



Network Dual Door Strike Intermediate Relay Module Operations Guide

Part #011375
Document Part #931208F
for Firmware Version 4.8

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VoIP Outdoor Intercom Operations Guide 931208F
Part # 011375

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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://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 931208F, which corresponds to firmware version 4.8, was released on May 30, 2017 and has the following changes:



- Updates [Figure 2-1, "DSR Page \(not associated with any DSRs\)"](#)
- Updates [Figure 2-5, "DSR Page \(Manual Mode\)"](#)
- Updates [Figure 2-6, "DSR Page \(Automatic Mode\)"](#)
- Updates [Figure 2-7, "DSR Page \(Single DSR Mode\)"](#)

Browsers Supported

The following browsers have been tested against firmware version 4.8:

- Internet Explorer (version: 10)
- Firefox (also called Mozilla Firefox) (version: 33.0)
- Chrome (version 48.0.2564.116)
- Opera (version 12.16)
- Safari (version: 5.1.7)

Pictorial Alert Icons

	General Alert 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.
	Ground This pictorial alert indicates the Earth grounding connection point.

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.

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

 GENERAL ALERT	<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>
 GENERAL ALERT	<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>
 GENERAL ALERT	<p>Warning</p> <p>The PoE connector is intended for intra-building connections only and does not route to the outside plant.</p>

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1 Product Overview and Setup

1.1 Introduction

The Network Dual Door Strike Intermediate Relay Module is a network device designed to control an electronic door strike. The door strike relay (DSR) is meant to be used as a replacement for (or an addition to) the on-board relay. In addition to being a drop-in 12 Amp relay, the DSR can monitor and record when the door is open or closed. The DSR can be configured to respond to DTMF code and call events.

The Network Dual Door Strike Intermediate Relay Module can be accessed in the following ways:

- Through the web interface of a CyberData device, as described in [Chapter 2, "Configure the Door Strike Relay"](#)
- Through the Windows utility that is outlined in [Chapter 3, "Networked Door Strike Configuration Utility"](#), and which is available for download by completing the following steps:

1. Go to the following URL:

<http://www.cyberdata.net/voip/011375/>

2. Click on the **FAQs** tab.

- Directly, with the commands described in document 930906, "Networked Door Strike Relay Module-Message Format Specification," which is available for download by completing the following steps:

1. Go to the following URL:

<http://www.cyberdata.net/voip/011375/>

2. Click on the **Downloads** tab.

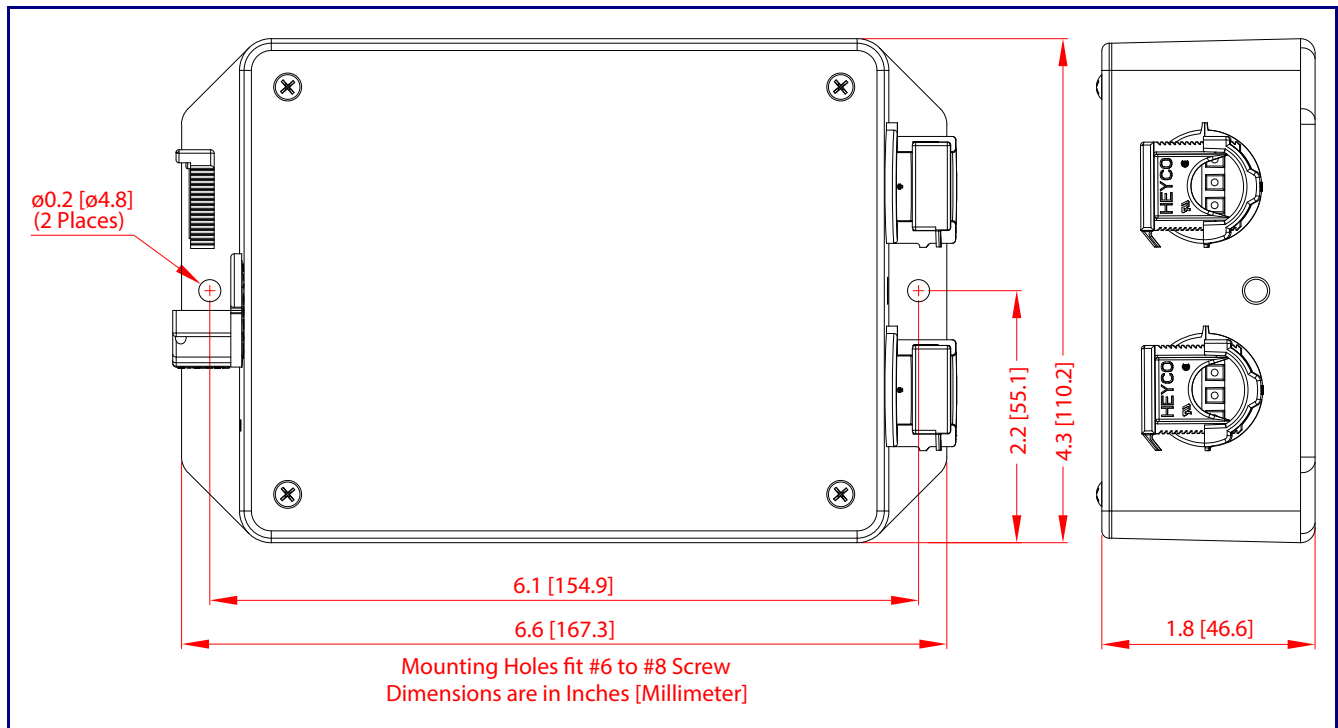
1.2 Parts List

- (1) Network Dual Door Strike Intermediate Relay Module
- (1) Accessory Kit
- (2) Cable Clamps

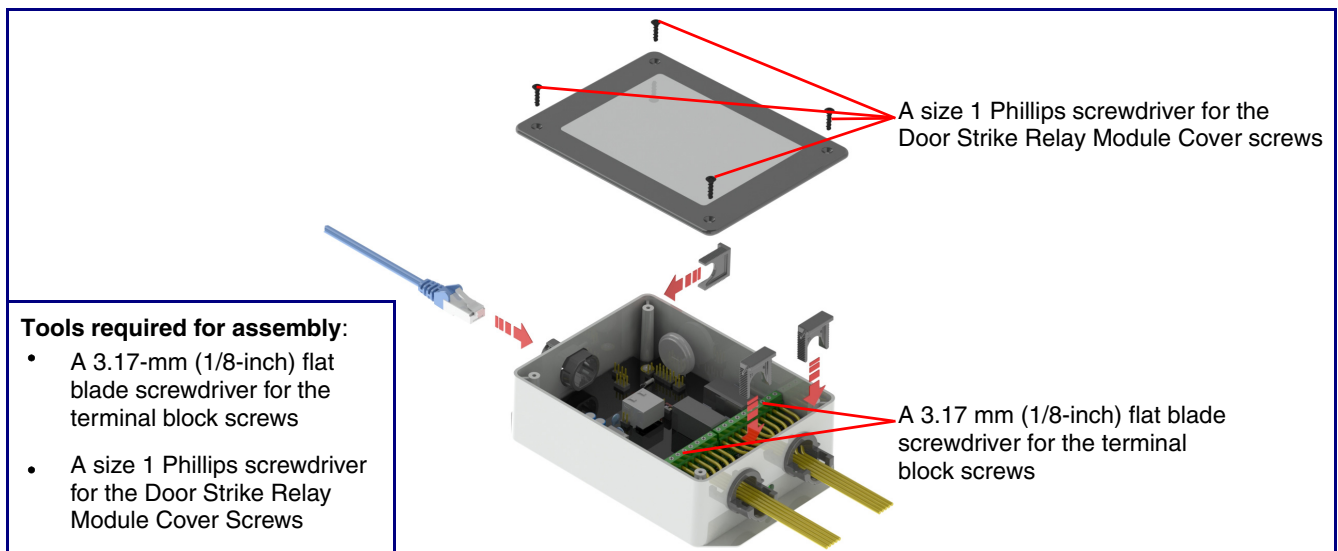
1.3 Specifications

Specifications	
Power Input	PoE IEEE 802.3af
Operating temperature	-10° C to 50° C (14° F to 122° F)
Relay Voltage/Current	12 A @ 250 VAC / 12 A @ 24 VDC

1.4 Dimensions



1.5 Assembly



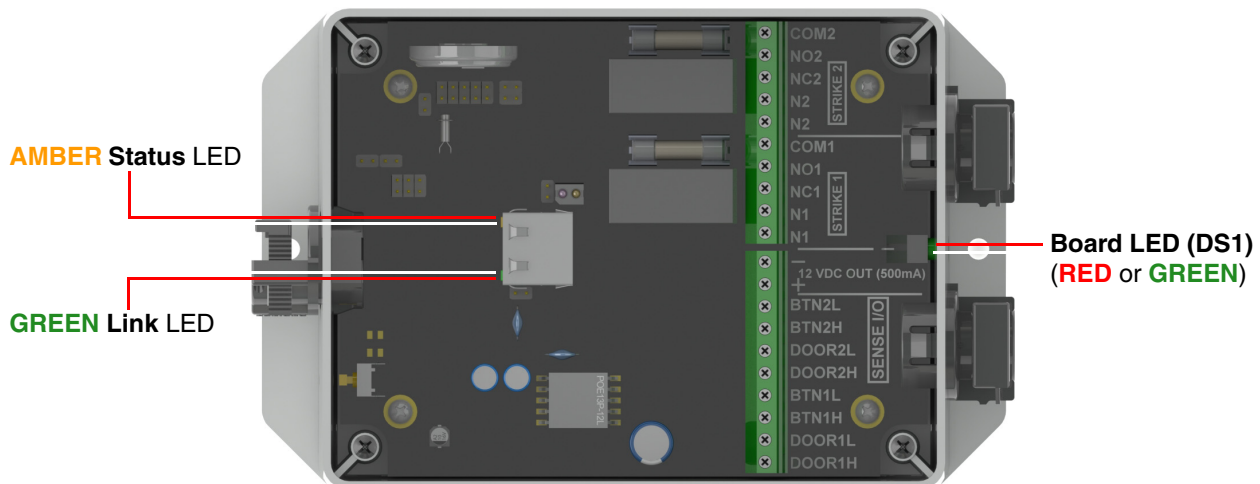
1.6 LED Behavior

See [Table 1-1](#) and [Figure 1-1](#) for the meaning of the device's LED behavior.

Table 1-1. LED Behavior

Status and Link LEDs (at J1):	
LED Behavior	Means
The AMBER Status LED is on and the GREEN Link LED is on and blinking.	No fault detected. The device is on the network and the device is not active.
Note: On boot, within approximately three seconds, the AMBER Status LED and the GREEN Link LED come on with the GREEN Link LED beginning to blink almost immediately.	
Board LED (DS1):	
LED Behavior	Means
On and solid RED	No fault detected. A relay is not engaged.
On and solid GREEN	No fault detected. A relay is engaged.
One long RED flash and a short RED flash	Device hardware fault, communication error
One long RED flash and one short AMBER flash	Device hardware fault, communication error
One long RED flash and two short AMBER flashes	Device hardware fault, memory error
One long RED flash and three short AMBER flashes	Device hardware fault, fuse
One short RED flash and one short AMBER flash	Network address, DHCP Issue
Note: On boot, the board LED blinks RED once, and then remains on and solid RED until a relay is engaged.	

Figure 1-1. LEDs




1.7 Wiring the Network Dual Door Strike Intermediate Relay Module

1.7.1 Network Dual Door Strike Relay Wiring Diagram with External Power Source

For wiring an electronic door strike to work over a network, we recommend the use of our external Networked Dual Door Strike Intermediate Relay (CD# 011375).

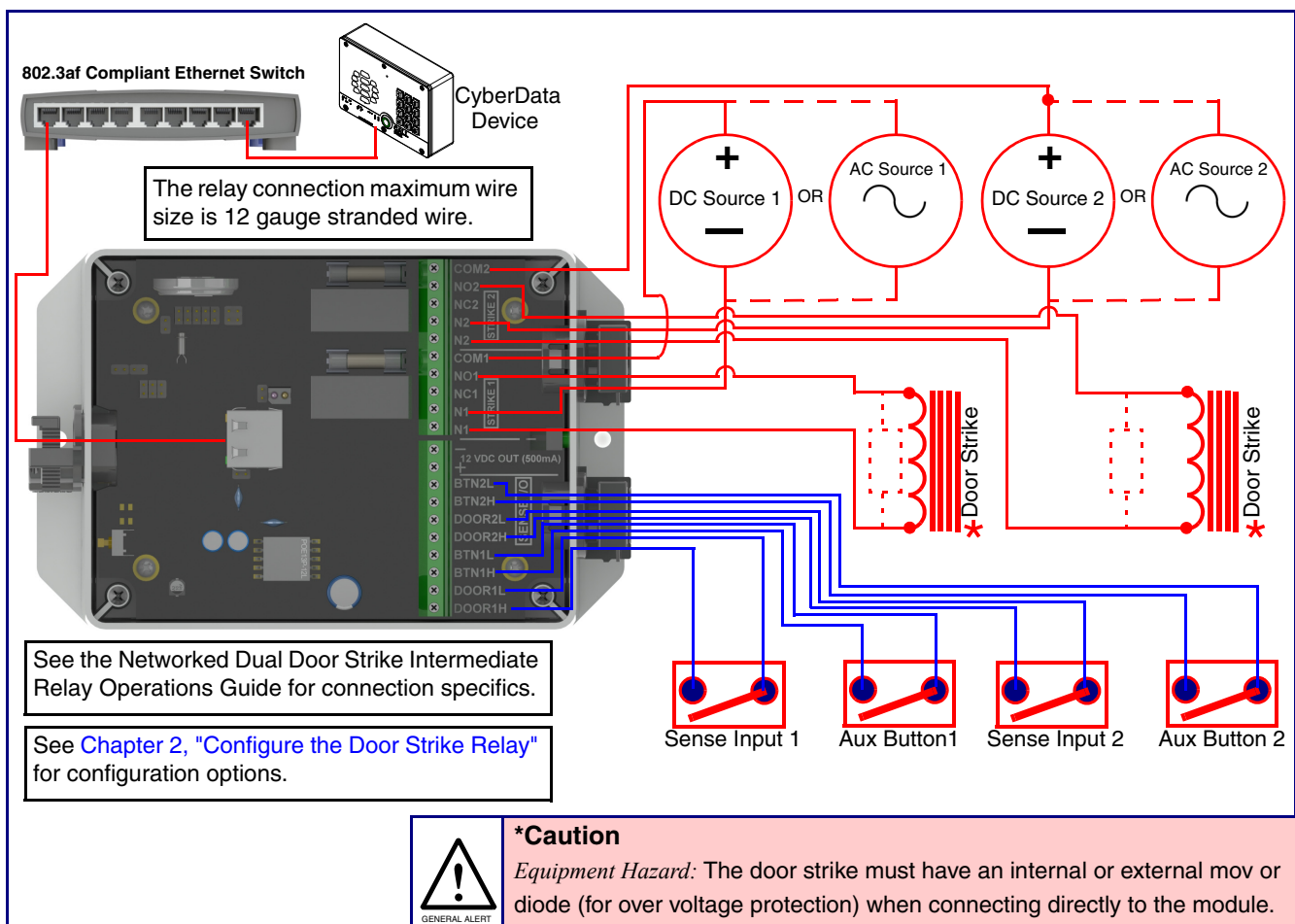
This product provides an easier method of connecting standard door strikes as well as AC and higher voltage devices. See [Figure 1-2](#) and [Figure 1-3](#) for the wiring diagrams.



