



Rock X Install Guide



Installation Prerequisite

Installation to be performed only by certified installer

Power Sourcing Requirement: PoE+ (802.3at Type 2) 30W *or*
12VDC 2.5A Auxiliary Power

PoE+: UL 294B and UL 1310 Class 2 LISTED / APPROVED power source, cable max length 30 meters, is mandatory to maintain UL 294 listing status

A ULC 60839- 11- 1 and CSA C 22.2 No 223 Class 2 power supply must be provided for ULC installations

Maximum Number of Access Points and Releasing Devices: 1

Wiegand/OSDP Badge Reader max cable length: 5 ft - 22 AWG (1.5 m)

Wiegand Panel max cable length: 500 ft - 22 AWG (152 m), 300 ft - 24 AWG (91 m)

OSDP Panel max cable length: 4000 ft - 24 AWG (1,219 m),
max length between nodes: 1640 ft - 24 AWG (500 m)

Parts Included

1x Alcatraz AI Rock X

1x Mounting plate

1x Panel Wiring harness

1x Reader Wiring harness

1x Environmental gasket kit

1x T15 Rock X security tool

2x Security screws #8-32

4x Wall Mounting screws #6-32

Required Tools and Supplies

2-Gang switch box

Gel filled B connectors or equivalent

22/6 cable, 5-9 conductor, Genesis 12061109 or equivalent (Wiegand)

4 conductor shielded twisted pair, Belden 3107A or equivalent (OSDP)

Level

Measuring tape

Wire stripper / cutter

Phillips screwdriver

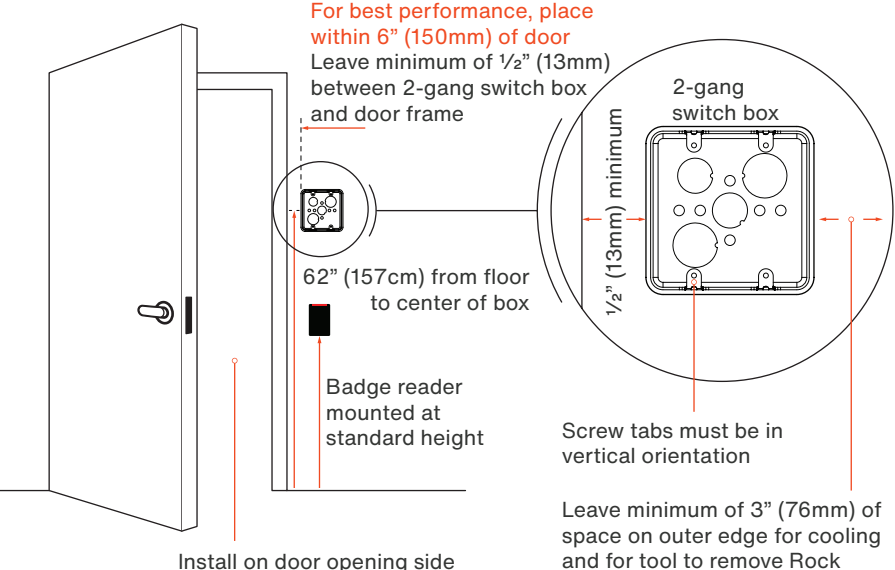
CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure

ATTENTION: L'utilisation de commandes, réglages ou instructions autres que ceux spécifiés ci-dessus présente un risque d'exposition dangereuse aux radiations

