AC-825IP

Networked Controller

Hardware Installation and User Guide

ROSSLARE
SECURITY PRODUCTS

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1. Introduction

The AC-825IP is an advanced networked access controller and is the backbone of a medium-scale to high-scale security system that can handle up to 60,000 users and 500,000 events.

Each AC-825IP access control unit (ACU) supports up to six doors (In/Out), each with 2 inputs and 1 output, and includes four additional auxiliary inputs and two auxiliary outputs.

The number of supported doors, inputs, and outputs can be increased by using the onboard 10-pin expansion slot to connect any of the following expansion boards:

- R-805 – 16 outputs
- S-805 – 16 inputs
- D-805 – 4-door expansion
- P-805 – 16 inputs and 8 outputs

Driven by Rosslare's powerful, flexible and easy to use AxTraxNG™ software, the system provides an ideal, modular and expandable solution for commercial and institutional needs. It provides seamless integration with Rosslare's range of RFID proximity, PIN, Proximity & PIN, smart card, and biometric readers with Rosslare's selection of RFID credentials.

The AC-825IP is ready for installation with a mountable and lockable metal enclosure (ME-1525) integrated with a switch, power management board /charger, sounder, and control panel.

Using an onboard Ethernet TCP/IP, multiple local or remote site door subnetworks can connect to the AxTraxNG Client/Server PC software running on Microsoft® Windows® 7/8 operating systems.

The AC-825IP platform consists of the following components:

- AC-825IP networked access controller
- ME-1525 metal enclosure with a detachable illumination bar
- Up to 4 A power management board
- VAC/VDC power switch
- Terminal block removal tool
- 4 x 2.2K and 4 x 8.2K resistors for the supervised inputs

1.1 Features

The AC-825IP is a powerful and adaptable access control solution with a range of powerful features:

- Controls 6 doors – 4 readers are connected via Wiegand format and 2 are connected via Open Supervised Device Protocol (OSDP)
- Controls an additional 4 doors connected via Wiegand when an D-805 is mounted (optional)
- Four IN/OUT readers, with tamper switch and LED control
- 12 supervised inputs, 28 when the S-805 or the P-805 expansions are installed
- 6 Form-C relay outputs (rated 5 A), 16 when R-805 is installed
- Onboard TCP/IP communication, incorporated bi-directional push communication with AxTraxNG server for enhanced data transmission speed and reliability
- Uses an AES 128-bit encryption between the AC-825IP panel and the AxTraxNG server
- Supports up to 60,000 users
- Supports up to 500,000 history log entries (FIFO) per ACU
- Built-in sounder for chime, bell and siren signals
- Remote firmware upgrades
- Removable terminal blocks

A real-time clock keeps time for up to 2 weeks without power and is backed up by a battery.

1.2 AxTraxNG

The AxTraxNG software is custom designed to set up, manage, and supervise all aspects of an access controller's network.

It offers the following capabilities:

1.2.1 Client-Server Structure

AxTraxNG operates through a dedicated AxTraxNG server computer, which communicates with the access control panels and their expansions to serve an unlimited number of network clients.

The server also runs the system's SQL database, which contains settings and definitions for access control across the entire facility. System users can define new users and credentials, and control access permissions. The system includes tools for database backup, input, and export of previous configurations and automatic backup on a periodic basis.

AxTraxNG supports all panel types and offers scalability and flexibility in addition to a range of advanced control features.

1.2.2 Configurable Links

The system's configurable links model makes it possible to trigger any chosen output automatically or report a configurable alarm, based on a selected input. This allows easy integration with other access systems such as intruder alarms, CCTV systems, and License Plate Recognition (LPR).

AxTraxNG can also define a selected set of operations, which are defined in configurable links, when a panel registers a specified user or a group of users. This can be useful, for example, in access control systems. The system can assign users with counters, allowing a limited number of entries to each panel.

1.3 Compatible Readers

The AC-825IP ACU provides support for most of the Wiegand formats, such as 26-bit, 30-bit, 32-bit, 35-bit, and 36-bit, as well as any OSDP readers that may be connected serially to the AC-825IP via RS-485 interface.

2. Technical Specifications

Specification	AC-825IP	R-805	S-805	D-805	P-805
ELECTRICAL SPECIFICATIONS					
Enclosure	ME-1525	ME-1505			
Enclosure SMPS	Input: 90 to 265 VAC, 50–60 Hz, switch mode power management board				
	Output: 12 VDC, 4 A				
PCBA Input Power	12 VDC, 2 A, regulated power management board				
Battery Charger	12 V sealed lead acid (SLA) up to 7 Ah				
OPERATIONAL SPECIFICATIONS					
Relays 5 A, Form-C	6	16	N/A	4	8
Supervised Inputs	12	N/A	16	8	16
Readers (Wiegand Format)	4	N/A	N/A	4	N/A
Readers (OSDP Format)	2	N/A	N/A	N/A	N/A
Expansion Port	1	N/A			
Connectivity	TCP/IP, OSDP, G-Bus	OSDP			
OPERATIONAL SPECIFICATIONS (AC-825IP only)					
Capacity	Up to 60,000 users				
History Event Log Size	Up to 500,000 entries				
Time Zones and Groups	256 multi-segment time zones, 64 holidays – each holiday can be multiple days Practically unlimited amount of access groups				
Special Features with AxTraxNG	Interlock, first-person delay, auto-relock, scheduled outputs operation, 4 programmable site codes, extended unlocked time, fully interconnectedness, car parking management, antipassback (per reader, between readers)				
Security Modes	Normal and Secure				
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature Range	-5°C to 50°C (23°F to 122°F)				
Storage Temperature Range	-25°C to 50°C (-13°F to 122°F)				
Operating Humidity	0 to 85% (non-condensing)				

