CDVI

LIFETIME WARRANTY
GARANTIE A VIE

Voir conditions de garantie à vie limitée. / Refer to Limited Lifetime Warranty

AC22

2-Door Controller
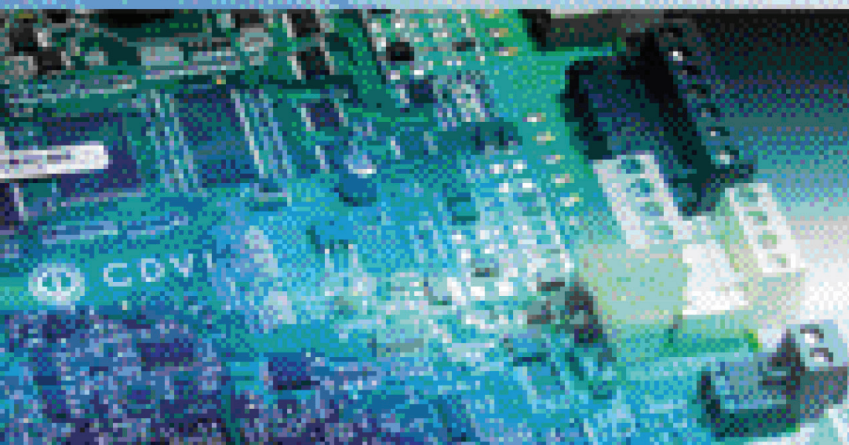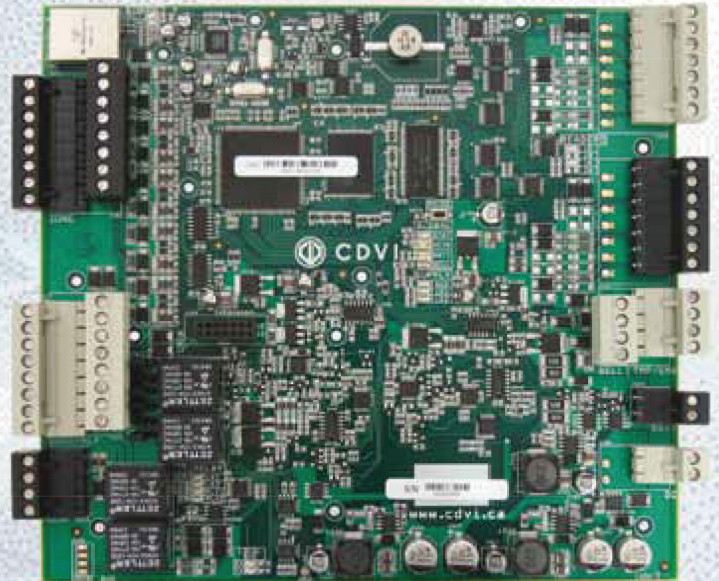
Range: Online Access Control

INSTALLATION MANUAL

Thank you for buying our products and for the confidence you placed in CDVI.

AC22
2-Door Controller

1] PRODUCT PRESENTATION

The AC22 is ATRIUM's powerful 2-door main controller. Using AX22 door expansion modules, 8 additional doors can be added to the AC22 main controller for a total of 10 doors. The AC22 main controller includes a pre-assembled universal power supply and features an RS-485 auto-detection communication bus eliminating the need for confusing jumper and DIP switch settings. Industry-unique and effortless card enrollment mode minimizes system start up and simplifies your life.

- **Control 2 doors / 2-readers**
  (up to 10 doors with four AX22 2-door expanders)
- **Embedded Web Server**
- **On-board Ethernet Port with AES 256-bit encryption**
- **Auto-detect hardware modules (No DIP Switches)**
- **Quick and easy card enrollment procedure**
- **Multi-purpose inputs 10 (20 using zone doubling)**
- **Totally fuseless system**
- **Pre-assembled universal power supply (120V / 240V)**
- **1,000 users/cards**
- **100 Access Levels**
- **100 Schedules each supporting 100 time periods**
- **1,000 Event Buffer**
- **10 Areas**
- **Ultra fast firmware update (less than 10 seconds)**
- **FREE Management Software**
- **Wiegand & ABA Track II magnetic stripe compatible**
- **Maintenance-friendly snap on terminal connectors**
- **Comprehensive LED status indicators**

Pre-assembled universal power supply included

2] NOTES AND RECOMMENDATIONS

FCC & IC COMPLIANCE

This device complies with Part 15 of the FCC rules Class A. 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. This class A digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. The ATRIUM AC22 2-Door Controller is also compliant with EN55022:1998, amendment 1:1995, Class A.

UL COMPLIANCE

To comply with UL listings, the following requirements must be met:

- Use of UL listed readers (Wiegand: 26-bit, 30-bit and 40-bit; mag stripe: up to 32 digits)
- Use of a UL recognized tamper switch on every housing cabinet for the AC22 2-Door Controller
- Use only UL listed cables
- Use only UL listed adaptors

Note: All circuits are power limited.

UL 294 COMPLIANCE NOTICE

- Use only UL 294 listed power supply
- Connect CDVI LED status indicator, part number 7020-0001-0000, to the DC Input gray terminals of the AC22.

Note: Backup battery provides operation of up to 12 hours but has been tested for 4 hours per Section 33 of UL 294, fifth edition.

The system's location and wiring methods shall be in accordance with the National Electrical Code, ANSI/NFPA 70.

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RECOMMENDED WIRING

Equipment	Wire Type	Size	Maximum Length
Card reader and Wiegand keypad	4 to 8 conductors, stranded, shielded (foil), drain conductor. For example: Alpha 5196, 5198, 5386, 5388, Belden 9553	22AWG (0.64mm) to 18AWG (1.02mm)	150m (500ft.)
Zone input	2 conductors, copper 22AWG (0.64mm)	22AWG (0.64mm)	600m (2000ft.)
Door strike	2 conductors, solid copper 18AWG (1.02mm)	18AWG (1.02mm)	150m (500ft.)
Power Supply	3 conductors, solid copper 18AWG (1.02mm)	14AWG (1.63mm)*	8m (25ft.)
Ethernet	CAT 5/5e	-	100m (300ft)
RS485 bus, Star or Daisy Chain (no BIAS/ EOL required)	CAT 5/5e or 4 pairs	24AWG (0.51mm)	1220m (4000ft.)
	4 conductors, copper	26AWG (0.40mm) to 18AWG (1.02 mm)	

* The Minimum Size Equipment Conductors for the AC mains required are 14 AWG if made of Copper or 12 AWG if made of Aluminium or Copper-Clad Aluminium. Do not use any switch-controlled outlets to power the system.

SPECIFICATIONS

System Resources	
Doors	2 (expandable to 10 doors)
Cards	Up to 1000 cards
Schedules	Up to 100 schedules (with up to 100 periods per schedule)
Buffered Events	Up to 1000 events
Operating Temperature	-20°C to +70°C (-4°F to +158°F)
Humidity	0% to 85% (non condensing)
System Autonomy	Full Distributed Architecture (100% Off-line Operation)
Firmware	Online Upgradeable
PCB Dimensions	19.9cm (7.83") x 18 cm (7.09")
Cabinet Dimensions	40 cm (15.8") high, 32 cm (12.6") wide, 9 cm (3.54") deep

Inputs	
Readers	2 x Wiegand Readers with Multiple Protocol Support (Wiegand 26-bit, 30-bit & 44-bit), Magnetic Stripe ABA Track 2
Keypads	2 x Wiegand Keypad with Multiple Protocol Support (Wiegand 8-bit & 26-bit)
Multi-Purpose Inputs	10 zone inputs (up to 20 using ZONE DOUBLER) with optional individual WIRE CUT & WIRE SHORT supervision.
Box Tamper	Normally Closed (N.C.) contact

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Communication

LOCAL BUS	RS485 @ 57600Baud supporting star and/or daisy chain topologies up to 4000ft (1220 meters)
ETHERNET	10/100 Base-T, Auto Sensing, 100m(300ft)

Power Supply

AC Power	120-240Vac, 200VA
Frequency	50Hz/60Hz
Output	24Vdc, 3.5A
AC Terminal Fuse	250Vac, 2.5 A, Time Lag, Slow Blow, Operating Temperature: -55oC to +125oC
Power Loss Indicator	Yes (DC IN)

Do Not Connect to a Receptacle Controlled by a Switch.

On-Board Protection (All fuseless, auto-resume)

VLK	12Vdc @ 750mA
AUX	12Vdc @ 1A
BELL	12Vdc @ 3A (up to 40W)
Battery	Against reversal, short, current limited/monitored

Power output specifications

Battery Backup

Battery Capacity	12Vdc 7Ah rechargeable acid/lead or gel cell backup battery (YUASA model #NP7-12 recommended). Ensure proper polarity.
Charging Current	250mA (default), 320mA, 500mA, or 1A. Refer to the ATRIUM user interface instruction manual for more information on how to modify the battery charging current.
Low Battery @	11.8Vdc
Low Battery Restore @	12.2Vdc
Low Battery Cut-Off @	10.5Vdc

Power Outputs (+12Vdc)

Lock Output 1	Maximum Current 750mA
Lock Output 2	
Reader 1	Maximum Current 1000mA
Reader 2	
Zone Inputs	
LOCAL BUS	
BELL	3A (up to 40W)

Outputs

LK1, LK2, RLY1, RLY2	Form C Relay, 5A @ 250Vac, 7A @ 125Vac, 7A @ 30Vdc
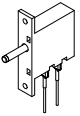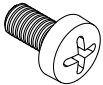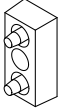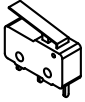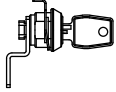
3] PACKAGE CONTENTS

This chapter details how to install and setup the ATRIUM 2-Door Controller.