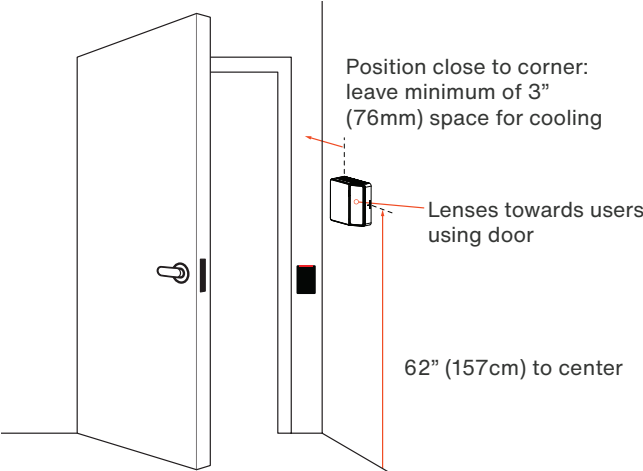


Step 1 -

Mount 2-gang switch box in wall



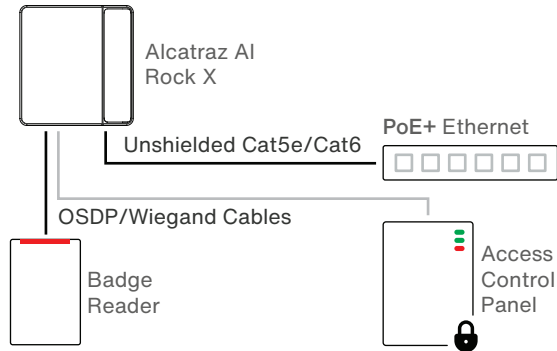
Alternate corridor install for tight spaces



Step 2 -

Wire cable harness to badge reader and access control panel

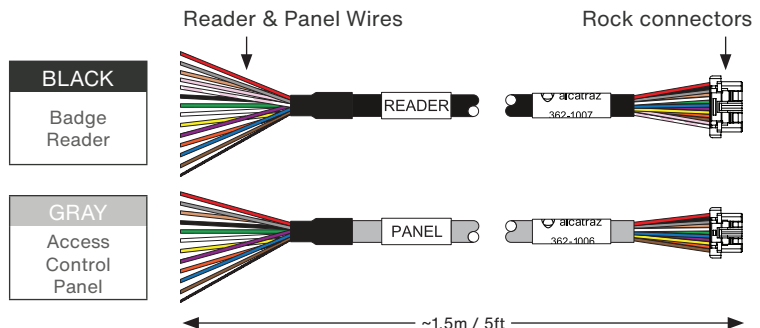
Connection Overview



It is possible to reuse existing Wiegand wiring for OSDP, however, using simple stranded cable typical of Wiegand access control readers does not meet RS485 twisted pair recommendations

For OSDP cable lengths greater than 200ft. (61M) or EMF interference, install $120\Omega \pm 2\Omega$ resistor across RS-485 termination ends

Wiring Harness Connections



Panel Wiring

		OSDP	Wiegand
12 VDC IN	RED	*	*
GND	BLACK	✓	✓
LED Green	ORANGE		✓
LED Red	BROWN		✓
Beeper	YELLOW		
Hold	BLUE		
Aux IN	GRAY		
D0 (+ RS485A)	GREEN	✓	✓
D1 (- RS485B)	WHITE	✓	✓
Tamper	VIOLET		
Aux OUT	TAN		
Aux 12-24 VDC IN	WHITE / RED		

✓ = Required * = Optional Failsafe

Reader Wiring

		OSDP	Wiegand
12 VDC OUT	RED	✓	✓
GND	BLACK	✓	✓
LED Green	ORANGE		✓
LED Red	BROWN		✓
Beeper	YELLOW		
Hold	BLUE		
Aux IN	GRAY		
D0 (+ RS485A)	GREEN	✓	✓
D1 (- RS485B)	WHITE	✓	✓
Tamper	VIOLET		
Aux OUT	TAN		
Intercom Button +	PINK		
Intercom Button -	WHITE / PINK		
Intercom LED	WHITE / ORANGE		

For wiegand installations that require 1-Wire LED control, ONLY connect the ORANGE wire (Panel LED Green) to the LED terminal on the panel