Warning

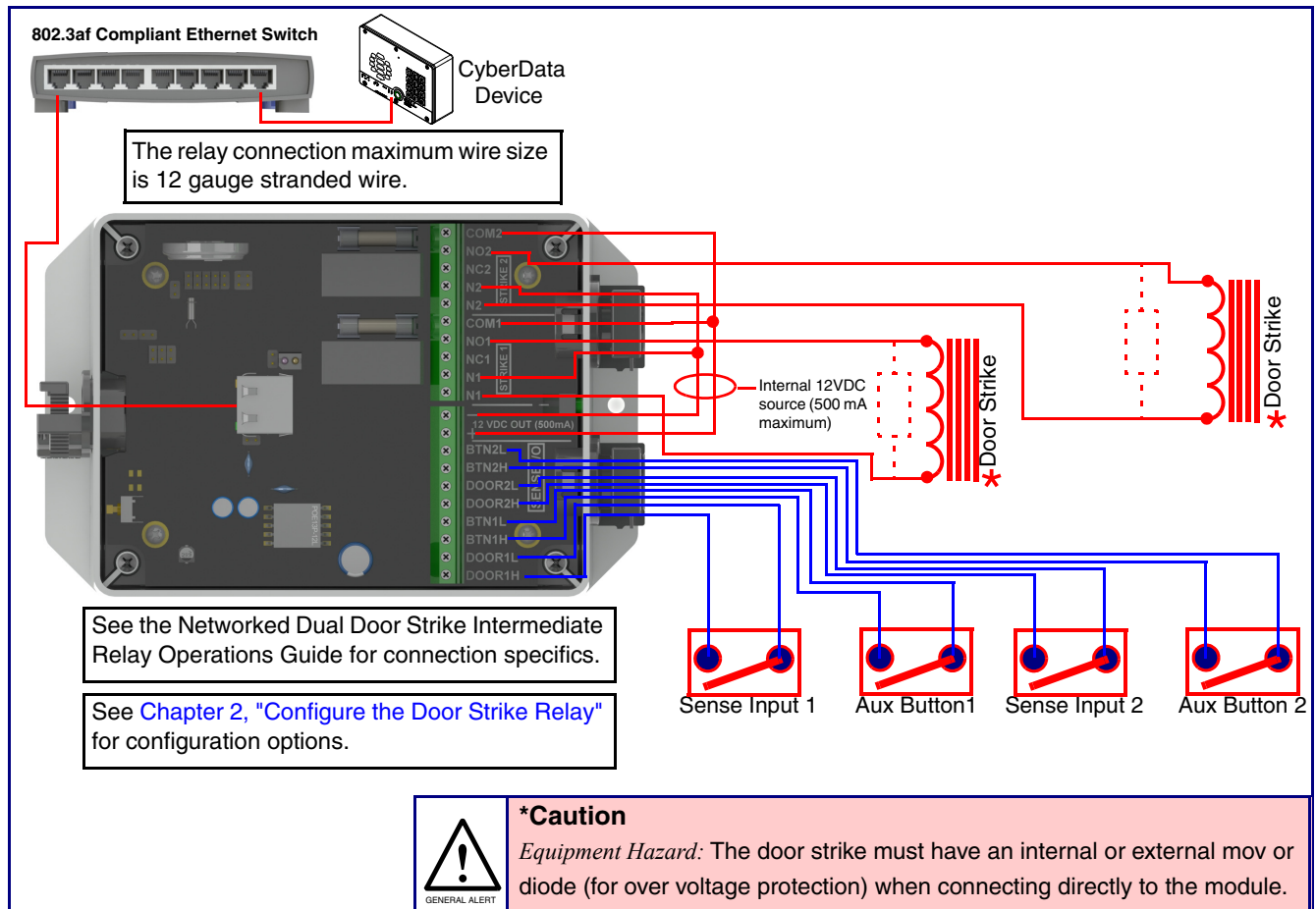
Electrical Hazard: Hazardous voltages may be present. No user serviceable part inside. Refer to qualified service personnel for connecting or servicing.

Figure 1-2. Network Dual Door Strike Relay Wiring Diagram with External Power Source



1.7.2 Network Dual Door Strike Relay Wiring Diagram Using PoE

Figure 1-3. Network Dual Door Strike Relay Wiring Diagram Using PoE



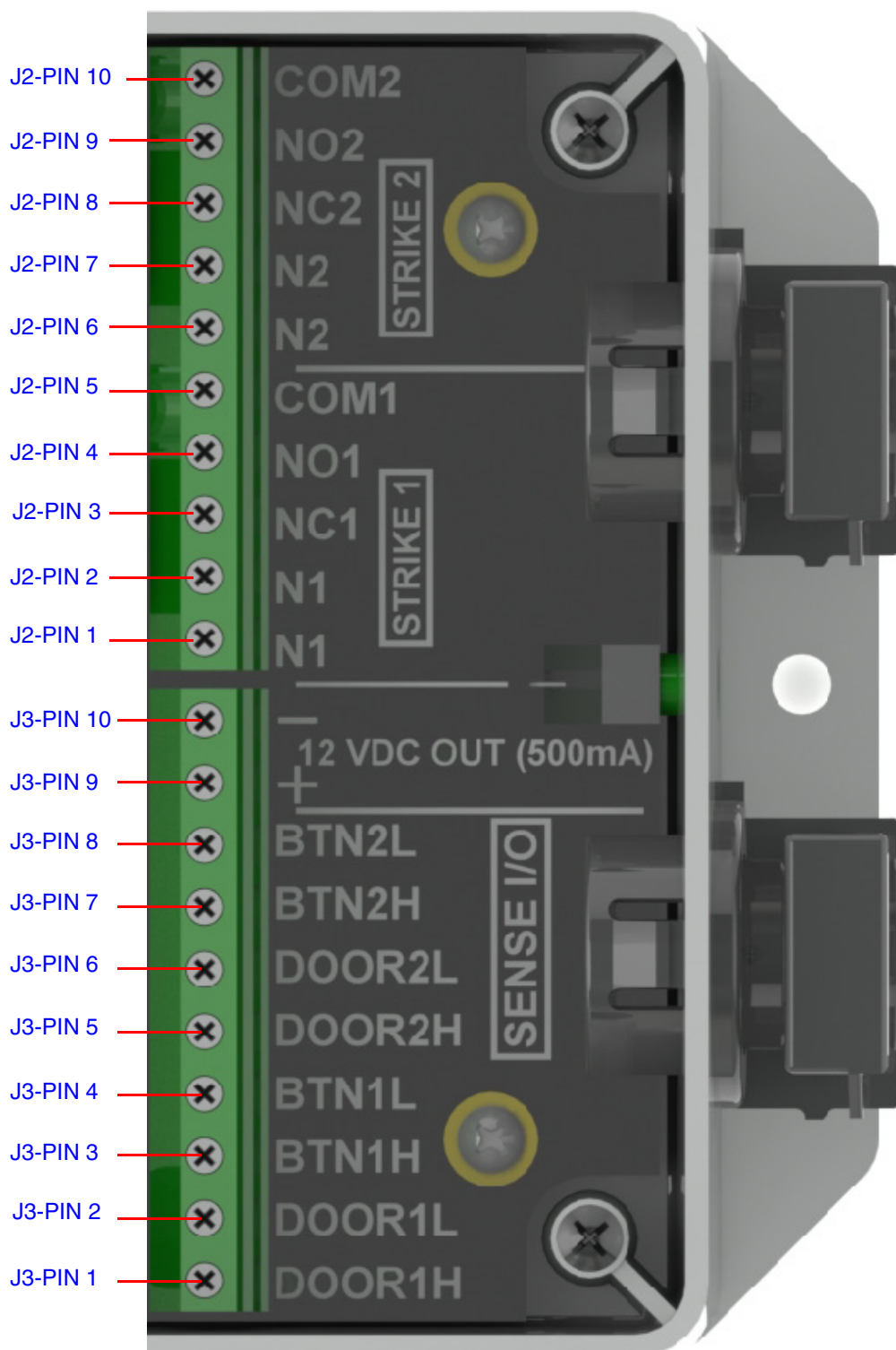
If you have questions about connecting door strikes or setting up the web configurable options, please contact our support department at the following website:

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

1.8 Terminal Block Wiring Connections

See [Figure 1-4](#) and [Table 1-2](#) for the terminal block wiring connections.

Figure 1-4. Terminal Block Wiring Connections



3. On the **DSR** page, enter values for the parameters indicated in [Table 1-2](#).

Note The question mark icon (?) in the following table shows which web page items will be defined after the **Toggle Help** button is pressed.

Table 1-2. Terminal Block Wiring Connections

	Connections	Description
N1	J2-PIN 1	Door Strike 1: Neutral or common tie point. Allows the user to tie the power source and door strike commons together internally to the box.
N1	J2-PIN 2	
NC1	J2-PIN 3	Door Strike 1: Normally closed relay contact
NO1	J2-PIN 4	Door Strike 1: Normally opened relay contact
COM1	J2-PIN 5	Door Strike 1: Relay common connection
N2	J2-PIN 6	Door Strike 2: Neutral or common tie point. Allows the user to tie the power source and door strike commons together internally to the box.
N2	J2-PIN 7	
NC2	J2-PIN 8	Door Strike 2: Normally closed relay contact
NO2	J2-PIN 9	Door Strike 2: Normally opened relay contact
COM2	J2-PIN 10	Door Strike 2: Relay common connection
DOOR1-H	J3-PIN 1	Door 1 sense high side connection
DOOR1-L	J3-PIN 2	Door 1 sense low side connection
BTN1-H	J3-PIN 3	Button 1 sense high side connection
BTN1-L	J3-PIN 4	Button 1 sense low side connection
DOOR2-H	J3-PIN 5	Door 2 sense high side connection
DOOR2-L	J3-PIN 6	Door 2 sense low side connection
BTN2-H	J3-PIN 7	Button 2 sense high side connection
BTN2-L	J3-PIN 8	Button 2 sense low side connection
12V(+)	J3-PIN 9	+12 V out at 500 mA
12V(-)	J3-PIN 10	Common connection for 12V output

1.9 Jumper Definitions

See [Table 1-2](#) for the jumper definitions.

Table 1-3. Jumper Definitions

Jumper	Description
JP4	Missing Installed—RTFM: Reset to factory defaults
JP6 ^a	Missing—Relay active state when energized Installed—Relay active state when not energized (i.e. no power, fail safe)
JP9 ^a	Missing—Button active when contacts shorted Installed—Button active when contacts open, fail safe)
JP10 ^a	Missing—Door open when contacts open Installed—Door open when contacts shorted

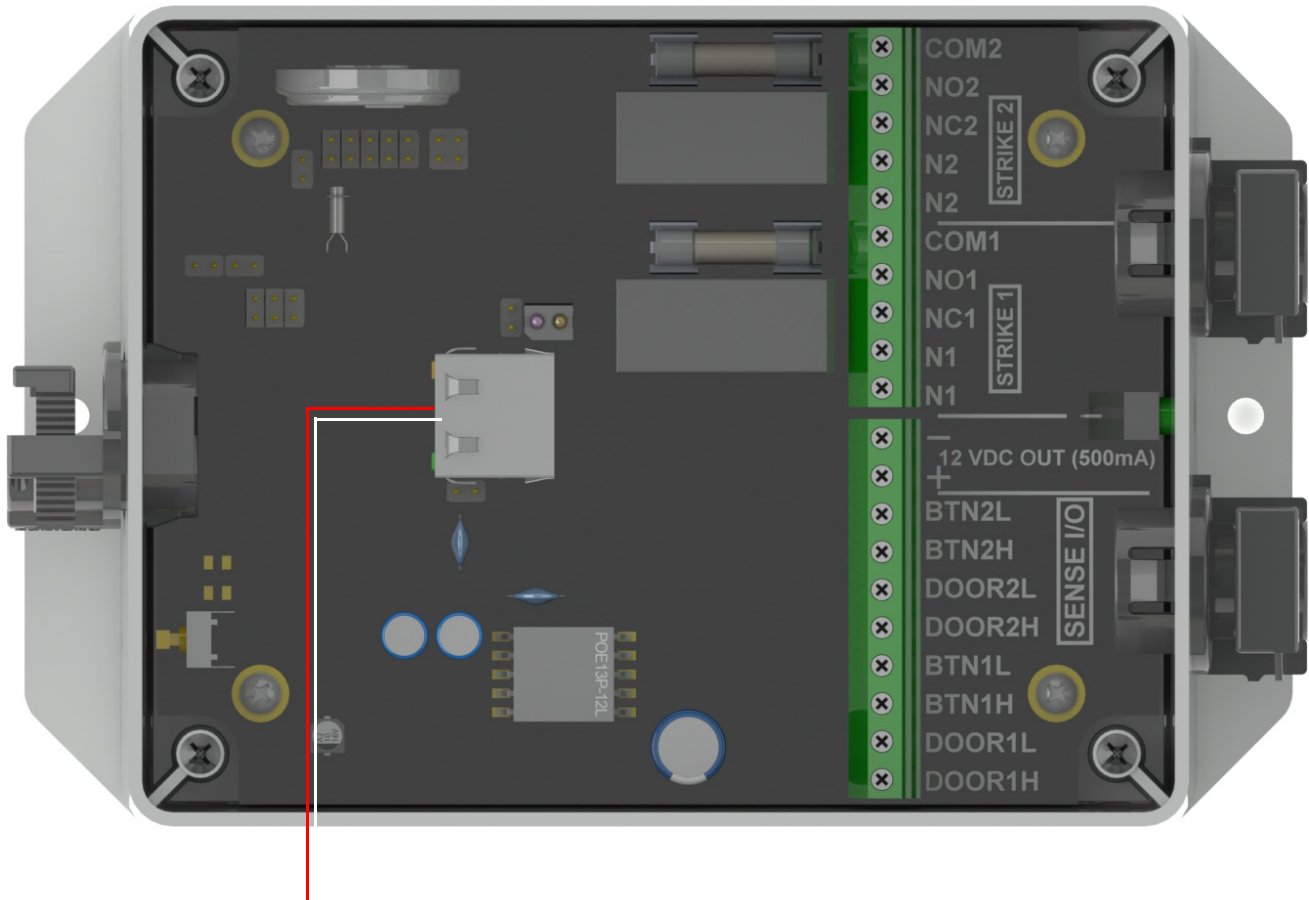
a. These settings are also configurable by using the configuration utility. CyberData recommends setting these parameters by using the configuration utility and leaving the jumpers off.

1.10 Reset to Factory Defaults

To reset the device to the original factory default settings, complete the following steps:

1. Remove power from the device by disconnecting the PoE network ethernet cable connection from J1.

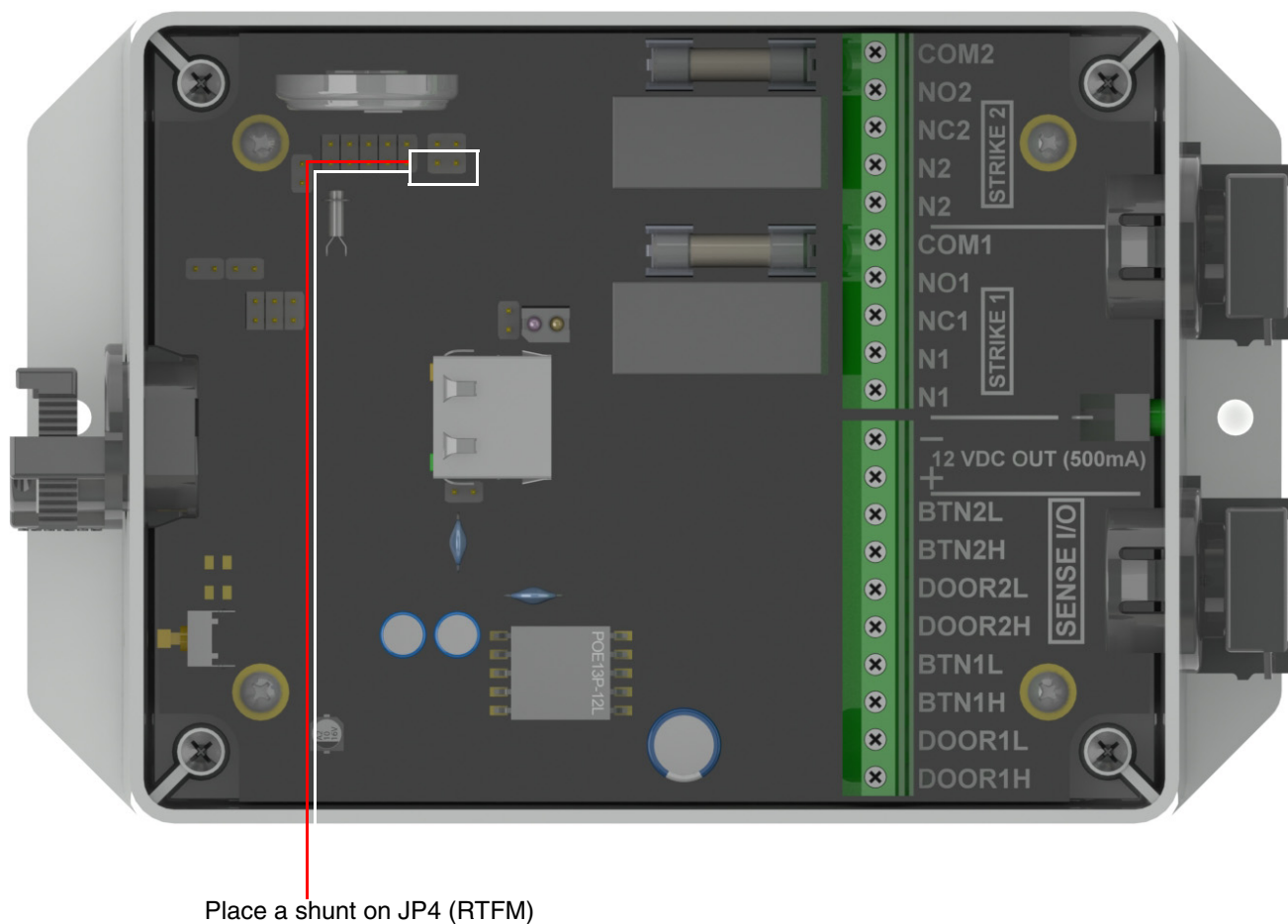
Figure 1-5. Disconnect the PoE network ethernet cable connection from J1



Disconnect the PoE network ethernet cable connection from J1

2. Place a shunt on JP4 (RTFM).

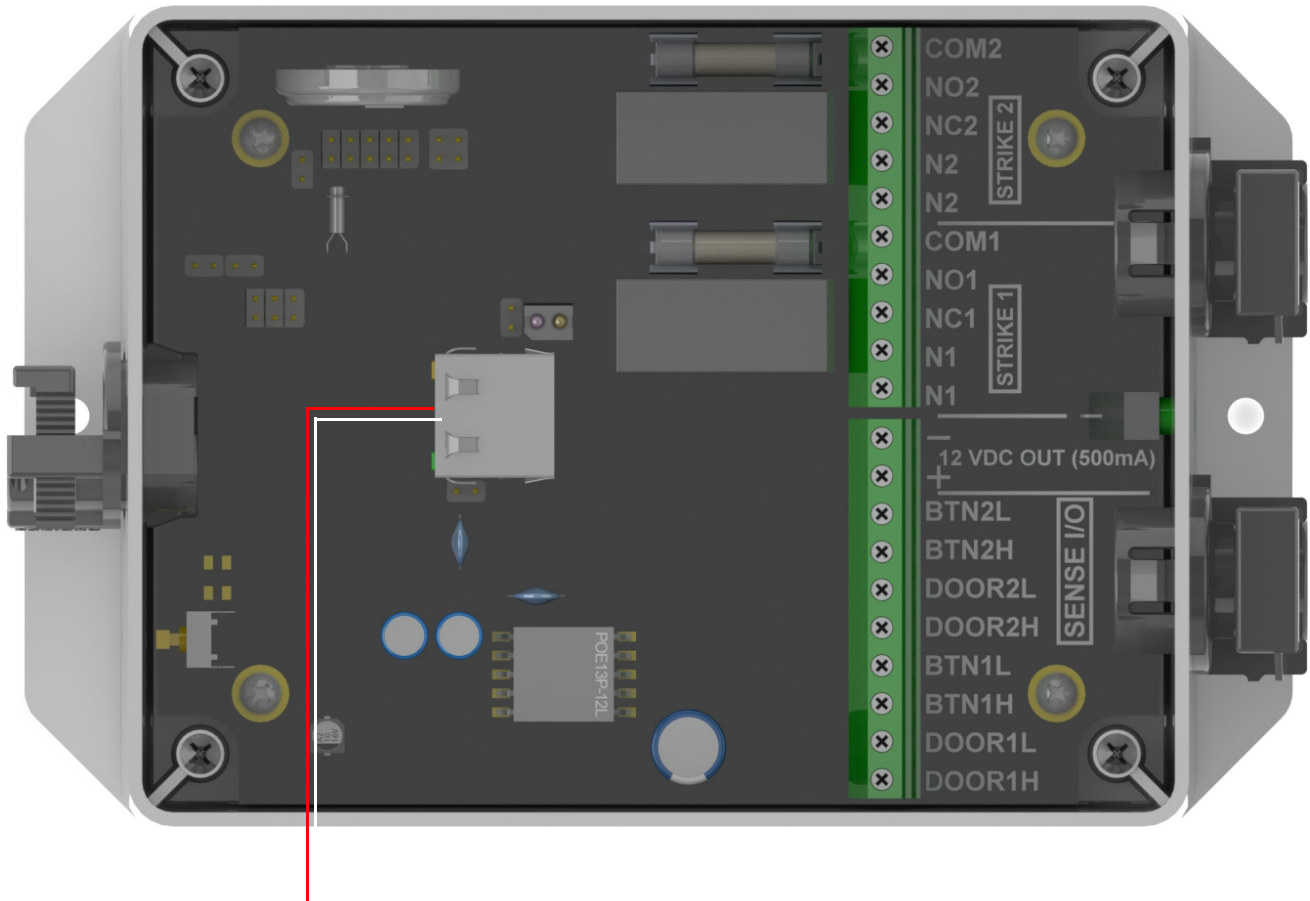
Figure 1-6. Place a shunt on JP4 (RTFM)



Place a shunt on JP4 (RTFM)

3. Supply power to the device by connecting the PoE network ethernet cable connection to J1.

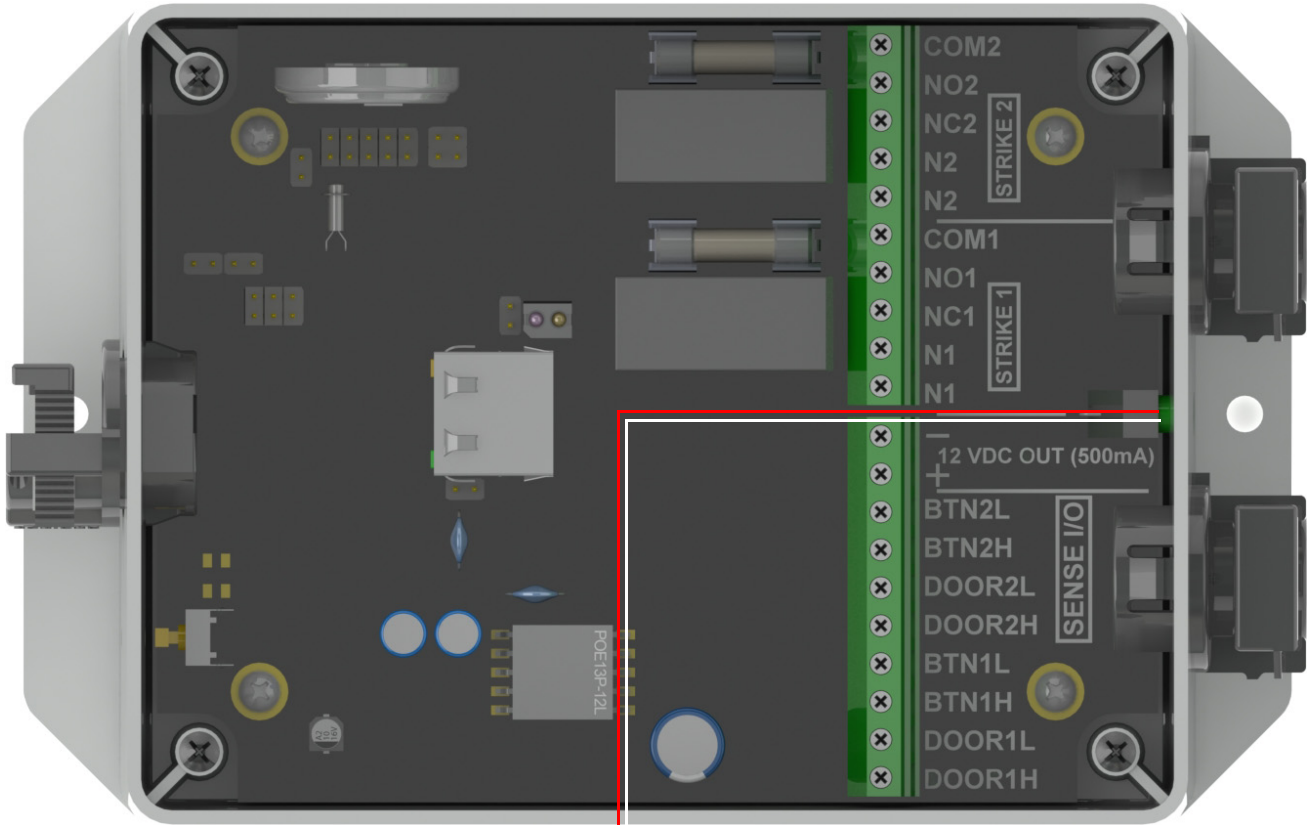
Figure 1-7. Connect the PoE network ethernet cable connection to J1



Connect the PoE network ethernet cable connection to J1

4. Wait until the LED slowly flashes green.

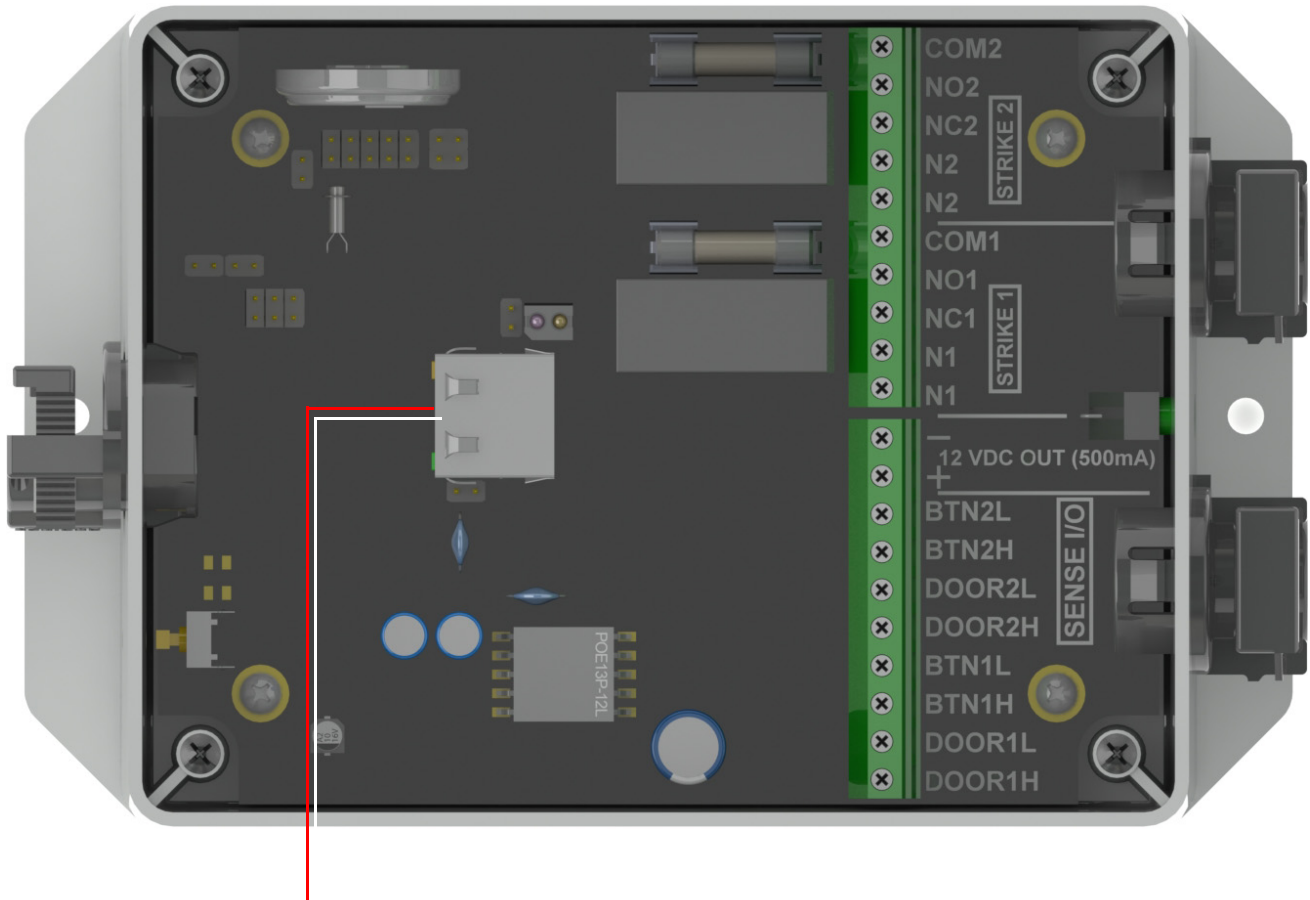
Figure 1-8. Wait until the LED slowly flashes green



