STI-6400 Exit Stopper®

INSTRUCTION MANUAL

Features:
- Helps prevent both unauthorized exits and entries through emergency exit doors.
- Easy to install.
- Less expensive than heavy horizontal bar type units and practical for all emergency doors.
- May be mounted on top, right, left or next to almost any door.
- User can select onsite whether to use an alarm or annunciator.
- Contact STI for custom applications.

Safety Technology International, Inc.

"We Protect The Things That Protect You."

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WARNINGS

All units are recommended for indoor use. Unit must be tested periodically to verify the life of battery. STI recommends you change the 9 Volt battery twice a year. Installer may need to purchase a simple audio-meter, typically available at your local electronics store, to measure the sound in areas where the alarm is expected to be heard during normal noise environment. Results from this test may prove it beneficial to purchase additional exit stopper units. When purchasing a remote unit (STI-6403) you will need to periodically test the connections to make sure audibles function at a sound level to alert staff. Maximum of three STI-6403 may be used in parallel.

All specifications and information shown are current as of publication and subject to change without notice.

WARRANTY INFORMATION

Lifetime guarantee against breakage of polycarbonate housing (one year on electronic components).

Specifications

Polycarbonate Enclosure:

Dimensions	5.375" W x 5.375" H x 2 " D (137mm x 137mm x 51mm)
Flammability:	UL94 V-2
Wall Thickness:	0.12 in (3.05mm)

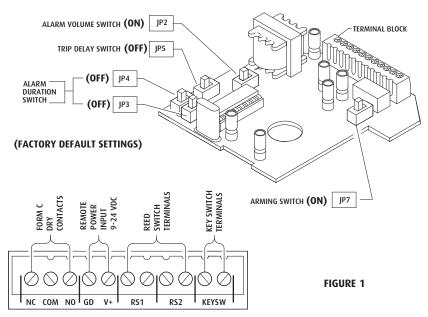**Electronics: STI-6400 - All Units**

Power Source	9 VDC Alkaline or 9V-24VDC wired Class II UL Listed transformer
Horn Volume at 1 ft.	95 dB low / 105 dB high
Relay Output	Form C Dry Contacts 0-30 VDC or VAC, 1 Amp
Stand by Current	10uA
Alarm Current	130mA at 95 dB / 200mA at 105 dB

Electronics: STI-6403 and STI-6404 - Remote Horn Unit

Power Source	9 VDC Operating Power* only
Horn Volume at 1 ft.	95 dB low / 105 dB high
Stand by Current	0 A
Alarm Current	50mA at 95 dB/ 200 mA at 105 dB

*Power source for the STI-6403 Remote Horn uses a separate power source from the STI-6400 alarm. The Remote Horn contains an internal 9 volt battery. Horn operates when the Form C contact at main unit is activated on alarm.

Circuit Board Set-up

ALARM VOLUME SWITCH (ON) JP2

TRIP DELAY SWITCH (OFF) JP5

ALARM DURATION SWITCH (OFF) JP4 (OFF) JP3

(FACTORY DEFAULT SETTINGS)

TERMINAL BLOCK

ARMING SWITCH (ON) JP7

FORM C DRY CONTACTS
REMOTE POWER INPUT 9-24 VDC
REED SWITCH TERMINALS
KEY SWITCH TERMINALS

NC COM NO | GD V+ | RS1 RS2 | KEYSW

FIGURE 1

TERMINAL BLOCK WIRING CONNECTIONS

Switch Settings

FEATURE	JP2	JP3	JP4	JP5	JP7
Volume - High (105 dB) at 1 ft.	ON*				
Volume - Low (95 dB) at 1 ft.	OFF				
Duration - 30 Second Alarm		OFF*	OFF*		
Duration - 180 Second Alarm		OFF	ON		
Duration - Continuous Alarm		ON	OFF		
Duration - Annunciator Mode		ON	ON		
Trip - Immediate				OFF*	
Trip - 15 Second Delay				ON	
Arming - Immediate					ON*
Arming - 15 Second Delay					OFF

*Factory Settings

Note: Slide black lever to desired ON/OFF position as labeled on circuit board.