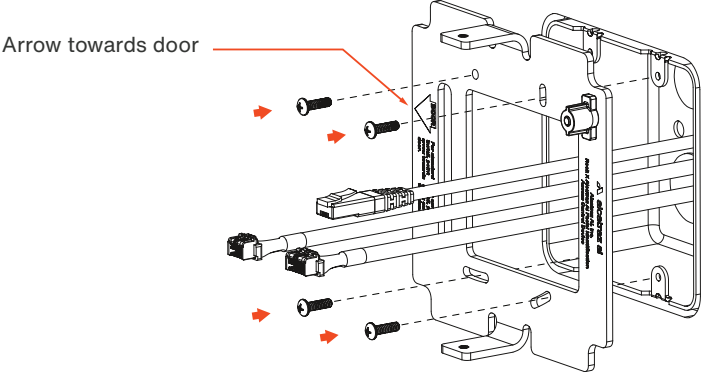
CAUTION: Incorrect wiring may cause permanent damage

ATTENTION: Un mauvais câblage peut causer des dommages irréversibles

Step 3 -

Thread cables through and attach mount plate to 2-gang box

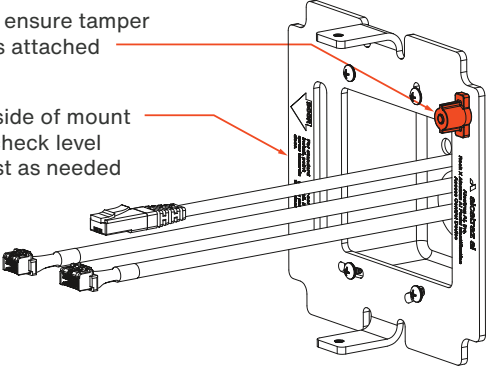
Attach mount plate to 2-gang box with provided screws, paying attention to point the arrow towards door



Check mount plate

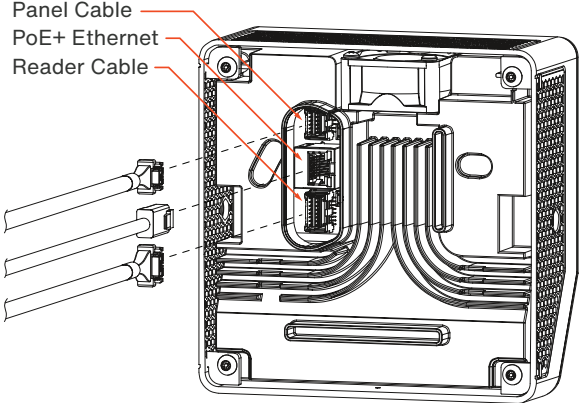
Check to ensure tamper magnet is attached

