.0.1 <u>must</u> upgrade to v7.1.7 first, and then on to later versions.</p>
---	--

2.3.2 Uploading the Firmware

To upload the firmware from your computer:

1. Retrieve the latest SIP Strobe firmware file from the SIP Strobe **Downloads** page at:
<http://www.cyberdata.net/products/voip/digitalanalog/strobe/downloads.html>
2. Unzip the firmware version file. This file may contain the following:
 - Firmware file
 - Release notes
3. Log in to the SIP Strobe home page as instructed in [Section 2.2.2, "Log in to the Configuration Home Page"](#).
4. Click the **Update Firmware** button to open the **Upgrade Firmware** page. See [Figure 2-21](#).

Figure 2-21. Upgrade Firmware Page

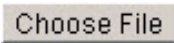
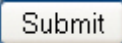
The screenshot shows the 'Upgrade Firmware' page in the CyberData Strobe web interface. The page has a blue header with the text 'CyberData Strobe'. On the left side, there is a vertical menu of buttons: Home, Device Config, Networking, SIP Config, Nightringer, Sensor Config, Multicast Config, Event Config, Autoprovisioning, and Update Firmware. The main content area is titled 'Upgrade Firmware' and contains a 'File Upload' section. This section displays 'Firmware Version: v7.1.7' and 'Please specify a file:'. Below this text is a 'Choose File' button and the text 'No file chosen'. At the bottom of the main content area, there is a note: 'System will automatically reboot after upgrading firmware' and a 'Submit' button.

5. Select **Browse**, and then navigate to the location of the SIP Strobe firmware file.
6. Click **Submit**.

Note This starts the upgrade process. Once the SIP Strobe has uploaded the file, the **Uploading Firmware** countdown page appears, indicating that the firmware is being written to flash. The SIP Strobe will automatically reboot when the upload is complete. When the countdown finishes, the **Upgrade Firmware** page will refresh. The uploaded firmware filename should be displayed in the system configuration (indicating successful upload and reboot).

Table 2-16 shows the web page items on the **Upgrade Firmware** page.

Table 2-16. Firmware Upgrade Parameters

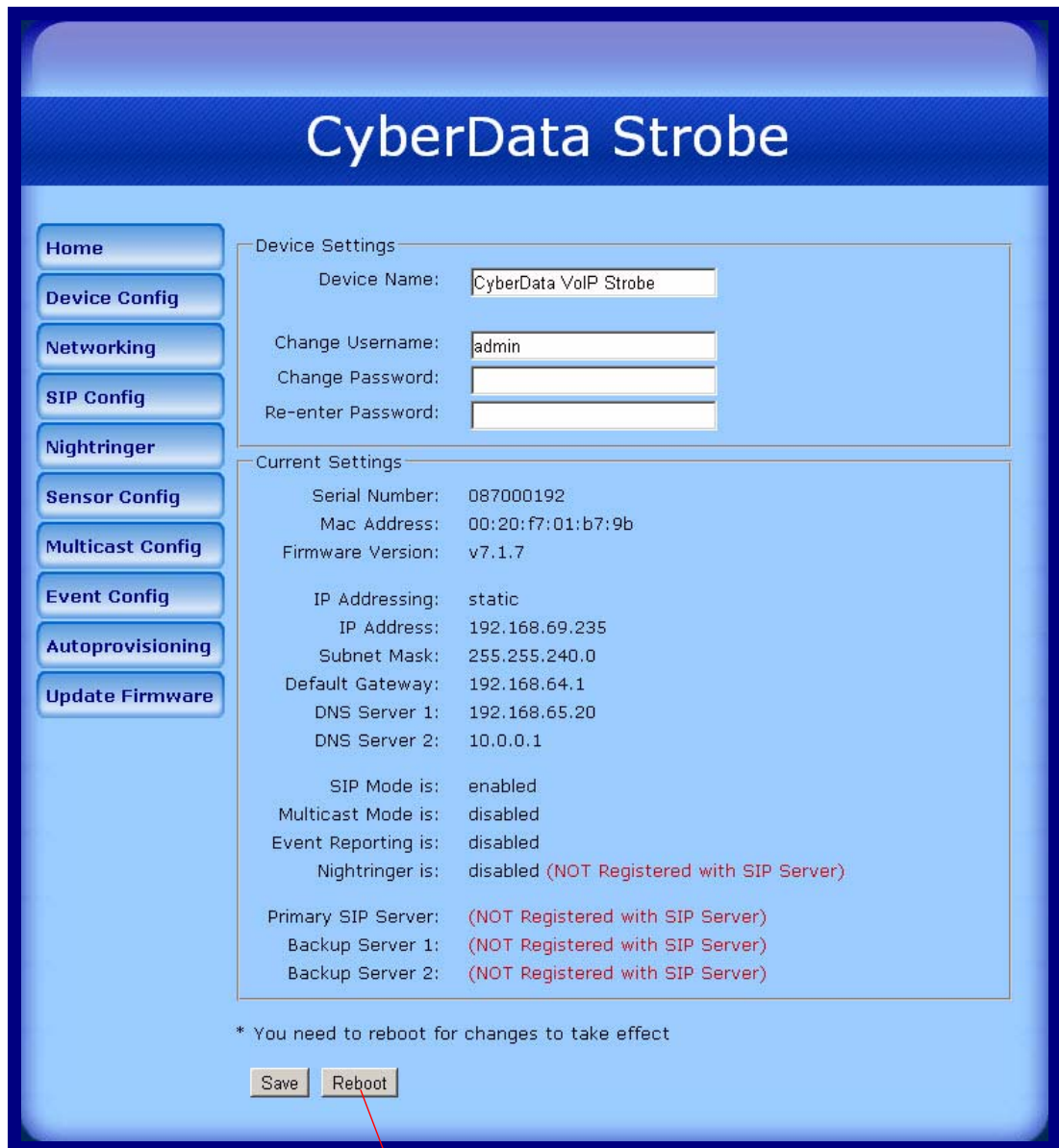
Web Page Item	Description
File Upload	
Firmware Version	Shows the current firmware version.
	Use the Choose File button to navigate to the location of the firmware file that you want to upload.
	Click on the Submit button to automatically upload the selected firmware and reboot the system.

2.3.3 Reboot the SIP Strobe

To reboot a SIP Strobe:

1. Log in to the web page as instructed in [Section 2.2.2, "Log in to the Configuration Home Page"](#).
2. Click the **Reboot** button ([Figure 2-22](#)). A normal restart will occur.

Figure 2-22. Reboot System Section



Reboot

2.4 Command Interface

Some functions on the device can be activated using simple POST commands to the web interface. The examples in [Table 2-17](#) use the free unix utility, **wget commands**. However, any program that can send HTTP POST commands to the device should work.

2.4.1 Command Interface Post Commands

Note These commands require an authenticated session (a valid username and password to work).

Table 2-17. Command Interface Post Commands

Device Action	HTTP Post Command ^a
Trigger relay (for configured delay)	wget --user admin --password admin --auth-no-challenge --quiet -O /dev/null "http://10.0.3.71/cgi-bin/command.cgi" --post-data "test_relay=yes"
Place call to extension (example: extension 130)	wget --user admin --password admin --auth-no-challenge --quiet -O /dev/null "http://10.0.3.71/cgi-bin/command.cgi" --post-data "call=130"
Terminate active call	wget --user admin --password admin --auth-no-challenge --quiet -O /dev/null "http://10.0.3.71/cgi-bin/command.cgi" --post-data "terminate=yes"
Force reboot	wget --user admin --password admin --auth-no-challenge --quiet -O /dev/null "http://10.0.3.71/cgi-bin/command.cgi" --post-data "reboot=yes"
Trigger the Door Sensor Test (Sensor Config page)	wget --user admin --password admin --auth-no-challenge --quiet -O /dev/null "http://10.0.3.71/cgi-bin/sensorconfig.cgi" --post-data "doortest=yes"
Trigger the Intrusion Sensor Test (Sensor Config page)	wget --user admin --password admin --auth-no-challenge --quiet -O /dev/null "http://10.0.3.71/cgi-bin/sensorconfig.cgi" --post-data "intrusiontest=yes"

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

Appendix A: Mounting the SIP Strobe

A.1 Mount the SIP Strobe

Before you mount the SIP Strobe, make sure that you have received all the parts for each SIP Strobe. Refer to [Table A-1](#).

