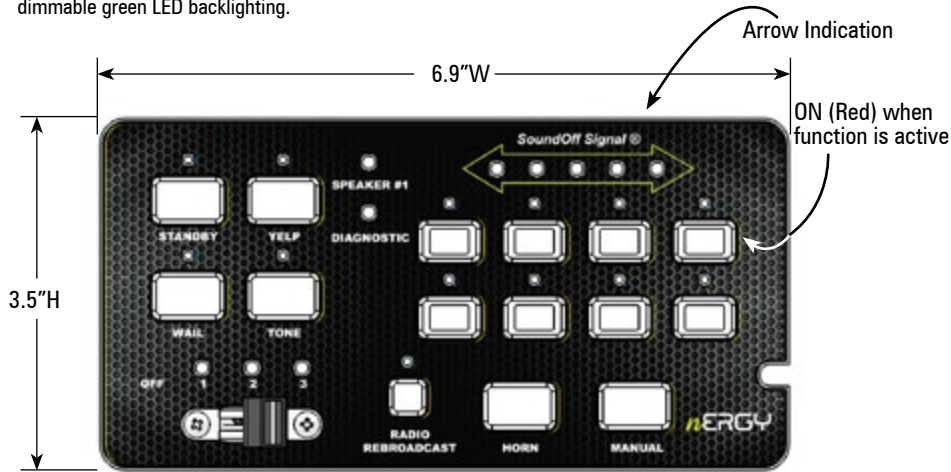


nERGY® bluePRINT®

CONTROL PANEL PART NUMBER: ENGCP18001

The Control Panel features 8 (eight) auxiliary buttons for one-touch programming and a three-position slide switch to allow convenient switching for the most frequently used warning modes.

It also features an eight-second buzzer alert to notify users that the level or auxiliary buttons are activated and dimmable green LED backlighting.



*Buttons are Backlit

⚠ WARNING

- HIGH CURRENT interconnects must be properly terminated. Poor crimp quality can cause heat build-up and fire. Follow crimp connector manufacturer instructions.
- DO NOT install this product or route any wires in the Air Bag Deployment Zone. Refer to vehicle Owner's Manual for deployment zones.
- Do NOT use system to disconnect headlights, brake lights or other safety equipment.
- Unit may become hot to touch during normal operation.
- Failure to properly install connectors, fuses or wiring may cause vehicle failure or fire.
- Installation must only be performed by trained technician. Installer must determine vehicle wiring configuration and proper integration of system.
- Use proper wire gauge. All power wires connecting to positive (+) or negative (-) battery terminal or local chassis ground (-) must be sized to supply at least 125% of max. current and properly fused at power source.
- Install protective grommets when routing wire through firewall or metal.



1.800.338.7337 / www.soundoffsignal.com

Tech Specs	nERGY Control System Control Panel
Input Voltage:	10-16Vdc (Negative Ground)
Sleep Current:	8 mA
Inputs:	1x 3pin MIC Input
Reverse Polarity Protection:	Protected
Transient Protection:	Protected
High Voltage Protection:	Protected
Low Voltage Protection:	Protected
Operating Temp:	-40 °C to + 65 °C
Dimensions:	6.9"H x 3.5"W x 1.2"D
Weight, Boxed:	1.3lb.
Weight, Device Only:	1.1lb
The control panel is not waterproof. Install in a protected location away from excessive heat and moisture.	

SIREN AMPLIFIER DIAGNOSTIC INDICATORS:

STANDBY	SPKR 1 INDICATOR	SPKR 2 INDICATOR	CONDITION
FLASHING	ON	ON	OVER-TEMPERATURE, (380R ONLY)
FLASHING	OFF	ON	UNDER-VOLTAGE
FLASHING	ON	OFF	OVER-VOLTAGE
FLASHING	FLASHING	-	COMM FAULT - RELAY
FLASHING	-	FLASHING	COMM FAULT - AMP
FLASHING	FLASHING	FLASHING	COMM FAULT -CENTRAL CONTROLLER
ON	-	-	STANDBY MODE
*OFF	ON	-	SPKR 1 IS ACTIVE
*OFF	-	ON	SPKR 2 IS ACTIVE
*OFF	OFF	-	SPKR 1 IS NON-FUNCTIONING
*OFF	-	OFF	SPKR 2 IS NON-FUNCTIONING

* SIREN AUDIO BUTTON ACTIVATED (EXCEPT RADIO REBROADCAST)

NOTICE:

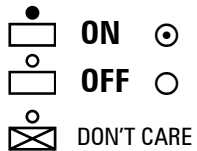
Installers and users must comply with all applicable federal, state and local laws regarding use and installation of warning devices.

