

Relay Network Card Installation Manual *RE260-267* • *Rev C* • *May '00*

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Chapter 1: Before You Start

This Chapter Explains:

- Intrinsic Safety
- Installation DOs and DON'Ts

Intrinsic Safety Information

ATTENTION INSTALLER

READ THIS IMPORTANT SAFETY INFORMATION BEFORE BEGINNING WORK

Portions of this product will be installed and operated in the highly combustible environment of a petroleum product storage tank. It is essential that you carefully read and follow the warnings and instructions in this manual to protect yourself and others from serious injury, explosion, electrical shock, or death.

WARNING!	All installation and programming of Red Jacket Prolink enclosures should be performed by factory trained personnel only. Before beginning any installation procedure, carefully read and understand all instructions.	
	Failure to follow these guidelines can result in severe personal injury, death, or substantial property damage. Retain a copy of this manual on site with the Prolink enclosure system as required by EPA regulations in paragraph 40CFR 280.45. Installations must comply with section 504, arti- cle 300 of the N.E.C. which defines intrinsic safety.	

Precautions must be taken in the installation of this product to limit power in the wiring to the fuel tanks and to keep that wiring physically separated from any other wiring (intrinsically safe).



All intrinsic wiring has to be routed through separate wireways and conduit from standard 120/240VAC wiring. Slot dividers are required to ensure UL separation between intrinsically safe wires and standard 120VAC wiring.

Notice It is your responsibility to maintain the effectiveness of the safety features by installing this product in accordance with the instructions and warnings that follow. Failure to do so could create danger to life and property and will result in voiding all warranties connected with this product.

Installation DOs and DON'Ts

WARNING! Failure to follow these guidelines could result in severe personal injury, death, or substantial property damage.

DOs

The following list represents the **DOs** for installing the Relay network card. Please read through this list before beginning the installation.

- **DO** plan all conduit or direct-bury runs and contractor's box installations before mounting the Prolink main data chassis.
- **DO** install the system to meet the National Electric Code(section 504, article 300); federal. State, and local codes; and any applicable safety regulations.
- DO disconnect all power before making final connections.
- **DO** maintain intrinsic safety. Sensor wires must be separated from all other non-intrinsically safe wiring. Install the safety tag on all intrinsically safe contractor's boxes.
- **DO** use Red Jacket recommended interconnect cable for conduit or direct bury applications. See table in Appendix A: Parts List.
- DO observe proper conduit access into the Prolink enclosure.
- DO mount the Prolink main data chassis in a dry, climate controlled environment.
- **DO** hardwire Prolink to a dedicated, isolated, circuit breaker.
- DO print all setup reports and store them on-site (after final programming is complete).
- **DO** install a station ground rod (if one is not present) and verify that it is connected to the Prolink main data chassis.

WARNING!

Failure to verify this ground connection <u>CAN</u> cause <u>SEVERE</u> personal injury, death, or substantial property damage



WARNING!

Failure to comply with these installation requirements will void product warranty.

DON'Ts

The following list represents the **DON'Ts** for installing the Relay network card. Please read through this list before beginning the installation.

- **DON'T** short circuit the power supply.
- DON'T handle the Relay network card or other circuit boards without proper grounding straps.
- **DON'T** allow unauthorized field service personnel to work on the internal circuits of Prolink or the Mag network card. Unauthorized work will adversely affect the intrinsic safety of the system and void product warranty.
- **DON'T** run any other lines or power devices through the Prolink enclosure. The ProLink main data chassis is a low-voltage device.
- **DON'T** hammer the cable into the sawcut.
- **DON'T** drill any holes in the Prolink enclosure.
- DON'T pull inventory sensor wires more than 1,000 feet maximum from Prolink .
- **DON'T** use cold water pipe as earth ground.
- DON'T cross barriers of low voltage with high voltage wire.
- DON'T cross phase controller with product relays.



Chapter 2: Overview and Installation Requirements

This Chapter Explains:

- Relay network card overview
- Installation Requirements

Relay network card overview

The Relay network card is a circuit board that contains four relays to control external electrical equipment. Electrical equipment can be connected provided it does not exceed the electrical rating of the relay.

