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SECTION 2 POWER AND GROUNDING REQUIREMENTS

Each 7101-P Panel will require a 110VAC duplex outlet (minimum 2 Amp) within ten cable feet of the intended installation location. The use of emergency power circuits is highly recommended due to possible facility power failures.

- Do not connect to a receptacle controlled by a switch.
- A central power supply can be used as well as the 12VDC plug in power supply.
- Do not extend the power supply cord provided. The maximum distance the duplex outlet should be from the 7101-P Panel is ten cable feet.

SECTION 3 TYPICAL INSTALLATION

NOTE: All life safety and electrical codes must be strictly followed.

1. Seek prior approval from the local life/fire safety officials before installing the 7101-P system.
2. Identify all equipment to be installed and inspect for any damage that may have resulted during shipment. If damage is found notify the carrier immediately and arrange for inspection. Be sure to retain all packing material.
3. Run all power and fire alarm cables.
4. Determine the location of the 7101-P Panel and cut holes in the wallboard as needed. Mount surface mount boxes if required.
5. Mount the electromagnetic lock in accordance with the instructions.
6. Connect the magnetic door contacts on the swing edge of the door.
7. Route all wires into the 7101-P Panel box. (Door contact, 7101-P Panel power, Magnetic Lock, etc...)
8. Prepare all wires for connection to the 7101-P Panel.
9. Make all wiring connections as shown on the following pages.
10. Plug in all power supplies and batteries on the 7101-P Panel.
11. The system is now ready for testing.
12. Once all connections have been made and the equipment tested for proper operation, make the connection to the fire alarm control panel.

NOTE: Up to eight 7101-P panels can be interfaced to a single relay in the fire alarm control panel. See the fire alarm connection section of the manual for more details.

13. Test the fire alarm interface connection by placing the fire alarm system into an alarm mode. **All locks should immediately release.**
14. The system should now be operational.

SECTION 4 SPECIFICATIONS

- Input Power: 12VDC, 150mA
- Backup power: 9VDC 180mAh (Rechargeable Battery)
- Relays: 2 form “C” 30VDC, 1A. max.
- Push Button: Normally Open switch
- Lock Voltage: 12VDC 900 mA. max with supplied transformer, or (24VDC 900 mA. Max)
- Fire Alarm: Normally Open, closure on alarm
- External Keypad Connector
- Mounting box:
 - Flush Mount Box (3-1/2” x 5-3/8 ”)
 - Surface Mount Box) (4-1/2” x 6-3/8”)

SECTION 5 SYSTEM COMPONENT DESCRIPTIONS

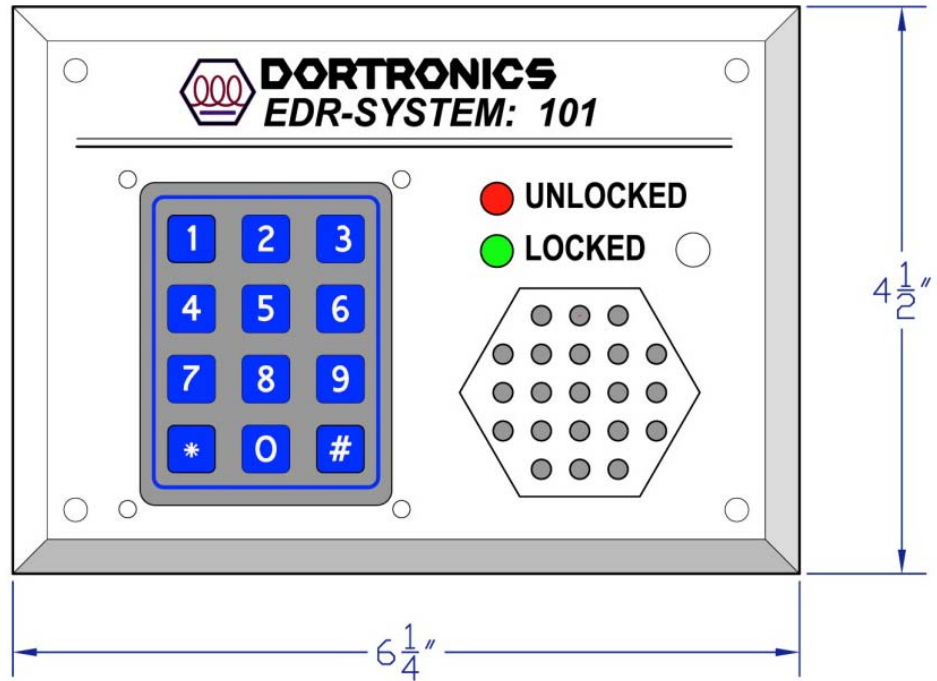
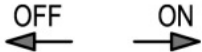


Fig. 1 7101-P Panel, Front View

NOTE:

7101-P IS SHIPPED WITH POWER OFF - INSERT BATTERY BEFORE POWERING UP

7101-P POWER SWITCH



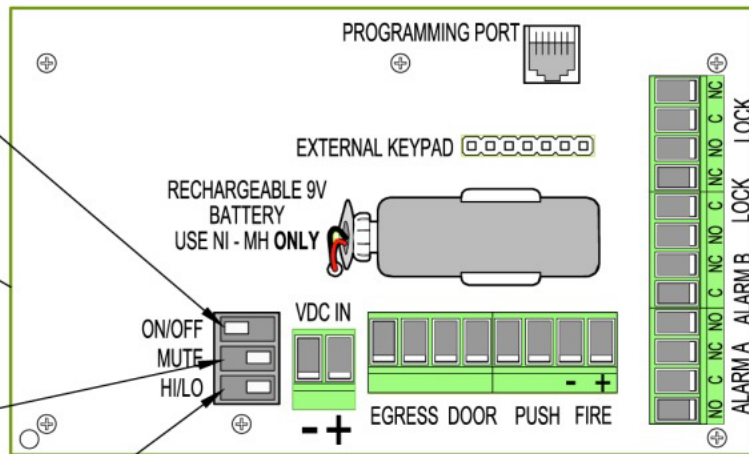
ADJUST SOUND PITCH



MUTES SOUNDER



SOUNDER VOLUME



7101-P

Fig. 2 7101-P Panel, Rear View

Standard operation

The 7101-P Panel is normally armed. To exit through the protected door, enter a valid escort code into the keypad and open the door. Any time the door is opened without first entering a valid escort code into the keypad, the alarm will sound. The door is normally locked, restricting access to only authorized staff members.

PM mode of operation

The 7101-P Panel can be programmed to unlock or disarm during certain hours of the day, it then will automatically lock and unlock at the specified times. These specific times are programmed into the panel by following the PM programming instructions provided in this Manual. (See *Section 8*.)

Delayed Egress timing control

The 7101-P Panel controls the delayed egress function of the system. Per Life Safety Code 101, doors designated as an emergency exit may utilize Delayed Egress. Timing is selectable for 15 or 30 seconds.

Anti-tailgate

This feature re-arms the door automatically after an authorized staff member has passed through the door and it closes. This prevents unauthorized persons from waiting until an authorized staff member passes through the door and then exiting without creating an alarm condition.

