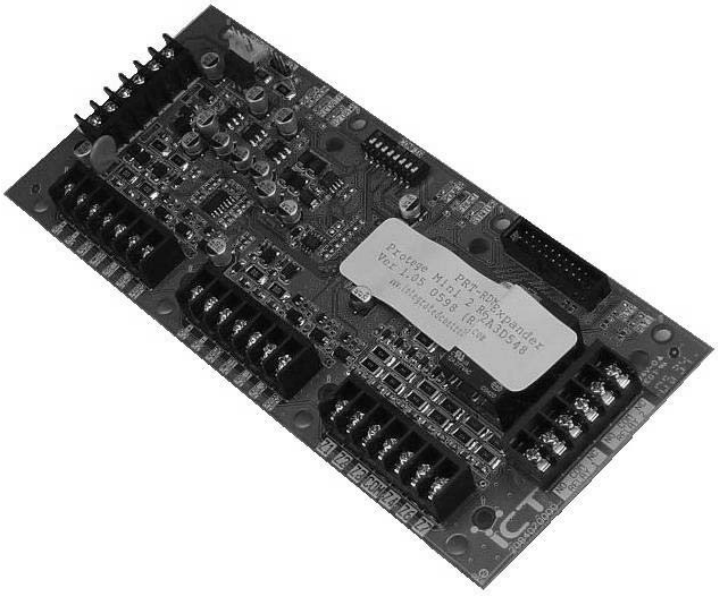
PRT-RDM2
Mini 2 Reader Expander



Installation Manual

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PROTÉGÉ SYSTEM

Introduction

The Protégé System is a powerful integrated alarm and access control management system designed to provide integration with building automation, apartment complex control and HVAC in one flexible package. Communicating through a proprietary high speed protocol across an encrypted RS-485 network using modular-based hardware design, system installers have the flexibility to accommodate any installation from small or large, residential or commercial.

Reader Expander

The PRT-RDM2 Protégé Mini 2 Reader Expander extends the number of card reader inputs on the system by 2 or 4 when using Multiple Reader mode, number of zone inputs by 6 (four zones used for door monitoring and control and up to six can be used for extended functionality) and the number of PGM outputs by 8 (includes 2 relay lock control outputs).

Flexible module network architecture allows large numbers of modules to be connected to the RS-485 Module Network. Up to 250 modules can be connected to the Protégé System in any combination to the network up to a distance of 900M (3000ft). Communication beyond this distance requires the use of a RS-485 Network Extender.

Locking a network prevents the removal, substitution or addition of modules to the module network effectively preventing any tampering with the system.

Features

- 4 Wiegand Reader Mode For 2 Entry/Exit Doors Per Reader Expander
- Secure Encrypted RS-485 Module Communications
- 6 Zone Inputs
- 2 Lock FORM C Relay PGM Outputs
- 6 Open Collector PGM Outputs (Reader Control Outputs)
- Smart Reader Missing/Tamper Monitoring
- Online and Remote upgradeable firmware

Reader Expander Specifications

The following specifications are important and vital to the correct operation of the PRT-RDM2 Protégé Mini Reader Expander. Failure to adhere to the specifications will result in any warranty or guarantee that was provided becoming null and void.

Integrated Control Technology continually strives to increase the performance of its products and as a result the specifications may change without notice. It is recommended that you always consult www.integratedcontroltechnology.com for the latest documentation and product information.

Power Supply

DC Input Voltage	12VDC (10.5VDC Min, 14.0VDC Max)
Operating Current	80mA (Typical)
Communication	
RS-485	Module Network
Outputs	
Lock Outputs	2 FORM C Relay Outputs
PGM Outputs	6 (50mA Max) Open Collector
Inputs	
Zone	6 (500ms to 40sec Input Speed)
Tamper	1 (Normally Closed)
Trouble Zone	16
Dimensions	
PCB Dimensions	92mm X 210mm 3.6" X 8.3"
Enclosure	280mm X 280mm X 89mm 11" X 11" X 3.5"
Temperature	
Operating	5˚- 55˚ Celsius 41˚ - 131˚ Fahrenheit
Humidity	0%-85% (Non-Condensing)
Storage	-10˚- 85˚ Celsius 14˚ - 185˚ Fahrenheit

It is important that the unit is installed in a dry cool location that is not affected by humidity. Do not locate the unit in air conditioning or a boiler room that can exceed the temperature or humidity specifications.

Protégé System Management Suite

The Protégé System Management Suite is a Windows 2000/XP Professional Integrated Access Control and Alarm Management system designed for any configuration from single site, single controller applications up to the global multi-national corporations using multiple site, multiple controller installations.

The Protégé System Management Suite application is ideal for the configuration and management of your Protégé installation. Special built in features and the quick-start kit will get your system up and running in minutes.

Protégé Modules

The Protégé System can be expanded to accommodate large numbers of modules using the encrypted RS-485 network. Modules that are currently available are listed below. Visit the Integrated Control Technology website www.integratedcontroltechnology.com for the latest Protégé module and product information.

Alphanumeric LCD User Interface (PRT-KLCD)

The Protégé LCD User Interface Keypad is the interface between the user and the Protégé System. All programming and end user functions can be performed using the LCD Keypad. The 32 character alphanumeric display uses easy to read messages and menus to guide users through the systems operation. The LCD Keypad also adds two zones (four zones in multiple zone configuration) and one PGM to the Protégé System.