The table below shows the maximum electrical rating of the relays. Each relay is individually fused (5 Amps @ 250 VAC).

125/250 VAC	30 VDC
less than	less than
5 Amps AC	5 Amps DC

Contact Ratings per Relay



Installation Requirements

The Relay network card requires an open slot in a Prolink chassis.

One significant difference between the Relay network card and most other network cards is that the connecting wiring coming into the front faceplate of this card IS NOT intrinsically safe. This makes it imperative that the lower dividers between the Relay network card and other network cards are installed before power is applied to the Prolink chassis.





Chapter 3: Installation

This Chapter Explains

- Installing the Relay Network Card
- Connecting External Equipment

Installing the Relay Network Card

The following procedure demonstrates how to install the Relay network card into a slot in a ProLink chassis.

Step 1: Disconnect power to the ProLink chassis at the electrical panel and the On-Off switch on the ProLink chassis power supply circuit board. Open the network card access panel and select an open slot for installation. Refer to figure 3.2.





Figure 3.1 Prolink chassis On-Off Switch

Step 2: Remove one of the conduit knockouts underneath the selected slot and install a conduit connector and conduit.

WARNING!	The short dividers in the lower section of the chassis may be removed for access but MUST be reinstalled to maintain intrinsic safety and complete the installation.
----------	--

- **Step 3:** Remove slot cover from the selected slot.
- Step 4: Slide the Relay network card into the selected slot. Note the orientation of the card in *figure 3.1*. Make sure that the card connects completely with the backplane board. Tighten the two hold-down thumbscrews to fully secure the card in position.

WARNING!	Do not attempt to install the card backwards.
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Figure 3.2 Installation of the Relay network card

Connecting External Equipment

WARNING!	To maintain intrinsic safety, it is ABSOLUTELY ESSENTIAL that the lower dividers between the Relay network card and any other network card are installed before power is reapplied to the Prolink chassis.
	Failure to install the lower dividers constitutes a hazard that <u>CAN</u> cause <u>SEVERE</u> personal injury, death, or substantial property damage <u>if ignored</u> .





Connect the device to receive this voltage to NO (Normally Open) or NC (Normally Closed)

Figure 3.3 Relay network card connectors

The Prolink system supports an optional external audible alarm to indicate when a hazardous condition such as an overfill has occurred. These installation procedures describe how to connect the optional audible alarm to one of the relays on the Relay Network Card





Figure 3.4 Wiring the Relay network card to the external alarm box

- **Step 1:** Install the External Alarm Box in the desired location. Do Not drill any holes in the enclosure. A factory supplied knockout is provided for a 1/2-in. conduit connection.
- **Step 2:** Disconnect power from the Prolink chassis. Run three 16-gauge wires (in conduit) from the external alarm box.
- Step 3: Run two of these wires L1 and 1 (in conduit) into the Prolink chassis. See figure 3.4.
- **Step 4:** Connect terminal 1 on the External Alarm Box to the common COM terminal on the selected Relay network card channel connector. Refer to figure 3.4.
- **Step 5:** Connect the (L1) wire from the electrical service panel to the normally open (NO) connector on the selected Relay network card channel.
- **Step 6:** Connect neutral (N) on the external alarm box to AC neutral on the electrical service panel.

Step 7: Connect L1 on the alarm box to L1 on the electrical service panel.



Step 8: Connect the green GND wire on the External alarm box to earth ground.

Step 9: Reconnect AC power to the Prolink chassis.

Relay Network Card configuration worksheet information

When installing the Relay network card, the following information must be recorded on the Prolink Installation and Configuration Worksheet. This information is required to configure the Prolink network and to register your warranty.

- Card Name
- Card date code
- Card neuron ID number
- Part Number
- Card chassis number
- Card slot number

This information should be entered on the Prolink Programming Configuration Worksheet (WAF03). Refer to *figure 3.5*.