SECTION 7 INSTALLATION AND CONNECTIONS

Typical System Connections

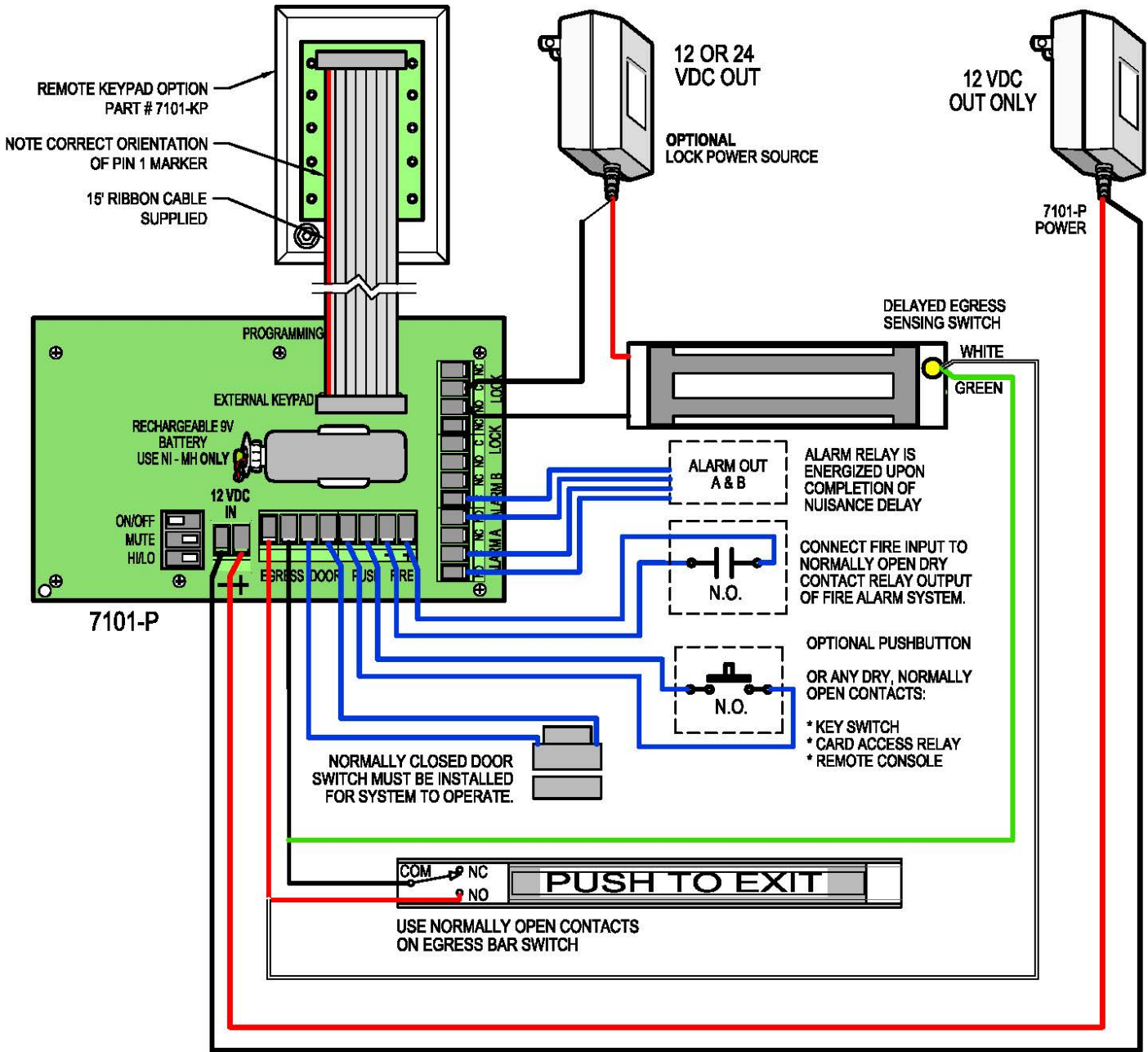


Fig. 3 7101-P Panel, Typical System Connections



NOTE: System activation is accomplished with either the Delayed Egress Sensing Switch on the Magnet; or via the PUSH TO EXIT egress bar. Both are shown above as optional Methods; however they are not used in conjunction with each other.

Only one method of activation is appropriate for the system to function properly.

SECTION 7 INSTALLATION AND CONNECTIONS

Optional Remote Sounder Connections

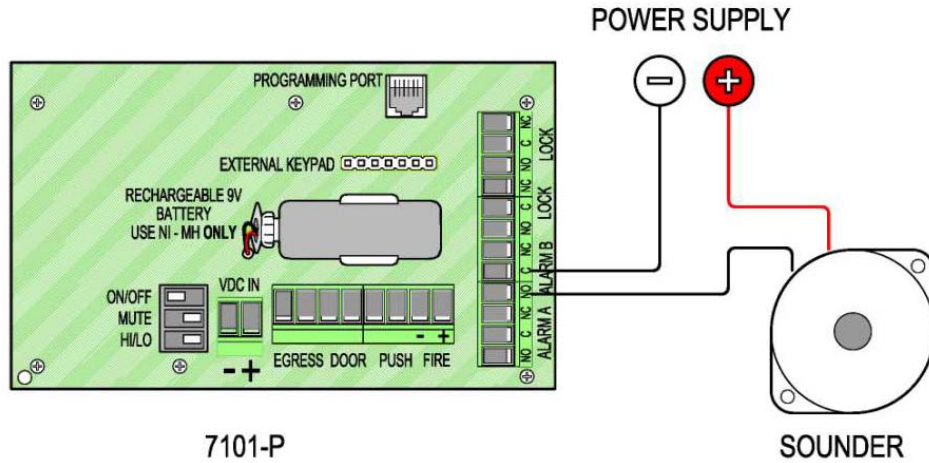


Fig. 4 7101-P Panel, Optional Sounder connection

Connect the positive power to the positive side of the sounder. Connect the negative lead to the “N.O.” of the ALARM B relay. Run a jumper wire from the “C” of the ALARM B relay to the negative side of the sounder.

SECTION 7 INSTALLATION AND CONNECTIONS

Single or Double Magnetic Door Contact Connections

Using cable supplied in the kit, twist the red and black wires together, and the green and yellow wires together. This will provide the two conductors shown. Connect red/black combination to one screw terminal and the green/yellow to the other screw terminal. There is no polarity issue when connecting these leads to these screw terminals. Now connect the two conductors to the leads on the magnetic door contacts as shown.

NOTE: When connecting a double set of magnetic door contacts, splice the door magnetic contacts in series as show at the right below in figure 5. Do not exceed 1 Amp per door.