Improper use or installation may void warranty coverage. To review our Limited Warranty Statement & Return Policy for this or any SoundOff Signal product, visit our website at www.soundoffsignal.com/sales-support. If you have questions regarding this product, contact **Technical Services**, Monday - Friday, 8 a.m. to 5 p.m. at **1.800.338.7337** (press #4 to skip the automated message). Questions or comments that do not require immediate attention may be emailed to techservices@soundoffsignal.com.

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PROGRAMMING MANUAL

LEGEND:



GRAYED AREAS DENOTE FACTORY DEFAULTS

NOTE:

For All programming modes: Momentarily depress Radio Rebroadcast push-button to exit.

To hear samples of all the tones available go to www.soundoffsignal.com website.

* = Setting can be selected in bluePRINT configuration application

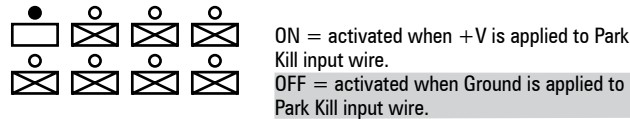
Setting in configuration application will override control panel displayed setting.

** = Setting can be overridden by bluePRINT configuration application if "on" setting is set on Control Panel

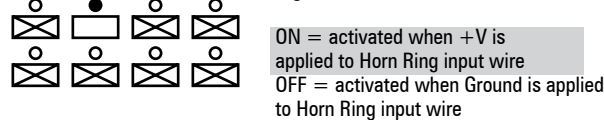
INPUT SETTINGS:

1. Press and Hold Auxiliary Button 1 and 3 until slide switch #3 LED flashes.

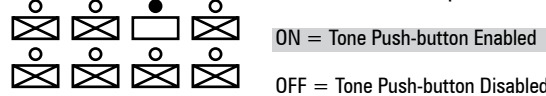
* **1. Park Kill Polarity Mode:** Determines what voltage level will activate park kill functions.



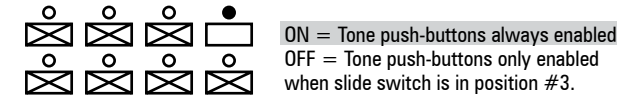
* **2. Horn Ring Polarity Mode:** Determines what voltage level will activate Horn Ring functions.



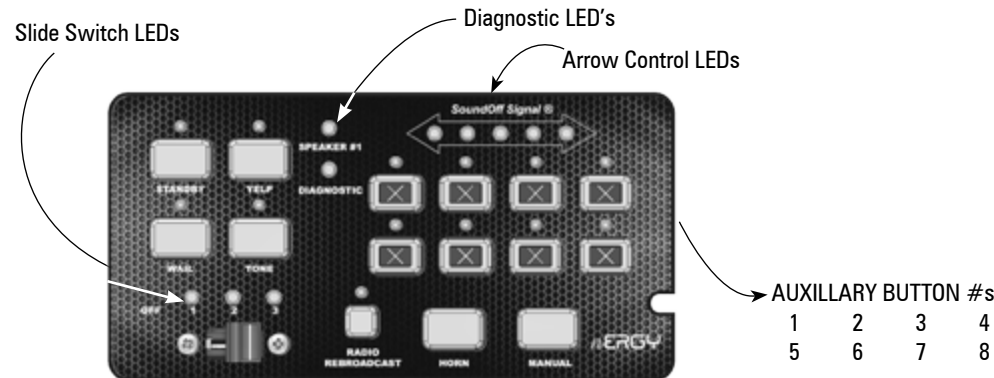
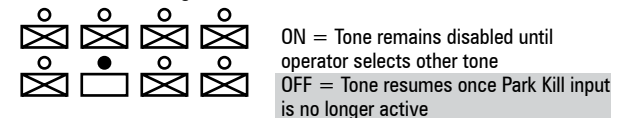
3. Tone Push-button: Determines if the Tone Push-button activation will allow a siren tone to be produced.



** **4. Level 3 tone activation:** Determines when the siren tone push-buttons on control panel are enabled.



** **5. Park Kill Latch:** When Park Kill input is triggered, determines how siren tone proceeds once park kill input is no longer active. Set to enabled for software control.



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PROGRAMMING MANUAL

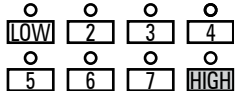
SLIDE SWITCH SETTINGS:

1. Press and hold Auxiliary Push-Button "1" and "4" until slide switch #2 indicator LED flashes.
2. Press Auxiliary Push-Button "1", "2" or "3" depending on which configuration for the slide switch is required.