Content of the 2-Door Controller

The 2-Door Controller contains:

- One 2-Door Controller module in its cabinet with connection diagram label
- AC power cord
- Metal Box kit:

	Wall Switch and a white wire (115mm) with a log at each end	Bolts and Nuts	Wall Switch Spacer	Door Switch and 2 white wire (350mm) with a log at one end	Door Switch Support	Fastener (PCB Holder)	Metal box screw	Metal box lock and key
Metal Box Kit	1	2 each	1	1	1	7	4	1

- Installation kit:

	Paire of Wire, Red and black, for backup battery (400mm)	1K Resistor	2.2K Resistor	Diode 1N4007 for the door strikes or locks
Installation Kit	1 pair	22	10	2

If any item is missing, please notify your distributor immediately.

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Location and Mounting

The cabinet is designed to be installed indoors, in a safe and secure location. Suggested locations include electrical rooms, communication equipment rooms, closets or in the ceiling. To save time, wiring and facilitate testing, install the cabinets at an equal distance between its controlled doors. Normal temperature and humidity levels should be maintained.

Cabinet Dimensions:

40 cm (15.8") high, 32 cm (12.6") wide, 9 cm (3.54") deep

The Cabinet Can Accommodate:

One 12Vdc @ 4.5AH or 7AH, gel cell type batteries and wiring connections (15cm (6") high, 6cm (2.5") wide, 9 cm (3.54") deep)

Battery Model	Voltage	Capacity	Length	Width	Height
SLA12-7	12 Volt	7 Ah	151mm (5.94")	65mm (2.56")	939.8mm (3.70")
SLA12-4.5	12 Volt	4.5 Ah	90mm(3.54")	70.1mm (2.76")	102.1mm (4.02")

Multiple Conduit Knock-outs:

Two 19.05mm (0.75") on each side and one 12.7mm (0.5") on top

Minimum Clearance For Cabinet:

25cm (10") clear space around all sides

38cm (15") clear space in front of cabinet

Minimum Clearance From Electrical Interference:

2.4m (8ft.) from high voltage equipment or wiring and from electrical equipment likely to generate interference

1.2m (4ft.) from telephone equipment or lines and 8m (25ft.) from transmitting equipment

The system's location and wiring methods shall be in accordance with the National Electrical Code, ANSI/NFPA 70.

AC22
2-Door Controller

4] MOUNTING INSTRUCTIONS

The box needs to be prepared before fixing it to its location.

Installing the Tamper Switches

Installing tamper switches allows the 2-Door Controller to detect when the cabinet door is opened and/or when the cabinet is removed from the wall. If needed install the tamper switch(es) as follow.

1. Install the wall switch plastic spacer on the back at bottom left side of the box as show in the following picture.

Before   After

2. Install the wall tamper switch using the supplied bolts and nuts as shown in the following picture.

3. Install the door tamper switch by aligning the switch holes to the pre-installed plastic bracket pins. Press firmly to secure the tamper switch in position.

Installing the box lock

Installing the box lock allows to secure the box from non authorized access. If needed install the box lock as shown in the following picture (inside view of the door).

1. Remove the box door knock-out.
2. Insert the lock in the hole.
3. Slide the "U" metal part into the lock groove as shown in the following picture to secure the lock in place.
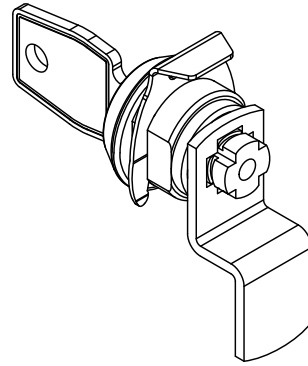
Alternatively or complementary to the box lock, the box may be secured by fixing the cover to its base using screws.
However this should be done only once the installation of the full 2-Door Controller system is completed.

1. Use the 4 screws supplied to secure the box cover to its base as shown in the following picture.
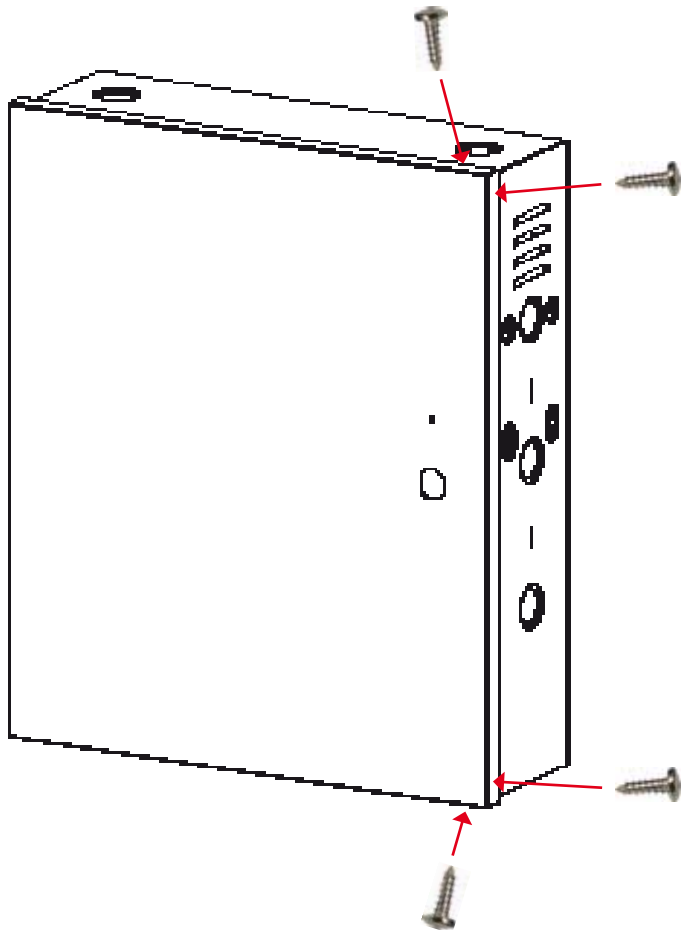
AC22
2-Door Controller

Fixing the Box to its Location

Install the box to its location using 4 screws (not supplied) as shown in the following picture.

If the wall tamper switch is used, make sure that the tamper switch arm moves freely and is completely pushed in when the enclosure is installed on the wall.