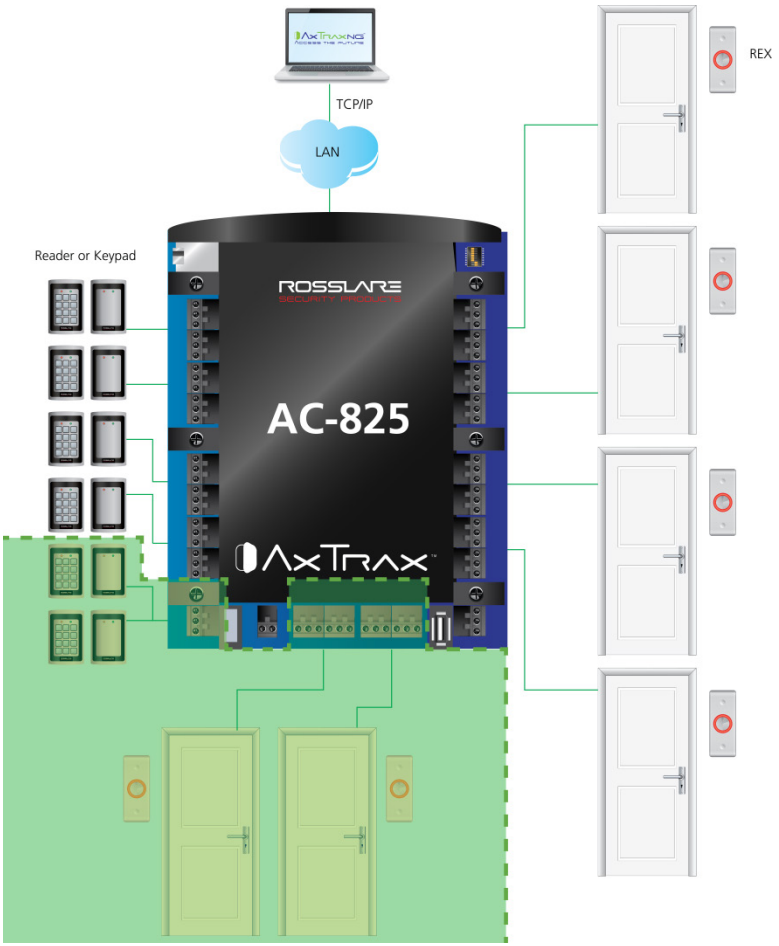
Specification	AC-825IP	R-805	S-805	D-805	P-805
MECHANICAL SPECIFICATIONS					
Enclosure Dimensions (H x W x D)	345 x 400 x 10 mm (13.6 x 15.7 x 0.4 in.)				
Enclosure Weight	5 kg (11.0 lb)	4.6 kg (10.1 lb)			
PCBA Dimensions (H x W)	224 x 164 mm (8.8 x 6.46 in.)	175 x 85 mm (6.9 x 3.3 in.)			
PCBA Weight	400 g (14.1 oz)	150 g (5.3 oz)			

3. AC-825IP Panel Setup

Each AC-825IP panel controls 6 or 10 doors (with the D-805) (3 or 5 doors in double reader per door mode). The panels connect together in a network and are controlled by a central server computer, running the AxTraxNG software system.

Figure 1 shows an example setup for a network of AC-825IP access control panels.

Figure 1: Sample AC-825IP Configuration



Note

The highlited area indicates the use of OSDP readers and their I/O connectivity.

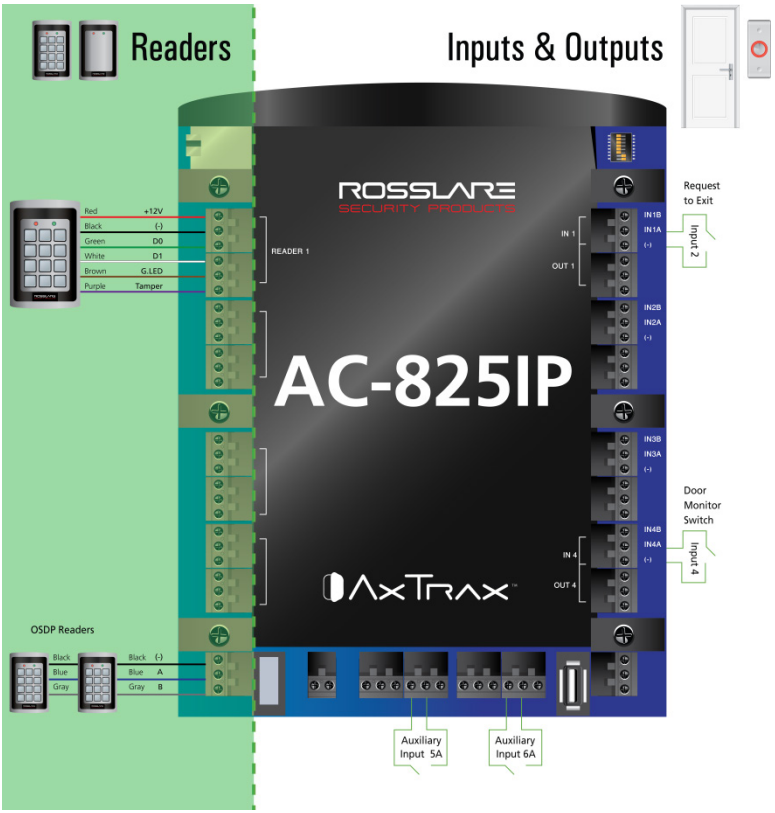
Bushings are needed for any conductors leaving the enclosure through the provided openings.

