

PREMIUM VISION® LIGHTING SYSTEM



The Premium Vision warning system is the most advanced system available.

VISION® THE ULTIMATE LIGHT SOURCE

Federal Signal's Premium Vision® is the most technologically advanced emergency lighting system ever produced! State-of-the-art design and electronic components make this system *truly* superior.

The Premium Vision system consists of seven independent light modules, each containing a microprocessor-controlled light assembly, and a full-featured electronic siren with light control.

SEVEN LIGHT MODULES

Microprocessor-based controls allow each of the Vision system's self-contained modules, or "Smart" pods, to provide a choice of light warning

patterns. Available patterns include: rotation at 95, 120, or 175 flashes per minute (FPM); oscillation to the front, rear, or sides; steady burn; and flashing. Smart pods used as steady burn, alley, or takedown lights have horizontal tracking (jogging) capability and can home to a predetermined position.

Pattern selection can be performed during or after installation. The control head provides the interface for choosing patterns, so no disassembly, special tools, or wiring changes are necessary. Refer to the Vision Software Product Bulletin (#1607) for additional details on lighting patterns.

Parabolic reflectors in the Smart pods are controlled by gearless stepper motors. These motors allow smooth and precise positioning of the light. Additionally, stepper motors are quieter and have a 33% longer life than conventional DC motors.

QUICK REFERENCE

FEATURES

- Patented v-shape design delivers more warning light to all angles.
- Individual light pods permit superior aerodynamic performance and light transmission.
- Reflectors controlled by long-life stepper motors (no gears).
- Capable of synchronized or random rotating warning.
- Includes a 100/200-watt electronic siren.
- Available with built-on halogen or LED SignalMaster™ directional light.
- Simple color customization and dome replacement.

APPLICATION

- Emergency services vehicles

APPROVALS

- All rotating lights meet SAE J845
- All lightbar flashing lights meet SAE J595
- Cal steady burn light meets CAC Class B
- Brake/turn/tail lights meet SAE J186

REPLACEMENT PARTS

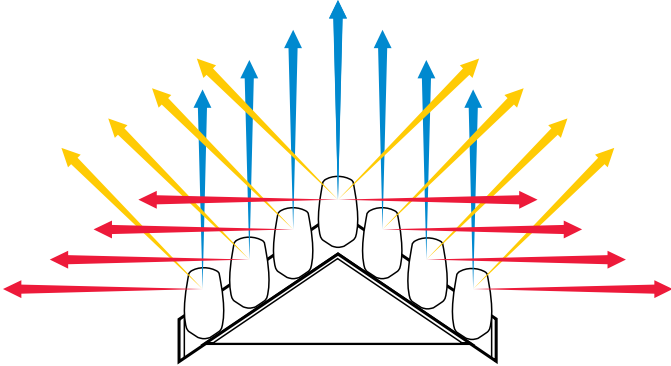
See specifications on pg. 3

RELATED PRODUCTS

- Strobe Systems
Bulletin #4131
- Motorized Mirror/Deck Lights
Bulletin #4140
- Viper™ Interior Lights
Bulletin #4150
- DynaMax™ Speaker
Bulletin #6102

PATENTED V-SHAPE

An important element of emergency response is adequate warning light at intersections. The unique shape of the Vision lighting system is designed specifically for maximum light warning at the critical 45° and 90° angles found at intersections.



With the warning lights offset, light from multiple sources is visible at more angles. This means that more light and more activity is visible to motorists and passers-by. Specially designed domes eliminate angles found in conventional lightbars and improve light transmission (brightness) for added safety.

CONTROL HEAD

All warning functions and programmable features of the Premium Vision system are at your fingertips with the included control head. The control's raised, rubberized pushbuttons provide "sensory feedback" when an option is selected. When a button is pushed, a click is felt, a beep is heard, and the V-shaped LED display simulates light activation. The control head also has a four-position slide-switch for quick command of warning functions.



The Premium Vision control head is also a full-featured siren controller. Six siren tones, horn ring transfer, radio rebroadcast, and public address are all available. The horn ring feature is programmable through the control head and will activate a light pattern and/or a siren tone with the vehicle's horn ring.

Keyboard configurations for the control head are user selectable and can vary with specific Premium Vision software. Each keyboard configuration has a different function assigned to each of the control's pushbuttons. Only one keyboard may be selected at a time, and the configuration can be easily changed when required.

Auxiliary relay outputs are available for control of accessory functions, such as headlight flashers, grille lights, or rear deck lights. Four 20-amp relays are supplied with the Premium Vision system.

INSTALLATION

The Premium Vision system can be installed on any vehicle with a 12-volt negative ground electrical system. The interface/relay unit is small enough to be installed in the glove box, under the seat, or in the trunk.

The interface/relay unit connects to the control head with a simple telephone cable, and it connects to the lightbar via a small multi-conductor cable. A mounting bracket is supplied for the control head and for the interface/relay unit, facilitating mounting in a variety of positions.

MAINTENANCE

Modular construction and reliable solid-state electronics minimize downtime in Premium Vision systems. Circuit boards, domes, and lamps are all easily replaceable, and microprocessor technology allows lighting functions to be changed without disassembly.

COLOR CUSTOMIZATION

Modular design means easy color customization. Domes and colored inserts are available in a variety of colors and easy to remove or replace. Two Torx head screws are used to secure the domes in place, and inserts snap into molded tabs and are held in place with the dome.

Specify dome colors (red, blue, amber, clear, green) when ordering your system. For a two-color signal, specify a clear dome and order front and/or rear inserts (purchased separately).

SIGNALMASTER™ DIRECTIONAL LIGHT

For additional warning capability, the SignalMaster™ directional light provides supplemental warning lighting for any hazardous situation. Left arrow, right arrow, and center-out patterns can divert traffic around a dangerous situation, or a warning pattern may be used to advise caution.

SignalMaster units are available in halogen (V7P44SS-SM and V7PSS-SM) or LED (V7P44SS-LED and V7PSS-LED). When choosing a Vision model with a built-on SignalMaster, the included control will operate the directional light.



SPECIFICATIONS

Input Voltage	11–16 VDC
Polarity	Negative ground electrical systems only
Operating Temperature	–30° C to 65° C
Standby Current	3.0 amperes (nominal)
Lamp Power (Vision)	50 watts
Siren Power	100/200 watts
Siren Frequency Range	700–1500 Hz (nominal)
Siren Voltage Output	64 V peak-to-peak
Audio Power (PA mode)	45 watts (average)
Input Impedance	4,000 ohms (nominal)

Operating Current

V7P44SS	30.0 amps
V7PSS	30.0 amps
V7P60SS	40.0 amps

Control Head Dimensions

Height	3.2 in. (8.1 cm)
Width	1.3 in. (3.2 cm)
Length	6.7 in. (17.0 cm)
Weight	0.6 lbs. (0.3 kg)

Interface Unit Dimensions

Height	2.7 in. (6.9 cm)
Width	6.4 in. (16.3 cm)
Length	6.6 in. (16.8 cm)
Weight	4.0 lbs. (1.8 kg)

Vision Dimensions

Height	5.9 in. (14.9 cm)		
Width	28.0 in. (71.1 cm)		
Length (in.)	44.5	48.0	60.0
(cm)	113.0	121.9	152.4
Ave. Weight* (lbs.)	60.0	60.0	65.0
(kg)	27.2	27.2	29.5

*Add 7.0 lbs. (3.3 kg) for units with Signalmaster.

REPLACEMENT PARTS

Domes, Clear	Z8572001A
Domes, Red	Z8572001A-01
Domes, Amber	Z8572001A-02
Domes, Blue	Z8572001A-03
Pod Assembly, Driver Side (no dome)	Z8572101A
Pod Assembly, Center (no dome)	Z8572101A-01

Pod Assembly, Passenger Side (no dome)	Z8572101A-02
Pod Assembly, Passenger Side (no dome)	Z8572101A-03
Lamp (Rotator), 50W Halogen Vertical Filament	Z8107141A

How To ORDER

Premium Vision models include the lighting system, control head with cable, siren/relay control, interface/relay unit, power cable, and choice of mounting feet. For hook-on mount applications, purchase hook kit separately.

1. Specify Premium Vision model.

V7P44SS	44" system with control
V7P44SS-SM	44" system with control and halogen SignalMaster
V7P44SS-LED	44" system with control and LED SignalMaster
V7PSS	48" system with control
V7PSS-SM	48" system with control and halogen SignalMaster
V7PSS-LED	48" system with control and LED SignalMaster
V7P60SS	60" system with control

2. Specify mounting feet.

VMK-SB	Hook-on mount feet (requires hook kit, see #3)
VMPK	Permanent mount kit

3. If hook-on mount feet are ordered, specify hook kit (purchase separately).

HK-ASTR	1990–99 Chevy Astro
HK-CP91	1991–96 Chevy Caprice
HK-CV92	1992–99 Ford Crown Victoria
HK-TAUR96	1996–99 Ford Taurus
HK-FE	1991–99 Ford Explorer
HK-MUST	1994–00 Ford Mustang
HK-FORD	1987–98 Ford Aerostar
HK-LUM95	1995–99 Chevy Lumina
HK-CK	1988–98 Chevy C/K pickup
HK-CAV	1995–99 Chevy Cavalier

4. Specify dome colors for each pod (see Pod Numbering Diagram).

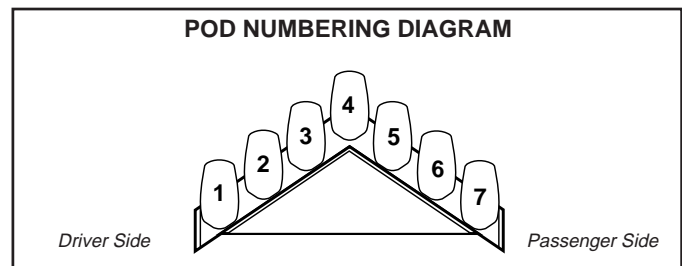
V-R	Red dome
V-B	Blue dome
V-A	Amber dome
V-C	Clear dome
V-G	Green dome
V-CIE	CIE Blue dome

5. If required, order colored inserts. Specify color (red, blue, amber, green).

VFI-color	Front insert
VRI-color	Rear insert

6. Order accessories (if necessary).

MNCT	Noise-cancelling microphone
RMK	Microphone extension kit



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Emergency Products

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