16 Zone Expansion Module (PRT-ZX16)

Extends the Protégé System with the addition of 16 Zones and 4 Programmable Outputs (PGM's). Operates from 16VAC with onboard power supply and isolated communication interface.

16 Zone Standard Expansion Module (PRT-ZXS16)

Extends the Protégé System with the addition of 16 Zones and 1 Programmable Output (PGM). Operates from 12VDC network connection. No onboard power supply.

16 PGM Expansion Module (PRT-PX16)

Extends the Protégé System with the addition of 16 Programmable Outputs (PGM's) (16 7A FORM C Relays). The PRT-PX16 can be connected to the slave communications interface of the PRT-RDI2 2 Reader Expansion Module for FULL monitored elevator control with the addition of the PRT-DRI Destination Reporting Interface Optical Input Module.

16 PGM Standard Expansion Module (PRT-PXS16)

Extends the Protégé System with the addition of 16 Programmable Outputs (PGM's) (16 20mA Open Collector Outputs). Operates from 12VDC network connection. No onboard power supply.

Ethernet Intelligent 2 Reader Expansion Module (PRT-RDE2)

Communicating over a high speed interface using 10/100 Ethernet, interface connection for two card readers, either Wiegand or Magnetic Stripe formats. Four Wiegand Card Readers can be connected in Multiple Card mode. The 2 Reader Ethernet Expansion Module also adds 8 Zones and 8 Outputs to the Protégé System. Some of the outputs on the PRT-RDE2 have specific access control functions and can be used as zones in the Protégé alarm processing functions.

Intelligent 2 Reader Expansion Module (PRT-RDI2)

Adds the interface connection for two card readers, either Wiegand or Magnetic Stripe formats. Four Wiegand Card Readers can be connected in Multiple Card mode. The 2 Reader Expansion Modules also adds 8 Zones and 8 Outputs to the Protégé System. Some of the outputs on the PRT-RDI2 have specific access control functions and can be used as zones in the Protégé alarm processing functions.

Mini 2 Reader Expansion Module (PRT-RDM2)

Adds the interface connection for two card readers, either Wiegand or Magnetic Stripe formats. Four Wiegand Card Readers can be connected in Multiple Card mode. The 2 Reader Expansion Modules also adds 6 Zones and 8 Outputs to the Protégé System. Some of the outputs on the PRT-RDM2 have specific access control functions and can be used as zones in the Protégé alarm processing functions.

Analog 4 Channel Input Expansion Module (PRT-ADC4)

Protégé allows the connection of the latest building automation technology and completely integrated building automation solutions. Adds 4 Analog Inputs (4-20mA or

0-10V) allowing the connection of numerous industrial automation sensors. The Analog Input Expansion Modules also adds 4 PGM Outputs to the Protégé System.

Analog 4 Channel Output Expansion Module (PRT-DAC4)

Protégé allows the connection of the latest building automation technology and completely integrated building automation solutions. Adds 4 Analog Outputs (4-20mA or 0-10V) allowing the connection of numerous industrial automation outputs including air damper and sun louver controls as well as analog flow valves. The Analog Output Expansion Modules also adds 4 PGM Outputs to the Protégé System.

INSTALLATION

Package Contents

When receiving the PRT-RDM2 Protégé Mini Reader Expander you should find the kit contains the items listed below. The kit type is clearly labelled on the packaging and will tell you what your kit contains. Please note that if you do not have the correct contents contact your distributor immediately.

PRT-RDM2-PCB **Protégé Mini Reader Expander PCB Only**

Contents:
- *Reader Expander Printed Circuit Board*
- *6 X Plastic Mounting Standoffs*
- *14 X 1K Ohm Resistors*
- *2 X 1N4007 Lock Reverse EMF Protection Diodes*

Location and Mounting

The Protégé Mini Reader Expander is available as a PCB Only (Printed Circuit Board) or complete unit supplied with a metal cabinet. It is recommended that the cabinet provided be used where possible, as this provides the best mounting and installation solution as well as the required cable entry and termination space.

When installing the Protégé Mini Reader Expander ensure that there is adequate clearance around all sides of the enclosure and air flow to the vents of the enclosure are not restricted.

It is recommended to install the Protégé Mini Reader Expander in a location that will facilitate easy access for wiring. It is also recommended that the Protégé Mini Reader Expander is installed in electrical rooms, communication equipment rooms, closets or in an accessible area of the ceiling.

1. Insert the plastic stand-offs in to the locations to mount the PCB board.
2. Calculate the location and position of the enclosure and mark the holes for the keyhole points in the top left and right locations. This will allow you to screw in the screws and then hang the box on them adjusting the location to suit.
3. Ensure a solid fixing point and screw in the two screws. Before tightening the top screws insert the tamper bracket in the slot provided on the right side of the enclosure.
4. Fix the enclosure securely using the remaining mounting holes on the bottom left, right and centre of the enclosure.
5. When stacking the units insert the longer plastic standoffs from the rear of the board in to the larger holes and snap in tightly to allow the second unit to be stacked. This must be done before the lower board is in place.
6. Insert the PCB in to the enclosure and mount using the plastic standoffs inserted during step one.

Install the enclosure when the circuit board is NOT installed on the plastic stand-offs. This will reduce the risk of damage caused by debris during the installation process.

