

**INSTALLATION INSTRUCTIONS  
FOR STROBE SYNCHRONIZATION  
MODULE MODEL SSM**

Address all communications and shipments to:



**FEDERAL SIGNAL CORPORATION**



**INSTALLATION INSTRUCTIONS  
FOR STROBE SYNCHRONIZATION MODULE  
MODEL SSM**

** SAFETY MESSAGE TO INSTALLERS**

It is important to follow all instructions shipped with this product. This device is to be installed by a trained electrician who is thoroughly familiar with the National Electrical Code and will follow the NEC Guidelines as well as local codes.

This device should be considered a part of the signaling system and not the entire signaling system.

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

- Read and understand all instructions before installing or operating this equipment.
- Do not connect this sync module to the system when power is on.
- After installation, test the system to ensure that it is operating properly.
- After testing is complete, provide a copy of this instruction sheet to all operating personnel.
- Establish a procedure to routinely check the installation for integrity and proper operation.

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

**A. UNPACKING.**

After unpacking the unit, examine it for damage that may have occurred in transit. If the equipment has been damaged, do not attempt to install or operate it, file a claim immediately with the carrier stating the extent of the damage. Carefully check all envelopes, shipping labels and tags before removing or destroying them.

**B. GENERAL.**

The Federal Signal's strobe synchronization module SSM is designed to sync low inrush current 24VDC models 3 Fireball, or 3 Electra ray, 2 27XST or 2 FSEX strobes. The SSM accepts strobe input from control panel or a power supply and provides sync output to the strobes. The SSM is UL Listed under Standard 1971(Emergency Appliances for the Hearing Impaired) for indoor use. The 24VDC input to the sync module

SSM is polarized for compatibility with standard reverse polarity supervision of signaling circuit of control panel. Following strobe models are available for use with SSM.

<u>24VDC</u> <u>MODELS &amp; SERIES</u>	<u>MAX DC</u> <u>OPERATING CURRENT</u>	<u>MAX.UNITS</u> <u>SUPPORTED BY SSM</u>
224XST-024, SERIES C	0.75A	3
225XST-I-024, SERIES B	0.75A	3
FB2PSTX-I-024, SERIES B	0.75A	3
FB2PST-I-024, SERIES B	0.75A	3
FB24ST-024, SERIES B	0.75A	3
FB24ST-HI-024, SERIES C	0.75A	3
224XST-HI -024, SERIES B	0.75A	3
FSEX-HI-024, SERIES D	1.90A	2
FSEX-024, SERIES D	1.90A	2
27XST-024, SERIES E	1.90A	2



When strobes are connected to SSM module, makes sure that the total peak operating current and total inrush current required by all the strobes do not exceed the rating of the strobe signal input source (control panel or power supply) connected to the SSM module's 24VDC input. Over loading these sources could result in loss of power, loss of synchronization and failure to alert occupants during emergency.



Do not connect more than maximum number of strobes suggested in the table above to the SSM module.

Connect the SSM module only to the circuits with continuously applied voltage. Do not use SSM in the coded, nonregulated or interrupted supply voltage circuits.

### C. ELECTRICAL WIRING.

The SSM module has in-out wiring terminals that accept #14 to #18 (AWG) wires at each screw terminal. Strip 3/8-inch wire insulation for connection to the screw terminal. Connect strobe signal output of the control panel (or power supply) to the terminals marked **24VDC in** at **J1**. Connect the Signal Positive (+) to the terminal marked '+' and connect the Signal Negative from control panel to the terminal marked '-' of **J1** of the SSM module. Connect the red (**+IN**) lead of strobes#1 to be synchronized to the '+' and connect second red (**+OUT**) lead to red (**+IN**) lead of the strobe #2. Connect the black (**-IN**) lead of the strobe#1 to the '-' screw terminal of **24VDC out** at **J3** and connect second black (**-OUT**) lead to the (**-IN**) black lead of the strobe #2 as shown in the figures 1 and 2. The polarity shown in the wiring diagram is for the operation of the strobes. Control panel reverses the polarity during supervision.

Grounding can be achieved by mounting the SSM module to the grounded electrical back box with provided hardware.

#### **D. MOUNTING.**

Mount sync module SSM to a two gang, 2-inch deep, grounded back box as shown in figure 3 using the hardware supplied. Select conduit entrance to the box such that there is sufficient clearance for the wires. Use adequate lead length; excess lead length could result in insufficient wiring space. Position wires in the box such that there is minimum stress on the terminals.

#### **E. SERVICE.**

The Federal factory will service your equipment or provide technical assistance with any problems that cannot be handled locally.

