

SIGNALMASTER™ DIRECTIONAL LIGHTING SYSTEMS



SignalMaster™ lights can provide direction information, emergency warning, or both.

SignalMaster™ directional lighting systems come in a variety of sizes and configurations to meet the demands of emergency response.

MODELS

SignalMaster directional lights use sequentially flashing lights to build directional or warning patterns for passing motorists. When used with SMC controllers, four distinctive patterns can be produced; left arrow, right arrow, center-out, and a flashing warning pattern.

All directional patterns are produced by individual lamps being activated in sequence, and all lamps

remain lit until the pattern is completed. Lenses are separated to minimize “bleed” from lamp to lamp, creating a well-defined arrow pattern.

Four-, six-, and eight-lamp models are available for use in a variety of applications. A pair of four-lamp models can be synchronized for directional warning on oversize and specialty vehicles. Directional units come with either a 15', 30', or 50' controller cable. Additional controller cable can be purchased separately (model SM-EXT).

The extruded aluminum housing of the SignalMaster provides strength and durability. It also incor-



Combination model SML6-2DS1 features six halogen directional lamps (center) and two strobe lamps (ends).

QUICK REFERENCE

FEATURES

- Units can provide directional information to passing motorists, warn of danger, or both.
- Four-, six-, and eight-lamp units available for a wide variety of applications.
- Housing designed to block out sunlight for greater visibility.
- New LED versions reduce amp draw to 2.6 amps for an eight-lamp system.
- Optically enhanced lens design maximizes light distribution at critical, off-axis angles.
- Combination models add red and blue warning in halogen or strobe.
- Mounting brackets available for a variety of applications.

APPLICATIONS

- Supplemental warning for vehicles with roof-mounted lighting systems
- Marked “slick-top” vehicle warning
- Parking enforcement vehicles
- Large, special operations vehicles
- Fire and EMS vehicles

APPROVALS

- SAE J595 Class B (halogen)
- CAC Title 13, Article 22 (halogen)

RELATED PRODUCTS

Flashers

Bulletin #3301

Viper™ ILS

Bulletin #4150

SmartSiren® Light/Siren Control

Bulletin #5113

porates a visor that blocks sunlight for increased effectiveness during daylight operation. All lenses are constructed of impact resistant polycarbonate and can be removed easily for quick color customization or bulb replacement.

NEW! LED SIGNALMASTER MODELS

Reduced amp draw and improved resistance to shock are just two benefits of our new LED SignalMaster models.

LEDs (light emitting diodes) are 100% solid-state lighting sources that are based on microchip technology. This high-tech design makes SignalMaster LED directional lights both extremely efficient and extremely durable. An eight-lamp LED SignalMaster (**SMLED8**) draws 2.6 amps, and the light modules have no filament to break, resulting exceptionally long service life. All LEDs are encapsulated in epoxy as further protection against vibration and shock during rigorous operation.

SIGNALMASTER LEDs PERFORM!

- Rated for more than 100,000 hours of use.
- Extremely low amp draw reduces strain on electrical systems.
- No filament and encapsulated in epoxy – exceptionally resistant to shock and vibration.
- Narrow spectral bandwidth results in truer colors, approaching 100% efficiency in the production of colored light.
- Not “overstuffed!” Too many LEDs add unnecessary cost and introduce characteristics that can actually degrade light output.
- Precision placement of components and precision optics enhance LED SignalMaster performance.
- High reliability means less vehicle downtime and a reduction in maintenance costs to departments.
- Peak rise (from “off” to “on”) up to 1000 times faster than conventional bulb technology. Faster peak rise brings SignalMaster LEDs to full intensity quicker for faster response time.

HALOGEN AND COMBINATION MODELS

Halogen models use 27-watt lamps in combination with optically enhanced lensing. This design maximizes light distribution to critical angles. Combination units add red and blue flashing lights in strobe or halogen at both ends for increased warning capability.

ECONOMY MODELS

Economy versions that include a controller are also available. Models **SM428A** (42") and **SM518A** (51") are eight-lamp SignalMaster systems complete with a simple L-bracket style controllers. These systems have three patterns (left arrow, right arrow, and flashing warn) and a brake/turn or tail light override for added warning when the unit is not in operation. Economy units have a clear anodized finish which keeps these models corrosion resistant and low cost.



CONTROLS

Designed for ease of operation, SignalMaster controls are compact and require no standby current. LEDs on the control emulate the warning pattern currently active on the directional system. Standard and deluxe controls are available for each six- and eight-lamp system, and a standard control is available for the four-lamp system.

STANDARD CONTROLS

Models **SMC1** (eight-lamp units), **SMC14** (four-lamp units), and **SMC16** (six-lamp units) generate four patterns: left arrow, right arrow, center-out, and a flashing warning pattern.

DELUXE CONTROLS

Models **SMC3** (eight-lamp), **SMC5** (eight-lamp), and **SMC56** (six-lamp) can also flash auxiliary lights in combination with the six- and eight-lamp units. Two additional LEDs indicate activation of auxiliary lights.

Model **SMC3** features an auxiliary output terminal to activate a user-supplied relay for additional functions, such as a rotating light. This control also has an auxiliary input terminal that enables activation of the flashing warn pattern from a remote location, such as another switch control.

Models **SMC5** and **SMC56** add two functions to the capabilities of the **SMC3** control. To decrease power consumption, the “Low” mode activates just a single lamp at a time, instead of building the pattern. “Fast” mode increases the speed of the patterns, increasing the urgency of the signal.

MOUNTS

To meet the wide variety of mounting needs, Federal has a wide range of mount kits available for the SignalMaster. Separate mounts for installation on flat surfaces, lightbars and decks, and more may be purchased.

How To Order

1. Specify SignalMaster model.

SMLED4-30	Four-LED module unit with 30' cable
SMLED6	Six-LED module unit with 15' cable
SMLED6-30	Six-LED module unit with 30' cable
SMLED6-2DS1	Eight-lamp unit: (6) amber LED modules and (2) DS1 strobes at each end
SMLED8	Eight-LED module unit with 15' cable
SMLED8-30	Eight-LED module unit with 30' cable
SML4-30	Four-lamp unit with 30' cable
SML4-30-24V	Four-lamp unit with 30' cable, 24-volt
SML6	Six-lamp unit with 15' cable
SML6-24V	Six-lamp unit with 15' cable, 24-volt
SML6-50	Six-lamp unit with 50' cable
SML6-2DS1	Six-lamp unit with (2) DS1 strobes and 15' cable
SML6-2SML1F	Six-lamp unit with (2) flashing SML1s and 15' cable
SML6-2SML1F30	Six-lamp unit with (2) flashing SML1s and 30' cable
SML8	Eight-lamp unit with 15' cable
SML8-24V	24-volt SML8
SML8-30	SML8 with 30' cable
SML8-30-24V	SML8 with 30' cable, 24-volt
SML8-50	SML8 with 50' cable
SM428A	Eight-lamp (42") economy unit with L-bracket control
SM428A-24	24-volt SM428A
SM518A	Eight-lamp (51") economy unit with L-bracket control
SM518A-24	24-volt SM518A

2. Order controller (unless ordering SM428A or SM518A models).

SMC1	Control for SML8
SMC14	Control for (2) SML4-30
SMC16	Control for SML6
SMC3	Deluxe control for SML8 and auxiliary input and output
SMC5	Deluxe control for SML8, includes "Low" and "Fast" modes
SMC5-24	24-volt SMC5 for use with SML8-24V
SMC56	Deluxe control for SML6, includes "Low" and "Fast" modes
SMC56-24	Deluxe control for SML6-24V, includes "Low" and "Fast" modes
SS2000SM-SC	SmartSiren® electronic siren and light controller with SignalMaster control ("SC" version is only SmartSiren that operates LED SignalMasters)

3. Order mount (if necessary).

SML6-A	Assemble to StreetHawk lightbar
SML-BA	Bracket foot adaptor for attaching SML6 or SML8 to vehicle roof
SML-FM	Flat mount kit
SML-LBM	Lightbar mount kit
SML-SM	System mount kit
SML-UM	Universal mount kit
SML-WM	Window mount kit for SML1 and SML2
SCWM	Suction cup mount kit for SML1 and SML2

4. Order optional equipment (if necessary).

SM-EXT	50' extension cable
R2	30-amp relay for use with SMC3



SMC1



SMC5

TECHNICAL SPECIFICATIONS

<i>Model</i>	<i>Volts</i>	<i>Light Source Type</i>	<i>Current Draw (Amps)</i>	<i>Flash Patterns Per Minute</i>	
				<i>Directional</i>	<i>Warning</i>
SML4-30	12.8	LED	1.3 peak	-	-
SML4-30-24V	24.0	LED	2.0 peak	-	-
SML6-30	12.8	LED	2.0 peak	-	-
SML6-2DS1	12.8	LED	4.8 peak*	-	-
SML6-24V	12.8	LED	2.6 peak	-	-
SML6-24V/56-24V	24.0	LED	2.6 peak	-	-
SML8-30	12.8	LED	2.6 peak	-	-
SML8-30-24V	24.0	LED	2.6 peak	-	-
SML8-30/-50	12.8	27W Halogen	8.4 peak	-	-
SML8-24V/-30-24V	24.0	20W Halogen	3.3 peak	-	-
SML6/-50	12.8	27W Halogen	12.6 peak	-	-
SML6-24V	24.0	20W Halogen	5.0 peak	-	-
SML6-2DS1	12.8	27W Halogen	15.4 peak*	-	-
SML6-2SML1F/30	12.8	27W Halogen	14.7 peak	-	-
SML8-30/-50	12.8	27W Halogen	17.0 peak	-	-
SML8-24V/-30-24V	24.0	20W Halogen	8.5 peak	-	-
SMC1/14/16/3	12.8	-	-	35	60
SMC5/56	12.8	-	-	60 fast / 35 standard	95 fast / 60 standard
SMC5-24V/56-24V	24.0	-	-	60 fast / 35 standard	95 fast / 60 standard
SS2000SM-SC	12.0	-	-	60 fast / 35 standard	95 fast / 60 standard

*Amp draw rating includes SPS2P power supply (purchase separately).

DIMENSIONS

<i>Model</i>	<i>Length</i>		<i>Depth</i>		<i>Height</i>		<i>Shipping Weight</i>	
	<i>in.</i>	<i>cm.</i>	<i>in.</i>	<i>cm.</i>	<i>in.</i>	<i>cm.</i>	<i>lbs.</i>	<i>kg.</i>
4-lamp	19.5	49.5	3.3	8.4	2.7	6.9	4.0	1.8
6-lamp	31.4	79.8	3.3	8.4	2.7	6.9	6.0	2.7
SML6-2DS1								
SML6-2DS1								
SML6-2SML1F/30	41.8	106.2	3.3	8.4	2.7	6.9	8.0	3.6
8-lamp	41.8	106.2	3.3	8.4	2.7	6.9	8.0	3.6
All SMC	5.1	13.0	6.1	15.5	1.4	3.6	2.0	0.9



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2645 Federal Signal Drive, University Park, IL 60466-3195
 Tel.: (800) 264-3578 • Fax: (800) 682-8022
 Web: www.fedsig.com

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