Cabinet Tamper Switch

The enclosure tamper input signals to the monitoring station or remote computer that the reader expander enclosure has been opened. The tamper input switch should be mounted into the steel bracket provided and connected to the tamper connection terminals as shown in the diagram below. The tamper input opens and closes trouble zone RDxxx:01 on the reader expander.

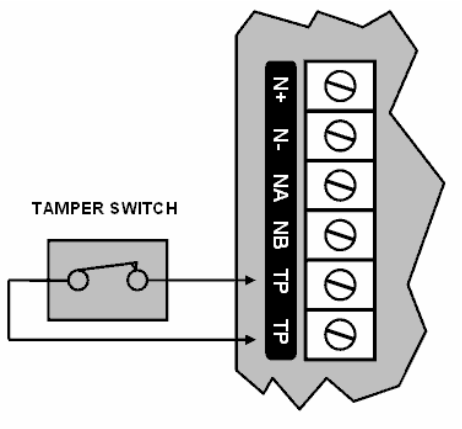

Figure 1 - Tamper Input

Encrypted Module Network

The Protégé Mini Reader Expander incorporates encrypted RS-485 communications technology. Connection of the communications should be performed according to the diagram shown in figure 6. It is important that the N+ Network Communications Power be supplied from an independent battery backed power supply unit or a networked module capable of supplying the required voltage to all of the network powered devices on the RS485 network.

Always connect the Reader Expanders NA and NB terminals to the NA and NB terminals of the communication network. The N+ and N- must go to a 12V power supply source as shown in the following diagram and connected at ONLY one +12V power source.

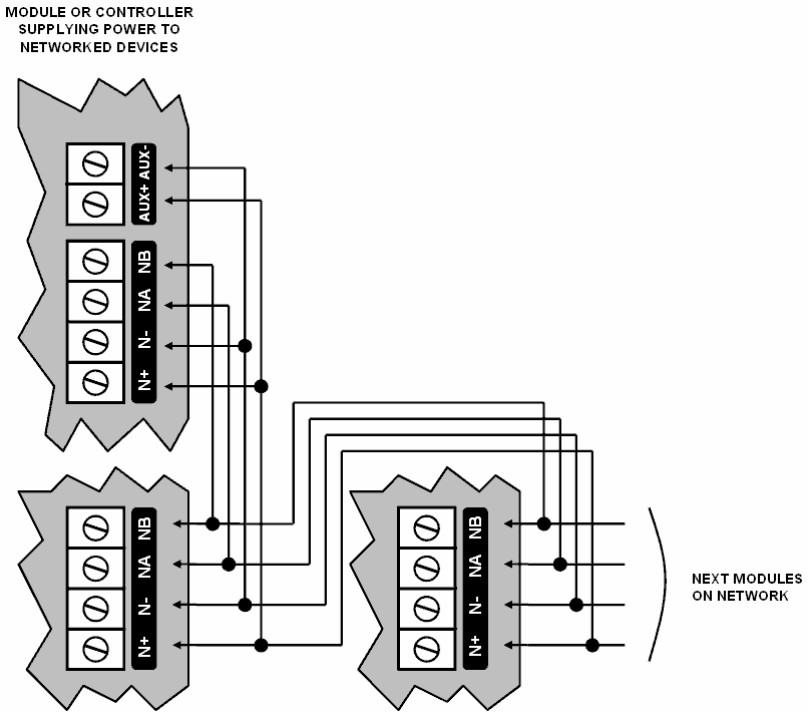

Figure 2 - Network Power Supplied By Network Module

The 12V N+ and N- Communication input must be supplied from only ONE point. Connections from more than one 12V supply may cause failure or damage to the reader expander or device supplying network power.

Under no circumstances should you power the locking devices that are connected to the PRT-RDM2 from the N+ and N- network communication power supply. A separate power supply MUST be used to power the locking devices.

The EOL (End Of Line) jumper setting MUST be set in the ON position for the LAST module on the RS485 network. EOL is ON when the jumper is closest to the EOL text.

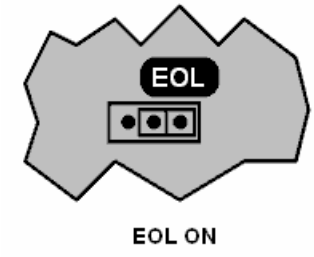

Figure 3 - EOL Jumper ON

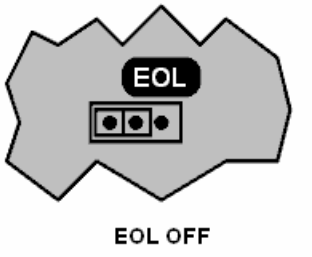

Figure 4 - EOL Jumper OFF

DOOR ACCESS CONTROL

Introduction

The Protégé Mini Reader Expander allows the control of two separate access controlled doors used for entry or exit only, and a single access controlled door using entry/exit.

Reader Connection

The Protégé Mini Reader Expander allows the connection of 2 magnetic clock and data reading devices or 4 Wiegand reading devices and the ability to control 2 doors (Entry or Exit Only) or 1 door (Entry and Exit). The following diagrams show the connection of standard Wiegand Reader with the Protégé Mini Reader Expander controlling an Access Door and Entry/Exit Door.

