FEDERAL SIGNAL
Safety and Security Systems

Model SST3-MV-SB

Remotely Selectable Siren

25500971 Rev A0 1124



Limited Warranty: This product's limited warranty can be found at www.fedsig.com/SSG-Warranty.

SAFETY MESSAGES TO INSTALLERS AND USERS ⚠:
It is important to follow all instructions shipped with this product. This siren is to be installed by a trained electrician who is thoroughly familiar with and will follow all applicable national and local codes in the country of use.

This siren should be considered a part of the warning system and not the entire warning system.

The selection of the mounting location for the siren, its controls, and the routing of the wiring are to be accomplished under the direction of the facilities engineer and the safety engineer. Listed below are some other important safety instructions and precautions you should follow:

- Read and understand all instructions before installing or operating the equipment.
- Any maintenance to the siren system must be done with power turned off.
- To avoid electrical shock hazards, do not connect wires when power is applied. Failure to observe this warning may lead to serious injury or death.
- Never alter the unit in any manner. Safety may be compromised if additional openings or other alterations are made.
- The nameplate, which may contain cautionary or other information of importance to maintenance personnel, should NOT be obscured in any way. Ensure that the nameplate remains readable.
- All effective warning sirens produce loud sounds, which may cause, in certain situations, permanent hearing loss. Take appropriate precautions such as using hearing protection. The device should be installed far enough away from potential listeners to limit their exposure while still maintaining its effectiveness.
- DO NOT rotate the projector more than 180 degrees or internal siren wiring may be damaged.
- For maximum effectiveness, ensure that the front of the siren is clear of obstructions.
- After installation or maintenance, ensure that all threaded joints are properly tightened.
- After installation, test the siren system to ensure that it is operating properly.
- Establish a procedure to routinely check the configured system for proper activation and operation.
- Check the unit periodically to ensure that the effectiveness of the device has not been reduced because it has been clogged with a foreign substance or because objects have been placed in front of it.
- After testing is complete, provide a copy of this instruction sheet to all personnel.

Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death to you or others.

Unpacking the Device: After unpacking the device, examine it for damage and verify the parts. If a part is missing or damaged, do not attempt to install it. Instead, contact Federal Signal Customer Support.

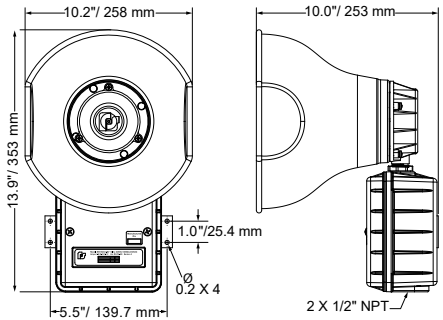
Table 1 Electrical ratings

Operating Voltage	24 Vdc	120 Vac	240 Vac
Max. Operating Current	0.50 A	0.21 A	0.12 A
Frequency	DC	50/60 Hz	50/60 Hz

Field Installation Applications

Mounting the Unit

Figure 1 Mounting Dimensions



The amplified siren can be mounted on any relatively flat surface. Conduit connections can be made to the two 1/2" threaded openings at the bottom of the housing. A 1/2" conduit plug is supplied for field installation if one of the 1/2" threaded openings is not utilized. After the mounting location and mounting method have been selected, proceed with the applicable instructions below.

Improper operation could occur if an accumulation of water, snow, dust, etc. resides in the unit projector, severely reducing or preventing output of this device. Mount the unit so the projector is pointed horizontally or slightly downward.

Flat Surface Mounting

1. Select the mounting location and place the rear of the housing against the mounting surface.

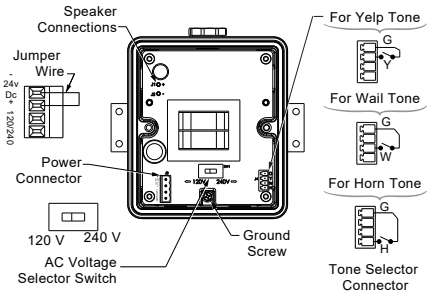
NOTICE

DRILLING PRECAUTION: Before drilling holes in any surface, ensure that both sides of surfaces are clear of items that could be damaged.

2. Using the mounting holes as a template, scribe drill-position marks on the mounting surface. See Figure 1 for mounting hole spacing.
3. Secure the unit to the mounting surface with appropriate user-supplied No. 10 hardware.
4. Remove the cover by removing the two No. 10 by 1-1/2" Phillips® head screws to access the wiring compartment.
5. Route the wires through the 1/2" threaded openings into the unit in accordance with national and local electrical codes. Wire size depends upon the operating current and the distance from the power source. All electrical wiring must be routed through approved conduit and fittings.
6. Reposition the projector if necessary to obtain the desired sound coverage. Loosen the collar nut and move the projector to the desired position. Tighten the nut to lock the projector in place.

Electrical Connections

Figure 2 Electrical Connections



WARNING

SHOCK HAZARD: To avoid electrical shock, do not connect wires when power is applied. Failure to observe this warning may lead to serious injury or death.

CAUTION

Do not try to operate the unit by connecting both AC and DC power sources at the same time.

Use only 12 to 18 AWG (2.5 to 1.0 mm) wire for the power connection. Strip no more than 0.25 inch (6 mm) of wire insulation from the ends of the power leads. If stranded wire is used, ensure that there are no loose strands outside the connector plug that could touch the adjacent lead and cause a short circuit.

120/240 Vac Wiring (See Figure 2)

1. Set the voltage selector switch SW1 to the desired source voltage.
2. Connect the AC power leads to the 120/240 terminals of the four-position 5.08 mm J3 plug supplied loose with the unit. The unit is not polarity-sensitive for AC power.
3. Insert the stripped wire ends into the terminal as far as they can travel. Tighten the terminal screw to 5 in-lb (0.56 N-m) maximum.
4. Plug the connector into the J3 receptacle on the printed circuit board. The connector installs in one direction only.
5. If required, connect the ground wire to the green No. 8 grounding screw provided inside the housing.

24 Vdc Wiring (See Figure 2)

1. Remove the jumper wire from the four-position 5.08 mm J3 connector plug provided with the unit.
2. Connect the positive power source lead to the (+) terminal and the negative power source lead to the (-) terminal.
3. Insert the stripped wire ends into the terminal as far as they can travel. Tighten the terminal screw to 5 in-lb (0.56 N-m) maximum.
4. Plug the connector into the J3 receptacle on the printed circuit board. The connector installs in one direction only.
5. If required, connect the ground wire to the green No. 8 grounding screw provided inside the housing.

Tone Activation Wiring (See Figure 2)

Remote Tone Activation Connection

Remote tone activation can be accomplished by wiring a switch or contact between the various terminals of the 3.81 mm J4 tone selector connector plug. Use appropriately-sized, shielded, twisted pair cables. Plug terminals are rated for 16 to 22 AWG (1.5 to 0.5 mm) wire. For proper operation of the remote activation circuit, the total loop resistance should not exceed 1000 ohms.

1. Connect the switch wires to the 3.81 mm J4 connector plug per Figure 2.

2. Insert the stripped wire ends into the terminal as far as they can travel. Tighten the terminal screw to 2.2 in-lb (0.25 N-m) maximum.
3. Plug the connector into the J4 receptacle on the printed circuit board. The connector installs in one direction only.

The selected tone plays when the unit is powered up and remote activation switches/contacts are closed.

By connecting a set of switches/contacts to each of the three tones, a single tone can be activated by closing the appropriate contact. When contact closures are applied to all tone terminals simultaneously, the HORN tone will override the other two tones. If contact closures are applied to HORN and any other tone, HORN will override the other tone. If contact closures are applied to both the WAIL and YELP tones, the WAIL tone will override the YELP tone.

Wiring for Single Tone Activation at Power Up

By connecting a permanent short jumper wire between the GND terminal and desired tone terminal, the unit can be operated by switching the operating power. The jumper wire is provided with the unit.

1. Connect the jumper wire to the 3.81mm J4 connector plug per Figure 2.
2. Insert the stripped wire ends into the terminal as far as they can travel. Tighten the terminal screw to 2.2 in-lb (0.25 N-m) maximum.
3. Plug the connector into the J4 receptacle on the printed circuit board. The connector installs in one direction only.

The selected tone plays when the unit is powered up.

Completing the Assembly

1. Reinstall the cover, making sure the gasket is fully seated and compressed. Tighten the cover screws to 25-30 in-lb (2.8-3.4 N-m).
2. Turn on power to the unit and proceed to the Testing/Operation section.

Testing/Operation

⚠ WARNING

SOUND HAZARD: All effective sirens and horns produce loud sounds (120 dB) that may cause permanent hearing loss. Always minimize your exposure to siren sound and wear hearing protection. Do not sound siren indoors or in enclosed areas where you and others will be exposed to the sound. Recommendations in the OSHA Sound Level Standard (29 CFR 1910F) should not be exceeded.

1. After installation is complete, be sure to test the system to verify that each amplified siren operates satisfactorily.
2. After completion of the initial system test, establish a program for periodic testing of this device.
3. Provide a copy of these instructions for the Safety Engineer, system operator(s), and maintenance personnel.

SAFETY MESSAGES TO OPERATORS ⚠:
Even if your warning system is operating properly, it may not be completely effective. People may not hear or heed your warning signal. You must recognize this fact and ensure that your warning signal achieves its intended effect through proper test/training sequences within your specific application(s).

Maintenance and Service

Technical Assistance: Contact our Technical Support Team at +1 708-587-3587 or signalsupport@fedsig.com.

Repair Service: A return authorization is required. Contact your Authorized Distributor or Federal Signal Customer Support. Defective products under warranty will be repaired or replaced at Federal Signal's discretion.

Product Returns: Returns require authorization from Federal Signal. Contact your Authorized Distributor for more information on our return policy or to request a return.

Ordering Replacement Parts

Consult the product datasheet online for an updated list of replacement parts. If the product requires a part that is not available for purchase, your unit must be repaired or replaced. The product's dome should be regularly inspected for scratches or chips and, if damaged, it must be replaced. A strap wrench (6" capacity) may be used to aid in the dome removal.

Table 2 Replacement parts

Description	Part Number
Speaker Assembly	K8593103
PCBA	K20000104
Connector Plug	K140340



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Additional translations available at signaling.fedsig.com
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