Wait until the LED slowly flashes green

5. Remove power from the device by disconnecting the PoE network ethernet cable connection from J1.

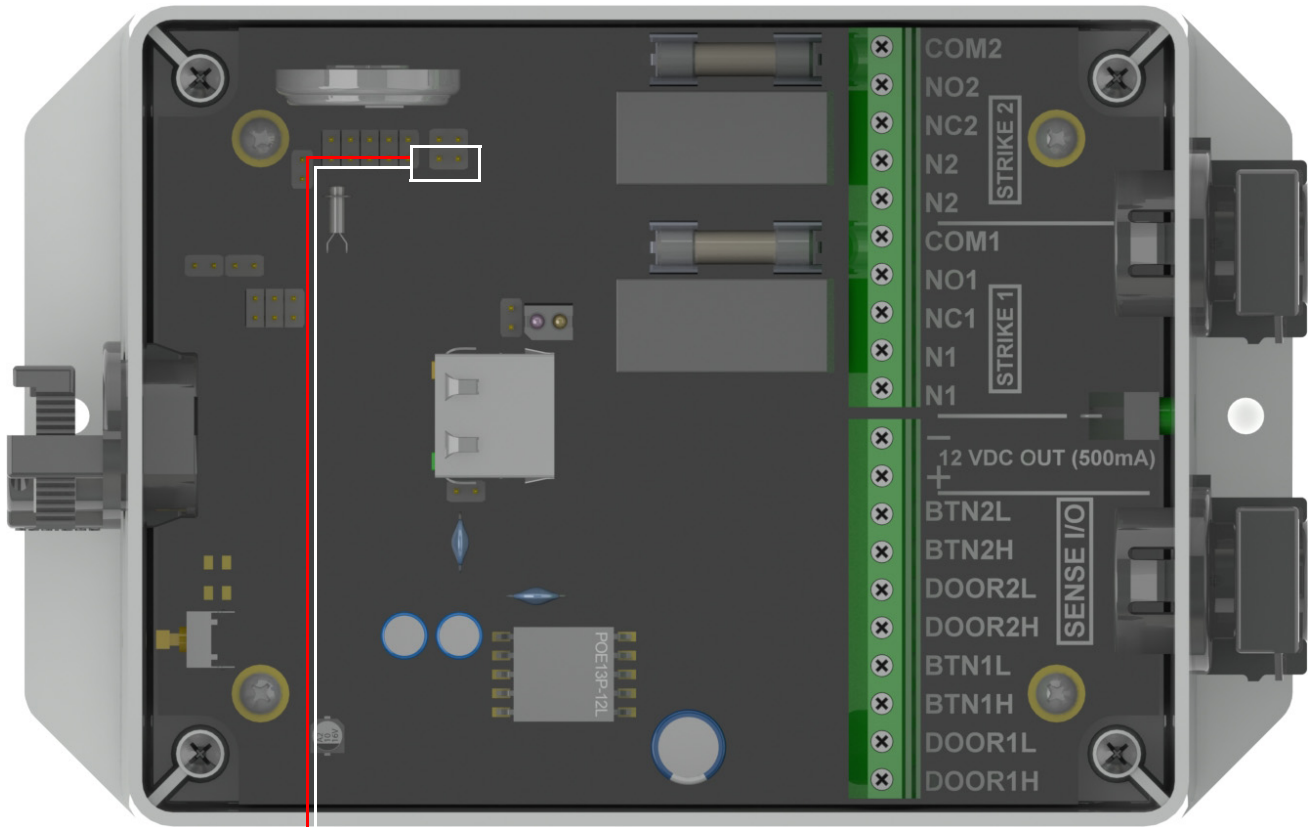
Figure 1-9. Disconnect the PoE network ethernet cable connection from J1



Disconnect the PoE network ethernet cable connection from J1

6. Remove the shunt from JP4.

Figure 1-10. Remove the shunt from JP4



Remove the shunt from JP4.

1.11 Connection Overview


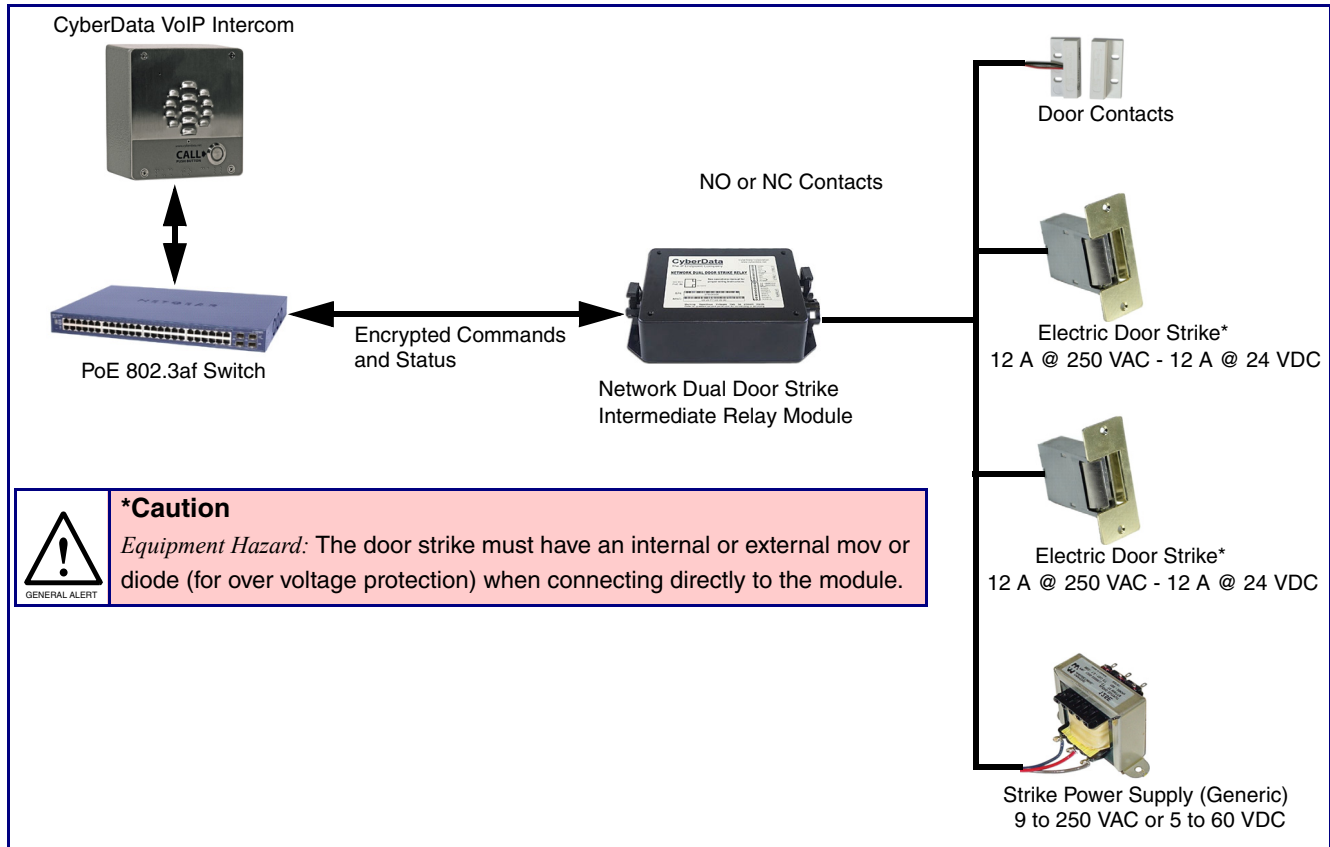
 GENERAL ALERT	<p>Warning</p> <p><i>Electrical Hazard:</i> Hazardous voltages may be present. No user serviceable part inside. Refer to qualified service personnel for connecting or servicing.</p>
--	--

Figure 1-11. Connection Overview



2 Configure the Door Strike Relay

The Door Strike Relay (DSR) is a network device designed to control an electronic door strike. The DSR is meant to be used as a replacement for (or an addition to) the on-board relay. In addition to being a drop-in 12 Amp relay, the DSR can monitor and record when the door is open or closed.

The DSR can be configured to trigger in the following ways: on the entry of a DTMF code, manually through the web interface, or by using a Windows application.

This section describes operations for running firmware version 4.8 or later of the Dual Door Strike Relay. If you have an older version of the firmware, then please contact CyberData Technical Support. The version number appears in the **Discovered Remote Relays** section on the **DSR** page (Figure 2-1).

Note CyberData has streamlined the Networked Dual Door Strike Relay (011375) functions with release 11.7.x of the SIP and Singlewire intercom line of products. The Dual Door Strike Relays operate in three modes:

Manual mode: The user enters a DTMF code to unlock or lock either or both remote relays. The relay(s) remain engaged until the deactivate code is received. Codes must be distinct.

Automatic mode: The user enters a DTMF code to unlock the outer relay, for the time specified by the user. When the outer door has opened and closed, and the specified time has elapsed, the inner relay will engage for the time specified. This mode also includes an override, where DTMF codes will lock or unlock both remote relays.

Single Mode: With only one door in use, the user enters a DTMF code to unlock the remote relay for the time specified by the user.

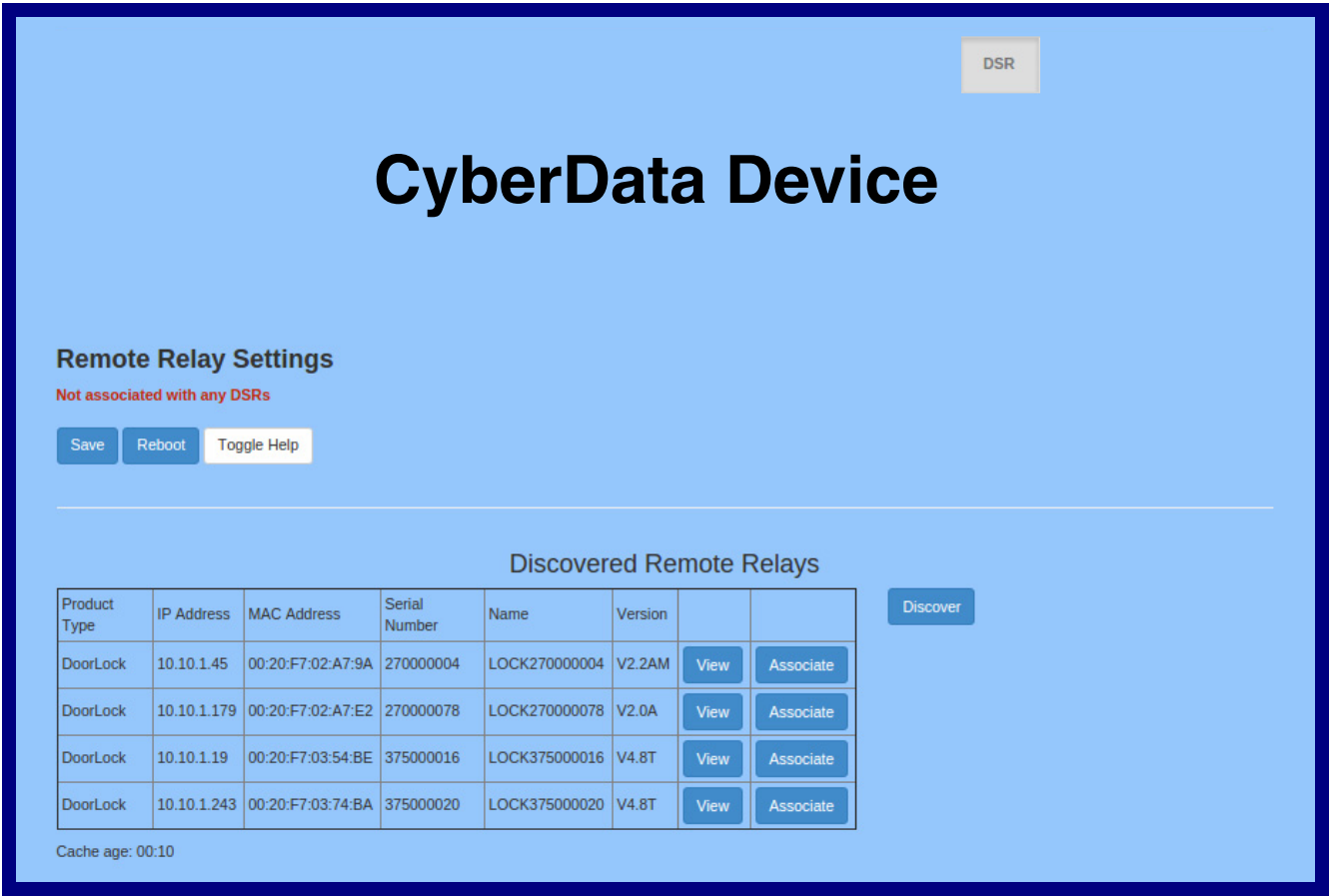
For legacy Networked Door Strike Relays (011270), the relay operates in Single Mode.

Keypad versions of the intercom may be configured to activate a single DSR, either a 011375 in Single Mode, or a 011270. The user has the option to use enter a code from the keypad to either activate the relay for a specified time, or to use a code to activate the relay until the deactivation code is entered.

Intercoms running version 11.7.0 or later must run the Networked Dual Door Strike Relay with version 4.8, and version 4.8 DDSRS must run with version 11.7.0 or later intercoms.

- 1. Click on the **DSR** menu button to open the **DSR** page (Figure 2-1).








Figure 2-1. DSR Page (not associated with any DSRs)



2. On the **DSR** page, enter values for the parameters indicated in [Table 2-1](#).

Note The question mark icon (?) in the following table shows which web page items will be defined after the **Toggle Help** button is pressed.

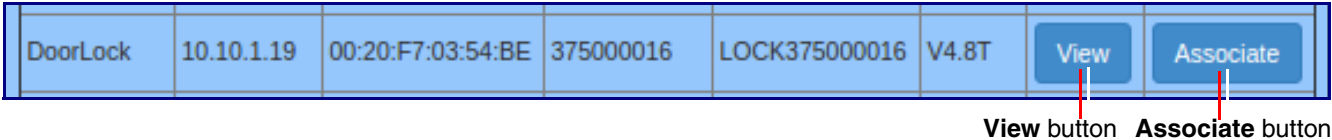
Table 2-1. DSR Configuration Parameters (not associated with any DSRs)

Web Page Item	Description
Remote Relay Settings	The settings in this section will activate an associated door strike relay.
	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.
	Click on the Toggle Help button to see a short description of some of the web page items. First click on the Toggle Help button, and you will see a question mark (?) appear next to some of the web page items. Move the mouse pointer to hover over a question mark to see a short description of a specific web page item.
Discovered Remote Relays	The Discovered Remote Relays section lists all of the networked door strike relays on the network. To associate your device with a door strike relay, click on the Associate button. This action allows the user to configure the door strike relay. Keep in mind that a device may only be associated with one door strike relay.
Product Type	Displays the product type of the remote relay.
IP Address	Displays the IP address of the remote relay.
MAC Address	Displays the MAC address of the remote relay.
Serial Number	Displays the serial number of the remote relay.
Name	Displays the name of the remote relay.
Version	Displays the version of the remote relay.
	Use this button to search for and find any remote relays that are available on the network.
	Use this button to view the settings of a remote relay that has been “discovered” after pressing the Discover button.
	Use this button to associate the remote relay with the device. Only one relay may be associated with a device.
	Use this button to disassociate the remote relay from the device. Only one relay may be associated with a device. This button is only available when a relay is associated with a device.

