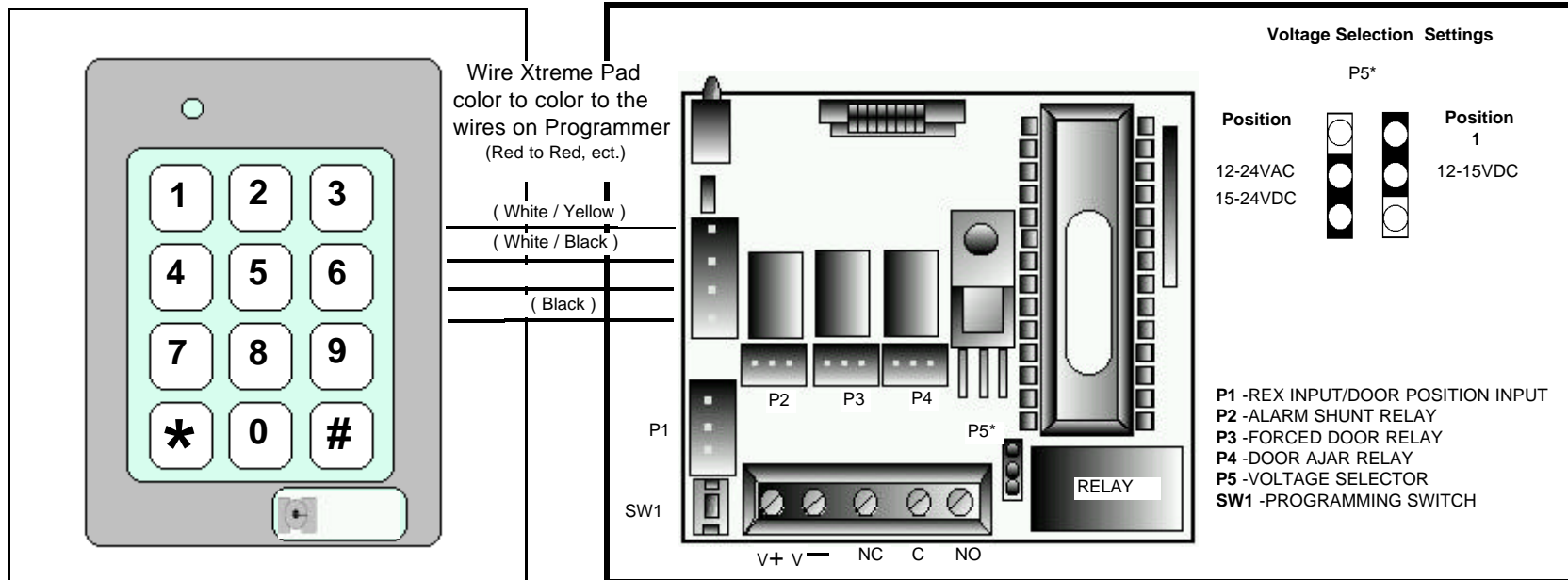


232xt Wiring Diagrams and Specifications



*P5 is the Voltage Selector. With the jumper in position one, 12-15vdc only operation is selected. With the jumper in position two 15-24vdc/12-24vac operation is selected.

Packing Checklist:

- Xtreme™ Keypad
- 232 XT Programming Controller
- Four Conductor Wire Harness (2)
- Three Conductor Wire Harness (4)
- Slotted Screws (4)
- Plastic Anchors (4)
- 5/64 Allen Head Wrench (1)
- Machine Screws (2)
- Tech Supp. With Warranty card
- ACCESS CONTROL Features and Programming Guide

SPECIFICATIONS:

MECHANICAL:

XT CASE DIMENSIONS:
2.75"w x 4.50"h x 1.50"d

ENVIRONMENTAL:

TEMPERATURE:
-20°F TO 130°F (-28°C TO 54°C)

PROGRAMMER CASE DIMENSIONS:

2.75"w x 4.50"h x 2.50"d

ELECTRICAL:

VOLTAGE:
12-24 Volts AC/DC (selected by P5 jumper)

CURRENT:

@12-24 Volts AC/DC- 20ma typical-150ma max with all relays energized

OUTPUTS:

Main relay: 8 Amp, Form-C @ 24volts-10 AMP surge
Relays 2, 3, & 4 are Form C relays-1 AMP MAXIMUM

INTERNATIONAL



ELECTRONICS, INC.™

INTERNATIONAL ELECTRONICS, INC.
427 TURNPIKE STREET, CANTON, MA 02021 U.S.A.
800-343-9502, 617-821-5566 (FAX)617-821-4443

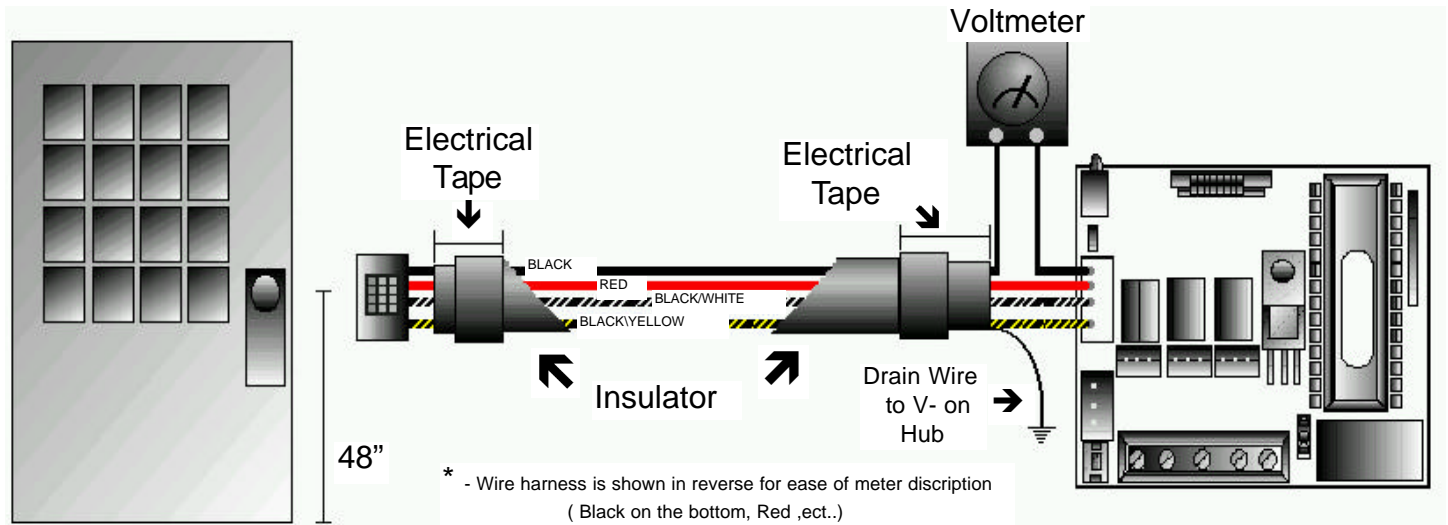
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6063170 REV 1.01

WIRING THE XTREME™

The Xtreme™ keypad is a device which you choose to place either inside or outside the door. IEI manufactures several other devices to choose from; keypads, magnetic card readers, proximity card readers, and touch chip readers.

Choosing the correct device for the application is important. IEI manufactures light traffic and heavy traffic devices. If you are not sure which device to utilize, please call us at **1-800-343-9502**.