Installing the 2-Door Controller PC board

Install the 7 fasteners (PCB holder) supplied respectively to the box holes identified in red in the following picture.
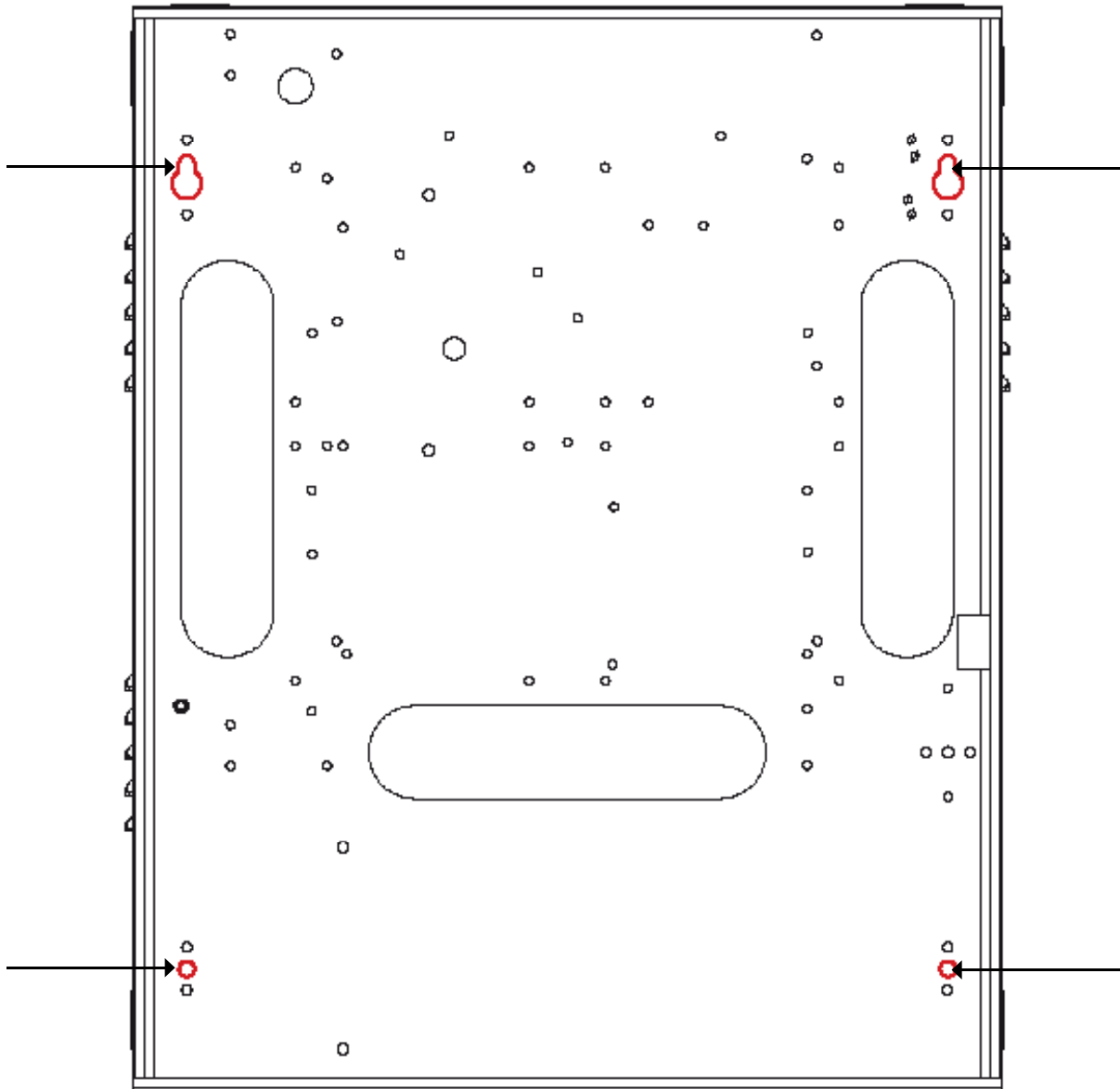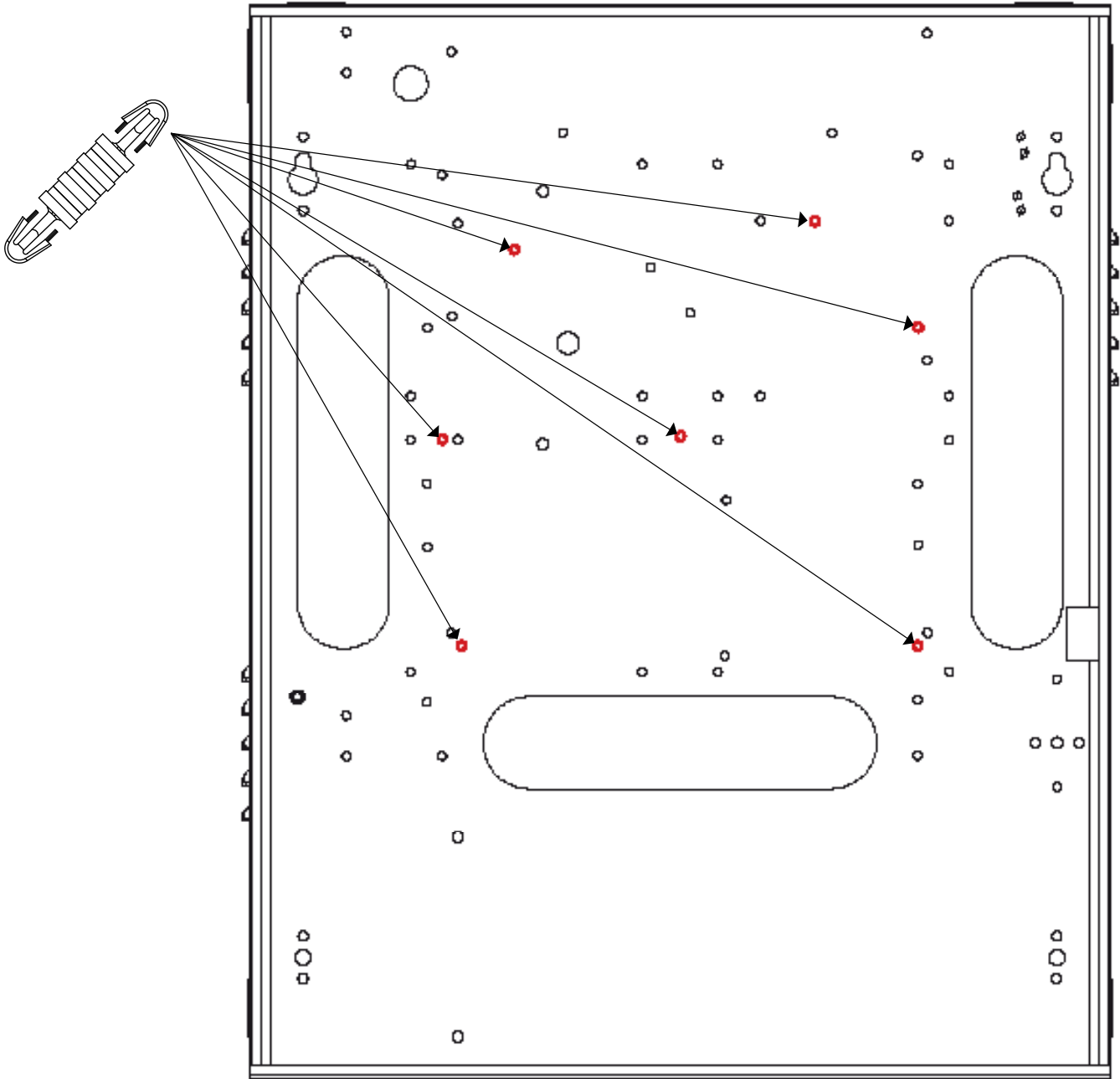
AC22
2-Door Controller

Install the 2-Door Controller PCB by aligning the fasteners with the corresponding PCB holes and pressing firmly to secure the PCB in place.
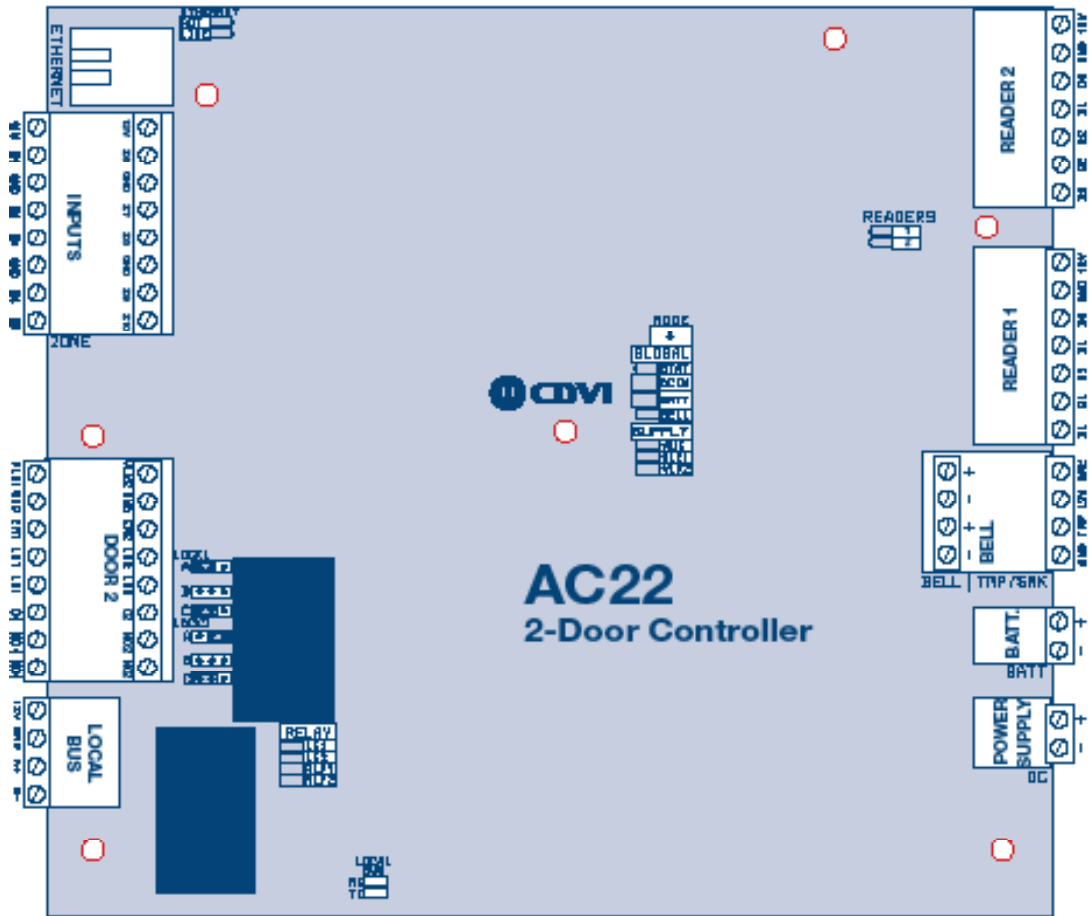
5] WIRING DIAGRAM

CONNECTING THE BOX TAMPER SWITCHES

Connecting the tamper switches allows the 2-Door Controller to detect when the cabinet door is opened and/or when the cabinet is removed from the wall. To install the tamper switches, see "Installing the Tamper Switches".