SLIDE SWITCH SETTINGS					
MODE		RELAY OUTPUT #1	RELAY OUTPUT #2	RELAY OUTPUT #3	SLIDE SWITCH POSITION
1	AUXILIARY PUSH-BUTTON '1' IS SELECTED	✓			1
		✓	✓		2
		✓	✓	✓	3
2	AUXILIARY PUSH-BUTTON '2' IS SELECTED	✓			1
			✓		2
				✓	3
3	AUXILIARY PUSH-BUTTON '3' IS SELECTED	✓			1
			✓		2
		✓	✓	✓	3

*Setting PA Volume:

1. Press and Hold Auxiliary Push-Button "1" and "2" until slide switch #2 and #3 indicator LED flashes.
2. Depress and hold PA switch on microphone and press Push-button "1"- "8" depending on volume required. When correct volume is determined, press Radio Rebroadcast and the volume setting will be permanently stored.



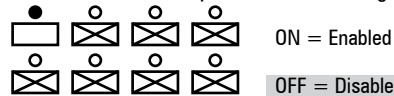
BACKLIGHT INTENSITY:

While pressing RADIO REBROADCAST BUTTON, press Auxiliary Button 1-8 to adjust backlight intensity. Button 1 = Lowest intensity, Button 8 = Highest intensity. Backlight must be enabled by the Gray wire on CN6.

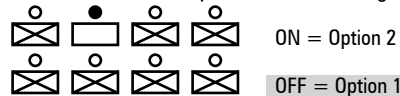
ALTERNATE MODES:

1. Press and Hold Auxiliary Push-Button "2" and "6" until Slide Switch indicator #1 and indicator #2 LED flashes.

1. Alternate Horn Ring control: Custom operation of vehicle horn when pressed. Refer to figure below for details.



2. Alternate Horn Ring control option: (Alternate Horn Ring Control must be enabled). Custom operation of vehicle horn when pressed. Refer to figure below for details.

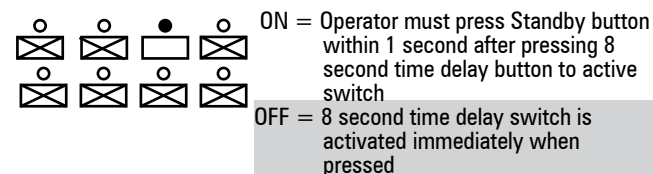


ALTERNATE HORN RING CONTROL

	OPTION 1	OPTION 2				
STANDBY	OEM HORN	OEM HORN				
LEVEL 1	OEM HORN	OEM HORN				
LEVEL 2	Air Horn or Wail Button Tone while Pressed *	Tap to Turn On Warning Tone, Tap again to Change Warning Tone. Press and Hold for Air Horn Tone				
LEVEL 3	Tap to turn ON Warning Tone, Tap again to change Warning Tone. Press and Hold for Air Horn Tone	<table border="1"> <thead> <tr> <th>TOGGLE SWITCH OFF:</th> <th>TOGGLE SWITCH ON:</th> </tr> </thead> <tbody> <tr> <td>Air Horn Tone or Wail Button Tone while Pressed *</td> <td>Tap to change Warning Tone, Press and Hold for Air Horn Tone</td> </tr> </tbody> </table>	TOGGLE SWITCH OFF:	TOGGLE SWITCH ON:	Air Horn Tone or Wail Button Tone while Pressed *	Tap to change Warning Tone, Press and Hold for Air Horn Tone
TOGGLE SWITCH OFF:	TOGGLE SWITCH ON:					
Air Horn Tone or Wail Button Tone while Pressed *	Tap to change Warning Tone, Press and Hold for Air Horn Tone					

*Set in "OTHER MODES" 6. Horn Ring Standby Tone

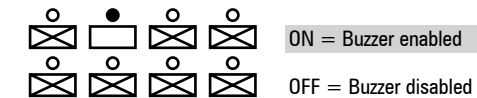
3. GUN LOCK SECURITY:



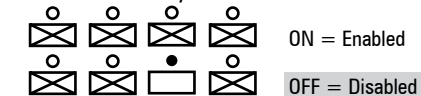
OTHER MODES:

1. Press and Hold Auxiliary Button "1" and "5" until slide switch #1 and #3 indicator LED flashes.

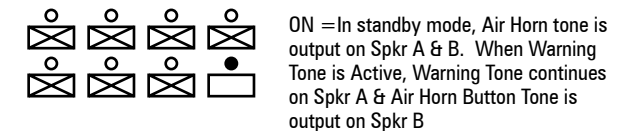
1. Buzzer: Audible tone from control panel whenever operator presses push-button or changes position of slide/rotary switch



2. 8 Second Buzzer Alert: Provides audible beep whenever any auxiliary switches are ON or level 1, 2, or 3 is active.



