RSDP-805 Series

Expansion Boards for AC-825IP

Installation Guide

Introduction

The RSDP-805 series expansion boards can be installed directly on top of the AC-825IP or installed on the wall and fitted on a DIN rail as an expansion board with RS-485 communication to the AC-825IP OSDP/RSDP-Bus (serial bus).

When an RSDP-805 expansion board is used with Rosslare's AxTraxPro™ Access Control Management Software, the expansion board supports SIA Open Supervised Device Protocol (OSDP V2) including OSDP-SC (secure channel).

The available RSDP-805 models are:

- R-805 Series: 16-Output Expansion Board
- S-805 Series: 16-Input Expansion Board
- D-805 Series: 4-Door Expansion Board
- P-805 Series: 16-Input, 8-Output Expansion Board

R-805 Series

Expansion Boards for AC-825IP

Installation Guide

1. Introduction

The R-805 is a 16-output expansion board for the AC-825IP access control panel.

The expansion board supports 16-relays (5 A Form-C) for general purpose and security application .

2. Technical Specifications

Electrical Characteristics	
Input Voltage	12 to 16 VDC
Input Current (not including attached devices)	Standby: 65 mA, 12 VDC Maximum: 700 mA
Number of Outputs	16
Output Relays	5 A with N.O., N.C., and COM contacts Form-C Relays
RS-485 Communication Ports	OSDP/RSDP bus (S-bus)
Tamper Input (from enclosure)	4-pin tamper connector
Environmental Characteristics	
Operating Environment	Indoor
Operating Temp. Range	0°C to 50°C (32°F to 122°F)
Operating Humidity Range	0% to 85% (non-condensing)
Physical Characteristics	
Dimensions (H x W x D)	178 x 87 x 38 mm (7.0 x 3.4 x 1.5 in.)
Weight	315 g (11.2 oz)
Relays Characteristics	
Operation Voltage	12 VDC
Operation Current	40 mA
Number of Relays	16
Relay Type	Form-C (NO/COM/NC)
Relay Out[put	Rated 5 A @ 30 VDC or 5 A @ 30 VAC, 0.6 power factor
LED Indicators	
Power LED	Active when connected to a power source
Output LED	16 LEDs Each output LED is active when an output relay is energized.

3. Wiring Instructions

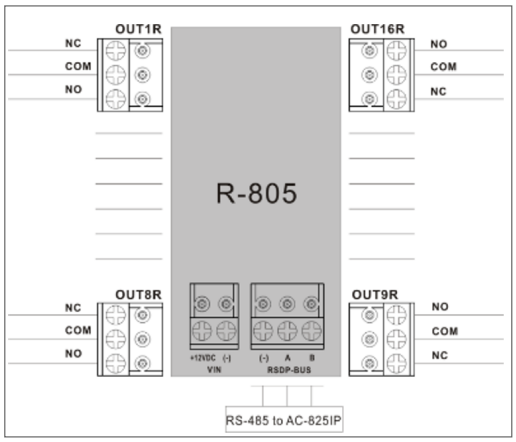
To wire the R-805 expansion board:

1. Connect the RS-485 communication terminal block to the OSDP/RSDP-bus (serial bus) on the AC-825IP panel.

> For more information, see the *AC-825IP Hardware Installation and User Manual*.

2. Connect the 16-outputs to your various applications.

> For RS-485 communication, use a maximum of 1,200 m (4,000 ft) cable length and minimum 22 AWG.



4. Operating the R-805

When a R-805 expansion board is used with a AC-825IP access control panel, it is necessary to define output types from the **Groups** element in the tree view in the AxTraxNG/AxTraxPro Access Control Management Software. Output functions are defined using the **Links** element within each panel tree menu item.

> For more information, see the *AxTraxNG User Guide* or the *AxTraxPro Desktop Client User Guide*.