3.1 Input Wiring – Supervised Inputs

When wiring the AC-825IP for supervised inputs, resistors should be placed on the input switch and not on the terminal block.

Figure 2 presents a view of the inputs and their connection options.

Figure 2: Input Wiring – Supervised Inputs



For more details on reader connectivity, refer to Figure 7 and Figure 9 in Section 3.5.

3.2 Output Wiring

Figure 3 and Figure 4 illustrate wiring for two main types of 12 VDC electrical release mechanisms. Other electrical devices can be switched using the voltage free relay contacts.

Figure 3: Door Lock – Failed Close

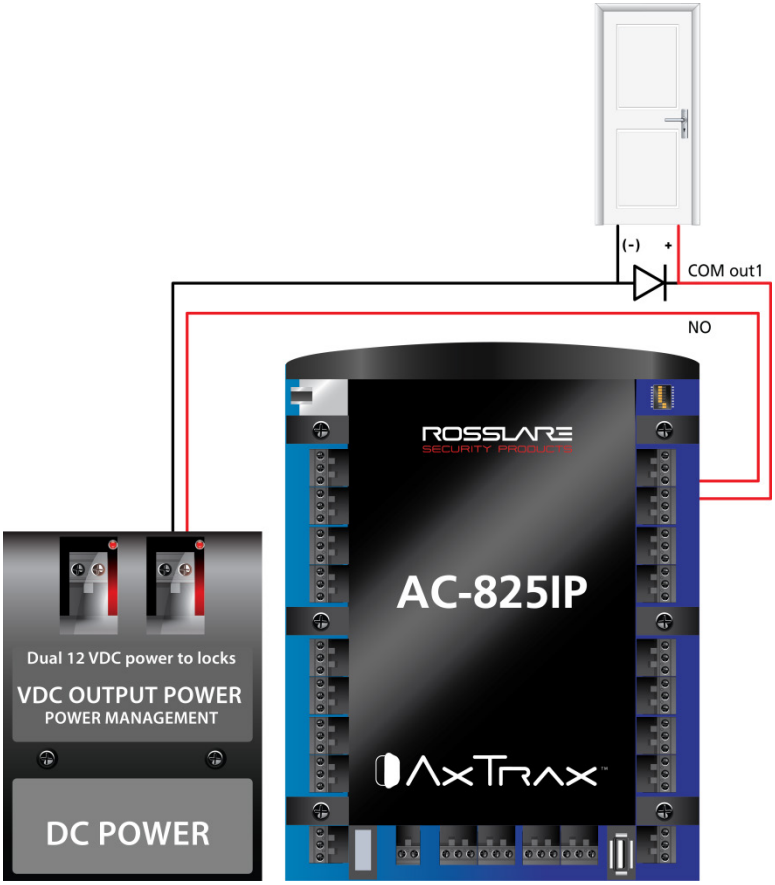
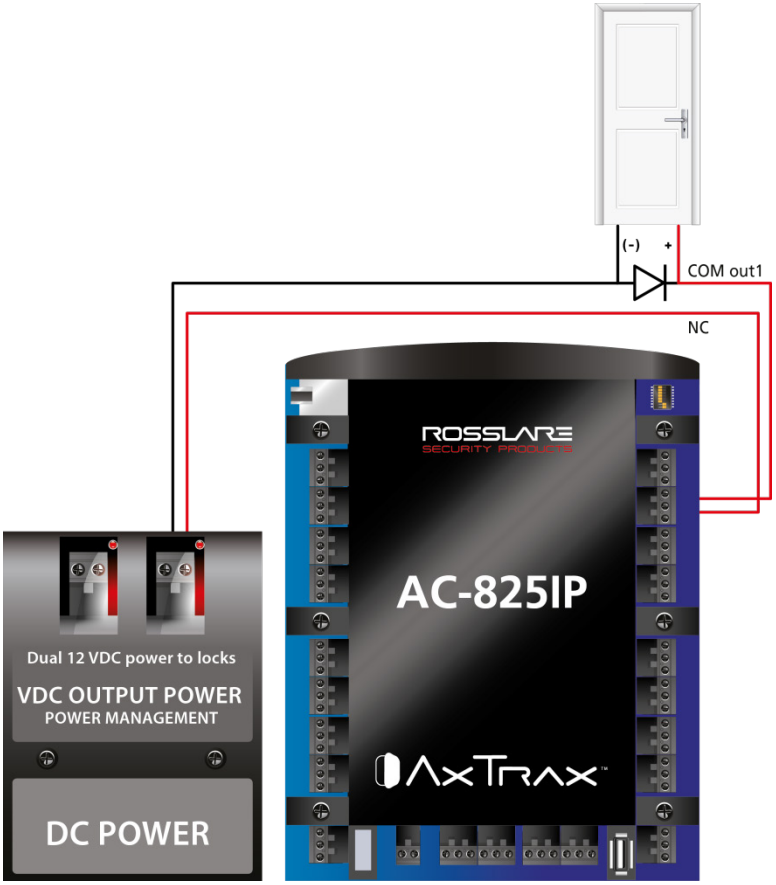


Figure 4: Door Lock – Failed Open



3.3 Open Supervised Device Protocol

OSDP allows connecting control panels with various peripheral devices (card readers, control panels, and other security management systems) while unlocking the potential of the onboard computing resources within the system.

