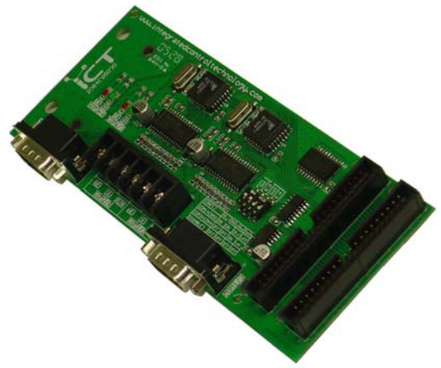
PRT-COMM
Dual Serial Communications Interface



Installation Manual

1.0 Introduction

The Protégé System is an advanced technology security system specifically designed to enhance the functionality of security, building automation and access control by providing a complete integrated solution with local monitoring and offsite communication.

Connected directly on the Protégé System Controller, the PRT-COMM adds 2 COM (serial communication) ports to the system controller. You can connect up to 2 PRT-COMM modules to the system controller. Take advantage of the advanced communication services provided in the Protégé System such as ModBUS Slave, GSM and SMS Modem, Serial Printer and Direct Connect. To add RS485 communications connect an ACC-485 RS232/RS485 Serial Converter to either of the COM ports.

2.0 Configuration

You can connect up to 2 PRT-COMM interface modules to the system controller.

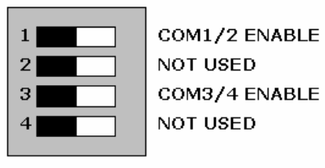


Figure 1 - DIP Switch Address Selection

The setting for the communication port numbers is provided by a four way dip switch located beside the COM1/3 DB9 connector.

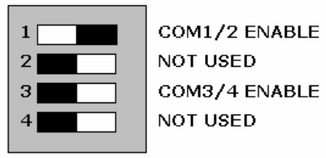


Figure 2 - COM 1/2

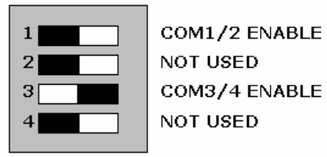


Figure 3 - COM 3/4

If all of the address configuration switches are in the off position the communication interface will be disabled. The factory default setting is COM1 and COM2.

3.0 Connection And Mounting

The Protégé System Controller allows up to two communication interface units to be installed. Mounting is made with the offset holes on the System Controller PCB.

Daughter Board Installation

When installing the daughter board ensure that the plastic mounting hardware provided is correctly inserted from the rear of the system controller PCB.

- Power down the system controller removing ac and battery connections.
- Insert the plastic standoffs through the rear of the system controller.
- Insert the 40 way ribbon cable connector in to the system controller expansion connector.
- Place the PRT-COMM interface on the plastic standoffs.
- Connect the 40 way ribbon cable to the 40 way connector on the PRT-COMM board.

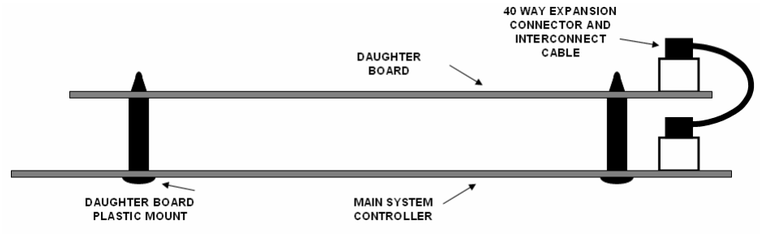


Figure 4 - Connection and Mounting

Power to the system controller MUST be turned off when connecting any hardware or system device to the system controller. Failure to do so may damage the system controller and expansion device.

4.0 Indication

Indicators are provided for both communication ports that show data communication in receive and transmit. A red LED indicates data is being transmitted out of the port to the attached device and a green LED indicates data is being received from the attached device.

5.0 DB9 Connector Wiring

The DB9 Male connectors are configured as DTE serial communications plugs. The following table details the pin output functions.

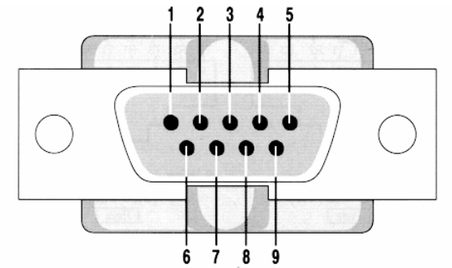


Figure 5 - DB9 Male Connector EIA-574 RS-232/V.24

Pin	***Function***
3 (TXD)	Transmit Data. Data is sent to the connected device. (OUTPUT)
2 (RXD)	Receive Data. Data is received from the connected device . (INPUT)
7 (RTS)	Request To Send. RTS/CTS Flow Control. (OUTPUT)
8 (CTS)	Clear To Send. RTS/CTS Flow Control. (OUTPUT)
6 (DSR)	Data Set Ready. Indicates to the system controller that the attached device is ready to communicate. (INPUT)
4 (DTR)	Data Terminal Ready. Indicates to connected device that the port is ready to communicate. (OUTPUT)
1 (DCD)	Data Carrier Detect. Modem is connected with another modem. (INPUT)
9 (RI)	Ring Indicator. Modem's telephone line is ringing. (INPUT)
5 (SG)	Signal Ground. Connected to the ground of the System Controller.

The Transmit Data, Receive Data and Signal Ground are also routed to standard terminal connections on the Protégé PRT-COMM for direct hard wiring.

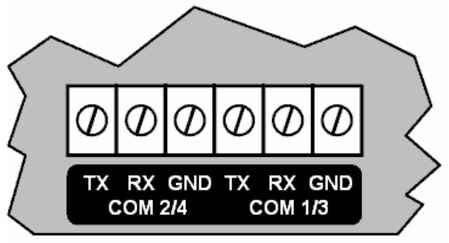


Figure 6 - Wiring Terminal Connections

The Protégé System Controller in most cases only uses the RXD, TXD and SG lines to communicate allowing a standard 3 wire serial cable to be used. Refer to the Protégé Reference Manual for information on the cable required for each service.

6.0 Service Configuration

To program the serial port to operate with a service use the Installer Code or a code that has installation menu access and select [**MENU, 4, 7, 1**].

To quickly test the installation of the PRT-COMM it is recommended to program a serial printer service and connect a standard cross over cable between a computer/laptop and the system controller.

7.0 Specifications

Power Supply

Voltage	3.3VDC (+/-2%)
Current	29mA (Typical)

Indication

TX/RX	LED Indication TX and RX

Communication

RS-232	Dual RS232 Serial Interface
Connection	DB9 Male (DTE) Screw Terminal RX/TX/GND

Temperature

Operating	5˚- 55˚ Celsius 41˚ - 131˚ Fahrenheit
Humidity	0%-85% (Non-Condensing)

*Specifications are subject to change without notice, please visit www.integratedcontroltechnology.com for the updated information. Integrated Control Technology standard warranty and terms apply.