Wiring the Xtreme™ keypad to the programming control unit requires a four conductor, stranded and **shielded** cable to be wired between two units. Maximum lengths are as follows:

- 22 AWG stranded : 250 feet
- 20 AWG stranded : 500 feet
- 18 AWG stranded : 1000 feet

At the programming control unit, connect the four conductor cable to the four pin connector on the controller relay board, as shown in the diagram above. The drain wire at the programming controller must be attached to ground, also the foil shield should be cut back with the insulator and taped with electrical tape. **Ground is the V- terminal on TS1 if the power supply is grounded.** At the Xtreme™ keypad, the drain wire and foil shield is cut back with the insulator and taped with electrical tape. The four conductor harness connects into the four wire harness on the Xtreme™ keypad. Both wire harnesses are connected to each other color to color.

TESTING THE Xtreme™ KEYPAD FOR GROUND POTENTIAL DIFFERENCES

If the Xtreme™ keypad is mounted to the metal door frame of the building, a ground potential test should be run. This test is important because a potential difference between the power supply ground and the ground on the metal frame of a building can render the system inoperable. The Xtreme™ keypad should first be installed and the power supply grounded and turned off. Now set up a meter to read DC voltage. At programming controller separate the black wire of the four conductor cable from the wire running to the Xtreme™ keypad and attach the meter in series with the two wires per diagram above. If the meter shows more than one volt then the front end must either be insulated from the frame or the ground wire of the reader must be removed. Setup meter to read AC voltage and repeat test. On the Xtreme™ keypad you will find the grounding wire screwed to the case at one end and plugged into the circuit board on the other end. If you have any questions about this procedure please call IEI Technical Support, **1-800-343-9502**.

Propped Door Relay

This output is utilized to inform personnel that the door is being held, or propped open, after a valid entry. To accomplish this, the Xtreme™ programming controller comes equipped with a relay and an internal timer circuit that is designated for this purpose. The form C relays are rated to handle one (1) amp of current at either 12 volts or 24 volts, type AC or DC, and can turn on or off one leg of power to a warning device. Warning device not included with IEI equipment.

To incorporate this feature into your system, simply locate one of the five connectors, each one with three (3) wires, green, blue, and gray, located in the box with the Xtreme™ programming controller. With the controller powered down, unlatch the keypad from the plastic housing and slide the printed circuit board out of housing, exposing the connectors as shown in **Diagram A**.

Wiring the Propped Door Relay

1. Connect the three conductor harness with the green, blue, and gray wire to the propped door relay jack as shown in diagram A.
2. Connect green wire to V+ on sounder.
3. Connect blue wire to V+ from power supply.
4. Connect V- from power supply to V- on sounder.
5. Gray wire is not used.

Programming the Propped Door Relay

To program how long the door can be propped open before the alarm is tripped, Program as follows:

****No programming is done at the Xtreme™ keypad.****

1. Enter programming mode. Press 99 # (master code) *
2. Verify that the programmer is in programming mode. (Yellow light should be flashing slowly.)
3. Press 44 # (time) # 0 # **, time represents how long the door may be propped before the relay energizes. Time must be 10 to 900 seconds

Propped door time must be programmed in intervals of 10 seconds, ie. 10, 30, 60,... up to 900 seconds.

4. Press * to exit program mode, yellow light should not be flashing.

NOTE: This feature requires that you utilize the Normally closed door contact (input) per diagram B.