Each panel can connect to up to 2 readers via OSDP.

3.4 Power Management

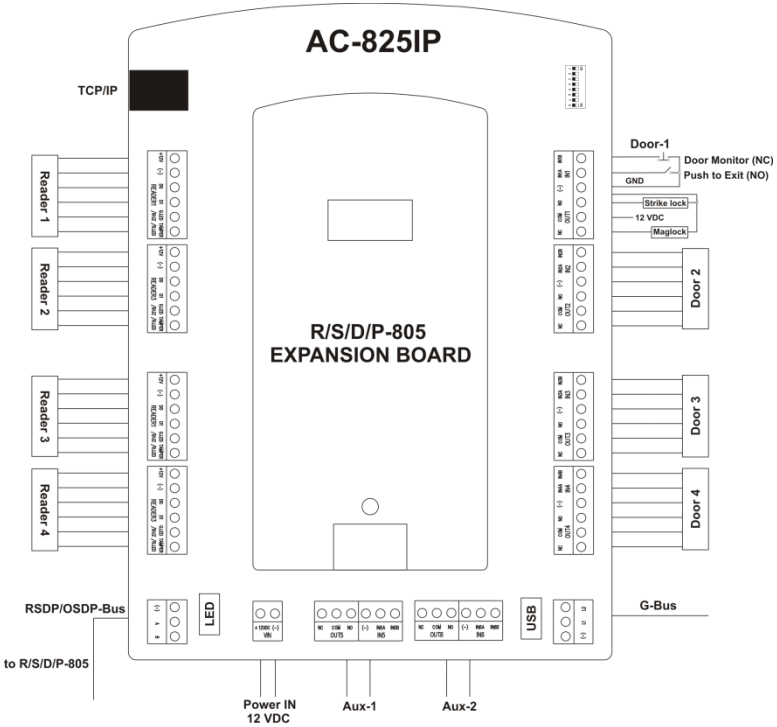
Figure 5 illustrates the AC-825IP ACU within the ME-1525 enclosure. It is recommended to add a 12 VDC lead acid backup battery in case the power management board fails. If the main input is 12 VDC, wire it to the power management board, which has a load rating of up to 4 A for lock connectivity. If 4 A is not sufficient, an external power supply should be added according to the electrical requirements. For more information, refer to Section 4.3.

Figure 5: AC-825IP in the ME-1525 Enclosure

3.5 AC-825IP Wiring Ports

Figure 6 presents a detailed view of the access control panel with all it wiring communications.

Figure 6: AC-825IP Wiring Communications



Note

The USB G-Bus ports and DIP switches are currently not functional.

3.6 Readers and Cable Length

Readers are supplied with cables having a limited length. The color of the cable cover represents the cable's functionality according to the Wiegand and OSDP standards (Figure 7 and Figure 8).

Figure 7: Reader Wiring – Wiegand

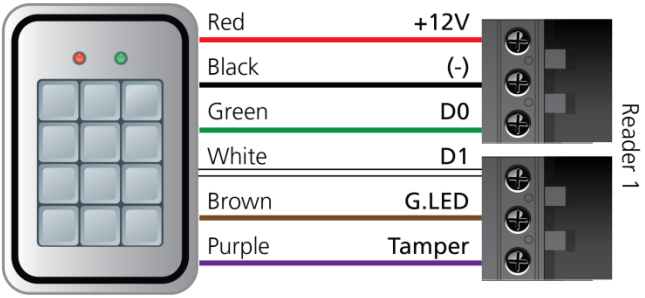
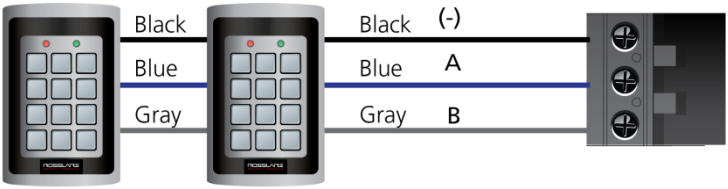


Figure 8: Reader Wiring – OSDP



If you wish to extend the cable distance, make sure you use the correct cable according to the cable color.