To use both switches:

1. Connect one end of the supplied wire, the one with a log at each end, to the door tamper switch terminal and the other end to the wall tamper switch terminal.

2. Connect the other terminal of the door tamper switch to the "TMP" terminals using the supplied wire.

3. Connect the other terminal of the wall tamper switch to the "GND" terminals using the supplied wire.
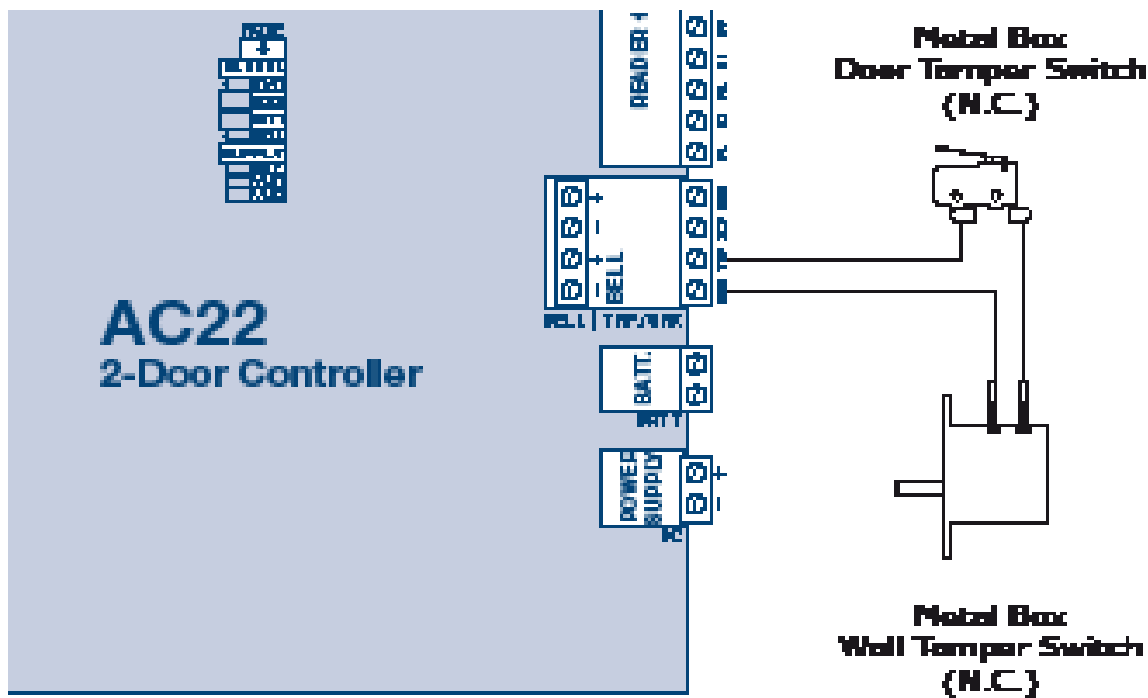
To use only one switch:

1. Connect one terminal of the tamper switch to the "TMP" terminals using the supplied wire.

2. Connect the other terminal of the same tamper switch to the "GND" terminals using the supplied wire.

If you do not use the tamper switch, connect a wire between the "TMP" and "GND" terminals.

12V AND SMK TERMINALS

The 12V and SMK terminals are reseved for future use to connect 2-wire smoke detectors.

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CONNECTING BELLS

The ATRIUM 2-Door Controller supports the connection of one or several bells or sirens in parallel. The high current output allows to drive bell(s)/siren(s) in parallel for up to 40 watts total. The Bell control circuitry gives the following indications.

- Indication of bell/siren Output activation using LED.
- Complete and Real-Time Bell/Siren proper operation and failure monitoring.
- Bell Short / Presence detection even when Bell isn't activated along with

    common Automatic shutdown of bell output on over current.
- Programmable Automatic restore: either on next deactivation/activation cycle or

    after a programmable reset delay.

Connect the bell(s) and/or siren(s) on the "+" and "-" terminal. There are two sets of "+" and "-" terminals on the PCB that are wired in parallel allowing to connect two or several bells and/or sirens in parallel.
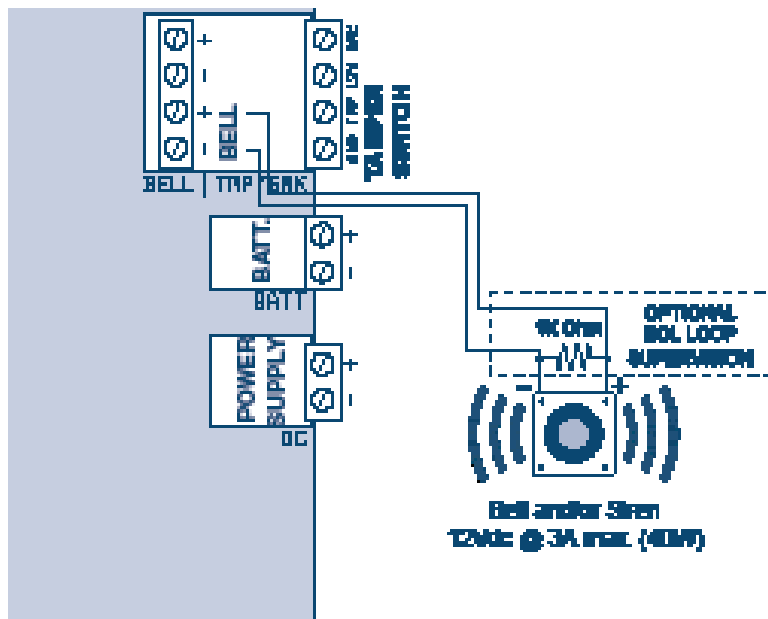
To allow the monitoring of the bell/siren, a 1Kohms resistor is required in parallel if the bell/siren has a high impedance.

See "Recommended Wiring" section for more information on wiring type, size, and maximum length.

CONNECTING READERS AND KEYPADS

The 2-Door Controller allows automatic format detection and decoding of the connected reader/keypad. When installing a keypad with a Wiegand output, the keypad's "D0" and "D1" wires should be connected to the same terminals as the reader (the reader output must be open collector). Depending on the required application more than one keypad and/or reader can be connected to the same terminals.

Most readers and keypads have built-in buzzers and LEDs. These should be connected to module's programmable outputs (B1, G1, R1 for READER 1 and B2, G2, R2 for READER 2). These are open collector outputs capable of sinking 100mA. Please note that the B, G and R outputs are programmed for a 7-wire reader by default. Typically, a blue/red/green indicator on the reader will inform the card user that access has been granted (changes from blue to green), access has been denied (changes from blue to flashing red), door is locked (from blue to brief red) or door is unlocked by a schedule (changes from blue to brief green). Typically, the reader buzzer or an external sounding device will inform the card user that the door has been left open after a valid access or the door has been forced open. The functions of all these outputs are programmable through the ATRIUM software. The ATRIUM system is configured for the SOLAR, STAR and NANO models of readers by default (Standby blue).
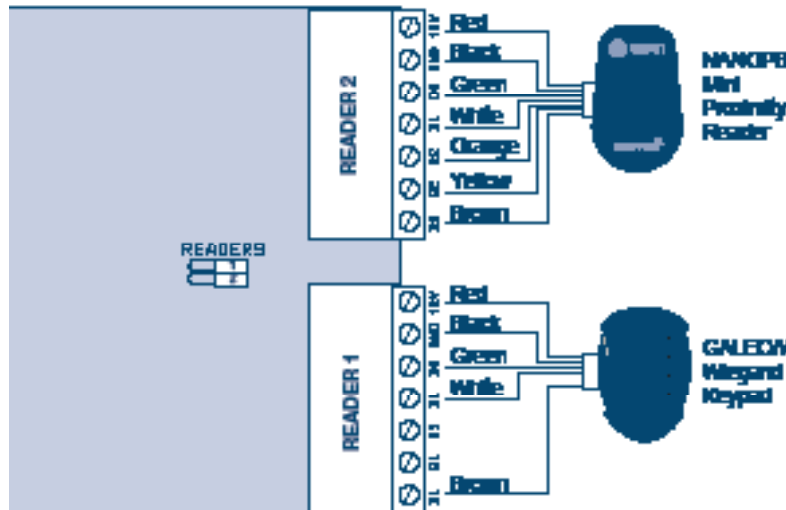
See chapter 2 "Recommended Wiring" for more information on wiring type, size, and maximum length.

Compatible readers and keypads:

- NANOPW (White) and NANOPB (Black)
- STARPW (White) and STARPB (Black)
- SOLARPW (White) and SOLARPB (Black)
- DGLP FN WLC26
- DGLP WLC26
- DGLI F WLC26
- DGLI WLC26
- DGLP60WLC
- KCPROXWLC (Reader & Keypad)
- DGLM (Magstripe)

And most popular Wiegand readers & keypad

⚠️ Please note that the 2-Door Controller provides 12Vdc output. Connecting a device (keypad or reader) requiring a different voltage may damage the reader or keypad and invalidate the 2-Door Controller warranty.