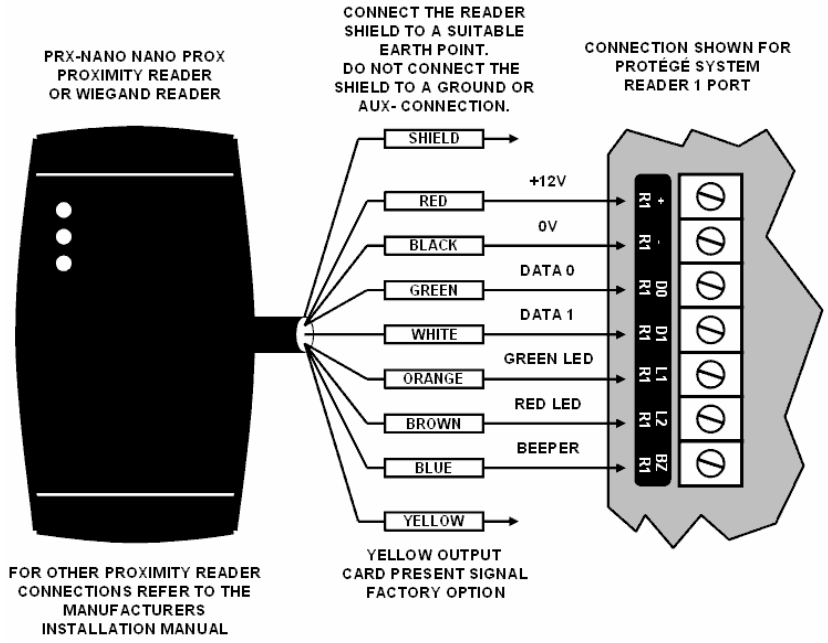

Figure 5 - Standard Reader Interface

The shield connection on the card reading device that is connected to the reader port should NOT be connected to a AUX- or 0V connection. Do not join the shield and black wires at the card reading device. The shield should not be connected to any shield used for isolated communication. Always refer to the card reader manufacturer for detailed installation guidelines.

The beeper output on the PRT-RDM2 provides diagnostic information to the end user and installer when access is denied or the unit is operating offline. Refer to the *PGM Beeper Operation on Page 18*.

Multiple Wiegand Reader Connection

When operating the reader expander in multiple reader mode the Protégé Mini Reader Expander allows the connection of 4 reading devices for Entry/Exit control of doors per reader input.

When connecting Wiegand readers in multiple reader mode the secondary reader that is connected will have all connections wired to the same port as the primary card reader with the DATA 1 connection wired to the opposite reader inputs DATA 1 input.

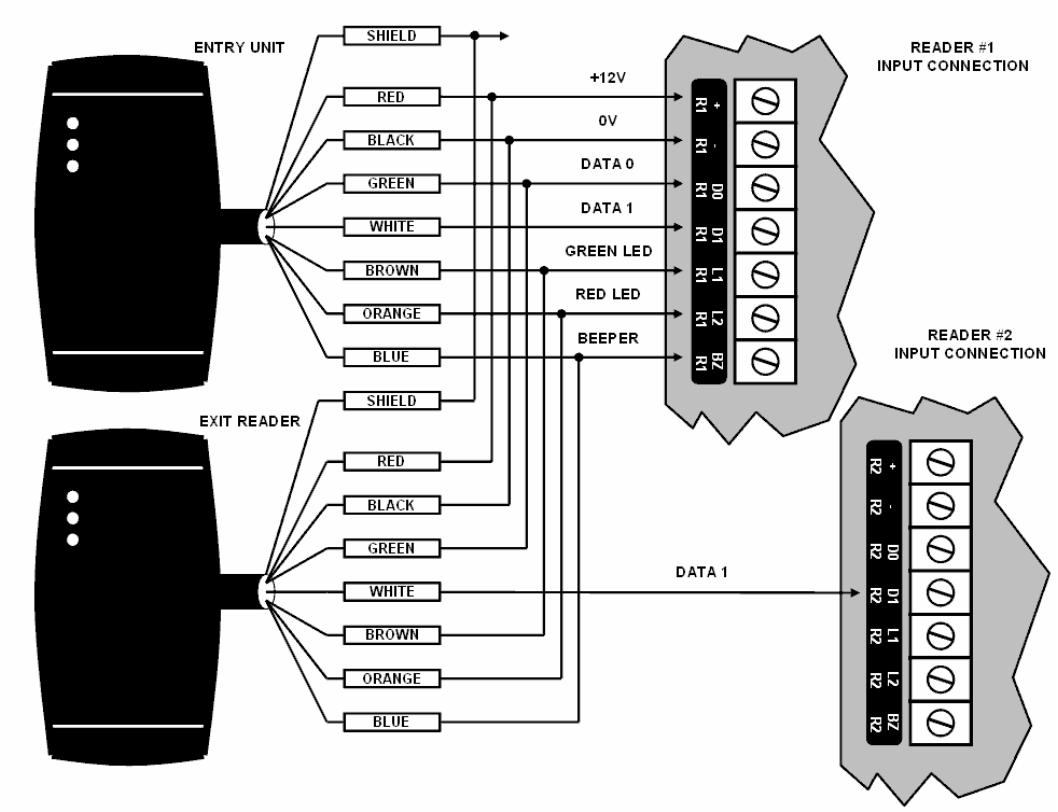

Figure 6 - Multiple Reader Interface

The shield connection on the card reading device that is connected to the reader port should NOT be connected to N- or a 0V connection. Do not join the shield and black wires at the card reading device. The shield should not be connected to any shield used for isolated communication. Always refer to the card reader manufacturer for detailed installation guidelines.