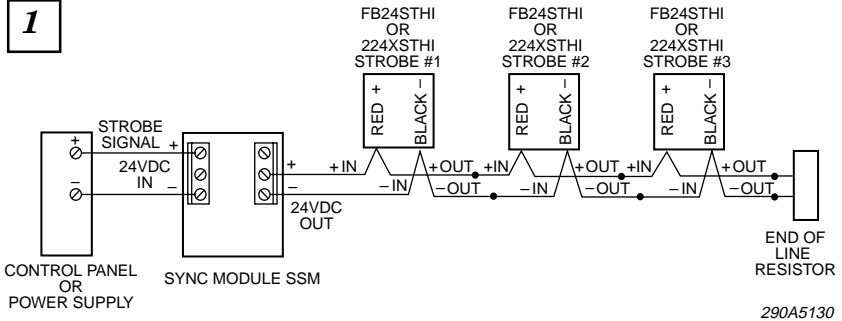
Any units returned to Federal Signal for service, inspection, or repair must be accompanied by a Return Material Authorization. This R.M.A. can be obtained from the local Distributor or Manufacturer's Representative.

At this time a brief explanation of the service requested, or the nature of the malfunction, should be provided.

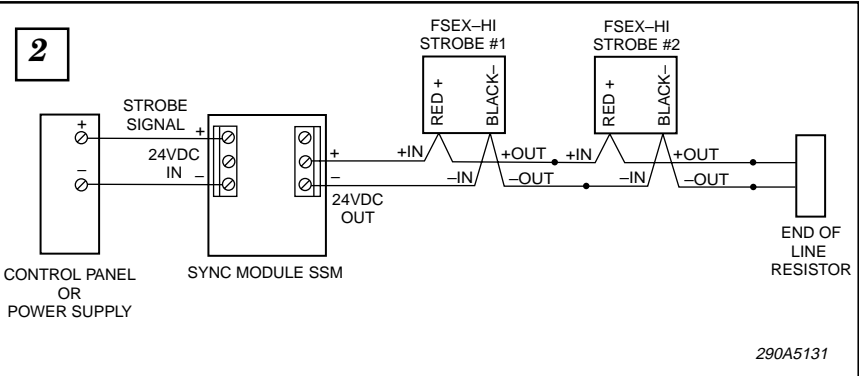
Address all communications and shipments to:

Service Department  
Electrical Products  
Federal Signal Corp.  
2645 Federal Signal Dr.  
University Park, IL 60466-3195

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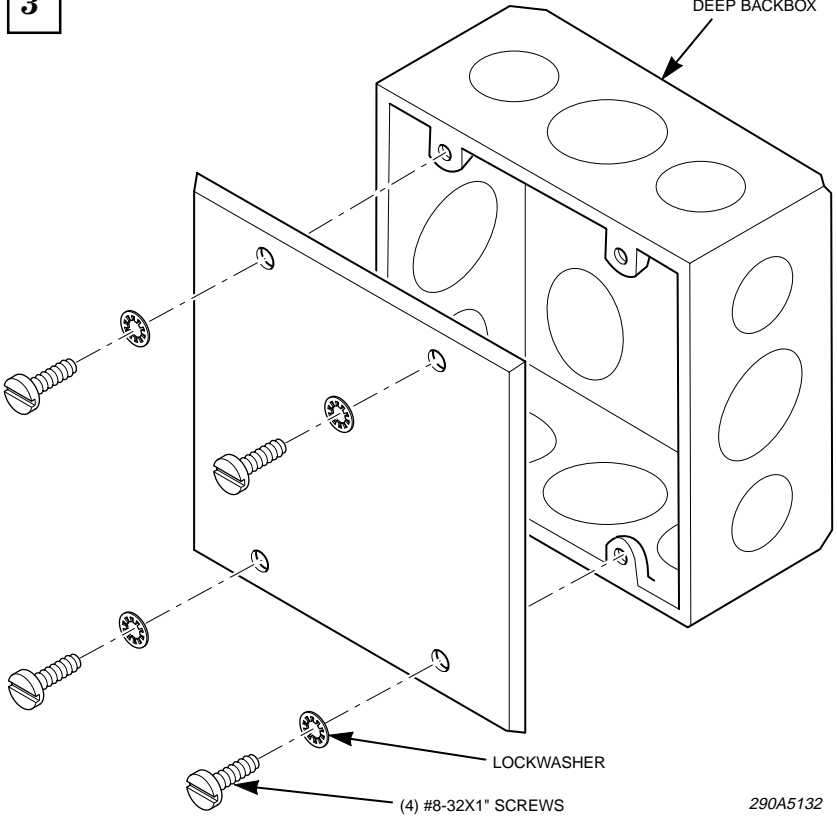


2



3

4-11/16"X2-1/8"  
DEEP BACKBOX



2561992A  
REV. A Printed 9/04  
Printed in U.S.A.