



Installation and Operation Instructions

CZ0000 UNIVERSAL CONTROL HEAD

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

Size: 5.9in x 2.8in x 0.8in

Input Voltage: 12-24VDC

Rated Output Current: 130mA per wire

Temp. Range: -40°C to 65°C
-40°F to 149°F

Installation and Mounting

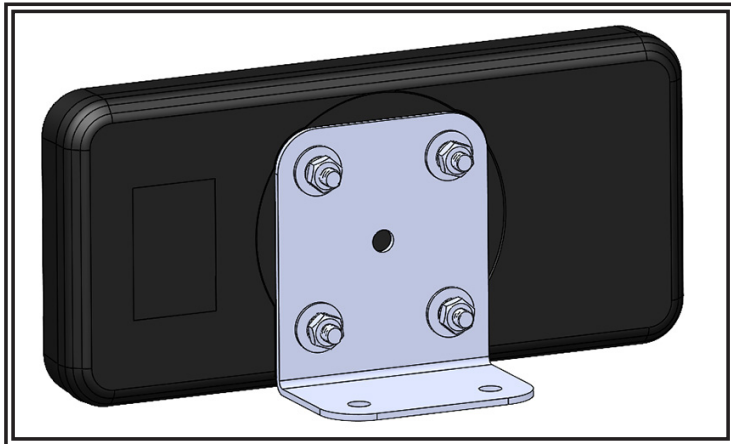
Unpacking & Pre-Installation:

Carefully remove the product and place it on a flat surface. Examine the unit for transit damage and locate all parts. If damage is found or parts are missing, contact the transit company or CODE 3. Do not use damaged or broken parts.

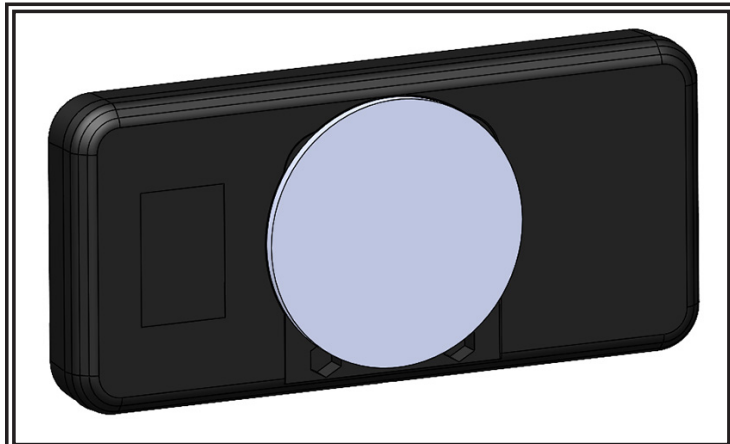
Ensure the product voltage is compatible with the planned installation.

Installation:

1. Apply bracket or Velcro included with the controller to the backside of the controller according to the preferred method of mounting.
2. If using a SIB, plug connector from the controller into matching connector on SIB device.
3. The SIB device will need a configuration from the Matrix software so that the buttons on the controller operate according to the user's intentions.
4. If using discrete wires, use adapter and install as desired.



Bracket Mounting



Velcro Mounting

Wiring Instructions

The following table indicates the activation of the output wires from the control head regarding the button pressed and whether it comes from a short press (<2 seconds) or a long press (>2 seconds). The corresponding button numbers are shown in the figure below.

A long press of button three puts the controller into backlighting mode. After ten seconds, the backlight will turn off and a single button press turns on the button and the backlighting. This mode is intended to reduce glare during nighttime operation.

An additional Red wire is available for an ignition wire for the SIB.

Use included pigtail harness if directly wiring the control head to a device other than the SIB. Remove pigtail connector harness if directly wiring to a SIB.

Each output wire is rated at 130mA each. To power a high power device, use a suitable relay.

Button Functions

Button 10: When short-pressed, the LED indicator lights on the bottom of the control head will turn on indicating Left Arrowstik. When long-pressed, the Left Cut (Brown) wire will be activated/deactivated and the button will blink on and off.