Table A-1. Wall Mounting Components (Part of the Accessory Kit)

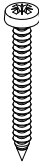
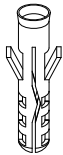
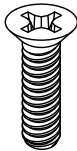
Quantity	Part Name	Illustration
4	#6 x 1.5 inches Sheet Metal Screw	
4	#6 Ribbed Plastic Anchor	

Table A-2. Gang Box Mounting Components

Quantity	Part Name	Illustration
4	#6-32 x 0.625-inch Flat-Head Machine Screw.	

After the SIP Strobe is assembled, plug the Ethernet cable into the SIP Strobe Assembly (see [Figure A-23](#)).

[Section 2.1.4, "Network Connectivity, and Data Rate"](#) explains how the **Link** and **Status** LEDs work.

Figure A-23. Network Connector Prior to Installation

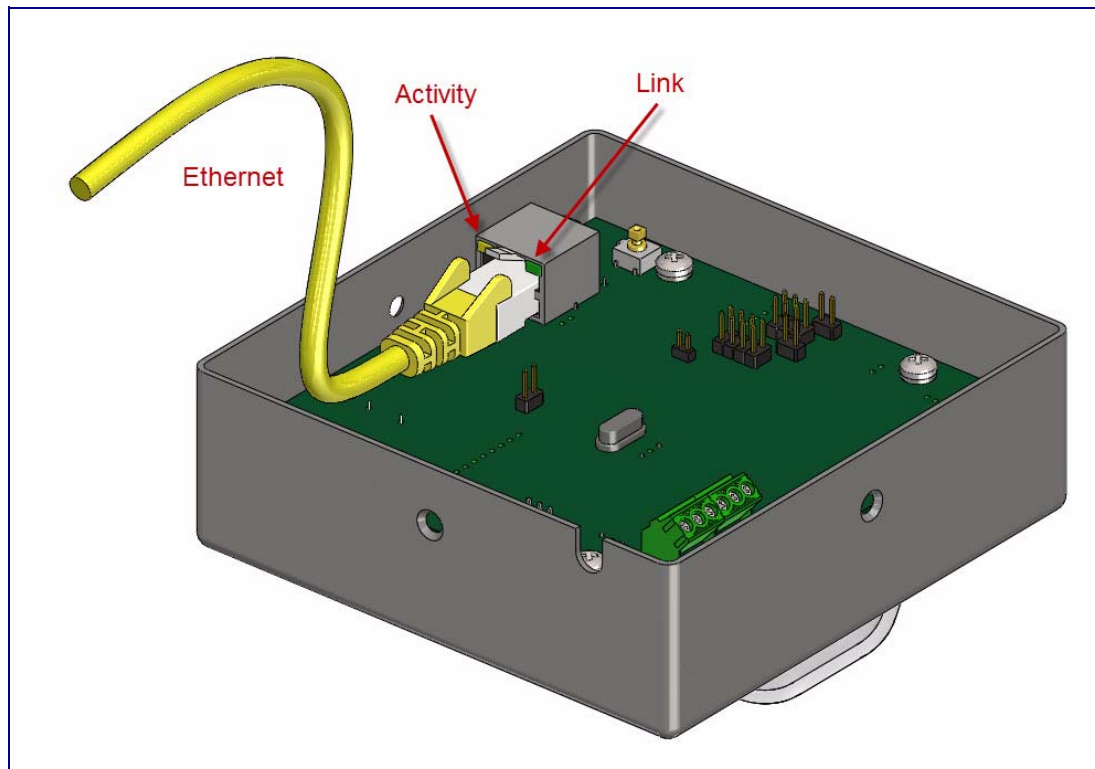


Figure A-24 shows the mounting options for the SIP Strobe.

Note Be sure to connect the SIP Strobe up to the Earth Ground.

