Siren Driver

ELK-100

Two Channel- High Performance

APPLICATION:

The **ELK-100** Siren Driver is a great choice for residential and commercial security installations. It draws less current than many siren drivers, and offers two volume levels (one indoor, the other outdoor) simultaneously. The ELK-100 has two inputs, Yelp & Steady.

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Siren Driver
ELK-100

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Two Channel - High Performance

FEATURES:

- Two Volume Levels Simultaneously.
- Draws Less Current Than Most Sirens.
- Loud Attention Getting Sound.
- *ComboTrigger*™ option for controls that have a single alarm output with a pulsing option for fire or burglary. When pulsed, this channel produces a distinctive third sound pattern.
- *MilliMiser*™ option allows further reduction of current draw for controls that have limited alarm or auxiliary output.
- Lifetime Limited Warranty.
- Packed In Reusable Poly Storage Box.

SPECIFICATIONS:

- Operating Voltage: 6 - 14 Volts D.C.
- Sound Level: 122 db @ 1 meter.
- Sounds: Steady, Yelp, & Slow Sweep Steady Overrides Yelp.
- Nominal Current Drain: 1.2 Amps.
- *MilliMiser*™ Current Drain 800 mA.
- Maximum Speaker Loading: 4 Ohms.
- Size: 2.75" X 3.6" (70mm X 91mm).

Features or Specifications subject to change without notice.

ELK
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Instructions Printed On Inside

SPEAKER HOOKUP The ELK-100 has 3 speaker terminals. Terminal HIGH is for high volume (max. current draw), LOW is for low volume (min. current draw), and SPKR is a common terminal. The unique benefits of having 3 terminals are:

1. Two volume levels can be obtained simultaneously from two speakers (ie: one indoor, the other outdoor).
2. Current draw can be minimized (*MilliMiser™*) by connecting speaker(s) to terminals SPKR & LOW only.
3. Maximum volume can be obtained by connecting speaker(s) to terminals SPKR & HIGH only.
4. Low wattage speakers (10 to 15 watts) may be connected to SPKR & LOW with no danger of burnout.

Speakers 8 Ohm Nom.	Connection of 2 or more Speakers (series, parallel)	Total Load	Avg. current draw using Terminals SPKR & HIGH	Avg. current draw using Terminals SPKR & LOW
1	---	8 Ohms	1.2 Amps	800 mA
2	Parallel	4 Ohms	2.1 Amps	1.5 Amps
2	Series	16 Ohms	700 mA	600 mA
3	2 Series,1 Parallel	6 Ohms	1.7 Amps	1.2 Amps