Prolink Installation and Configuration Worksheet Sample

Prolink Configuration Worksheet– SAMPLE

	anation	WORKSHEEL OAMI EE	Network Card
Chassis #		Slot 1	Туре
Type of Network Card Installed	Neuron ID Number	RELAY NETWORK CARD 12/15/98 123456789 12345678910 REXXX-XXX	Date Code
CHANNEL 1 PROBE/SENSOR TYPE	Number	EQUIPMENT TYPE EQUIPMENT LOCATION NORMALLY OPEN OR NORMALLY CLOSED	Serial Number
CHANNEL 2 PROBE/SENSOR TYPE		EQUIPMENT TYPE EQUIPMENT LOCATION NORMALLY OPEN OR NORMALLY CLOSED	
CHANNEL 3 PROBE/SENSOR TYPE		EQUIPMENT TYPE EQUIPMENT LOCATION NORMALLY OPEN OR NORMALLY CLOSED	
CHANNEL 4 PROBE/SENSOR TYPE		EQUIPMENT TYPE EQUIPMENT LOCATION NORMALLY OPEN OR NORMALLY CLOSED	

Figure 3.5 Relay network card required information



Chapter 4: Pathway Plus Setup

This Chapter Explains

• Relay Network Card Setup in Pathway

Relay Network Card Setup in Pathway

athway Plus - relay	2 / Relay Card	? >
-	Relay Properties	0
	Prolink Setup Wizard	
The Prolink Setup Wiza This device can be ide which will flash the se	ard will now aid in the setup of the following device: Relay Card. ntified by the neuron ID below or by pressing the "Wink" button rvice LED for the device.	
	Node Name: Relay Card	
	Neuron Id: 000239732200	
	Wink the service LED for this device	
Previous Next	Cancel Help	1
ected to "relev ?"		

Wink: Click on this button to blink the service LED on the node. This is helpful in situations where there is more than one network card of the same type installed in the same chassis. Blinking this LED will identify the specific card that is being configured.

The **node name** represents the current name of the card you will be working with. The **neuron id** is a permanent number, and it does not change.



Pathway Plus - relay 2 / Relay Card	? ×
: Relay Properties	\bigcirc
Node ID Neuron ID: 000239732200 Version: RELAY@1-02	
Node Name To change the node name, enter the name in the Relay Card box to the right:	
Node State The current node state is: Configured Online To change the node state, click the check box to the right: Image: Node Online	
Node Address Assign the chassis and slot number for the node in Chassis: 1 the boxes to the right: Slot: 4	
Previous Cancel Cancel	Help

Node ID: Neuron ID: The neuron ID is a read only field that contains a unique set of numbers and letters that identify the device. (No two Prolink devices have the same neuron ID) The neuron ID should match the printed label found on the device as well as the corresponding label on the configuration worksheet.

Node Name: Name: Each device has a default name assigned to it. If you want to change this name, enter it in this field. The name in this field will be displayed by Pathway Plus anywhere this node appears. (Max. of 12 characters)

Node State: Current Node State: This is a read only field that shows the current node state.

Online Configured-This is the normal operating state. In this case the application is loaded, configured, and connected to the Prolink network.

Soft Offline-In this case the application is loaded and configured, however the application is not running. This state would be used when performing service at the station to prevent this node from going into alarm. For example, a mag node would be taken offline to allow the mag probe to be pulled from the tank for inspection or replacement without sending an alarm to the network.

Node Online: In most cases this check box should remain selected. To take the node offline to allow service work to be performed at the station, uncheck this box.



Node Address: The address is used to identify which chassis and slot the card is in. It identifies the physical location.

Pathway Plus - relay 2 / Relay Card			? ×
••	R	elay Properties	0
	Select all the obje	Setup of Node Objects cts below that you want the wizard to set	up.
	Run setup wizard for:	Relay 1	Enabled
	Run setup wizard for:	Relay 2	Enabled
	Run setup wizard for:	Relay 3	Enabled
	Run setup wizard for:	Relay 4	Enabled

This section allows you to select which Relay Node objects you want the Prolink Setup Wizard to configure at this time.

.

.





You are now finished with the setup parameters for the Relay Card. To store these settings in the device select 'Next.'



Pathway Plus - relay 2	/ Relay Card / Relay 1 ?	×
+	Relay Properties	
	Prolink Setup Wizard The Prolink Setup Wizard will now aid in the setup of the following object: Relay 1. The device to which this object belongs can be identified by the neuron id below or by pressing the "wink" button which will flash the service LED for the device. Object Name: Relay 1 Neuron Id: 000239732200 Wink the service LED for this device	
Previous Next	Cancel Help	
Connected to "relay 2".		lle

The **node name** represents the current name of the card you will be working with. The **neuron id** is a permanent number, and it does not change.