CONNECTING INPUTS

The 2-Door Controller can monitor the state of up to 20 devices (using zone doubling) such as magnetic contacts, motion detectors, temperature sensors, or other devices. The following are examples of the type of inputs that can be monitored:

Magnetic Door Contact:

Permits supervision of door "status" (opened, closed, opened too long, forced open). Inputs 1 and 6 are assigned by default as the door contact for Door 1 and Door 2 respectively. When using the default system settings, you can easily swap terminals to troubleshoot the installation.

Request to Exit (REX):

The device used can be a push button, vertical-view motion detector or floor mat sensor. The door can then be programmed to unlock on a REX detection. Not required if there is a reader/keypad on both sides of the door. When a magnetic door contact is installed, the system can differentiate between a door forced open and an authorized exit. Inputs 2 and 7 are assigned by default for Door 1 and Door 2 REX inputs respectively.
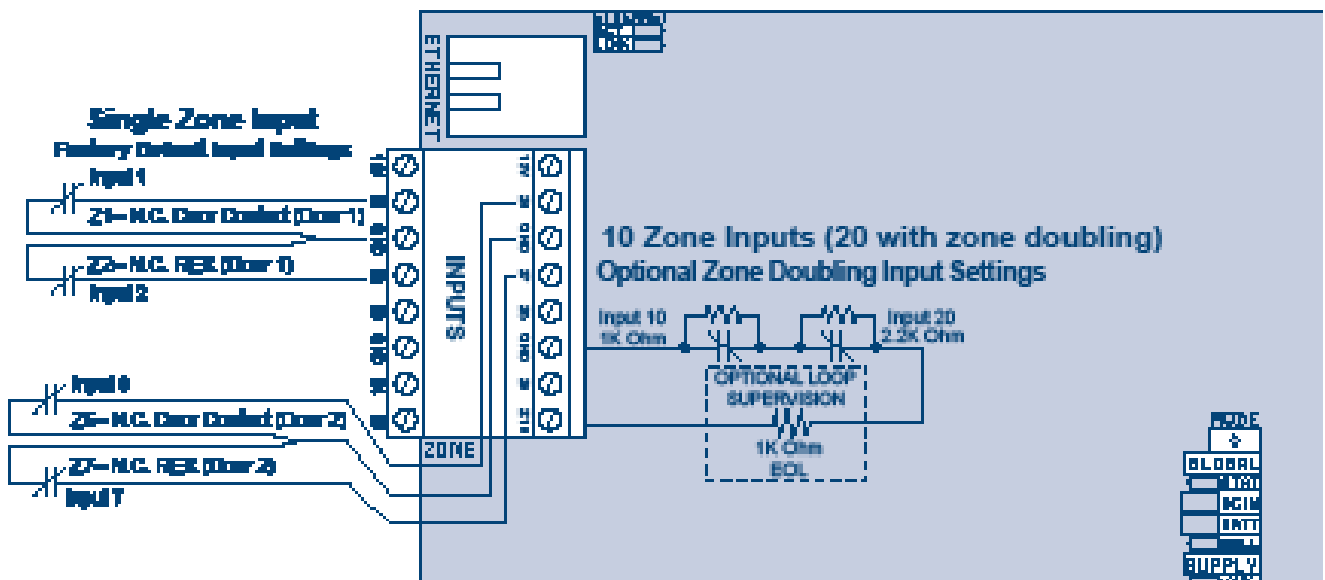
See "Recommended Wiring" section for more information on wiring type, size, and maximum length.

Examples of Input Connection Methods

Single without EOL and without TAMPER Supervision
(Limit of 1 Detection Device on the Input)

When using this method, only one device can be connected to the input. The input must be connected using only one Contact (NO or NC: programmable per INPUT in Software) as described in the following figure. This setup will not support WIRE CUT or WIRE SHORT supervision, but will generate an alarm condition when the state of the input is breached.
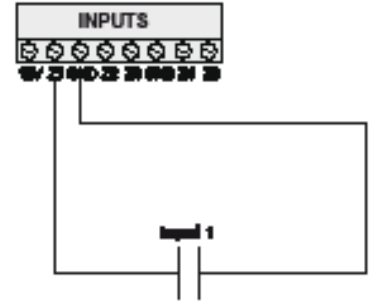
WIRE SHORT supervision: NO

WIRE CUT supervision: NO

Single with WIRE SHORT Supervision
(Limit of 1 Detection Device on the Input)

When using this method, only one device can be connected to the input. The input must be connected using only one Contact (NO or NC: programmable per INPUT in Software) as described in the following figure. This setup will not support WIRE CUT supervision but offers WIRE SHORT supervision and will generate an alarm condition when the state of the input is breached.

WIRE SHORT supervision: YES (Detected as INPUT SHORT)

WIRE CUT supervision: NO

Single with WIRE CUT Supervision
(Limit of 1 Detection Device on the Input)

When using this method, only one device can be connected to the input. The input must be connected using only one Contact (NO or NC: programmable per INPUT in Software) as described in the following figure. This setup will support WIRE CUT supervision but will not offer WIRE SHORT supervision and will generate an alarm condition when the state of the input is breached.

WIRE SHORT supervision: NO

WIRE CUT supervision: YES (Detected as INPUT CUT)

Single with WIRE SHORT and WIRE CUT Supervision
(Limit of 1 Detection Device on the Input)

When using this method, only one device can be connected to the input. The input must be connected using only one Contact (NO or NC: programmable per INPUT in Software) as described in the following figure. This setup will support both WIRE CUT and WIRE SHORT supervision and will generate an alarm condition when the state of the input is breached.
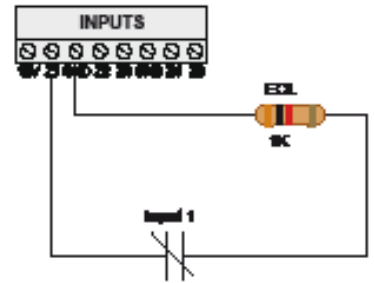

WIRE SHORT supervision: YES (Detected as INPUT SHORT)

WIRE CUT supervision: YES (Detected as INPUT CUT)

Doubled with WIRE CUT Supervision
(2 Detection Device on the Input)

When using this method, two device can be connected to the input. The input must be connected using two Contacts (NO or NC: programmable per INPUT in Software) as described in the following figure. This setup will support WIRE CUT supervision but not WIRE SHORT supervision and will generate an alarm condition when the state of one of the input is breached.
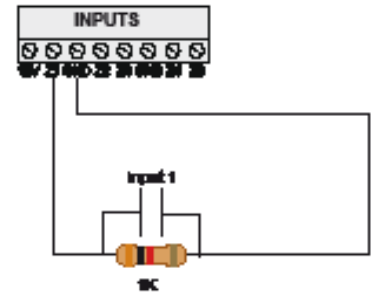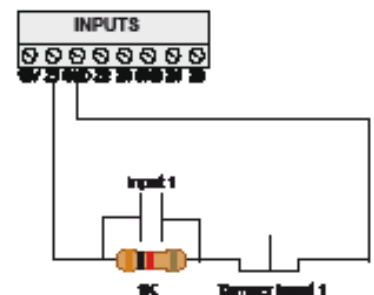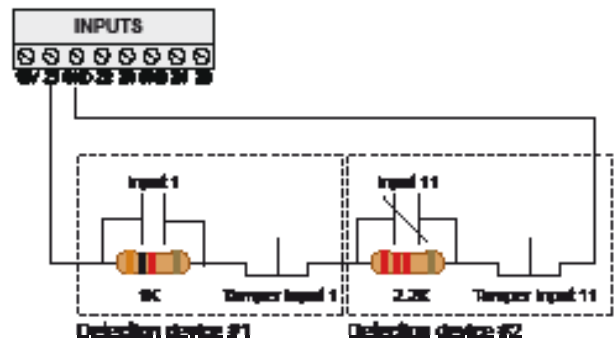

WIRE SHORT supervision: NO

WIRE CUT supervision: YES (Detected as INPUTS CUT)

Doubled with WIRE SHORT and WIRE CUT Supervision
(2 Detection Device on the Input)

When using this method, two device can be connected to the input. The input must be connected using two Contacts (NO or NC: programmable per INPUT in Software) as described in the following figure. This setup will support WIRE CUT and WIRE SHORT supervision and will generate an alarm condition when the state of one of the input is breached.
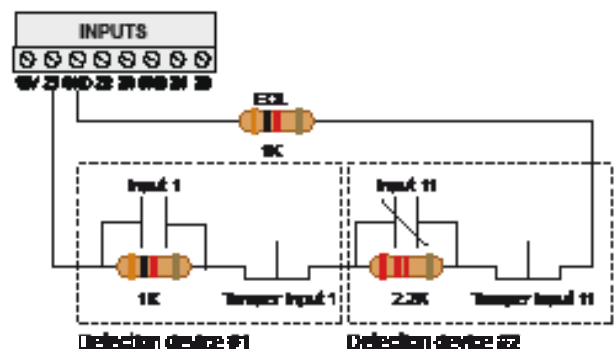
WIRE SHORT supervision: YES (Detected as INPUTS SHORT)

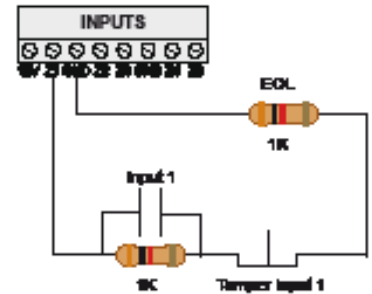WIRE CUT supervision: YES (Detected as INPUTS CUT)

DOOR - LOCKING DEVICES

Each 2-Door Controller Module has two lock outputs and each of these outputs is associated to a reader input. When the LOCK OUTPUT is configured (see "Jumper Settings" on page 17) to provide power (12Vdc), the LOCK OUTPUT is protected by a fuseless protection monitoring algorithm and will shutdown if the current exceeds 750mA @ 12Vdc. When interconnecting to an alarm system, we recommend to use the LOCK OUTPUT in its DRY CONTACT Configuration (see "Jumper Settings" on page 17).

