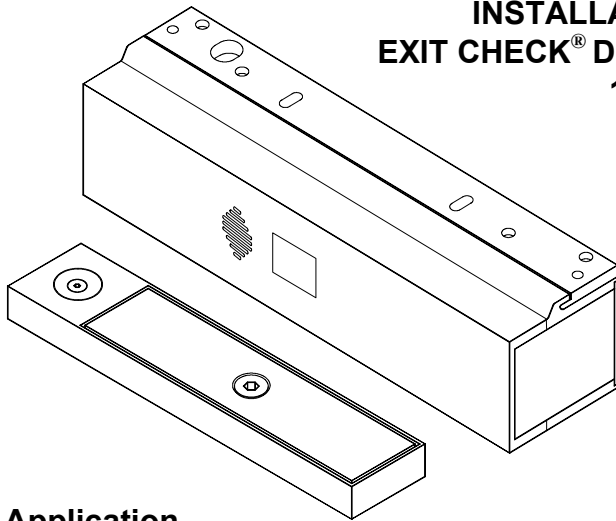


SDC SECURITY DOOR CONTROLS

3580 Willow Lane, Westlake Village, CA 91361-4921 • (805) 494-0622 • Fax: (805) 494-8861
www.sdcsecurity.com • E-mail: service@sdsecurity.com

INSTALLATION INSTRUCTIONS EXIT CHECK® DELAYED EGRESS EMLOCK® 1511S / 1511T



**PUSH UNTIL ALARM
SOUNDS. DOOR CAN BE
OPENED IN 15 SECONDS.**

**KEEP PUSHING. THIS DOOR
WILL OPEN IN 15 SECONDS.
ALARM WILL SOUND.**

*California Building
Code Compliant*

Application

When unauthorized egress is initiated, the Exit Check® delays egress through the door for 15 or 30 seconds. Meanwhile, the person exiting must wait while personnel or security respond. An integral digital countdown display and voice commands inform the person intending to exit of the seconds remaining to unlock. The door unlocks after 15 or 30 seconds have elapsed, permitting egress. A signal from the fire/life safety system will release the lock for uninhibited egress in an emergency.

Exit Check® applications include:

- Restricting the egress of patients for their own safety.
- Restricting the egress of commercial center patrons for security application needs.
- Controlling pedestrian traffic in transportation facilities, including airport jetways and tarmacs

1511S Operational Description (NFPA-101)

The 1511S operation complies with the following building and fire codes: NFPA 101; NFPA 1-UFC; UBC; IBC; IFC; SBC; California Building Code. Listings: UL Listed: Special Locking Arrangements and Auxiliary Locks; California State Fire Marshal (CSFM) Listed.

The door is normally closed & secured and/or latched. The model 1511S Exit Check secures the door in the locked condition, and the display shows the preset delay time.

Activation of the 1511S Exit Check is made by releasing the door latch and applying up to 15 lbs. of pressure to the door, giving a pre-activation warning tone. (A 1 or 2 second nuisance delay will prevent false activation of the alarm).

When the nuisance delay time has been exceeded, the Exit Check begins the irreversible door release cycle. At this time the display continues to count down, the verbal warning continues and an alarm output is provided to alert personnel of an unauthorized exit.

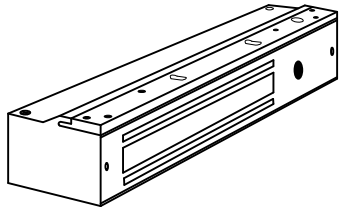
The integral digital countdown display and voice commands inform the person intending to exit of the seconds remaining to unlock. The Exit Check will release the door after the 15 or 30 second delay cycle has expired, allowing free egress. A steady warning tone with the voice command "Exit Now" will sound until the Exit Check is reset by authorized personnel.

1511S Operational Description (BOCA/Chicago)

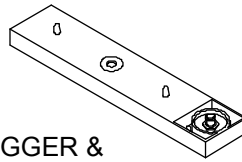
The 1511S operation complies with BOCA National Building Code and the Chicago Building Code: UL Listed, Special Locking Arrangements and Auxiliary Locks.

The releasing operation of the 1511S is the same as described above, with the exception that the door relocks automatically 30 seconds after closure (*reset switch not required*). Each time the door is open before 30 seconds has elapsed the relock timer resets and relocks the door in 30 seconds.

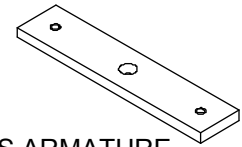
Included in Package



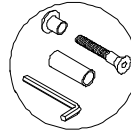
1511S EMLOCK
HOUSING ASSY. &
MOUNTING PLATE



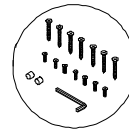
1511S TRIGGER &
ARMATURE BASE
1511S-11



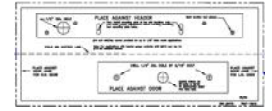
1511S ARMATURE
1511S-12T



ARMATURE
SCREW PACK
1580S-101-C



EMLOCK
SCREW PACK
C-1500



TEMPLATE
TEMP-1511

Suggested Optional Equipment

Digital Entry



928 Digital Keypad
Two relay outputs:
Relay 1 -Reset;
Relay 2 - Choice of
momentary or
sustained bypass.

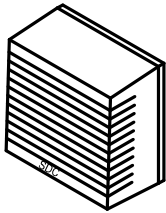
Power Supply



600 Series Power Supply
Field Selectable 12 or 24VDC modular
Power Supplies with Fire/Life Safety
Emergency Release. Tri-colored LED,
separate PTC protected outputs, battery
charger, and Class 2 Outputs.

602RF 1 Amp
631RF 1.5 Amp
632RF 2 Amp
634RF 4 Amp
636RF 6 Amp

Remote Speaker



101-SP
Indoor Surface Mount;
85dB@3ft.;
Compact Design (4 in. sq.);
Plug-in connector included
for easy installation

Station Controls, Annunciator Panels, and Consoles



728
Single station two
function key switch
control for alarm
reset and access or
sustained bypass.



101-1A
The single station
annunciator is
equipped with a tri-
colored LED and
audible alarm.



101-PAM
Visual & audible
annunciation, timed
access, sustained
bypass and audible
mute.