Figure A-24. Mounting Options

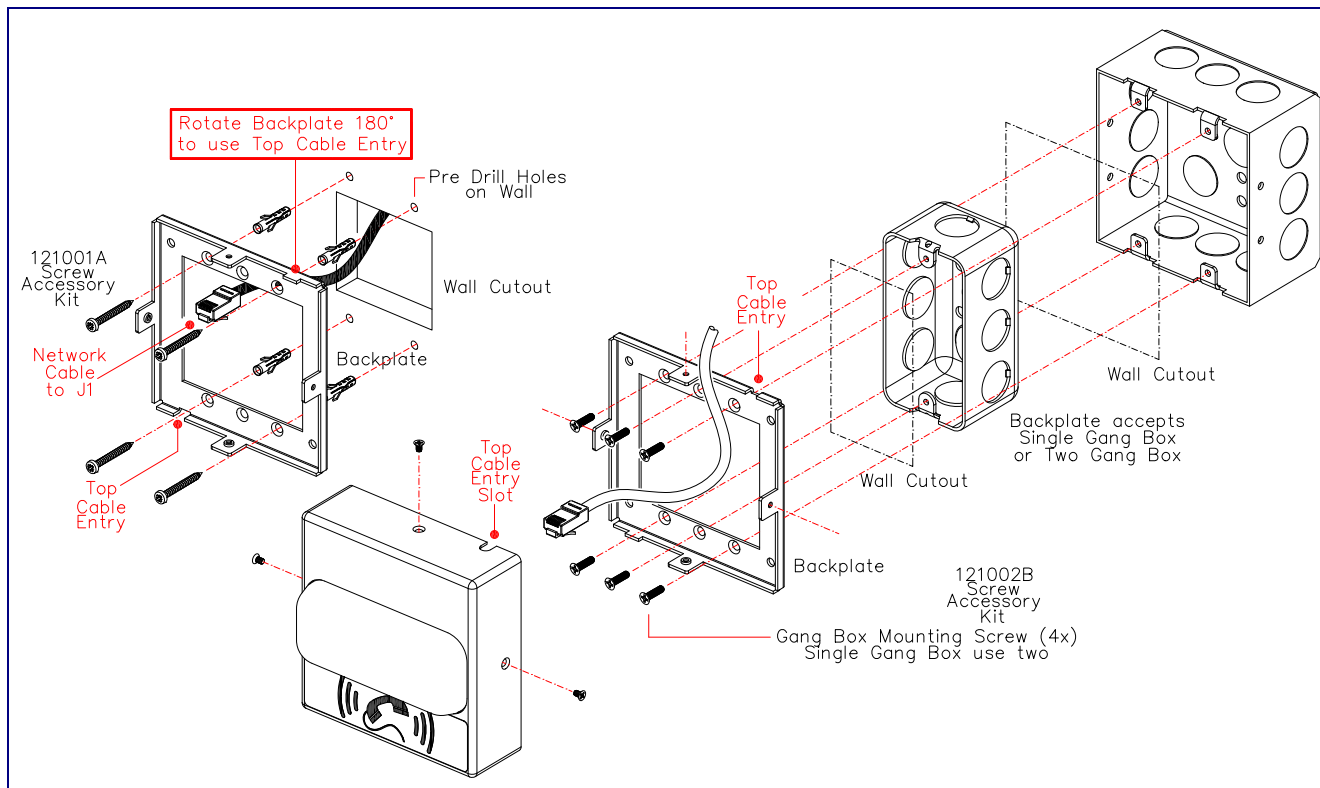
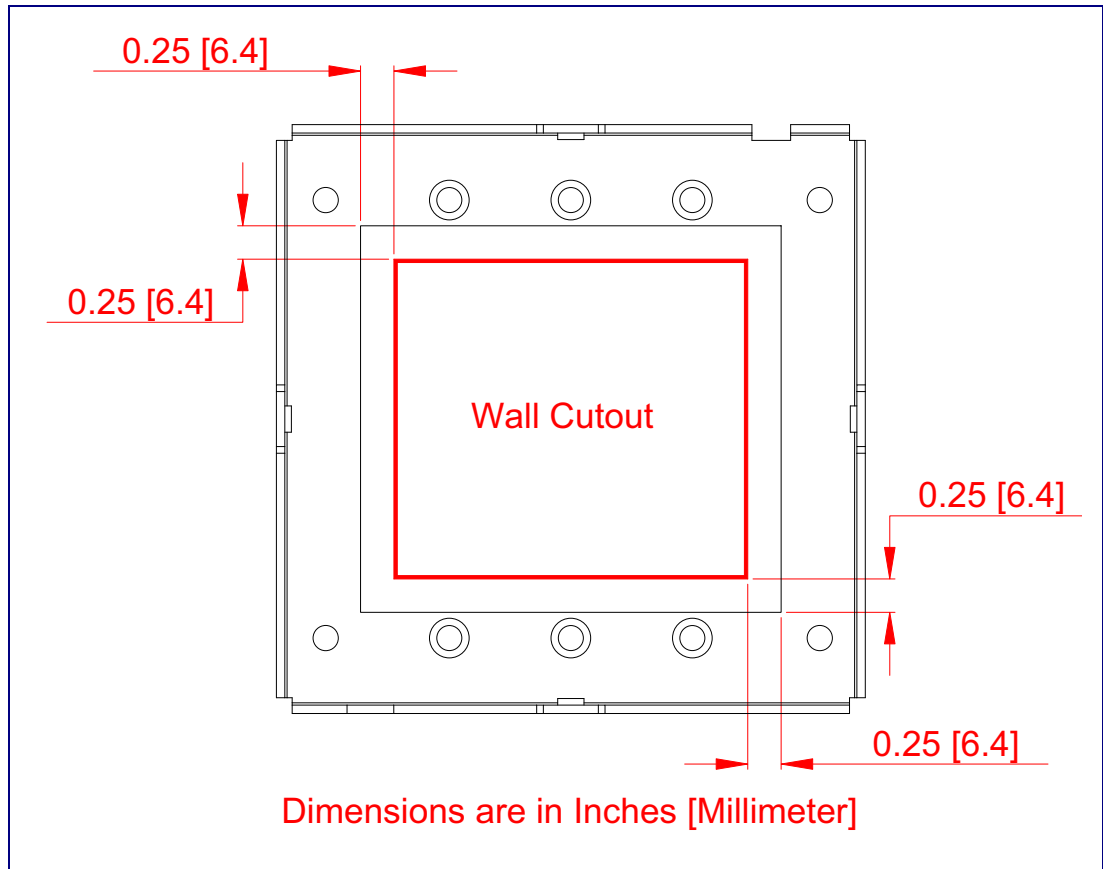


