

Smart Card Reader AL1191, AL-1193 Installation Instructions

Introduction

This is the SmartCard Reader Installation Instructions for models AL-1191 and AL-1193. The smart card reader is a multifunction, all-purpose proximity card reader suitable for all locations (including outdoors) that require a short-range reader. You can connect the reader directly to the Alliance system RS485 databus.

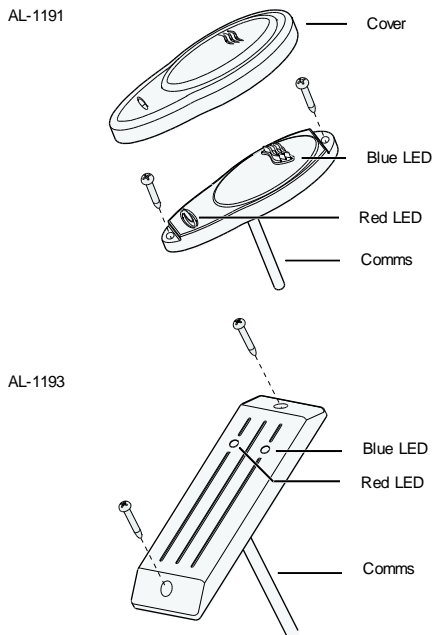
You can configure the reader through the control panel menu when it is connected to the system databus, through the DGP menu when it is connected to the local databus, or you can use a configuration card. Refer to the Smart Card Reader Programming Manual for more information.

The AL-1191 model is shipped with a white removable cover (there are five other colors available).

Reader components

Figure 1 below shows the reader components.

Figure 1: Reader components



Blue LED. Door open, disarmed.

Red LED. Door open, armed

Comms. LED control, buzzer control, power.

Installation

You should program the reader and change the default address (16) before you install the reader. Refer to the Smart Card Reader Programming Manual for programming details.

You can mount the reader on any flat surface with two #6 (3 to 3.5 mm diameter) panhead screws (Figure 1). We do not recommend using countersunk screws.

You will experience a slightly reduced range if you mount the reader on a metal surface. If you mount the AL-1191 reader outdoors, ensure that the blue LED is at the top.

To mount the reader, do the following:

1. Gently pry the AL-1191 cover sides away from the main reader body to remove cover and expose the mounting screws. Do not use excessive force or the reader can be irreparably damaged.
2. Mount the reader using the mounting screws.
3. Gently press the cover over the main body of the AL-1191 reader until it locks into place.

Wiring

Table 1 below describes the reader wiring components.

Table 1: Wiring components

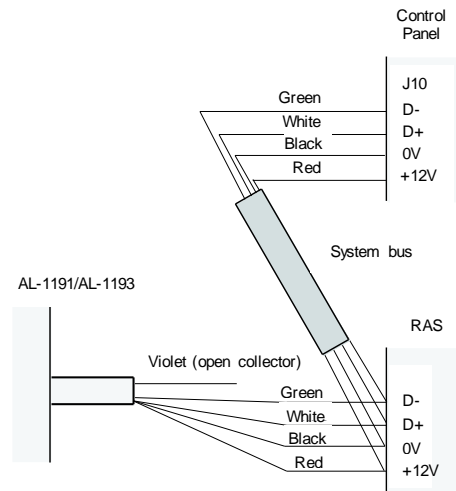
Wire color	Name	Description
Red		Positive 9 to 14 VDC supply.
Black	0 V	DC supply ground.
Green	D-/D0/Data	RS485 Data -, Wiegand Data 0 Absolute maximum, 12 V at 10 mA
White	D+/D1/Clock	RS485 Data +, Wiegand Data 1 Absolute maximum, 12 V at 10 mA