728-L
Single station two
function key switch
control for alarm reset
and access with a tri-
colored LED showing
door condition.



101-4AM
Provides visual &
audible annunciation
with audible mute for
one, two, three or
four openings.



TCC Desk Top :
Stations 4, 8, & 12
SDC Annunciator Consoles
provide remote annunciation
of multiple openings. Stations
are specified in sets of four.
Control switches are capable
of both sustained bypass and
timed unlocking.



702-6R
Single station one
function key switch
control for alarm
reset.



101-1AK
Visual & audible
annunciation and a
two function key
switch for alarm
reset and access or
sustained bypass.



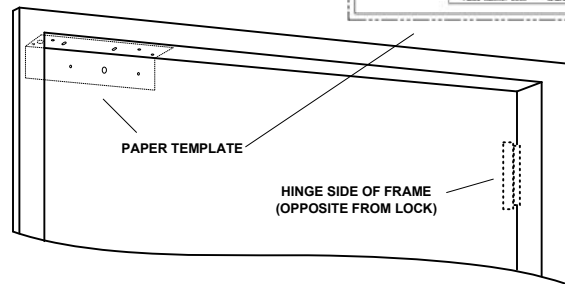
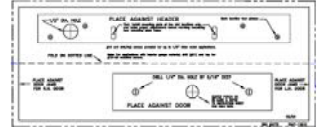
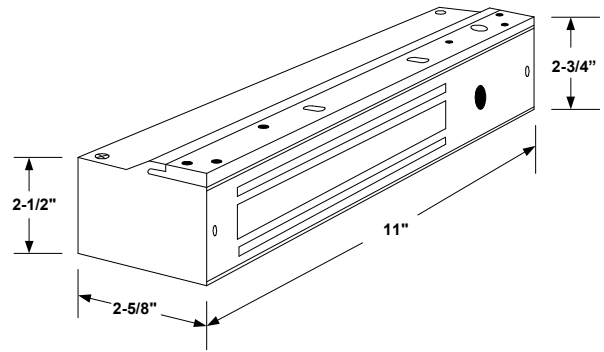
PSB560
Request-to-exit pressure
sense non-latching bar
that will activate the Exit
Check[®] when slight
pressure is applied to
the bar. For doors
without latching.

Door and Frame Preparation Instructions

STEP 1. Locate the paper template and fold along the dotted line. Place the folded edge of the template against the door stop and door at the header while against the vertical stop, opposite the hinge side of the door. Tape in place at this position.

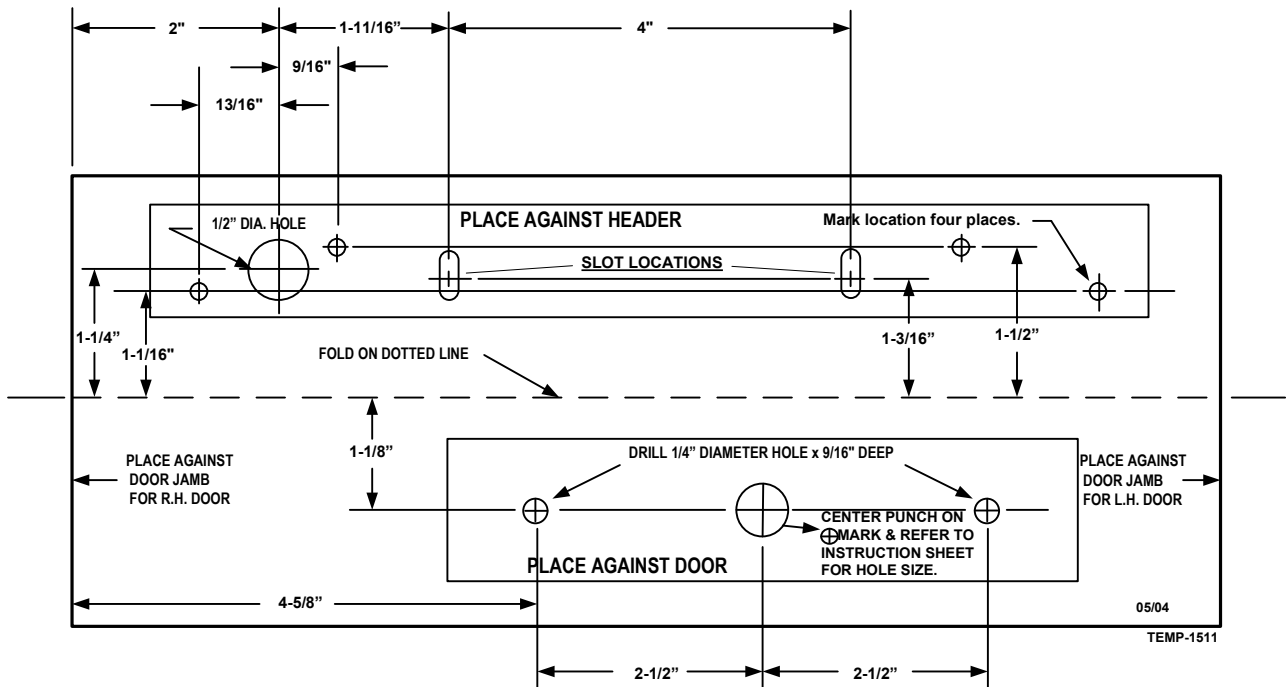
STEP 2. As indicated on the paper template, punch the designated hole locations on the frame and armature mounting holes on the door. **(NOTE: PRIOR TO DRILLING, INSPECT TO SEE IF ANY OF THE HOLES CANNOT BE DRILLED DUE TO THE FRAME OR DOOR CONFIGURATION. A FILLER PLATE OR ANGLE BRACKET MAY BE REQUIRED. SEE PAGE 4.)**

STEP 3. Drill and tap the two 1511S mounting holes as indicated on the paper template. **(NOTE: READ NOTE ON TEMPLATE WITH REGARD TO SELECTING THE PROPER HOLE SIZE FOR ARMATURE MOUNTING BOLT.)**



Door and Frame Reference Dimensions

IMPORTANT! – IT IS HIGHLY RECOMMENDED THAT YOU FIRST INSTALL THE MOUNTING PLATE AT TWO SLOT LOCATIONS ONLY. THIS WILL ALLOW YOU TO MAKE PROPER ADJUSTMENTS OF THE LOCK'S POSITION PRIOR TO MARKING, DRILLING AND TAPPING THE FOUR PERMANENT MOUNTING PLATE HOLES.