Figure A-25 shows the maximum recommended wall cutout dimensions for mounting the SIP Strobe.

Figure A-25. Maximum Recommended Wall Cutout Dimensions



Appendix B: Troubleshooting/Technical Support

B.1 Frequently Asked Questions (FAQ)

A list of frequently asked questions (FAQs) are available on the SIP Strobe product page at:

<http://www.cyberdata.net/products/voip/digitalanalog/strobe/faqs.html>

Select the support page for your product to see a list of frequently asked questions for the CyberData product:

B.2 Documentation

The documentation for this product is released in an English language version only. You can download PDF copies of CyberData product documentation from the SIP Strobe product page at:

<http://www.cyberdata.net/products/voip/digitalanalog/strobe/docs.html>

B.3 Contact Information

Contact	<p>CyberData Corporation 3 Justin Court Monterey, CA 93940 USA www.CyberData.net Phone: 800-CYBERDATA (800-292-3732) Fax: 831-373-4193</p>
Sales	<p>Sales 831-373-2601 Extension 334</p>
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>http://www.cyberdata.net/support/contactsupportvoip.html</p> <p>We have several technical support staff monitoring this form and they will contact you within 12 hours after receiving a form submission.</p> <p>Phone: (831) 373-2601, Ext. 333 Email: support@cyberdata.net</p>
Returned Materials Authorization	<p>To return the product, contact the Returned Materials Authorization (RMA) department:</p> <p>Phone: 831-373-2601, Extension 136 Email: RMA@CyberData.net</p> <p>When returning a product to CyberData, an approved CyberData RMA number must be printed on the outside of the original shipping package. No product will be accepted for return without an approved RMA number. Send the product, in its original package, to the following address:</p> <p>CyberData Corporation 3 Justin Court Monterey, CA 93940 Attention: RMA "your RMA number"</p>
RMA Status Form	<p>If you need to inquire about the repair status of your product(s), please use the CyberData RMA Status form at the following web address:</p> <p>http://www.cyberdata.net/support/rmastatus.html</p>

B.4 Warranty

CyberData warrants its product against defects in material or workmanship for a period of two years from the date of purchase. Should the product fail within the warranty period, CyberData will repair or replace the product free of charge. This warranty includes all parts and labor.