TABLE 1. ELK-100 SPEAKER LOADING & CURRENT DRAW

NOTE: While normal resistance for a single alarm speaker is 6.5 to 8 Ohms, total resistance (or load) changes when multiple speakers are wired together in series or parallel. Total resistance should never be less than 4 Ohms on either the SPKR & LOW or the SPKR & HIGH terminal connections. Refer to Table 1 and the diagrams below for wiring multiple 8 Ohm speakers in parallel or series to maintain a load between 4 and 16 Ohms.
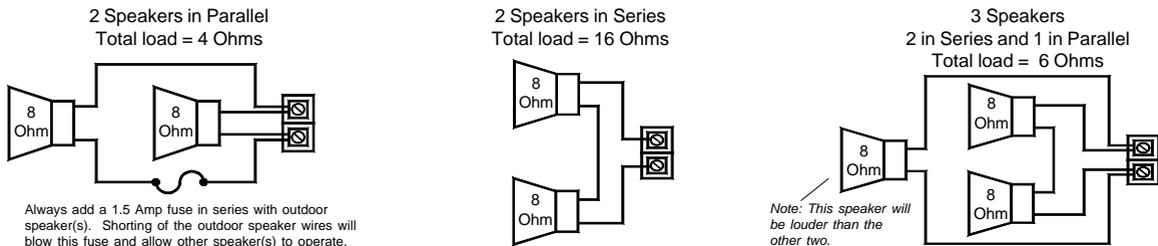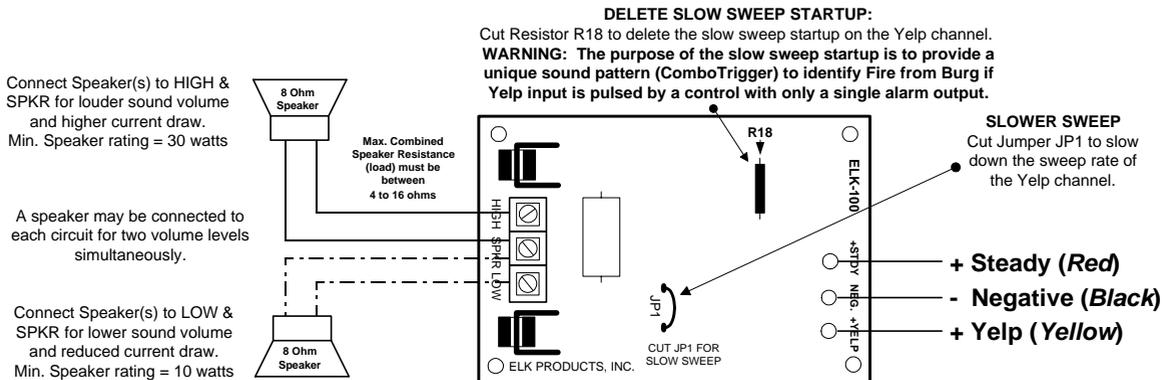
MilliMiser™ Connecting the speaker(s) to the LOW and SPKR terminals allows current draw to be reduced by approximately 25% with only 6 to 8% less sound.

VOLTAGE INPUTS Connect the 3 terminals on the ELK-100 to the control panel alarm output as follows:
+STDY (*Red*) = Steady Channel generally connected to the alarm output terminal for Fire.
NEG. (*Black*) = Common Negative (-)
+YELP (*Yellow*) = Yelp Channel generally connected to the alarm output terminal for Burglary.

ComboTrigger™ For controls with only a single alarm output, connect the NEG and +YELP to the alarm output and program the control to pulse the output (if available) for Fire. Pulsing the +YELP input on/off at a 1 sec. duty cycle produces a unique slow sweep sound which draws attention and helps identify Fire from Burg.

DELETE SLOW SWEEP STARTUP:
Cut Resistor R18 to delete the slow sweep startup on the Yelp channel.
WARNING: The purpose of the slow sweep startup is to provide a unique sound pattern (ComboTrigger) to identify Fire from Burg if Yelp input is pulsed by a control with only a single alarm output.

SLOWER SWEEP
Cut Jumper JP1 to slow down the sweep rate of the Yelp channel.

Connect Speaker(s) to HIGH & SPKR for louder sound volume and higher current draw. Min. Speaker rating = 30 watts

A speaker may be connected to each circuit for two volume levels simultaneously.

Connect Speaker(s) to LOW & SPKR for lower sound volume and reduced current draw. Min. Speaker rating = 10 watts

8 Ohm Speaker

Max. Combined Speaker Resistance (load) must be between 4 to 16 ohms

8 Ohm Speaker

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CUT JP1 FOR SLOW SWEEP

+ Steady (*Red*)
- Negative (*Black*)
+ Yelp (*Yellow*)

2 Speakers in Parallel
Total load = 4 Ohms

Always add a 1.5 Amp fuse in series with outdoor speaker(s). Shorting of the outdoor speaker wires will blow this fuse and allow other speaker(s) to operate.

2 Speakers in Series
Total load = 16 Ohms

3 Speakers
2 in Series and 1 in Parallel
Total load = 6 Ohms

Note: This speaker will be louder than the other two.

For more information contact your local Distributor or: ELK Products, Inc. - PO Box 100 - 3266 US Hwy. 70 West - Hildebran, NC, - 28637 - USA - (828) 397-4200