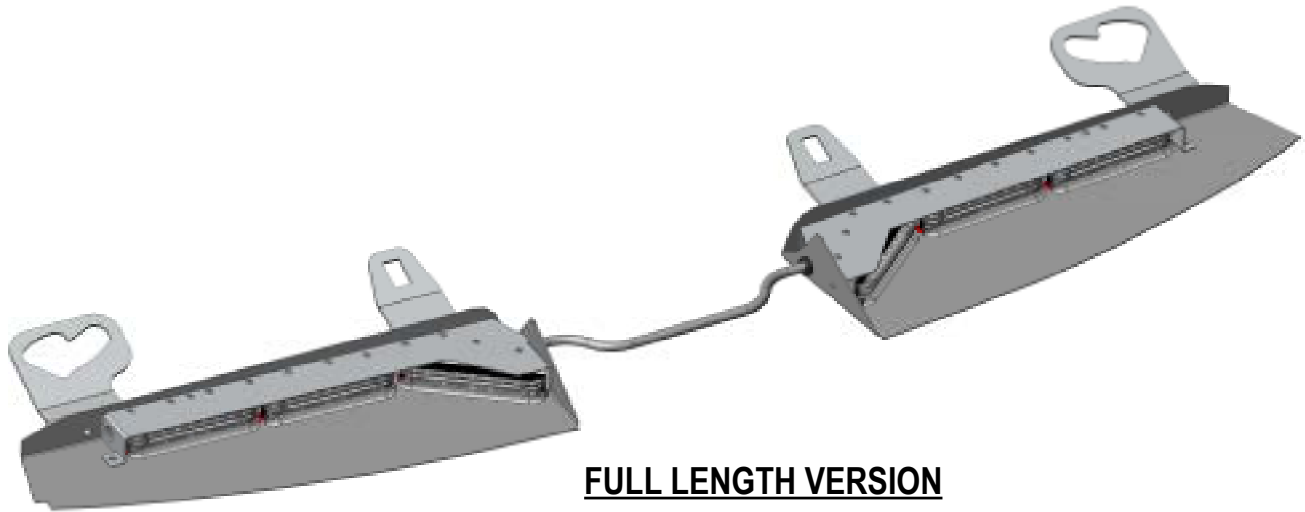
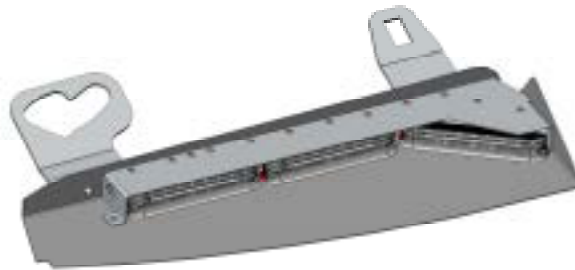


INSTALLATION & OPERATION MANUAL



FULL LENGTH VERSION



PASSENGER SIDE ONLY VERSION



SuperVisor-MC™ - 2015 Chevy Tahoe With Multi Color Torus™ Technology Interior Lighting System

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For future reference, record your product's serial no. here _____

IMPORTANT:

Read all instructions and warnings before installing and using.

INSTALLER: *This manual must be delivered to the end user of this equipment.*

Introduction

The Multi Color SuperVisor-MC™ (hereafter called "Unit") is an interior lighting system that fits in the visor area near the top of the windshield. The SuperVisor-MC has room for up to (6) Torus Multi Color Light Heads.

Product Features

Torus Multi Color Light Head Options: Red/White, Blue/White, Amber/White, Red/Blue, Red/Amber, Blue/Amber

Size Full Unit: 31.85" length X 2.20" tall X 6.34" deep-----Weight: 7.5 lbs

Size Pass Only Unit: 20.35" length X 2.20" tall X 6.34" deep-----Weight: 4.0 lbs



The use of this or any warning device does not ensure that all drivers can or will observe or react to an emergency warning signal. Never take the right-of-way for granted. It is your responsibility to be sure you can proceed safely before entering an intersection, driving against traffic, responding at a high rate of speed, or walking on or around traffic lanes. The effectiveness of this warning device is highly dependent upon correct mounting and wiring. Read and follow the manufacturer's instructions before installing or using this device. The vehicle operator should insure daily that all features of the device operate correctly. In use, the vehicle operator should insure the projection of the warning signal is not blocked by vehicle components (i.e.: open trunks or compartment doors), people, vehicles, or other obstructions. This equipment is intended for use by authorized personnel only. It is the user's responsibility to understand and obey all laws regarding emergency warning devices. The user should check all applicable city, state and federal laws and regulations. Code 3, Inc., assumes no liability for any loss resulting from the use of this warning device. Proper installation is vital to the performance of this warning device and the safe operation of the emergency vehicle. It is important to recognize that the operator of the emergency vehicle is under psychological and physiological stress caused by the emergency situation. The warning device should be installed in such a manner as to: A) Not reduce the output performance of the system, B) Place the controls within convenient reach of the operator so that he can operate the system without losing eye contact with the roadway. Emergency warning devices often require high electrical voltages and/or currents. Properly protect and use caution around live electrical connections. Grounding or shorting of electrical connections can cause high current arcing, which can cause personal injury and/or severe vehicle damage, including fire. Any electronic device may create or be affected by electromagnetic interference. After installation of any electronic device operate all equipment simultaneously to insure that operation is free of interference. Never power emergency warning equipment from the same circuit or share the same grounding circuit with radio communication equipment. All devices should be mounted in accordance with the manufacturer's instructions and securely fastened to vehicle elements of sufficient strength to withstand the forces applied to the device. Driver and/or passenger air bags (SRS) will affect the way equipment should be mounted. This device should be mounted by permanent installation and within the zones specified by the vehicle manufacturer, if any. Any device mounted in the deployment area of an air bag will damage or reduce the effectiveness of the air bag and may damage or dislodge the device. Installer must be sure that this device, its mounting hardware and electrical supply wiring does not interfere with the air bag or the SRS wiring or sensors. Mounting the unit inside the vehicle by a method other than permanent installation is not recommended as unit may become dislodged during swerving, sudden braking or collision. Failure to follow instructions can result in personal injury. **PROPER INSTALLATION COMBINED WITH OPERATOR TRAINING IN THE PROPER USE OF EMERGENCY WARNING DEVICES IS ESSENTIAL TO INSURE THE SAFETY OF EMERGENCY PERSONNEL AND THE PUBLIC.**

Unpacking & Pre-installation

Carefully remove the Unit and place it on a flat surface, taking care not to scratch the lenses or damage the cable coming out of the Housing. Examine the unit for transit damage, broken optics, LED's, etc. Report any damage to the carrier and keep the shipping carton.

The Multi Color SuperVisor-MC light bar is built to operate on 12 volt D.C. negative ground (earth). The Unit will not operate properly if you have an electrical system other than 12 volt D.C. negative ground (earth).

Test the unit before installation. To test, touch the black wire to the ground (earth) and the other wires to +12 volts D.C., in accordance with the instructions attached to the cable and as shown in the Multi Color SuperVisor Internal Wiring Diagram at the top of page 7 of this manual (an automotive battery is preferable for this test). A battery charger may be used, but note that some electronic options may not operate normally when powered by a battery charger. If problems occur at this point, contact the factory.

WARNING!



Utilizing non-factory supplied screws and/or mounting brackets and/or the improper number of screws may result in loss of warranty coverage on the equipment.

Mounting Hardware - All mounting hardware is packed in a small bag inside the main carton. See page 7 for part descriptions and quantities.

Installation & Mounting Instructions - Full SuperVisor or Passenger Side Only SuperVisor

Step 1 - Removing Sun Visors - Driver Side shown - Installation is same for Passenger Side!

Begin the installation by removing the driver and passenger sun visors. Identify each visor with tape or other marking to indicate the driver from the passenger side unit; they are not always identical. First remove the plastic visor pivot bracket cover by prying the cover apart at the thin slit shown in Figure 1 with a thin instrument like a putty knife. There are small keeper tabs which hold the cover to the pivot bracket (Figure 2 shows the locations of the tabs). Pry the slit open and pull the cover down and away from the headliner at the same time. It helps to pull the edge of the cover outward and down in the area of each tab to help release the cover from the pivot bracket. When one of the tabs is released, it is easier to release the cover at the other tab locations (Figure 3 shows the cover removed). Next there are three screws that hold the pivot arm bracket of the sun visor to the headliner. Remove the three screws using a small #15 Torx screwdriver as shown in Figure 4. The screws do not have to be completely removed from the plastic pivot arm bracket to release the pivot arm (see Figure 5). Unplug the visor vanity mirror light wire if the vehicle is so equipped (see Figure 6).



FIGURE 1



FIGURE 2



FIGURE 3



FIGURE 4



FIGURE 5



FIGURE 6

Step 2 - Remove the visor retaining clips

Pry open the small cover on the sun visor retaining clip with a small flat bladed screwdriver to gain access to the sun visor retaining clip screw (see Figure 7). Remove the single #15 Torx screw that holds each clip in place as shown in Figure 8.

Note: On later model vehicles the plastic visor clips are held to the headliner fabric with the stamped sheet metal clips that are located above the headliner fabric (See Figure 9). Carefully pull and angle the plastic clips from side to side until the stamped sheet metal clips release the plastic clips from the headliner. Remove the stamped clips and discard them so they don't interfere with the Unit's Installation or cause rattles after the installation.



FIGURE 7



FIGURE 8



FIGURE 9

Step 3 - Attach the pivot arm brackets

Attach the outer mounting brackets that are supplied noting the difference between passenger and driver side brackets (see Figure 10) **Note: The Driver side is shown (The bracket you have may differ slightly from what is shown).** Rotate the pivot arm on the Driver's side sun visor and verify the orientation of the outer bracket as shown in Figure 11. Re-plug the wire terminal that goes to the visor mirror vanity light, if the vehicle is so equipped, and carefully tuck the wire and terminal back into the elongated slot in the headliner as you position the driver's side pivot arm. **Note: Take extra care that neither the wires nor the connector get pinched.** Attach the three Torx screws as shown in Figure 12. Repeat this operation for the Passenger side pivot arm and outer mounting bracket. Leave the Torx screws slightly loose at this time.



FIGURE 10



FIGURE 11



FIGURE 12

Step 4 Attach brackets to sun visor retaining clips

Place the inner bracket on the retaining clip as shown in Figures 13 and 14. Attach the inner bracket and retaining clip to the headliner with the Torx screw as illustrated in Figure 15. Leave the Torx screws slightly loose at this time.



FIGURE 13



FIGURE 14



FIGURE 15

Step 5 Mounting the SuperVisor MC™

Route the cable either behind the plastic A pillar cover or through the small cut out in the Unit's Outer Panel. Carefully raise one half of the Unit into position behind the mounting brackets. Line up the slotted mounting holes in the inner and outer mounting brackets with the threaded holes in the Unit while holding it up as level as possible against the windshield. Thread the supplied 1/4" - 20 bolts & internal tooth lock washers into the Unit's Outer Panel (see Figures 16 & 17). Tighten the screws to just finger tight. Repeat this step for the other half of the Unit. Tighten the three Torx screws in each of the two outer pivot brackets by tightening each screw a little at a time (see Figure 12 above). **Note: Tightening the three screws each a little at a time helps prevent cracking the OEM plastic pivot bracket.** Tighten the two Torx screws in the center inner mounting brackets (see Figure 15 above). While pushing up firmly on the Unit's Outer Panel at each mounting point to close up the gaps as much as possible between the Unit's outer panel & the vehicle's headliner, tighten each of the 1/4-20 bolts in the mounting brackets (see Figure 18 & 19 page 5). **Note: In some cases you will need to simultaneously pull down on the mounting brackets so that when you release the unit it stays up tight enough to ensure light from the light heads does not get through!** Replace the plastic visor pivot bracket covers (see Figure 20 page 5) & snap the small inner visor clip covers closed. Each half of the Unit will look as shown in Figure 21 on page 5.



FIGURE 16



FIGURE 17



FIGURE 18



FIGURE 19



FIGURE 20



FIGURE 21

Caution: Avoid drilling into the housing of the light bar as this could damage wiring or other internal components.



WARNING:

This unit must be mounted within the interior passenger compartment of the vehicle only. It is not intended for use in exterior applications. All devices should be mounted in accordance with the manufacturer's instructions and securely fastened to vehicle elements of sufficient strength to withstand the forces applied to the device. Driver and/or passenger air bags (SRS) will affect the way equipment should be mounted. This device should be mounted by permanent installation and within the zones specified by the vehicle manufacturer, if any. Any device mounted in the deployment area of an air bag will damage or reduce the effectiveness of the air bag and may damage or dislodge the device. Installer must be sure that this device, its mounting hardware and electrical supply wiring does not interfere with the air bag or the SRS wiring or sensors. Mounting the unit inside the vehicle by a method other than permanent installation is not recommended as unit may become dislodged during swerving, sudden braking or collision. Failure to follow instructions can result in personal injury.

Wiring Instructions

Finish routing the cable as desired. It is advisable to leave an extra loop of cable when installing the light bar to allow for future changes or reinstallations. For wiring of the Multi Color SuperVisor, see pages 6 & 7.

LED Fusing Considerations

NOTE: The Components of the Multi Color SuperVisor System are circuit protected by the Multi Color SuperVisor System CC Board so the individual wires in the System do not require fusing.



WARNING!

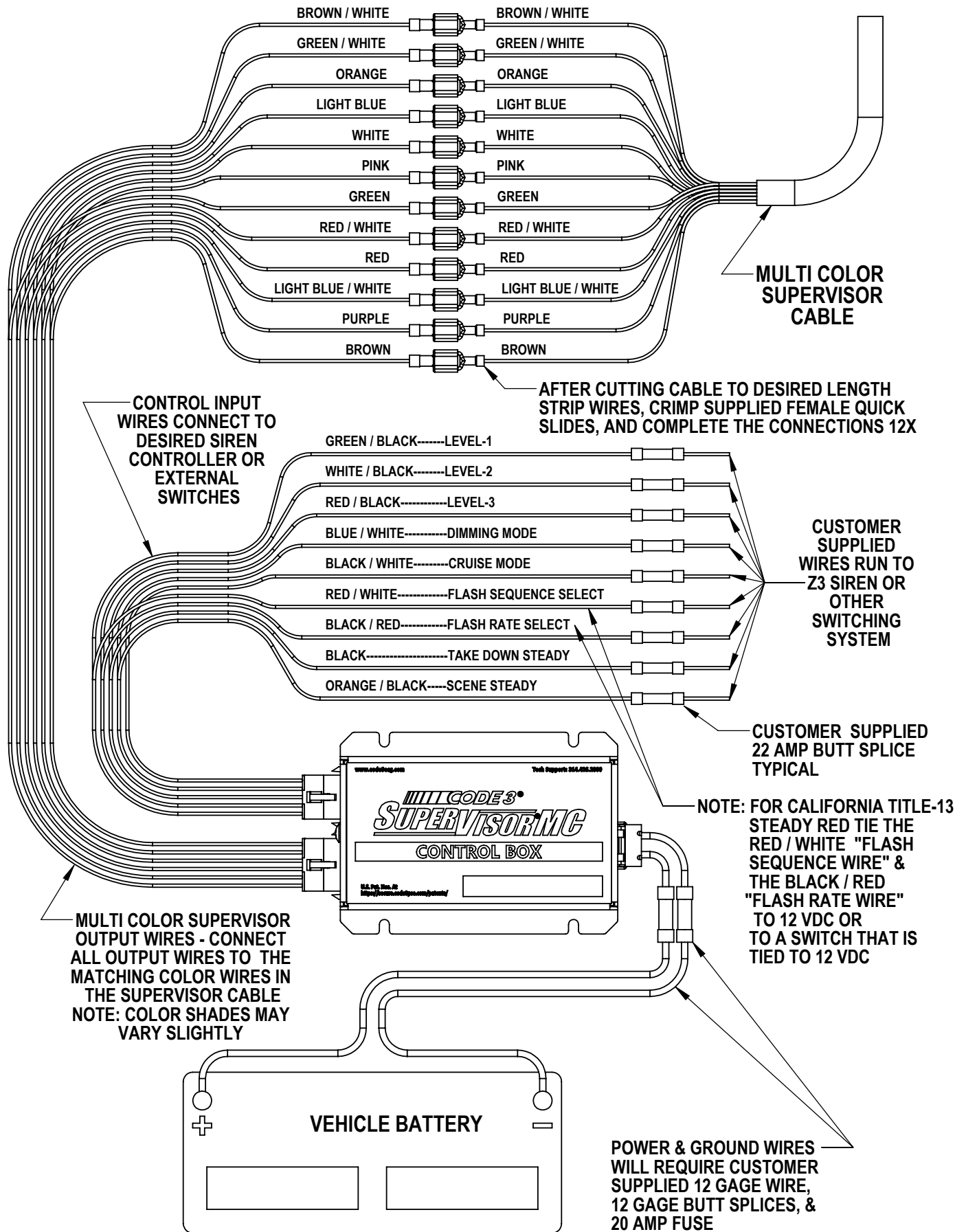
DO NOT APPLY 12 VOLTS DIRECTLY TO THE SUPERVISOR WIRES AFTER IT IS CONNECTED TO THE SUPERVISOR MULTI COLOR CC BOX. THE MULTI COLOR SUPERVISOR CC BOARD OR THE LIGHT HEADS COULD BE DAMAGED BY APPLYING 12 VOLTS TO THE CC OUTPUTS!



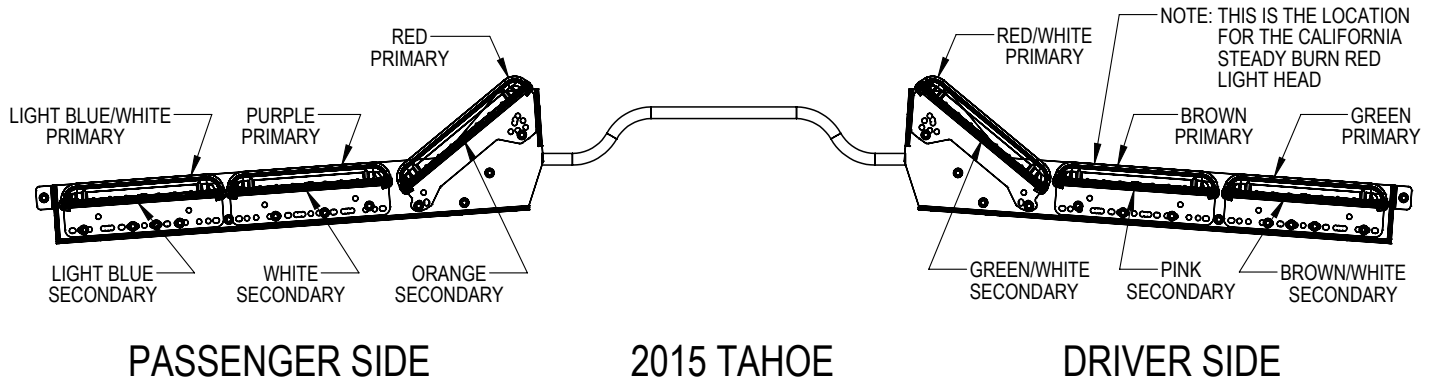
WARNING!


Larger wires and tight connections will provide longer service life for components. For high current wires it is highly recommended that terminal blocks or soldered connections be used with shrink tubing to protect the connections. Do not use insulation displacement connectors (e.g. 3M[®] Scotchlock type connectors). Route wiring using grommets and sealant when passing through compartment walls. Minimize the number of splices to reduce voltage drop. High ambient temperatures (e.g. under hood) will significantly reduce the current carrying capacity of wires, fuses, and circuit breakers. Use "SXL" type wire in engine compartment. All wiring should conform to the minimum wire size and other recommendations of the manufacturer and be protected from moving parts and hot surfaces. Looms, grommets, cable ties, and similar installation hardware should be used to anchor and protect all wiring. Fuses or circuit breakers should be located as close to the power takeoff points as possible and properly sized to protect the wiring and devices. Particular attention should be paid to the location and method of making electrical connections and splices to protect these points from corrosion and loss of conductivity. Ground terminations should only be made to substantial chassis components, preferably directly to the vehicle battery. The user should install a fuse sized to approximately 125% of the maximum Amp capacity in the supply line to protect against short circuits. For example, a 30 Amp fuse should carry a maximum of 24 Amps. **DO NOT USE 1/4" DIAMETER GLASS FUSES AS THEY ARE NOT SUITABLE FOR CONTINUOUS DUTY IN SIZES ABOVE 15 AMPS.** Circuit breakers are very sensitive to high temperatures and will "false trip" when mounted in hot environments or operated close to their capacity.

MULTI COLOR SUPERVISOR & CC WIRING DIAGRAM



MULTI COLOR SUPERVISOR INTERNAL WIRING DIAGRAM



WARNING!  This Product contains high intensity LED devices. To prevent eye damage, DO NOT stare into light beam at close range.

Changing Flash Rates and Lighting Sequences

To change Multi Color SuperVisor Light Head flash rates, momentarily touch the Black Wire with Red Stripe (Flash Rate Control Wire) to 12 VDC Power (+ Positive). By holding the wire to + Positive for (1) second it will advance the flash rate by one, by holding the wire to + Positive for (3) seconds it will move the flash rate back by one. Holding the wire to + Positive for (5) seconds will set the flash rate back to the factory default setting. See Flash Rate Chart Below! Changing the flash Sequence works the same way except you use the Red Wire with White Stripe (Flash Sequence Control Wire). See Sequence Chart below!

Light Head Flash Sequences

LEFT / RIGHT (DEFAULT)
 PRIMARY & SECONDARY
 PRIMARY ONLY - LEVEL - 1 DEFAULT
 SECONDARY ONLY
 PRIMARY W / WHITE POPS - LEVEL - 3 DEFAULT
 PRIMARY W / WHITE RANDOM

EVEN / ODD
 PRIMARY & SECONDARY
 PRIMARY ONLY - LEVEL - 2 DEFAULT
 SECONDARY ONLY
 PRIMARY W / WHITE POPS
 PRIMARY W / WHITE RANDOM

IN / OUT
 PRIMARY & SECONDARY
 PRIMARY ONLY
 SECONDARY ONLY
 PRIMARY W / WHITE POPS
 PRIMARY W / WHITE RANDOM

RANDOM
 PRIMARY & SECONDARY
 PRIMARY ONLY
 SECONDARY ONLY
 PRIMARY W / WHITE POPS
 PRIMARY W / WHITE RANDOM

CYCLE SEQUENCE RANDOM
 PRIMARY & SECONDARY
 PRIMARY ONLY
 SECONDARY ONLY
 PRIMARY W / WHITE POPS
 PRIMARY W / WHITE RANDOM

ALL ON RANDOM
 PRIMARY & SECONDARY

SWEEP LEFT / RIGHT
 PRIMARY & SECONDARY
 PRIMARY ONLY
 SECONDARY ONLY
 PRIMARY W / WHITE POPS
 PRIMARY W / WHITE RANDOM

Light Head Flash Rates

Double Flash-75 - LEVEL - 2 DEFAULT
 Triple Flash-75
 Quad Flash-75
 Quint Flash-75
 Double Flash-150 - LEVEL - 3 DEFAULT
 Triple Flash-150 - LEVEL - 1 DEFAULT
 Quad Flash-150
 Quint Flash-150
 Triple Pop Flash-150
 Quad Pop Flash-150
 Single Flash-375
 Cycle Rates

INSTALLER NOTE:

FLASH RATE + FLASH SEQUENCE = FLASH PATTERN

Cruise is configurable to any symmetric setting.
TD Steady is configurable to any symmetric setting.

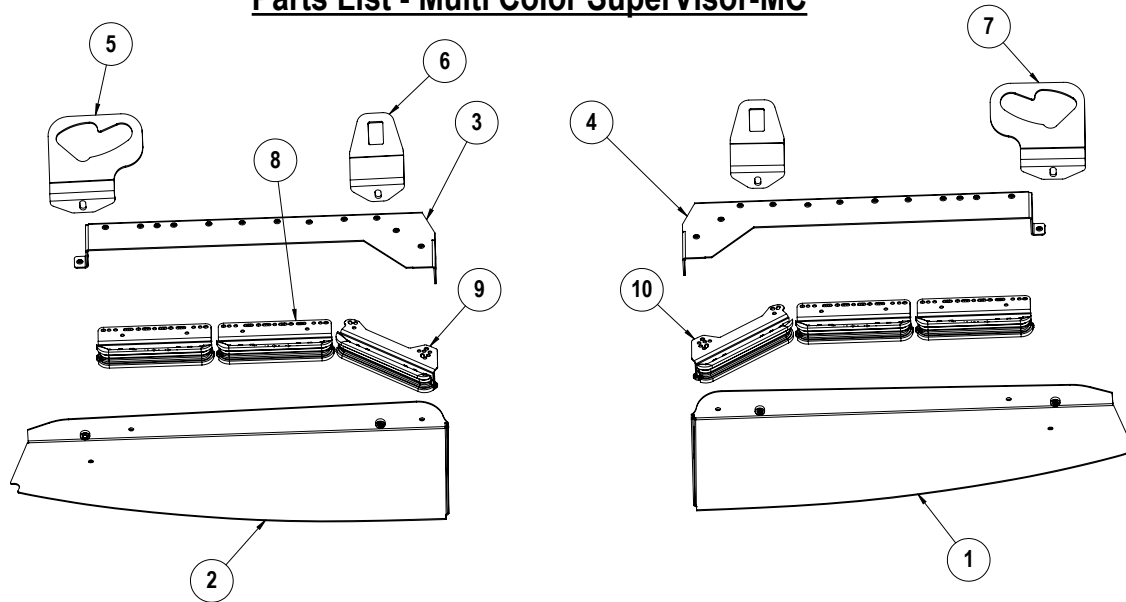
<u>Cruise</u>	<u>TD Steady</u>	<u>Scene Steady</u>
2 Outer Secondary Steady	2 Inner Secondary	All 6 Secondary
2 Outer Secondary Flicker	2 Middle Secondary	
4 Outer Secondary Steady	2 Outer Secondary	
4 Outer Secondary Flicker	4 Inner/Middle Secondary	
6 Outer Secondary Steady	4 Outer/Middle Secondary	
6 Outer Secondary Flicker	4 Inner/Outer Secondary	

Cruise is lowest priority and will not work when any other feature is enabled. Different combinations of lights can be used as Cruise by tapping the Sequence wire to +12V while **only the Cruise** is turned on.

TD Steady will work with or without Level 1, 2, or 3 lights engaged. Different combinations of lights can be used as the TD by tapping the Sequence wire to +12V while only the TD Steady is turned on.

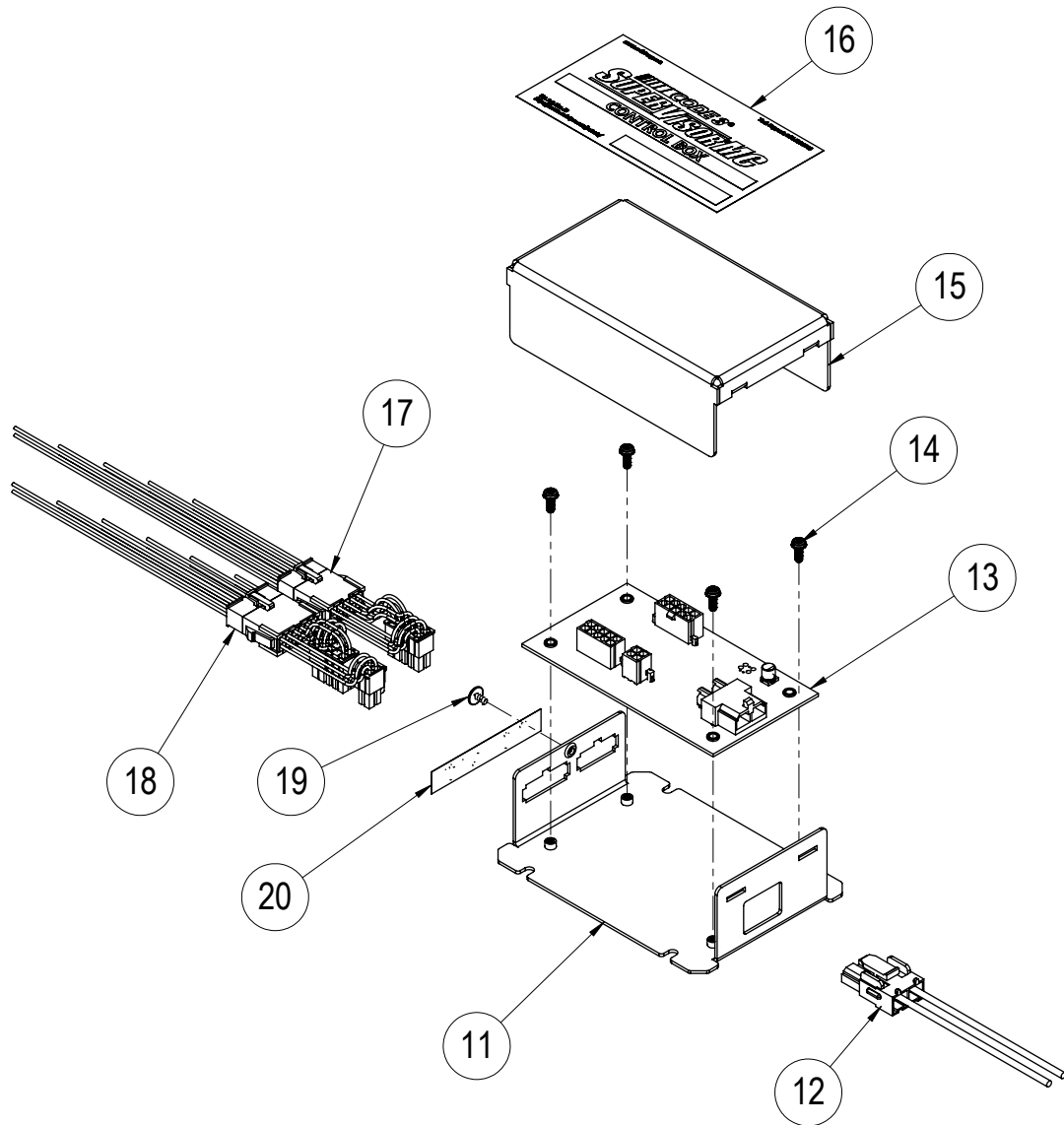
Scene Steady overrides all other functions.

Parts List - Multi Color SuperVisor-MC



<u>Reference Number</u>	<u>Part Description</u>	<u>Part Number</u>	<u>Quantity</u>
1	Outer Panel - Driver Side	T16287	1
2	Outer Panel -Passenger Side	T16286	1
3	Chassis-Passenger Side W Tab Trimmed Off	T16288	1
4	Chassis-Driver Side W Tab Trimmed Off	T16289	1
5	Passenger Side Outer Mounting Bracket	T16291	1
6	Inner Mounting Bracket	T16290	2
7	Driver Side Outer Mounting Bracket	T16292	1
8	Torus Multi Color Forward Facing Lt Head Module	Contact Code 3, Inc for P/N	4
9	Torus Multi Color Passenger Intersection Lt Head Module	Contact Code 3, Inc for P/N	1
10	Torus Multi Color Driver Intersection Lt Head Module	Contact Code 3, Inc for P/N	1

Parts List - CC Box - SuperVisor-MC - Multi Color



<u>Reference Number</u>	<u>Part Description</u>	<u>Part Number</u>	<u>Quantity</u>
11	E-Tray - Multi Color SuperVisor	T17164	1
12	Power Ground Cable--Mass State Police Slick Top System	T56637	1
13	PCB Central Controller-Midrange	T57137	1
14	#6-32 X.375 Phil Rd M/S, Stl, Zinc	T04250	4
15	Cover-CC Housing-Multi Color SuperVisor	T17165	1
16	Label-CC Box-Multi Color SuperVisor	T17168	1
17	Input Harness-Multi Color SuperVisor CC Box	T17166	1
18	Output Harness-Multi Color SuperVisor CC Box	T17167	1
19	#8 X .25 SMS Phillips Truss Head Screw-Black Oxided	T89905	1
20	Label-CC Box-Multi Color SuperVisor-INPUT/OUTPUT	T17168	Part of Item 16 Above

Troubleshooting

All SuperVisor-MCs are thoroughly tested prior to shipment. However, should you encounter a problem during installation or during the life of the product, follow the guide below for information on repair and troubleshooting. Additional information may be obtained from the factory technical help line at 314-996-2800. Follow the guide below for information on repair and troubleshooting.

TROUBLESHOOTING GUIDE

Note: LED modules must be replaced as a module. There are no user serviceable parts.

PROBLEM	QUESTIONS	POSSIBLE CAUSE	SOLUTION
LED module not operating when powered.	N/A	A. Bad power/ground connection. B. Defective module.	A. Fix connection. B. Replace module

Notes

Notes

WARRANTY

Code 3, Inc.'s emergency devices are tested and found to be operational at the time of manufacture. Provided they are installed and operated in accordance with manufacturer's recommendations, Code 3, Inc. Guarantees all parts and components except the lamps to a period of 1 year, LED Light Head modules to a period of 5 years (unless otherwise expressed) from the date of purchase or delivery, whichever is later. Units demonstrated to be defective within the warranty period will be repaired or replaced at the factory service center at no cost.

Use of lamp or other electrical load of a wattage higher than installed or recommended by the factory, or use of inappropriate or inadequate wiring or circuit protection causes this warranty to become void. Failure or destruction of the product resulting from abuse or unusual use and/or accidents is not covered by this warranty. Code 3, Inc. Shall in no way be liable for other damages including consequential, indirect or special damages whether loss is due to negligence or breach of warranty.

CODE 3, INC. MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY INCLUDING, WITHOUT LIMITATION, WARRANTIES OF FITNESS OR MERCHANTABILITY, WITH RESPECT TO THIS PRODUCT.

PRODUCT RETURNS

If a product must be returned for repair or replacement*, please contact our factory to obtain a Return Goods Authorization Number (RGA number) before you ship the product to Code 3, Inc. Write the RGA number clearly on the package near the mailing label. Be sure you use sufficient packing materials to avoid damage to the product being returned while in transit.

*Code 3, Inc. Reserves the right to repair or replace at its discretion. Code 3, Inc. Assumes no responsibility or liability for expenses incurred for the removal and /or reinstallation of products requiring service and/or repair.; Nor for the packaging, handling, and shipping; nor for the handling of products returned to sender after the service has been rendered.

NEED HELP? Call our Technical Assistance HOTLINE - (314) 996-2800

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