Should the product fail out-of-warranty, a flat rate repair charge of one half of the purchase price of the product will be assessed. Repairs that are in warranty but are damaged by improper modifications or abuse, will be charged at the out-of-warranty rate. Products shipped to CyberData, both in and out-of-warranty, are shipped at the expense of the customer. Shipping charges for repaired products shipped back to the customer by CyberData, will be paid by CyberData.

CyberData shall not under any circumstances be liable to any person for any special, incidental, indirect or consequential damages, including without limitation, damages resulting from use or malfunction of the products, loss of profits or revenues or costs of replacement goods, even if CyberData is informed in advance of the possibility of such damages.

B.4.1 Warranty & RMA Returns within the United States

If service is required, you must contact CyberData Technical Support prior to returning any products to CyberData. Our Technical Support staff will determine if your product should be returned to us for further inspection. If Technical Support determines that your product needs to be returned to CyberData, an RMA number will be issued to you at this point.

Your issued RMA number must be printed on the outside of the shipping box. No product will be accepted for return without an approved RMA number. The product in its original package should be sent to the following address:

CyberData Corporation
3 Justin Court.
Monterey, CA 93940
Attn: RMA "xxxxxx"

B.4.2 Warranty & RMA Returns Outside of the United States

If you purchased your equipment through an authorized international distributor or reseller, please contact them directly for product repairs.

B.4.3 Spare in the Air Policy

CyberData now offers a *Spare in the Air* no wait policy for warranty returns within the United States and Canada. More information about the *Spare in the Air* policy is available at the following web address:

<http://www.cyberdata.net/support/warranty/spareintheair.html>

B.4.4 Return and Restocking Policy

For our authorized distributors and resellers, please refer to your CyberData Service Agreement for information on our return guidelines and procedures.

For End Users, please contact the company that you purchased your equipment from for their return policy.

B.4.5 Warranty and RMA Returns Page

The most recent warranty and RMA information is available at the CyberData Warranty and RMA Returns Page at the following web address:

<http://www.cyberdata.net/support/warranty/index.html>

Index

Numerics

101-ulmage-d-strobe 42
 16 AWG gauge wire 6
 717-ulmage-d-strobe 42
 717-ulmage-strobe 42

A

AC voltages 2
 AC voltages, enclosure is not rated 7
 act light 12
 activate relay (intrusion sensor) 30
 activate relay (sensor) 30
 address, configuration login 17
 audio encodings 3
 autoprovisioning 40

- autoprovisioned firmware upgrades 41
- autoprovisioning autoupdate 41
- autoprovisioning enabled option 40
- autoprovisioning from DHCP 40
- autoprovisioning server (IP address) 41
- networking 40

 autoprovisioning configuration 38, 39
 auxiliary relay 7
 auxiliary relay wiring diagram 8

B

backup SIP server 1 25
 backup SIP server 2 25
 backup SIP servers, SIP server

- backups 25

 baud rate

- verifying 11

 blink strobe (intrusion sensor) 30
 blink strobe (sensor) 30

C

changing

- the web access password 20

 Cisco SRST 25
 command interface 46
 commands 46
 configurable parameters 19, 21, 23, 25, 44

configuration

- default IP settings 15
- door sensor 29
- intrusion sensor 29
- network 22
- SIP 24
- using Web interface 15

 configuration home page 18
 configuration page

- configurable parameters 19, 21, 23, 25, 44

 contact information 52
 contact information for CyberData 52
 Current Network Settings 23
 current network settings 23
 CyberData contact information 52

D

default

- device settings 55
- gateway 15
- IP address 15
- subnet mask 15
- username and password 15
- web login username and password 18

 default device settings 14
 default gateway 15, 23
 default IP settings 15
 default login address 17
 device configuration 20

- device configuration parameters 39
- the device configuration page 38

 device configuration page 20
 device configuration parameters 21
 device configuration password

- changing for web configuration access 20

 DHCP Client 3
 DHCP IP addressing 23
 dimensions 4
 discovery utility program 17
 DNS server 23
 door sensor 30
 door strike