When a R-805 expansion board is used with a AC-825IP access control panel, the unit must be set to installation mode in the AxTraxNG/AxTraxPro Access Control Management Software as given below .

1. Turn off power.
2. Set all four DIP switches to **ON**.
3. Turn on power.
4. Wait three seconds. In 30 seconds or less set all four DIP switches to **OFF**.

> The Transmit Data (TX) LED light blinks red.

S-805 Series

Expansion Boards for AC-825IP

Installation Guide

1. Introduction

The S-805 is a 16-input expansion board for the AC-825IP access control panel.

The expansion board supports 16-supervised inputs for general purpose and security application .

2. Technical Specifications

Electrical Characteristics	
Input Voltage	12 to 16 VDC
Input Current (not including attached devices)	Standby: 70 mA, 12 VDC Maximum: 75 mA
Number of Inputs	16
Supervised Inputs Voltage	5 VDC maximum voltage
RS-485 Communication Ports	OSDP/RSDP bus (S-bus)
Tamper Input (from enclosure)	4-pin tamper connector
Environmental Characteristics	
Operating Environment	Indoor
Operating Temp. Range	0°C to 50°C (32°F to 122°F)
Operating Humidity Range	0% to 85% (non-condensing)
Physical Characteristics	
Dimensions (H x W x D)	178 x 87 x 38 mm (7.0 x 3.4 x 1.5 in.)
Weight	232 g (8.2 oz)
Output Power Characteristics	
Output Voltage	10-12 VDC
Maximum Output Current	800 mA
LED Indicators	
Power LED	Active when connected to a power source

3. Wiring Instructions

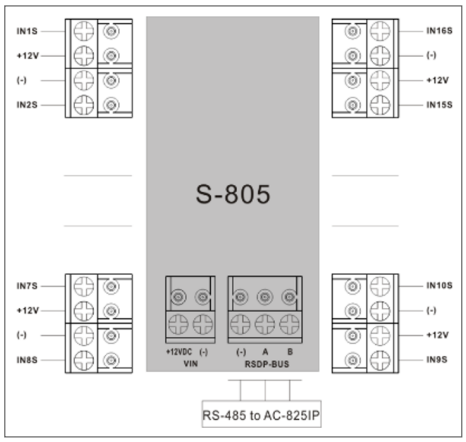
To wire the S-805 expansion board:

1. Connect the RS-485 communication terminal block to the OSDP/RSDP-bus (serial bus) on the AC-825IP panel.

> For more information, see the *AC-825IP Hardware Installation and User Manual*.

2. Connect the 16-inputs to your various applications.

> For RS-485 communication, use a maximum of 1,200 m (4,000 ft) cable length and minimum 22 AWG.



4. Operating the S-805

When a S-805 expansion board is used with a AC-825IP access control panel, it is necessary to define input types from the **Groups** element in the tree view in the AxTraxNG/AxTraxPro Access Control Management Software. Input functions are defined using the **Links** element within each panel tree menu item.

> For more information, see the *AxTraxNG User Guide* or the *AxTraxPro Desktop Client User Guide*.

When a S-805 expansion board is used with a AC-825IP access control panel, the unit must be set to installation mode in the AxTraxNG/AxTraxPro Access Control Management Software as given below .

1. Turn off power.
2. Set all four DIP switches to **ON**.
3. Turn on power.
4. Wait three seconds. In 30 seconds or less set all four DIP switches to **OFF**.

> The Transmit Data (TX) LED light blinks red.

D-805 Series

Expansion Boards for AC-825IP

Installation Guide

1. Introduction

The D-805 is a 4-door expansion board for the AC-825IP access control panel.

The expansion board supports four Wiegand readers and four doors with two supervised inputs, including one relay output for each door.

