

The Original



# SOS<sup>®</sup>

Siren-Operated Sensor

The Nation's Most Widely-Used Uniform Emergency Access

## Installation instructions for the SOS 12

As with all our past units this SOS carries a 5 year warranty. The warranted is voided for the following:

- Holes drilled into the board chamber
- Water damage to the unit
- Burned boards—due to power surges or apply the wrong power
- Physical damage to the circuit board.

The area outlined in yellow is the board chamber. Drilling any holes inside this area or through its sidewalls will void the warranty.

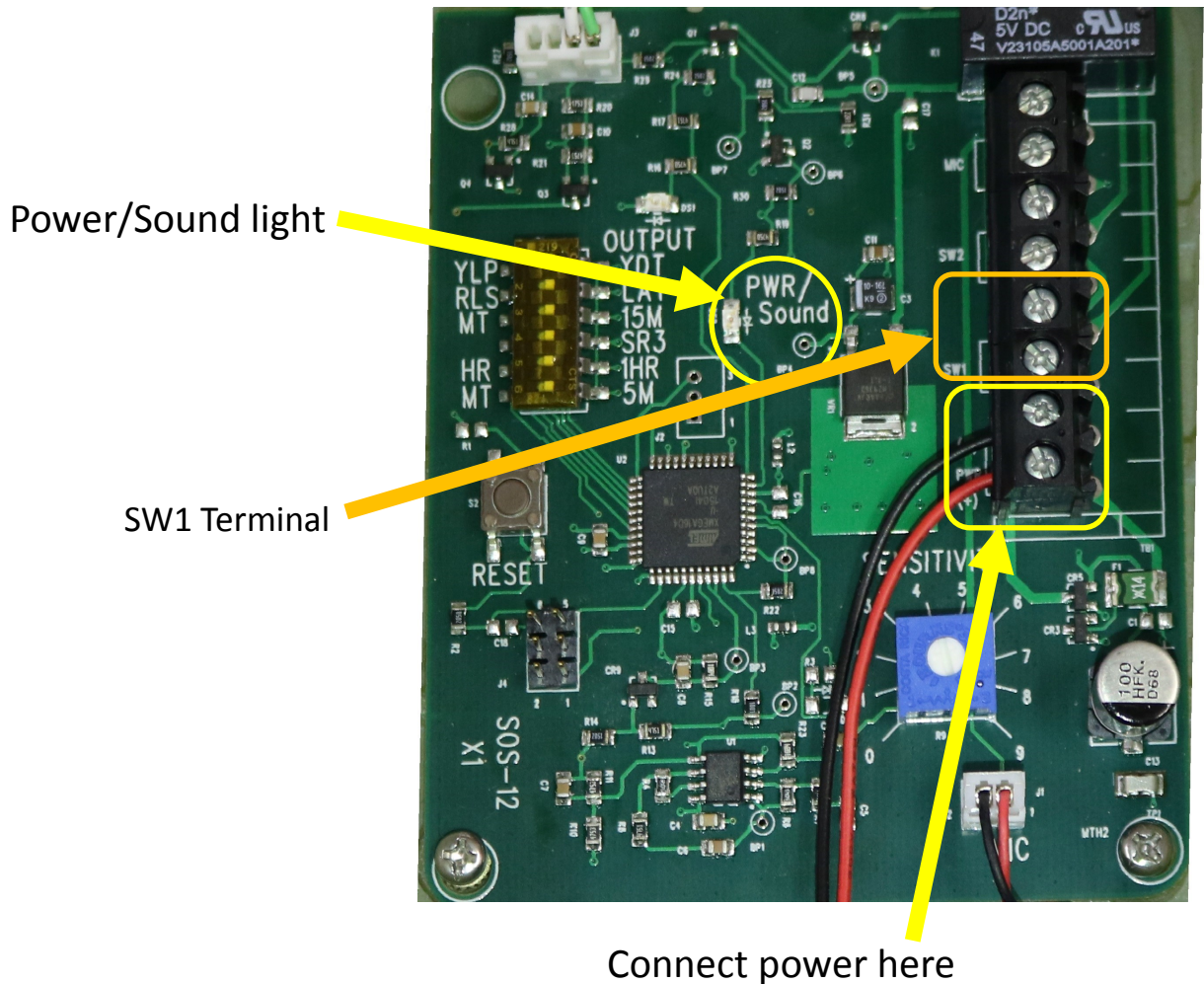


1. Remove the face plate of the SOS 12 unit.
2. Find a location INSIDE the fence to mount the SOS 12. Do not put the unit inside the gate operator enclosure or next to any noisy machinery that will interfere with the sensor picking up the sound of the siren.
3. Using the screws provided, mount the SOS 12 with the microphone facing the oncoming emergency vehicle. The enclosure has four pre-drilled holes for mounting.