2.0.1 Dual DSR Mode Setting Modes

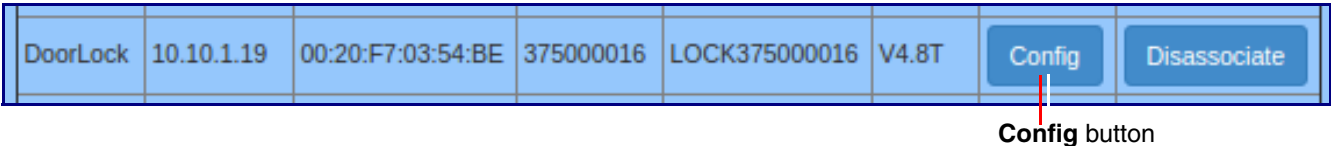
1. To access the Automatic, Manual, and Single DSR modes for the **Dual DSR Mode** setting, you must first associate the door strike relay with your CyberData device by clicking on the **Associate** button (Figure 2-2).

Figure 2-2. View Button and Associate Button



2. Once the door strike relay is associated, the **View** button (Figure 2-2) will change to the **Config** button (Figure 2-3).
3. Click on the **Config** button (Figure 2-3) to open the **Configure Device Page** (Figure 2-4).

Figure 2-3. Config Button



4. On the **Configure Device Page** (Figure 2-4), you can select one of the following modes for the **Dual DSR Mode** setting:
 - **Manual Mode:** In manual mode, the relays are activated and deactivated by the DTMF codes specified on the **DSR** web page. The codes must be distinct. See [Section 2.0.2, "Manual Mode"](#).
 - **Automatic:** In automatic mode, the outer relay (relay 2) is activated by DTMF, for the time specified in the **Energize Time** setting in the DSR **Configure Device Page**. After the door is opened and closed, the inner relay (relay 1) is activated, also for the time specified in the **Energize Time** setting in the DSR **Configure Device Page**. See [Section 2.0.3, "Automatic Mode"](#).
 - **Single DSR Mode:** In this mode, only the inner relay (relay 1) can be activated using the DTMF code specified on the web page, for the time specified in the **DTMF Pulse Duration (in seconds)** setting. See [Section 2.0.4, "Single DSR Mode"](#).

Figure 2-4. Configure Device Page

Configure Device

Serial Number

375000016

MAC Address

00:20:F7:03:54:BE

Version

V4.8T

Device Name

LOCK375000016

Addressing Mode

Static

☒ DHCP

IP Address:

10.10.1.19

Subnet Mask:

255.0.0.0

Default Gateway:

10.0.0.1

Command Port:

59999

Send Events

Off

☒ On

Event IP Address:

10.255.255.255

Event Port:

49999

Energize Time:

6

DST

Off

☒ On

DST Start:

M3.2.0/02.00.00

DST End:

M11.1.0/02.00.00

Current Time:

08:18:18 04212014

Encryption:

None

☒ AES-256

Password:

Dual DSR Mode:

☒ Manual Mode

☐ Automatic Mode

☐ Single DSR Mode

Refresh

Get Log

Clear Log

Reboot

Set Time

Save Changes

Cancel

Door State

open

Relay State

inactive

Button State

inactive

LED

red

Alarm State

alarm

JP4, 6, 9, 10

0000

Door2 State

closed

Relay2 State

inactive

Button2 State

inactive

Browse...

No file chosen

Upgrade

Dual DSR Modes

2.0.2 Manual Mode

Figure 2-5. DSR Page (Manual Mode)

DSR

CyberData Device

Remote Relay Settings

Associated with LOCK375000016 (10.10.1.19)

DTMF Unlock Door 1 Code:

456

DTMF Lock Door 1 Code:

654

DTMF Unlock Door 2 Code:

111

DTMF Lock Door 2 Code:

333

DTMF Unlock Both Doors Code:

777

DTMF Lock Both Doors Code:

999

Listen Port for Remote Relay Status:

49999

Save

Reboot

Toggle Help

Remote Door Sensor Settings

Door Open Timeout (in seconds):

0

Make call to extension:

☐

Play recorded audio:

☐

Dial Out Extension:

204

Dial Out ID:

id204

The Remote Relay Status section and settings only appear on the webpage when there is an associated door strike relay.

Remote Relay Status

Door 1: closed

Relay 1: inactive

Door 2: closed

Relay 2: inactive

Activate Relay 1

Deactivate Relay 1

Activate Relay 2

Deactivate Relay 2

Activate Remote Relays

Deactivate Remote Relays

Refresh

Discovered Remote Relays

Product Type	IP Address	MAC Address	Serial Number	Name	Version		
DoorLock	10.10.1.45	00:20:F7:02:A7:9A	270000004	LOCK270000004	V2.2AM	<div>View</div>	
DoorLock	10.10.1.179	00:20:F7:02:A7:E2	270000078	LOCK270000078	V2.0A	<div>View</div>	
DoorLock	10.10.1.19	00:20:F7:03:54:BE	375000016	LOCK375000016	V4.8T	<div>Config</div>	<div>Disassociate</div>
DoorLock	10.10.1.243	00:20:F7:03:74:BA	375000020	LOCK375000020	V4.8T	<div>View</div>	

Cache age: 00:16

Discover

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

Note The question mark icon (?) in the following table shows which web page items will be defined after the **Toggle Help** button is pressed.

Table 2-2. DSR Configuration Parameters (Manual Mode)

Web Page Item	Description
Remote Relay Settings	
DTMF Unlock Door 1 Code ?	Activation code used to activate the remote relay 1 (DSR) when entered on a phone during a SIP call with the device. Enter up to 25 digits (* and # are supported).
DTMF Lock Door 1 Code ?	Deactivation code used to deactivate the remote relay 1 (DSR) when entered on a phone during a SIP call with the device. Enter up to 25 digits (* and # are supported).
DTMF Unlock Door 2 Code ?	Activation code used to activate the remote relay 2 (DSR) when entered on a phone during a SIP call with the device. Enter up to 25 digits (* and # are supported)."
DTMF Lock Door 2 Code ?	Deactivation code used to deactivate the remote relay 2 (DSR) when entered on a phone during a SIP call with the device. Enter up to 25 digits (* and # are supported).
DTMF Unlock Both Doors Code ?	Activation code used to activate both remote relays (DSR) when entered on a phone during a SIP call with the device. Enter up to 25 digits (* and # are supported).
DTMF Lock Both Doors Code ?	Activation code used to activate both remote relays (DSR) when entered on a phone during a SIP call with the device. Enter up to 25 digits (* and # are supported).
Listen Port for Remote Relay Status ?	Specify the port to listen for remote relay (DSR) status packets.
Remote Door Sensor Settings	
Door Open Timeout (in seconds) ?	The time (in seconds) the device will wait before it performs an action when the remote (DSR) door sensor is activated. The action(s) performed are based on the configured Remote Door Sensor Settings below.
Make call to extension ?	When selected, the device will call an extension when the remote (DSR) door sensor is activated. Use the 'Dial Out Extension' field below to specify the extension the device will call.
Play recorded audio ?	When selected, the device will call the Dial Out Extension and play an audio file to the phone answering the SIP call (corresponds to Door Ajar on the Audiofiles page) when the remote (DSR) door sensor is activated.
Dial Out Extension ?	Specify the extension the device will call when the remote (DSR) door sensor is activated. Enter up to 64 alphanumeric characters.
Dial Out ID ?	An additional Caller identification string added to outbound calls. Enter up to 64 alphanumeric characters.
Save	Click the Save button to save your configuration settings. Note: You need to reboot for changes to take effect.
Reboot	Click on the Reboot button to reboot the system.

Table 2-2. DSR Configuration Parameters (Manual Mode)(continued)













Web Page Item	Description
	Click on the Toggle Help button to see a short description of some of the web page items. First click on the Toggle Help button, and you will see a question mark (?) appear next to some of the web page items. Move the mouse pointer to hover over a question mark to see a short description of a specific web page item.
Discovered Remote Relays	The Discovered Remote Relays section lists all of the networked door strike relays on the network. To associate your device with a door strike relay, click on the Associate button. This action allows the user to configure the door strike relay. Keep in mind that a device may only be associated with one door strike relay.
Product Type	Displays the product type of the remote relay.
IP Address	Displays the IP address of the remote relay.
MAC Address	Displays the MAC address of the remote relay.
Serial Number	Displays the serial number of the remote relay.
Name	Displays the name of the remote relay.
Version	Displays the version of the remote relay.
	Use this button to search for and find any remote relays that are available on the network.
	Use this button to view the settings of a remote relay that has been “discovered” after pressing the Discover button.
	Use this button to associate the remote relay with the device. Only one relay may be associated with a device.
	Use this button to disassociate the remote relay from the device. Only one relay may be associated with a device. This button is only available when a relay is associated with a device.
Remote Relay Status	Note: The Remote Relay Status section and settings only appear on the webpage when there is an associated door strike relay.
Door 1	Shows the status of Door 1.
Door 2	Shows the status of Door 2.
Relay 1	Shows the status of the Relay 1.
Relay 2	Shows the status of the Relay 2.
	Click on the Activate Relay 1 button to activate Relay 1 until the Deactivate Remote Relay 1 button is pressed.
	Click on the Deactivate Relay 1 button to deactivate Relay 1.
	Click on the Activate Relay 2 button to activate Relay 2 until the Deactivate Remote Relay 2 button is pressed.

Table 2-2. DSR Configuration Parameters (Manual Mode)(continued)

Web Page Item	Description
	Click on the Deactivate Relay 2 button to deactivate Relay 2.
	Click on the Activate Remote Relays button to activate both remote relays until the Deactivate Remote Relays button is pressed.
	Click on the Deactivate Remote Relays button to deactivate both remote relays.
	Click on the Refresh button to refresh the web page and accurately display the status of the remote relay (active/inactive) and door (open/closed).

2.0.3 Automatic Mode

Figure 2-6. DSR Page (Automatic Mode)

DSR

CyberData Device

Remote Relay Settings

Associated with LOCK375000016 (10.10.1.19)

DTMF Unlock Door 2 Code: 987

DTMF Pulse Duration (in seconds): 2

DTMF Unlock Both Doors Code: 777

DTMF Lock Both Doors Code: 999

Listen Port for Remote Relay Status: 49999

Save Reboot Toggle Help

Remote Door Sensor Settings

Door Open Timeout (in seconds): 0

Make call to extension: ☐

Play recorded audio: ☐

Dial Out Extension: 204

Dial Out ID: id204

Remote Relay Status

Door 1: closed Relay 1: inactive Door 2: closed Relay 2: inactive

Kick Remote Relay 2 Activate Remote Relays Deactivate Remote Relays Refresh

The Remote Relay Status section and settings only appear on the webpage when there is an associated door strike relay.

Discovered Remote Relays

Product Type	IP Address	MAC Address	Serial Number	Name	Version		
DoorLock	10.10.1.45	00:20:F7:02:A7:9A	270000004	LOCK270000004	V2.2AM	View	
DoorLock	10.10.1.179	00:20:F7:02:A7:E2	270000078	LOCK270000078	V2.0A	View	
DoorLock	10.10.1.19	00:20:F7:03:54:BE	375000016	LOCK375000016	V4.8T	Config	Disassociate
DoorLock	10.10.1.243	00:20:F7:03:74:BA	375000020	LOCK375000020	V4.8T	View	

Discover

Cache age: 00:30

6. On the **DSR** page, enter values for the parameters indicated in [Table 2-3](#).

Note The question mark icon (?) in the following table shows which web page items will be defined after the **Toggle Help** button is pressed.

Table 2-3. DSR Configuration Parameters (Automatic Mode)

Web Page Item	Description
Remote Relay Settings	
DTMF Unlock Door 2 Code ?	Activation code used to activate the remote relay 2 (DSR) when entered on a phone during a SIP call with the device. Enter up to 25 digits (* and # are supported)."
DTMF Unlock Both Doors Code ?	Activation code used to activate both remote relays (DSR) when entered on a phone during a SIP call with the device. Enter up to 25 digits (* and # are supported).
DTMF Lock Both Doors Code ?	Activation code used to activate both remote relays (DSR) when entered on a phone during a SIP call with the device. Enter up to 25 digits (* and # are supported).
Listen Port for Remote Relay Status ?	Specify the port to listen for remote relay (DSR) status packets.
Remote Door Sensor Settings	
Door Open Timeout (in seconds) ?	The time (in seconds) the device will wait before it performs an action when the remote (DSR) door sensor is activated. The action(s) performed are based on the configured Remote Door Sensor Settings below.
Make call to extension ?	When selected, the device will call an extension when the remote (DSR) door sensor is activated. Use the 'Dial Out Extension' field below to specify the extension the device will call.
Play recorded audio ?	When selected, the device will call the Dial Out Extension and play an audio file to the phone answering the SIP call (corresponds to Door Ajar on the Audiofiles page) when the remote (DSR) door sensor is activated.
Dial Out Extension ?	Specify the extension the device will call when the remote (DSR) door sensor is activated. Enter up to 64 alphanumeric characters.
Dial Out ID ?	An additional Caller identification string added to outbound calls. Enter up to 64 alphanumeric characters.
Save	Click the Save button to save your configuration settings. Note: You need to reboot for changes to take effect.
Reboot	Click on the Reboot button to reboot the system.
Toggle Help	Click on the Toggle Help button to see a short description of some of the web page items. First click on the Toggle Help button, and you will see a question mark (?) appear next to some of the web page items. Move the mouse pointer to hover over a question mark to see a short description of a specific web page item.
Discovered Remote Relays	
The Discovered Remote Relays section lists all of the networked door strike relays on the network. To associate your device with a door strike relay, click on the Associate button. This action allows the user to configure the door strike relay. Keep in mind that a device may only be associated with one door strike relay.	
Product Type	Displays the product type of the remote relay.

Table 2-3. DSR Configuration Parameters (Automatic Mode) (continued)

Web Page Item	Description
IP Address	Displays the IP address of the remote relay.
MAC Address	Displays the MAC address of the remote relay.
Serial Number	Displays the serial number of the remote relay.
Name	Displays the name of the remote relay.
Version	Displays the version of the remote relay.
Discover	Use this button to search for and find any remote relays that are available on the network.
View	Use this button to view the settings of a remote relay that has been “discovered” after pressing the Discover button.
Associate	Use this button to associate the remote relay with the device. Only one relay may be associated with a device.
Disassociate	Use this button to disassociate the remote relay from the device. Only one relay may be associated with a device. This button is only available when a relay is associated with a device.
Remote Relay Status	Note: The Remote Relay Status section and settings only appear on the webpage when there is an associated door strike relay.
Door 1	Shows the status of Door 1.
Door 2	Shows the status of Door 2.
Relay 1	Shows the status of the Relay 1.
Relay 2	Shows the status of the Relay 2.
Kick Remote Relay 2	Click on the Kick Remote Relay 2 button to activate Relay 2 for the time specified in the DTMF Pulse Duration (in seconds) setting.
Activate Remote Relays	Click on the Activate Remote Relays button to activate both remote relays until the Deactivate Remote Relays button is pressed.
Deactivate Remote Relays	Click on the Deactivate Remote Relays button to deactivate both remote relays.
Refresh	Click on the Refresh button to refresh the web page and accurately display the status of the remote relay (active/inactive) and door (open/closed).

2.0.4 Single DSR Mode

Figure 2-7. DSR Page (Single DSR Mode)

DSR

CyberData Device

Remote Relay Settings

Associated with LOCK375000016 (10.10.1.19)

DTMF Unlock Door Code:

321

DTMF Pulse Duration (in seconds):

2

Listen Port for Remote Relay Status:

49999

Save

Reboot

Toggle Help

Remote Door Sensor Settings

Door Open Timeout (in seconds):

0

Make call to extension:

Play recorded audio:

Dial Out Extension:

204

Dial Out ID:

id204

Remote Relay Status

Door: closed Relay: inactive

Kick Remote Relay

Refresh

The Remote Relay Status section and settings only appear on the webpage when there is an associated door strike relay.