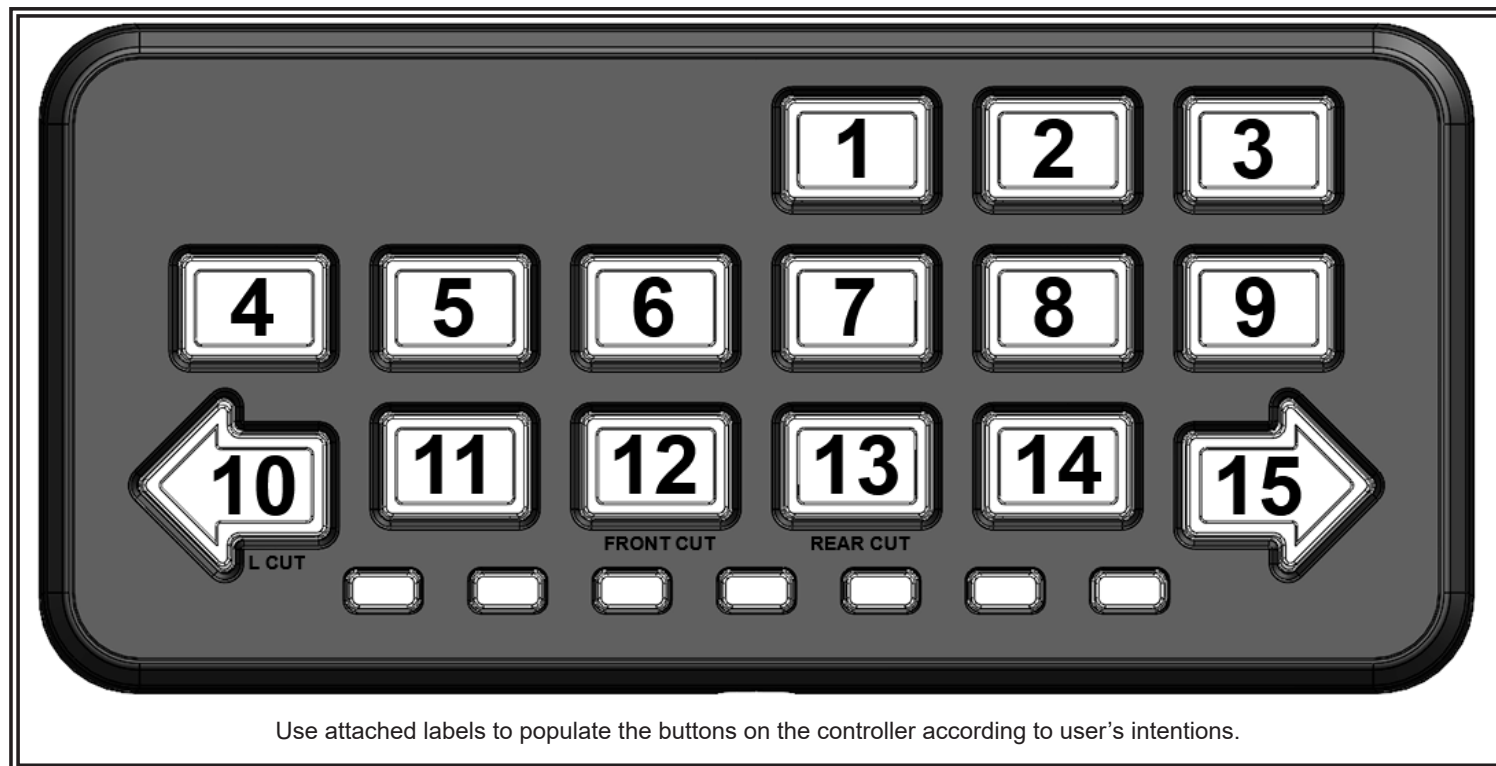
Button 12: When long-pressed, the Front Cut (Violet/Black) wire will be activated/deactivated and the button will blink on and off.

Button 13: When long-pressed, the Rear Cut (Blue/Black) wire will be activated/deactivated and the button will blink on and off.

Button 15: When short-pressed, the LED indicator lights on the bottom of the control head will turn on indicating right arrowstik.