- If you have one door with a reader on each side of the door, you can use either lock output.
- You can program the lock outputs to function in "fail-safe" (remove power to unlock a door) or "fail-secure" mode (power required to unlock a door).
- When using Electronic Mag Clamps or similar devices ensure that the current specifications are not exceeded.

⚠️ Always consult the regulatory agency in your area for existing regulations regarding doors designated as emergency exits.

Jumper Settings

The jumpers LOCK1 and LOCK2 must be set according to the door devices used. For a 12Vdc locking device (magnetic or strike), it can be connected to the terminals and the jumpers set in 12Vdc power mode on VLK+. Use either the NO or NC Lock Output Contact depending on the FAIL SAFE or FAIL SECURE connection mode. If the lock (or electromagnetic) requires 24Vdc, the lock output must be used in its dry contact mode and an external 24Vdc power supply must be used. The same applies if the Locking Device requires an alternating current supply (Vac).

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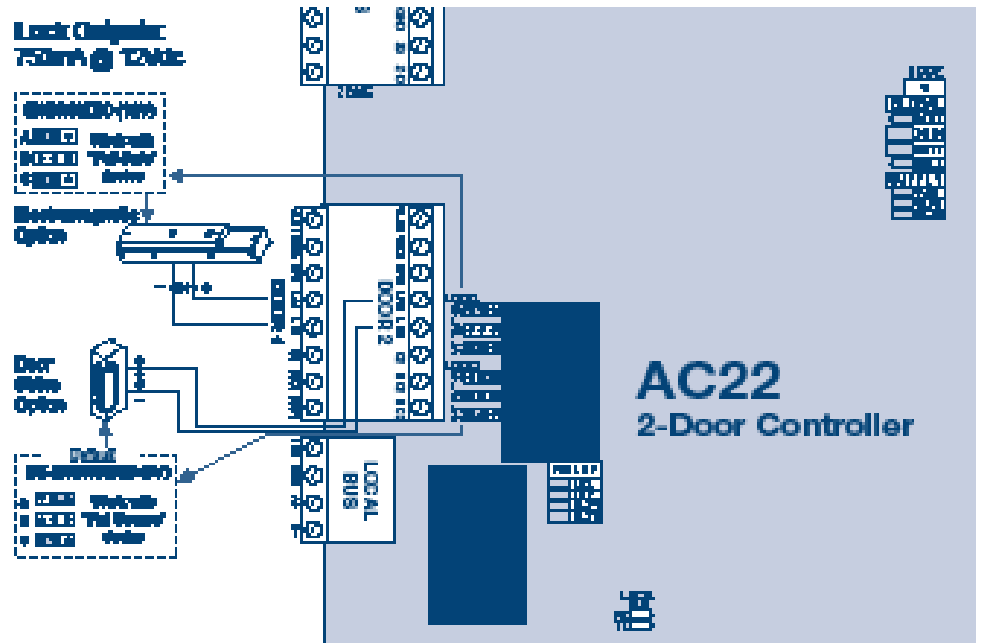
Wiring Diagram of Locking Device

Using On-Board
Power Supply

Using External
Power Supply
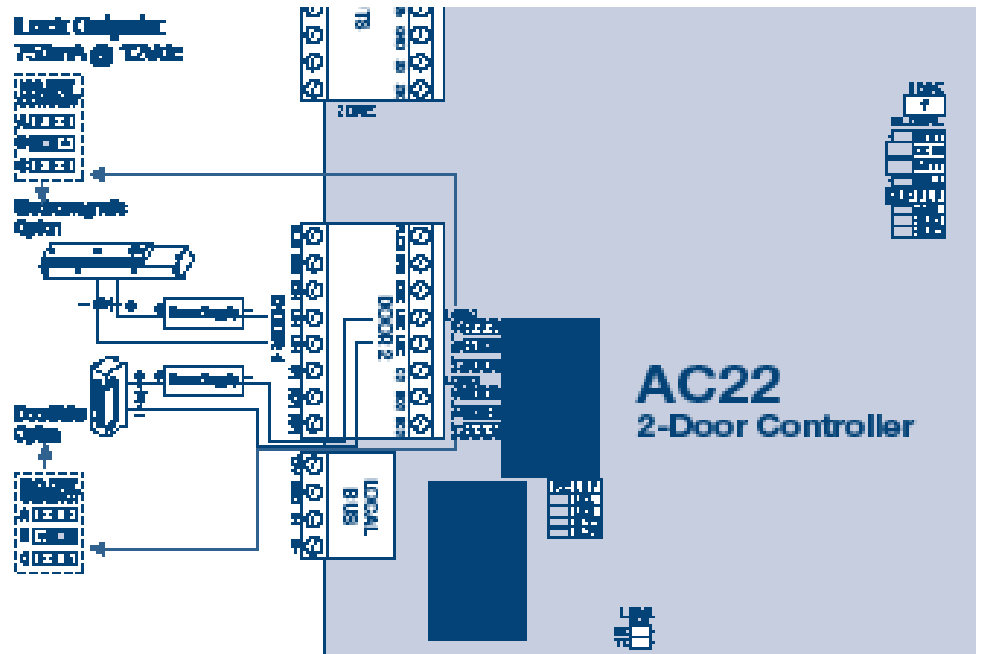
See "Recommended Wiring" section for more information on wiring type, size, and maximum length.

Terminals EM1 and EM2 are reserved for future use.

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2-Door Controller

POWER CONNECTIONS

⚠️ Do not power up the 2-Door Controller until all connections are completed.

The module operates from any 120/240 Vac sources using the supplied AC/DC power supply and provides fully monitored power solutions using:

- Smart Battery Deep discharge prevention with automatic electronic cut-off.
- Programmable & Adaptive battery charging algorithm (250mA (default), 320mA, 500mA, or 1A).
- Intelligent battery monitoring & charging algorithms allowing optimum performance using standard lead acid batteries.
- Real Time Monitoring algorithm for 'Battery Low/Disconnect/Reversal' and 'Insufficient Main Power'.

AC Source

The AC to DC power supply is pre-installed in the 2-Door Controller box but needs to be connected to the PCB.

1. Connect the AC/DC power supply output cable to the 2-Door Controller DC Power Supply "+" and "-" terminals. The polarity of the wires is identified as shown in the following picture.

2. Connect the pre-installed green power LED to the 2-Door Controller DC Power Supply "+" and "-" terminals; in parallel with the AC/DC power supply. The red wire goes on the "+" terminal and the white on the "-" terminal. Make sure that all wires are properly inserted and tighten.
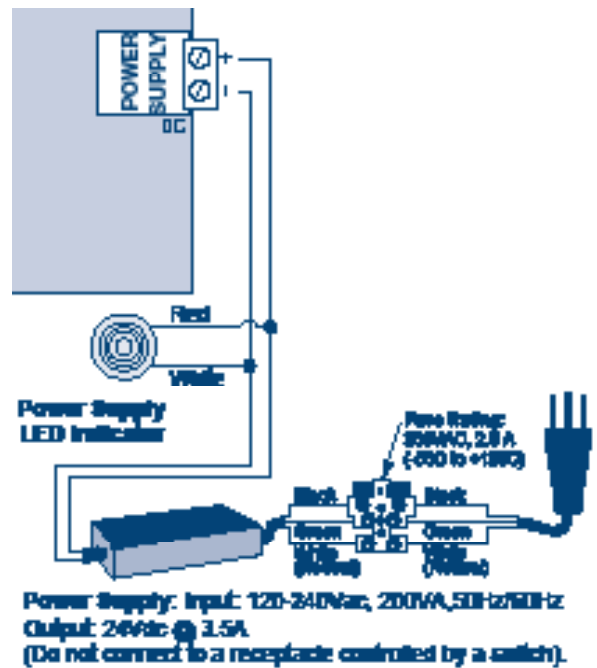
See "Recommended Wiring" section for more information on wiring type, size, and maximum length.

📝 The Minimum Size Equipment Conductors for the AC mains required are 14 AWG if made of Copper or 12 AWG if made of Aluminium or Copper-Clad Aluminium. Do not use any switch-controlled outlets to power the system.

⚠️ For PERMANENTLY CONNECTED EQUIPMENT, a readily accessible disconnect device shall be incorporated external to the equipment.

⚠️ For PLUGGABLE EQUIPMENT, the socket-outlet shall be installed near the equipment and shall be easily accessible.