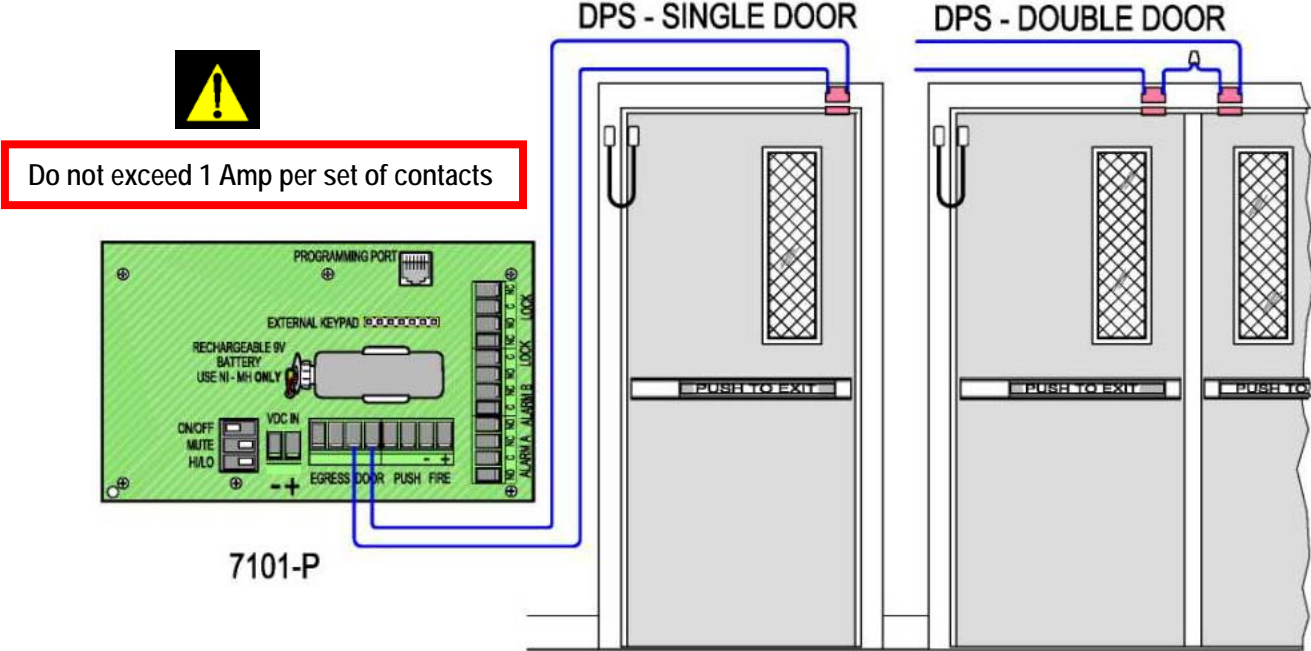


Fig. 5 7101-P Panel, DPS Magnetic Door Contact

SECTION 7 INSTALLATION AND CONNECTIONS

Normally Open Push Button Connections

NOTE: The use of release devices which provide a maintained closure are not recommended for use with the System.

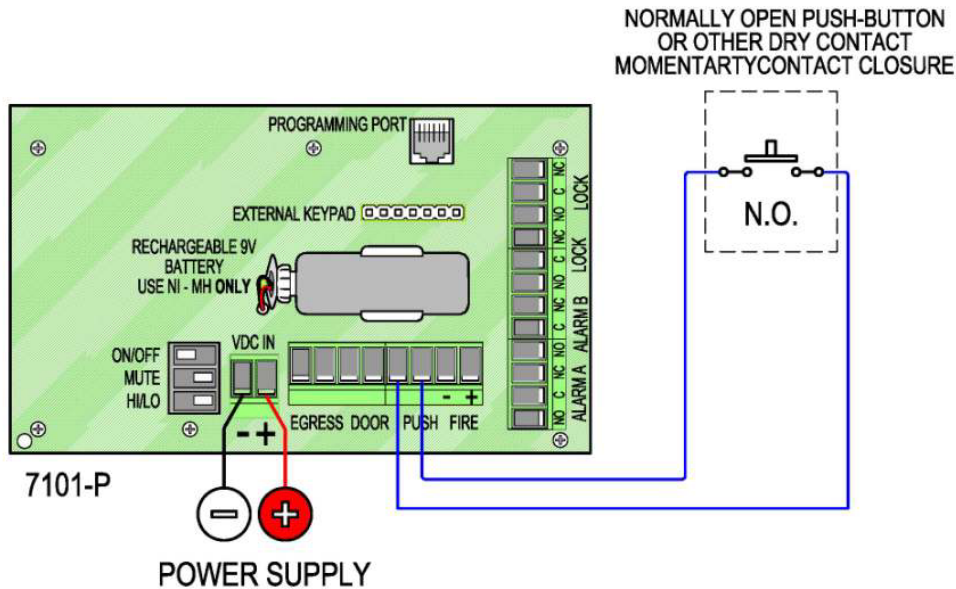


Fig. 6 7101-P Panel, Push Button Connection

Use cable to connect the Push Button to the 7101-P Panel. When the Push Button is activated the escort delay feature is activated and the door will become disarmed for the programmed exit delay. (See programming section of this Manual (*Section 8*) for setting and/or changing the escort delay time.)