Button 10 & 15: When both are activated together, the LED indicator lights on the bottom of the control head will show a Center Out pattern.

| Control Head | | | SIB |
|--------------|-------------|--------------|--------------|
| Button | Activate | Output Wire | Input Wire |
| 1 | Short Press | Green/Black | Green/Black |
| 2 | Short Press | White/Black | White/Black |
| 3 | Short Press | Red/Black | Red/Black |
| 4 | Short Press | Brown/White | Brown/White |
| 5 | Short Press | Green/White | Green/White |
| 6 | Short Press | Blue/White | Blue/White |
| 7 | Short Press | Gray/White | Gray/White |
| 8 | Short Press | Violet/White | Violet/White |
| 9 | Short Press | Orang/White | Orang/White |
| 10 | Short Press | Pink | Pink |
| 11 | Short Press | Pink/Black | Pink/Black |
| 12 | Short Press | Yellow/Black | Yellow/Black |
| 13 | Short Press | Green | Green |
| 14 | Short Press | Blue | Blue |
| 15 | Short Press | Orange | Orange |
| 10 | Long Press | Brown | Brown |
| 12 | Long Press | Violet/Black | Violet/Black |
| 13 | Long Press | Blue/Black | Blue/Black |



| EZ0000/CZ0000 Controller | | | | 16/27 Series TR | | |
|--------------------------|-------------|--------------|-------------------------------|-----------------|----------------|-------------------------------|
| Button | Activate | Output Wire | Note | Wire | Function | Note |
| 1 | Short Press | Green/Black | | Blue | Level 1 | |
| 2 | Short Press | White/Black | | Orange | Level 2 | |
| 3 | Short Press | Red/Black | | Yellow | Level 3 | |
| 4 | Short Press | Brown/White | | Light Blue | Work Light | |
| 5 | Short Press | Green/White | | (open) | | |
| 6 | Short Press | Blue/White | | (open) | | |
| 7 | Short Press | Gray/White | | (open) | | |
| 8 | Short Press | Violet/White | | Green | Pattern Select | |
| 9 | Short Press | Orang/White | | White | Dim | |
| 10 | Short Press | Pink | | (open) | | |
| 11 | Short Press | Pink/Black | | (open) | | |
| 12 | Short Press | Yellow/Black | | (open) | | |
| 13 | Short Press | Green | | (open) | | |
| 14 | Short Press | Blue | | (open) | | |
| 15 | Short Press | Orange | | (open) | | |
| 10 | Long Press | Brown | DS Cut | (open) | | |
| 12 | Long Press | Violet/Black | Front Cut | (open) | | |
| 13 | Long Press | Blue/Black | Rear Cut | (open) | | |
| n/a | | Red | 12VDC source with inline fuse | Red 10AWG | Power | 12VDC source with inline fuse |
| n/a | | Black | To ground | Black 10AWG | Ground | To ground |

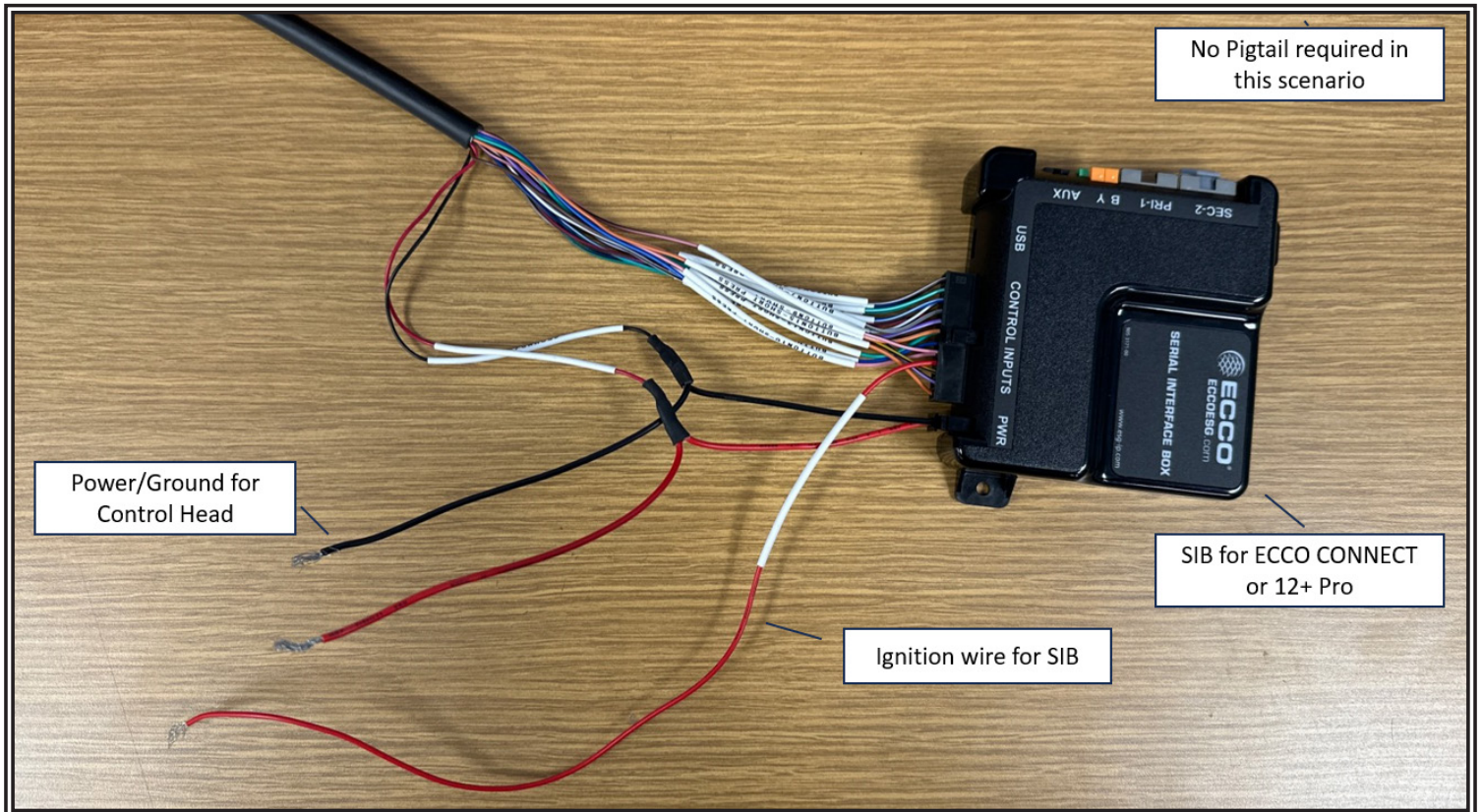
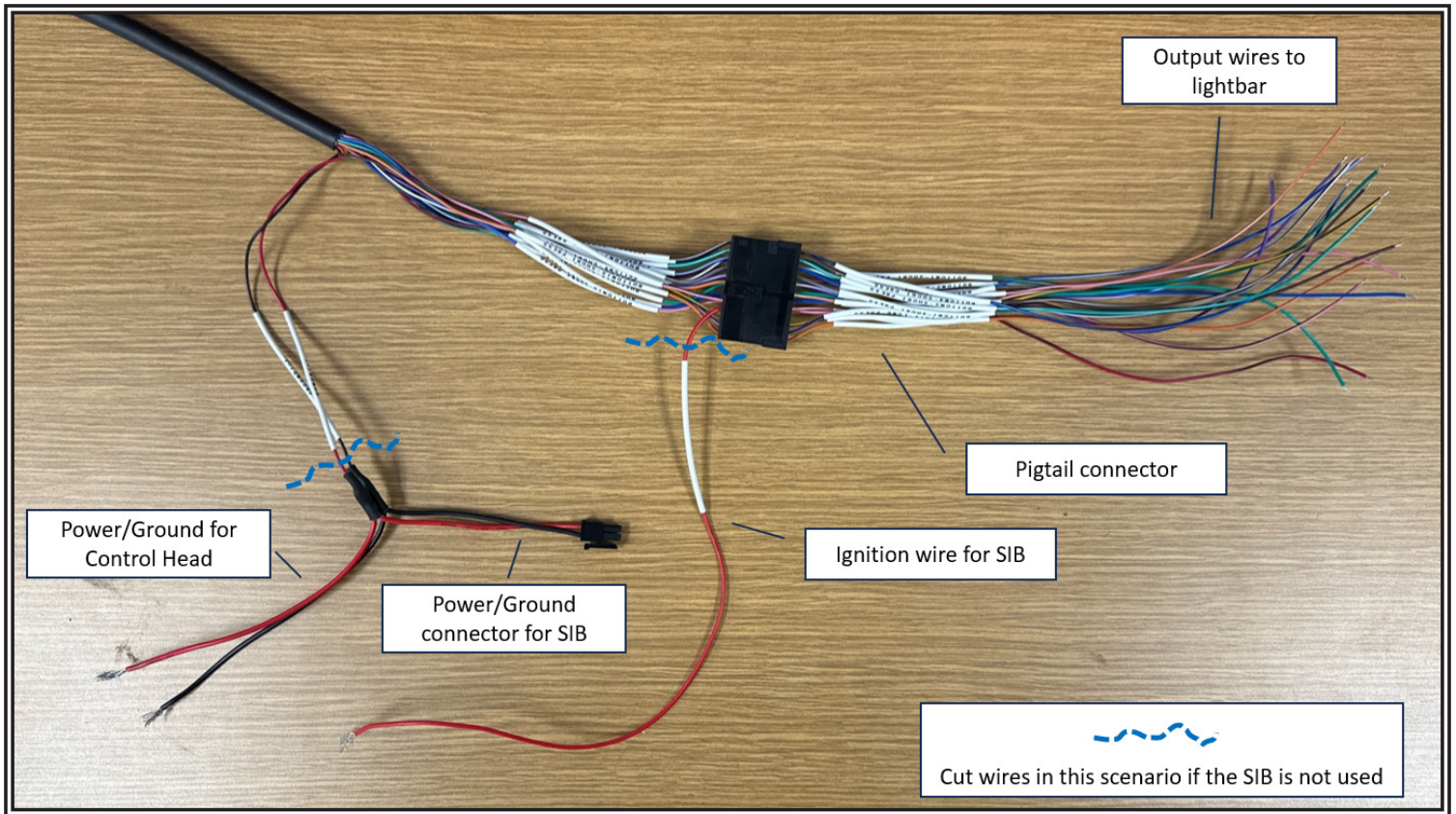
| EZ0000/CZ0000 Controller | | | | 16/27 Series CC | | |
|--------------------------|-------------|--------------|-------------------------------|-----------------|-----------------|-------------------------------|
| Button | Activate | Output Wire | Note | Wire | Function | Note |
| 1 | Short Press | Green/Black | | Green/Black | Level 1 | |
| 2 | Short Press | White/Black | | White/Black | Level 2 | |
| 3 | Short Press | Red/Black | | Red/Black | Level 3 | |
| 4 | Short Press | Brown/White | | Black 22AWG | TD Flash | |
| 5 | Short Press | Green/White | | Orange/Black | Take Down | |
| 6 | Short Press | Blue/White | | Green | Cruise | |
| 7 | Short Press | Gray/White | | (open) | | |
| 8 | Short Press | Violet/White | | (open) | | |
| 9 | Short Press | Orang/White | | Blue | Dim | |
| 10 | Short Press | Pink | | Red 22AWG | Left Arrowstik | |
| 11 | Short Press | Pink/Black | | Black/White | Left Alley | |
| 12 | Short Press | Yellow/Black | | Blue/White | Alley Flash | |
| 13 | Short Press | Green | | Black/Red | Pattern Select | |
| 14 | Short Press | Blue | | Red/White | Right Alley | |
| 15 | Short Press | Orange | | Orange | Right Arrowstik | |
| 10 | Long Press | Brown | DS Cut | White | Driver Side Cut | |
| 12 | Long Press | Violet/Black | Front Cut | Green/White | Front Cut | |
| 13 | Long Press | Blue/Black | Rear Cut | Blue/Black | Rear Cut | |
| n/a | | Red | 12VDC source with inline fuse | Red 10AWG | Power | 12VDC source with inline fuse |
| n/a | | Black | To ground | Black 10AWG | Ground | To ground |

| EZ0000/CZ0000 Controller | | | | 12+ Pro Vantage - Standard Wiring | | |
|--------------------------|-------------|--------------|-------------------------------|-----------------------------------|----------------------|-------------------------------|
| Button | Activate | Output Wire | Note | Wire | Function | Note |
| 1 | Short Press | Green/Black | | Brown | Pattern 1 | |
| 2 | Short Press | White/Black | | Orange | Pattern 2 | |
| 3 | Short Press | Red/Black | | Blue | Worklights/Takedowns | |
| 4 | Short Press | Brown/White | | (open) | | |
| 5 | Short Press | Green/White | | (open) | | |
| 6 | Short Press | Blue/White | | (open) | | |
| 7 | Short Press | Gray/White | | (open) | | |
| 8 | Short Press | Violet/White | | (open) | | |
| 9 | Short Press | Orang/White | | (open) | | |
| 10 | Short Press | Pink | | Yellow | Left Alley | |
| 11 | Short Press | Pink/Black | | (open) | | |
| 12 | Short Press | Yellow/Black | | (open) | | |
| 13 | Short Press | Green | | (open) | | |
| 14 | Short Press | Blue | | Violet | Pattern Select | |
| 15 | Short Press | Orange | | Green | Right Alley | |
| 10 | Long Press | Brown | DS Cut | (open) | | |
| 12 | Long Press | Violet/Black | Front Cut | (open) | | |
| 13 | Long Press | Blue/Black | Rear Cut | (open) | | |
| n/a | | Red | 12VDC source with inline fuse | Red 10AWG | Power | 12VDC source with inline fuse |
| n/a | | Black | To ground | Black 10AWG | Ground | To ground |

*Not compatible with combined power/signal cable or 4-pin cable

| EZ0000/CZ0000 Controller | | | | 12+ Pro Vantage - EZMATSIB/CZMATSIB (Serial Interface Box) | | |
|--------------------------|-------------|--------------|-------------------------------|--|-----------------|-------------------------------|
| Button | Activate | Output Wire | Note | Wire | Function | Note |
| 1 | Short Press | Green/Black | | Green/Black | Level 1 | |
| 2 | Short Press | White/Black | | White/Black | Level 2 | |
| 3 | Short Press | Red/Black | | Red/Black | Level 3 | |
| 4 | Short Press | Brown/White | | Brown/White | (open) | |
| 5 | Short Press | Green/White | | Green/White | (open) | |
| 6 | Short Press | Blue/White | | Blue/White | Pattern Select | |
| 7 | Short Press | Gray/White | | Gray/White | (open) | |
| 8 | Short Press | Violet/White | | Violet/White | (open) | |
| 9 | Short Press | Orang/White | | Orang/White | (open) | |
| 10 | Short Press | Pink | | Pink | Arrowstik Left | |
| 11 | Short Press | Pink/Black | | Pink/Black | (open) | |
| 12 | Short Press | Yellow/Black | | Yellow/Black | (open) | |
| 13 | Short Press | Green | | Green | Cruise | |
| 14 | Short Press | Blue | | Blue | Dim | |
| 15 | Short Press | Orange | | Orange | Arrowstik Right | |
| 10 | Long Press | Brown | DS Cut | Brown | DS Cut | |
| 12 | Long Press | Violet/Black | Front Cut | Violet/Black | Front Cut | |
| 13 | Long Press | Blue/Black | Rear Cut | Blue/Black | Rear Cut | |
| n/a | | Red | 12VDC source with inline fuse | Red 10AWG | Power | 12VDC source with inline fuse |
| n/a | | Black | To ground | Black 10AWG | Ground | To ground |

*Not compatible with combined power/signal cable or 4-pin cable



Troubleshooting

| Problem | Possible Cause | Solution |
|-------------------|---------------------------------|--|
| Does not function | Poor power or ground connection | Check power and ground connection to ensure power is reaching the controller |

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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