



7286 SERIES DOOR PROP ALARMS

**Economical Single
Door Monitoring**

**Adjustable Exit
Time & Warning
Period**

**Visual & Audio
Alarm Indication**

Reliable Operation

Made in the USA



Local and Remote Alarms

The Dortronics 7286-PT series of door prop alarms provide an audible warning sounder, at the door, if it is not closed within a specified time. Upon a forced door condition or if the door has not been closed during the warning period, an alarm relay is activated and can be utilized to signal other monitoring systems. A Piezo alert is also sounded locally.

Universal Operation

Opening the door, or an authorized REX will activate the PT timer. If the opening is forced an immediate alarm is sounded and signalled to monitoring systems. The allowed door open timer starts upon an authorized door opening. If the door has not closed at the end of this period, a local warning period begins. If the door remains unsecured past this time period, then an alarm condition is triggered. When supplied with the optional push button, a second set of momentary switch contacts are available to provide a R-E-X signal to an access control system.

Adjustable Exit Time Period

The allowed "door open" time may be set from 0 seconds to 90 minutes. This timer begins when the door has opened and the "door unlock" signal from the access system ceases. A warning will sound if the door has not been closed at the end of the time period.

Adjustable Warning Time Period

The "warning" period may be set from 0 seconds to 5 minutes. During this sequence the sounder emits a beeping tone to remind the user to close the door.

If the door is not closed before the end of this warning period, then the "door prop" alarm sequence is activated. At this point the alarm relay is activated and the local sounder emits a steady alarm alert. This alarm is continuous until reset one of 3 ways, 1:upon door closure, 2:by Auto timed Reset, 3:Manual reset by Key switch, Digital keypad or other N.O.device. The use of a Door Position Switch is required.

Compact Mounting Styles

The Dortronics PT door prop modules are available in any of the #7286 series single or double gang wall plate designs. The single plate will accommodate the PT module with sounder and LED. When used with mushroom pushbuttons or key switches a double gang plate is required.

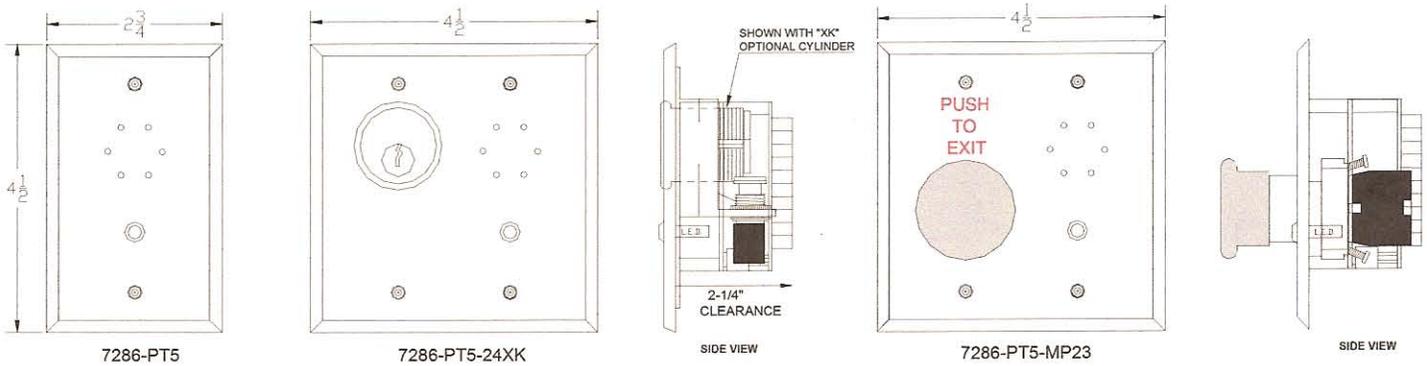
LED Indicator

A tri-state LED is provided for a visual indication of the door prop alarm condition. The LED is green when the door is secured, amber during door unlock/shunt, flashing amber when door is open (authorized), flashing red during the warning period, and steady red while in alarm.



7286 SERIES DOOR PROP ALARMS

7286-PT5 CONFIGURATIONS



Model Descriptions

7286-PT5

Local Door Prop Alarm Module on single gang 2-3/4" x 4-1/2" stainless steel wall plate with tri-color LED and 95 dB piezo audible sounder.

7286-PT5-24

Local Door Prop Alarm Module on double gang 4-1/2" x 4-1/2" stainless steel plate with tri color LED for visual status 95 dB piezo audible sounder. Includes key switch assembly with dual DPDT switches (1-Momentary for "RESET" and/or "REX" plus 1-Maintained for "SHUNT". One set of contacts from each DPDT switch may be used to also signal an access control system.