Xtreme™ CONTROL RELAY BOARD

DIAGRAM A

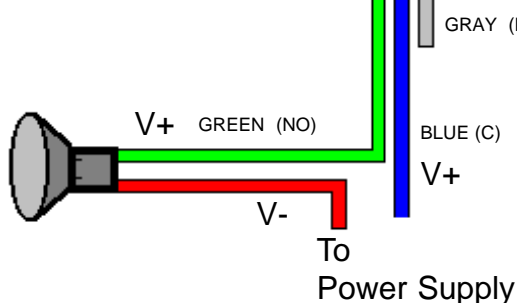
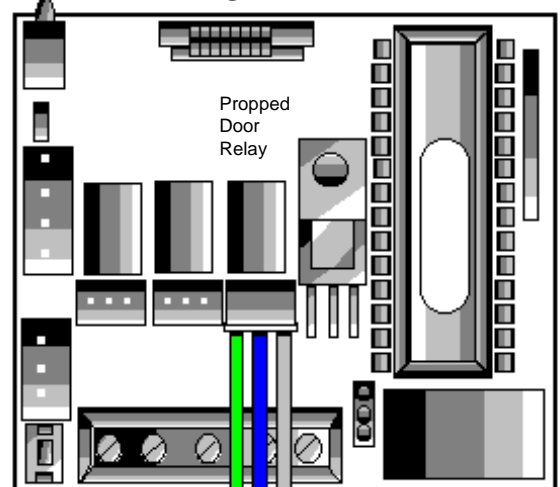
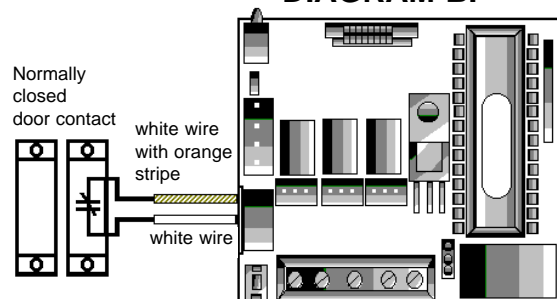


DIAGRAM B.



Forced Door Relay

This output is utilized to inform personnel that the door had been opened without authorization. To accomplish this, the Xtreme™ programming controller comes equipped with a relay and an internal timer circuit that is designated for this purpose. The form C relays are rated to handle one (1) amp of current at either 12 volts or 24 volts, type AC or DC, and can turn on or off one leg of power to a warning device. Warning device not included with IEI equipment.

To incorporate this feature into your system, simply locate one of the five connectors, each one with three (3) wires, green, blue, and gray, located in the box with the Xtreme™ programming controller. With the controller powered down, unlatch the keypad from the plastic housing and slide the printed circuit board out of housing, exposing the connectors as shown in **Diagram A**.

Wiring the Forced Door Relay

1. Connect the three conductor harness with the green, blue, and gray wire to the forced door relay jack as shown in diagram A.
2. Connect green wire to V+ on siren.
3. Connect blue wire to V+ from power supply.
4. Connect V- from power supply to V- on sounder.
5. Gray wire is not used.

Programming the Forced Door Relay

To program the time that the forced door output will stay energized, program as follows:

****No programming is done at the Xtreme™ keypad.****

1. Enter programming mode. Press 99 # (master code) *
2. Verify programmer is in programming mode. Yellow light should be flashing slowly.
3. Press 45 # (time) # 0 # * *, time represents how long the relay stays energized, 10 to 900 seconds, in Ten second intervals, or you may press 00 for a latched output, requiring a valid code to reset output. Forced door time must be programmed in intervals of 10 seconds, i.e. 10, 30, 60,... up to 900 seconds.
4. Press * to exit program mode, yellow light should not be flashing.

NOTE: This feature requires that you utilize the normally closed door contact (input) per diagram B.