Discovered Remote Relays

Discover

Product Type	IP Address	MAC Address	Serial Number	Name	Version		
DoorLock	10.10.1.45	00:20:F7:02:A7:9A	270000004	LOCK270000004	V2.2AM	<div>View</div>	
DoorLock	10.10.1.179	00:20:F7:02:A7:E2	270000078	LOCK270000078	V2.0A	<div>View</div>	
DoorLock	10.10.1.19	00:20:F7:03:54:BE	375000016	LOCK375000016	V4.8T	<div>Config</div>	<div>Disassociate</div>
DoorLock	10.10.1.243	00:20:F7:03:74:BA	375000020	LOCK375000020	V4.8T	<div>View</div>	

Cache age: 00:15

Operation Guide

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CyberData Corporation







7. On the **DSR** page, enter values for the parameters indicated in [Table 2-4](#).

Note The question mark icon (?) in the following table shows which web page items will be defined after the **Toggle Help** button is pressed.

Table 2-4. DSR Configuration Parameters (Single DSR Mode)

Web Page Item	Description
Remote Relay Settings	
DTMF Unlock Door Code ?	Activation code used to activate the remote relay (DSR) when entered on a phone during a SIP call with the device. Enter up to 25 digits (* and # are supported)
DTMF Pulse Duration (in seconds) ?	The length of time (in seconds) during which the remote relay (DSR) will be activated when the DTMF Pulse Code is detected. Enter up to 2 digits. Note: Set the value in the Energize Time setting to match the value in the DTMF Pulse Duration (in seconds) setting.
Listen Port for Remote Relay Status ?	Specify the port to listen for remote relay (DSR) status packets.
Remote Door Sensor Settings	
Door Open Timeout (in seconds) ?	The time (in seconds) the device will wait before it performs an action when the remote (DSR) door sensor is activated. The action(s) performed are based on the configured Remote Door Sensor Settings below.
Make call to extension ?	When selected, the device will call an extension when the remote (DSR) door sensor is activated. Use the 'Dial Out Extension' field below to specify the extension the device will call.
Play recorded audio ?	When selected, the device will call the Dial Out Extension and play an audio file to the phone answering the SIP call (corresponds to Door Ajar on the Audiofiles page) when the remote (DSR) door sensor is activated.
Dial Out Extension ?	Specify the extension the device will call when the remote (DSR) door sensor is activated. Enter up to 64 alphanumeric characters.
Dial Out ID ?	An additional Caller identification string added to outbound calls. Enter up to 64 alphanumeric characters.
Save	Click the Save button to save your configuration settings. Note: You need to reboot for changes to take effect.
Reboot	Click on the Reboot button to reboot the system.
Toggle Help	Click on the Toggle Help button to see a short description of some of the web page items. First click on the Toggle Help button, and you will see a question mark (?) appear next to some of the web page items. Move the mouse pointer to hover over a question mark to see a short description of a specific web page item.
Discovered Remote Relays	
The Discovered Remote Relays section lists all of the networked door strike relays on the network. To associate your device with a door strike relay, click on the Associate button. This action allows the user to configure the door strike relay. Keep in mind that a device may only be associated with one door strike relay.	
Product Type	Displays the product type of the remote relay.
IP Address	Displays the IP address of the remote relay.

Table 2-4. DSR Configuration Parameters (Single DSR Mode) (continued)

Web Page Item	Description
MAC Address	Displays the MAC address of the remote relay.
Serial Number	Displays the serial number of the remote relay.
Name	Displays the name of the remote relay.
Version	Displays the version of the remote relay.
	Use this button to search for and find any remote relays that are available on the network.
	Use this button to view the settings of a remote relay that has been “discovered” after pressing the Discover button.
	Use this button to associate the remote relay with the device. Only one relay may be associated with a device.
	Use this button to disassociate the remote relay from the device. Only one relay may be associated with a device. This button is only available when a relay is associated with a device.
Remote Relay Status	Note: The Remote Relay Status section and settings only appear on the webpage when there is an associated door strike relay.
Door	Shows the status of the door.
Relay	Shows the status of the remote relay.
	Click on the Kick Remote Relay button to activate Relay 1 for the time specified in the DTMF Pulse Duration (in seconds) setting.
	Click on the Refresh button to refresh the web page and accurately display the status of the remote relay (active/inactive) and door (open/closed).

2.0.5 Configure the Device (on the DSR page)

1. Click the **View** button on the **DSR** page to open the **Configure Device** page. After associating your device with a DSR, the **View** button will change to the **Config** button. Selecting the **Config** button allows the user to configure the associated DSR.

Figure 2-8. Configure Device Page

Configure Device

Serial Number	<input type="text" value="375000016"/>	<input type="button" value="Refresh"/>
MAC Address	<input type="text" value="00:20:F7:03:54:BE"/>	<input type="button" value="Get Log"/>
Version	<input type="text" value="V4.8T"/>	<input type="button" value="Clear Log"/>
Device Name	<input type="text" value="LOCK375000016"/>	<input type="button" value="Reboot"/>
Addressing Mode	<input checked="" type="radio"/> Static <input checked="" type="radio"/> DHCP	<input type="button" value="Set Time"/>
IP Address:	<input type="text" value="10.10.1.19"/>	<input type="button" value="Save Changes"/>
Subnet Mask:	<input type="text" value="255.0.0.0"/>	<input type="button" value="Cancel"/>
Default Gateway:	<input type="text" value="10.0.0.1"/>	
Command Port:	<input type="text" value="59999"/>	
Send Events	<input checked="" type="radio"/> Off <input type="radio"/> On	
Event IP Address:	<input type="text" value="10.255.255.255"/>	
Event Port:	<input type="text" value="49999"/>	
Energize Time:	<input type="text" value="6"/>	
DST	<input checked="" type="radio"/> Off <input type="radio"/> On	
DST Start:	<input type="text" value="M3.2.0/02.00.00"/>	
DST End:	<input type="text" value="M11.1.0/02.00.00"/>	
Current Time:	<input type="text" value="08:18:18 04212014"/>	
Encryption:	<input checked="" type="radio"/> None <input type="radio"/> AES-256	
Password:	<input type="password"/>	
Dual DSR Mode:	<input checked="" type="radio"/> Manual Mode <input type="radio"/> Automatic Mode <input type="radio"/> Single DSR Mode	

Door State	<input type="text" value="open"/>	
Relay State	<input type="text" value="inactive"/>	
Button State	<input type="text" value="inactive"/>	
LED	<input type="text" value="red"/>	
Alarm State	<input type="text" value="alarm"/>	
JP4, 6, 9, 10	<input type="text" value="0000"/>	
Door2 State	<input type="text" value="closed"/>	
Relay2 State	<input type="text" value="inactive"/>	
Button2 State	<input type="text" value="inactive"/>	

No file chosen

2. On the **Configure Device** page, enter values for the parameters indicated in [Table 2-5](#).

Note The question mark icon (?) in the following table shows which web page items will be defined after the **Toggle Help** button is pressed.

Table 2-5. Configure Device Parameters

Web Page Item	Description
Serial Number	Displays the serial number of the door strike relay.
MAC Address	Displays the mac address of the door strike relay.
Version	Displays the firmware version of the door strike relay.
Device Name	Displays the name of the door strike relay. The default name is "LOCK," followed by the 9 digit ASCII serial number. The maximum name length is 13 characters. The unit will always respond to its default name.
Addressing Mode	Determines whether an IP address will be manually assigned through Static mode or dynamically assigned through a DHCP server.
IP Address	Displays the IP address of the door strike relay.
Subnet Mask	Displays the subnet mask of the door strike relay.
Default Gateway	Displays the default gateway of the door strike relay.
Command Port	This shows the port on which the door strike relay sends status packets to the device (defaults to 49999).
Send Events	When enabled, events can be sent to the associated device.
Event IP Address	The IP address of the associated device.
Event Port	This is the port by which the door strike relay receives commands (defaults to 59999).
Energize Time	This is the number of seconds that the relay will be energized.
DST	Allows you to either enable or disable the Daylight Savings Time feature.
DST Start	<p>Sets the Daylight Savings Time starting time in the following format:</p> <p>M3.2.0/02:00:00</p> <p>M3 is the third month (March).</p> <p>.2 is the second occurrence of the day in the month.</p> <p>.0 is Sunday.</p> <p>/02:00:00 is the time.</p> <p>Note: When the occurrence is set to 5, the final occurrence of the day in the specified month is used.</p>
DST End	<p>Sets the Daylight Savings Time ending time in the following format:</p> <p>M11.1.0/02:00:00</p> <p>M11 is the eleventh month (November).</p> <p>.1 is the first occurrence of the day in the month.</p> <p>.0 is Sunday.</p> <p>/02:00:00 is the time.</p> <p>Note: When the occurrence is set to 5, the final occurrence of the day in the specified month is used.</p>

Table 2-5. Configure Device Parameters (continued)








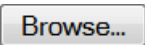

Web Page Item	Description
Current Time	Sets the current time. Note: Be sure to save the current time by clicking on the Set Time button.
Encryption	Encryption can either be set to None or AES-256 .
Password	Sets the AES encryption key. If encryption is currently enabled, the response to this command will be sent using the “old” key. The new key should be sent as 64 ASCII hexadecimal characters.
Dual DSR Mode	See Section 2.0.1, "Dual DSR Mode Setting Modes" . Manual: In manual mode, the relays are activated and deactivated by the DTMF codes specified on the DSR web page. The codes must be distinct. Automatic: In automatic mode, the outer relay (relay 2) is activated by DTMF, for the time specified in the Energize Time setting in the DSR Configure Device Page . After the door is opened and closed, the inner relay (relay 1) is activated, also for the time specified in the Energize Time setting in the DSR Configure Device Page . Single DSR Mode: In this mode, only the inner relay (relay 1) can be activated using the DTMF code specified on the web page, for the time specified in the DTMF Pulse Duration (in seconds) setting.
Door State	This field displays the current door state and is not configurable.
Relay State	This field displays the current relay state and is not configurable.
Button State	This field displays the current button state and is not configurable.
LED	This field displays the current LED state and is not configurable.
Alarm State	This field displays the current alarm state and is not configurable.
JP4, 6, 9, 10	This shows whether jumpers JP4, JP6, JP9, or JP10 are either enabled or disabled through the four digit sequence (0000). The 0 turns to 1 for an enabled jumper. For example, 0011 would mean jumpers JP9 and JP10 are activated, but JP4 and JP9 are not.
Door2 State	This field displays the current door2 state and is not configurable.
Relay2 State	This field displays the current relay2 state and is not configurable.
Button2 State	This field displays the current button2 state and is not configurable.
	Click on the Refresh button to refresh the Device Configuration page.
	Click on the Get Log button to get a log of the associated door strike relay activity. The door strike relay has 128Kb non-volatile storage for log data, storing an average of 10 days' worth of log data before it is overwritten.
	Click on the Clear Log button to clear the log from the door strike relay
	Click on the Reboot button to reboot any “discovered” remote relays and clear any associated devices.
	Click on the Set Time button to change the time.

Table 2-5. Configure Device Parameters (continued)

Web Page Item	Description
	Click on the Save Changes button to save any changes that are made to the Device Configuration page. Note: The time setting must be saved by pressing the Set Time button.
	Click on the Cancel button to cancel any changes that were made to the Configure Device page and return to the DSR page.
	Click on the Browse button to navigate through your computer and find firmware files.
	Click on the Upgrade button to upgrade the firmware of the door strike relay.

- Note** You must click on the **Save** button and then the **Reboot** button for the changes to take effect.
- Note** Associating a DSR does not require a reboot. However, you should reboot the device after disassociating a DSR.
- Note** Changes to the [Configure Device Page](#) require the user to select **Save Changes** within the window for the changes to take effect. This action reboots the DSR, but not the device.
- Note** DTMF and Door Sensor settings do not require a reboot for the changes to take effect.

3 Networked Door Strike Configuration Utility

3.1 Introduction

The Networked Door Strike Intermediate Relay Module Configuration Utility is Windows-based software used for discovering, configuring, and functional testing the CyberData Networked Door Strike Intermediate Relay Module (referred to as DSR in this document).

You can download the configuration utility program by completing the following steps:

1. Go to the following URL:
<http://www.cyberdata.net/voip/011375/>
2. Click on the **Downloads** tab.

3.2 Installation

To install the configuration utility, copy the configuration utility program to the desktop or in some other directory, and then create a shortcut for the program on your desktop or in some other directory. See [Figure 3-1](#).

Figure 3-1. Configuration Utility Program Shortcut

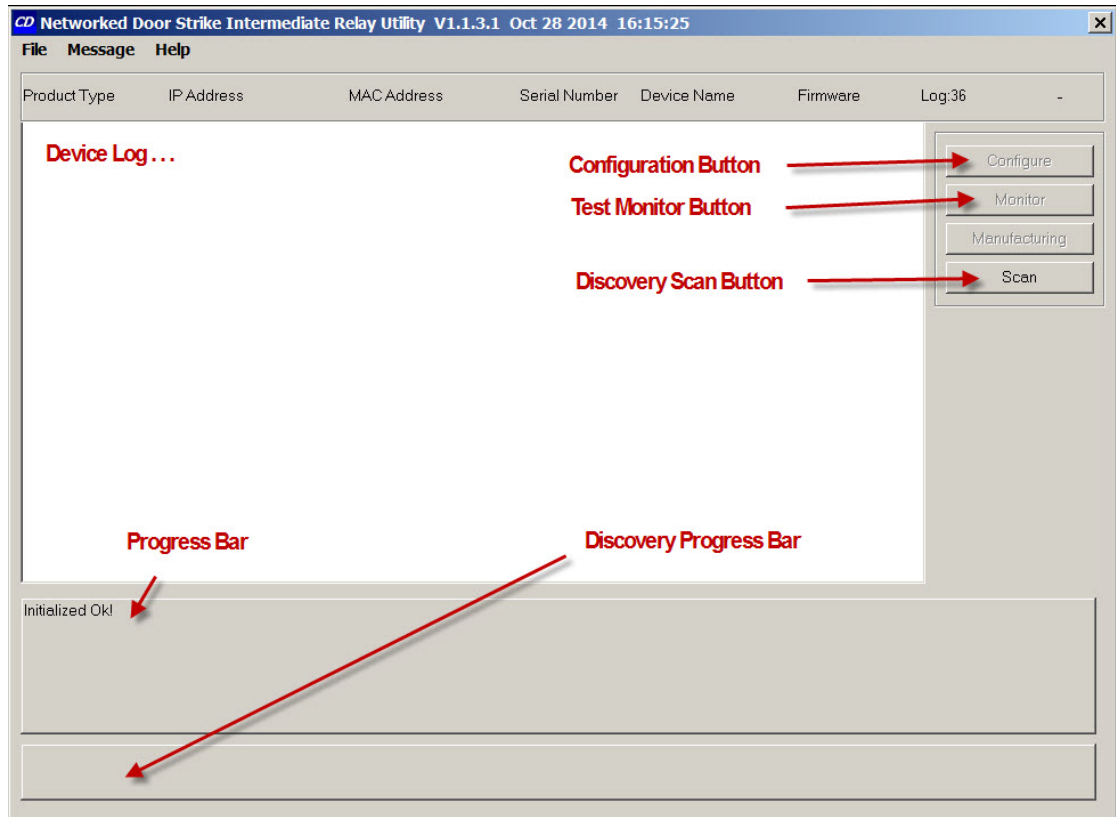


Note In [Figure 3-1](#), the configuration utility program is named **CDDsUtilR**. However, the program might be named something different on your computer.