7286-PT5-24xK

Same as 7286-PT5-24 above supplied with 1-1/4" mortise cylinder.

7286-PT5-MP23

Local Door Prop Alarm Module on double gang 4-1/2" x 4-1/2" stainless steel plate with tri color LED for visual status 95 dB piezo audible sounder. Includes a 1-9/16" dia. momentary push button with 1 set of Normally Open contacts, 1 set Normally Closed contacts. Typically the N.C. contact output is used to break power to maglock while the N.O. contact is used to signal the "REX" to an access control system. The lock relay of the card access system is used as the REX input to the 7286-PT5.

Additional Features

Dry Contact and Powered Outputs

In addition to the dedicated local sounder driver, a SPDT output is furnished to operate other remote alarm devices. Also a form "C" dry contact is supplied that can be used for signaling an independent monitoring system when an authorized door unlock condition occurs.

Request to Exit

A single R-E-X input controls the door lock and alarm outputs. The alarm functions are automatically shunted during an authorized unlock sequence. This allows the door prop alarm to be inhibited during an extended authorized door opening.

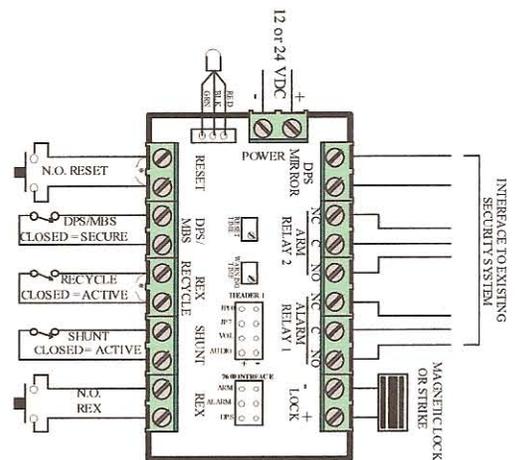
Alarm Shunt

In this mode upon contact closure the unit will not go into either warning or alarm. The REX input still functions as usual.

Manual or Automatic Alarm Reset

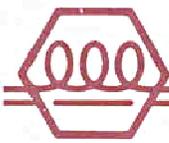
Typically, the door prop alarm is silenced and reset upon door closing. If no one is available to acknowledge alarms, a timed automatic reset may be engaged to silence the alarm after a preset period of from 0 seconds to 5 minutes, if the door remains in the open position. In the manual reset mode, the audio alarm will sound continuously, even after the door is closed. This manual reset mode requires reset by input from a normally open momentary contact such as a Key switch or Digital Keypad to silence the alarm.

7286-PT5 Inputs & Outputs



7286-PT5 Specifications

Door Prop Alarms shall be manufactured by Dortronics Systems, Inc. Onboard Key switch controls shall be momentary & alternate action with DPDT 3 amps @ 125VAC minimum as scheduled. Optional 1-1/4 Mortise Cylinder as required. Push button switch controls shall be momentary, with 1 set each N.O./N.C. 10 amps @ 125VAC minimum as scheduled. Push Button Switch caps shall be at least 1-9/16" in diameter. 7286-PT5 assemblies shall be flush wall mounted to standard, recessed, electrical boxes. Mounting screws shall be slotted oval head stainless steel. Pin in Hex Head tamper resistant screws shall be supplied where required. Mounting plates shall be constructed of stainless steel in single gang, or double gang as noted, and may be supplied with paint filled engraving.