3. Air Horn Button Output Channels



OFF = Air Horn Button Tone always produced on Spkr A & B

PROGRAMMING MANUAL

AUXILIARY SWITCH SETTINGS:

Refer to Figure at bottom center for Button and LED locations and terminology

1. Press and Hold Auxiliary Button #1 and #8 until slide switch #1 LED flashes.
2. Press the button which setting is going to be viewed/changed 1 time.
3. Monitor the 5 LED's for the arrow controller to determine setting
 - ⊙⊙⊙⊙⊙- *Arrow Controller (Left, Right, Center, OFF), Dual Output; 1 & 9
 - ⊙⊙⊙⊙⊙- Alternate Action Switch (Press ON / Press OFF)
 - ⊙⊙⊙⊙⊙- Momentary Action Switch (ON only when depressed)
 - ⊙⊙⊙⊙⊙- 8 Second ON Time (ON for 8 seconds when depressed)
 - ⊙⊙⊙⊙⊙- Level 1 Disable (Turns OFF Level 1 Output)
 - ⊙⊙⊙⊙⊙- Level 2 Disable (Turns OFF Level 2 Output)
 - ⊙⊙⊙⊙⊙- Left Arrow, Single Output
 - ⊙⊙⊙⊙⊙- Right Arrow, Single Output
 - ⊙⊙⊙⊙⊙- Center Arrow, Single Output
 - ⊙⊙⊙⊙⊙- Warning Bar Output

*Can only be programmed to one button and will disable Left, Right and Center Arrow Single Outputs if they are used.

4. Press and release button until desired mode is selected.
5. Continue steps 2-3 for any other buttons that need to be programmed.

Default Settings:

Button #1: Arrow Controller
 Button #2-7: Alternate Action Switch
 Button #8: 8 Second ON Time

Denotes Factory Default Setting

Auxiliary Push-button to Slide switch mapping programming:

Allows the operator to have the siren automatically turn on auxiliary push-buttons based on the position of the slide switch.

If an auxiliary push-button is programmed to turn ON when the slide switch position is selected, the auxiliary push-button will turn OFF when the programmed slide switch position is no longer selected.

The operator can override the automatic activation of the auxiliary push-button by momentarily pressing the auxiliary push-button.

To program:

1. Press auxiliary push-buttons '4' and '5' for 2 seconds until Radio Rebroadcast indicator LED flashes.
2. Move slide switch to desired position.
3. Press auxiliary push-buttons '1' – '8' as required.

LED ON	Auxiliary push-button will automatically turn ON when level switch position is activated.
LED OFF	Auxiliary push-button will not automatically turn ON when level switch position is activated.

4. Repeat steps 2 and 3 for other slide switch positions as required.
5. Place appropriate button legend over activity indicator for each programmed button.

*TONE PROGRAMMING:

1. Press and hold "buttons" "2" and "7" for 2 seconds until Slide switch LED'S 1,2, and 3 flash
2. Press tone button to be programmed (Wail, Yelp, Tone, Manual, or Horn). Auxiliary button 1 = HORN, button 2 = MANUAL
3. Auxiliary buttons 5-8 will determine which tone is to be played when the user presses the button.
4. Repeat steps 2 and 3 for each tone button
5. Press Radio Rebroadcast button to exit programming mode

MANUAL BUTTON TONE DURATION

MOMENTARY: When played solo

LATCHED: When played over other tones.

SIREN AMPLIFIER DIAGNOSTIC INDICATORS:

STANDBY	SPKR 1 INDICATOR	SPKR 2 INDICATOR	CONDITION
FLASHING	ON	ON	OVER-TEMPERATURE, (380R ONLY)
FLASHING	OFF	ON	UNDER-VOLTAGE
FLASHING	ON	OFF	OVER-VOLTAGE
FLASHING	FLASHING	-	COMM FAULT - RELAY
FLASHING	-	FLASHING	COMM FAULT - AMP
FLASHING	FLASHING	FLASHING	COMM FAULT -RELAY AND AMP
ON	-	-	STANDBY MODE
*OFF	ON	-	SPKR 1 IS ACTIVE
*OFF	-	ON	SPKR 2 IS ACTIVE
*OFF	OFF	-	SPKR 1 IS NON-FUNCTIONING
*OFF	-	OFF	SPKR 2 IS NON-FUNCTIONING

* SIREN AUDIO BUTTON ACTIVATED (EXCEPT RADIO REBROADCAST)

