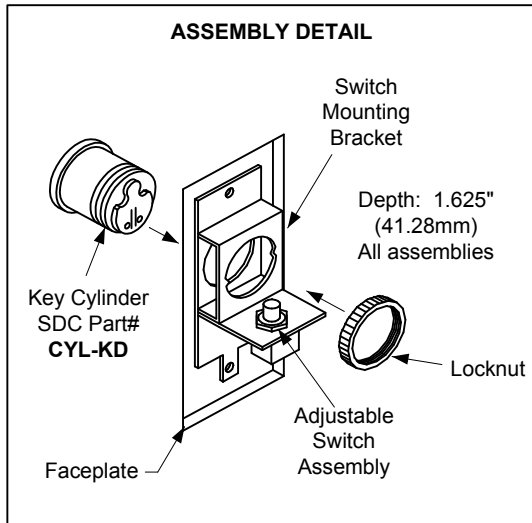# SECURITY DOOR CONTROLS

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MORTISE CYLINDER KEY SWITCH
INSTALLATION INSTRUCTIONS

SDC Key Switch Assemblies are compatible with U.S. standard, 1.125" and 1.25" mortise key cylinders and interchangeable core cylinders (not included). Compatibility with a new or existing facility mechanical key system is maintained. Standard switch assemblies are Single Gang box mounted. Assemblies equipped with narrow faceplates are mounted directly to the door frame.

ASSEMBLY DETAIL

Switch Mounting Bracket

Depth: 1.625" (41.28mm) All assemblies

Key Cylinder SDC Part# **CYL-KD**

Locknut

Adjustable Switch Assembly

Faceplate

KEY SWITCH ASSEMBLY PROCEDURE

1. Check the key cylinder for the proper tailpiece (see below). For Single Switch assemblies, use the cloverleaf type cam. For Dual Switch assemblies, a straight cam or cloverleaf type cam may be used. If you are using an SDC supplied cylinder, both cams will be supplied. If you are using another manufacturer's key cylinder, use the manufacturer's equivalent.

2. Insert the key cylinder through the front of the faceplate. Make sure the key cylinder is oriented correctly and the tailpiece is in the upright position.

3. While holding the key cylinder in place, slide the switch mounting bracket onto the back of the cylinder. Align the triangular tabs on the mounting bracket with the corresponding notches on the barrel of the key cylinder.
On the 700/700N/700T/800/800T/800AL Series, the bracket mounting holes will align with the faceplate mounting holes.
On the 800N/800ALN Series, the mounting bracket will screw directly to the back of the faceplate.

4. Secure the key cylinder by screwing the supplied Locknut to the back of the cylinder. Tighten firmly. Insert key into the cylinder and verify the activation of the switch(es) by turning the key. If necessary, adjust the switch position to ensure that the cam makes contact with the center of the switch plunger. The switch height should be adjusted so that the cam does not apply excessive downward pressure to the switch.

5. Once the electrical connections are completed, mount the key switch assembly:
For the 700/800/800AL Series, attach to a single gang mortise or surface mounted box.
For the 700T/800T Series, attach to a double gang mortise or surface mounted box.
For the 700N/800N/800ALN Series, See the frame preparation illustrations on Page 2.

Use tailpiece supplied with SDC Part# CYL-KD, or key cylinder manufacturer's equivalent.

TAILPIECE
Compatible with all dual switch assemblies.
Models x07 – x13
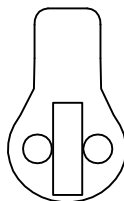
ACTUAL SIZE
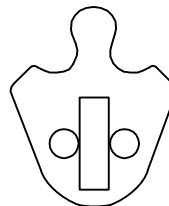
TAILPIECE
Compatible with all SDC Key Switches.

STANDARD FEATURES
- Compatible with 1-1/8" and 1-1/4" standard and interchangeable core mortise key cylinders (**supplied by others**).
- Key cylinder recessed for tamper resistance. (all except 700N Series)
- Tamper resistant spanner screws.
- Anti-tamper plugs (800 Series)
- **Contact Rating**: 6 amps @ 30VDC.
- **Wire Leads**: 7", 22 gauge.
- Large actuator assembly for positive & consistent circuit activation.

OPTIONAL KEY CYLINDER
CYL-KD – 1.25" Mortise Key Cylinder and (2) Keys.
Two different tailpieces included

FACEPLATE DIMENSIONS

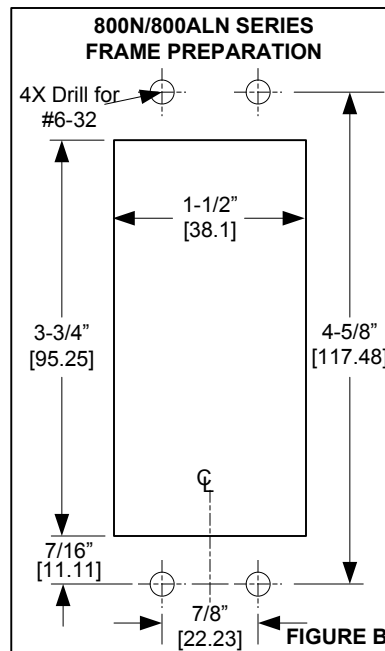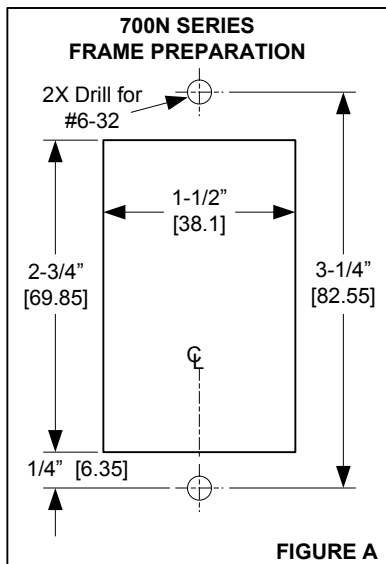|	
700:	4.5"H x 2.875"W x 20 Ga.
700N:	4.5"H x 1.75"W x 20 Ga.
700T:	4.5"H x 4.5"W x 20 Ga.
800/800AL:	5"H x 3.25" W x 0.25"D
800N/800ALN:	5.5"H x 1.75" W x 0.25"D
800T:	5"H x 5" W x 0.25"D