7286 SERIES USER MANUAL-C

FUNCTIONALITY

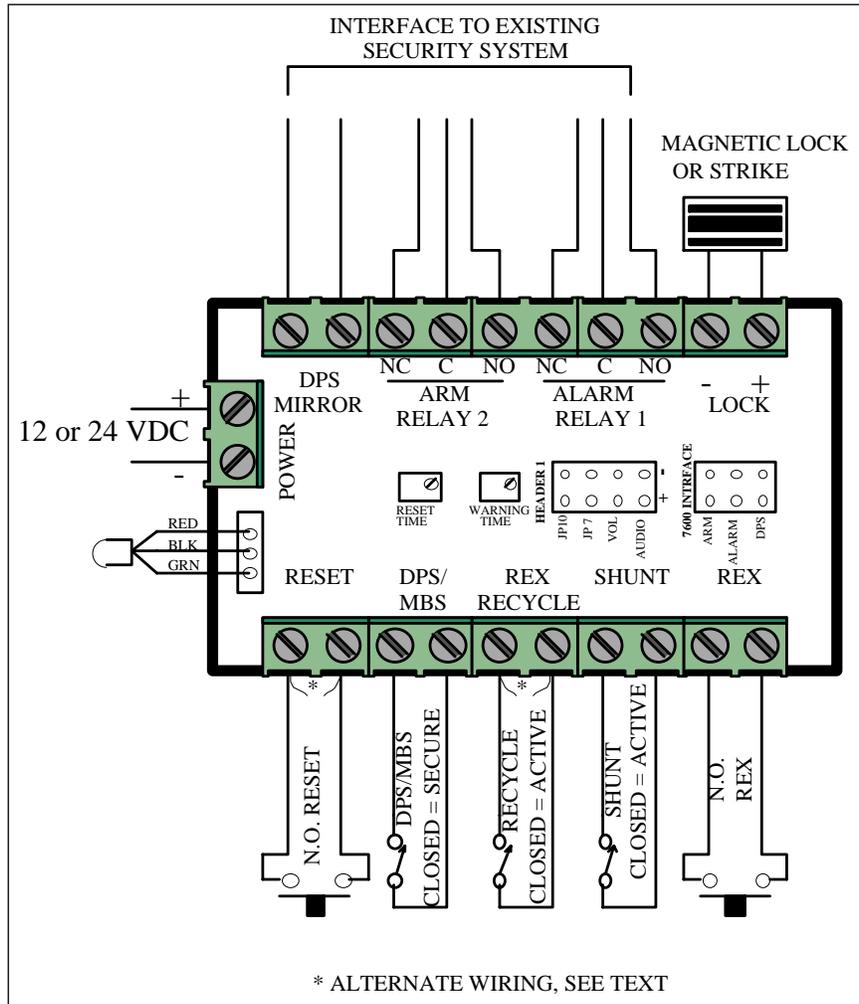
The 7200 door prop timer is a multi-function control device designed to set limits on how long a door is allowed to remain open. The various functions are as follows:

- **Secure mode:** The door is secured and locked. In this mode the door status is continuously checked. An alarm condition results if any attempt is made to force the door open. Security status can be determined by either a *door position switch (DPS)* or a *magnetic bond sensor (MBS)* at the users discretion.
- **REX (request for exit / access) mode:** This mode begins when a closure is provided to the *REX* input, and continues until the *REX* input opens. During this mode the door is unsecured. There is no time limit on the *REX* mode; As long as the *rex* input remains active, the door remains unlocked, and may be either opened or closed.
- **Prop mode:** When the *rex* input is removed and the door is left open, an internal timer sequence begins. The length of the Prop mode is user-selected, in the range of 0 seconds to 90 minutes, by means of a 16 position rotary switch. If the *REX* input again becomes active before the Prop mode times out, the 7200 returns to the *REX* mode of operation. If the door is closed before the Prop mode times out, the unit goes back to the secure mode of operation.
- **Warning mode:** If the door is held open long enough to allow the preset prop mode interval to time out, the 7200 enters the warning mode. During this mode, a local (at the door) audible warning is sounded. The on board sounder beeps at a rate of 1 beep per second, accompanied by a flashing red LED. The warning is not at this point a full alarm, but only an audible and visual warning that an alarm is imminent, and that the door should be closed to avoid going into the alarm mode. The length of the warning is user-settable, in the range of 0 seconds to 5 minutes, by means of an onboard potentiometer.
- **Alarm mode:** At the end of the warning mode, if the door has not been closed, the unit enters the full alarm mode. The intermittent audible beep of the warning phase changes to a steady alarm, and the alarm relay output is closed to signal an alarm condition to any external security system. The alarm can be reset either manually or automatically at the user's discretion. Unless the recycle mode is active (see below), the alarm is a latching mode. The mode cannot be exited until the door is re-secured and the alarm reset.
- **REX Recycle mode:** This mode allows the 7200 to exit the alarm mode and go back to the *rex* mode on a *REX* input closure.
- **Shunt mode:** When a closure is provided to the shunt input the 7200 enters the shunt mode. During this mode the unit will not go into either warning or alarm. The *REX* input still functions as usual to provide either security or access, but no alarm protection is provided in this mode.

