

## APPLICATION

The ELK-155RT is a self-contained Voice Siren mounted in a tampered "No Rust" stainless steel enclosure. It produces high quality pre-recorded voice messages along with loud siren sounds. It features two (2) channels, one for Burglary and one for Fire. The voice message and the siren alternately sound whenever one of the channels is activated. The ELK-155RT may be customized by use of removable on-board jumper plugs. For example: our **MilliMiser™** option allows the already low current draw of the ELK-155RT to be reduced even lower. This is ideal for controls with limited alarm output power. The stainless steel exterior reflects the color of the mounting surface allowing the ELK-155RT to blend easily with any residential or commercial building.

## FEATURES

- Installer Friendly - Compact & Easy To Mount.
- Sealed Reed Tamper Switches Front & Back.
- No Rust - No Mess.
- Two Input Channels, Burglar & Fire.
- Bilingual Voice - *English Or Spanish.*
- Temporal Coded Bell for Fire signalling.
- Speech and Siren or Speech only.
- **MilliMiser™** - Lower Current Draw.
- **ComboTrigger™** - Single Alarm Outputs.
- **VolumeStep™** - Gradual Volume Rise.
- Lifetime Limited Warranty, call or visit our website for details.

## SPECIFICATIONS

- Operating Voltage: 10 to 14 Volts D.C.
- Sound Level: 120 db, 13.8 VDC @ 1 meter.
- Nominal Current Drain: 1.25 Amps.
- **MilliMiser™** Current Drain 600 mA.
- Enclosure: #304 Stainless Steel With Stainless Hardware Included.
- Size: 5" H x 5" W x 4" D.
- Tamper: Sealed Reed Switches.
- Multiple US Patents Apply

Features or Specifications subject to change without notice.

## INSTALLATION

1. Using the backplate as a template, mark & drill 4 mounting holes and the wire or conduit entry hole (see Figure 1). Insert 4 1/4 x 1" wall anchors, then start the top two #10 x 1" screws.
2. Route the wire or conduit through the hole provided and hang backplate on the top screws. Then install remaining two screws and & tighten all four.
3. Temporarily hang the Voice Siren/speaker on the backplate by aligning the slotted insert on the top edge of the Siren with the 1/2" recessed tab on the bottom edge of the backplate. Press Siren onto tab. (See Figure 2), continued on page 2.

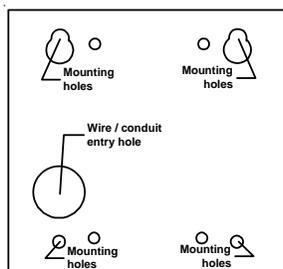


Figure 1

**Install top edge of backplate at least 1" below any soffit or building overhang.**

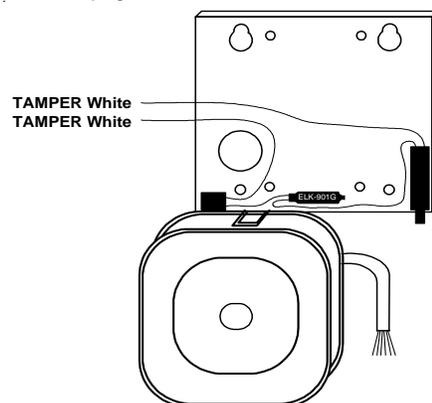


Figure 2

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules.

Features and Specifications subject to change without notice.

- ELK-SL1 Strobe Light for ELK 155 RT also available  
Mounts to bottom of Enclosure,  
12 Volts D.C., 140ma.  
Available Colors: Clear, Blue, Amber, Red

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# ELK

PRODUCTS, INC.

# Installation for ELK-155RT (continued)

4. Connect all wiring as follows. Recommended wire gauge is 18 AWG.

**TAMPER (2 white wires):** Connect to a 24 hour closed loop on the control panel. Tamper switch wires are spliced in series.

**BLACK (Neg -):** Connect to common negative (-) of the control panel.

**WHITE (Burglary BA+):** Connect to the positive (+) 12 VDC Burglary alarm output terminal. NOTE: This input utilizes our **ComboTrigger™** feature which automatically recognizes the difference in a steady voltage or a pulsing voltage from the control's alarm "bell" output. If the input voltage is steady the Yelping siren and Burglary voice message will play. If the input voltage is pulsing (1/2 to 1.5 second intervals) the Bell sound and the Fire message will play, provided the Red wire is connected to a constant +12 VDC source as explained below. The ELK-155RT is ideal for controls which have only a single alarm "bell" output.

**ORANGE (Fire FA+):** Connect to the positive (+) 12 VDC Fire alarm output terminal. Note: It may not be necessary to connect this wire if the control panel can pulse the alarm "bell" output for a fire alarm condition. Refer to the instructions for the White and Red wires for more information.

**RED ( 12 Vdc +):** OPTIONAL Connection of this wire to a positive (+) 12 VDC constant power source allows use of the steady/pulse **ComboTrigger™** feature by supplying standby current to the microprocessor in the ELK-155RT. NOTE: Most of the operating current will also be drawn from this wire, therefore the power source must be capable of providing up to 2 Amps of current. It may be necessary to connect this wire directly to the standby battery. If so we recommend using an in-line fuse holder with a 2 Amp fuse for overcurrent and short circuit protection.