NOTES:

- #10 self drill/tap screws provided for up to 1/8" thick metal applications
- For applications with heavier gauge material, drill (#21) and tap for #10-32 machine screws.

ARMATURE MOUNTING INSTRUCTIONS

STEP 1. Mount armature to door. (See figures 2A, 2B & 2C.)

STEP 2. Install the mounting plate (filler plate and/or angle bracket if needed – see figures 1A, 1B & 1C) to header with only the two screws at the slotted hole locations at this time. Snug the screws down lightly (do not torque) so the mounting plate & lock can be repositioned later.

STEP 3. Temporarily install the lock to the mounting plate with the 1/4-20 socket head screws encased in the lock.

STEP 4. With the lock mounted, close the door so the armature holder just comes into contact with the face of the lock. If the door is not completely closed when the lock & armature touch, open the door and reposition the lock away from the door as described in step 2. **(THIS IS TO PREVENT THE DOOR FROM USING THE LOCK AS THE DOOR STOP.)**

STEP 5. Remove the lock from the mounting plate, mark & punch all remaining screw and wiring holes. Drill & tap holes as indicated on the paper template and install all screws.

STEP 6. Reinstall the lock to the mounting plate. At this point, if there is no need to remove the lock for painting or any other reason, install the anti-tamper plugs over the socket head mounting screws, using a soft hammer to avoid damage to the lock case.

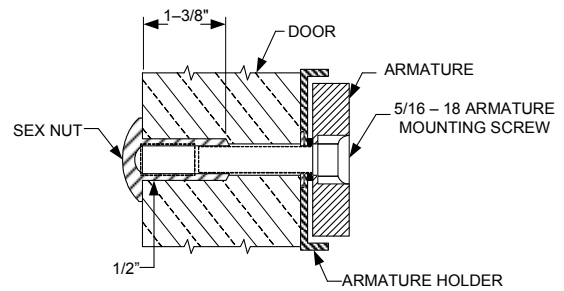


Figure 2A – SOLID DOOR

Drill exactly 3/8" diameter through the door. From sexnut side of door, drill 1/2" diameter hole 1-3/8" deep. Mount armature to door with hardware provided per Figure 2A.

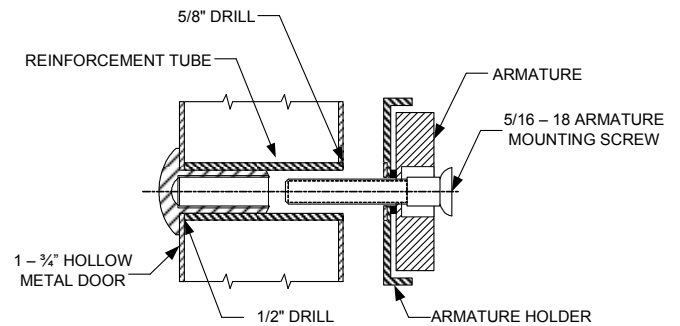


Figure 2B – HOLLOW METAL DOOR

From sexnut side of door, drill exactly 1/2" hole through one metal thickness only. From armature side of door, drill 5/8" hole to insert reinforcement tube. Press in sexnut & reinforcement tube all the way and mount armature to door using hardware provided per Figure 2B.

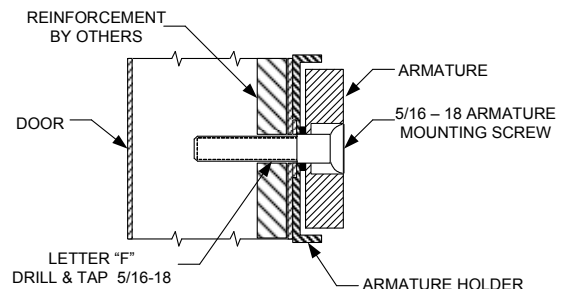
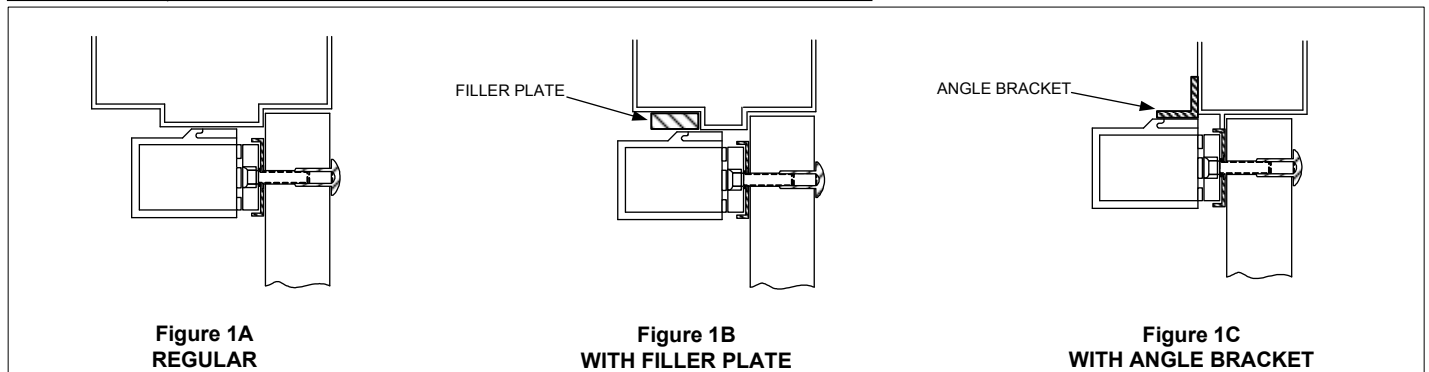