The **wink** button is a blink service to the LED on the node. This is helpful in situations where there is more than one network card of the same type installed in the same chassis. Blinking this LED will identify the specific card that is being configured.



Pathway Plus - relay	2 / Relay Card / Relay 1	? ×
+	Relay Properties	
	Object ID Object Number: 1	
	Object Name To change the object name, enter the name of the object in the box to the right:	
	Enabled State	
	To enable the object, check the box to the right: 🔽 Object Enabled:	
Previous	Cancel Help	
Connected to "relay 2".		Idle

Object ID is uniquely identified by the specific object by number in this screen. The Object ID property indicates which object is open for configuration or setup, and is a read only field.

Object Name displays the name of the object. This field may be changed (max. 12 characters) or left at default.

Enabled State box must be 'checked' to enable operation of the Relay.



*	Relay Properties
	Select the default state of the relay below: Perault State Normally Open Test Relay Normally Closed Set the relay mode of operation below: Relay Mode Set relay when alarm received, clear relay when alarm clears Set relay when alarm received, clear relay after timer duration. Set and clear relay on user defined events. S. Set relay when station closed, clear relay when station open. S. Define time of day schedule to set and clear relay. S. Control relay directly from another card.
Previous Next	Cancel Help

Default State is the selection that will determine if the Relay will be Normally Open (not energized) or Normally Closed (energized) in the inactive state. The radio button selected by default is 'Normally Open.'

Note: Changing the default state to 'Normally Closed' effectively reverses the physical 'Normally Open/Closed' contact operation.

The 'Test Relay' button here actuates the relay for five seconds, and is unrelated to the Relay Time Duration setting.

Relay Timer Duration sets the amount of time a relay alarm will remain 'on' before being cleared. This selection is only used when the Relay Mode 2 is enabled.

As indicated on the screen, Relay Timer Duration is measured in seconds. Range is 1 to 65,535 seconds.



Relay Mode:

There are six radio buttons in the Relay Mode radio button group. The radio button selected here determines the 'mode of operation' of the relay object. For example, if you choose Relay Mode radio button one, '1. Set relay when alarm is received, clear relay when alarm clears, then the card can be referred to as being in 'mode 1.'

1. Mode 1 configures the relay to activate when configured alarm events occur and deactivates after the same alarm events clear. Available alarm events are configured in the 'Alarm Configuration' tab.

2. Mode 2 configures the relay to activate when a configured alarm set event occurs and deactivates after the amount of time specified in the 'Relay Timer Duration' edit box. Available alarm events are configured in the 'Alarm Configuration' tab.

3. Mode 3 configures the relay to activate when configured alarm set events occur and deactivate when configured alarm clear events occur. Available set and clear events are configured in the 'Alarm Set Events' and 'Alarm Clear Events' tab. Note: Configuring a relay for mode 3 operation requires that you have at least one set and one clear event configured.

4. Mode 4 configures the relay to activate when the station closes and deactivate when the station opens. Station open and close times are configured in the main Station Properties 'Time/Hours' tab.

5. Mode 5 configures the relay to activate and deactivate based on an individual schedule. The schedule is configured in the 'Relay Schedule' tab (not available for Annunciator Relays).



Selec	he default state of the relay below:	
Rel G C C C C C	A state of the relay mode of operation below: More Mode Set the relay mode of operation below: Mode Set relay when alarm received, clear relay Set relay when station closed, clear relay Set and clear relay directly from another card.	elay Timer Duration Duration (sec): when alarm clears.) after timer duration. when station open. ar relay.
Previous Next		Cancel Help

Modes 1 and 2:

Mode 1: Configures the relay to activate when any configured alarm events occur and deactivates only if all configured events are in clear. Available alarm events are configured in the 'Alarm Configuration' tab.

The following example assumes two liquid sump sensors configured on a sensor network card.

Example 1: Sensor 1 and sensor 2 alarm events are chosen for the relay set event tab. If either sensor 1 or sensor 2 go into alarm the relay will set. If both sensor 1 and sensor 2 go into alarm then the relay will set and remain set until both sensors 1 and 2 go out of alarm.

Mode 2: Configures the relay to activate when a configured alarm set event occurs and deactivates after the amount of time specified in the 'Relay Timer Duration' edit box. Available alarm events are configured in the 'Alarm Configuration' tab.

For each occurrence of a configured alarm event the relay will activate for the specified duration.



r daiway r las - relay 2 7 rid	ciay cara 7 ficiay								
+	Relay Properties								
Alarm configuration for setting the relay.									
Objects: Selected alarms that will set relay.									
Mag #1 - Mag Tank #01	•	Alarm Name	State	Card Name	Object Name				
Inger magranerer		Overfill Alarm	Alarm	Mag #1	Mag Tank #01				
Object Alarms:		Water High	Alarm Alarm	Mag #1 Mag #1	Mag Tank #01 Mag Tank #01				
Alarm Name Sta	ite	i i alci i i git			indy failt for				
Overfill Alarm Ala	arm								
Product Low Ala	arm								
Water High Ala	arm 🛛								
Theff Alarm Ala									
Water Float Error Ala	arm								
	<<								
	_								
		ļ							
			(
				1					
Previous Next			Cancel	Help					
Connected to "relay 2".					Idle				

Objects: This drop down box allows the user to select from a list of different objects. The list will vary depending on installed options.

Object Alarms: To add entries to the list of alarms that will set the relay, select (highlight via mouse) one or more alarms desired in the left box. Then click on the '>>' button to copy selected Object Alarms to the 'Selected alarms that will set relay' box on the right. A maximum of 14 alarm events can be chosen.

To remove entries from the list of alarms that will set the relay, highlight the entries you want to remove in the right pane, then click '<<' button to remove the selected (highlighted) entries from the list of events that will set the relay.



Pathway Plus - relay	2 / Relay Card / Relay 1	? X
+	Relay Properties	
	Select the default state of the relay below: Default State Normally Open Test Relay Normally Closed Set the relay mode of operation below: Relay Mode 1. Set relay when alarm received, clear relay when alarm clears. 2. Set relay when alarm received, clear relay after timer duration. 3. Set and clear relay on user defined events 4. Set relay when station closed, clear relay when station open. 5. Define time of day schedule to set and clear relay. 6. Control relay directly from another card.	
Previous Next	Cancel Help	
Connected to "relay 2".		Idle

Mode 3: Configures the relay to activate when relay set events occur and deactivate when relay clear events occur. Available set and clear events are configured in the 'Alarm Set Events' and 'Alarm Clear Events' tabs. **Note:** Configuring a relay for mode 3 operation requires that you have at least one set and one clear event configured.



Pathway Plus - relay 2	/ Relay	Card /	' Relay	1				? X
**				Relay Pr	ropertie	s		
		Ala	arm (configuration	for setting	g the relay.		
Objects:				Selected events that v	vill set relay.			
				Alarm Name	State	Card Name	Object Name	
Mag #1 - Mag Tank #01		-		Overfill Alarm	Alarm	Mag #1	Mag Tank #01	
Object Alarms:								
Alarm Name	State							
Overfill Alarm	Alarm	_						
Overfill Alarm	Clear							
Product Low	Alarm							
Product Low	Clear		55					
Water High	Alarm		ii					
Water High	Clear							
Probe Failure	Alarm							
Probe Failure	Clear		11					
Theft Alarm	Alarm							
Theft Alarm	Clear							
Water Float Error	Alarm							
Water Float Error	Clear							
1				1				
						🖲 Any 🔿 All		
Previous Next					Cancel	Help		
Connected to "relay 2".								Idle

Objects: This drop down box allows the user to select from a list of different objects. The list will vary depending on installed options.

Object Alarms: To add entries to the list of alarms that will set the relay, select (highlight via mouse) one or more alarms desired in the left box. Then click on the '>>' button to copy selected Object Alarms to the 'Selected alarms that will set relay' box on the right. Maximum of seven selections.

To remove entries from the list of alarms that will set the relay, highlight the entries you want to remove on the right pane, then click the '<<' button to remove the selected (highlighted) entries from the list of events that will set the relay.