The secondary reader when connected will ALWAYS function as the exit reader.

Magnetic Reader Connection

The Protégé Mini Reader Expander allows the connection of standard magnetic track 2 format cards and provision is made in the software for a large number of formats. Formats include BIN number for ATM access control and first 4, 5 and 6 card numbers.

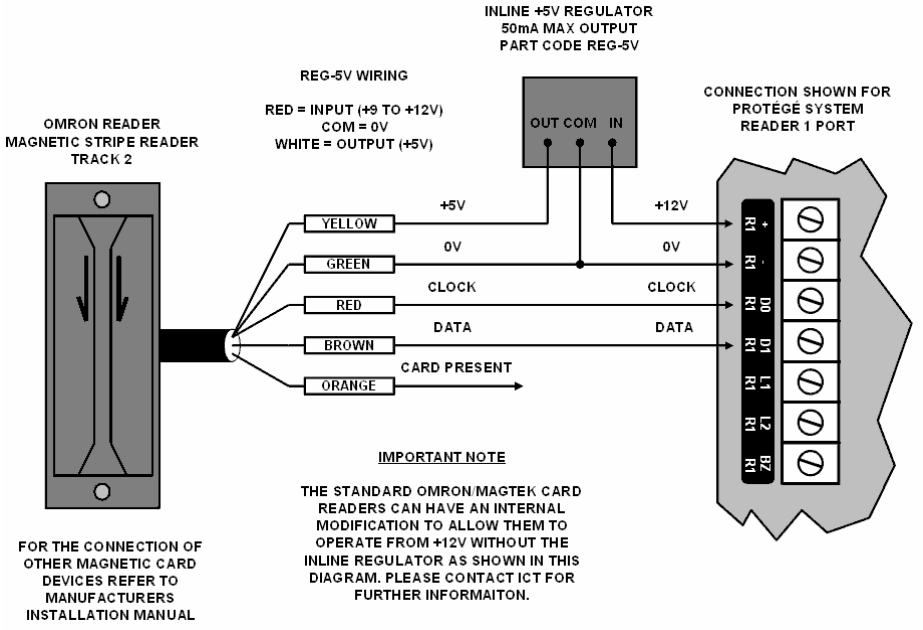

Figure 7 - Magnetic Card Reader Interface

Magnetic Card Readers are typically operated by 5 volts. Before connecting the Magnetic Card Reader to the Mini Reader Expander ensure that the supply voltage is correct and if required insert the inline 5 Volt regulator as shown in figure 7.

Door Contact Connection

The Protégé Mini Reader Expander allows the connection of up to 4 contacts for monitoring and controlling access control doors. Each zone on the reader expander can be used for the door function that is automatically assigned and as a normal zone input on the system. The following example shows the connection of a normally closed door position monitoring contact to monitor the open, closed, forced and alarm conditions of the door.

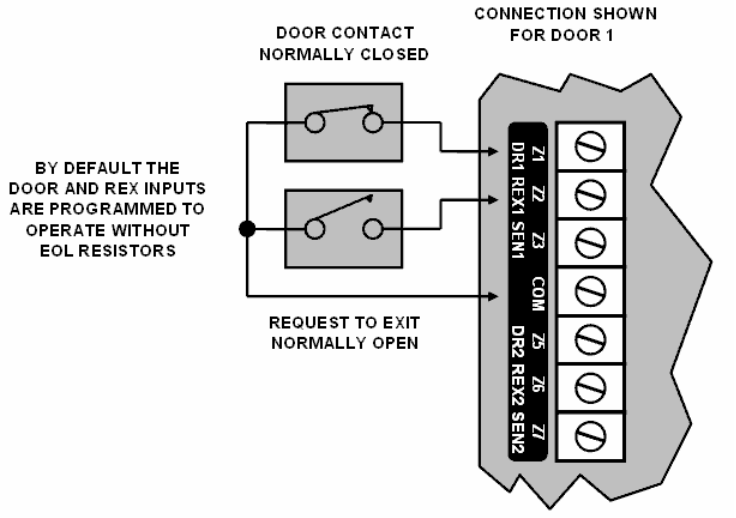

Figure 8 - Standard Door Contact Inputs

When connected the REX input can be programmed to operate regardless of the Door Contact State. The REX input can also be programmed to recycle the door alarm time to prevent nuisance alarms when the door is held open to permit longer entry.

Door Lock Connection

The Protégé Mini Reader Expander provides two lock output relays that can be used to switch electric locks.

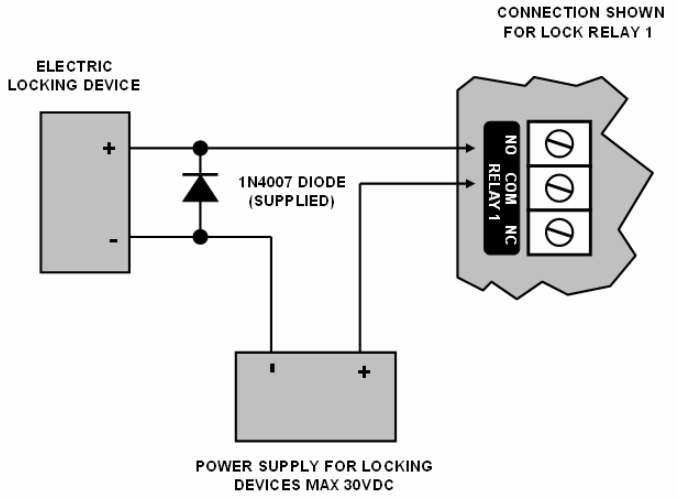

Figure 9 - Door Lock Outputs

When using a door with an entry and exit reader, the LOCK output should be connected to LOCK 1, and enable the swap lock option for the second reader input to allow the reader LED's to display the correct status.