Brown	LED 1	<p>Off line LED control configured to two-wire control will control the red LED only .</p> <p>Wire grounded: red LED on</p> <p>Wire open: red LED off</p> <p>Wire at +5 to +12 V: red LED off</p> <p>Off line LED Control configured to one-wire control will control both the red and blue LEDs</p> <p>Wire grounded: blue LED on</p> <p>Wire open circuit: both LEDs off .</p> <p>Wire at +5 V to +12 V: red LED on.</p> <p>Absolute maximum, 14 V</p>
Yellow	LED 2	<p>Configurable to control the blue LED when off line.</p> <p>Wire grounded: blue LED on.</p> <p>Wire open: blue LED off .</p> <p>Wire at +5V to +12V: blue LED off .</p> <p>Request-to-exit input when online to Alliance.</p> <p>This input may be connected to a push button connected to ground with RTE only selected on the option card or in Menu 10. Refer to the <i>Smart Card Reader Programming Manual</i>.</p>
Blue	Buzzer	<p>Off line buzzer control.</p> <p>Wire open or +5V to +12V: buzzer off .</p> <p>Wire grounded: buzzer sounding.</p> <p>Absolute maximum, 14 V.</p>
Violet	Open collector	<p>Configurable as: door relay , tamper output, credit controlled pulse, timed, or latched output.</p> <p>Absolute maximum, 14 V at 25 mA</p> <p>This is a low current output and must not be used to directly energize high current door openers.</p>
	470 ohm resistor	<p>Used to terminate RS485 bus when the reader is the last device on the bus.</p> <p>Install across D+ (white) and D- (green).</p>

System bus connections

Figure 2 below shows how to connect the reader to a RAS on the Alliance system bus.

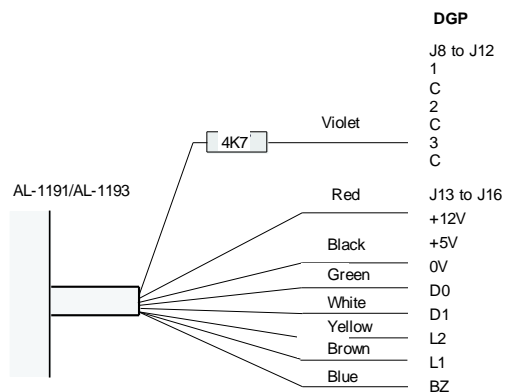
Figure 2: System Bus connections



Wiegand block connections

Figure 3 below shows how to connect the reader to the Wiegand connection block on a 4-Door/Elevator Controller DGP.

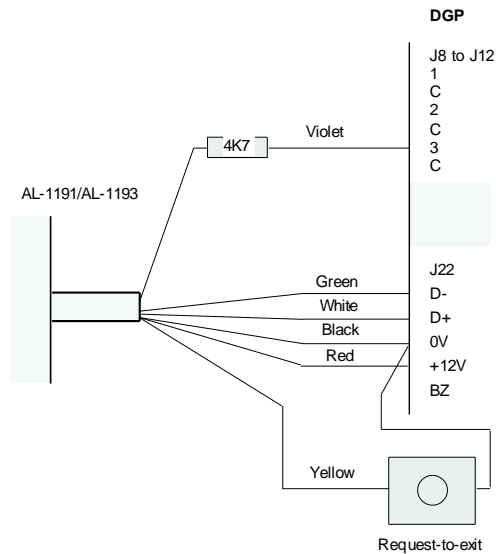
Figure 3: Wiegand block connections



Local bus connections

Figure 4 on page 3 shows how to connect the reader to a 4-Door/Elevator Controller DGP local bus with a request-to-exit input.

Figure 4: Local Bus connections



Tamper

The reader has a tamper feature. When the reader is connected to the system databus, tamper data is transmitted to the Alliance system with system data. You can configure a tamper control for both online and offline operation using an external open collector output (violet wire)

Specifications

Current consumption	
Standby	25 mA
Active	80 mA maximum
Input voltage	
	9 to 14 VDC
Operating temperature	
	32 to 120°F (0 to 49°C)
Humidity	
	85% noncondensing

Regulatory information

UL listings	UL 294 Standard for Access Control System Units
	UL 365 Standard for Police Station Connected Burglar Alarm Units and Systems
	UL 609 Standard for Local Burglar Alarm Units and Systems
	UL1610 Standard for Central Station Burglar Alarm Units
	UL 1635 Standard for Digital Alarm Communicator System Units

FCC compliance

This device complies with part 15 of the FCC rules. Operation is subject to the following conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet or a circuit different from the one where the receiver is connected.
- Consult the dealer or an experienced radio-TV technician for help.

FCC ID: CGGATS1190-1192.

Contact information

www.utcfireandsecurity.com or www.interlogix.com

For customer support, see www.interlogix.com/customer-support

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