PROGRAMMING MANUAL

WAIL BUTTON

BUTTON #6	BUTTON #7	BUTTON #8	SPKR A	SPKR B
OFF	OFF	OFF	WAIL 1	WAIL 1
OFF	OFF	ON	WAIL 2	WAIL 2
OFF	ON	OFF	WAIL 1	WAIL 2
OFF	ON	ON	WAIL 1	YELP 1
ON	OFF	OFF	WAIL 1	ALERT A
ON	OFF	ON	WAIL 1	HiLo
ON	ON	OFF	WAIL 2	SUPER HiLo
ON	ON	ON	WAIL 2	PIERCER

YELP BUTTON

BUTTON #6	BUTTON #7	BUTTON #8	SPKR A	SPKR B
OFF	OFF	OFF	YELP 1	YELP 1
OFF	OFF	ON	YELP 2	YELP 2
OFF	ON	OFF	YELP 1	YELP 2
OFF	ON	ON	YELP 1	WAIL 1
ON	OFF	OFF	YELP 1	PIERCER
ON	OFF	ON	YELP 1	HiLo
ON	ON	OFF	YELP 2	SUPER HiLo
ON	ON	ON	YELP 2	PIERCER

*TONE SCROLL

SPKR A	SPKR B
WAIL 1	WAIL 2
WAIL 2	YELP 1
YELP 1	YELP 2
YELP 2	PIERCER
PIERCER	ALERT A
ALERT A	WAIL 1

TONE BUTTON

BUTTON #5	BUTTON #6	BUTTON #7	BUTTON #8	SPKR A	SPKR B
OFF	OFF	OFF	OFF	TONE SCROLL*	TONE SCROLL*
OFF	OFF	OFF	ON	PIERCER	PIERCER
OFF	OFF	ON	OFF	HiLo	HiLo
OFF	OFF	ON	ON	SUPER HiLo	SUPER HiLo
OFF	ON	OFF	OFF	ALERT A	ALERT A
OFF	ON	OFF	ON	ALERT A	HiLo
OFF	ON	ON	OFF	ALERT A	SUPER HiLo
OFF	ON	ON	ON	HiLo	SUPER HiLo
ON	OFF	OFF	OFF	HiLo	PIERCER
ON	OFF	OFF	ON	ALERT A	ALERT B
ON	OFF	ON	OFF	PIERCER	YELP 1
ON	OFF	ON	ON	PIERCER	WAIL 1
ON	ON	OFF	OFF	SUPER HiLo	PIERCER
ON	ON	OFF	ON	WAIL 1	WAIL 2
ON	ON	ON	OFF	YELP 1	YELP 2
ON	ON	ON	ON	WAIL 1	YELP 1

HORN BUTTON

BUTTON #5	BUTTON #6	BUTTON #7	BUTTON #8	SPKR A	SPKR B
OFF	OFF	OFF	OFF	HORN 1	HORN 1
OFF	OFF	OFF	ON	HORN 2	HORN 2
OFF	OFF	ON	OFF	HORN 3	HORN 3
OFF	OFF	ON	ON	HORN 4	HORN 4
OFF	ON	OFF	OFF	HORN 1	HORN 2
OFF	ON	OFF	ON	HORN 1	HORN 3
OFF	ON	ON	OFF	HORN 4	HORN 1
OFF	ON	ON	ON	HORN 2	HORN 3
ON	OFF	OFF	OFF	HORN 2	HORN 4
ON	OFF	OFF	ON	HORN 3	HORN 4
ON	OFF	ON	OFF	HORN 1	WAIL 1
ON	OFF	ON	ON	HORN 1	YELP 1
ON	ON	OFF	OFF	HORN 1	PIERCER
ON	ON	OFF	ON	HORN 2	YELP 1
ON	ON	ON	OFF	HORN 3	YELP 1
ON	ON	ON	ON	HORN 4	SUPER HiLo

MANUAL BUTTON (SOLO PLAY ONLY)

BUTTON #6	BUTTON #7	BUTTON #8	SPKR A/B
OFF	OFF	OFF	WAIL 1 FREQUENCY DECREASE WHEN RELEASED
OFF	OFF	ON	WAIL 1 IMMEDIATE OFF WHEN RELEASED
OFF	ON	OFF	YELP 1
OFF	ON	ON	PIERCER
ON	OFF	OFF	ALERT A
ON	OFF	ON	HiLo
ON	ON	OFF	SUPER HiLo
ON	ON	ON	WAIL 1 IMMEDIATE OFF WHEN RELEASED

Denotes Factory Default Setting

NOTICE:

Installers and users must comply with all applicable federal, state and local laws regarding use and installation of warning devices.

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