Remote Keypad Connections

When connecting the Remote Keypad connect the ribbon cable as shown below. Figure 7 is intended as a reference to show that no matter the orientation of the 7101-P Panel with respect to the Remote Keypad, the connections at each end of the ribbon cable should match as shown. Ribbon cable supplied with 7101-KP is 15 feet long

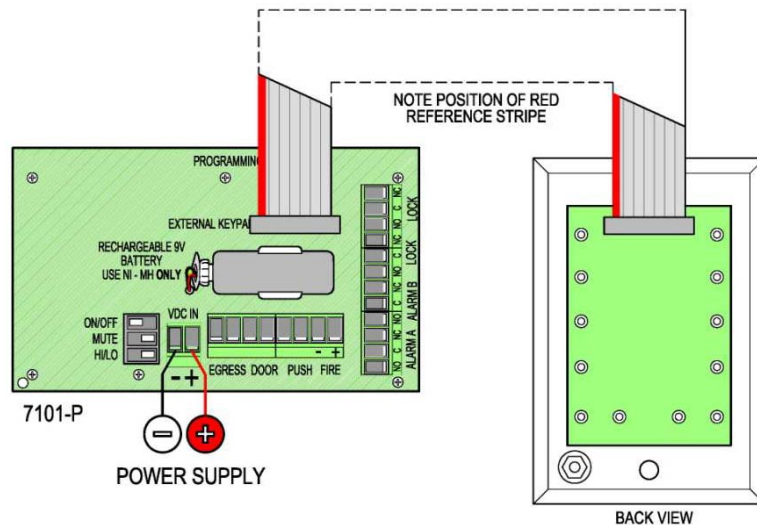


Fig. 7 7101-P to Remote Keypad Connections

SECTION 7 INSTALLATION AND CONNECTIONS

Electromagnetic Lock Connections

Connecting a single electromagnetic lock to the 7101-P Panel

Refer to Fig. 8 below for connection to the 7101-P. Use 20AWG, four-conductor wire for connections. Use the red and black conductors for the power connection. The green and white conductors are for connection of the delayed egress switch. (Also see the delayed egress connection information in this Section of the Manual.)

NOTE: All applicable electrical and life safety codes must be strictly adhered to when installing the system.

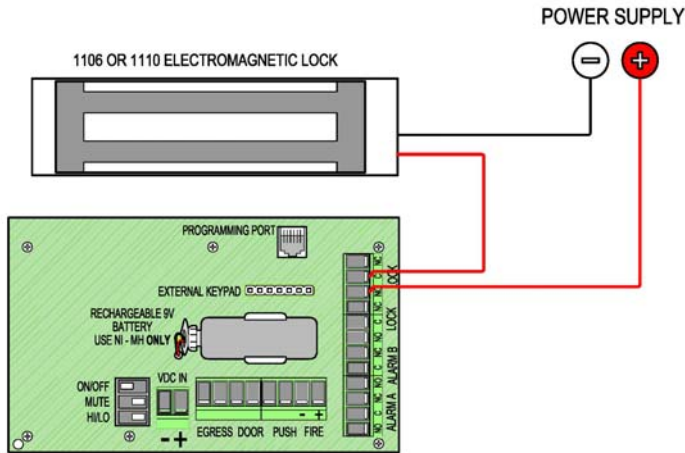


Fig. 8 7101-P to Electromagnetic Lock Connections

NOTE: When using electromagnetic locks, the system must be interfaced to the building's fire alarm control system. A normally open dry contact relay is required in the fire alarm control panel for connection to the 7101-P panel. Up to eight 7101-P Panels can be interfaced to this relay. If your application includes more than eight units then multiple relays are required. (See *Fire Alarm Connections* in this section of the Manual for more details.)

Connecting multiple electromagnetic locks to the 7101-P Panel

Refer to Fig. 9 for connection to the 7101-P Panel. Use 20AWG, four-conductor cable for the connection. Use the red and black conductors for the power connection. The green and white conductors are used for connection to the delayed egress switch.