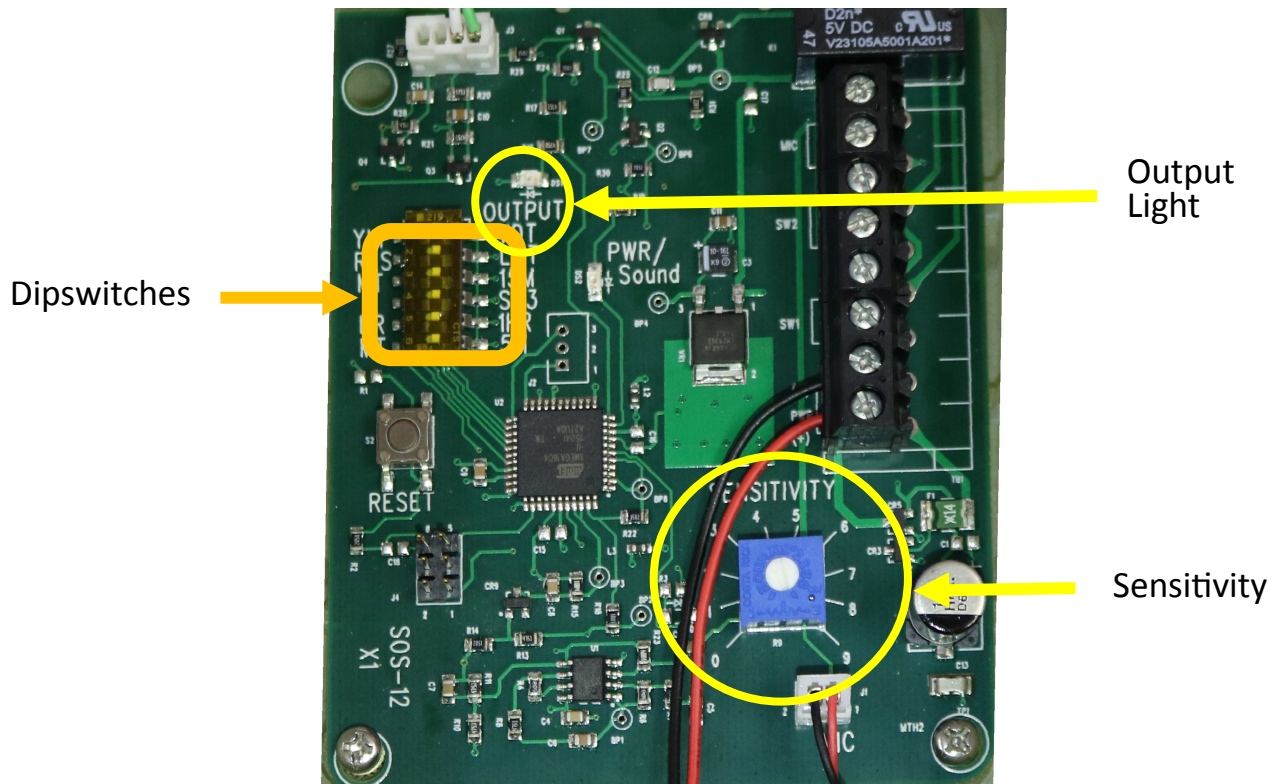
**NOTE:** If mounting the SOS onto metal, do not allow metal shaving to remain in the enclosure.



4. Run a positive and a negative wire 18—22 AWG stranded (not included) from a power source such as the gate operator or a battery. The power can be 9 to 24 volts DC or 9 to 16 volts AC.
5. Once power is connected the Power/Sound – amber light LED will blink every 10 seconds.



6. Connect a wire 18—22 AWG stranded wire to a NORMALLY OPEN terminal on the gate operator control board. Connect a second wire 18—22 AWG stranded wire to a COMMON terminal on the gate operator control board.
7. **TEST** by touching these two wires together momentarily and the gate should open. Some times the gate operator control board has a “FIRE” or “SIREN” terminal if it is not NORMALLY OPEN the SOS unit will not function properly.
8. Now attach the wires from Normally Open and Common to the SW1 Terminals.