Features

- Power Input - 12 or 24 VDC as required by lock. Current draw is 100 ma maximum (alarm sounder activated) without lock requirement.
- Lock Output - Solid state powered output for fail-safe or fail-secure (selectable by jumper).
- Audio Output - Solid state to local piezo-sounder (selectable volume by jumper).
- REX Input - Dry contact (NO) from access-control lock relay or push button switch.
- Rex Recycle Input – When closed allows a subsequent REX request to be serviced during an alarm. When open, ignores REX during alarm.
- Door Switch / Bond Sensor Input – Dry Contact input. Optional supervised input configuration available.
- Automatic Alarm Shunt - REX input can be held closed indefinitely to prevent alarm.
- Manual Bypass (Shunt Input)- Dry contact input from remote device/key switch shunts alarm
- Door Switch Output - Relay output mirrors door switch input for access control system.
- Alarm Output - Relay output triggered on forced door or door held open after warning.
- Arm/Shunt Output - Relay output triggered on remote shunt or during authorized access.
- Manual or Automatic (Timed 0 Sec. – 5 Min.) alarm reset – user selectable and adjustable.
- User-Adjustable Warning Time: 0 Sec. – 5 Min.
- User-Adjustable Door-Prop time: 0 Sec. – 90 Min.

FIELD WIRING



INSTALLATION

INPUTS TS1

RESET: This input silences and resets an alarm condition. There are two ways to use this input:

1. If manual reset is desired, a normally open device is used (i.e. pushbutton, key switch, keypad, etc.). In this mode of operation, the door must be closed prior to applying the reset. A momentary closure of the reset input will reset the alarm.
2. If automatic reset is desired, a jumper should be installed across the reset input. In this mode the reset will be automatic, and will occur when the auto reset timer times out. See *Setting the Auto Reset Timer*.

DPS/MBS: This input monitors either the Door Position Switch or the Magnetic Bond Sensor. Switch contacts should be closed when the door is secure.

REX RECYCLE: This input determines the function of the REX input during an alarm condition:

- If the RECYCLE input is open, the REX input is ignored during an alarm condition. The REX remains disabled until the alarm is reset.
- If the RECYCLE is closed, the REX remains enabled during an alarm condition. A REX input will take the unit out of alarm and through a new REX cycle.

Either a toggle type switch or a permanent jumper may be used to enable the REX Recycle. If this function is not used, the input may be left permanently open.

SHUNT: Upon closure this input prevents the 7200 from going into alarm. The shunt also overrides, but does not reset, an existing alarm. If an existing alarm condition exists when the shunt input is activated, the alarm will be disabled, but the 7200 will return to the alarm state as soon as the shunt is removed.

REX: The Request for Exit input can be tied to a key switch, digital keypad, card reader, or any other normally open device that will provide access to authorized personnel only.

OUTPUTS TS2

DPS MIRROR: This is an isolated dry contact output that follows or “mirrors” the state of the Door Position Switch.

ARM RELAY2: Dry contact output that reports an authorized or shunt condition to an external system.

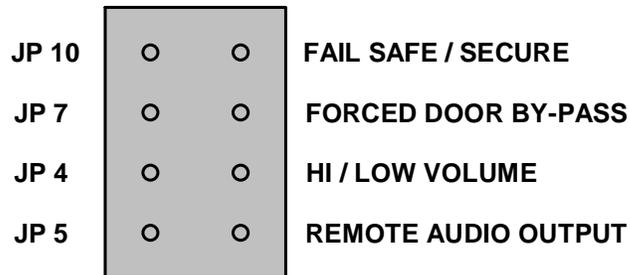
ALARM RELAY1: Dry contact output that reports an alarm condition to an external system.

LOCK: Powered output drives a locking device. Can be user configured, via jumper JP10, for either fail-safe or fail-secure devices.

POWER

POWER: Connect either a 12V or 24V (depending on lock requirements) regulated DC power supply to the power terminals. The current capacity of the power supply should be chosen based on the lock requirements. Note the polarity shown in the field wiring diagram. Incorrect polarity will not damage the 7200, but the unit will not function.

HEADER 1

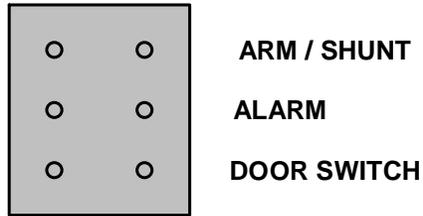


JP5 (AUDIO OUT): These pins are used to connect a self-driven piezo type audio sounder. The sounder should be rated at 9 to 12 volts DC.

JP4 (AUDIO VOLUME): The volume of the audio sounder can be adjusted for low or high volume. Install a jumper on JP4 for high volume. Remove the jumper for low volume.

JP7: (FORCED DOOR BY-PASS): With jumper in place, a REX input is not required. Opening the door will start the held-open timing sequence (allowable open time delay/warning time delay/auto-reset timer) without creating a forced door alarm.

JP10 (FAIL SAFE / SECURE): This set of pins is used to configure the lock output for either a fail-safe device (such as a magnetic lock), or a fail-secure device (such as a magnetic strike). Install a jumper across these pins for fail-secure (strike) output. Remove the jumper for fail-safe (magnetic lock) operation.



The 7600 interface connector is used to interface the 7200 to the Dortronics 7600 Annunciator unit. All connections are isolated dry contact. Polarity does not matter:

ARM: Connects to the ARM input of the 7600.

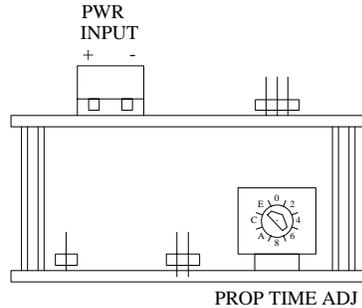
ALARM: Connects directly to the ALARM input of the 7600.

DOOR: Connects directly to the DOOR input of the 7600.

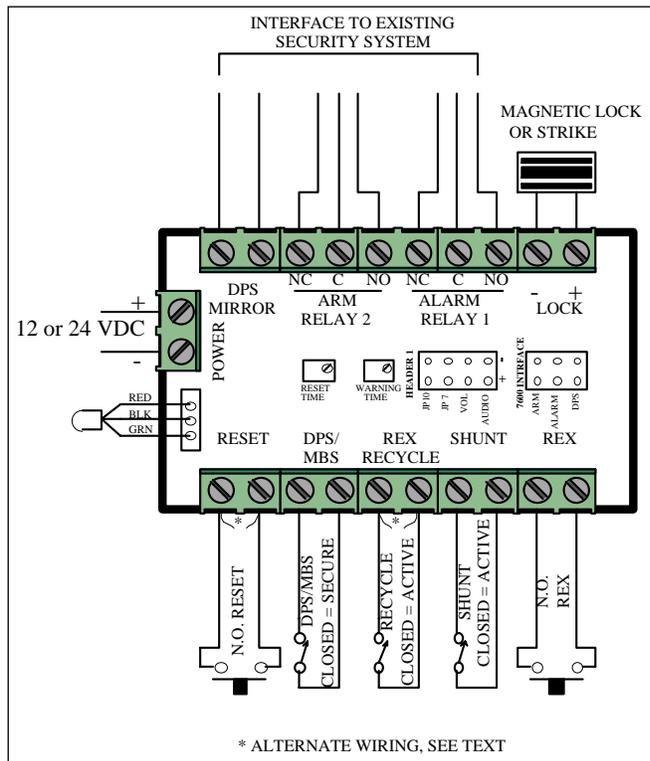
A separate 7200PT unit must be used for each individual zone of the 7600 on which door prop protection is needed.

SETUP

SETTING THE PROP TIME: The prop time is user-adjustable in the range of 0 seconds to 90 minutes. A 16 position rotary switch is used to make the adjustment. The switch is labeled 0-9 and A-F. Refer to the chart below for switch settings to achieve various timer settings.



| Position | Seconds | Minutes |
|----------|---------|---------|
| 0 | 0 | |
| 1 | 5 | |
| 2 | 10 | |
| 3 | 15 | |
| 4 | 20 | |
| 5 | 25 | |
| 6 | 30 | |
| 7 | 45 | |
| 8 | 60 | 1 |
| 9 | 120 | 2 |
| A | 300 | 5 |
| B | 600 | 10 |
| C | 900 | 15 |
| D | 1800 | 30 |
| E | 3600 | 60 |
| F | 5400 | 90 |



SETTING THE WARNING TIME: The warning time is adjustable over the range of 0 seconds to 5 minutes. Referring to the illustration above, use the potentiometer labeled “Warning Time” to adjust the time period. This is a multi-turn adjustment, and is adjustable over a wide time range. The adjustment may be a little tricky if very short warning times are needed. A trial and error procedure will be necessary to get exact times.

SETTING THE AUTO-RESET TIME: The Auto-Reset time is also adjustable over the range of 0 seconds to 5 minutes. Referring to the illustration above, use the potentiometer labeled “Auto-Reset Time” to adjust the time period. This is a multi-turn adjustment, and is adjustable over a wide time range. The adjustment may be a little tricky if very short Auto-Reset times are needed. A trial and error procedure will be necessary to get exact times.

OPERATION

Prior to applying power the door should be closed. Upon power-up the system should go into a secure state, indicated by a steady green LED.

REX

The REX (Request for Exit) release mode allows only "authorized" persons to exit, and requires the use of a key, keypad, card reader or other device to restrict access to authorized personnel. The door will immediately unlock and the LED will change color from green to yellow. If the door remains open after the REX is released, the Prop Timer begins running. The length of the prop cycle may be anywhere from 0 seconds to 5 minutes depending on the setting of the 16 position rotary switch. If the door is not closed before the Prop Timer cycle is complete, the 7200 will go into the Warning cycle, followed by the Alarm mode.

Note that the timing cycle starts only after the input is released. This feature can be useful if you have need for the door to remain unlocked for extended time periods. A toggle switch may be connected to the REX input on terminal strip TS1. Setting the switch to the closed position will hold the door in the unlocked position indefinitely.

WARNING

If, after an initial REX request, the door is held open long enough for the Prop Time to expire, the 7200 will go into its warning mode. During this time, there will be a local warning consisting of an intermittent beep accompanied by a flashing red LED. This is an indication that the door has been opened longer than the maximum allowable time, and that an alarm is imminent. The warning will reset automatically if the door is closed before the 7200 goes into alarm, or if another Rex request is received before the unit goes into alarm.

The length of the warning cycle may be anywhere in the range of 0 seconds to 5 minutes depending on the setting of potentiometer R5.

ALARM

If the door remains open after the warning period expires, the 7200 will go into full alarm. The audible beep and red LED are now continuous, and the alarm relay closes to signal any external system that the alarm condition exists. The alarm cycle can be exited in one of three ways:

1. By a RESET. The reset may be either manual or automatic. See RESET below.
2. By an active SHUNT input. See SHUNT below.
3. If the REX RECYCLE input is closed, by an active REX input. See REX RECYCLE below.

RESET

The RESET input is used to silence and reset an alarm condition on the 7200. The reset can be configured as either a manual or automatic (timed) reset.

MANUAL RESET: If a normally opened device is connected to the RESET input, the manual reset will be enabled. To manually reset an alarm:

1. Close the door. The 7200 cannot be manually reset unless the door is closed and secured.
2. Momentarily close the reset input.

AUTO RESET: If a normally closed device, or a permanent jumper, is connected to the RESET input, the automatic reset will be enabled. An auto reset functions as follows:

- The 7200 will automatically reset an alarm condition after the auto reset timer times out (see “Setting the Auto Reset Time” in the SETUP section).
- The alarm will be reset regardless of whether the door is open or closed.
- An alarm can always be reset manually at any time before the auto reset has occurred. Opening and re-closing the reset input will override the auto reset and cause a manual reset of the alarm. Keep in mind that the door must be closed prior to performing a manual reset.

REX RECYCLE

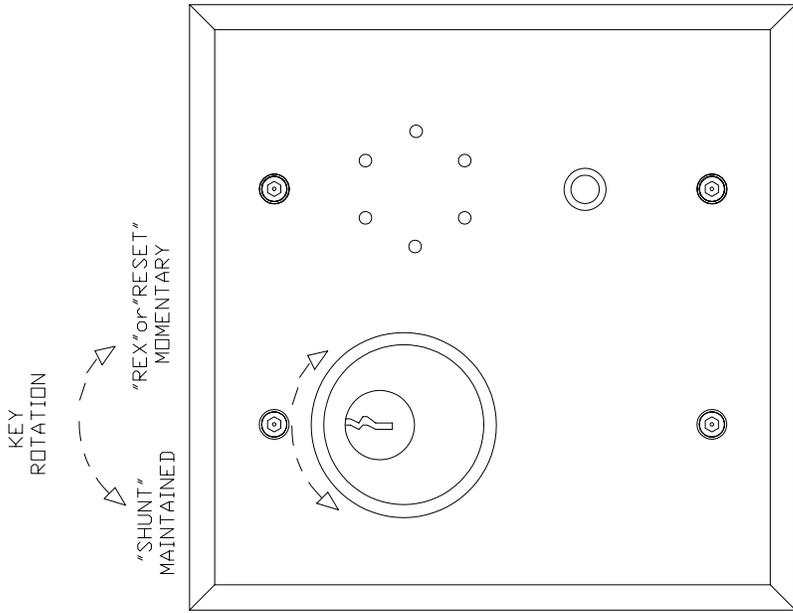
This input determines how the 7200 handles a REX request during an alarm condition.

- If the REX RECYCLE is open, a REX request will be ignored during an alarm.
- If the REX RECYCLE is closed, a REX request will take the 7200 out of alarm, in effect resetting the alarm condition, and a normal REX cycle will begin.

SHUNT

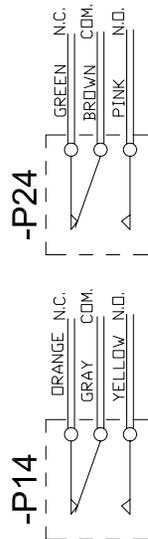
The SHUNT input is used to prevent the 7200 from going into alarm, or if already in an alarm state, to temporarily override the alarm. The shunt does not reset an alarm that is already in progress, the 7200 will go back to the alarm state when the shunt input opens.

7286 KEY SWITCH INSTRUCTIONS



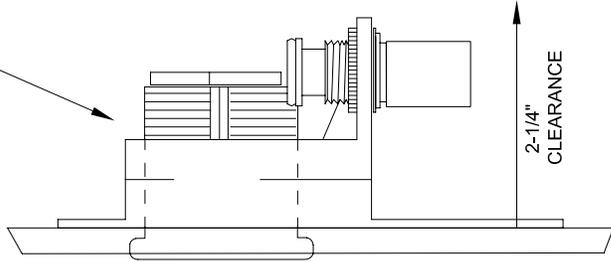
USE FOR "SHUNT" INPUT
 DPDT
 MAINTAINED SWITCH

(CCW KEY ROTATION)



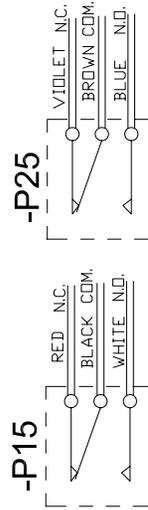
IF UTILIZING THE MAINTAIN SET OF CONTACTS FROM THE KEYSWITCH FOR THE "SHUNT" INPUT THE SECOND SET OF MAINTAIN CONTACTS MAY BE USED TO SIGNAL THE ACCESS CONTROL SYSTEM OF A "SHUNT" CONDITION.

SHOWN WITH "XK" OPTIONAL CYLINDER



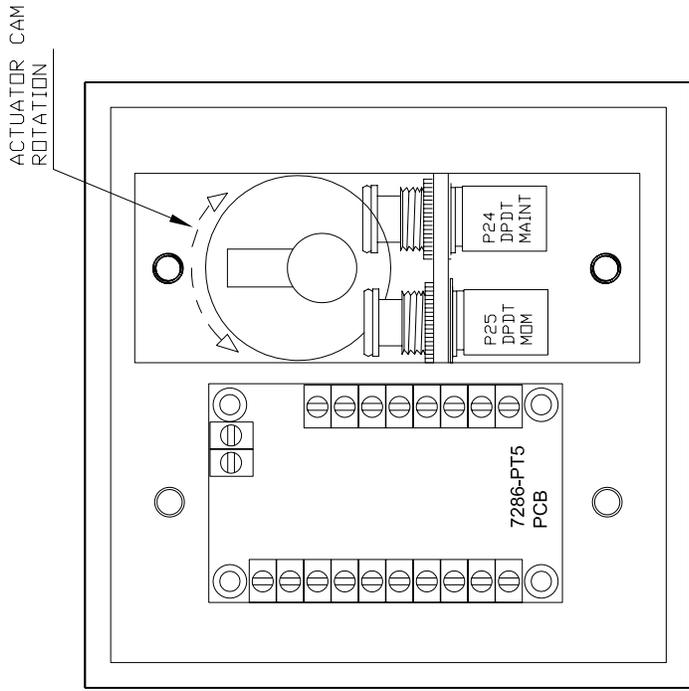
USE FOR "REX" or "RESET"
 DPDT
 MOMENTARY SWITCH

(CW KEY ROTATION)



IF UTILIZING THE MOMENTARY SET OF CONTACTS FROM THE KEYSWITCH FOR THE "REX" INPUT THE SECOND SET OF MOMENTARY CONTACTS MAY BE USED TO SIGNAL THE ACCESS SYSTEM OF AN AUTHORIZED REQUEST.

IF UTILIZING THE MOMENTARY CONTACTS FOR THE "RESET" INPUT, THE SECOND SET OF CONTACTS ARE NOT USED.



DORTRONICS
 SYSTEMS, INC.

