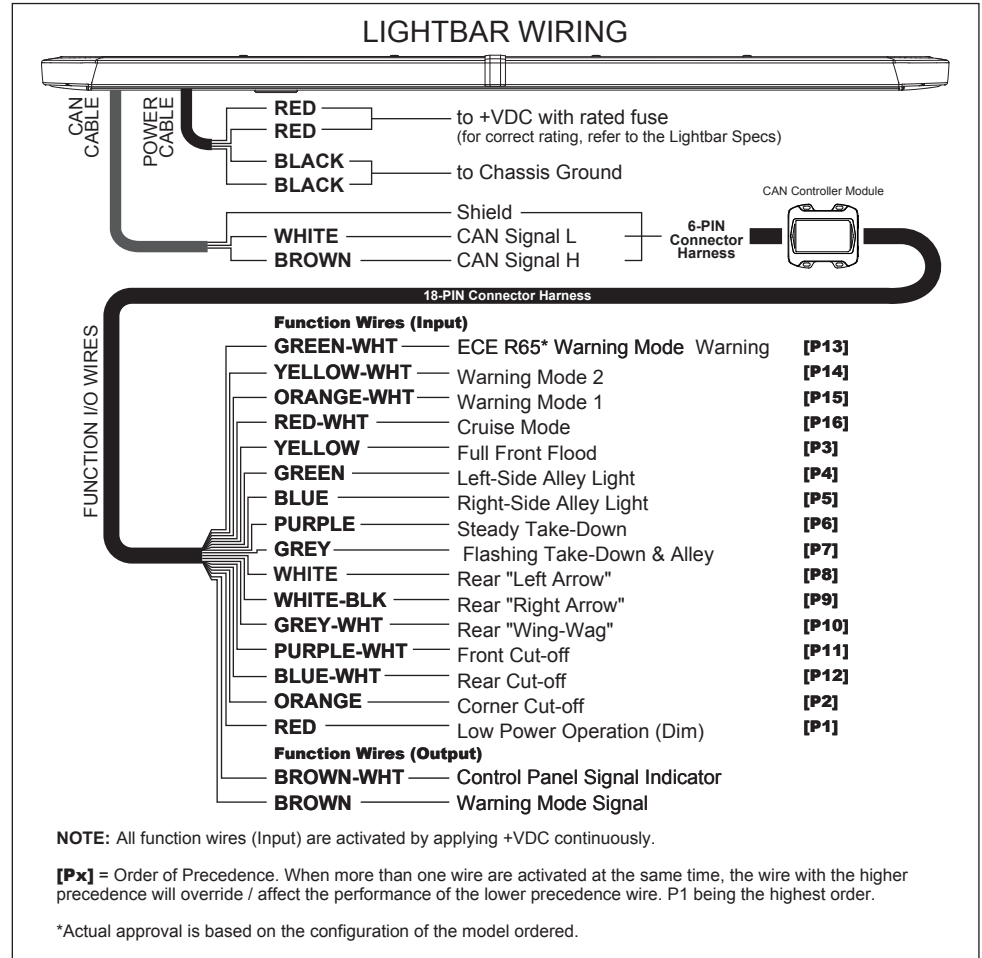


## WIRING & FUNCTIONS (CE - Single / Dual / Tri Colour - ECE R65/R10)

Proper installation of the product requires the installer to have a good understanding of automotive electronics, systems and procedures. Different applications may require different functions. For optimum efficiency, it is highly recommended to determine, configure and test the required functions prior to installation.



### ⚠ WARNING

- DO NOT USE THE POWER WIRE(S) AS THE LIGHTBAR ACTIVATION SWITCH. USE ONLY THE FUNCTION WIRE(S) TO SWITCH AND ACTIVATE.
- ENSURE THE POWER WIRE(S) ARE PROPERLY CONNECTED BEFORE ACTIVATING ANY FUNCTION WIRE(S).
- FAULTY CONNECTIONS MAY CAUSE THE LIGHTBAR TO MALFUNCTION AND / OR RESET TO ITS DEFAULT SETTINGS.
- DO NOT USE A HIGH PRESSURE POWER WASHER TO CLEAN YOUR LIGHTBAR; THIS MAY DAMAGE YOUR LIGHTBAR AND VOID ITS WARRANTY.

## == POWER CABLE ==

1. Route power cables to the vehicle firewall towards the battery, preferably using a factory pass-through. If drilling a hole is required, please ensure there are no factory components in the area to be drilled.
2. Splice 2 **RED** wires to form a single wire then install a fuse (user-supplied) to the end of the **RED** wire, before connecting it to the battery. (for correct fuse rating, refer to the Lightbar Specs.)
3. Splice 2 **BLACK** wires to form a single wire then connect the **BLACK** wire to the vehicle chassis-ground next to the battery.

**NOTE:** Ensure that all wires of the power cable are firmly connected to the power source.

## == CAN CABLE ==

1. Route CAN Cable towards the CAN Controller Module.
2. Connect 2 CAN signal and Shield wires to respective counterparts on the 6-pin connector harness of the CAN Controller Module. (Refer to CAN Controller Module Installation and Operation Manual)

## == FUNCTION WIRES (Input) ==

Connect each individual function wire according to its function.

### **ECE R65 WARNING MODE**

Activate *ECE R65 Warning Mode* by applying **+VDC** to **GREEN-WHT** wire. All corner lighthoods will display Double Flash [2Hz] simultaneously.

### **WARNING MODE 1**

Activate *Warning Mode 1* by applying **+VDC** to **ORANGE-WHT** wire. All warning lighthoods will display Double Flash [2Hz] simultaneously.

### **WARNING MODE 2**

Activate *Warning Mode 2* by applying **+VDC** to **YELLOW-WHT** wire. All warning lighthoods will display Double Flash [2Hz], left half alternating right half.

### **CRUISE MODE**

Activate *Cruise Mode* by applying **+VDC** to **RED-WHT** wire. All warning lighthoods will be activated in low power steady-burn.

### **FULL FRONT FLOOD**

Activate *Full Front Flood* by applying **+VDC** to the **YELLOW** wire. All Front, Take-Down and Alley Lights will display in High Power steady-burn.

**Note:** If the lightbar is equipped with Dual or Tri Colour warning lighthouse, Colour 2 or Colour 3 will be displayed respectively.

### **TAKE-DOWN LIGHT**

Activate steady-burn *Take-Down Light* by applying **+VDC** to **PURPLE** wire.

When *Take-Down Light* is activate with *Flashing Take-Down & Alley Light*, Take-Down Light(s) will steady-burn while Alley Light(s) flash continuously.

### **ALLEY LIGHT**

Activate steady-burn *Alley Light* by applying **+VDC** to

- **GREEN** wire for *Left-Side Alley Light*.
- **BLUE** wire for *Right-Side Alley Light*.

When *Alley Light* is activate with *Flashing Take-Down & Alley Light*, Alley Light(s) will steady-burn while Take-Down Light(s) flash continuously.

### **FLASHING TAKE-DOWN LIGHT & ALLEY LIGHT**

Activate *Flashing Take-Down & Alley Light* (Left alternating Right) by applying **+VDC** to **GREY** wire.

## **TRAFFIC ARROW**

Activate rear *Traffic Arrow* function by applying **+VDC** to:

- **WHITE** wire for *Left Arrow*.
- **WHITE-BLK** wire for *Right Arrow*.
- Above 2 wires together for *Centre-Out Arrow*.

**Note:** If the lightbar is equipped with Dual or Tri Colour warning lighthouse, Colour 2 or Colour 3 will be displayed respectively.

## **REAR WIG-WAG**

Activate *Rear Wig-Wag* by applying **+VDC** to **GREY-WHT** wire. Rear lighthoods will display Single Flash [2Hz], alternating side-by-side.

**Note:** If the lightbar is equipped with Dual or Tri Colour warning lighthouse, Colour 2 or Colour 3 will be displayed respectively.

## **WARNING CUT-OFF**

Deactivate warning lighthoods in each respective area by applying

- **+VDC** to **PURPLE-WHT** wire for *Front Cut-off*.
- **+VDC** to **BLUE-WHT** wire for *Rear Cut-off*.
- **+VDC** to **ORANGE** wire for *Corner Cut-off*.

**Note:** *Warning Cut-off* does not affect *Take-Down Light*, *Alley Light* and *Traffic Arrow* function.

## **LOW POWER OPERATION / DIM FUNCTION**

Activate *Low Power Operation* by continuously applying **+VDC** to **RED** wire.

## == FUNCTION WIRES (Output) ==

Connect each individual function wires according to its function.

### **CONTROL PANEL SIGNAL INDICATOR (REAR LIGHTHEAD)**

Connect **BROWN-WHT** wire to the display signal input of a compatible Control Panel to display current rear lighthouse activity.

### **WARNING MODE SIGNAL**

Connect **BROWN** wire to an apparatus that is needed to be turned ON with Warning Modes (e.g. Unlocking Siren Interlock); a 250mA signal is output whenever **GREEN-WHT**, **YELLOW-WHT** and/or **ORANGE-WHT** wire is activated.

## == AUTO-DIMMING LIGHT SENSOR ==

If the lightbar is equipped with an Auto-Dimming Light Sensor, *Low Power Operation* will automatically activate when the ambient brightness is below the set-value (e.g. night time) and deactivate once prior condition is removed. The Auto-Dimming Light Sensor takes precedence over all other function wires.

## == PC PROGRAMMING ==

All function wires may be customized and re-programmed to user's preference for

- Light Sensor dimming values,
- Lighthouse flash delay,
- Lighthouse flash groups / phases,
- Lighthouse flash patterns,
- Lighthouse colours,
- Low power %,
- Traffic arrow patterns,
- Output signal,
- Wire precedence (priority),
- and etc.

For more information about PC programming and Software, please refer to Software Manual or contact your sales representative.