**GREEN (BA -):** OPTIONAL Some controls, (DSC & others) switch on and off the negative (-) side of the alarm output instead of the positive (+). The ELK-155RT can accommodate this operation quite well. Simply connect the Green wire to the negative (-) 12VDC Burglary alarm output terminal, the Red wire to the positive (+) alarm terminal, and the black wire to the common negative (-) terminal of the control. When connected in this manner, this input will also activate the Fire channel message if the alarm output is pulsed on/ off in 1/2 to 1.5 second intervals.

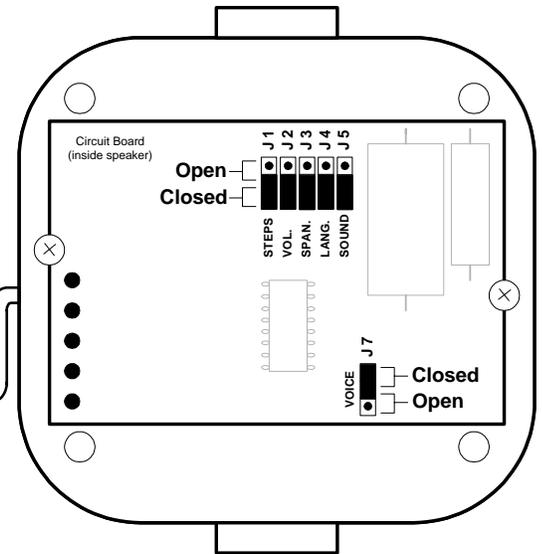
NOTE: The ELK-155RT Siren is factory set for maximum loudness and current draw. To change the unit for lower current draw and loudness, remove jumper J2 for the *MilliMiser™* option as described in the "Jumper Options" section.

To change the jumpers, remove the four screws and cover from the back of the siren, move the desired jumpers, reclose cover.

### Jumper Options:

<b>J1</b>	Closed = Full Volume Open = <i>Volume Step™</i> Siren starts off at low volume and gradually steps up to full volume in 90 seconds.			
<b>J2</b>	Closed = Full Current. Open = <i>MilliMiser™</i> Low Current Draw. Reduces current draw by approx. 25% with only 8-10% less volume. Great for controls that have limited alarm current.			
<b>J5</b>	Closed = Warble Siren Sound. Open = Pulsing Buzzer Sound.			
English Speech plus Siren =		<b>J3</b>	<b>J4</b>	<b>J7</b>
English Speech Only =	Closed	Closed	Closed	Open
Spanish Speech plus Siren =	Open	Open	Open	Closed
Spanish Speech Only =	Open	Open	Open	Open
Spanish and English plus Siren =	Closed	Open	Open	Closed
Spanish and English Only =	Closed	Open	Open	Open
Siren Sounds Only (No Voice) =	Open	Closed	Closed	

WHITE (Burglary BA+)  
ORANGE (Fire FA+)  
BLACK (Neg -)  
RED (12Vdc +)  
GREEN (Burglary BA -)



Wiring hookup and view of inside with back removed.

### VOICEMESSAGES

Voice messages are spoken in English, Spanish/English, or Spanish only, depending upon the switch and jumper settings. (See "Jumper Options"). Each channel has an initial cycle, followed by a repeating cycle.

**BA (English):** 3 Sec. Tone, *Intruder, intruder, leave immediately* followed by warble or pulsing buzzer sound. Repeat

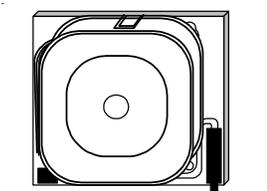
**FA (English):** *Fire, fire, leave immediately* Followed by a loud distinctive Temporal Coded Bell sound. Repeat

**BA (Spanish):** 3 Sec. Tone, *Intruso, intruso* Followed by warble or pulsing buzzer sound. Repeat (Message will alternate in English unless J3 is opened.)

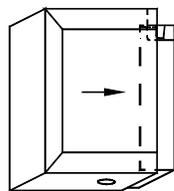
**FA (Spanish):** *Incendio, incendio* Followed by a loud distinctive Bell sound. Repeat (Message will alternate in English unless J3 is opened.)

**PULSING BA INPUT:** (Spanish or English) 3 Sec. Tone, *Fire, fire, leave immediately* Followed by a Temporal Coded Bell sound. Repeat

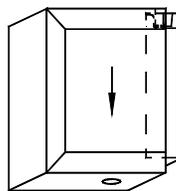
5. Move the siren/speaker from its hanging position to its final mount by aligning its top and bottom slots with the 1/2" tabs on the top edge of the backplate and in the bottom center above the bolt threads. (See Figure 3) Press firmly.
6. Slide front cover over the siren/speaker. Lift up to engage the tabs in the cover with the two "U" shaped slots on the top edges of the backplate. (Figure 4) Lower cover until tabs are in slots. Push cover towards wall, then lift up to lock tabs in slots. Thread 1/4-20 hex bolt into hole on bottom of cover and tighten until secure.
7. The front cover tamper switch is pressed closed by the front cover during the final 3 to 4 full turns of the hex bolt. Test the tamper circuit using a continuity meter.



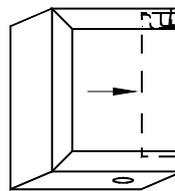
Tuck wires into lower corner away from top inside corners.  
**Figure 3**



Slide over speaker.

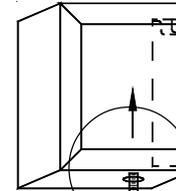


Lower tabs into slots.



Push towards wall.

**Figure 4**



Lift up to lock, then secure with hex bolt.

Tamper switch is closed by front cover during the final 3 to 4 turns of the hex bolt.