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AC Terminal Fuse

⚠️ The following steps are only presented in case you need to replace the AC terminal fuse.

1. Disconnect the AC power cord from the power source or for permanent installation, turn off the power breaker[1].

2. Open the AC compartment at the top left to access the fuse holder.

Fuse holder

3. Pull out the fuse holder.

4. Replace the fuse using the same fuse type:
   250VAC, 2.5 A
   Time Lag, Slow Blow
   Operating Temperature: -55oC to +125oC.
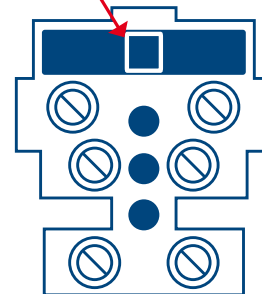
Permitted replacements:
   a) Littelfuse P/N 021802.5MXP
   b) Schurter P/N 0034.3121
   c) Various (means any type, from any manufacturer that complies with the "Technical Data and securement means" and meets the "Mark of conformity" can be used).

5. Replace the fuse holder in its location.

6. Close the AC compartment.

7. Connect the AC power cord to the power source or for permanent installation, turn on the power breaker[1].

📝 [1]. For permanent installation, this step must be done by a qualified person in accordance with your local safety regulations.

Battery Backup

The 2-Door Controller cannot be started on battery power only. Battery backup time varies with each system. Typical backup time is between 2 and 20 hours using standard equipment and settings.

Wire a 12Vdc (either 4.5Ah or 7Ah) gel type battery and then connect it to the BATT "+" and "-" terminals with the battery leads supplied.
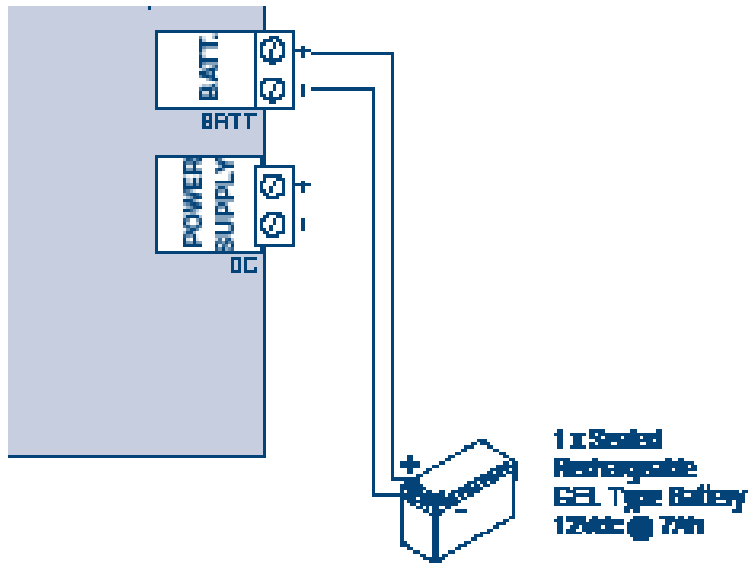
12Vdc 7Ah rechargeable acid/lead or gel cell backup battery (YUASA model #NP7-12 recommended). Ensure proper polarity. Various (means any type, from any manufacturer that complies with the "Technical Data and securement means" and meets the "Mark of conformity" can be used).

The battery charge current can be set to either 250mA (default), 320mA, 500mA, or 1A. Refer to the ATRIUM user interface instruction manual for more information on how to modify the battery charging current.

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2-Door Controller

LED INDICATORS

The ATRIUM 2-Door Controller has several status LEDs that are very useful to diagnose problems when using or installing the ATRIUM system. Refer to the following picture for the emplacement of those LEDs on the ATRIUM 2-Door Controller. All LEDs are explained in the following pages.

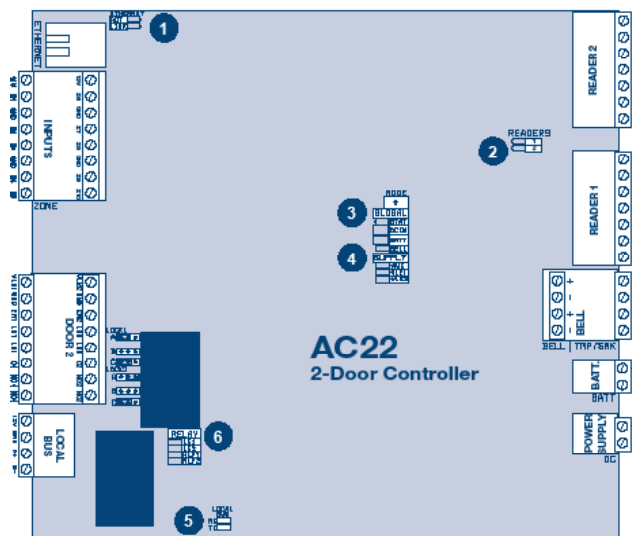| 1	ETHERNET	ACT	Green LED flashing: Data transmitted/received.
		LNK	Green LED: Ethernet network detected.
2	READERS	#1	Green LED flashing: Data received from Reader #1.
		#2	Green LED flashing: Data received from Reader #2.
3	GLOBAL	STAT	Flash once per second: Firmware is operating normally.
			Flash rapidly: Firmware is upgrading.
			Blink once per 3 seconds: Card enrollment mode.
		DC IN	DC IN Green LED: 2-Door Controller is powered properly.
			Red LED: No primary power.
		BATT	BATT Green LED: Primary power present and battery charging.
			Off LED: Primary power present and battery full.
			Red LED: No battery or battery not properly connected.
			Red LED flashing: Battery power is below 11.8Vdc.
		BELL	BELL Red LED: No bell/siren connected or short circuit.
4	SUPPLY	AUX (12Vdc supply for readers and inputs connections)	Green LED: Output power activated.
			Off LED: Deactivated or in protection mode (short circuit).
		VLK1/VLK2	Green LED: Output power activated.
			Off LED: Deactivated or in protection mode (short circuit).
5	LOCAL BUS	RX	Green LED flashing: Data received on local bus.
		TX	Green LED flashing: Data transmitted on local bus.
6	RELAY	LK1	Green LED: Door 1 Lock Relay is active/triggered.
		LK2	Green LED: Door 2 Lock Relay is active/triggered.
		RLY1	Green LED: Auxiliary Relay 1 is active/triggered.
		RLY1	Green LED: Auxiliary Relay 2 is active/triggered.

ETHERNET 10/100 MBPS NETWORK CONNECTION

The ATRIUM 2-Door Controller provides a 10/100Mbps Ethernet port to allow direct connection from a local PC or interconnect to an existing LAN/WAN. Connect the Ethernet 10/100 Mbps port of the ATRIUM 2-Door Controller to a LAN or WAN network using an UTP cable (maximum 100m (300ft)).
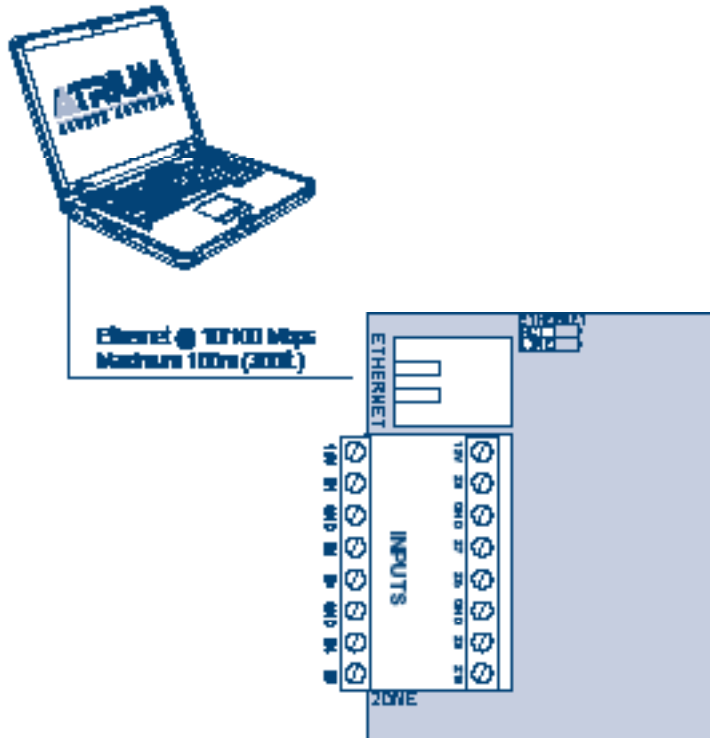
CONNECTING EXPANDER MODULES TO THE CONTROLLER

The 2-Door Controller has a RS485 LOCAL BUS terminal allowing the connection with the ATRIUM expander module. The RS485 LOCAL BUS communication is up to 1220 m (4000 ft) maximum of wires. Connect the expander module's using these topologies:

DAISY CHAIN

BUS
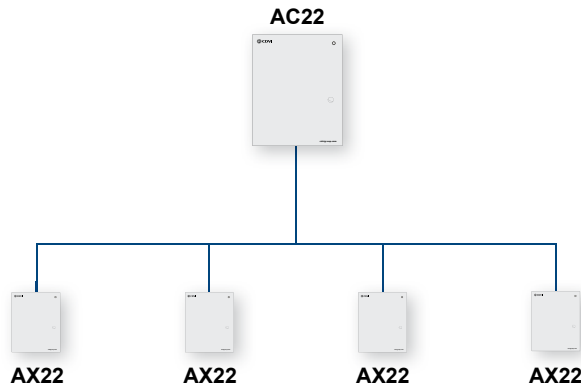
STAR
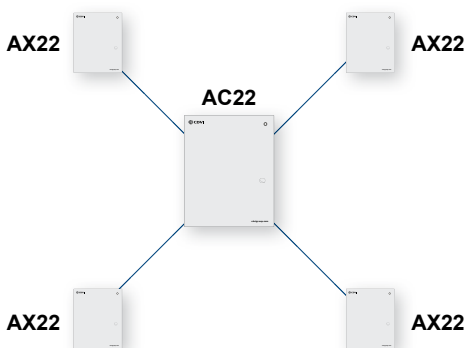
MIXED
DAISY CHAIN/BUS/STAR
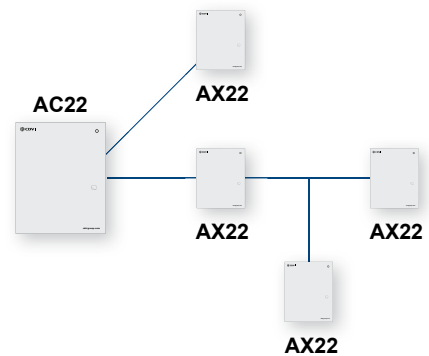
6] PROGRAMMATION

The stand-alone card enrollment allows you to add or delete user cards without the need of a PC by using one of the following procedures.

CARD ENROLLMENT PROCEDURE (USING 2-DOOR CONTROLLER MODE BUTTON).

1. Press and hold the on-board MODE button for 1 second.

    The STAT LED blink once every 3 seconds.

Card
ENROLLMENT MODE button
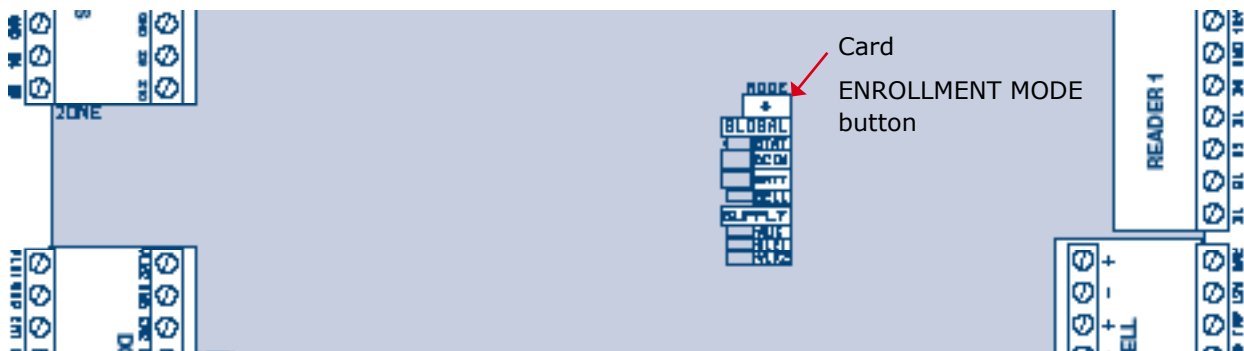
2. Within five minutes, choose any card reader of the system and
    present the PROGRAMMING card to start adding/removing cards.
    Reader LEDs will begin flashing in sequence (2 Red flashes + 2 Green).

3. Present cards, one by one, to the reader.
    NEW cards will be ADDED:
    Green LED will flash and a pulsed beep will be emitted.
    Each new card will create a user and attribute the card to the user

    EXISTING cards will be DELETED:
    Red LED will flash & a long beep will be emitted.

4. Present the PROGRAMMING card again to stop enrollment mode.
    The flashing sequence (2 Red flashes + 2 Green) will stop.

The card enrollment learning mode automatically ends when no new card is presented for 5 minutes

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CARD ENROLLMENT PROCEDURE
(USING MASTER & PROGRAMMING CARDS ONLY).

1. Present the MASTER card to a reader.

    The door will unlock, keep it open.

    (The door must be equipped with a door contact)

    Carte Master

2. Within 5 seconds, present the PROGRAMMING card to the reader.

    Reader LEDs will begin flashing in sequence

    (2 Red flashes + 2 Green).

    Enrollment mode is active.

3. Present cards, one by one, to the reader.

    NEW cards will be ADDED.

    Carte Programming

    Green LED will flash and a quick beep will be emitted.

    Each new card will create a user and attribute the card to the user

    EXISTING cards will be DELETED.

    Red LED will flash & a long beep will be emitted.

4. Present the PROGRAMMING card again to stop enrollment mode.

    The flashing sequence (2 Red flashes + 2 Green) will stop.

The card enrollment learning mode ends when no new card is presented for 5 minutes.

For other card enrollment methods, refer to the "ATRIUM Software" user guide.

7] Warranty - Terms & Conditions

The "Limited Lifetime Warranty" is offered by CDVI exclusively for CDVI products featuring the logo "limited lifetime warranty", and supplied by authorized CDVI dealers participating in the offer. You can obtain the address of the local authorized dealer participating in the offer by contacting CDVI or a local CDVI subsidiary. The "limited lifetime warranty" is only applicable to hidden defects detected during the lifetime of the product, as defined by the CDVI Group (10 years or 200 000 operations - whichever of the two expires first).

The "limited lifetime warranty" conditions shall not modify the sales conditions between CDVI and its customers.

DURATION OF THE OFFER:

- This offer is valid from July 1st 2010; CDVI reserves the right to terminate this offer without prior notice.
- However, any product already registered up to the date of withdrawal of the offer will remain eligible for the "Limited Lifetime Warranty".
- The warranty applies only to the available products mentioned in the above statement.

CONDITIONS :

- Hidden defects are guaranteed for an unlimited shelf life (period of time before use).
- To be eligible for the "limited lifetime warranty", the product must be registered at CDVI within one month of its delivery to the end user, by completing in and returning back the "warranty" form by fax, email or post to the local CDVI subsidiary. This information may also be registered on lineat www.cdvigroup.com.
- Only the issue of the "limited lifetime warranty" certificate by CDVI can confirm product registration; CDVI may not be held responsible in the event of loss or non presentationof the form.
- The "limited lifetime warranty" only applies to products installed by a skilled and experienced personal with the necessary trade qualifications to install according to the highest standards, respecting the standards, instructions and guidelines defined by CDVI and according to the maximum recommended specifications.
- To enable CDVI to determine whether a product is eligible to claim for the "limited lifetime warranty", after prior issue of a return of materials authorization number (RMA) by CDVI, the customer must return the product and all of its accessories in the original packaging with a copy of its invoice. The transport fees shall be paid by the customer and the package must be returned to CDVI or to a CDVI authorized repair centre.
- Eligibility for the "limited lifetime warranty" cover must be confirmed by CDVI.
- The "limited lifetime warranty" only covers the replacement or repair of the parts acknowledged as faulty by CDVI.
- CDVI reserves the right to respect its obligation by replacing the product or the parts acknowledged as faulty by a standardpart replacement or by a product or new parts, or by an updated or improved version of the product with identical or similar functionalities.
- In respect of the applicable law, CDVI cannot be held responsible for material or immaterial damages causedto goods or to third parties and as a direct or indirect result of the installation, utilization, product faults or poor functioning of a device.
- The "limited lifetime warranty" is non-assignable andnon-transferrable; only the person who registered the aforementioned warranty may benefit from the warranty.
- The "limited lifetime warranty" is limited to the eligible product and is strictly limited to the conditions in effect on the date of purchase by the customer.

NOT COVERED BY THE "LIMITED LIFETIME WARRANTY":

- The following are not covered by the "limited lifetime warranty":
- Any product which has undergone even the slightest modification or change;
- Any product which has been installed and/or used with any auxiliary device not supplied by CDVI;
- Any product which has been used for demonstrations or display;
- Any product or its elements considered as "consumables" such as fuses, lights and batteries for example;
- Failure or malfunctioning as a result of an accident, poor storage conditions, unsuitable assembly, bad utilization or handling, poor maintenance, unsuitable repair or intervention.
- Any call-out and installation fees (for assembly and dismantling) as well as transport costs (to and from the repair centre) and maintenance fees.

THE INSTALLER'S RESPONSIBILITIES:

When registering the limited lifetime warranty on line, the installer is responsible for the information supplied. In case of errors, the limited lifetime warranty will not be applicable.

NOTES:

HOW TO ORDER REPAIR PARTS

DEVANCO CANADA

19192 HAY ROAD, UNIT Q
SUMMERSTOWN, ON K0C 2E0

TOLL FREE: 855-931-3334

www.devancocanada.com

**WHEN ORDERING REPAIR PARTS
PLEASE SUPPLY THE
FOLLOWING INFORMATION:**

✓ **PART NUMBER**
✓ **DESCRIPTION**
✓ **MODEL NUMBER**