ASSEMBLY TOOLS:
For convenience, a small spanner tool is provided with the assembly for fastening of spanner security screws
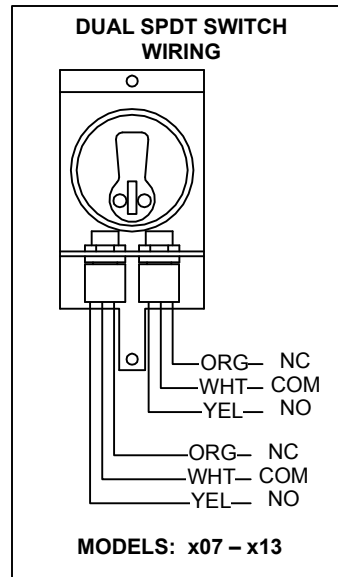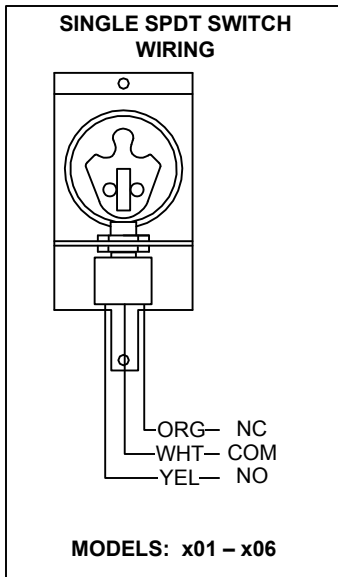**SS-632** Standard Spanner Screw Drivers are available

FRAME PREPARATION FOR NARROW KEY SWITCHES

Key switches fit a 1-3/4" frame. For jamb preparation make cut out as shown in Figure A OR Figure B. Using the faceplate as a template, drill and then tap for #6-32 screws. NOTE: FIGURES NOT TO SCALE
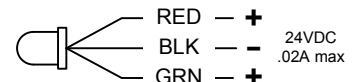
700N SERIES FRAME PREPARATION

2X Drill for #6-32

1-1/2" [38.1]

2-3/4" [69.85]

3-1/4" [82.55]

1/4" [6.35]

FIGURE A

800N/800ALN SERIES FRAME PREPARATION

4X Drill for #6-32

1-1/2" [38.1]

3-3/4" [95.25]

4-5/8" [117.48]

7/16" [11.11]

7/8" [22.23]

FIGURE B

KEYSWITCH WIRING INSTRUCTIONS

FOR 700/700N/700T/800/800N/800T/800AL SERIES & OPTIONS:

SINGLE SPDT SWITCH WIRING

ORG— NC
WHT— COM
YEL— NO

MODELS: x01 – x06

DUAL SPDT SWITCH WIRING

ORG— NC
WHT— COM
YEL— NO

ORG— NC
WHT— COM
YEL— NO

MODELS: x07 – x13

Single Color LED Wiring (**L1G, L1R, or L2 Option**)

RED — **+** 24VDC
WHT — **–** .02A max

Tri-Color LED Wiring (**LT Option**)

RED — **+**
BLK — **–** 24VDC .02A max
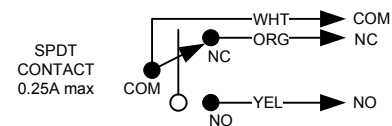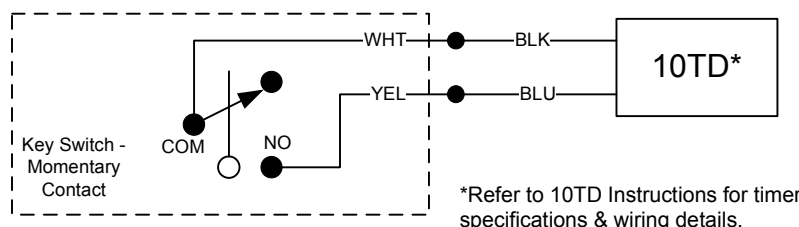GRN — **+**

- Apply +VDC to RED wire to illuminate RED
- Apply +VDC to GRN wire to illuminate GRN
- Apply +VDC to both GRN & RED wire to illuminate AMBER

Anti-Tamper Switch (ATS) Option Wiring

SPDT CONTACT 0.25A max

WHT ▶ COM
ORG ▶ NC
NC
COM
NO
YEL ▶ NO

Buzzer (RMB) Option Wiring (12/24VDC)
RED Wire: +VDC, BLK Wire: -VDC

Siren (SN) Option Wiring (4 to 28VDC)
' ⊕ ' Terminal: +VDC,
' ⊖ ' Terminal: -VDC

FOR TIMED MODELS x04 & x10 ONLY, **CONNECT THE MOMENTARY CONTACT TO THE 10TD MINI TIMER AS SHOWN:**

WHT— ●—BLK—
YEL— ●—BLU—
10TD*

Key Switch - Momentary Contact
COM   NO

*Refer to 10TD Instructions for timer specifications & wiring details.