R/S/D/P-805 Series

Expansion Boards for AC-825IP

Installation Manual

Models:

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

R-805

S-805

D-805

P-805

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R-805

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16-Output Expansion Board

Installation Manual

1. Introduction

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

The R-805 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).

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

Figure 1: R-805

2. Technical Specifications

2.1 Electrical Characteristics

Input Voltage	12–16 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 Port	OSDP/RSDP-bus (S-bus)
Tamper Input (from enclosure)	4-pin tamper connector

2.2 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)

2.3 Physical Characteristics

Dimensions (L 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)

2.4 Relays Characteristics

Operation Voltage	12 VDC
Operation Current	40 mA
Number of Relays	16
Relay Type	Form-C (NO/COM/NC)
Relay Output	Rated 5 A @ 30 VDC or 5 A @ 30 VAC, 0.6 power factor

2.5 LED Indicators

Power LED	Active when connected to a power source
Output LEDs	16 LEDs Each output LED is active when an output relay is energized

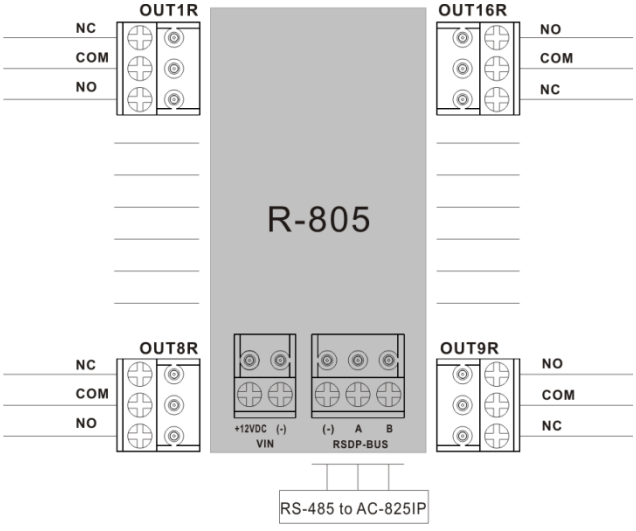
3. Wiring Instructions

To wire the R-805 expansion:

1. Connect the RS-485 communication terminal block to the OSDP/RSDP-bus (serial bus) on the AC-825IP panel. For details, see the *AC-825IP Hardware Installation and User Manual*.
2. Connect the 16-outputs to your various applications (Figure 2).

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

Figure 2: Wiring the R-805 Outputs



4. Operating the R-805

When using AC-825IP and R-805 with AxTraxNG, define output types from the Groups element in the Tree View. Output functions are defined using the Links element within each Panel tree menu item.

For more information, refer to the *AxTraxNG Software Manual*.

S-805

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16-Input Expansion Board

Installation Manual

1. Introduction

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

The S-805 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).

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

Figure 3: S-805

2. Technical Specifications

2.1 Electrical Characteristics

Input Voltage	12–16 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 Port	OSDP/RSDP-bus (S-bus)
Tamper Input (from enclosure)	4-pin tamper connector

2.2 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)

2.3 Physical Characteristics

Dimensions (L 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)

2.4 Output Power Characteristics

Output Voltage	10–12 VDC
Max. Output Current	800 mA

2.5 LED Indicators

Power LED	Active when connected to a power source

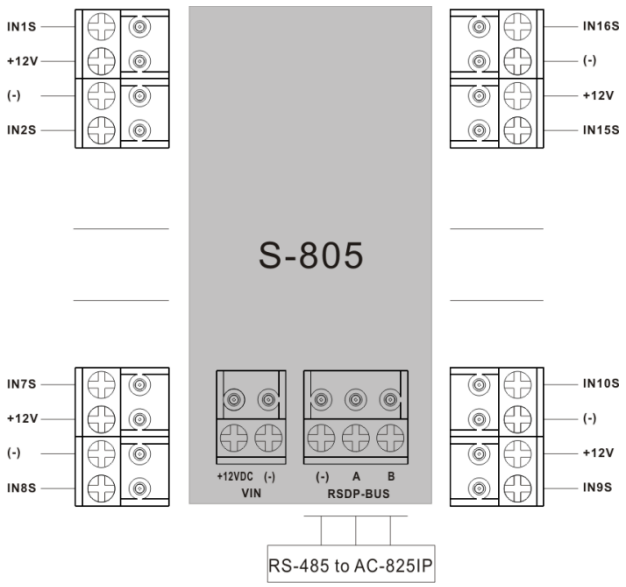
3. Wiring Instructions

To wire the S-805 expansion:

1. Connect the RS-485 communication terminal block to the OSDP/RSDP-bus (serial bus) on the AC-825IP panel. For details, see the *AC-825IP Hardware Installation and User Manual*.
2. Connect the 16-inputs to your various applications (Figure 4).

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

Figure 4: Wiring the S-805 Inputs



4. Operating the S-805

When using AC-825IP and S-805 with AxTraxNG, define input types from the Groups element in the Tree View. Input functions are defined using the Links element within each Panel tree menu item.