When the 'Any' default button is selected, any single set event may activate the relay independently.

When the 'All' button is selected, all set events must occur and be true together before the relay is activated.



Pathway Plus - relay 2	athway Plus - relay 2 / Relay Card / Relay 1 ?							
: Relay Properties								
Alarm configuration for clearing the relay.								
Objects:	Objects: Selected events that will clear relay:							
Mag #1 Mag Tapk #01		-	Alarm Name	State	Card Name	Object Name		
Imag #1 - Mag Tarik #01		Ľ	Overfill Alarm	Clear	Mag #1	Mag Tank #01		
Object Alarms:								
	1							
Alarm Name	State							
Overfill Alarm	Alarm							
Overfill Alarm	Clear							
Product Low	Alarm							
Product Low	Clear	>>						
Water High	Alarm							
Water High	Clear							
Probe Failure	Alarm							
Probe Failure	Clear	<<						
Theft Alarm	Alarm							
Theft Alarm	Clear							
Water Float Error	Alarm							
Water Float Error	Clear							
,			,					
					🖲 Any 📉 🔿 All			
Previous Next				Cancel	Help			
Connected to "relay 2".								

Objects: This drop box allows the user to select from a list of different objects. The list will vary depending on installed options.

Object Alarms: To add entries to the list of alarms that will clear the relay, select (highlight via mouse) one or more alarms desired in the left box. Then click on the '>>' button to copy selected Object Alarms to the 'Selected alarms that will clear relay' box on the right. Maximum of seven selections.

To remove entries from the list of alarms that will clear the relay, highlight the entries you want to remove in the right pane, then click '<<' button to remove the selected (highlighted) entries from the list of events that will clear the relay.

When the 'Any' default button is selected, any single clear event may deactivate the relay independently.

When the 'All' button is selected, all clear events must occur and be true together before the relay is deactivated.



Examples for Mode 3:

The following examples assume four liquid sump sensors configured on a sensor network card.

Example 1: Sensor 1 and sensor 2 alarm events are chosen for the relay set event tab with 'Any' selected. Sensor 3 and sensor 4 alarm events are chosen for the relay clear event tab with 'Any' selected. If sensor 1 **OR** sensor 2 goes into alarm the relay will activate. If sensor 3 **OR** sensor 4 goes into alarm the relay will activate. If sensor 3 **OR** sensor 4 goes into alarm the relay will deactivate even if sensor 1 and 2 are still in alarm. Clear events have priority over set events.

Example 2: Sensor 1 and sensor 2 alarm events are chosen for the relay set event tab with 'All' selected. Sensor 3 and sensor 4 alarm events are chosen for the relay clear event tab with 'All' selected. If sensor 1 **AND** sensor 2 go into alarm (either simultaneously or consecutively) then the relay will set. If sensor 3 **AND** sensor 4 go into alarm (either simultaneously or consecutively) the relay will deactivate even if sensor 1 and sensor 2 are still in alarm. Clear events have priority over set events.

When the conditions for the clear relay event are met the relay will clear regardless of the conditions of the set event. In a situation where the conditions for both set and clear events are true the relay will clear, however, if the clear event were to go false while the set events were true, then the relay would set again.



Pathway Plus - relay	2 / Relay Card / Relay 1	? ×
**	Relay Properties	
	Select the default state of the relay below: Perault State Normally Open Test Relay Duration (sec): Set the relay mode of operation below: Relay Mode 1. Set relay when alarm received, clear relay when alarm clears. 2. Set relay when alarm received, clear relay after timer duration. 3. Set and clear relay on user defined events. 4. Set relay when station closed, clear relay when station open. 5. Define time of day schedule to set and clear relay. 6. Control relay directly from another card.	
Previous Next	Cancel Help	
Connected to "relay 2".		Idle

Mode 4: Configures the relay to activate when the station closes and deactivate when the station opens. Station open and close times are configured in the main Station Properties 'Time/Hours' tab. The station hours must be previously configured.