Use any side of mount plate to check level and adjust as needed

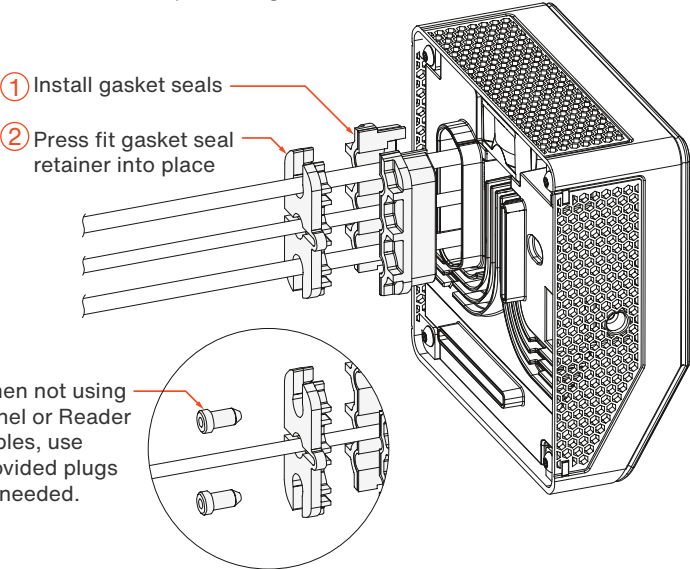


Step 4 -

Plug in and seal cables



For outdoor installs, use provided gasket kit

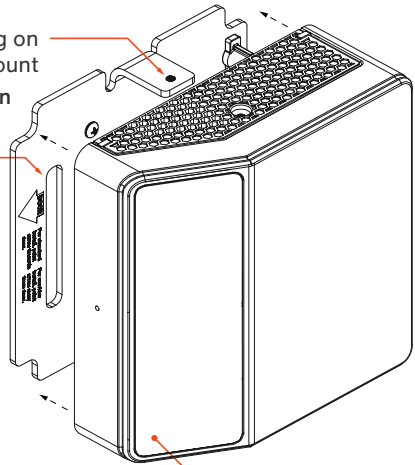


Step 5 -

Attach Rock to wall plate

Align threaded plate with opening on side of Rock X and press onto mount
Hold in place while screwing down

Arrow and narrow plate opening towards door



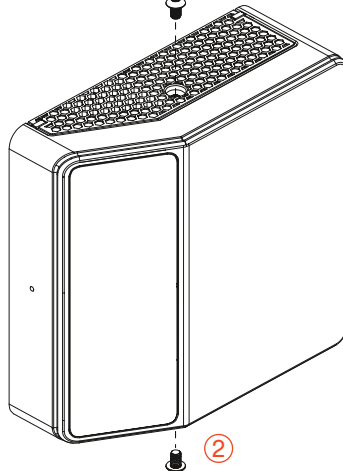
Glass facing door

T15 Security Torx Key

8/32 x 1/4

Security Screw x2

①



②

Rock X has TAMPER detection: Removal of Rock X from wall mount will result in TAMPER signal assertion to ACS



Step 6 –

Post installation check

Rock Power up

The Rock must have PoE+ (802.3at Type 2, minimum 30W), or Auxiliary power (12-24 VDC, minimum 600mA)

The bootup sequence will not be successful if the Rock does not have sufficient power, and may go into a reboot loop

Booting

Status icons and a progress bar appear in the main display to indicate booting and will complete in approximately 2 min



Running

By default all new Rocks start in demo mode until configured - this will be indicated by the word DEMO down the left side of the display

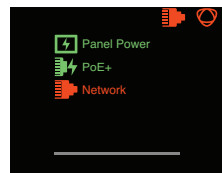
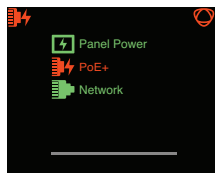
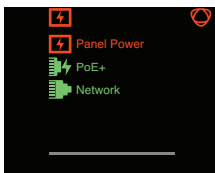


One or more of the following status icons may be present in the status bar on the display after bootup

**No PoE+ Power		QR Code read active	
*Bad network connection		Server connection bad	
**No Auxiliary Power		Not on-boarded to server	
*Tamper detected		Person in range	

* Must be resolved before completing install
** PoE+ or Auxiliary power is required

The installation is not complete if any of the following errors are present, these errors must be resolved to complete the installation



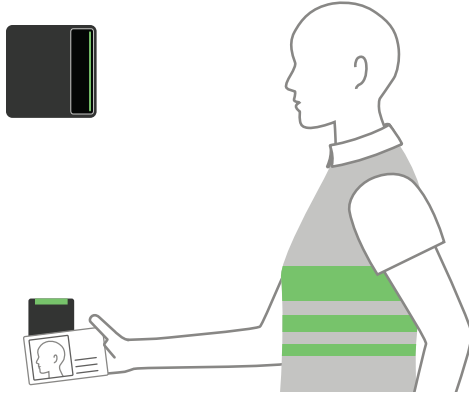
Step 7 -

Post installation functionality verification

1. Make sure all fault messages are cleared (see step 6)
2. If using OSDP, this must be configured before proceeding (<https://alca.link/Configure-OSDP>)
3. Swipe badge* (badge must have access to door in ACS)
 - a) Rock and badge reader will flash the same color
 - b) Gray badge icon turns green

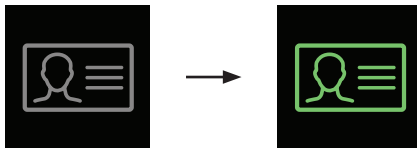
3a:

Match LED color on Rock and badge reader



2b:

Gray to Green badge icon















Door should unlock and the installation is now complete, you may proceed with commissioning - [access the Alcatraz AI Admin Portal Guide by scanning the QR code on the back cover of this document for more info](#)

*If a mask is being worn, an animation to pull down the mask will be displayed - it is not necessary to remove the mask to use badge only



Troubleshooting Icons -

No PoE+ Power		No PoE+ power has been detected.	Check PoE+ power source. Minimum 802.3at Type 2, 30W.
No Auxiliary Power		No auxiliary power has been detected.	Check auxiliary power source. 12-24VDC 600mA
No Panel Power		No panel power has been detected.	Check ACS power source.
Bad Network Connection		The following may scroll: IP:0.0.0.0, SN:0.0.0.0, GW:0.0.0.0, SRV:onboarding. alcatraz.ai(?).	Check for loose network connections or disabled network ports.
Tamper		Rock is removed from mount.	Check that the Rock is secure to the wall.
Internal Comms Down		Internal communications are down.	Power cycle. Contact Support if it persists.
QR Code Receptive		Icon is able to read an Alcatraz AI generated QR code shown to the camera.	Icon will disappear after Onboarding.
QR Config Accepted		Rock accepts network configurations after scanning in QR code.	If not displayed after a QR code scan, try holding QR code further away, or print QR code on a piece of paper
No DNS Connection		Rock cannot connect to the DNS server.	Check that required ports are open and firewall rules are properly configured.
IP resolution failed		Rock cannot resolve the server IP address.	Check that required ports are open and firewall rules are properly configured.
NTP not syncing		Rock cannot connect to the NTP server.	Check that required ports are open and firewall rules are properly configured.
No Server Connection		Rock cannot connect to the server running the Alcatraz AI Admin Portal.	Check that required ports are open and firewall rules are properly configured.
Not Onboarded		Rock has not been onboarded to the Alcatraz AI Admin Portal.	Will clear once the Rock is onboarded and status in Alcatraz AI Admin Portal shows Active and Online.

ROCK-X ALCATRAZ FACIAL AUTHENTICATION ACCESS CONTROL DEVICE

Part Number	S10-0002
Input Power	PoE+ (42.5V to 57V DC) or Auxiliary DC (12V DC) Rock Power Consumption 10W Typical at 25C
Badge Reader Output	12VDC 200mA
Operating Temp	-40° – 66°C (-40° – 150°F)
Humidity	Relative humidity 0-100% non condensing
Environmental	IP66 Weather Rating, IK8 Impact Rating
Access Control	Maximum Number of Access Points and Releasing Devices: 1
FAR	0.001%
Weight	1.66lbs (0.75kg)
Size	W 13.8cm (5.4") x H 13.8cm (5.4") x D 5.5cm (2.2")

Max number of face/templates enrolled shall not exceed 25,000

Ethernet/PoE+ and Wiegand Cable to Reader and Panel are Class II/Power Limited

Equipment not intended for connection to telephone, or outside wiring as covered by Article 800 in the National Electrical Code, NFPA 70

This equipment is not suitable for use in locations where children are likely to be present

FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Any changes or modifications to this device not explicitly approved by the manufacturer could void your authority to operate this equipment.

ATTENTION: Tout changement ou toute modification apportés à cet appareil sans l'approbation expresse du fabricant risque d'invalider l'autorisation relative à son utilisation.

CE Marking

Alcatraz AI hereby declares that these facial authentication devices are in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.



WARNING: This product can expose you to chemicals including DINP, which is known to the State of California to cause cancer, and DIDP, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

AVERTISSEMENT: Ce produit peut vous exposer aux produits chimiques, dont DINP, connu de l'Etat de Californie pour causer le cancer et DIDP, connu de l'Etat de Californie pour causer des anomalies congénitales ou d'autres dommages reproductifs. Pour plus d'informations, visitez le site www.P65Warnings.ca.gov.

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