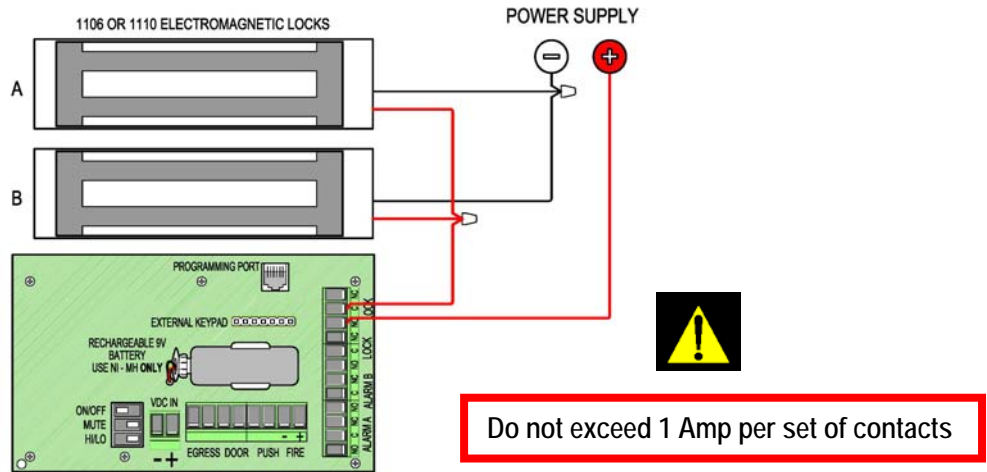


Fig. 9 7101-P to Two Electromagnetic Lock Connections

SECTION 7 INSTALLATION AND CONNECTIONS

Delayed Egress Switch Connections

Connecting the Delayed Egress Switch to the 7101-P

Refer to Fig. 10 in this Manual for connections to the 7101-P Panel. Use 20AWG, four-conductor cable for connections. The green and white conductors are used for connection to the delayed egress switch. All applicable electrical and life safety codes must be strictly adhered to when installing the systems. (See *Section 10* of this Manual for delayed egress programming details.)

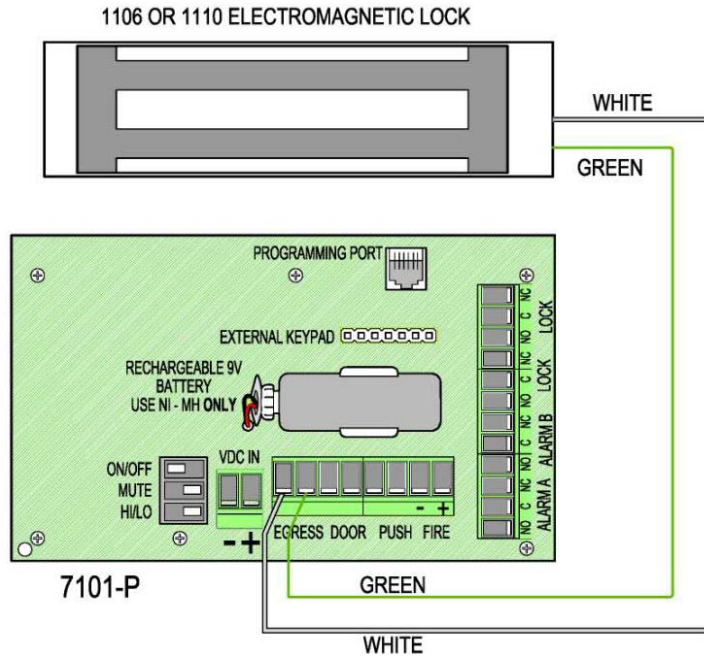


Fig. 10 7101-P to Egress Switch Connections

NOTE: Delayed egress switches are wired in parallel.

Connecting multiple Delayed Egress switches to the 7101-P Panel

Refer to Fig. 11 for connection to the 7101-P Panel. Use 20AWG, four-conductor cable for connections. The green and white conductors are used for connection to the delayed egress switch. All applicable electrical and life safety codes must be strictly adhered to when installing the systems. (See *Section 10* of this Manual for delayed egress programming details.)

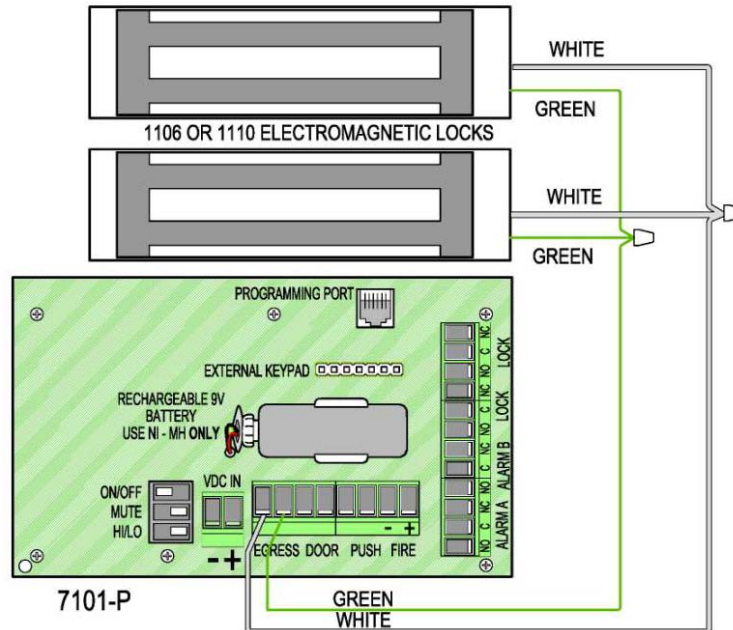


Fig. 11 7101-P to Two Egress Switch Connections



SECTION 7 INSTALLATION AND CONNECTIONS

Single Panel Fire Alarm Connections

NOTE: After completing the fire alarm connection, the fire alarm system must be placed into an alarm condition to verify immediate release of all locks.