•-	Deless Drenen4les	
**	Relay Properties	
	Operation Hours	
	Mar 12:00 AM	
	THE 12:00 AM = 12:00 AM	
	Ved 12:00 AM = 12:00 AM	
	Thur 12:00 AM 12:00 AM	
	Fri 12:00 AM	
	Sat 12:00 AM	
	Sun 12:00 AM = 12:00 AM	
Previous	Cancel Help	

The operation hours table is displayed for information purposes only, and is read only on this tab.

Note 1: When the station is **open**, the relay is **inactive**. When the station is **closed**, the relay is **active**. When both open and close times are the same for a given day, the station is considered open for 24 hours, therefore the relay would be inactive for the entire 24 hour period.

Note 2: A day unchecked means that the relay will be active for that entire 24 hour period.



Pathway Plus - relay	2 / Relay Card / Relay 1	? X
+	Relay Properties	
	Select the default state of the relay below: Operault State Normally Open Test Relay Duration (sec): Set the relay mode of operation below: Relay Mode 1. Set relay when alarm received, clear relay when alarm clears. 2. Set relay when alarm received, clear relay after timer duration. 3. Set and clear relay on user defined events. 4. Set relay when station closed, clear relay when station open. 5. Define time of day schedule to set and clear relay. 6. Control relay directly from another card.	
Previous Next	Cancel Help	
Connected to "relay 2".		Idle

Mode 5: Configures the relay to activate and deactivate based on an individual schedule. The schedule is configured in the 'Relay Schedule' tab.



Pathway Plus - relay 2 / Relay Card /	Relay 1				? X
+**	R	elay Proj	perties		
	Relay Sche <u>Day</u> Mon Tue VVed Thur Fri	dule Relay Set Time 01:00 AM 02:00 AM 03:00 AM 04:00 AM 05:00 AM	Relay Clear Time 02:00 AM 03:00 AM 04:00 AM 05:00 AM 05:00 AM		
	☐ Sat ☐ Sun	06:00 AM	07:00 AM		
Connected to "relay 2"			Cancel Help		Idle
Connected to "relay 2".					Idle

The Relay Schedule allows the user to determine when the relay object will be set (activated) and cleared (deactivated). The relay object will set and clear based on the times specified in the 'Relay Set Time' and 'Relay Clear Time' spin edit boxes for each checkmarked day.

Checking 'Day' enables the 'Relay Set Time' and 'Relay Clear Time' for that day, otherwise the relay is inactive for that day.

Note: The Relay Schedule is not available for Annunciator Relays!



Pathway Plus - relay	2 / Relay Card / Relay 1	? ×
+	Relay Properties	
	Use this space to make any notes concerning the setup or operation of this device. Note: These notes are for local reference and are not stored in the device.	
Previous	Cancel Help	
Connected to "relay 2".		Idle

This is the user's opportunity to make any notes to have for future reference.



Pathway Plus - relay	2 / Relay Card / Relay 1	? X
**	Relay Properties	
	Display Status Monitor	
	This Prolink object has a status monitor associated with it. You can use the status	
	monitor to view the current state of the object and to verify that it is working correctly.	
	Display the Status Monitor?	
	Yes	
	C No	
Previous	Cancel Help	
Connected to "relay 2".		Idle



ihway Plus - relay 2 / Relay Card / Relay 1 🔹 🦹	х
Relay Properties	
Current Relay State ✓ Open Time: 8:36:02.AM Closed Test Relay Closed Led is blinking when relay is not in its default state.	
Previous Next Cancel Help	
nected to "relay 2".	e

Open and Closed Check boxes display the relay status. When the 'Test Relay' button is clicked the relay will toggle for five seconds to test the relay operation. The Test Relay button toggles the relay, forcing the current relay state to change from one position to the other.

Toggling the current relay state does not change the default relay state.

The Green LED will blink while the relay is not in default position.

The 'Time' field is the current system time based on your computer's clock, and is displayed for informational purposes only.



Pathway Plus - relay 2 / Relay Card / Relay 1	? ×
: Relay Properties	
Prolink Setup Wizard This concludes the setup parameters for Relay 1. The Prolink Setup Wizard has completed. Select "Finish" below to exit.	
Previous Finish Cancel	
Connected to "relay 2".	

Setup is complete!



Appendix A: Replacement Parts

Part Number	Description
RE400-598-5	Relay Network Card
RE260-267	Relay Network Card Installation Manual



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