**Xtreme™ CONTROL RELAY BOARD
DIAGRAM A.**

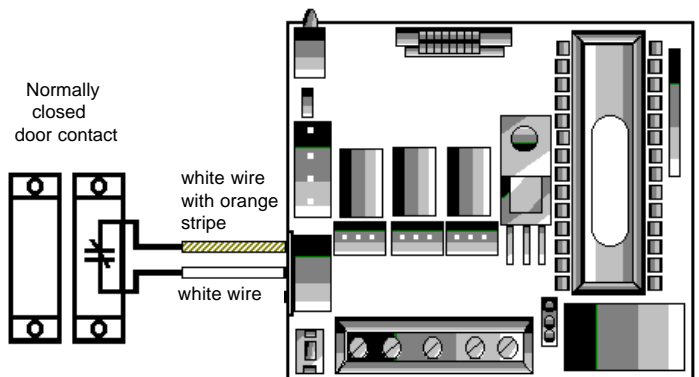
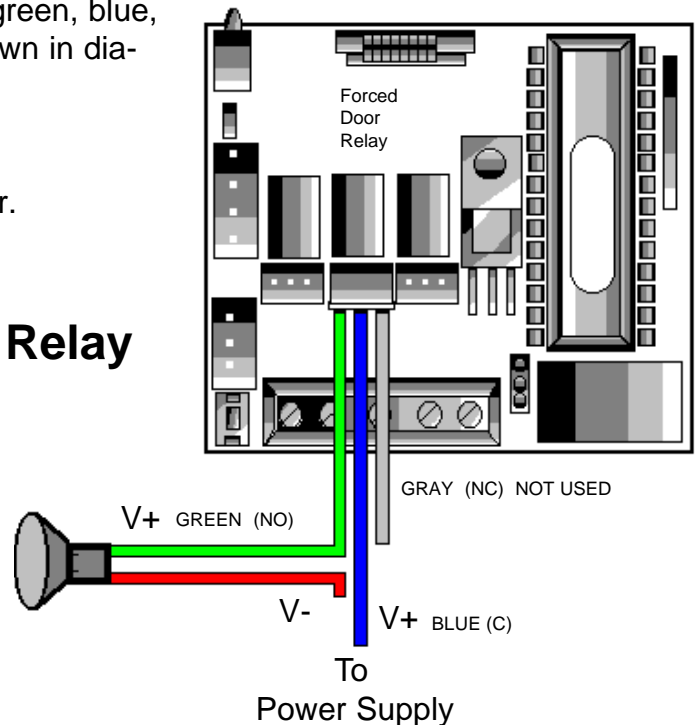


DIAGRAM B.

Alarm Shunt Relay

The Alarm shunt relay may be necessary to use when a security system or other type of system has already been in existence. The Alarm shunt relay keeps the alarm from activating when the door is opened, by keeping either a closed or opened state on the existing alarm panels zone. The Alarm shunt relay operates when the set of normally closed door contacts has been opened after a valid code entry. No programming required. The time of operation follows the main relay time.

To incorporate this feature into your system, simply locate one of the three connectors, each one with three (3) wires, green, blue, and gray, located in the box with the Xtreme™ programming controller. With the controller powered down, unlatch the keypad from the plastic housing and slide the printed circuit board out of housing, exposing the connectors as shown in diagram A.

Wiring the Alarm Shunt Relay

1. Connect the three conductor harness with the green, blue, and gray wire to the alarm shunt relay jack as shown in diagram A.
2. Connect green wire to “Common” side of door contact.
3. Connect blue wire to “Normally Open” side of door contact.
4. Make a parallel connection to the green and blue wires, (as shown in diagram A.), and run the leads to the alarm panel.

NOTE: This feature requires that you utilize the normally closed door contact (input) per diagram B.

Auto Re-Lock

Auto Re-Lock solves the problem of people “tailgating” in behind those using valid access protocol, allowing the programmer the opportunity to set a long door open time. This feature over-rides the main relay timer, resetting the door open time as soon as the controller sees the door open. In many situations, you will find yourself programming a long door open time, this allows people carrying packages enough time to get from the Xtreme™ to the door and open it before the timer runs out. Other people may only require a few seconds to do the same task, without an auto re-lock, the door would be left unlocked long enough for people to tailgate in behind you. No programming is necessary. After a valid access or egress, the programming control monitors the door contact, sees the door switch open and drops the main relay immediately. Disengaging the lock, which you will notice always locking behind you, whether you take three seconds to get to the door or ten seconds.

NOTE: This feature requires that you utilize the normally closed door contact (input) per diagram B.

Xtreme™ CONTROL RELAY BOARD

DIAGRAM A

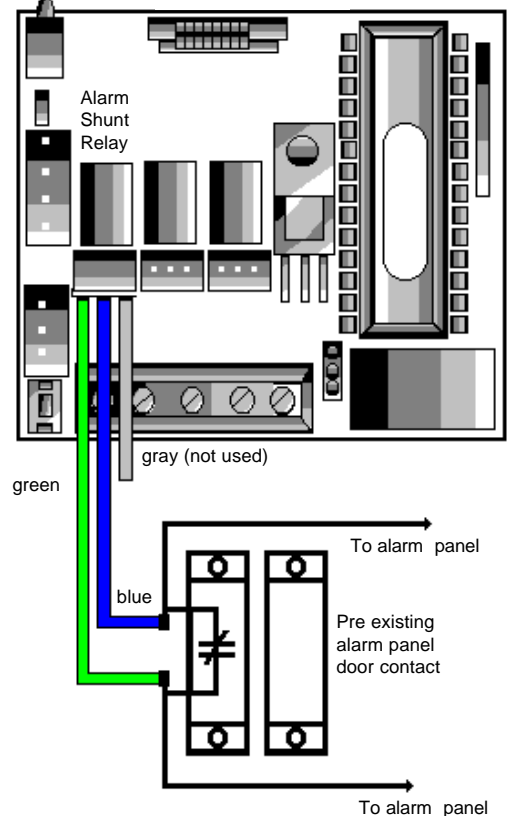
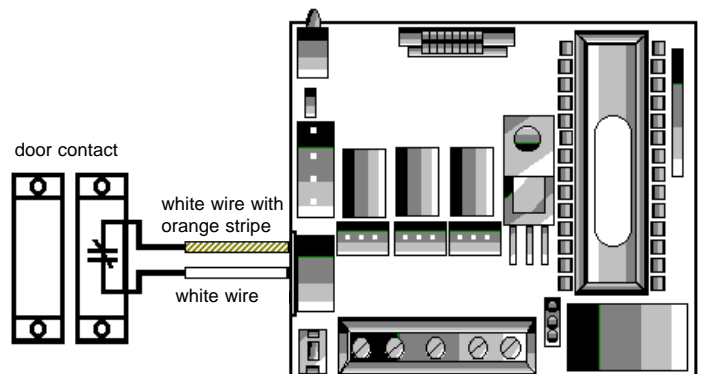
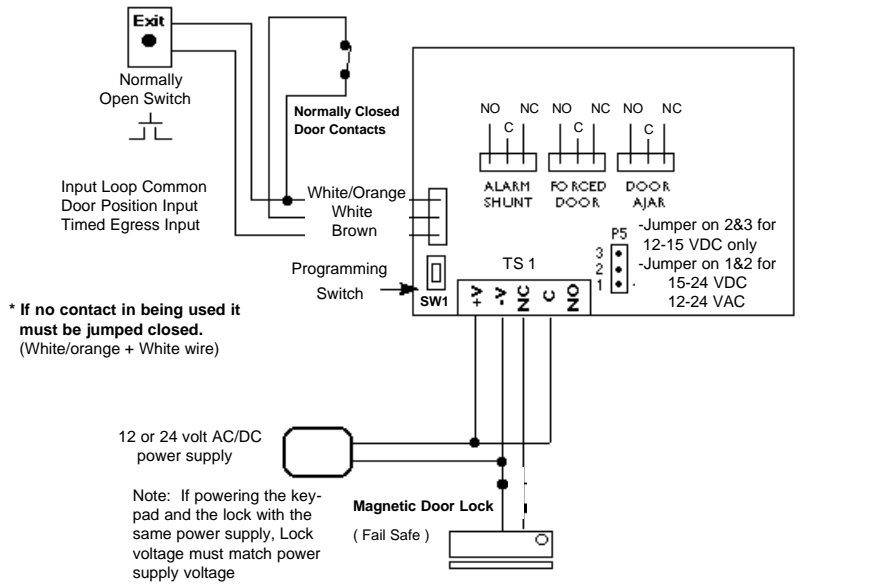


