# **TOMAR**

# Operating & Programming **Instruction Manual**



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# Programming Warning Modes Using Lightbar Control Cable

The Blade™ (960L) Lightbar flash patterns may be custom programmed by using the Lightbar Control Cable.

The Blade™ Lightbar has a wide variety of Flash Patterns built into the 960L Flasher memory. Using EEPROM flash memory, the 960L Flasher can be reprogrammed many times. The 960L programs have been designed to allow independent programming of the Front, Rear and Side Lamps. Factory patterns settings and a complete list of available patterns are detailed in Appendix A for the type of Blade™ Lightbar you have ordered.

The following pages detail the method used to change the flash pattern factory setting programming to an alternative available flash pattern using the lightbar control cable.

CAUTION: REMOVE POWER BEFORE WORKING ON THE LIGHTBAR. DO NOT REMOVE OR REPLACE LAMPS WHEN POWER IS APPLIED TO THE LIGHTBAR.

# Programming Warning Modes Using The Lightbar Control Cable

There are two ways to control the Blade™ lightbar. The first method is to control the lightbar by using a progressive slide switch. The second method is to control the lightbar using independent rocker or on/off switches.

#### Entering programming mode.

To activate the lightbar programming mode:

- 1) GROUND the 10 AWG BLACK wire.
- 2) Apply +12 vdc to the 12 AWG RED wire.
- 3) Apply +12 vdc to the GRN input wire.
- 4) Apply +12 vdc to program the desired mode (see chart below)

NOTE: All 7 combinations of the 3 mode wires (ORG, BLU, WHT/BLK) can be programmed uniquely. If two or more wires are to be activated simultaneously, the wire combination must be programmed as well.

Program Progressive Slide Switch	Apply +12vdc to:
Mode 1 - ORG	ORG
Mode 2 - ORG + BLU	ORG + BLU
Mode 3 - ORG + BLU + WHT/BLK	ORG + BLU + WHT/BLK

Program Independent Switch	Apply +12vdc to:	
Switch #1 - ORG	ORG	
Switch #2 - BLU	BLU	
Switch #3 - WHT/BLK	WHT/BLK	

Once Programming Mode has been entered, tap (apply and remove) the appropriate wire to advance through the available flash patterns and rates. Continue until the desired activation is selected. Repeat step 4 for additional mode programming. Remove power from all wires to exit programming mode.

#### **Advance Pattern Selection:**

Tapping the **Red/White** wire advances the **Rear Warning Lamps.** 

Tapping the Brown/White wire advances the Front Warning Lamps.

Tapping the Gray wire advances the Side Warning Lamps.

#### **Advance Flash Rate Selection:**

Tapping the **Red/White + White** wires advances the **Rear Flash Rate.** 

Tapping the Brown/White + White wires advances the Front Flash Rate.

Tapping the **Gray + White** wire advances the **Side Flash Rate**.

#### Advance Optional Features (if ordered):

Tapping the Brown wire toggles the Takedown light between Off and Flashing.

Tapping the White wire toggles the Rearwork light between Off and Flashing.

Tapping the **Yellow** wire toggles the **Alley lights** between **Off** and **Flashing**.

# **Programming Traffic Direction Mode**

#### Entering programming mode.

To activate the lightbar programming mode:

- 1) GROUND the 10 AWG BLACK wire.
- 2) Apply +12 vdc to the 12 AWG RED wire.
- 3) Apply +12 vdc to the GRN input wire.
- 4) Apply +12 vdc to RED/WHT input wire.

NOTE: The Traffic Direction modes are (RED/WHT) Right Arrow, (BRN/WHT) Left Arrow and (RED WHT + BRN/WHT) Center Out. Traffic Direction modes are only available when at least five 960 LMOD LED modules are configured to the rear of the Blade<sup>TM</sup> (960L) lightbar.

Once Programming Mode has been entered, tap (apply and remove) the appropriate wire to advance through the available flash patterns and rates. Continue until the desired activation is selected. Remove power from all wires to exit programming mode.

#### **Advance Pattern Selection**

Tapping the White/Black wire advances the Direction pattern.

Tapping the **Orange** wire advances the **Front** warning lamps pattern.

Tapping the Gray wire advances the Side warning lamps pattern.

Tapping the **Blue** wire advances the **Rear Outboard** warning lamps pattern.

NOTE: During normal operation, the Rear Outboard warning lamps will flash only when the TRAFFIC DIRECTION mode has been programmed for flashing Rear Outboards and a WARNING mode has been programmed for any flashing REAR lamps and both are activated at the same time.

#### **Advance Flash Rate Selection:**

Tapping the White/Black + White wire advances the Direction flash rate.

Tapping the **Orange + White** wire advances the **Front** warning flash rate.

Tapping the **Gray + White** wire advances the **Side** warning flash rate.

Tapping the **Blue + White** wire advances the **Rear Outboard** warning flash rate.

#### Advance Optional Features (if ordered):

Tapping the Brown wire toggles the Takedown light between Off and Flashing.

Tapping the White wire toggles the Rearwork light between Off and Flashing.

Tapping the Yellow wire toggles the Alley lights between Off and Flashing.

NOTE: During normal operation, the flashing REARWORK light will flash only when the TRAFFIC DIRECTION mode has been programmed for flashing REARWORK light and a WARNING mode has been programmed for a flashing REARWORK light and both are activated at the same time.