Note

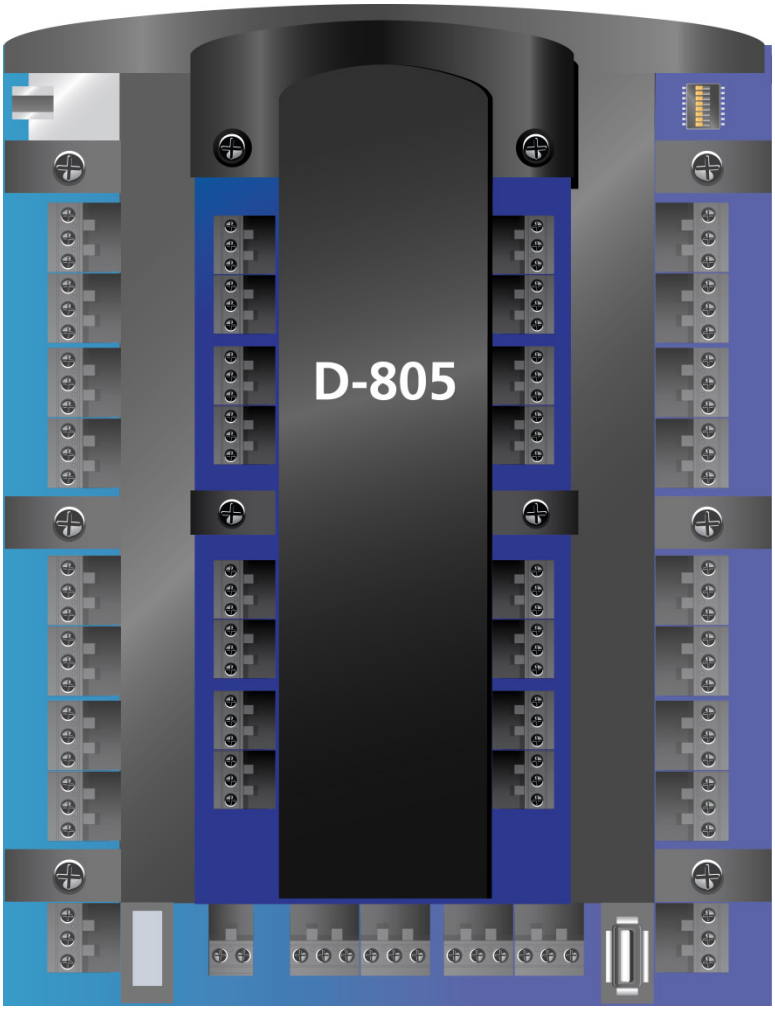
Some readers are not supplied with a cable. Please refer to the reader's manual for connecting it to the relevant reader port.

Refer to the reader specifications for the maximum cable length (typically 150 m with an 18 AWG cable).

3.7 Expansion Boards

The AC-825IP control panel provides a slot for expansion boards (Figure 9).

Figure 9: Slot for Expansion Board Attachment



There are four types of expansion boards as follows:

- R-805 – The R-805 is an optional expansion board that adds 16 outputs to the access control panel.
- S-805 – The S-805 is an optional expansion board that adds 16 supervised inputs to the access control panel.
- D-805 – The D-805 is an optional door expansion board that adds 4 reader inputs, 4 outputs (Form C, 5 A), and 8 supervised inputs to the access control panel.
- P-805 – The P-805 is an optional expansion board that adds 16 supervised inputs and 8 outputs to the access control panel.

4. Input and Output Connections

This chapter describes the AC-825IP access control panel's input and output connections.

4.1 Input Types

There are four input types:

- Normally Closed (N.C.)
- Normally Open (N.O.)
- Single EOL resistor
- Double EOL resistor

Supervised inputs have three states:

- Normal
- Abnormal
- Trouble

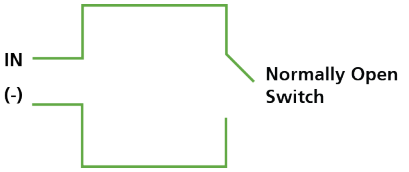
The Trouble state is caused by either tampering with the input circuit or by a faulty hardware installation. Once an input is configured as a supervised input, add a resistor of 2.2K, 8.2K, or both on the input circuit. See the following diagrams.

4.1.1 Normally Open Input Connection

A Normally Open Input has 2 states:

- Switch Open – Normal State:
  Loop resistance = Infinite (open circuit)
- Switch Closed – Abnormal State:
  Loop resistance = 0 (short circuit)

Figure 10: Normally Open Input Connection

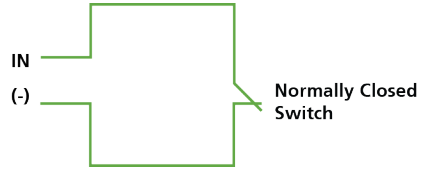


4.1.2 Normally Closed Input Connection

A Normally Closed Input has two states:

- Switch Closed – Normal State:
  Loop resistance = 0 (short circuit)
- Switch Open – Abnormal State:
  Loop resistance = Infinite (open circuit)

Figure 11: Normally Closed Input Connection



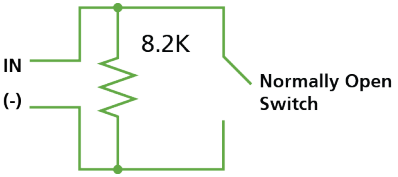
4.1.3 Normally Open Supervised Single EOL Resistor Input Connection

Connect an 8.2K resistor in parallel to the input switch contacts.

A Normally Open Supervised Input has 3 states:

- Switch Open – Normal State:
  Loop resistance = 8.2K
- Switch Closed – Abnormal State:
  Loop resistance = 0 (short circuit)
- Open circuit across input terminals – Trouble State:
  Loop resistance = Infinite (open circuit).

Figure 12: Normally Open Supervised Input (Single Resistor)



4.1.4 Normally Open Supervised Double EOL Resistor Input Connection

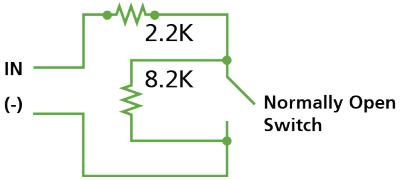
Connect a 2.2K resistor in series to the input switch contacts.

Connect an 8.2K resistor parallel to the input switch contacts.