- cannot be powered by alternate power input nor PoE power 6

E

- earth ground 49
- enable night ring events 34
- ethernet cable 48
- event configuration
 - enable night ring events 34
- expiration time for SIP server lease 25, 26, 28

F

- factory default settings 14
 - how to set 14
- firmware
 - 101-ulmage-d-strobe file 42
 - 717-ulmage-d-strobe file 42
 - 717-ulmage-strobe file 42
 - where to get the latest firmware 43
- firmware image usage instructions and warnings 42

G

- gang box mounting 49
- green link light 11

H

- home page 18
- http POST command 46
- http web-based configuration 3

I

- identifying your product 1
- illustration of device mounting process 47
- installation, typical device system 2
- intrusion sensor 29, 30
 - activate relay 30
- IP address 15, 23
- IP addressing 23
 - default
 - IP addressing setting 15

J

- J3 terminal block, 16 AWG gauge wire 6

L

- lease, SIP server expiration time 25, 26, 28
- lengthy pages 32
- link LED 48
- link light 11
- local SIP port 25
- log in address 17

M

- MGROUP
 - MGROUP Name 32
- mounting the device 47
- multicast configuration 31
- Multicast IP Address 32

N

- navigation (web page) 16
- navigation table 16
- network activity, verifying 12
- network configuration 22
- network rate 4
- Network Setup 22
- nightring tones 32
- Nightringer 6, 27, 42
- Nightringer in peer to peer mode (cannot be used) 27, 42
- nightringer settings 28
- Nightringer, SIP registration required 27, 42

P

- packet time 3
- pages (lengthy) 32
- part number 4
- parts list 5
- password
 - for SIP server login 25
 - login 18
 - restoring the default 15
- port
 - local SIP 25
 - remote SIP 25
- POST command 46
- power requirement 4
- priority
 - assigning 32
- product
 - configuring 15

- mounting 47
- parts list 5
- product features 3
- product overview
 - product features 3
 - product specifications 4
 - supported protocols 3
 - supported SIP servers 3
 - typical system installation 2
- product specifications 4
- protocols supported 3

R

- reboot 44, 45
- remote SIP port 25
- Reset Test Function Management (RTFM) switch 14
- reset test function management switch 13
- resetting the IP address to the default 47, 51
- restoring factory default settings 14, 55
- restoring the factory default settings 14
- return and restocking policy 54
- ringtones 32
 - lengthy pages 32
- RMA returned materials authorization 52
- RMA status 52
- RTFM jumper 13
- RTFM switch 13, 14
- RTP/AVP 3

S

- sales 52
- sensor 30
 - activate relay 30
 - blink strobe 30
 - sensor normally closed 30
- sensor setup page 29
- sensor setup parameters 29
- sensors 30
- server address, SIP 25
- service 52
- setting up the device 6
- settings, default 14
- SIP
 - enable SIP operation 25
 - local SIP port 25
 - user ID 25
- SIP (session initiation protocol) 3
- SIP configuration 24
 - SIP Server 25
- SIP configuration parameters

- outbound proxy 25
- registration and expiration, SIP server lease 25, 26, 28
 - user ID, SIP 25
- SIP registration 25
- SIP remote SIP port 25
- SIP server 25
 - password for login 25
 - SIP servers supported 3
 - user ID for login 25
- Spare in the Air Policy 53
- SRST 25
- static IP addressing 23
- status LED 48
- subnet mask 15, 23
- supported protocols 3

T

- tech support 52
- technical support, contact information 52
- terminal block, 16 AWG gauge wire 6

U

- user ID
 - for SIP server login 25
- username
 - changing for web configuration access 20
 - default for web configuration access 18
 - restoring the default 15

V

- verifying
 - baud rate 11
 - network activity 12
 - network connectivity 11

W

- warranty 53
- warranty & RMA returns outside of the United States 53
- warranty & RMA returns within the United States 53
- warranty and RMA returns page 54
- warranty policy at CyberData 53
- web access password 15
- web access username 15
- web configuration log in address 17

web page
 navigation 16
web page navigation 16
web-based configuration 15
weight 4
wget, free unix utility 46

Y

yellow act light 12