## TEST UNIT

9. Begin testing by turning the sensitivity dial clockwise to setting 8.5.
10. Using the Yelp Siren CD provided, or download the MP3 yelp off our website [https://sosgate.com/files/file/13-sos\\_yelpmp3/](https://sosgate.com/files/file/13-sos_yelpmp3/) 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.
11. 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 they are using a different siren sound than “YELP” or they are only leaving their siren on for 1-2 seconds.
12. Have the emergency responder sound their “YELP” siren. If the gate does not open within 3 seconds, verify that the PWR/Sound light is coming on solid. If PWR/Sound light is solid and the gate still does not open turn up the sensitivity. The output light must come on before an open trigger is sent to the gate operator.

**Note:** Every time the siren is interrupted or changed the digital processor begins the process over again, this internal reset can take several seconds.

The SOS 12 has 6 dipswitches they control what type of sound will trigger the unit and how long the unit will hold the gate open once it has been triggered. All the dipswitches are in the “off” position when it is shipped from the factory.

**Dipswitch 1:** In the off position “YLP” the sensor will open the gate with a yelp siren within three seconds. In the on position “YDT” the sensor will open the gate to any sound that reaches the correct decibel level for 5 seconds. This is usually used to allow other siren tones to open the gate. The sensitivity dial controls how high the decibels need to be to open the gate.

The remaining dipswitches all determine how long the unit will hold the gate open after it has been triggered. When they are all off the gate will open and run through its normal cycle—usually letting only one vehicle through the gate. If you choose to have a dipswitch on only one of them should be one at a time.

**Dipswitch 2:** In the on position “LAT” the unit will latch the gate open until someone pushes the reset button.

**Dipswitch 3:** In the on position “1HR” the unit will hold the gate open for 1 hour or until someone pushes the reset button.

**Dipswitch 4:** In the on position “15M” the unit will hold the gate open for 15 minutes or until someone pushes the reset button.

**Dipswitch 5:** In the on position “5M” the unit will hold the gate open for 5 minutes or until someone pushes the reset button.

**Dipswitch 6:** Is not being used at this time.

## Trouble Shooting the SOS

1. The number on reason for the SOS to not open the gate is that the emergency responder is not using the “YELP” siren. If they use a different siren the gate will not open.
2. Check that the Power/Sound blinks about every 4 seconds. If blinking go to step 3.
  - a. If the light is not blinking you do not have power to the board or the board has been damaged.
    - i. Confirm that the boards is receiving 9-30 volts DC or 9-16 volts AC.
    - ii. If the board is receiving the proper power and the Power/Sound light is not blinking the board has been damaged and needs to be replaced. If under the 5 year warranty return it to us at:
      1. DF Supply, Inc.  
8500 Hadden Rd.  
Twinsburg, OH 44087
3. Make a noise — (play the siren, whistle, yell) — While doing this the Power/Sound light should come on solid while the noise is being made. If the light comes on go to step 4.
  - a. If the light does not come on solid then there is something wrong with the microphone or the Potentiometer is too low.
    - i. Turn the Potentiometer up to 8.5 & make a noise again. If the light comes on solid go to step 4.
    - ii. Unplug and plug back in the microphone from the board. This is a white connector below the potentiometer. Make noise again — if the light does not come on solid the microphone is bad.
      1. Contact us at 800-878-7829 to purchase a new microphone.
4. Sound the “YELP” Siren for at least 5 seconds. If you are using a hand held device or car stereo turn the potentiometer to 8.5. The output light should come on solid and the gate should open.
  - a. If the light does not come on and the Siren is the “YELP” the board is damaged and needs to be replaced.
  - b. If the output light comes on but the gate does not open.
    - i. Take the wire out of SW1 or SW2 that lead to the gate. Touch them together the gate should open.
      1. If the gate does not open ensure those wires are connected to the normally open and common terminals on the gate operator.
    - ii. If the gate opens then there is something wrong with the relay on the board and will need to be sent to us for repair or replacement.
5. If the gate is opening without a siren present.
  - a. The potentiometer needs to be turned down and the first dipswitch needs to be in the YLP position.
  - b. Arrange to have a courtesy visit from an emergency vehicle so that the potentiometer can be set as low as possible but still open the gate.