A Normally Open Supervised Input has 3 states:

- Switch Open – Normal State:
  Loop resistance = 10.4K
- Switch Closed – Abnormal State:
  Loop resistance = 2.2K
- Open circuit (infinite loop resistance) or short circuit (0 resistance) across input terminals – Trouble State

Figure 13: Normally Open Supervised Input (Double Resistor)



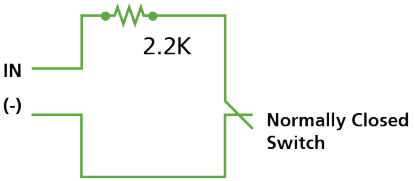
4.1.5 Normally Closed Supervised Single EOL Resistor Input Connection

Connect a 2.2K resistor in series to the input switch contacts.

A Normally Closed Supervised Input has 3 states:

- Switch Closed – Normal State:
  Loop resistance = 2.2K
- Switch Open – Abnormal State:
  Loop resistance = Infinite (open circuit)
- Short circuit across input terminals – Trouble State:
  Loop resistance = 0 (short circuit)

Figure 14: Normally Closed Supervised Input (Single Resistor)



4.1.6 Normally Closed Supervised Double EOL Resistor Input Connection

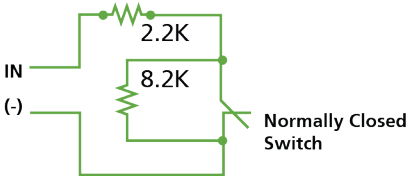
Connect a 2.2K resistor in series to the input switch contacts.

Connect an 8.2K resistor parallel to the input switch contacts.

A Normally Closed Supervised Input has 3 states:

- Switch Closed – Normal State:
  Loop resistance = 2.2K
- Switch Open – Abnormal State:
  Loop resistance = 10.4K
- Open circuit (infinite loop resistance) or short circuit (0 resistance) across input terminals – Trouble State

Figure 15: Normally Closed Supervised Input (Double Resistor)



4.2 Inputs Description

4.2.1 Request-to-Exit Button (REX) Input

Use the REX Input to open a door directly. Typically, the REX input is connected to a Normally Open push button that is located inside the premises. The push button is generally located in an easy-to-access position and opens a door without reading any credential.

Scenario	Setting
Two Readers per Door	Door 1 – IN 1A
	Door 2 – IN 3A
One Reader per Door	Door 1 – IN 1A
	Door 2 – IN 2A
	Door 3 – IN 3A
	Door 4 – IN 4A
	Door 5 – IN 5A
	Door 6 – IN 6A

REX Inputs functions when using D-805:

Scenario	Setting
Two Readers per Door	Door 4 – IN1C
	Door 5 – IN3C
One Reader per Door	Door 7 – IN1C
	Door 8 – IN2C
	Door 9 – IN3C
	Door 10 – IN4C

4.2.2 Door Monitor Input

The Door Monitor Input typically connects to a Normally Closed door sensing micro-switch for door status monitoring. Using Door Monitor enables many advanced options such as door forced alarm, door held open warnings, interlocking doors and more.

Scenario	Setting
Two Readers per Door	Door 1 – IN 1B
	Door 2 – IN 3B
	Door 3 – IN 5B

One Reader per Door	Door 1 – IN 1B
	Door 2 – IN 2B
	Door 3 – IN 3B
	Door 4 – IN 4B
	Door 5 – IN 5B
	Door 6 – IN 6B
Two Readers per Door	Door 4 – IN1D
	Door 5 – IN3D
One Reader per Door	Door 7 – IN1D
	Door 8 – IN2D
	Door 9 – IN3D
	Door 10 – IN4D

4.2.3 General Purpose Inputs

These are free inputs that can be used for various functions. This function is only available with the S-805 expansion. The following should be defined:

Scenario	Setting
Two Readers per Door	IN 2A
	IN 2B
	IN 4A
	IN 4B
	IN 6A
	IN 6B
One Reader per Door	(no general purpose inputs available)

General purpose inputs are suitable for most uses. For example, they might be used to detect tampering, to activate alarm sensors, or to monitor a power management board failure.

General purpose inputs functions when using S-805 or D-805:

Unit	Expansions
S-805	IN1S to IN16S
P-805	IN1P to IN16P
D-805	IN2C
	IN2D
	IN4C
	IN4D

4.3 Outputs

Rosslare Security recommends the use of suppression diodes for all outputs that activate an inductive load.

4.3.1 Door Lock

There are two types of door locking devices:

- Fail open (fail secure)
- Fail close (fail safe)

The following should be defined:

Scenario	Setting
Two readers per door	Door 1 – OUT 1
	Door 2 – OUT 2
	Door 3 – OUT 5
One reader per door	Door 1 – OUT 1
	Door 2 – OUT 2
	Door 3 – OUT 3
	Door 4 – OUT 4
	Door 5– OUT 4
	Door 6 – OUT 6

Door outputs when using D-805:

Scenario	Setting
Two Readers per Door	Door 1 – OUT 1
	Door 2 – OUT 3
	Door 3 – OUT 5
	Door 4 – OUT 1D
	Door 5 – OUT 3D
One Reader per Door	Door 1 – OUT 1
	Door 2 – OUT 2
	Door 3 – OUT 3
	Door 4 – OUT 4
	Door 5 – OUT 5
	Door 6 – OUT 6
	Door 7 – OUT 71D
	Door 8 – OUT 8
	Door 8 – OUT 2D
	Door 9 – OUT 3D
	Door 10 – OUT 4D

The output can sink current from any power management board (see Section 3.3).


Note

For UL installations, the installer must configure the system as fail-safe to comply with NFPA (National Fire Protection Association) regulations.