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ALARM FEATURE DESCRIPTION

- **Volume Switch JP2** - Sets alarm volume to high 105 dB or low 95 dB.
- **Duration Switch JP3 and JP4** - Amount of time alarm sounds after trip. Arming resets at end of duration if door is closed. Alarm will not reset if in continuous mode; alarm sounds until battery is drained. Annunciator Mode is a series of 10 short beeps or until door is closed.
- **Trip Delay Switch JP5** - If you wish to **ENTER** an alarmed door without sounding the horn immediately, the trip delay will allow 15 seconds for you to enter and de-activate the alarm with the key switch before the alarm will sound.
- **Arming Switch JP7** - This mode is useful when an **AUTHORIZED EXIT** is required through alarmed door. In "ON" position immediate arming will set the alarm ready to function as soon as door is opened. In "OFF" position delay arming will allow 15 seconds for you to exit through the door without sending alarm signal.

INSTALLATION INSTRUCTIONS

Note: STI recommends setting up unit and testing settings prior to mounting.

1. Make sure key switch is in the OFF position.
2. Remove tamper screw on side of unit and remove housing cover. Save this tool for future servicing and battery change (Figure 2).
3. Set switches, on circuit board, to desired alarm settings (figure 1).
4. Test settings by connecting battery or external power source. If using external power source a Class II UL Listed transformer is required. If power is present at terminal block (figure 1) 9V battery is in no-load on standby power consumption.
5. Mount main unit on or next to door using hardware provided. Reed switch mounting locations can be moved to one of the four positions shown in figure 2. If mounted next to door, route reed switch wire through knockout in bottom of housing as shown in figure 3.
6. Mount magnet on door frame (or door if unit is mounted next to door) using screws provided. When mounting on metal doors or door frames, use plastic spacers provided. Reed switch and magnet must be within 3/4" when door is closed (3/8" on metal door and frame). Please refer to figures 4, 5 and 6 on page 6 for other mounting options.
7. If installing STI-6402, STI-6403, or STI-6404 continue to page 7 for more instructions (Figures 7 and 8). STI-6402 mounting option is shown on page 6.
8. Replace cover by sliding flanges on inside of cover into slots on base. Then rotate the cover over unit and snap close. Replace tamper screw.
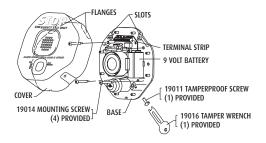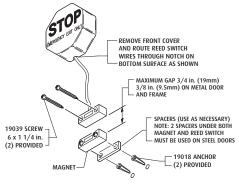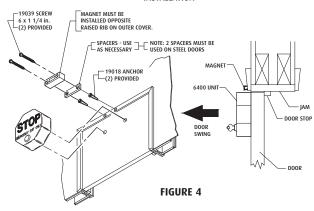

FLANGES   SLOTS
TERMINAL STRIP
9 VOLT BATTERY
COVER
19014 MOUNTING SCREW (4) PROVIDED
BASE
19011 TAMPERPROOF SCREW (1) PROVIDED
19016 TAMPER WRENCH (1) PROVIDED