For more information, refer to the *AxTraxNG Software Manual*.

D-805

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4-Door Expansion Board

Installation Manual

1. Introduction

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

The D-805 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).

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

Figure 5: D-805

2. Technical Specifications

2.1 Electrical Characteristics

Input Voltage	12–16 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

2.2 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)

2.3 Physical Characteristics

Dimensions (L 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)

2.4 Reader Characteristics

Reader Output Voltage	10–12 VDC
Max. Reader Current	245 mA
LED Control Output	Open collector, Active low
Tamper Input	TTL input 5 VDC
Supported Formats	Various (refer to the AxTraxNG™ software manual)

2.5 LED Indicators

Power LED	Active when connected to a power source
Output LEDs	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.

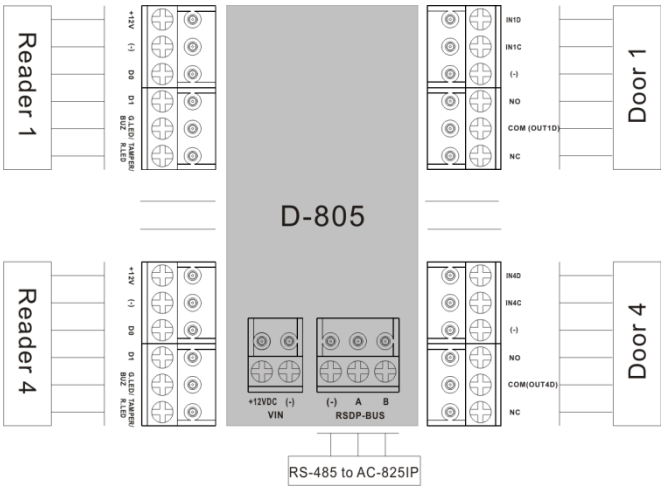
In general, the cable length should be no more than 150 m (500 ft) with an 18 AWG cable. Refer to each reader's installation guide for specific details.

To wire the D-805 expansion:

1. Connect the RS-485 communication terminal block to the OSDP/RSDP-bus (serial bus) on the AC-825IP panel (Figure 6). For details, see the *AC-825IP Hardware Installation and User Manual*.

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

Figure 6: Wiring the D-805



4. Operating the D-805

When using AC-825IP and D-805 with AxTraxNG, define input and output types from the Groups element in Tree View. Input and output functions are defined using the Links element within each Panel tree menu item.

For more information, refer to the *AxTraxNG Software Manual*.

P-805

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16-Input, 8-Output Expansion Board

Installation Manual

1. Introduction

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

The P-805 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).

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

Figure 7: P-805

2. Technical Specifications

2.1 Electrical Characteristics

Input Voltage	12–16 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

2.2 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)

2.3 Physical Characteristics

Dimensions (L x W x D)	178 x 87 x 38 mm (7.0 x 3.4 x 1.5 in.)
Weight	284 g (10 oz)

2.4 Reader Characteristics

Operation Voltage	10–12 VDC
operation Current	40 mA
Number of Relays	8
Relay Type	Form-C [NO/COM/NC]
Relay Output	Rated 5 A @ 30 VDC or 5 A @ 30 VAC, 0.6 power factor

2.5 LED Indicators

Power LED	Active when connected to a power source
Output LEDs	8 LEDs Each output LED is active when an output relay is energized

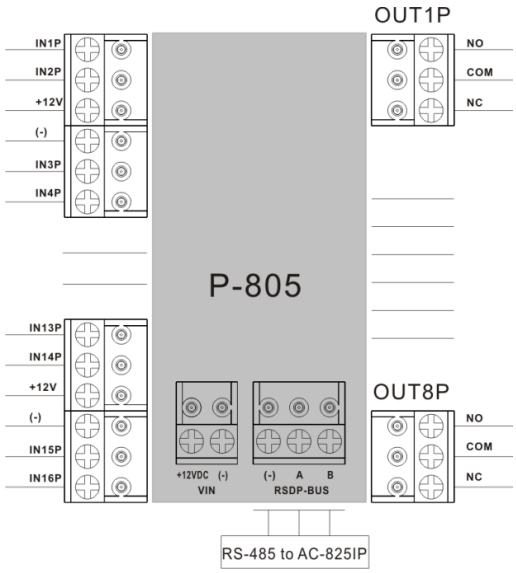
3. Wiring Instructions

To wire the P-805 expansion:

1. Connect the RS-485 communication terminal block to the OSDP/RSDP-bus (serial bus) on the AC-825IP panel. For details, see the *AC-825IP Hardware Installation and User Manual*.
2. Connect the 16 inputs and 8 outputs to your various applications (Figure 8).

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

Figure 8: Wiring the P-805 Inputs and Outputs



4. Operating the P-805

When using AC-825IP and P-805 with AxTraxNG, define input and output types from the Groups element in the Tree View. Input and output functions are defined using the Links element within each Panel tree menu item.

For more information, refer to the *AxTraxNG Software Manual*.

UL 294 7th Edition

The following labeled R-805, S-805, D-805, and 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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