

The Original



# SOS

Siren-Operated Sensor

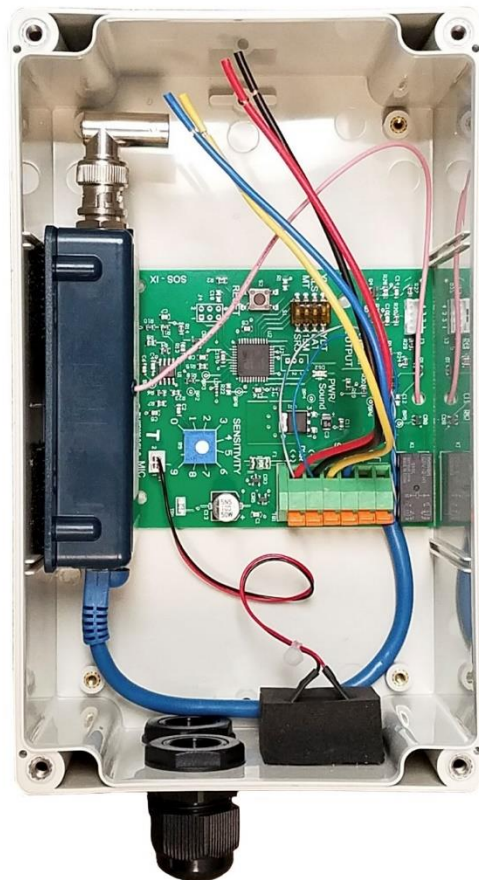
Access Control and Emergency Access

Gate Trigger

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www.sosgate.com

## SOS Gate Trigger Installation Instructions

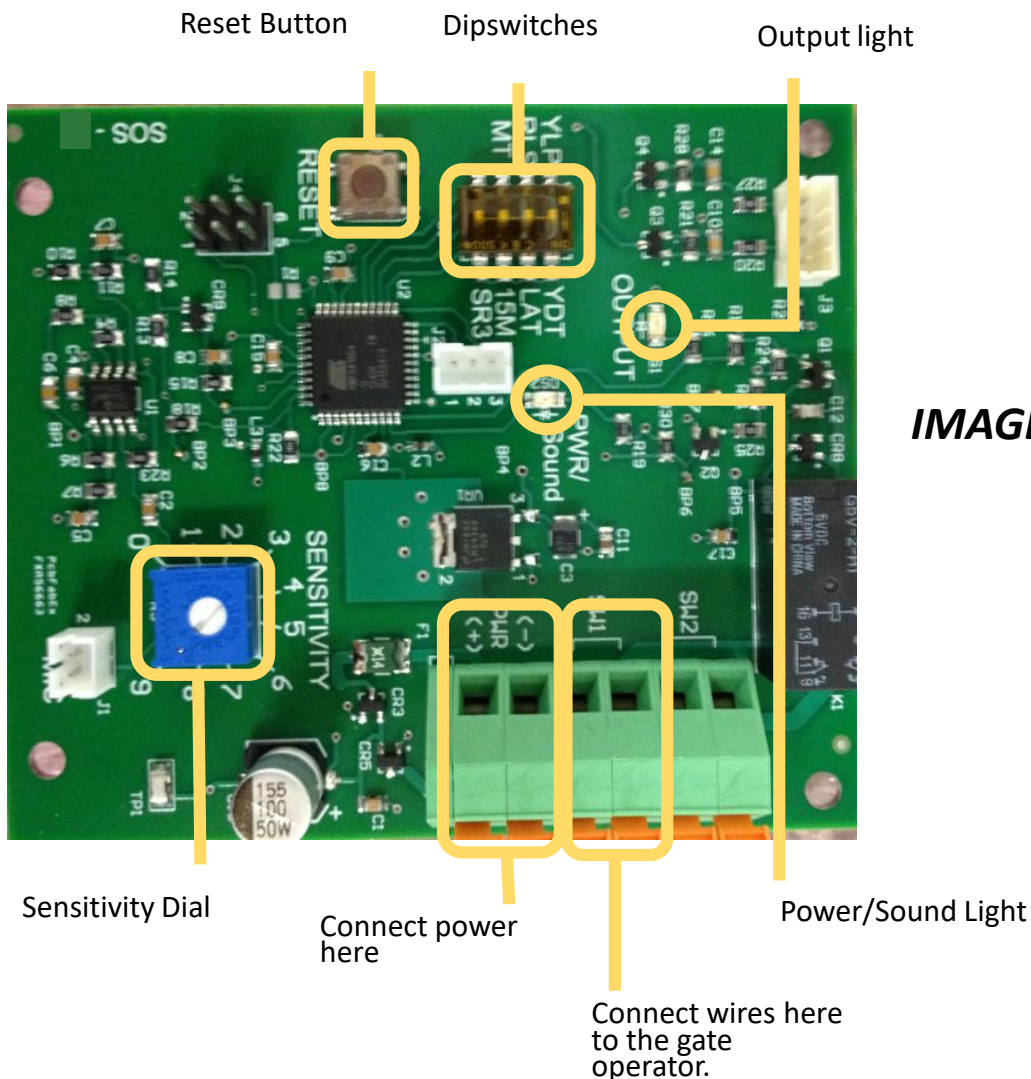


### Mounting the Unit

1. Identify where you are going to mount the SOS Gate Trigger. This location should be inside the fenced perimeter where outsiders are not able to easily access the unit. The antenna should have a clear line of sight to the desired trigger area. Also excess noise will interfere with operation of the "YELP" sensor so do not put it inside the gate motor enclosure or close to noisy machinery.
2. Remove the face plate of the SOS Gate Trigger.
3. Using the screws provided, mount the SOS SILENT unit right side up with the antenna wire coming out of the bottom of the enclosure. The enclosure has four pre-drilled holes for mounting. Mounting the unit sideways or upside down can cause water damage and WATER DAMAGE will void the warranty. If additional holes are drilled into the enclosure or if you use the small knock-out hole in the bottom for wires, make these holes water tight with silicone.

### Connecting the Power and Gate Operator (Image 3)

4. Attach wires from power source, such as the gate operator unit or a battery, to the wires coming out of the power terminals on the SOS board. **The power must be 12 volts DC.**
5. Once power is connected correctly the Power/Sound – amber light LED will blink every 5 seconds.
6. Connect a 18—22 AWG stranded wire to a NORMALLY OPEN terminal on the gate operator control board. Connect a second 18—22 AWG stranded wire to a COMMON terminal on the gate operator control board. Some gate operator control boards have a “FIRE” or “SIREN” terminal. These terminals will only work if they are NORMALLY OPEN – additionally on some control boards these ports need a constant trigger to open. If a constant trigger is needed turn on one of the dipswitches that holds the gate open for a minimum of 5 minutes. (See page 3)
7. TEST the connection by touching these two wires together momentarily and the gate should open.
8. Now attach the wires from Normally Open and Common to the SW1 Terminals on the SOS board.



**IMAGE 3**



**IMAGE 4**



**IMAGE 5**

### **Connecting the Antenna (Images 4 and 5)**

9. Cut the coaxial cable to desired length. The shorter the cable the less interference.
10. Unscrew the cover off the antenna (Image 4).
11. Strip the coaxial cable. Screw down the copper center wire onto the copper antenna base (red).
12. Twist the remaining mesh sheath insert into the crimp connection (blue). Crimp the connection tight.
13. Screw the cover of the antenna back on.

### **Tuning the RFID Antenna**

14. To adjust the read distance from 10 feet up to 600 feet you will need a tuning kit (SOS-TUNE), sold separately. The kit comes with instructions on how to tune the read range to the desired distance.