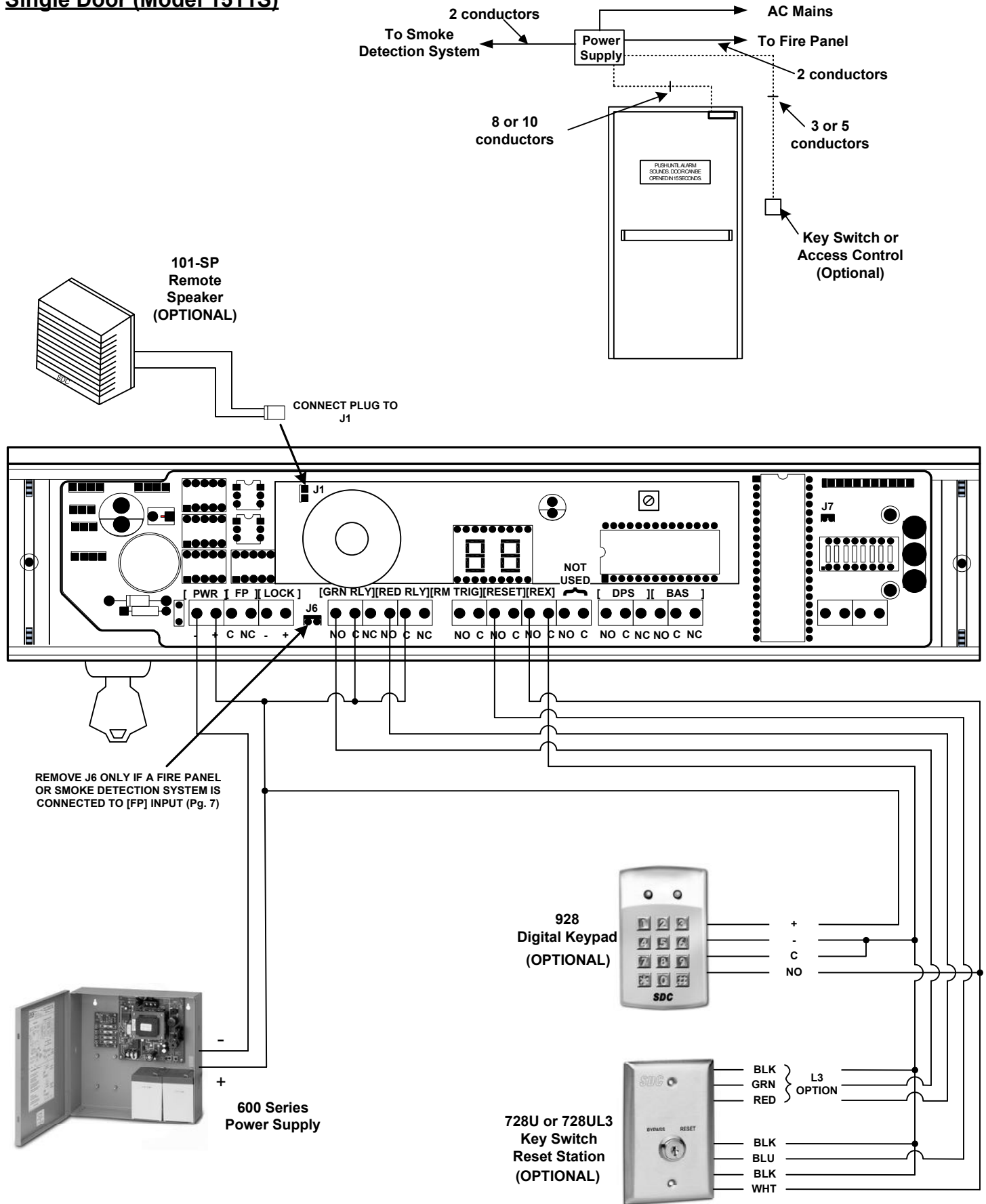
Figure 2C – REINFORCED ALUMINUM OR HOLLOW METAL DOOR

Use letter "F" drill and tap for 5/16-18 machine screw. Mount armature to door with hardware provided per Figure 2C.

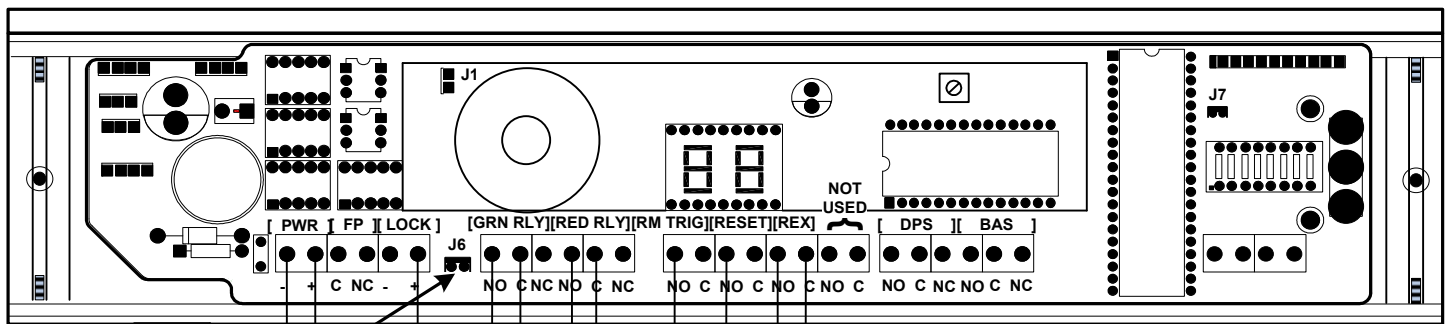
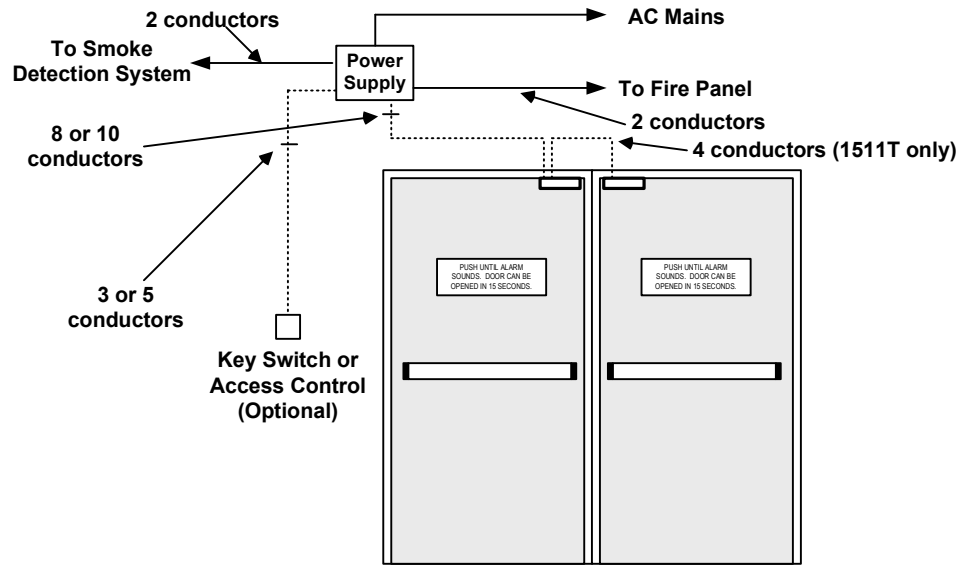
REGULAR, FILLER PLATE & ANGLE BRACKET DETAILS



**Typical System Wiring –
Single Door (Model 1511S)**



Typical System Wiring – Pair of Doors (Model 1511T)



MASTER

REMOVE J6 ONLY IF A FIRE PANEL OR SMOKE DETECTION SYSTEM IS CONNECTED TO [FP] INPUT (Pg. 7)



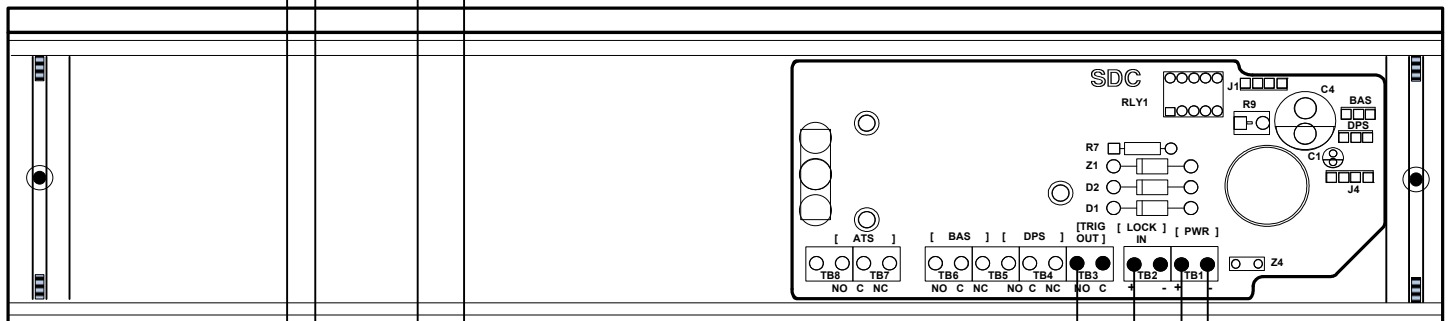
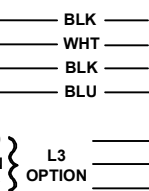
600 Series Power Supply



928 Digital Keypad (OPTIONAL)

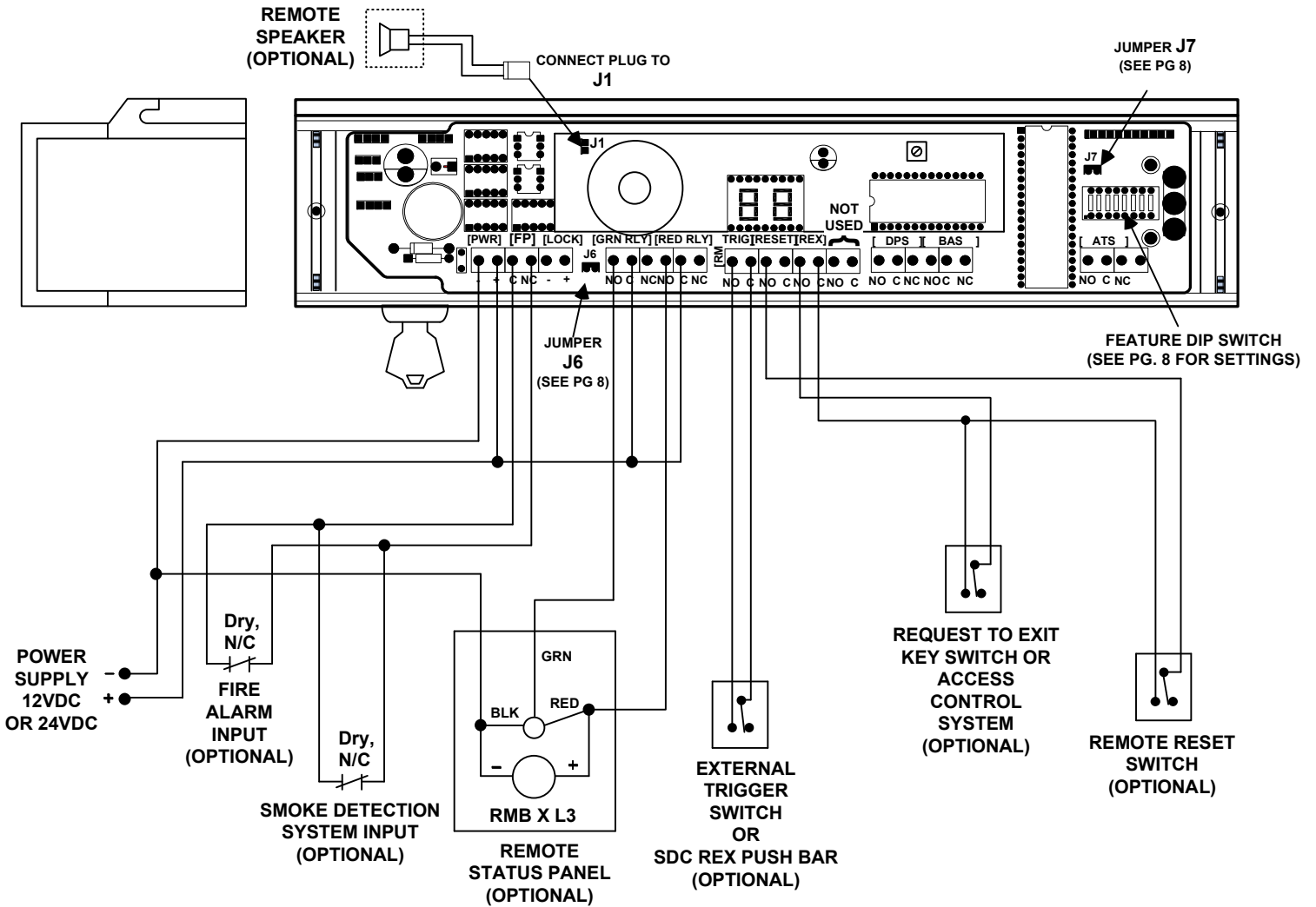


728U or 728UL3 Key Switch Reset Station (OPTIONAL)