3.3 Main Dialog

Double-click on the configuration utility shortcut (see [Figure 3-1](#)) to open the program, and the Main Dialog appears (see [Figure 3-2](#)):

Figure 3-2. Main Dialog



[Table 3-2](#) shows the function of the items that are available on the Main Dialog.

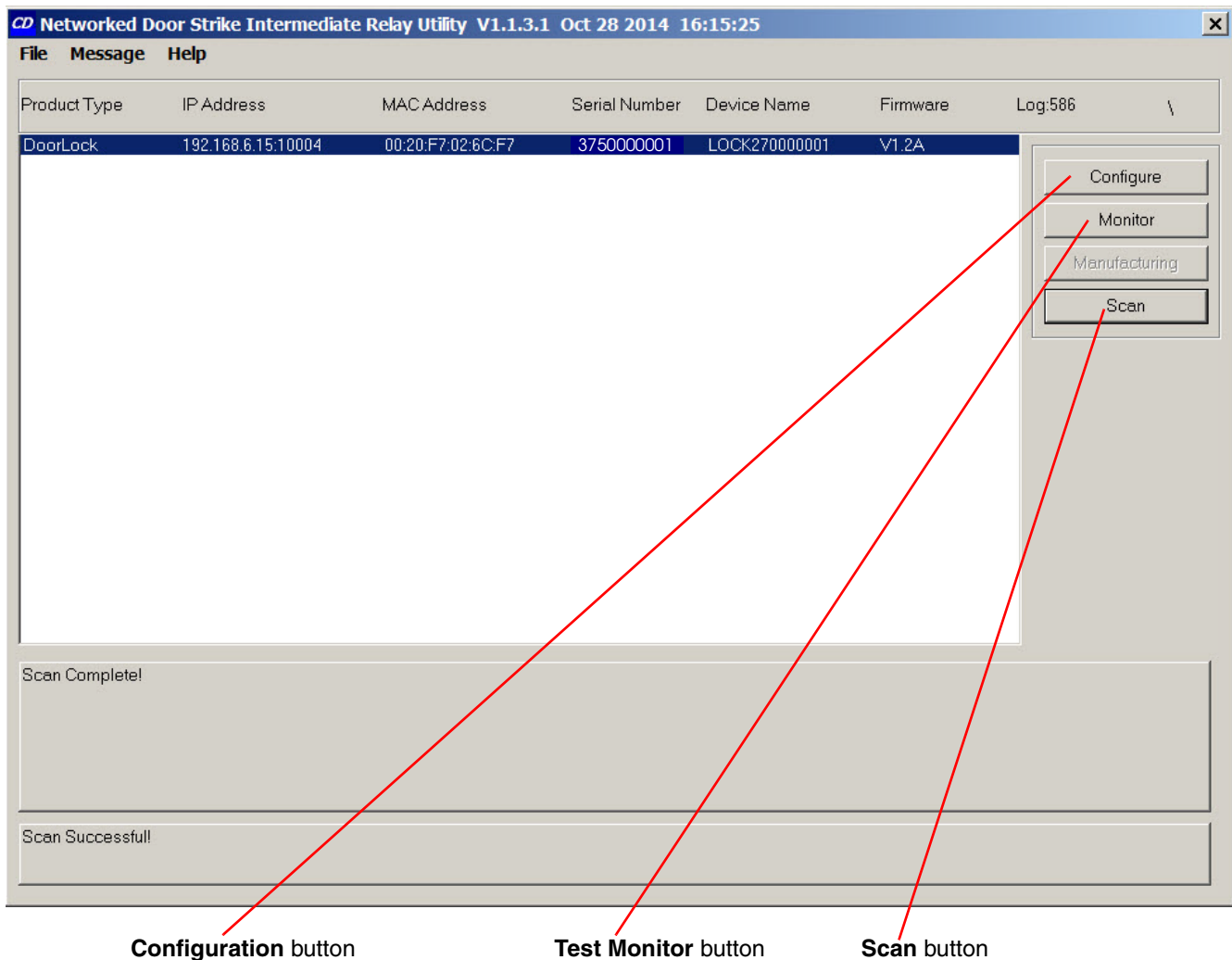
Table 3-1. Main Dialog Items

Item	Function
Discovery Scan Button	Clicking this button starts Discovery of DSRs that are attached to the Local Area Network (LAN). During Discovery, the Configuration Button and Test Monitor Button are not available. When Discovery completes, a list of DSRs connected to the LAN appears on the Device Log , and then the Configuration Button and Test Monitor Button become active.
Device Log	As DSRs are Discovered on the LAN, they will appear as a list in the Device Log.
Configuration Button	Selecting a DSR from the Device Log and clicking this button will open the Configuration Dialog (see Section 3.4.1, "Configuration Dialog") for the selected DSR.
Test Monitor Button	Selecting a DSR from the Device Log and clicking this button will open the Test Monitor Dialog (see Section 3.5.2, "Test Monitor Dialog") for the selected DSR.
Progress Bar and Discovery Progress Bar	The Progress Bar and Discovery Progress Bar are constantly being updated. If an error occurs during Discovery, Configuration, or Testing, messages appearing in the Progress Bars will show the cause of the error.

3.4 Discovery Dialog

Clicking the [Discovery Scan Button](#) starts the “Discovery” of DSRs on the LAN. During Discovery, the [Configuration Button](#) and [Test Monitor Button](#) are not available. When Discovery completes, a list of DSRs connected to the LAN appears on the [Device Log](#), and then the [Configuration Button](#) and [Test Monitor Button](#) become active.

Figure 3-3. Discovery Dialog



In [Figure 3-3](#), there is only one DSR connected to the LAN. If there were more DSRs on the LAN, they would appear as a list of DSRs. The final DSR discovered is automatically selected. Network Configuration parameters such as IP Address and MAC Address are listed as well as DSR manufacture information, serial number, device name, and firmware version.

If more than one DSR appears on the list, click anywhere the list entry to select which DSR is to be Configured or Tested.

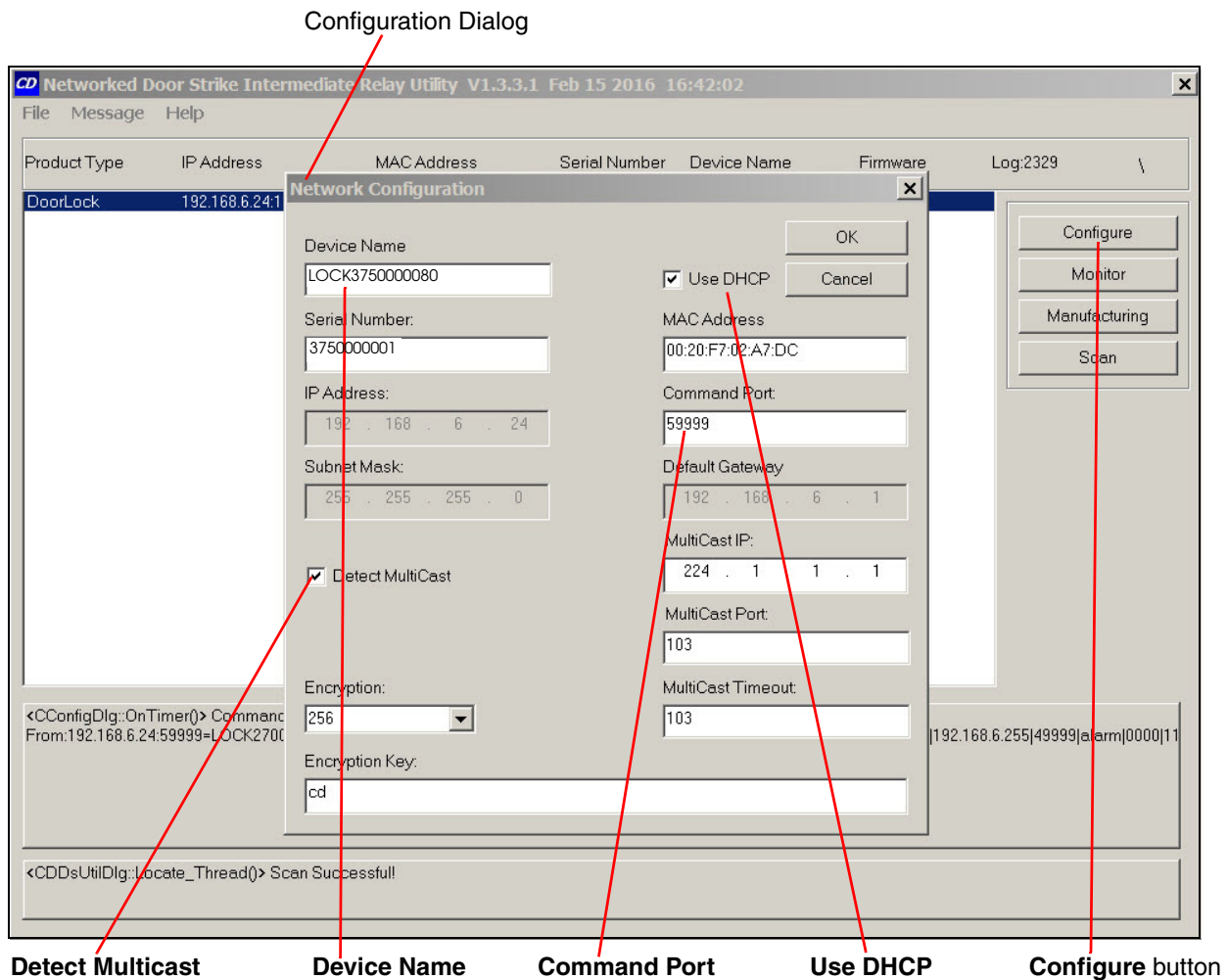
Then click the [Configuration Button](#) or [Test Monitor Button](#) to open the [Configuration Dialog](#) or [Test Monitor Dialog](#).

3.4.1 Configuration Dialog

Click on the [Configuration Button](#) to go to the Configuration Dialog (see [Figure 3-3](#)). The Configuration Dialog allows you to configure the DSR name and LAN connection variables.

Note This software will not configure or enable encryption.

Figure 3-4. Configuration Dialog



On the Configuration Dialog, you may enter values for the parameters indicated in [Table 3-2](#).

Table 3-2. Configuration Dialog Items

Item	Function
Device Name	Default DSR name is generated at time of manufacture and comprises 'LOCK' concatenated with the DSR serial number. Maximum length is 13 characters.
Serial Number	The serial number is generated at time of manufacture and cannot be changed.
IP Address	The IP address is assigned by DHCP or Static IP.
Subnet Mask	The subnet mask is a screen of numbers used for routing traffic within a subnet.

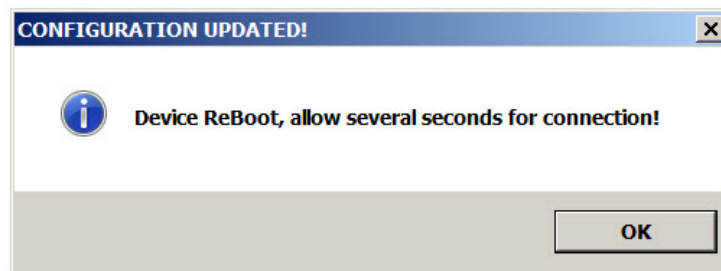
Table 3-2. Configuration Dialog Items (continued)

Item	Function
Detect Multicast	Check to enable Multicast detect on Multicast IP, Multicast Port, and Multicast Timeout.
Encryption	Select NONE for no encryption, or 256 for AES-256 encryption.
Encryption Key	If AES-256 encryption is selected, enter an encryption key of up to 32 Ascii characters or 64 Hexadecimal encoded key value.
Use DHCP	Manufacture default is IP by DHCP. Removing the check makes available IP Address, Subnet Mask, and Default Gateway for static IP configuration.
MAC Address	The MAC address is generated at time of manufacture and cannot be changed.
Command Port	In the event the default command port conflicts with other applications using the LAN, the command port can be changed to another value. The command port is the port that the DSR listens to for commands on the LAN.
Default Gateway	In computer networking, the default gateway is the node that is assumed to know how to forward packets onto other networks.
Multicast IP Address	224.0.0.0 to 239.255.255.255 (see RFC 5771)
Multicast Port	The Multicast Port is the group port address used for the specified multicast IP packet stream.
Multicast Timeout	The Multicast Timeout is the number of seconds that the relay will remain energized after receipt of the multicast packet.

3.4.2 Configuration Updated Dialog

If configuration changes have been made which require the DSR to be restarted, the Configuration Updated Dialog will appear:

Figure 3-5. Configuration Updated Dialog



Configuration changes that require a restart are DHCP to static IP or static IP to DHCP.

Wait 10 seconds for the DSR to implement configuration changes then click on the **OK** button.

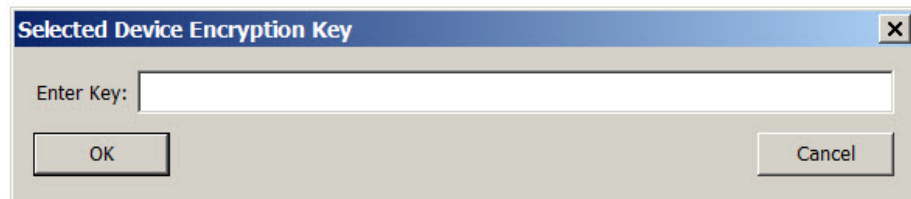
A scan of DSRs will automatically be started, and then the [Main Dialog](#) (Figure 3-2) will appear.

3.5 Test Monitor Dialog

3.5.1 Selected Device Encryption Key

If encryption has been configured by other software for the DSR being tested, the **Selected Device Encryption Key** Dialog (Figure 3-6) will appear and the encryption key must be provided before proceeding to the [Test Monitor Dialog](#) (see [Section 3.5.2, "Test Monitor Dialog"](#)).

Figure 3-6. Selected Device Encryption Key Dialog



The Encryption Key is 64 hexadecimal characters which is 32 hexadecimal pairs, or not more than 32 ASCII characters.

If a hexadecimal key is entered, exactly 64 hexadecimal characters must be provided.

If an ASCII key is provided, up to 32 characters of ASCII characters may be provided. The software will convert an ASCII key to hexadecimal before sending the key to the Network Dual Door Strike Intermediate Relay Module.

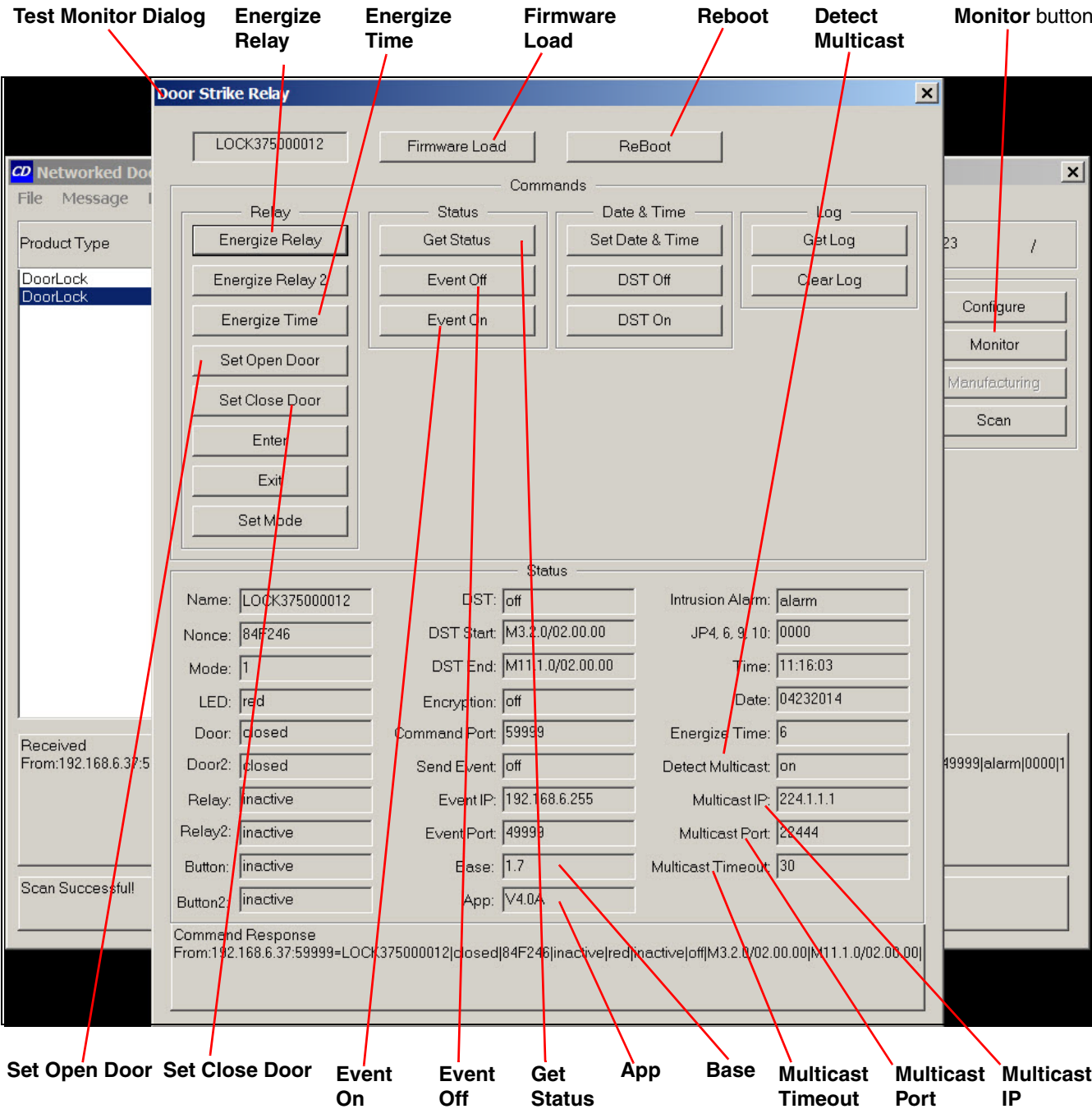
Software decides that the key is ASCII if 32 characters or less have been provided.

Software decides that the key is hexadecimal if exactly 64 characters have been provided and all of the characters are hexadecimal.

3.5.2 Test Monitor Dialog

Click on the **Monitor** button to go to the Test Monitor Dialog (see [Figure 3-7](#)). The Test Monitor Dialog is used to test commands from a Host in conjunction with DSR hardware and to make configuration of features not network-related.

Figure 3-7. Test Monitor Dialog



On the Test Monitor Dialog, you may enter values for the parameters indicated in [Table 3-3](#).

Table 3-3. Test Monitor Dialog Items

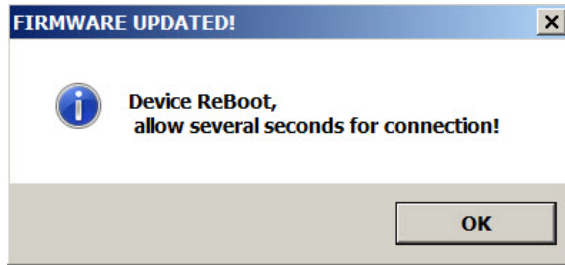
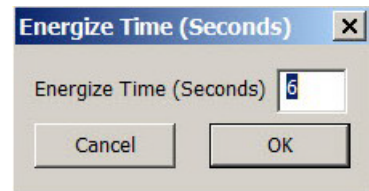
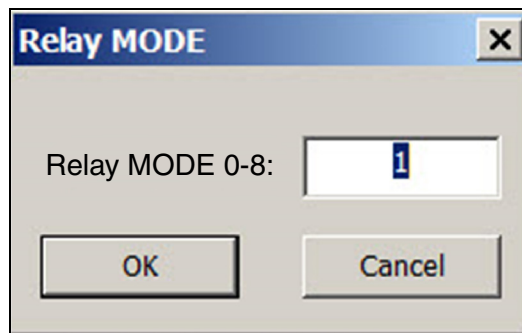
Item	Function
Firmware Load	<p>If the firmware requires an update, clicking this button will open a standard Windows File Dialog. Navigate to the firmware update file, and then click on the Open button. The firmware update will proceed and may take several minutes.</p> <p>At the end of the firmware update, the following dialog will appear:</p>  <p>The dialog box is titled 'FIRMWARE UPDATED!' and contains an information icon, the text 'Device ReBoot, allow several seconds for connection!', and an 'OK' button.</p> <p>Wait 10 seconds for the DSR to implement configuration changes, and then click on the OK button. A scan of DSRs will automatically be started and the Main Dialog (Figure 3-2) will appear.</p>
Reboot	<p>Causes the DSR to restart as if power has been cycled. Wait 10 seconds for the DSR to restart. A scan of DSRs will automatically be started and the Main Dialog (Figure 3-2) will appear.</p>
Commands	
Commands\Relay	
Energize Relay	<p>Causes the door open relay to be energized. Listen for an audible 'click' and watch the red LED turn green. The relay will remain energized for the number seconds shown in the Energize Time field of the status group.</p> <p>The inner door is unlocked for one time period. Door will remain locked if outer door is open and will be unlocked if the outer door is closed within a time period. Time period may be overridden by specifying a time in seconds (nn) with the command.</p>
Energize Relay 2	<p>Causes the door 2 open relay to be energized. Listen for an audible 'click' and watch the red LED turn green. The relay will remain energized for the number seconds shown in the Energize Time field of the status group. The parameter after the energize command is optional, if specified it is the number of seconds to energize the relay, if omitted the default value will be used. The outer door is unlocked for one time period. Door will remain locked if inner door is open and will be unlocked if the inner door is closed within a time period. Time period may be overridden by specifying a time in seconds (nn) with the command.</p>
Energize Time	<p>Configure the length of time that the relay remains energized by the Energize Relay command. The following dialog is presented:</p>  <p>The dialog box is titled 'Energize Time (Seconds)' and contains a text field with the value '6', 'Cancel' and 'OK' buttons.</p> <p>Enter the number of seconds the relay is to remain energized then click OK.</p>

Table 3-3. Test Monitor Dialog Items (continued)

Item	Function
Set Open Door	Causes the door open relay to be permanently energized. Listen for an audible 'click' and observe the red LED turn green . The relay will remain energized until Set Close Door or Energize Relay command is issued.
Set Close Door	Causes permanently energized door open relay to de-energize. Listen for an audible 'click' and observe the green LED turn red .
Enter	After receipt of this command the outer door is unlocked for one time period. If the outer door is opened, the inner door will be unlocked for one time period when the outer door is re-closed. This command is ignored if either door is open.
Exit	After receipt of this command the inner door is unlocked for one time period. If the inner door is opened, the outer door will be unlocked for one time period when the inner door is re-closed. This command is ignored if either door is open. (Both doors are unlocked when the inner door is re-closed to allow a change of mind and permit re-entry instead of enforcing exit.)
Set Mode	This setting allows you to configure the operation mode: The following dialog is displayed:



Enter the operating mode (0 through 8), and then click **OK**.

Here are the available modes:

- 0. network relay mode - In this mode the two relays are independently controlled and the two door senses become additional button/general purpose inputs.
- 1. Closed - both doors are normally locked.
- 2. Open - both doors are unlocked, airlock procedure enforced.
- 3. Enter - outer door unlocked, inner door unlocked after an outer door closure.
- 4. Exit - inner door unlocked, outer door unlocked after an inner door closure.
- 5. Outer - outer door is unlocked whilst inner door is closed.
- 6. Inner - inner door is unlocked whilst outer door is closed.
- 7. Emergency - both doors are unlocked, airlock procedure NOT enforced.
- 8. Single - outer door relay, sense, button and commands disabled/ignored.

Table 3-3. Test Monitor Dialog Items (continued)

Item	Function
Set Mode (continued)	<p>MODE 1 - Close mode</p> <p>After receipt of this command the controller will lock both doors.</p> <p>MODE 2 - Open mode</p> <p>After receipt of this command the controller will unlock both doors. Whenever an open door is detected the both relays will be activated. This command is intended for use during normal business hours. This mode permits entrance and exit from the controlled area whilst enforcing the presence of an 'air lock.'</p> <p>MODE 3 - Enter mode</p> <p>In this mode the outer door is normally unlocked. After the outer door is opened and re-closed the inner door will be unlocked for a single time period (the outer door will always be locked whenever the inner door is open).</p> <p>MODE 4 - Exit mode</p> <p>In this mode the inner door is normally unlocked. After the inner door is opened and re-closed the outer door will be unlocked for a single time period. The inner door will always be locked whenever the outer door is open.</p> <p>MODE 5 - Outer open mode</p> <p>In this mode the outer door is normally unlocked. The outer door will be locked whenever the inner door is open to enforce air lock.</p> <p>MODE 6 - Inner open mode</p> <p>In this mode the inner door is normally unlocked. The inner door will be locked whenever the outer door is open to enforce air lock.</p> <p>MODE 7 - Emergency mode</p> <p>After receipt of this command both doors are unlocked and the air lock procedure is no longer enforced. This mode allows both doors to be simultaneously opened to allow emergency egress from the controlled area.</p> <p>MODE 8 - Single door mode</p> <p>In this mode the controller works in single door mode. All commands for the outer door are ignored and the status of its associated button and sense switch are not reported to the host.</p> <p>Open - For compatibility with single door controller Same action as MODE 2 unless in single door mode.</p> <p>Close - For compatibility with single door controller Same action as MODE 1 unless in single door mode.</p>
Commands\Status	
Get Status	Updates all fields of the status group.
Event Off	Disables Events.

Table 3-3. Test Monitor Dialog Items (continued)

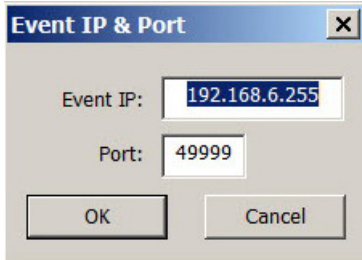
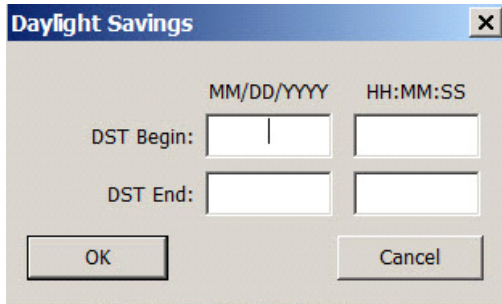
Item	Function
Event On	Click on this button to enable events, and the following dialog appears:
 <p>The 'Event IP & Port' dialog box has a title bar with a close button. It contains two input fields: 'Event IP:' with the value '192.168.6.255' and 'Port:' with the value '49999'. At the bottom are 'OK' and 'Cancel' buttons.</p>	
Click OK to accept event parameters.	
Commands\Date & Time	
Set Date & Time	Click on this button to set the date and time to that of this client.
DST Off	Click on this button to disable the daylight savings time adjustment.
DST On	Click on this button to enable the daylight savings time adjustment. After the following dialog appears, enter the daylight saving dates and times, and then click the OK button:
 <p>The 'Daylight Savings' dialog box has a title bar with a close button. It contains two rows of input fields. The first row is labeled 'DST Begin:' and the second 'DST End:'. Each row has two input fields: one for the date (MM/DD/YYYY) and one for the time (HH:MM:SS). At the bottom are 'OK' and 'Cancel' buttons.</p>	
Commands\Log	
Get Log	Click on this button to navigate to the directory where the log file is to be stored, and then click on the Save button.
Clear Log	Click on this button to delete the log.
Status	
Name	Displays the name of the Network Dual Door Strike Intermediate Relay Module.
Nonce	Displays the last nonce that was returned by the Network Dual Door Strike Intermediate Relay Module.
Mode	Displays the operation mode which is detailed in the Set Mode section.
LED	Displays the state of the LED (red or green).
Door	Displays the Door state (open or closed).
Door 2	Displays the Door 2 state (open or closed).
Relay	Displays the Relay state (active or inactive).
Relay 2	Displays the Relay 2 state (active or inactive).
Button	Displays the Button state (active or inactive).

Table 3-3. Test Monitor Dialog Items (continued)

Item	Function
Button 2	Displays the Button 2 state (active or inactive).
DST	Displays the daylight savings time state (on or off).
DST Start	Displays the month and day that daylight savings time begins.
DST End	Displays the month and day that daylight savings time ends.
Encryption	Displays the encryption state (on or off).
Command Port	Displays the port on which commands are received.
Send Event	Displays the state of the send event setting (on or off).
Event IP	Displays the state of the event IP, the IPv4 to which events are directed.
Event Port	Displays the state of the Event Port, the port to which events are directed.
Base	Displays the Base firmware version.
App	Displays the Application firmware version.
Intrusion Alarm	Displays the state of the intrusion alarm.
JP4, 6, 9, 10	Displays the state of the jumpers in binary representation (0000 = all off, 1111 = all on).
Time	Displays the time of the Network Dual Door Strike Intermediate Relay Module.
Date	Displays the date of the Network Dual Door Strike Intermediate Relay Module.
Energize Time	Displays the time in seconds that relays will be energized.
Detect Multicast	Displays the state of the detect multicast packet setting (on or off).
Multicast IP Address	Displays the multicast IP address (from 224.0.0.0 to 239.255.255.255 [see RFC 5771])
Multicast Port	Displays the group port address used for the specified multicast IP packet stream.
Multicast Timeout	Time (in seconds) that the remote relay will remain active after the multicast broadcast has ended.

Appendix A: Troubleshooting/Technical Support

A.1 Frequently Asked Questions (FAQ)

To see a list of frequently asked questions for your product, do one of the following:

1. Go to the following URL:

<http://www.cyberdata.net/voip/011375/>

2. Click on the **FAQs** tab.

A.2 Documentation

The documentation for this product is released in an English language version only. You can download PDF copies of CyberData product documentation by doing one of the following:

1. Go to the following URL:

<http://www.cyberdata.net/voip/011375/>

2. Click on the **Downloads** tab.

A.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://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>
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. Also, RMA numbers require an active VoIP Technical Support ticket number. A product will not 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://support.cyberdata.net/</p>

A.4 Warranty and RMA Information

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

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

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