4.4 Card Readers and Keypads

Each access control panel can be connected to a maximum of 6 readers (or 10 readers when using D-805).

A keypad is required for any reader mode that requires PIN code entries, such as "Card or PIN", "PIN Only" or "Card and PIN (Secured mode)".

When connecting a reader, the following should be defined:

Scenario	Setting
Two Readers per Door	Door 1 – Reader 1 IN/OUT
	Door 1 – Reader 2 IN/OUT
	Door 2 – Reader 3 IN/OUT
	Door 2 – Reader 4 IN/OUT
	Door 3 – Reader 5 (OSDP) IN/OUT
	Door 3 – Reader 6 (OSDP) IN/OUT
One Readers per Door	Door 1 – Reader 1 IN/OUT
	Door 2 – Reader 2 IN/OUT
	Door 3 – Reader 3 IN/OUT
	Door 4 – Reader 4 IN/OUT
	Door 5 – Reader 5 (OSDP) IN/OUT
	Door 6 – Reader 6 (OSDP) IN/OUT

When using the D-805, the following should be defined:

Scenario	Setting
Two readers per door:	Door 1 – Reader 1 IN/OUT
	Door 1 – Reader 2 IN/OUT
	Door 2 – Reader 3 IN/OUT
	Door 2 – Reader 4 IN/OUT
	Door 3 – Reader 5 (OSDP) IN/OUT
	Door 3 – Reader 6 (OSDP) IN/OUT
	Door 4 – Reader 1D IN/OUT
	Door 4 – Reader 2D IN/OUT
One readers per door:	Door 1 – Reader 1 IN/OUT
	Door 2 – Reader 2 IN/OUT
	Door 3 – Reader 3 IN/OUT
	Door 4 – Reader 4 IN/OUT
	Door 5 – Reader 5 (OSDP) IN/OUT
	Door 6 – Reader 6 (OSDP) IN/OUT
	Door 7 – Reader 1D IN/OUT
	Door 8 – Reader 2D IN/OUT
	Door 9 – Reader 3D IN/OUT
	Door 10 – Reader 4D IN/OUT

Use the AxTraxNG software to set the readers for IN or OUT use and to set the data transmission format for each reader.

The reader's tamper output connects to the access control panel's Reader-Tamper input. If the reader is interfered with, an alarm can be generated.

The controller activates the LED control for the time the door is open.

5. AC-825IP Hardware Settings

Access control panels, configured as either single reader door or double reader door controllers, have two readers, IN or OUT.

Expansion boards attached to the expansion slot of the panel must be configured the same as the panel (single or double door).

Expansion boards connected via RS-485 standard can be configured independently of the panel.

When configuring two readers per door, the two readers connected to a door must be using the same format (OSDP or Wiegand).

Table 1: Possible Hardware Settings

Connectors	Description	Setup
Two Readers per Door:		
Outputs	Door 1 Lock output	(OUT 1)
	Door 2 Lock output	(OUT 3)
	Door 3 Lock output	(OUT 5)
	General purpose output	(OUT 2)
	General purpose output	(OUT 4)
	General purpose output	(OUT6)
Inputs	Door 1: Request-to-Exit	(IN 1A)
	Door monitor input	(IN 1B)
	Door 2: Request-to-Exit	(IN 3A)
	Door monitor input	(IN 3B)
	Door 3: Request-to-Exit	(IN5A)
	Door monitor input	(IN5B)
Readers	Reader1 – Door1	Door Entry or Exit
	Reader2 – Door1	Door Exit or Entry
	Reader3 – Door2	Door Entry or Exit
	Reader4 – Door2	Door Exit or Entry
	Reader5 (OSDP) – Door3	Door Exit or Entry
	Reader6 (OSDP) – Door3	Door Exit or Entry
One Reader per Door:		
Outputs	Door1 Lock output	(OUT 1)
	Door2 Lock output	(OUT 2)
	Door3 Lock output	(OUT 3)
	Door4 Lock output	(OUT 4)
	Door5 Lock output	(OUT 5)

Connectors	Description	Setup
	Door6 Lock output	(OUT 6)
Inputs	Door1 Request-to-Exit	(IN 1A)
	Door monitor input	(IN 1B)
	Door2 Request-to-Exit	(IN 2A)
	Door monitor input	(IN 2B)
	Door3 Request-to-Exit	(IN 3A)
	Door monitor input	(IN 3B)
	Door4 Request-to-Exit	(IN 4A)
	Door monitor input	(IN 4B)
	Door5 Request-to-Exit	(IN 5A)
	Door monitor input	(IN 5B)
	Door6 Request-to-Exit	(IN 6A)
	Door monitor input	(IN 6B)
Readers	Reader1	(Door1 IN/OUT)
	Reader2	(Door2 IN/OUT)
	Reader3	(Door3 IN/OUT)
	Reader4	(Door4 IN/OUT)
	Reader5	(Door5 IN/OUT)
	Reader6	(Door6 IN/OUT)
Two Readers per Door with 8 Readers (D-805):		
Outputs	Door1 Lock output	(OUT 1)
	Door2 Lock output	(OUT 3)
	Door3 Lock output	(OUT 5)
	Door4 Lock output	(OUT 1D)
	Door4 Lock output	(OUT 3D)
Inputs	Door1 Request-to-Exit	(IN 1A)
	Door1 monitor input	(IN 1B)
	Door2 Request-to-Exit	(IN 3A)
	Door2 monitor input	(IN 3B)
	Door3 Request-to-Exit	(IN 5A)
	Door3 monitor input	(IN 5B)
	Door4 Request-to-Exit	(IN 1C)
	Door4 monitor input	(IN 1D)
	Door5 Request-to-Exit	(IN1C)
	Door5 monitor input	(IN1D)
Readers	Reader1	(Door1 IN/OUT)
	Reader2	(Door1 OUT/IN)
	Reader3	(Door2 IN/OUT)