2. Technical Specifications

Electrical Characteristics	
Input Voltage	12 to 16 VDC
Input Current (not including attached devices)	Standby: 65 mA, 12 VDC Maximum: 220 mA
Number of Reader Ports	4
Number of Inputs	8
Number of Outputs	4
Output Relays	5 A with N.O., N.C., and COM contacts Form-C Relays
Supervised Inputs Voltage	5 VDC maximum voltage
RS-485 Communication Port	OSDP/RSDP-bus (S-bus)
Tamper Input (from enclosure)	4-pin tamper connector
Environmental Characteristics	
Operating Environment	Indoor
Operating Temp. Range	0°C to 50°C (32°F to 122°F)
Operating Humidity Range	0% to 85% (non-condensing)
Physical Characteristics	
Dimensions (H x W x D)	178 x 87 x 38 mm (7.0 x 3.4 x 1.5 in.)
Weight	268 g (9.5 oz)
Reader Characteristics	
Reader Output Voltage	10-12 VDC
Maximum Reader Current	245 mA
LED Control Output	Open collector, Active Low
Tamper Input	TTL input 5 VDC
Supported Formats	Various (see the *AxTraxNG User Guide* or the *AxTraxPro Desktop Client User Guide*)
LED Indicators	
Power LED	Active when connected to a power source
Output LED	Four LEDs Each output LED is active when an output relay is energized.

3. Wiring Instructions

The reader terminal supports the reader's two data lines. For Wiegand readers, these are data lines D0 and D1. For Clock & Data readers, D0 is the DATA line and D1 is the CLOCK line.

There is also support for a tamper signal input from the reader and for one LED control output to the reader.

Proximity and keypad readers are supplied with a limited cable. The color of the cable cover represents the cable's function.

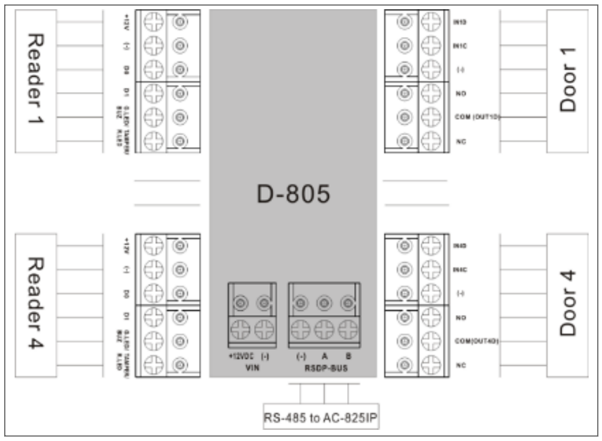
In general, the cable length should be no more than 150 m (500 ft) with an 18 AWG cable. See each reader's installation guide for specific details.

To wire the D-805 expansion board:

1. Connect the RS-485 communication terminal block to the OSDP/RSDP-bus (serial bus) on the AC-825IP panel.

> For more information, see the *AC-825IP Hardware Installation and User Manual*.

> For RS-485 communication, use a maximum of 1,200 m (4,000 ft) cable length and minimum 22 AWG.



4. Operating the D-805

When a D-805 expansion board is used with a AC-825IP access control panel, it is necessary to define input and output types from the **Groups** element in the tree view in the AxTraxNG/AxTraxPro Access Control Management Software. Input and output functions are defined using the **Links** element within each panel tree menu item.

> For more information, see the *AxTraxNG User Guide* or the *AxTraxPro Desktop Client User Guide*.

When a D-805 expansion board is used with a AC-825IP access control panel, the unit must be set to installation mode in the AxTraxNG/AxTraxPro Access Control Management Software as given below .

1. Turn off power.
2. Set all four DIP switches to **ON**.

3. Turn on power.
4. Wait three seconds. In 30 seconds or less set all four DIP switches to **OFF**.

The Transmit Data (TX) LED light blinks red.

P-805 Series

Expansion Boards for AC-825IP

Installation Guide

1. Introduction

The P-805 is a 16-Input, 8-Output expansion board for the AC-825IP access control panel.

The expansion board supports 16-supervised inputs and 8 relays (5 A Form-C) for general purpose and security application .

2. Technical Specifications

Electrical Characteristics	
Input Voltage	12 to 16 VDC
Input Current (not including attached devices)	Standby: 65 mA, 12 VDC Maximum: 380 mA
Number of Inputs	16
Supervised Inputs Voltage	5 VDC maximum voltage
Number of Outputs	8
Output Relays	5 A with N.O., N.C., and COM contacts Form-C Relays
RS-485 Communication Port	OSDP/RSDP-bus (S-bus)
Tamper Input (from enclosure)	4-pin tamper connector
Environmental Characteristics	
Operating Environment	Indoor
Operating Temp. Range	0°C to 50°C (32°F to 122°F)
Operating Humidity Range	0% to 85% (non-condensing)
Physical Characteristics	
Dimensions (H x W x D)	178 x 87 x 38 mm (7.0 x 3.4 x 1.5 in.)
Weight	284 g (10 oz)
Reader Characteristics	
Operation Voltage	10-12 VDC
Operation Current	40 mA
Number of Relays	8
Relay Type	Form-C (NO/COM/NC)
Relay Out[put	Rated 5 A @ 30 VDC or 5 A @ 30 VAC, 0.6 power factor
LED Indicators	
Power LED	Active when connected to a power source
Output LED	8 LEDs Each output LED is active when an output relay is energized.

3. Wiring Instructions

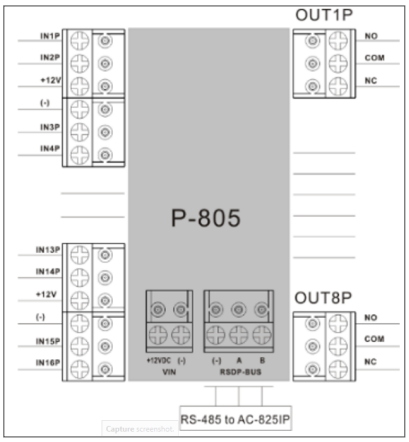
To wire the P-805 expansion board:

1. Connect the RS-485 communication terminal block to the OSDP/RSDP-bus (serial bus) on the AC-825IP panel.

> For more information, see the *AC-825IP Hardware Installation and User Manual*.

2. Connect the 16 inputs and 8 outputs to your various applications.

> For RS-485 communication, use a maximum of 1,200 m (4,000 ft) cable length and minimum 22 AWG.



4. Operating the P-805

When a P-805 expansion board is used with a AC-825IP access control panel, it is necessary to define input and output types from the **Groups** element in the tree view in the AxTraxNG/AxTraxPro Access Control Management Software. Input and output functions are defined using the **Links** element within each panel tree menu item.

> For more information, see the *AxTraxNG User Guide* or the *AxTraxPro Desktop Client User Guide*.

When a P-805 expansion board is used with a AC-825IP access control panel, the unit must be set to installation mode in the AxTraxNG/AxTraxPro Access Control Management Software as given below .

1. Turn off power.
2. Set all four DIP switches to **ON**.
3. Turn on power.
4. Wait three seconds. In 30 seconds or less set all four DIP switches to **OFF**.

> The Transmit Data (TX) LED light blinks red.

UL 294 7th Edition

The following labeled R-805, S-805, D-805, P-805 are UL listed to UL 294 7th Edition Standard for Access Control System Units. It has the following Access Control Performance Ratings:

Destructive Attack	Level I
Endurance	Level IV
Line Security	Level I
Standby Power	Level II

Limited Warranty

The full ROSSLARE Limited Warranty Statement is available in the Quick Links section on the ROSSLARE website at www.rosslaresecurity.com.

Rosslare considers any use of this product as agreement to the Warranty Terms even if you do not review them.

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For more information regarding support, visit https://support.rosslaresecurity.com.