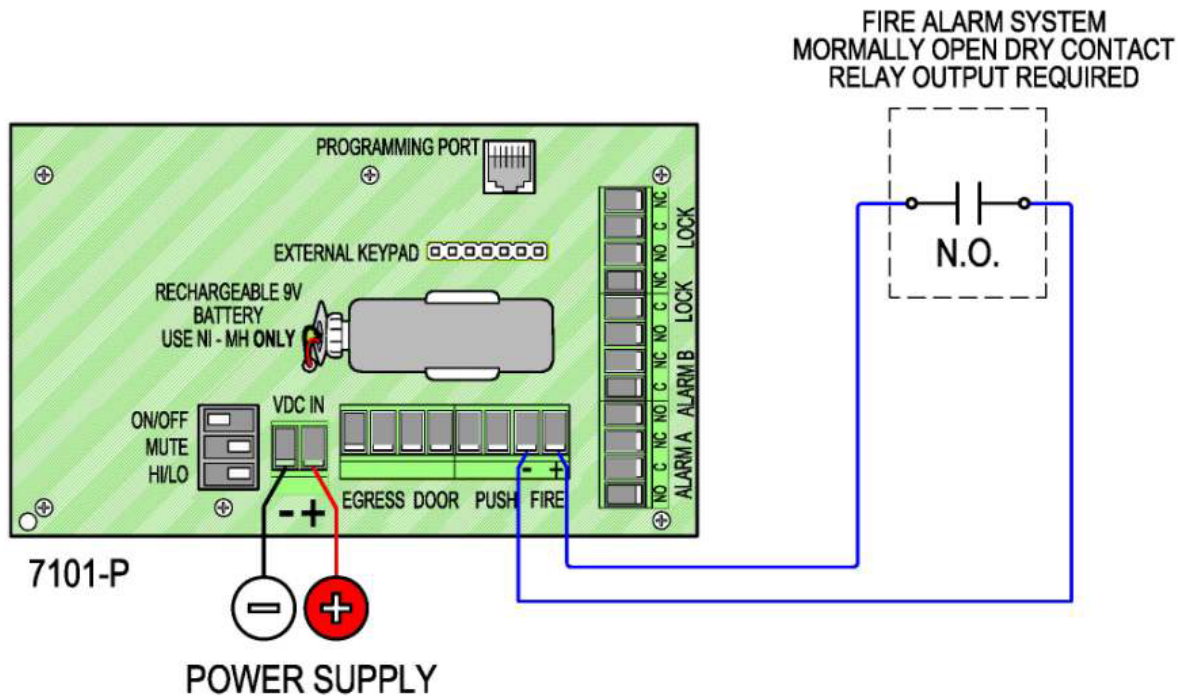


Fig. 12 7101-P to Fire Alarm System Connections

Connecting a 7101-P Panel to the Fire Alarm Control Panel.



NOTE: Per NFPA-101, any locking device installed on a designated emergency exit door must be overridden by the fire alarm control panel in case of fire alarm activation. A qualified fire alarm technician must complete fire alarm connections.

Do not connect more than eight panels in parallel to a single fire alarm relay. Doing so could result in failure of the fire alarm release feature during a fire alarm emergency.

SECTION 7 INSTALLATION AND CONNECTIONS

Multiple Panel Fire Alarm Connections

NOTE: After completing the fire alarm connection, the fire alarm system must be placed into an alarm condition to verify immediate release of all locks.