7286 KEY SWITCH
 INSTRUCTIONS

DATE 1/3/05

FILE

DRAWN JTF

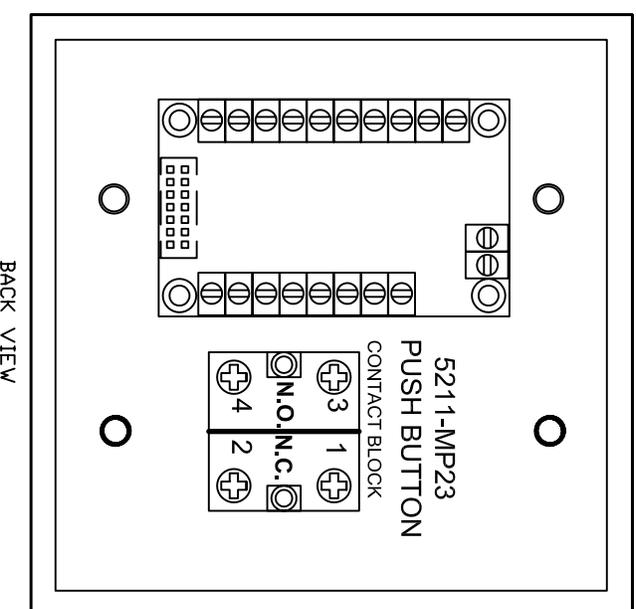
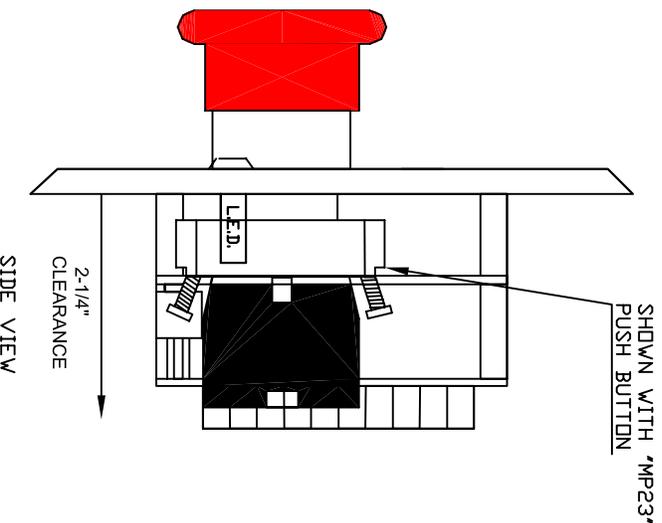
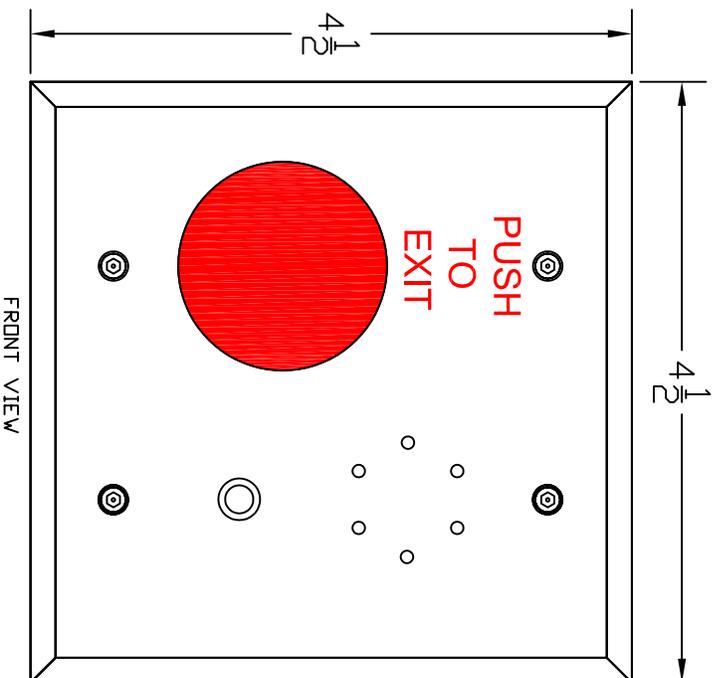
SHEET 1

DF 1

SIZE A

7286-PT5-MP23 PUSH BUTTON SWITCH INSTRUCTIONS

SHOWN WITH
OPTIONAL TEXT

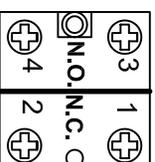


UTILIZING THE N.O. MOMENTARY SET OF CONTACTS FROM THE PUSH BUTTON FOR THE "REX" INPUT THE SECOND SET OF N.C. MOMENTARY CONTACTS MAY BE USED TO SIGNAL THE ACCESS SYSTEM OF AN AUTHORIZED REQUEST.

SPECS:

- SWITCH RATING: 5211-MP23PP
10A @ 115VAC OR 24VDC
UL RECOGNIZED/CSA CERTIFIED
- OPERATING TEMP: +5F - +158F
- LED RATING: .08A @24VDC
- PIEZD RATING: .08A @24VAC
- FACE PLATE: .032 THICK STAINLESS

USE FOR "REX"
MOMENTARY SWITCH
1 SET N.O. 1 SET N.C.



| | |
|--------------------------------------|---------------------|
| | |
| DORTRONICS SYSTEMS, INC. | |
| 7286-PT5-MP23 SWITCH INSTRUCTIONS | |
| DATE: 1/3/05 | FILE: |
| DRAWN: JTF | SHEET 1 OF 1 SIZE A |