The 1N4007 diode shown in Figure 8 is supplied with the Protégé Mini Reader Expander and MUST be installed at the electric strike terminals.

ZONE INPUTS

Introduction

The Protégé Mini Reader Expander has 6 Zone Inputs. The reader expander also monitors 16 trouble zones used to report trouble conditions. A trouble zone is in most cases not physically connected with a device, rather it is related within the system. For example a module communication fault causes a trouble zone to open as a result of the communication failure.

Zone Inputs

The Protégé Mini Reader Expander can monitor the state of up to 6 zone inputs such as magnetic contacts, motion detectors and temperature sensors. Devices connected to these zones can be installed to a maximum distance of 300m (1000ft) from the Controller when using 22 AWG. The Controller supports normally opened and normally closed configurations with or without EOL resistors on a per zone configuration setting.

Zones can be programmed from the Protégé LCD Keypad (PRT-KLCD) or using the Protégé System Management Suite (PRT-SMGT). RD001:01 to RD001:08 represent Zone 1 to Zone 8 on the Protégé Mini Reader Expander (Substitute the module address for the appropriate address being programmed).

Zone 4 and Zone 8 are not physically connected to any terminal on the Protégé Mini Reader Expander and should not be used. The zone when viewed from the Protégé LCD User Station will show as shorted in resistor mode or closed in normally closed mode.

When using a zone with the EOL resistor configuration, the controller generates an alarm condition when the state of a zone changes and generates a tamper alarm condition when a wire fault (short circuit) or a cut wire (tampered) in the line occurs.

When using the EOL resistor configuration, the EOL resistor option must be turned on for the zone(s) so that the tamper and short states can be monitored (refer to Zones Section in the Protégé Reference Manual).

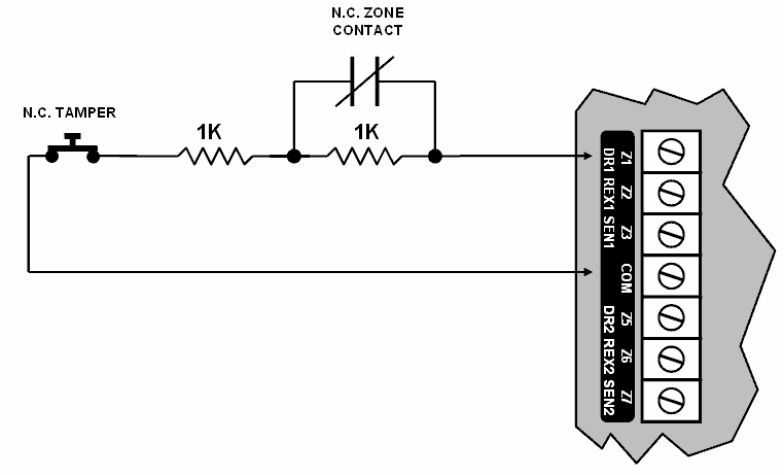

Figure 10 - EOL Resistor Zone Configuration

Each zone input can use a different input configuration. To program a large number of zones, with a single configuration type, use the Multiple Selection feature in the Protégé System Management Suite application.

When using the No Resistor configuration, the Controller only monitors the opened and closed state of the connected input device generating the (OPEN) Alarm and (CLOSED) Sealed conditions.

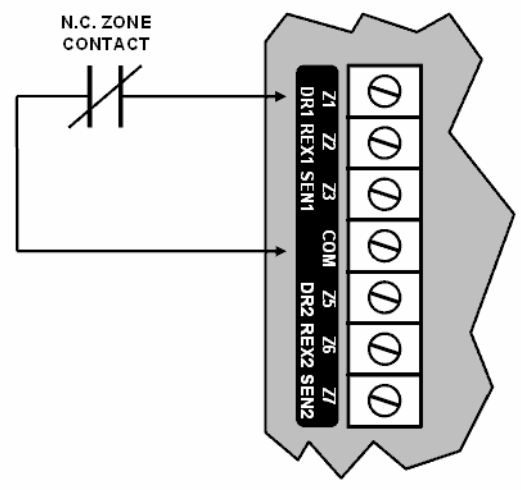

Figure 11 - Normally Closed Zone Configuration No Resistors

Trouble Zone Inputs

Each reader expander can monitor up to 16 trouble zones. Trouble zones are used to monitor the status of the reader expander and in most cases are not physically connected to an external zone. For example, trouble zone RD001:06 is used to monitor door 1 for a forced open condition and will generate an alarm state if the door is forced.

The following table details the trouble zones that are configured in the system and the trouble type and group that they activate.

Zone Number	Description	Type	Group
RDxxx:01	Module Tamper	System Tamper	System
RDxxx:02	Reserved	Power Fault	General
RDxxx:03	Reserved	Power Fault	General
RDxxx:04	Reserved	Power Fault	General
RDxxx:05	Reserved	Power Fault	General
RDxxx:06	Door 1 Forced	Forced Door	Access
RDxxx:07	Door 2 Forced	Forced Door	Access
RDxxx:08	Door 1 Left Open	Left Open	Access
RDxxx:09	Door 2 Left Open	Left Open	Access
RDxxx:10	Reader 1 or 2 Voltage	Power Fault	General
RDxxx:11	Reserved	Power Fault	General

RDxxx:12	Reader 1 Tamper	System Tamper	System
RDxxx:13	Reader 2 Tamper	System Tamper	System
RDxxx:14	Door 1 Lockout	Attempts	Access
RDxxx:15	Door 2 Lockout	Attempts	Access
RDxxx:16	Module Offline	Module Offline	System

Replace the 'xxx' with the appropriate address of the reader expander that you are programming.

PROGRAMMABLE OUTPUTS

Introduction

The Protégé Mini Reader Expander has 4 Programmable Outputs (PGM's). The PGM's are used to activate the Electric Door Locks, Sirens, Lighting Control and Relay Accessory Products.

Lock PGM Outputs (1 and 2)

Relays are provided on PGM output 1 and 2 these are used for the Lock 1 (PGM1 RD001:01) and Lock2 (PGM2 RD001:02) functions and are used to control electric door strikes and other lock control devices. The lock relay will switch a maximum current of 5A resistive.

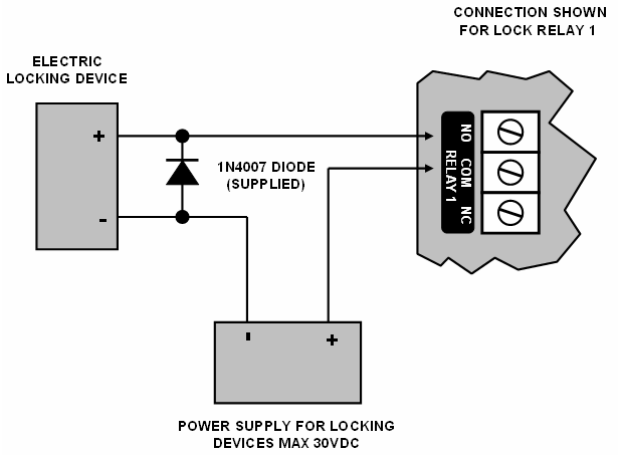

Figure 12 - Lock Output PGM1/2 Connection (PGM 1 Shown)

Standard PGM Outputs (3 To 8)

The PGM outputs 3, 4, 5, 6, 7 and 8 on the Protégé Mini Reader Expander are open collector outputs and switch to a ground connection.

The PGM's have a default pre-programmed function as detailed in the following table and are used to control the indicator and audible outputs on the attached reading device. These functions may be disabled by programming the appropriate setting in the reader expander configuration.

PGM Number	Description
RDxxx:03	LED 1 (Green) Reader 1
RDxxx:04	LED 2 (Red) Reader 1
RDxxx:05	BEEPER Reader 1
RDxxx:06	LED 1 (Green) Reader 2
RDxxx:07	LED 2 (Red) Reader 2
RDxxx:08	BEEPER Reader 2

Replace the 'xxx' with the appropriate address of the reader expander that you are programming.

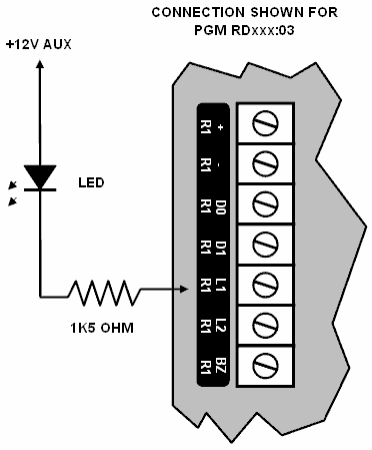

Figure 13 - Example Open Collector Output Connection (LED)

The PGM outputs 3 to 8 can switch to a maximum capacity of 50mA each, exceeding this amount will damage the PGM output.

PGM Beeper Outputs Special Function (5 and 8)

The PGM beeper outputs 5 and 8 on the Protégé Mini Reader Expander provide special diagnostic information when a card is presented. The following table shows the beeper modes of operation.

Function	Description
2 Beeps	Access Granted. The lock will activate and allow access to the door the card has been presented.
4 Beeps	Offline Access Granted. This is generated ONLY if the reader expander is operating offline and the mode of offline operation allows access.
1 Long Beep	Offline Access Denied. This is generated ONLY if the reader expander is operating offline and the mode of offline operation prevents this card from being allowed access.
1 Long Beep 1 Short Beep	Access Denied Card Number Not Known. The card number is not known in the system. The card that has been presented to the reader could not be matched to a valid user in the system.
1 Long Beep 2 Short Beeps	Access Denied Door Group. The user is denied access because they do not have access to the door. This error will also be generated if the door group is not set or the door group schedule is not valid.
1 Long Beep 3 Short Beeps	Access Denied Area Group. The user is denied access because they do not have access to the area that is being controlled by the door. If the area that the door is associated with is armed, and the user does not have this area in their area

	disarm group, they will be denied access. This also depends on the area group settings for the door.
1 Long Beep 4 Short Beeps	Access Denied Access Level. The user is denied access because they do not have a valid access level or the access level they are assigned is currently outside the programmed schedule.

CONFIGURATION SWITCH

Introduction

The addressing of the Protégé Mini Reader Expander allows up to 128 devices to be connected to the Protégé System Controller. The 'CONFIG' configuration DIP switch allows each reader expander to have a unique address.

Address Configuration

The switch positions 1 to 7 select the device address from 1 to 128. When setting an address the reader expander must be powered down (Battery and AC) and restarted for the new address to take affect. When changing the address the reader expander will automatically default the internal configuration and require a network update. See the Protégé System reference manual for information on performing a module update.

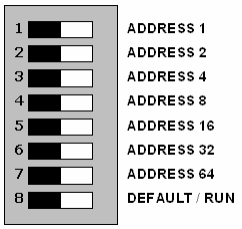

Figure 14 - Reader Expander CONFIG Switch Functions

The device address is determined by adding the value of each switch that is selected in the ON position and then adding 1 to this value. In the example below the address 079 results in (64+8+4+2) + 1 = 079. Setting all address switches to OFF results in the default address of 001.

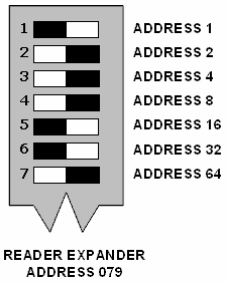

Figure 15 - Reader Expander Configured For Address 079

STATUS INDICATION

Introduction

The Protégé Mini Reader Expander includes extensive diagnostic indicators that can aid the installer in diagnostic faults and conditions. In some cases an indicator may have multiple meanings depending on the status indicator display at the time.

Status Indicator

The Status Indicator is located in the centre of the PCB and indicates the status of the Protégé Mini Reader Expander. If the Protégé Mini Reader Expander is operating normally the LED will indicate this by **FLASHING** at 1 second intervals. **FLASHING** rapidly at 250ms intervals indicates that the reader expander is attempting to register with the system controller, or that communication has failed and the reader expander is retrying the request.

When the fault indicator is ON the status indicator will show an error code. Refer to the section *Error Code Display* on page 23 for more information.

Fault Indicator

The fault indicator LED is identified by the text 'FAULT' and is located in the centre of the PCB. When the fault indicator is **FLASHING** the Reader Expander is operating in firmware update mode, or there is no firmware loaded. The fault indicator when **ON** indicates that an error has occurred while trying to register with the system controller. The status indicator will flash a number of times indicating an error code. Refer to the section Error Code Display on page 23 for more information.

Auxiliary Power Indicator

If power input supply is normal the 'POWER' indicator will be **ON**. If the input is faulty or damaged the 'POWER' indicator will be **OFF**.

Lock 1/Lock 2 Indicators

The Lock 1 and Lock 2 indicators will show the status of the Lock Output Relay.

ON	Lock Relay Output is **ON**.
OFF	Lock Relay Output is **OFF**

Reader Power Indicator

Reader voltage is supplied to the R+ outputs through the reader fuse. If the reader supply is normal the indicator will be **ON**. If the indicator is **OFF** the reader output is not.

R1 and R2 Data Indicator

A short **FLASH** (<250 Milliseconds) on the Data Indicator will show that data was received but was not in the correct format. A long **FLASH** (>1 Second) indicates that the unit has read the data and the format was correct.

ERROR CODE INDICATION

Introduction

When the reader expander attempts to register or communicate with the system controller a registration error can be generated indicating that it was not successful.

Error Code Display

The following table is only valid if the FAULT indicator is **ON** and the STATUS indicator is **FLASHING.** If the fault indicator is **FLASHING** the Reader Expander requires a firmware update or is currently in firmware update mode.

The status indicator will **FLASH** with the error code number. The error code number is shown with a 250ms **ON** and **OFF** period (duty cycle) with a delay of 1.5 seconds between each display cycle.

STATUS FLASHING	ERROR DESCRIPTION
1	Unknown Error Code *The error code returned by the system controller could not be understood by the reader expander. Contact Integrated Control Technology..*
2	Firmware Version *The firmware version on the reader expander is not compatible with the system controller. To clear this error, update the module using the module update application.*
3	Address Too High *The reader expander address is above the maximum number of reader expanders available on the system controller. To clear this error change the address to one within the range set on the system controller, restart the reader expander by disconnecting the power.*
4	Address In Use *The Address is already in use by another reader expander. To clear this error set the address to one that is currently not occupied by a reader expander. Use the view network status command to list the attached devices, or the network update command to refresh the registered device list.*
5	Controller Secured Registration Not Allowed *Controller is not accepting any module registrations. To allow module registrations use the network secure command to change the secure setting to not secured.*
6	Serial Number Fault *The serial number in the device is not valid. Return the unit to the distributor for replacement.*
7	Locked Device *The reader expander or system controller is a locked device and can not communicate on the network. Return the unit to the distributor for replacement.*

ORDERING INFORMATION

Product Codes

Please use the following product codes when placing an order for the Protégé Mini Reader Expander.

PRT-RDM2-PCB **Mini Protégé Mini Reader Expander (PCB Only)**
Includes *Accessory Bag*

To order the Mini Reader Expander in a cabinet order the CAB-MED steel cabinet complete with transformer and tamper connections separately.

Manuals and literature are available at the Integrated Control Technology website in the documentation section. If you require manuals on CD-ROM please request a literature CD-ROM from the website.

WARRANTY

Introduction

The Protégé Mini Reader Expander is covered under the Integrated Control Technology standard terms and warranty agreement. This document can be downloaded from the Integrated Control Technology web site or obtained by return fax.

Contact

Integrated Control Technology welcomes all feedback. Please visit our website or use the information below.

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