Connectors	Description	Setup
	Reader4	(Door2 OUT/IN)
	Reader5 (OSDP)	(Door3 IN/OUT)
	Reader6 (OSDP)	(Door3 OUT/IN)
	Reader1D	(Door4 IN/OUT)
	Reader2D	(Door4 OUT/IN)
	Reader3D	(Door5 OUT/IN)
	Reader4D	(Door5 OUT/IN)
One Reader per Door with 8 Readers (D-805)		
Outputs	Door1 Lock output	(OUT 1)
	Door2 Lock output	(OUT 2)
	Door3 Lock output	(OUT 3)
	Door4 Lock output	(OUT 4)
	Door5 Lock output	(OUT 5)
	Door6 Lock output	(OUT 6)
	Door7 Lock output	(OUT 1D)
	Door8 Lock output	(OUT 2D)
	Door9 Lock output	(OUT 3D)
	Door10 Lock output	(OUT 4D)
Inputs	Door1 Request-to-Exit	(IN 1A)
	Door2 Request-to-Exit	(IN 2A)
	Door3 Request-to-Exit	(IN 3A)
	Door4 Request-to-Exit	(IN 4A)
	Door5 Request-to-Exit	(IN 5A)
	Door6 Request-to-Exit	(IN 6A)
	Door7 Request-to-Exit	(IN 1C)
	Door8 Request-to-Exit	(IN 2C)
	Door9 Request-to-Exit	(IN 3C)
	Door10 Request-to-Exit	(IN 4C)
Readers	Reader1	(Door1 IN/OUT)
	Reader2	(Door2 OUT /IN)
	Reader3	(Door3 IN/OUT)
	Reader4	(Door4 OUT /IN)
	Reader5 (OSDP)	(Door5 IN/OUT)
	Reader6 (OSDP)	(Door6 OUT /IN)
	Reader1D	(Door7 IN/OUT)
	Reader2D	(Door8 OUT /IN)
	Reader3D	(Door9 OUT /IN)
	Reader4D	(Door10 OUT /IN)

5.1 DIP Switch Configuration

Currently not used.

5.2 Setting AC-825IP Panel Type in AxTraxNG

The AC-825IP panel type is defined using AxTraxNG. There are two panel types: a panel with one reader per each door or a panel with two readers per each door. Please refer to the AxtraxNG manual for further details.

6. Communications

Communication lines are used to upload and download information between the AC-825IP panel and the AxTraxNG server using an IP Network.

6.1 TCP/IP Network Connection

The computer running the AxTraxNG server can communicate with the access control panels via an IP network. The connection settings are controlled within the AxTraxNG Client software.

AC-825IP panels connect to the IP network using an onboard network module.

6.1.1 LAN and WAN Requirements

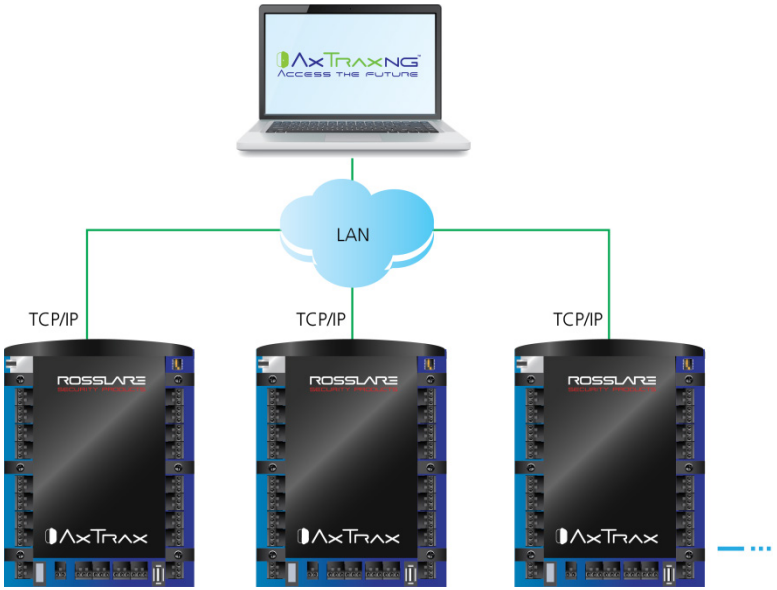
The devices can be connected to an IP network using any valid network address.

The following schematic illustrates the connection of a single AC-825IP to a computer via a LAN network.

The maximum distance from the Ethernet port of the panel to the LAN connection is 328 ft. (99.97 m).

When the IP connection is implemented over a WAN, it is then possible to communicate with the panel via the Internet with an AxTraxNG client, allowing multiple access controllers worldwide to be reached.

Figure 16: Connecting Multiple Access Control Panels (AC-825IP) to the AxTraxNG Server



Communications

Before connecting a panel by an IP connection for the first time, the AxTraxNG software must configure the device. Settings are then stored in the device (see the *AxTraxNG Software Manual for further details*).

A. 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.

AC-825

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