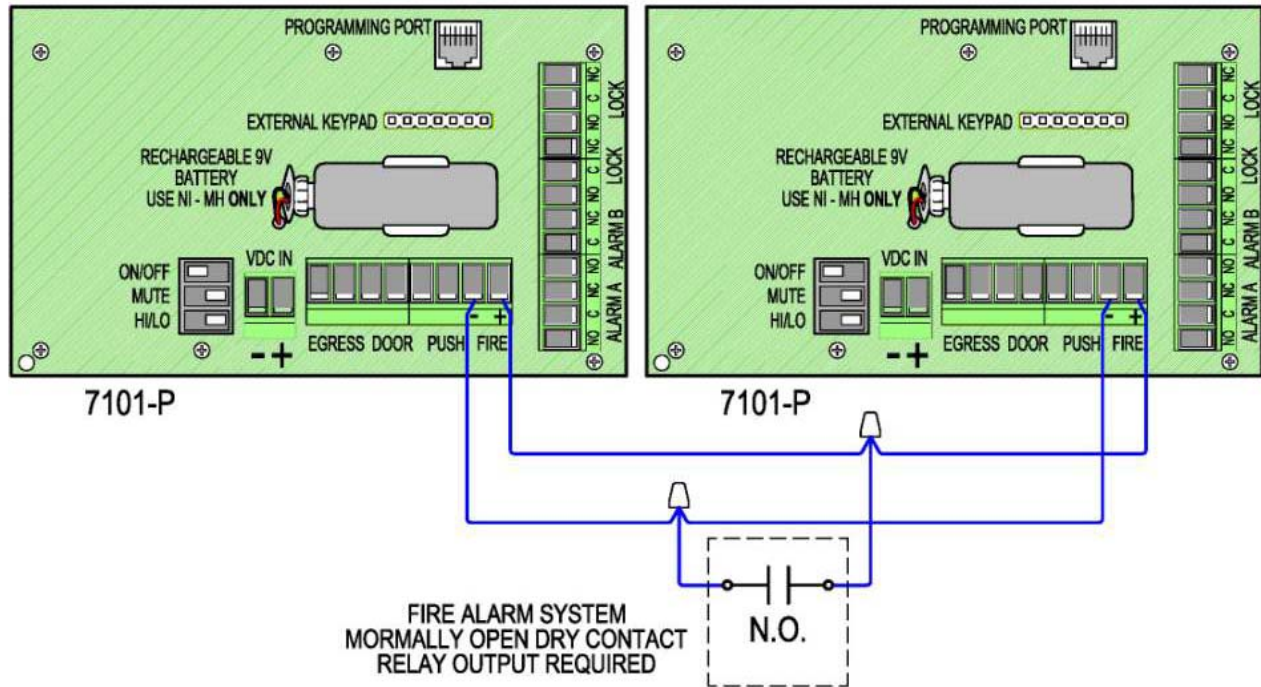


Fig. 13 Multiple 7101-P's and Fire Alarm Control Panel Connections



NOTE: Per NFPA-101 any locking device installed on a designated emergency exit door must be overridden by the fire alarm control panel in case of a fire alarm activation.

Do not connect more than eight panels in parallel to a single fire alarm relay. Doing so could result in failure of the fire alarm release feature during a fire alarm.

SECTION 10 TESTING THE 7101-P DELAYED EGRESS MAGNETIC LOCKING SYSTEM

Verify that all wiring connections are complete and wired as shown in the diagrams in *Section 7* of this manual.

The 7101-P Panel, out of the box with power supplied, should be in the armed mode and the Green LED ON., and the door equipped with the Magnetic Locking System should be LOCKED.

RECOMMENDED WEEKLY TESTS

Testing the Escort and Anti-tailgate Features

Enter the reset code into the keypad on the 7101-P Panel. The Green LED should turn off and the Red LED should turn on. Open the door. No alarm condition should be activated. **(This is the Escort Feature)**

Now close the door. The Green LED should immediately turn on, the 7101-P Panel should again be in the armed mode, and the door should again be locked. **(This is the Anti-tailgate Feature)**

Testing the Delayed Egress feature

With the door in the armed mode, apply pressure on the opening hardware of the door. The 7101-P Panel should begin to emit an audible indication that the delayed egress feature of the lock has been activated. Wait 15 (or 30) seconds. The door should unlock and open if pushed upon. Close the door. Enter the reset code into the keypad. The 7101-P Panel should reset and return to the armed mode.

Testing the Door Status feature

Enter the reset code into the keypad on the 7101-P Panel, the Green LED should turn off and the Red LED should turn on. Open the door. No alarm condition should be activated at this point. Keep the door open for 30 or more seconds. The 7101-P Panel should go into an alarm mode. Close the door and enter the reset code into the keypad. The 7101-P Panel should now be in the armed mode with the Green LED on.

Testing the Remote Keypad

If a Remote Keypad has been installed with the 7101-P Panel, repeat the test for the Escort feature and the Anti-tailgate feature using the Remote Keypad.

Testing the Remote Push Button

If a remote Push Button has been installed with the 7101-P Panel, repeat the test for the Escort feature and the Anti-tailgate feature using the Push Button.

RECOMMENDED MONTHLY TESTS

Testing the Fire Alarm Release feature

Place the fire alarm system into the alarm mode and verify that all locks release. The 7101-P Panel(s) should be in the fire alarm release alarm condition. Clear the Fire Alarm condition, the Green LED should turn on, the 7101-P Panel(s) should again be in the armed mode, and the door(s) should again be locked. After testing the Fire Alarm Release Feature, the Escort, Anti-tailgate and Door Status features should be retested as described above.

RECOMMENDED ANNUAL SERVICE

Battery Replacement

The battery should be replaced annually with a rechargeable 9VDC NI-MH replacement part# (7101-9-BAT)

SECTION 11 REPLACEMENT PARTS LIST

<u>Part #</u>	<u>Description</u>
7101-9-BAT	9VDC (NI-MH Rechargeable Battery)
4012	12VDC 1amp (Plug-in power supply)
1160015	Door Contact Switch SPDT (N.O. contacts used only)
5222015-SCM	Dortronics Egress switch
5211-MP23/RXE1	Push To Exit Button (Normally Open)
7101-KP	Remote Keypad