SLAVE

Wiring Details & Functions (ALL OPTIONS SHOWN)



TERMINAL BOARD CONNECTIONS		
[PWR]	POWER IN - POWER IN +	12 VDC OR 24 VDC
[FP]	COM N/C	TO CLOSED FIRE/SMOKE DETECTOR CONTACT
[LOCK]	AUX LOCK - AUX LOCK +	SLAVE/TANDEM LOCK POWER TERMINALS
[GRN RLY]	N/O COM N/C	LOCK SECURE OUTPUT
[RED RLY]	N/O COM N/C	ALARM OUTPUT
[RM TRIG]	N/O COM	EXTERNAL TRIGGER SWITCH INPUT
[RESET]	N/O COM	EXTERNAL RESET SWITCH INPUT
[REX]	N/O COM	REQUEST TO EXIT INPUT

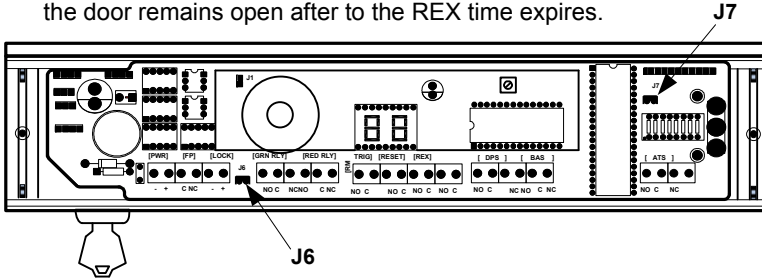
MONITORING OPTIONS		
[DPS]	N/O COM N/C	DOOR POSITION SWITCH (DPS)
[BAS]	N/O COM N/C	BOND ALERT (BAS)
[ATS]	N/O COM N/C	ANTI-TAMPER SWITCH (ATS)

JUMPER SETTINGS

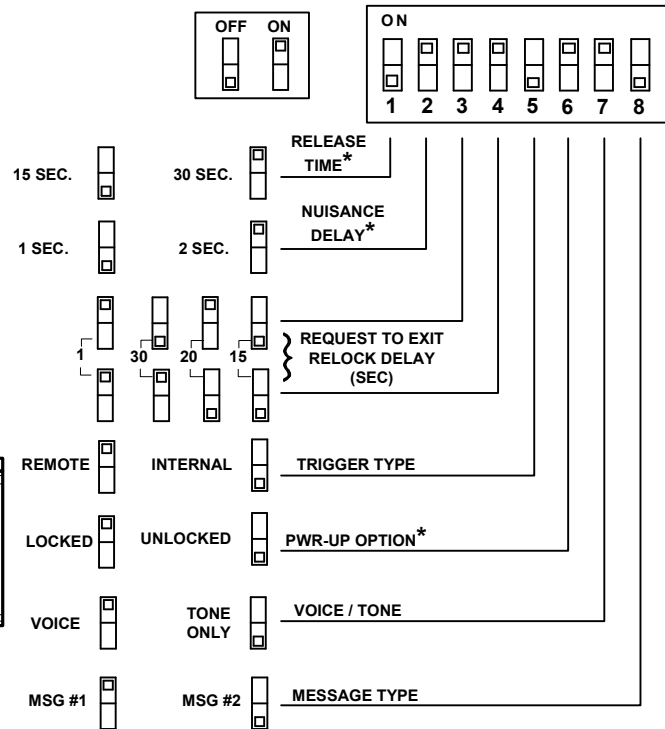
JUMPER J6 (Fire Alarm Input) – Factory Installed. Remove J6 only if a dry, normally closed contact from a fire alarm OR smoke detector system is connected to the Fire Panel [FP] terminals.

JUMPER J7 (Door Prop) – When removed, the ExitCheck™ will allow the user to prop the door open indefinitely after a valid REX input, without causing an alarm. The lock will automatically relock once the door is closed.

With J7 installed, the ExitCheck™ will go into its alarm mode if the door remains open after the REX time expires.



DIP SWITCH SETTINGS



RELEASE TIME* – The Release time is selectable for 15 or 30 seconds. The Nuisance Delay time period is included in the door release cycle and it will not increase or decrease the “total time to unlock” once the ExitCheck™ is activated.

*** WARNING!**
CONTACT AUTHORITY HAVING JURISDICTION FOR APPROVAL PRIOR TO SELECTING DELAY TIME OR PWR-UP SETTINGS

NUISANCE DELAY* – The Nuisance delay time feature, intended to avoid accidental triggering, is selectable for 1 or 2 seconds. Releasing the door latch and pushing on the door will activate the internal trigger sensor. Activating the trigger beyond the nuisance delay time will start the irreversible Exit Delay cycle time. The Nuisance Delay time period is included in the lock release cycle and it will not increase or decrease the “total time to unlock” once the ExitCheck™ is activated. Releasing the door before the end of the Nuisance delay time will turn off the warning alarm and reset the ExitCheck™ to secure mode.

REQUEST TO EXIT PERIOD – The Request to Exit (REX) time is selectable for 1, 15, 20, or 30 seconds. The REX time is the period of time the lock will remain “bypassed”, after a remote normally open contact switch is momentarily activated. When activated with an access control system, the REX time cycle begins immediately after the access control open time expires. The ExitCheck™ will automatically relock if the door is opened, and then closed during the REX time cycle.

TRIGGER TYPE – The trigger type is selectable for “REMOTE” or “INTERNAL”. Selecting INTERNAL mode uses the internal trigger sensor to activate the Exit Delay cycle. Selecting REMOTE mode disables the internal trigger. Activation of the Exit Delay cycle is triggered by an external exit device equipped with a normally open contact switch.

