



Installation and Operation Instructions

ECCO Connect Kit

EC103

IMPORTANT! Read all instructions before installing and using. Installer: This manual must be delivered to the end user.



WARNING!

Failure to install or use this product according to manufacturer's 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 understood the safety information contained in this manual.

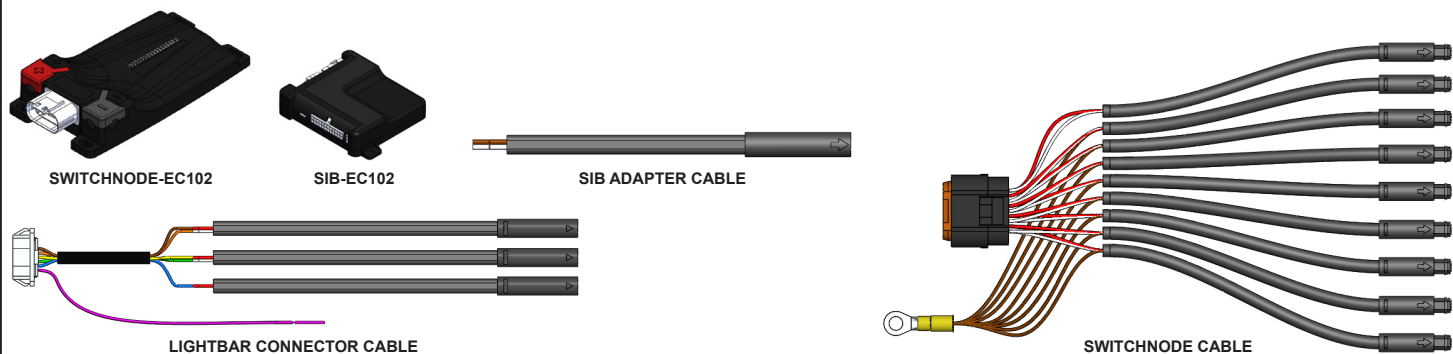
1. Proper installation combined with operator training in the use, care, and maintenance of emergency warning devices are essential to ensure the safety of emergency personnel and the public.
2. Emergency warning devices often require high electrical voltages and/or currents. Exercise caution when working 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 is 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 they 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 daily 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 an emergency warning signal. Never take the right-of-way for granted. It is the vehicle operator's responsibility to be sure they can proceed safely before entering an intersection, drive against traffic, respond at a high rate of speed, or walk 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 emergency warning 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.

Specifications

Input Voltage:	12VDC
Input Current:	Varies based on hardware selected
Temp. Range:	-40°C to 65°C -40°F to 149°F

Kit Contents

Core Products



Optional Products



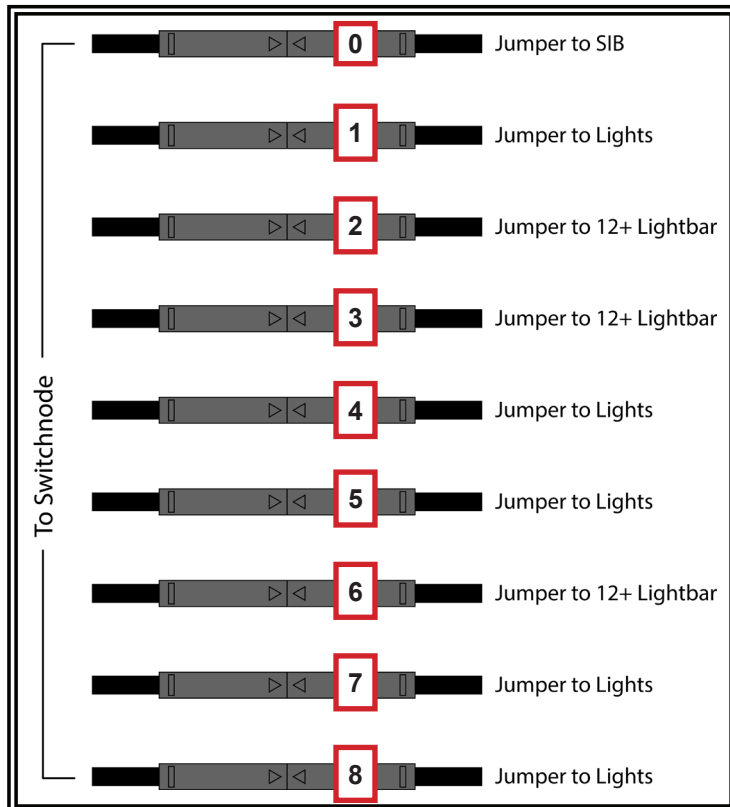
This kit is designed to integrate one 12+ Pro lightbar (standard wiring option) and up to five different directional lights within the same ECCO CONNECT system. The flash patterns come pre-programmed in the SIB. Use the instructions below to install this system. If you run into any questions, please reach out to our Tech Support team. We'll be happy to assist.

Installation and Mounting

1. Install the SIB, SWITCHNODE, and (if ordered) EZ0000 controller inside the cab on a flat surface that is safe from moisture. Follow provided instructions for mounting each product.
2. Mount the exterior lighting directionals in the desired locations of the vehicle. Note: Drill a 1" hole for the wire exit of the directional.
3. Mount the 12+ Pro lightbar per in the install instructions included with the lightbar. Route the control cable back to the Switchnode. The control cable is included with lightbar and comes in three different lengths (15', 23', 48'). Program the 12+ flash patterns using the "Pattern Select" wire (purple wire). Reference the install instructions included with the 12+ for details. Note: The 12+ flash patterns run independent from the rest of the system and will not be in sync.

Wiring Instructions

1. Use 8 AWG Ring Terminal and 8 AWG wire connect the Switchnode positive terminal to +12V.
2. Use 10-12 AWG Ring Terminal and 10 AWG wire connect the Switchnode negative terminal to ground.
3. Connect the EZ0000 power and input connectors into the SIB. Connect the two red wires to +12V and black to ground.
4. Connect Switchnode to Serial Interface Box by plugging the CAN 690-0499-00 and 690-1051-00.
5. Route Cables from the Switchnode to each directional. Connect deutsch connections.
6. Connect the 12+ lightbar to the Switchnode using the lightbar connector.
7. Connect Switchnode Junction Harness according to image below.
8. If you are connecting the SIB input wires to switches, select the desired SIB input wires to use based on the flash pattern table in this install guide. The remaining unused input wires can be trimmed and capped.

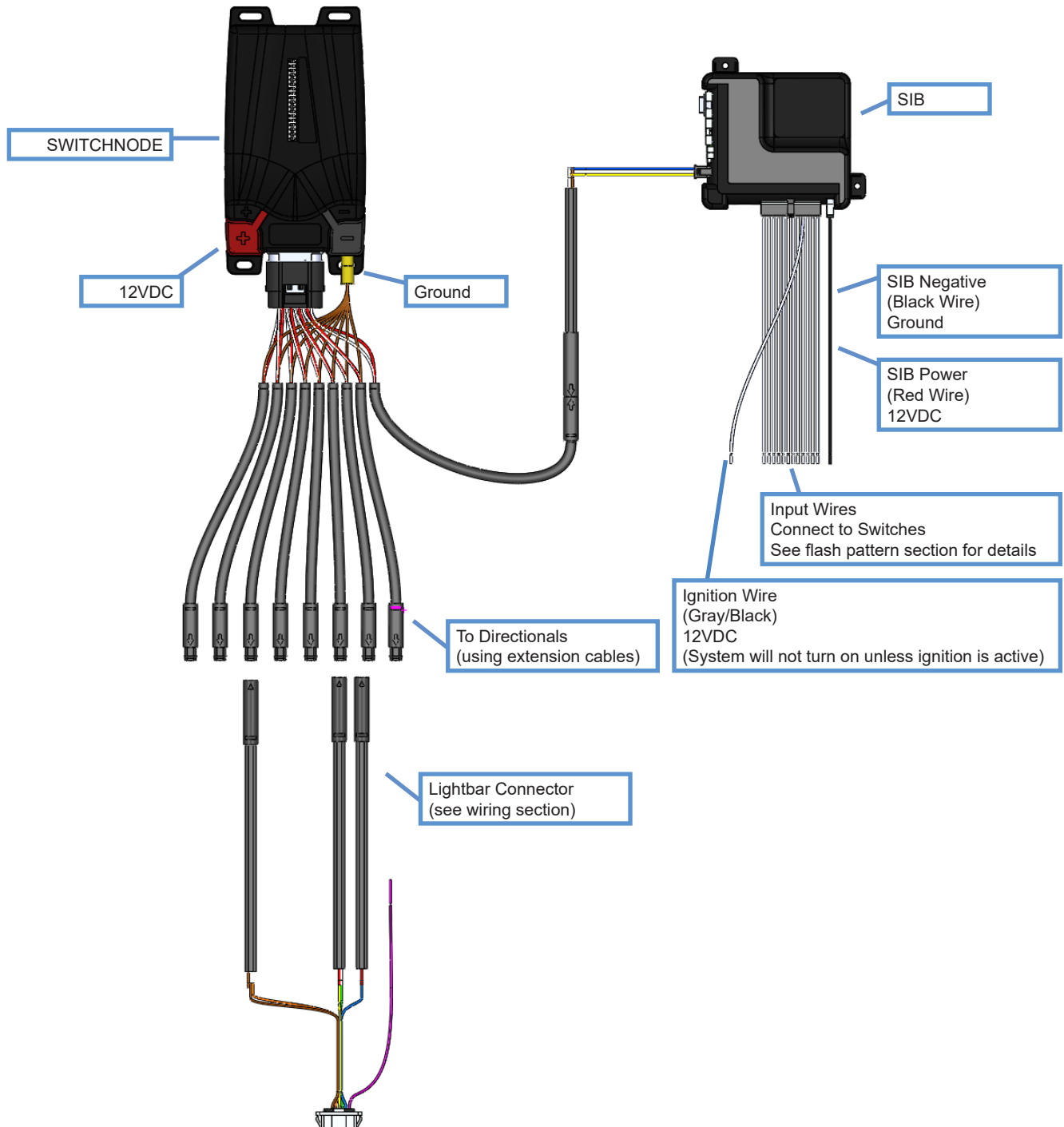


- 0 - CAN harness connected back to SIB
- 1 - Light positioned on front left of vehicle
- 2 - 12+ Lightbar (orange & brown wires)
- 3 - 12+ Lightbar (green and yellow wires)
- 4 - Light positioned on front right of vehicle
- 5 - Light positioned on rear left of vehicle
- 6 - 12+ Lightbar (blue wire)
- 7 - Light positioned on roof or headache rack of vehicle
- 8 - Light positioned on rear left of vehicle

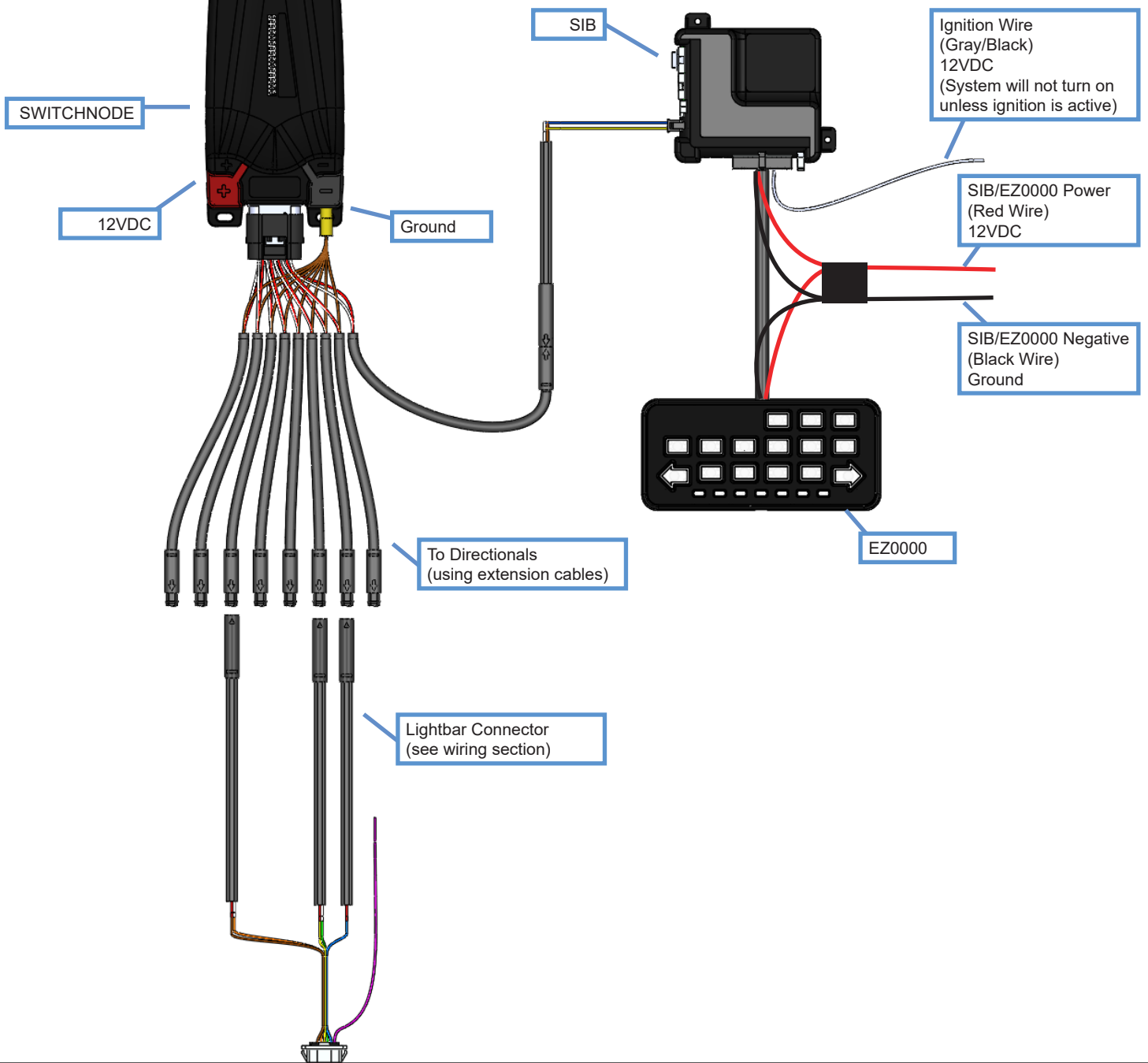
Attach covers to connectors to increase the breaking strain to 55 lbs. of the connector.



SYSTEM CONTROLLED USING SIB INPUT WIRES



SYSTEM CONTROLLED WITH EZ0000 CONTROLLER

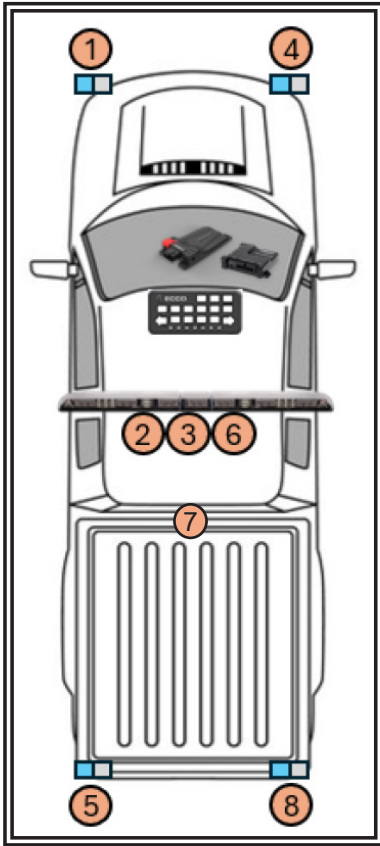


EZ0000 Controller		SIB	Directional Flash Pattern		12+ Lightbar Function	
Button	Activate	Input Wire	Flash Pattern (Single Button Push)	Flash Pattern (Multi-Press Buttons)	Flash Pattern (Single Button Push)	Flash Pattern (Multi-Press Buttons)
1	Short Press	Green/Black	-	-	LEVEL 1	LEVEL 3
2	Short Press	White/Black	-	-	LEVEL 2	
3	Short Press	Red/Black	-	-	WORK LIGHT	
4	Short Press	Brown/White	SINGLE FLASH 75, PRIMARY COLOR	SINGLE FLASH 75, PRIMARY & SECONDARY COLORS		
5	Short Press	Green/White	SINGLE FLASH 75, SECONDARY COLOR			
6	Short Press	Blue/White	DOUBLE FLASH 115 (T13), PRIMARY COLOR			
7	Short Press	Gray/White	DOUBLE FLASH 115 (T13), SECONDARY COLOR	DOUBLE FLASH 115 (T13), PRIMARY & SECONDARY COLORS		
8	Short Press	Violet/White	TRIPLE FLASH 120 (ECE65), PRIMARY COLOR			
9	Short Press	Orange/White	TRIPLE FLASH 120 (ECE65), SECONDARY COLOR	TRIPLE FLASH 120 (ECE65), PRIMARY & SECONDARY COLORS		
10	Short Press	Pink	LEFT SIDE STEADY	-	ALLEY LEFT	
10	Long Press	Brown	LEFT CUT	-		
11	Short Press	Pink/Black	FLICKER CRUISE, PRIMARY COLOR	-		
12	Short Press	Yellow/Black	FLICKER CRUISE, SECONDARY COLOR	-		
12	Long Press	Violet/Black	FRONT CUT	-		
13	Short Press	Green	STEADY BURN, SECONDARY COLOR (WHITE FLOOD)	-		
13	Long Press	Blue/Black	REAR CUT	-		
14	Short Press	Blue	DIM (30%)	-		
15	Short Press	Orange	RIGHT SIDE STEADY	-	ALLEY RIGHT	
(not available)	White		QUAD FLASH 75, PRIMARY & SECONDARY COLORS, FLASH OVER CRUISE	-		
(not available)	Gray/Black		*Ignition – must be powered for system to turn on.			
(not available)	Orange/Black		DIAMOND FLASH, PRIMARY COLOR			
(not available)	Gray		DIAMOND FLASH, SECONDARY COLOR	DIAMOND FLASH, PRIMARY & SECONDARY COLORS		
(not available)	Yellow		QUINT FLASH 150, PRIMARY COLOR			
(not available)	Purple		QUINT FLASH 150, SECONDARY COLOR	TRIPLE FLASH 120 (ECE65), PRIMARY & SECONDARY COLORS		

List of primary/secondary colors by product:

PRODUCT	PRIMARY	SECONDARY
7965A-EC	AMBER	(NONE)
7945A-EC	AMBER	(NONE)
ED3802AB-EC	BLUE	AMBER
ED3802AW-EC	AMBER	WHITE
ED3802AG-EC	AMBER	GREEN
ED3511AB-EC	BLUE	AMBER
ED3511AW-EC	AMBER	WHITE
5590CAC-EC	AMBER	WHITE
5590CAB-EC	BLUE	AMBER
5590CAG-EC	AMBER	GREEN
ED5051AW-EC	AMBER	WHITE
ED5051AB-EC	BLUE	AMBER
ED5051AG-EC	AMBER	GREEN
ED3794AW-EC	AMBER	WHITE
ED3794BA-EC	BLUE	AMBER

Reference the guidance below to connect each product back to the correct Switchnode outputs. The 12+ Pro will use three connectors (#2, 3, 6). Use jumper cables routed from the Switchnode to the directionals placed on the vehicle. Different lengths of jumper cables are available.



Warranty

Manufacturer Limited Warranty and Limitation of Liability:

Manufacturer warrants that on the date of purchase, this product will conform to Manufacturer's specifications for this product (which are available 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.

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