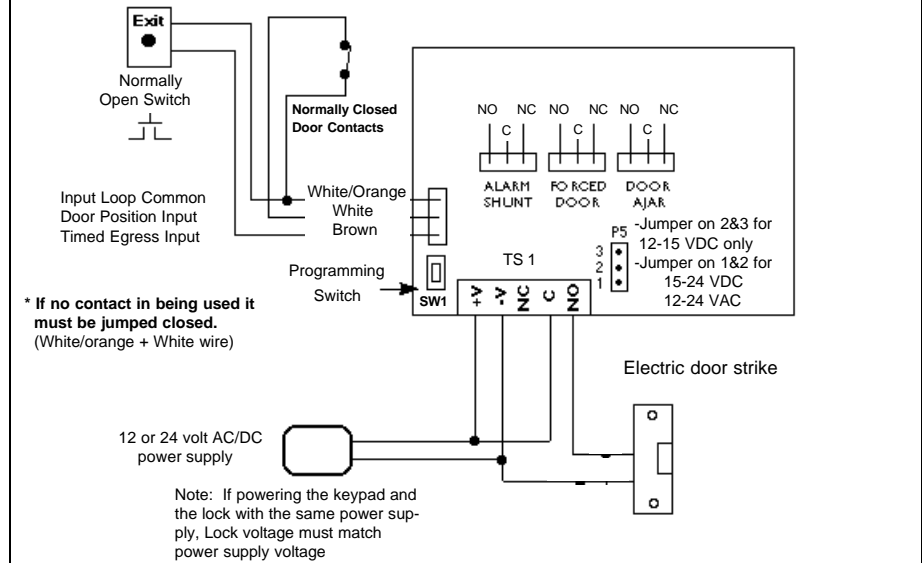
DIAGRAM B.



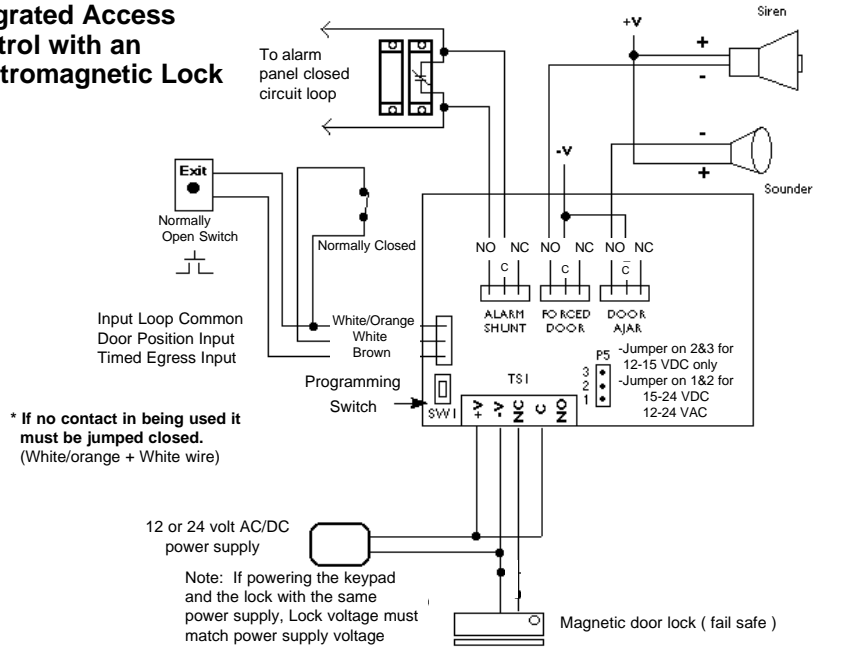
Basic Access Control with an Electromagnetic Lock



Basic Access Control with an Electric Door Strike



Integrated Access Control with an Electromagnetic Lock



Integrated Access Control with an Electric Door Strike