FIGURE 2

VIEW SHOWING MAGNET INSTALLATION

REMOVE FRONT COVER AND ROUTE REED SWITCH WIRES THROUGH NOTCH ON BOTTOM SURFACE AS SHOWN

MAXIMUM GAP 3/4 in. (19mm) 3/8 in. (9.5mm) ON METAL DOOR AND FRAME

SPACERS (USE AS NECESSARY) NOTE: 2 SPACERS UNDER BOTH MAGNET AND REED SWITCH MUST BE USED ON STEEL DOORS

19039 SCREW 6 x 1 1/4 in. (2) PROVIDED

MAGNET

19018 ANCHOR (2) PROVIDED

FIGURE 3

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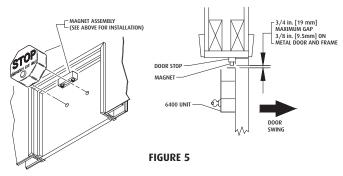
Mounting Options
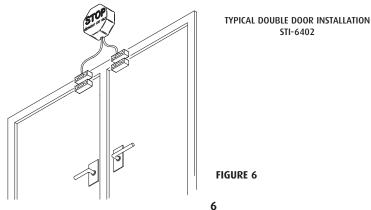
TYPICAL FLUSH MOUNT DOOR JAM INSTALLATION

19039 SCREW 6 x 1 1/4 in. (2) PROVIDED

MAGNET MUST BE INSTALLED OPPOSITE RAISED RIB ON OUTER COVER.

SPACERS - USE AS NECESSARY

NOTE: 2 SPACERS MUST BE USED ON STEEL DOORS

19018 ANCHOR (2) PROVIDED

MAGNET

6400 UNIT

JAM

DOOR STOP

DOOR SWING

DOOR

FIGURE 4

TYPICAL RECESSED MOUNT DOOR JAM INSTALLATION

MAGNET ASSEMBLY (SEE ABOVE FOR INSTALLATION)

3/4 in. [19 mm] MAXIMUM GAP 3/8 in. [9.5mm] ON METAL DOOR AND FRAME

DOOR STOP

MAGNET

6400 UNIT

DOOR SWING

FIGURE 5
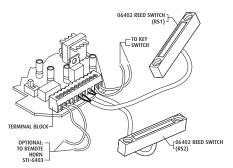
*Note: When mounting reed switch on door and the main unit on wall, wire service loop must be used.

TYPICAL DOUBLE DOOR INSTALLATION STI-6402

FIGURE 6

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STI-6402 DOUBLE DOOR INSTALL NOTES

1. Determine length needed for reed switch wires. STI provides 6 ft. which can be cut to desired length.
2. Connect first reed switch in RS1 and second in RS2 (Figure 7). (Refer to Figure 1 for additional details on page 4.)
3. If not using extra reed switch, add jumper across two terminals of RS2 on terminal block.
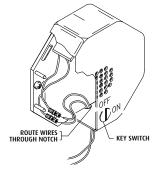
*Note: Alarm will sound when either door is opened.

VIEW SHOWING INSTALLATION OF
ADDITIONAL REED SWITCH 06402

FIGURE 7

STI-6403 REMOTE HORN INSTALL NOTES

1. Remove cover.
2. Connect two conductor wire (14-24 AWG) from main unit terminal block pins COM and NO to remote horn unit terminal block. (wire not provided). Units can be set up to 300 ft. apart. Not polarity sensitive (refer to Fig. 1 and Fig. 7 for details).
3. Connect internal battery.
4. Mount similar to main unit with #8 x 1 in. screws and anchors if necessary.
5. Replace cover and screws.
6. Turn key switch to ON position.

*Note: The ON/OFF key position is opposite from 6400 main unit. Remote horn sounds when main unit alarm is activated.

STI-6403 REMOTE HORN UNIT INSTALLATION

FIGURE 8

STI-6404 DOUBLE DOOR WITH REMOTE HORN INSTALL NOTES

The STI-6404 is a combination unit for double doors with a remote horn. Reference the installation instructions for the main unit, the STI-6402 and the STI-6403 for complete installation.

STI-6405 EXIT STOPPER WITH MOMENTARY RESET

The STI-6405 uses a momentary switch. After initial installation, unit is always on and you do not have to remember to turn it on when you leave a protected area. This model also eliminates having to remember to re-arm it because it is never off.

When the alarm is triggered, to silence the alarm, insert the key and turn completely to the "RESET" position and hold for 2 seconds, then release. The switch will spring back to its original position and push the key out. To turn the unit off, supply power must be removed.

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