### **Testing the Unit**

Properly testing the unit involves three sensitivity tests:

**1<sup>st</sup> test** the “YELP” siren steps 1-3 below. To complete this test any RFID tags will need to be outside the read range or inside a metal container.

**2<sup>nd</sup> test** is to bring the RFID tag into range and the gate should open.

**3<sup>rd</sup> test** is to invite an emergency responder to open the gate with their RFID tag and with their “YELP” siren.

15. Begin testing by turning the sensitivity dial clockwise to setting 8.5.
16. Using the Yelp Siren CD provided, or download the MP3 yelp off our website [www.sosgate.com](http://www.sosgate.com) onto your mobile device, play it at the loudest volume setting. Hold your device close to the microphone the PWR/Sound light should come on solid and the output light should come on as the gate opens within 3 seconds.
17. Test the unit now with a live siren. You want to have the sensitivity setting as low as possible but still able to open the gate with a live siren. The main reason for the SOS not triggering the gate open is that the emergency responders are not using the siren tone “YELP” or they are not leaving their siren on for 3 seconds.



**SOS recommends inviting an emergency responder out once each year to help you conduct a live siren test and an RFID tag test. This will ensure the SOS Gate Trigger remains in good working order. Most emergency responders will gladly perform this service but it is the gate owner’s responsibility to invite them.**

#### **Adjusting Dipswitch Settings on the SOS Board**

**Dipswitch 1:** When this switch is in the YLP position, the sensor will detect only a “yelp” siren and will open the gate after a valid signal has been detected for 3 seconds. When the switch is in the YDT position, the sensor will open the gate once it has detected any siren or any continuous loud noise (such as a loud engine) for 5 seconds. To avoid false triggers, SOS suggests keeping this switch in the YLP position.

**Dipswitch 2:** When this switch is in the RLS position, the sensor will not interfere with the gate’s normal closure time. When the switch is in the LAT position, the gate will remain open until the reset button is pushed or power is recycled. This will override any other programming for closing times and the gate will remain open until it is reset. There is a reset button on the outside of the enclosure.

**Dipswitch 3:** When this switch is in the MT position, the sensor will not interfere with the gate’s normal closure time. When the switch is set to 15M, the gate will remain open for 15 minutes. **Note:** When switch #2 is in the LAT position, the settings for switch #3 are irrelevant.

**Dipswitch 4:** This dipswitch is not currently being used.