POWER-UP OPTION* – The power-up option, indicating the state of the ExitCheck™ upon restoration of system power, is selectable to “UNLOCKED” or “LOCKED”. In the LOCKED mode, the ExitCheck™ will attempt to reset to secure mode. In the UNLOCKED mode, the ExitCheck™ will remain unlocked and the digital display will indicate two horizontal bars “--”. Turning the reset switch momentarily to the reset position will relock and rearm the door. This feature enables the ExitCheck™ to comply with code requirements in jurisdictions that require manual reset/relock upon loss and restoration of system power.

ALARM TYPE – The alarm type is selectable to “TONE ONLY” or “VOICE”. When secure, the ExitCheck™ digital display will indicate a 15 second delay time. Upon activation of the irreversible Exit Delay cycle, the digital display begins counting down to zero. In VOICE mode, the countdown will be accompanied by a warning beeping tone and verbal exit instructions. When the digital display indicates zero, the ExitCheck™ releases. The speaker output changes to a continuous warning tone and the verbal instruction announces “Exit Now”. In TONE ONLY mode, the countdown will be accompanied by a warning beeping tone only, which changes to a continuous tone once the Exit Delay cycle expires.

MESSAGE TYPE – The message type is selectable to “MSG1” or “MSG2”.

MSG1: (Female Voice) “Exit in 12 seconds, facility staff has been notified...Exit in 5 seconds...exit now...”

MSG2: (Male Voice) “Exit in 12 seconds, security has been alerted...Exit in 5 seconds...exit now...”

Both messages repeat “Exit now” until the lock is reset.

Lock Adjustment and Operation

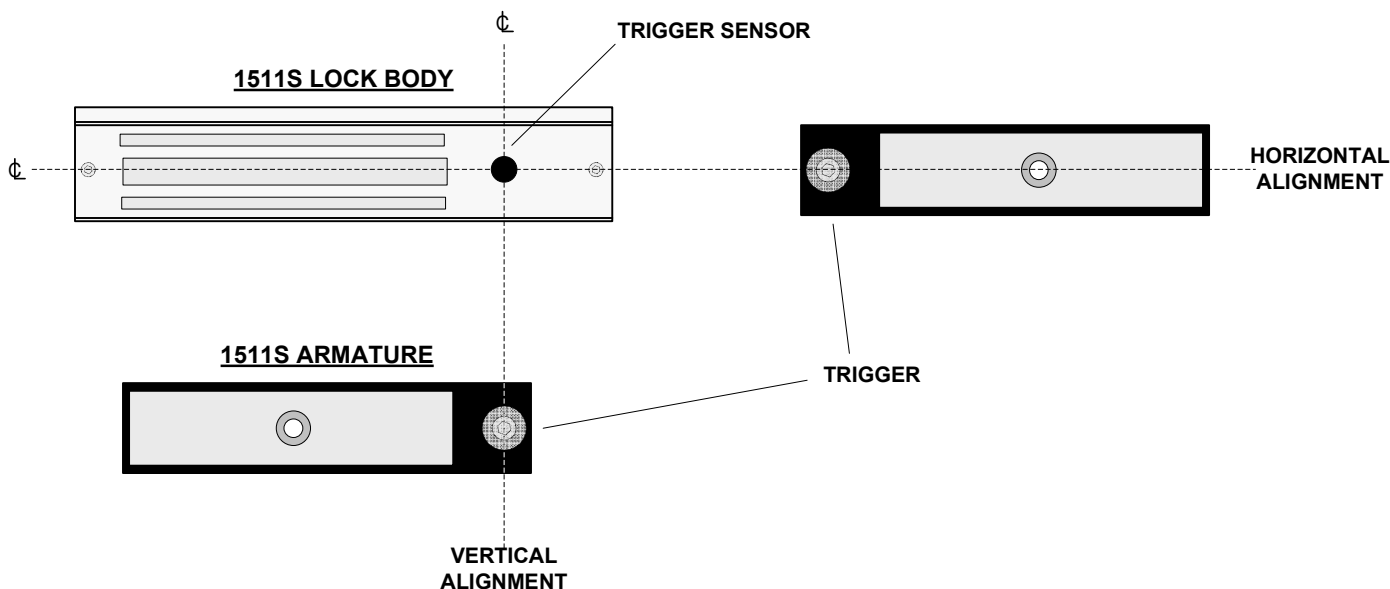
STEP 1. After the lock has been mounted to the door and frame per the provided template, feed the wiring through the access hole and out to the controller board. Re-install the lock front cover onto the lock. Ensure that the trigger sensor is aligned with the hole in the cover. The sensor is preset at the factory to slightly project through the cover. **WARNING: DO NOT ATTEMPT TO ADJUST THE TRIGGER SENSOR LENGTH. AS THIS WILL RESULT IN DAMAGE TO THE SENSOR AND VOID THE WARRANTY.**

STEP 2. Make all wiring connections to the lock. Observe the polarity of the input power terminals. The lock senses the power supply voltage and automatically configures itself for 12vdc or 24vdc operation. Correct power supply voltage must be used for proper lock operation. **WARNING: INPUT TERMINALS FOR RESET, REX AND REMOTE TRIGGER MUST ONLY BE CONNECTED TO A NORMALLY OPEN MOMENTARY DRY CONTACT SWITCH (I.E. 928 DIGITAL KEYPAD OR 728 KEY SWITCH). CONNECTION TO A VOLTAGE OR A "WET" OUTPUT MAY DAMAGE THE LOCK AND VOID THE WARRANTY.**

STEP 3. Slowly swing the door closed and visually observe the position of the armature trigger as it approaches the trigger sensor on the lock. If the provided mounting template was used during the lock and armature installation, the trigger & sensor should align with one another both horizontally and vertically. The LED on the back of the trigger sensor will light when the armature trigger is detected. **IMPORTANT: CORRECT OPERATION OF THIS LOCK DEPENDS ON THE TRIGGER SENSOR BEING ABLE TO DETECT THE ARMATURE TRIGGER WHEN THE DOOR IS CLOSED. A PROXIMITY ADJUSTMENT CAN BE MADE TO THE TRIGGER FOR FINE TUNING. THIS IS EXPLAINED IN STEP 4.**

STEP 4. After alignment has been verified, close the door and apply power to the lock. The digital display will show a two bars "--" indicating that the lock is in the Manual Power Up mode. Push on the door to verify that the door is unlocked. Reset the lock at this time by turning the built in key switch clockwise or by triggering the remote reset input. The lock should now secure the door and the LED display will show the delay time. You may change the mode to Auto Power Up by setting the #6 dipswitch to the ON position. Now when you first apply power, the door will be secure and the LED display will display the delay time without having to reset the lock.

STEP 5. Activation of the 1511S can be made by door movement or an external trigger. When using the door movement method, activation is achieved through the way the armature hardware is designed. When someone unlatches the door and applies up to 15 lbs. pressure, the lock will hold onto the armature while simultaneously letting the door & trigger armature move away from the lock & trigger sensor. Sensitivity in the detection of the trigger movement can be adjusted for optimum sensitivity & performance. This adjustment can be made by using the 5mm hex wrench provided with the lock. The center of the trigger or "target" is spring loaded and can be screwed in and out of the armature thus either decreasing or increasing the space between itself and the sensor. The "spring" feature of the target is to prevent damage from direct contact with the trigger sensor. Depending on the accuracy of the alignment, the trigger does not have to physically touch the sensor to operate correctly.



Standard Features

1650 lbs. Holding Force
15 or 30 Second Exit Delay when activated.
1 or 2 Second Nuisance Delay
75dB Alarm Tone with Digital Display & Selectable Voice Instruction
Choice of Activation Trigger:

- Door Movement
- Exit Device w/ REX Switch
- Touch Sense Bar w/REX Switch

Vandal resistant Proximity Sensor Trigger
Auto Sensing 12/24VDC input power
Connection for Tandem Option (Pairs of Doors)

Optional Features

DPS Door Position Switch
BAS Bond Alert Sensor
ATS Anti Tamper Switch
E Energy Saver Option (1200 lb. Holding Force)

Selectable Automatic & Manual Power-Up Feature

Auto Power-Up – Occurs when power is restored and/or the fire panel is restored.

Manual Power-Up – *This is a UBC & California Building Code Compliant Feature* – Only after power restoration and fire panel reset may the lock be reset manually at the opening. Lock can be reset with the built-in reset key switch or, a key switch or keypad adjacent to the door.

Inputs & Outputs

REX Input
Fire Alarm/Smoke Detection System Release
Remote Reset Input
Remote Trigger Input
Tandem/Slave Lock Input
DPS – Door Position Status (Optional)
BAS – Magnetic Bond Status (Optional)
ATS – Anti-Tamper (Optional)
Alarm Output
Lock Status Relay Output

- Door Secure
- Door Unlocked

Specifications

Interior Applications Only
Input Voltage Requirements:
Dual Voltage (Auto Sensing) –
12/24 VDC (+/- 10%)
Power Consumption:
Standard Model (1650 lbs.) -
1511S – 830/450 mA @ 12/24 VDC
1511T – 1500/850 mA @ 12/24 VDC
Energy Saver (1200 lbs., “E” Option) –
1511S – 400/275 mA @ 12/24 VDC
1511T – 650/400 mA @ 12/24 VDC
Size: 11"L x 2-3/4"H x 2-5/8"D
Lock Status Relay Rating: 1 Amp @ 30V resistive
Alarm Output Rating: 1 Amp @ 30V resistive
DPS Rating: 250 mA @ 30V resistive
BAS Rating: 250 mA @ 30V resistive
ATS Rating: 1 Amp @ 30V resistive

Building & Fire Life Safety Code Compliant

1511SND
IBC International Building Code
IFC International Fire Code
NFPA 101 Life Safety Code
NFPA 1, UFC, Uniform Fire Code
UBC Uniform Building Code
CBC California Building Code
SBC Standard Building Code
1511SBD
BOCA National Building Code compliant
1511SCD
Chicago Building Code compliant

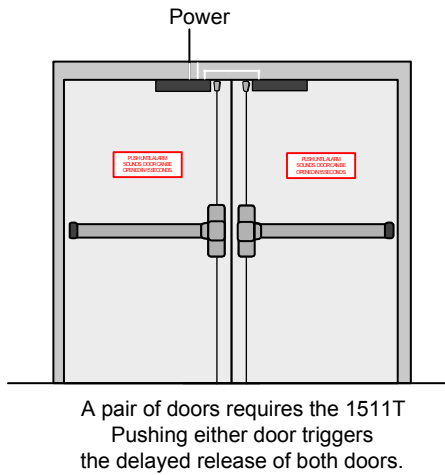
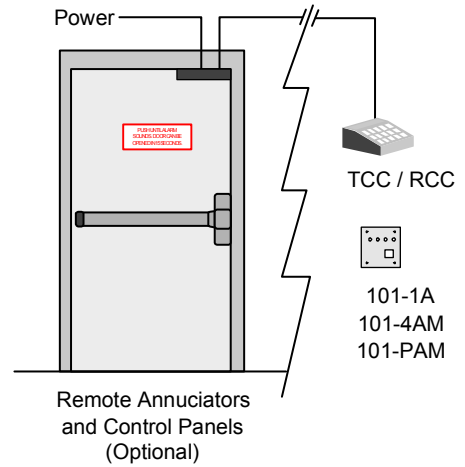
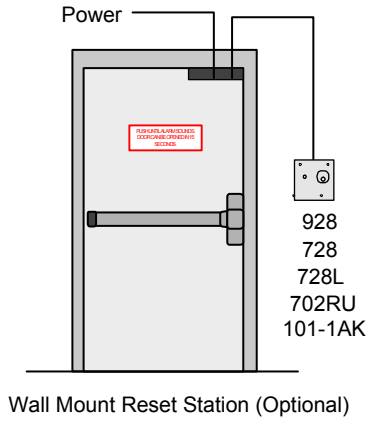


GWXT Auxiliary Locks
FWAX Special Locking Arrangements

California State
Fire Marshal Listed
CSFM #3774-0324:103

Systems Applications Reference

Activation by applying pressure to doors with latching hardware:



Activation by a remote trigger for doors with or without latching hardware:

