Manufacturer Limited Warranty Policy:

Manufacturer warrants that on the date of purchase this product will conform to Manufacturer's specifications for this product (which are avaiable from the Manufacturer upon request). This Limited Warranty extends for Sixty (60) months from the date of purchase.

DAMAGE TO PARTS OR PRODUCTS RESULTING FROM TAMPERING, ACCIDENT, ABUSE, MISUSE, NEGLIGENCE, UNAPPROVED MODIFICATIONS, FIRE OR OTHER HAZARD; IMPROPER INSTALLATION OR OPERATION; OR NOT BEING MAINTAINED IN ACCORDANCE WITH THE MAINTENANCE PROCEDURES SET FORTH IN MANUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS VOIDS THIS LIMITED WARRANTY.

Exclusion of Other Warranties:

MANUFACTURER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. THE IMPLIED WARRANTIES FOR MERCHANTABILITY, QUALITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE ARE HEREBY EXCLUDED AND SHALL NOT APPLY TO THE PRODUCT AND ARE HEREBY DISCLAIMED, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW. ORAL STATEMENTS OR REPRESENTATIONS ABOUT THE PRODUCT DO NOT CONSTITUTE WARRANTIES.

Remedies and Limitation of Liability:

MANUFACTURER'S SOLE LIABILITY AND BUYER'S EXCLUSIVE REMEDY IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR UNDER ANY OTHER THEORY AGAINST MANUFACTURER REGARDING THE PRODUCT AND ITS USE SHALL BE, AT MANUFACTURER'S DISCRETION, THE REPLACEMENT OR REPAIR OF THE PRODUCT, OR THE REFUND OF THE PURCHASE PRICE PAID BY BUYER FOR NON-CONFORMING PRODUCT. IN NO EVENT SHALL MANUFACTURER'S LIABILITY ARISING OUT OF THIS LIMITED WARRANTY OR ANY OTHER CLAIM RELATED TO THE MANUFACTURER'S PRODUCTS EXCEED THE AMOUNT PAID FOR THE PRODUCT BY BUYER AT THE TIME OF THE ORIGINAL PURCHASE. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR LOST PROFITS, THE COST OF SUBSTITUTE EQUIPMENT OR LABOR, PROPERTY DAMAGE, OR OTHER SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES BASED UPON ANY CLAIM FOR BREACH OF CONTRACT, IMPROPER INSTALLATION, NEGLIGENCE, OR OTHER CLAIM, EVEN IF MANUFACTURER OR A MANUFACTURER'S REPRESENTATIVE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. MANUFACTURER SHALL HAVE NO FURTHER OBLIGATION OR LIABILITY WITH RESPECT TO THE PRODUCT OR ITS SALE, OPERATION AND USE, AND MANUFACTURER NEITHER ASSUMES NOR AUTHORIZES THE ASSUMPTION OF ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH SUCH PRODUCT.

This Limited Warranty defines specific legal rights You may have other legal rights which vary from jurisdiction to jurisdiction. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages.

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.

/////CODE 3°

10986 North Warson Road St. Louis, MO 63114 Technical Service: (314) 996-2800 c3_tech_support@code3esg.com www.code3esg.com

A Division of ESG | www.eccogroup.com

920-0502-00 Rev. B Page 12 of 12



Installation and Operation Instructions M180S/M180SMC WARNING LIGHT





WARNING!

Failure to install or use this product according to manufacturers recommendations may result in property damage, serious injury, and/or death to those you are seeking to protect!



Do not install and/or operate this safety product unless you have read and understand the safety information contained in this manual.

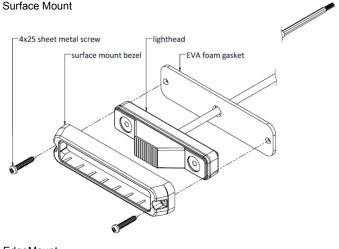
- 1. Proper installation combined with operator training in the use, care, and maintenance of emergency warning devices are essential to ensure the safety of you and those you are seeking to protect.
- 2. Exercise caution when working with live electrical connections.
- 3. This product must be properly grounded. Inadequate grounding and/or shorting of electrical connections can cause high current arcing, which can cause personal injury and/or severe vehicle damage, including fire.
- 4. Proper placement and installation are vital to the performance of this warning device. Install this product so that output performance of the system is maximized and the controls are placed within convenient reach of the operator so that s/he can operate the system without losing eye contact with the roadway.
- 5. Do not install this product or route any wires in the deployment area of an air bag. Equipment mounted or located in an air bag deployment area may reduce the effectiveness of the air bag or become a projectile that could cause serious personal injury or death. Refer to the vehicle owner's manual for the air bag deployment area. It is the responsibility of the user/operator to determine a suitable mounting location ensuring the safety of all passengers inside the vehicle particularly avoiding areas of potential head impact.
- 6. It is the responsibility of the vehicle operator to ensure during use that all features of this product work correctly. In use, the vehicle operator should ensure the projection of the warning signal is not blocked by vehicle components (i.e., open trunks or compartment doors), people, vehicles or other obstructions.
- 7. The use of this or any other warning device does not ensure all drivers can or will observe or react to a 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.
- 8. This equipment is intended for use by authorized personnel only. The user is responsible for understanding and obeying all laws regarding warning signal devices. Therefore, the user should check all applicable city, state, and federal laws and regulations. The manufacturer assumes no liability for any loss resulting from the use of this warning device.

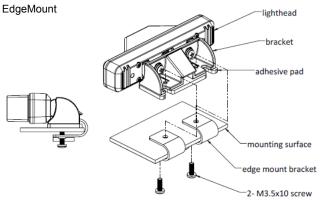
920-0502-00 Rev. B Page 1 of 12

CONTENTS:

1	Light Head
1	Multi-Mount Base: Includes- 2- M4x25 Sheet metal screws 2- Split washers 2- M3.5x10 screws 2- M3 washers
1	Adhesive Pad
1	1- EVA foam gasket

Mounting:





Wire: M180S

RED: Positive(need to add 2A Fuse)

BLACK: Negative BLUE: Pattern Switch

YELLOW: Synchronized Function (Up to 8 units can be Synchronized)

ORANGE: Takedown Light Operation (need to add 2A Fuse) GREEN: Ground Light Operation(need to add 2A Fuse)

Operation Environment:

Ambient Temperature: -30 to 50°C

PHASE OPERATION:

Phase 1 (Ph1) lashes simultaneously with Ph1 Phase 2 (Ph2) lashed simultaneously with Ph2

(Up to 8 units can be Synchronized)

Apply BLUE TO BLACK wire:

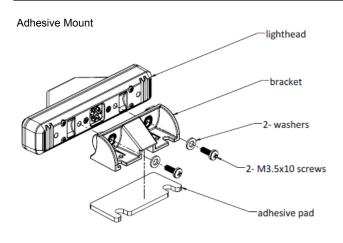
- -Less than 1 sec. for next pattern
- -Between 1-3 sec. for previous pattern
- -Between 3-5 sec. for factory default pattern
- -More than 5 sec. default to pattern #13 (M180S) and pattern #12 (M180SMC)

SPECIFICATIONS:

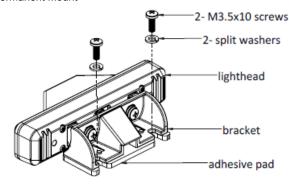
Input Voltage	12-24VDC
Work Current	M180S = 1.8A Max @ DC12V M180SMC = 3.6A Max @ DC12V

Important! This unit is a safety device and it must be connected to its own separate, fused power point to assure its continued operation should any other electrical accessory fail.

Caution: When drilling into any vehicle surface, make sure the area is free from any electrical wires, fuel lines, vehicle upholstery, etc. that could be damaged



Permanent Mount



Wire: M180SMC

RED: Positive, Colors 1 & 3 (need to add 5A Fuse) WHITE:

Positive, Colors 2 & 4 (need to add 5A Fuse)

BLACK: Negative

BLUE: Pattern Select to negative YELLOW: Synchronized Function (Up to 8 units can be Synchronized)

ORANGE: Takedown Light Operation(need to add 2A Fuse) GREEN: Ground Light Operation(need to add 2A Fuse)

	RED	WHITE
PRODUCT	1 & 3 COLORS	2 & 4 COLORS
M180SMC-AW	AMBER	WHITE
M180SMC-BW	BLUE	WHITE
M180SMC-RB	RED	BLUE
M180SMC-RW	RED	WHITE
M180SMC-AG	AMBER	GREEN
M180SMC-BA	AMBER	BLUE
M180SMC-RA	AMBER	RED

TROUBLE SHOOTING

The M180S and M180SMC series have been factory tested and approved. If the functions of device fail, please check the following:

- 1. After connecting with the power supply, be sure that the power source end is joined in correct way. And then, make sure that there is no short-circuited power occurring.
- 2. Ensure Power switch is turned to "ON" position.

920-0502-00 Rev. B Page 11 of 12

							SAE .	J595			CA T13			SAE J	845			ECE R65	
	MODE 1	MODE 2	MODE 1										RED	AMBER	BLUE	WHITE			
	Color 1	Color 2	Color 1 & Color 3										(120)	(110)	(100)	(90)			
PATTERN	&	&	MODE 2	FLASH PATTERN	SYNC.	RED	AMBER	BLUE	WHITE	RED	AMBER	BLUE					RED	AMBER	BLUE
	Color 3	Color 4	Color 2 & Color 4	·															
	(Red	(white line	(Red line & White line																
	line)	,	,	ECER65/SAE		Н													
	31		55	Quad 120FPM Ph1	YES	Class	Class 1	Class	Class 2	N/C	N/C	N/C	Class 2	Class 2	Class 2	Class 2	N/C	N/C	N/C
				Color 1 Synchronous Color 3		1		1		,	,	,					,	,	
				ECER65/SAE		Н													
	32		56	Quad 120FPM Ph2	YES	Class	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 2	Class 2	Class 2	Class 2	N/C	N/C	N/C
				Color 1 Synchronous Color 3		1		1											
				ECER65/SAE		П													
			57	Quad 120FPM Ph1	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				Color 1 Alternately Color 4															
				ECER65/SAE															
			58	Quad 120FPM Ph2	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				Color 1 Alternately Color 4															
				ECER65/SAE															
7		31	59	Quad 120FPM Ph1	YES	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 2	Class 2	Class 2	Class 2	N/C	N/C	N/C
				Color 2 Synchronous Color 4		Ш													
				ECER65/SAE															
		32	60	Quad 120FPM Ph2	YES	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 2	Class 2	Class 2	Class 2	N/C	N/C	N/C
				Color 2 Synchronous Color 4		Щ													
				ECER65/SAE															
	33	33	61	Quad 120FPM Ph1	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				(Color 1 Synchro- nous Color 3) Alter- nately (Color 2 Synchronous Color4)															
				ECER65/SAE															
	34	34	62	Quad 120FPM Ph2	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				(Color 1 Synchro- nous Color 3) Alter- nately (Color 2 Synchronous Color4)															
				ECER65/SAE		П													
	35	35	63	Quad 120FPM	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				(Color1 Alternately Color 2) Alter- nately (Color 3 Alternately Color 4)															
				Modulation		П													
8			64	(Color 1Synchronous color 3) Alter- nately (Color 2 Synchronous Color 4)	NO	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				2 Double, 2 Quad															
9			65	(Color 1 Synchronous Color 3) Alter- nately (Color 2 Synchronous Color 4)	NO	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				4 Single, 2 Triple		П													
10			66	(Color 1 Synchronous Color 3) Alter- nately (Color 2 Synchronous Color 4)	NO	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
			67	1 Double, 1 Triple, 1Quad	N/O		N/C	N/O	N/C	N. /2	N/6	N1 / C	N/0	N/C	N/2	N/0	N1/0	N/6	N. '2
11			67	(Color 1 Synchronous Color 3) Alter- nately (Color 2 Synchronous Color 4)	NO	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
12	36		68	Steady burn- Color 1 &3	NO	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
		36	69	Steady burn- Color 2 & 4	NO	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C

920-0502-00 Rev. B Page 10 of 12

WARNING!

This unit is safety device and it must be connected to its own seperate fused power point to assure its continued operation should any other electrical accessory fail.



WARNING!

When drilling into any vehicle surface, make sure the area is free from any electrical wires, fuel lines, vehicle upholstery, etc. that could be damaged.

M180S Series Flash Pattern Chart:

		riasii Patterii Cii	1		SAE	J595			CA T13			SAE .	J845			ECE R65)
PATTERN	MODE	FLASH PATTERNS	SYNC.	RED	AMBER	BLUE	WHITE	RED	AMBER	BLUE	RED (140)	AMBER (140)	BLUE (140)	WHITE (100)	RED	AMBER	BLUE
	1	Single Flash 75FPM sim. Phase1	yes	Class 1	Class 1	Class 1	Class 1	Class B	Class B	Class B	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C
1	2	Single Flash 75FPM sim. Phase2	yes	Class 1	Class 1	Class 1	Class 1	Class B	Class B	Class B	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C
	3	Single Flash 75FPM Alt.	yes	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	4	Single Flash 120FPM sim. Phase1	yes	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1
2	5	Single Flash 120FPM sim. phase2	yes	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1
	6	Single Flash 120FPM Alt.	yes	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	7	Double Flash 75FPM sim. Phase1	yes	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C
3	8	Double Flash 75FPM sim. phase2	yes	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C
	9	Double Flash 75FPM Alt.	yes	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	10	Double Flash 120FPM sim. Phase1	yes	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1
4	11	Double Flash 120FPM sim. phase2	yes	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1
	12	Double Flash 120FPM Alt.	yes	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
		Quad Flash 75FPM sim. Phase1	yes	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C
5	14	Quad Flash 75FPM sim. Phase2	yes	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C
	15	Quad Flash 75FPM Alt.	yes	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	16	Quad Flash 150FPM sim. Phase1	yes	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 1	Class 2	Class 2	Class 2	N/C	N/C	N/C
6	17	Quad Flash 150FPM sim. Phase2	yes	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 1	Class 2	Class 2	Class 2	N/C	N/C	N/C
	18	Quad Flash 150FPM Alt	yes	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C

920-0502-00 Rev. B Page 3 of 12

					SAE	J595			CA T13			SAE .	J845			ECE R65	,
PATTERN	MODE	FLASH PATTERNS	SYNC.	RED	AMBER	BLUE	WHITE	RED	AMBER	BLUE	RED (140)	AMBER (140)	BLUE (140)	WHITE (100)	RED	AMBER	BLUE
	19	Triple 75FPM sim. Phase1	yes	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C
7	20	Triple 75FPM sim. Phase2	yes	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C
	21	Triple 75FPM Alt.	yes	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	22	Quint Flash 150FPM sim. Phase1	yes	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 1	Class 2	Class 2	Class 2	N/C	N/C	N/C
8	23	Quint Flash 150FPM sim. Phase2	yes	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 1	Class 2	Class 2	Class 2	N/C	N/C	N/C
	24	Quint Flash 150FPM Alt.	yes	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
9	25	Steady - Single	NO	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
10	26	Steady Burn	NO	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
11	27	Modulation	NO	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
12	28	2 Double Flash,2 Triple Alt.	NO	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
13	29	4 Single Flash ,2 Quad Flash Alt.	NO	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C

920-0502-00 Rev. B Page 4 of 12

							SAE	J595			CA T13			SAE J	845			ECE R65	
	MODE 1	MODE 2	MODE 1										RED	AMBER	BLUE	WHITE			
	Color 1	Color 2	Color 1 & Color 3					İ					(120)	(110)	(100)	(90)			
PATTERN	&	&	MODE 2	FLASH PATTERN	SYNC.	RED	AMBER	BLUE	WHITE	RED	AMBER	BLUE					RED	AMBER	BLUE
	Color 3	Color 4	Color 2 & Color 4					İ		İ									
	(Red line)	(white line)	(Red line & White line)																
				SAE/T13															
	26		46	Quad 75FPM Ph1	YES	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 2	Class 2	Class 2	Class 2	N/C	N/C	N/C
	ĺ			Color 1 Synchronous Color 3				Ī		İ									
				SAE/T13															
	27		47	Quad 75FPM Ph2	YES	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 2	Class 2	Class 2	Class 2	N/C	N/C	N/C
				Color 1 Synchronous Color 3															
				SAE/T13															
			48	Quad 75FPM Ph1	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				Color 1 Alternately Color 4															
				SAE/T13															
			49	Quad 75FPM Ph2	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				Color 1 Alternately color 4															
				SAE/T13															
6		26	50	Quad 75FPM Ph1	YES	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C
				Color 2 Synchronous Color 4															
				SAE/T13															
		27	51	Quad 75FPM Ph2	YES	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C
				Color 2 Synchronous Color 4															
				SAE/T13															
	28	28	52-Default	Quad 75FPM Ph1	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				(Color 1 Synchronous Color 3) Alter- nately (Color 2 Synchronous Color 4)															
				SAE/T13															
	29	29	53	Quad 75FPM Ph2	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				(Color 1 Synchronous Color 3) Alter- nately (Color 2 Synchronous Color 4)															
				SAE/T13															
	30	30	54	Quad 75FPM	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				(Color 1 Alternately Color 2) Alter- nately (Color 3 Alternately Color 4)															

920-0502-00 Rev. B Page 9 of 12

							SAE	J595			CA T13			SAE J	845			ECE R65	
PATTERN	MODE 1 Color 1 & Color 3 (Red	MODE 2 Color 2 & Color 4 (white line)	MODE 1 Color 1 & Color 3 MODE 2 Color 2 & Color 4 (Red line & White line)	FLASH PATTERN	SYNC.	RED	AMBER	BLUE	WHITE	RED	AMBER	BLUE	RED (120)	AMBER (110)	BLUE (100)	WHITE (90)	RED	AMBER	BLUE
	line)	write line,	37	SAE/T13 Triple 75FPM Ph1 Color 1 Synchronous Color 3	YES	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 2	Class 2	Class 2	N/C
	22		38	SAE/T13 Triple 75FPM Ph2 Color 1 Synchronous Color 3	YES	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C
				SAE/T13 Triple 75FPM Ph1 Color 1 Alternately Color 4	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				SAE/T13 Triple 75FPM Ph2 Color 1 Alternately Color 4	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
5		21	41	SAE/T13 Triple 75FPM Ph1 Color 2 Synchronous color 4	YES	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C
		22	12	SAE/T13 Triple 75FPM Ph2 Color 2 Synchro- nous Color 4	YES	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 2	N/C	N/C	N/C
	23	23		SAE/T13 Triple 75FPM Ph1 (Color 1 Synchronous Color 3) Alternately (Color 2 Synchronous Color 4)	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	24	24		SAE/T13 Triple 75FPM Ph2 (Color 1 Synchronous Color 3) Alter- nately Color 2 Synchronous Color 4)	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	25	25		SAE/T13 Triple 75FPM (Color 1 Alternately Color 2) Alternately (Color 3Alternately Color 4)	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C

920-0502-00 Rev. B Page 8 of 12

M180SMC Series Flash Pattern Chart:

							SAE	J595			CA T13			SAE J	845			ECE R65	
	MODE 1	MODE 2	MODE 1										RED	AMBER	BLUE	WHITE			
	Color 1	Color 2	Color 1 & Color 3										(120)	(110)	(100)	(90)			
PATTERN	&	&	MODE 2	FLASH PATTERN	SYNC.	RED	AMBER	BLUE	WHITE	RED	AMBER	BLUE					RED	AMBER	BLUE
	Color 3	Color 4	Color 2 & Color 4																
	(Red line)	(white line	(Red line & White line																
				SAE/T13 SAE/T13		П													
	1-Default		1	Single 75FPM Ph1	YES	Class 1	Class 1	Class1	Class1	Class B	Class B	Class B	Class 1	Class 1	Class1	Class1	N/C	N/C	N/C
				Color 1 Synchronous Color 3															
				SAE/T13 SAE/T13															
	2		2	Single 75FPM Ph2	YES	Class 1	Class 1	Class 1	Class 1	Class B	Class B	Class b	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C
				Color 1 Synchronous Color 3		Ш													
				SAE/T13															
			3	Single 75FPM Ph1	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				Color 1 Alternately Color 4		Щ			,									,	
				SAE/T13															
			4	Single 75FPM Ph2	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				Color 1 Alternately Color 4		Щ													<u> </u>
				SAE/T13		Class		Class		Class									
		1-Default	5	Single 75FPM Ph1	YES	Class 1	Class 1	Class 1	Class 1	Class B	Class B	Class B	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C
1				Color 2 Synchronous Color 4		Щ													
				SAE/T13		Class		Class		Class									
		2	6	Single 75FPM Ph2	YES	1	Class 1	1	Class 1	В	Class B	Class B	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C
				Color 2 Synchronous Color 4		Н				_									<u> </u>
				SAE/T13															
	3	3	7	Single 75FPM Ph1 (Color 1 Synchronous Color 3) Alter-	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				nately (Color 2 Synchronous Color 4)		Щ													<u> </u>
				SAE/T13															
	4	4	8	Single 75FPM Ph2	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				(Color 1 Synchronous Color 3) Alter- nately (Color 2 Synchronous Color 4)															
				SAE/T13															
				Single 75FPM	\														
	5	5	9	(Color 1 Alternately Color2) Alter- nately	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				(Color 3 Alternately Color 4)															

920-0502-00 Rev. B Page 5 of 12

							SAE	J595			CA T13			SAE J	845			ECE R65	
	MODE 1	MODE 2	MODE 1										RED	AMBER	BLUE	WHITE			
	Color 1	Color 2	Color 1 & Color 3										(120)	(110)	(100)	(90)			
PATTERN	&	&	MODE 2	FLASH PATTERN	SYNC.	RED	AMBER	BLUE	WHITE	RED	AMBER	BLUE					RED	AMBER	BLUE
	Color 3	Color 4	Color 2 & Color 4																i i
	(Red line)	(white line	(Red line & White line																
				Single 375FPM Ph1															\Box
	6		10	Color 1 Synchronous Color 3	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
	_			Single 375FPM Ph2				/-								/-	/-		
	7		11	Color 1 Synchronous Color 3	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
			12	Single 375FPM Ph1	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
			12	Color 1 Alternately Color 4	11.3	IV/C	N/C	N/C	N/C	N/C	N/C	N/C	IN/C	N/C	N/C	N/C	N/C	N/C	N/C
			13	Single 375FPM Ph2	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				Color 1 Alternately Color 4	120	, c	, c	.,, 0	.,, 0	.,, c	, c	.,, 0	.,, 0	.,, c	.,, c	, c	.,, 0	, c	.,, 。
2		6	14	Single 375FPM Ph1 Color 2 Synchro- nous Color 4	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
		7	15	Single 375FPM Ph2	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
		,	15	Color 2 Synchronous Color 4	153	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				Single 375FPM Ph1															
	8	8	16	(Color 1 Synchronous Color 3) Alter- nately (Color 2 Synchronous Color 4)	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				Single 375FPM Ph2															П
	9	9	17	(Color 1 Synchronous Color 3) Alter- nately (Color 2 Synchronous Color 4)	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				Single 375FPM															
	10	10	18	(Color 1 Alternately Color 2) Alter- nately (Color 3 Alternately Color 4)	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				SAE/T13 SAE/ T13															
	11		19	Double 75FPM Ph1	YES	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C
				Color 1 Synchronous Color 3															1 1
				SAE/T13 SAE/ T13															
	12		20	Double 75FPM Ph2	YES	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C
				Color 1 Synchronous Color 3															
				SAE/T13															
			21	Double 75FPM Ph1	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
3				Color 1 Alternately Color 4															
				SAE/T13															
			22	Double 75FPM Ph2	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				Color 1 Alternately Color 4															\square
				SAE/T13		Class													
		11	23	Double 75FPM Ph1	YES	1	Class 1	Class 1	Class 1	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C
				Color 2 Synchronous Color 4		\vdash													$\vdash \vdash \vdash$
		13		SAE/T13 Double 75FPM Ph2	VEC	Class	Class 4	Class	Class 4	NI/C	N/C	N/C	Class	Class 4	Clare	Class 4	N/C	N/C	N/C
		12	24	Color 2 Synchronous Color 4	YES	1	Class 1	cidss 1	Ciass 1	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C
				COIOL 2 SYNCHOUIOUS COIOF 4															ш

920-0502-00 Rev. B Page 6 of 12

				,			SAE .	1595			CA T13			SAE J	845			ECE R65	
	MODE 1	MODE 2	MODE 1										RED	AMBER	BLUE	WHITE			
	Color 1	Color 2	Color 1 & Color 3										(120)	(110)	(100)	(90)			
PATTERN	&	&	MODE 2	FLASH PATTERN	SYNC	RED	AMBER	BLUE	WHITE	RED	AMBER	BLUE					RED	AMBER	BLUE
.,	Color 3	Color 4	Color 2 & Color 4	. 5 5	51116.		, and a	5202			711110211	5202					,,,,,	7 IIII DEN	5202
	(Red																		
	line)	wnite line,	(Red line & White line)												<u> </u>				
				SAE/T13															
	13	13	25	Double 75FPM Ph1 (Color 1 Synchronous Color 3) Alter-	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				nately (Color 2 Synchronous Color 4)															
				SAE/T13															
3	14	14	26	Double 75FPM Ph2	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				(Color 1 Synchronous Color 3) Alter- nately (Color 2 Synchronous Color 4)															
				SAE/T13															
	15	15	27	Double 75FPM	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				(Color 1 Alternately Color 2) Alter- nately (Color 3 Alternately Color 4)															
				ECER65/SAE		Cl													
	16		28	Double 120FPM Ph1 Color 1 Synchro- nous Color 3	YES	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C
				ECER65-SAE															
	17		29	Double 120FPM Ph2	YES	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1
				Color 1 Synchronous Color 3															
				ECER65/SAE															
			30	Double 120FPM Ph1	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				Color 1 Alternately Color 4															
			31	ECER65/SAE	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				Double 120FPM Ph2 Color 1 Alter- nately Color 4	123	11/0	N/C	14/6	11/0	14/6	14/6	Nyc	14/6	14/6	14,00	14/6	14/0	14/ C	14/6
				ECER65/SAE		O.													
		16	32	Double 120FPM Ph1	YES	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1
4				Color 2 Synchronous Color 4															
				ECER65/SAE		Class													
		17	33	Double 120FPM Ph2	YES	Class 1	Class 1	Class 1	Class 1	N/C	N/C	N/C	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1
				Color 2 Synchronous Color 4															
				ECER65/SAE															
	18	18	34	Double 120FPM Ph1	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				(Color 1 Synchronous Color 3) Alter- nately (Color 2 Synchronous Color 4)							1				<u> </u>				
				ECE/SAE															
	19	19	35	Double 120FPM Ph2	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				(Color 1 Synchronous Color 3) Alter- nately (Color 2 Synchronous Color 4)															
				ECER65/SAE															
	20	20	36	Double 120FPM	YES	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
				(Color 1 Alternately Color 2) Alter- nately (Color 3Alternately Color 4)															

920-0502-00 Rev. B Page 7 of 12