



Siren Operated Sensor

SOS II (Digital Sound Processing)

Looking down the circuit board, identify the four small switches.
The switches may be set to the desired "mode," (left or right) as follows:

(This chart is also attached under lid of enclosure)

1. YLP-YWH Yelp- or Yelp-Wail-Hi Lo-DT (decibel time)
2. FST-SLO Fast or Slow to Trigger
3. RLS-LAT Release or Latch Relay
4. MT-15M Momentary or 15 Minute Relay hold

Advantages

- Reverse polarity operation. Even if the power supply is connected backwards the SOS will operate normally.
- Double relay closures for use on dual (in and out) gates providing wider fire equipment entry.
- All SOS products have a 5 year limited warranty if installation instructions are followed.
- It is the **gate owner's responsibility** to periodically verify SOS functionality.

LED's

When power is applied, the LED will blink slowly amber.

The amber LED turns off and the green LED activates once a siren has been detected and the relay closes. The amber LED is on steadily only when the received sound is above the threshold sensitivity setting and the SOS is trying to discern a siren. If a sound does not have a high enough frequency to be a siren it is rejected.

User Selectable Options

- Siren pattern recognition is user selectable from "Yelp" only to "Yelp, Wail, Hi Lo" and Decibel Time concurrently.
- User selectable "fast or slow" detection response to any one of the chosen siren options.
- User selectable relay action. Relay duration can be set to momentary, 15 minute, or latch-until reset.
- Latch mode can be cleared by pressing the reset switch, or removal of power temporarily.

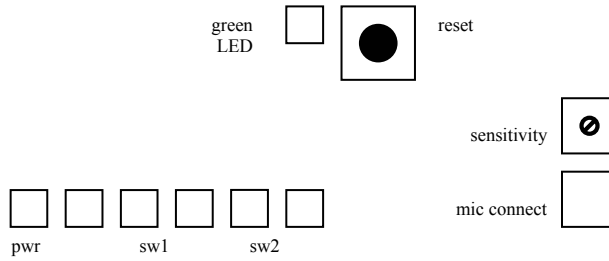
Mounting the SOS

All gate operators use low voltage for their electronic controls (AC or DC) and this can also be used as your SOS power source. If unfamiliar, use a long 4 conductor cable (24 gauge stranded) for testing, thereby allowing options for the best permanent mounting location. Some installers mount the SOS inside their larger gate control box, but just be sure the "Yelp" sound can reach it without distortions. CAUTION: If mounting the SOS onto metal, do not allow drilled metal pieces to collect onto the magnetic field that is present around the back side of the microphone.

Locate the SOS **inside** the fence!! In higher security installations, one may wish to place it high and out of reach, and/or at some farther distance away. Since the sensitivity and location of the SOS is variable, one can require a high volume of "Yelp" sound. This would thwart pernicious or "sneaky" attempts to open the gate.

While deciding on the best permanent mounting location for the SOS, remember that the omnidirectional microphone should be facing down. Mounting holes are located in the four corners inside box, drop screw **inside** of the indentures, but **outside** of the weather seal, screws provided.

If you **must** drill into the back of the SOS enclosure, do so through either of the two raised portions (left or right) of the mic sponge using the same size hole. Get a tight fit and seal out moisture. Moisture damage will negate warranty.



Connecting to Test the “Yelp”

Press clear down on orange lever to connect wires. Connect 9 to 30 VAC or DC to the + and -. Polarity does not matter. The amber light will slowly blink. Connect the two relay wires from the OPEN-gate terminals into SW1 or SW2.

To test for a proper gate hookup, touch a jumper between NO and COM (there are two). They are SW1 & SW2. This should trigger the gate to open, as if by the SOS relay closure. The “Yelp” tape provided and used with the player held close to the mic, will trigger the relay closure & flash a green LED within 2.5 seconds. If the “mode” switch is pushed away from #1 the SOS will respond to the YELP, WAIL, OR HI LO within 2.5 seconds. The DT (decibel time) 6 seconds.

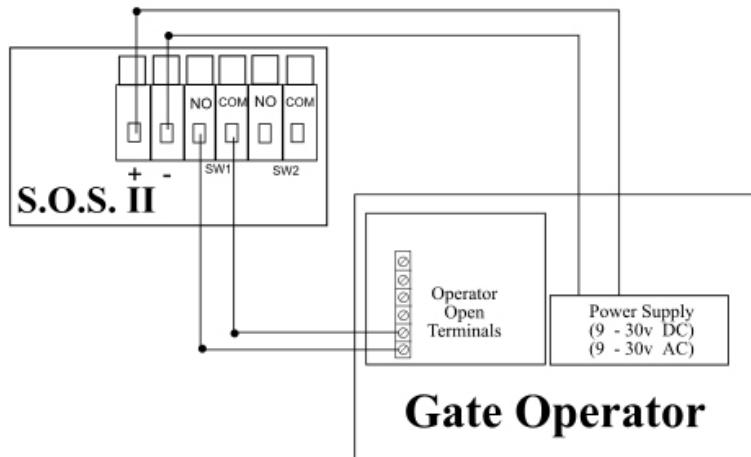
Adjusting the SOS with a Live Vehicle “Yelp”

(Most emergency responders will gladly help test.)

The sensitivity factory set at “normal.” Full sensitivity (clockwise) is seldom needed. If the vehicle is using a “Yelp” sound similar to the demo tape, the amber light should come on steadily and the relay will close in 2.5 seconds or less. If the amber light does not come on steadily, advance the sensitivity and test again.

Wiring

Standard Wiring:



Presence Loop Drawing:

