



Bluetooth

## INSTALLATION GUIDE

# TRAFFIC SIGNAL BARRIER

V 1.23



### IMPORTANT

Before proceeding with the system installation,  
read all instructions and warnings.

## TABLE OF CONTENTS

Warning	1
General Description	1
Parts List	2
Technical Specifications	2
How It Works	3
Maintenance	5
Caution	6
Wiring Diagram	7
Power Supply Wiring Diagram Options	8
Warranty	9

## WARNING

This document provides all the necessary information for the proper and safe installation of your **Traffic Signal Barrier**.

Before proceeding with the installation or configuration of the **Traffic Signal Barrier**, the installation technician must first have read and understood the instructions in this guide.

This document contains important information to prevent the risk of serious injury to both installation technicians and users.

## GENERAL DESCRIPTION

Zone Technologies' **traffic signal barrier system**, designed and manufactured in Quebec, allows permanent or temporary installation on all North American-type pick-ups and meets the minimum standards of TOME V of the MTQ. Managing traffic on Quebec construction sites therefore becomes easier and safer.

The opening and closing of a traffic lane is done with a wireless Bluetooth controller that is weatherproof (IP53) and rechargeable via USB-C cable. The controller's 24-hour battery life and 30m range allow for safe usage. In the event of a defect or discharge of the controller's lithium battery. An auxiliary button, located on the barrier control module, will allow manual control of the opening and closing of the traffic lane. It is important to note that a loss of Bluetooth communication between the controller and the traffic signal barrier does not reset the barrier's position. The barrier will remain in the same position until Bluetooth communication with the controller is restored. Synchronization with the barrier will be performed upon reconnection with the controller to avoid affecting the current road signs.

With its pivoting side opening, retractable barrier, and various locking points, the Zone Technologies Traffic Signal Barrier allows for secure, temporary installation when moving between your worksites. With its robust and aesthetically design, it will withstand harsh environmental conditions. The Traffic Signal Barrier can be powered by connecting it to the vehicle's main battery or using the trailer socket extension for vehicles equipped with this option.

## PARTS LIST:

BARS-MAN



BARS-L200 ou BARS L300



MOTEUR-BARRIERE



CAB-USBMA-USBC-SH-3



DIV-USB-CIGAR-CHARGE



BARS-CONTROL

## ELECTRICAL SPECIFICATIONS

### CONTROL MODULE

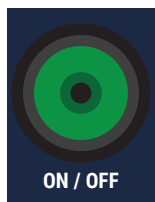
<b>Voltage:</b>	10Vdc to 18Vdc
<b>Operating Temperature:</b>	-40°C to 75°C (-40°F to 167°F)
<b>Current:</b>	Without Load = 25mA at 12Vdc With Load (max) = 5A at 12Vdc
<b>Outputs:</b>	Motor (12Vdc) = 10A Lampes (GND) = 5A

### CONTROLLER

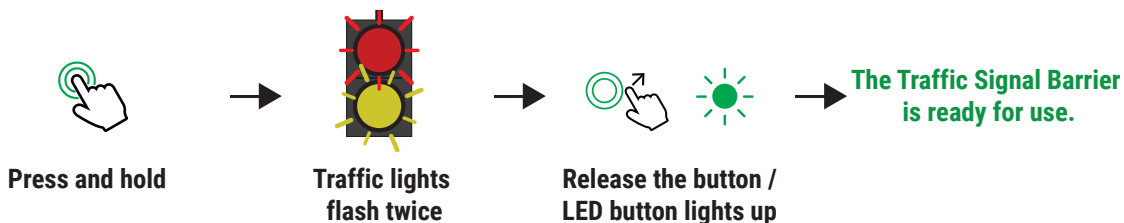
<b>Communication:</b>	Bluetooth Protocole Range 250m (Ext. / Optimal conditions)
<b>Operating Temperature:</b>	-20°C to 60°C (-4°F to 140°F)
<b>Charging Temperature:</b>	0°C to 45°C (32°F to 113°F)
<b>Current:</b>	OFF = 0.25mA ON = 50mA
<b>Autonomy:</b>	3 weeks
<b>Recharge :</b>	4h (USB-C - 500mA)

## HOW IT WORKS

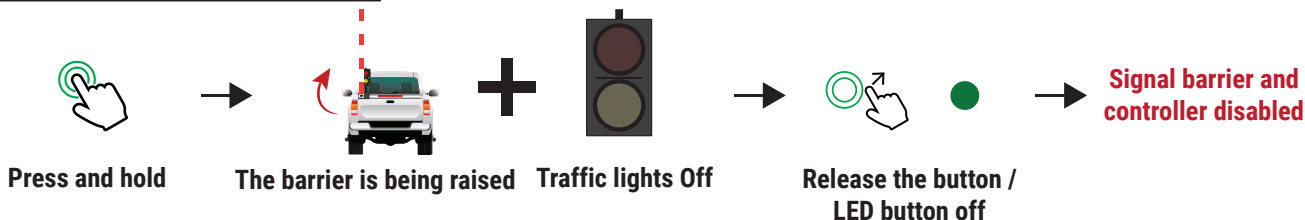
### ACTIVATING AND USING THE CONTROLLER



#### GREEN Button: Controller activation



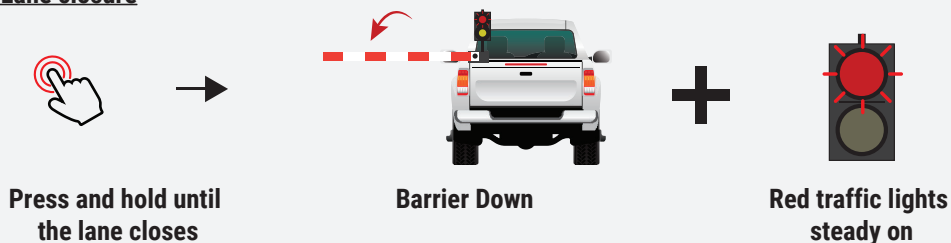
#### GREEN Button: Controller deactivation



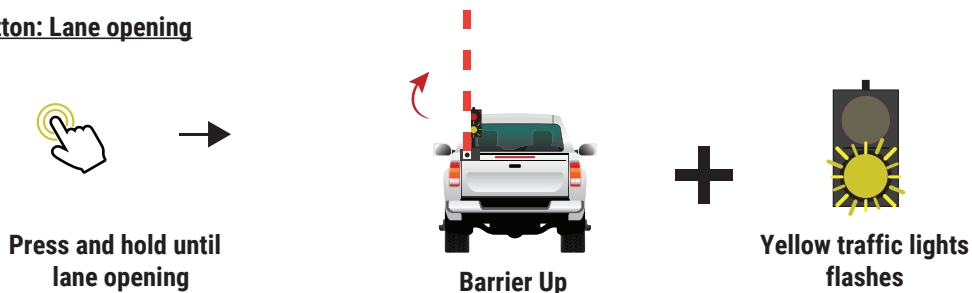
**IMPORTANT:** The activation procedure remains the same even when the controller is **charging** (See BATTERY section for more details)



#### RED Button: Lane closure



#### YELLOW Button: Lane opening



### Battery Information

Life span = 10 days (8h/day)

Recharge = 3h (0 to 100%)

Connector: USB-C



Slow flashing (every 5 seconds) → Controller OFF & Active Charging

Rapid flashing (every 1 second) → Controller ON & Active Charging

**NOTE :** To activate the system when the controller is charging, follow the activation instructions above (press the GREEN button).

## CONTROL MODULE



### GREEN button: Open/Close the lane (Manual Mode)



Press the button if the lane is already open  
**RED** light is ON



Barrier closes the lane

**Figure A**  
Lane closure



*\*The warning light remains red during the opening or closing of the barrier.*

### GREEN button: Open/Close the lane (Manual Mode)



Press the button if the lane is already closed  
**YELLOW** light FLASHES



Barrier opens the lane

**Figure B**  
Lane Opening



*\*The warning light remains red during the opening or closing of the barrier.*

**\*NOTE :** Pressing the button while the barrier is moving will stop the barrier from moving and the lamp will remain in the state it was in.

## Automatic Reconnection

### Loss of connection or deactivation between the controller and the barrier

*It should be noted that the barrier will remain in the same state it was in BEFORE it lost the connection*

#### The controller is off

To reconnect:

- Reactivate the controller (GREEN button)
- The controller light should be flashing (Searching for the barrier)
- After a few seconds, the light should remain steady On.

or/and

#### The distance between the controller and the barrier is too great

To reconnect:

- Make sure your controller is turned on (Green Button)
- Move the controller closer to the barrier (10m or less)
- The controller light should be flashing (searching for the barrier)
- After a few seconds, the light should remain steady On.

**NOTE :** In all cases, the controller will synchronize with the barrier and keep the state the barrier is in at the time of connection.

## Resetting Bluetooth Communication

**IMPORTANT :** Please contact Zone Technologies technical support before proceeding with this operation. It should only be used when replacing the controller with a new one and not as a debugging technique in the event of an inability to operate the barrier.

### a) Make sure the barrier is powered

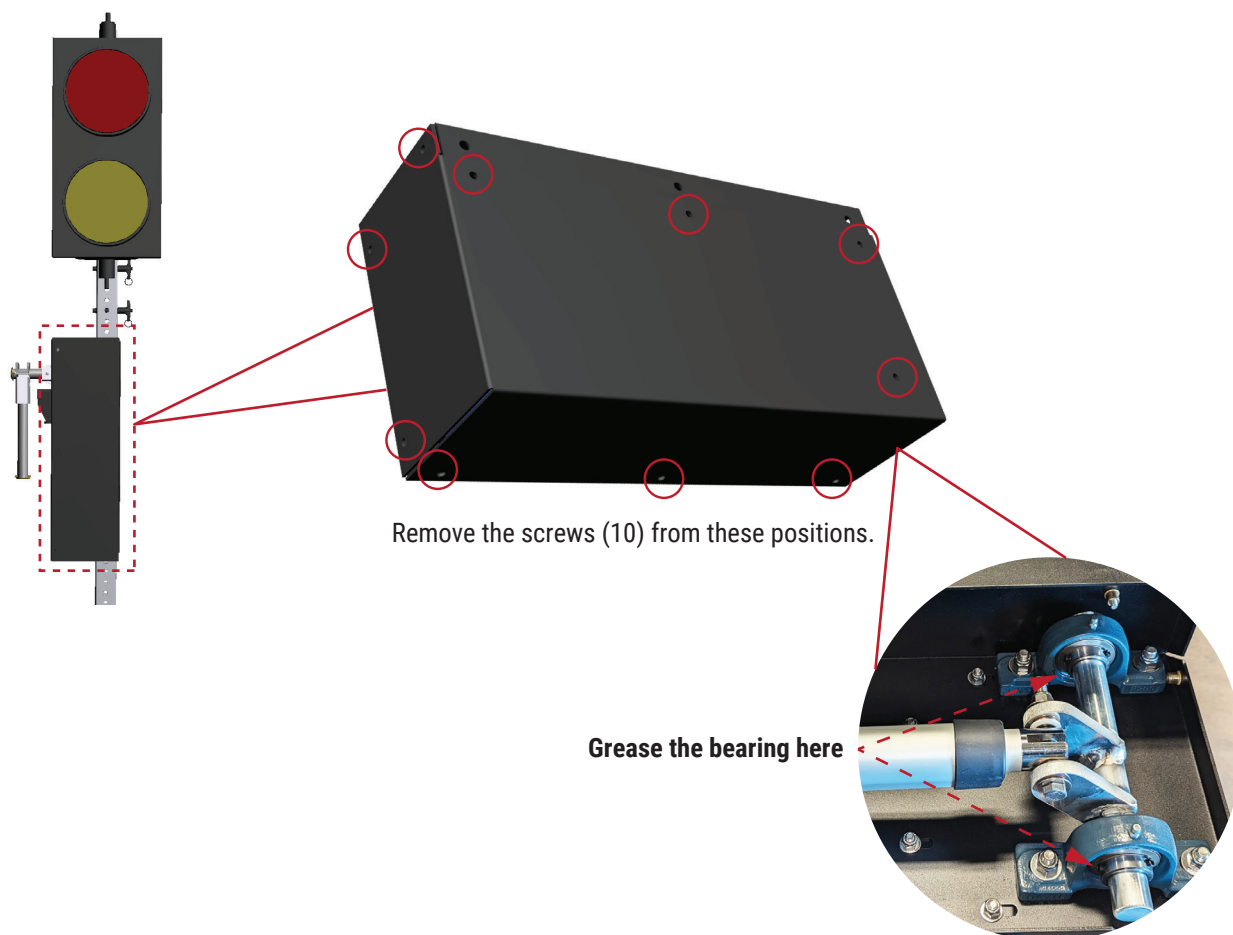
- Perform a "Scan" with your cell phone
- Go to the Bluetooth menu on your phone and perform a scan
- You should see a device named "BARR\_ xxxxx"

### b)Reset procedure

- Press the **GREEN** button to activate the controller (green LED flashes)
- Press the **YELLOW** and **RED** buttons simultaneously.
- Keep pressing until the **GREEN** LED is Steady On
  - If the **GREEN** LED is Steady On, wait until it flashes before pressing the buttons, then it will become Steady On again.
  - The process takes between 5 and 10 seconds.

## MAINTENANCE

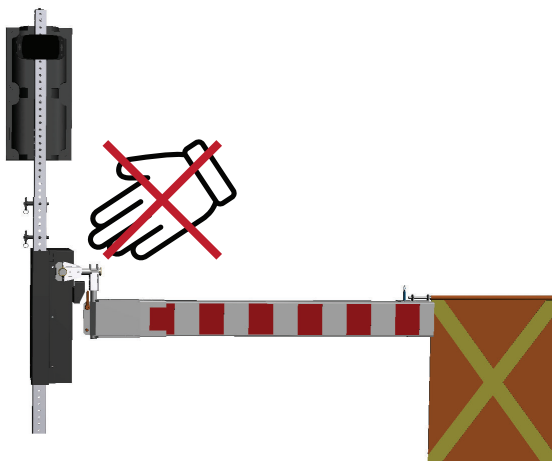
Lubricating the mechanical parts of the barrier motor is recommended once a year (and when necessary) for proper product operation and will help extend its lifespan.



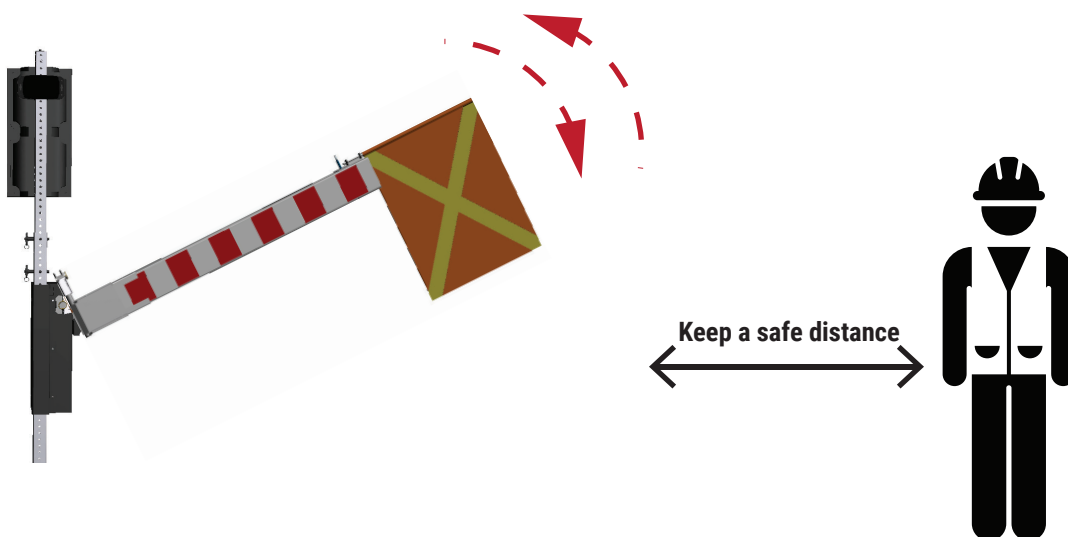
## CAUTION

When assembling or using this product, which is generally safe, you should nevertheless be attentive and cautious. When assembling the product (see page 5), be cautious with your hands and fingers to avoid them getting caught between moving parts.

**When using the product, there is an area where you should not place or approach your hands or fingers.**

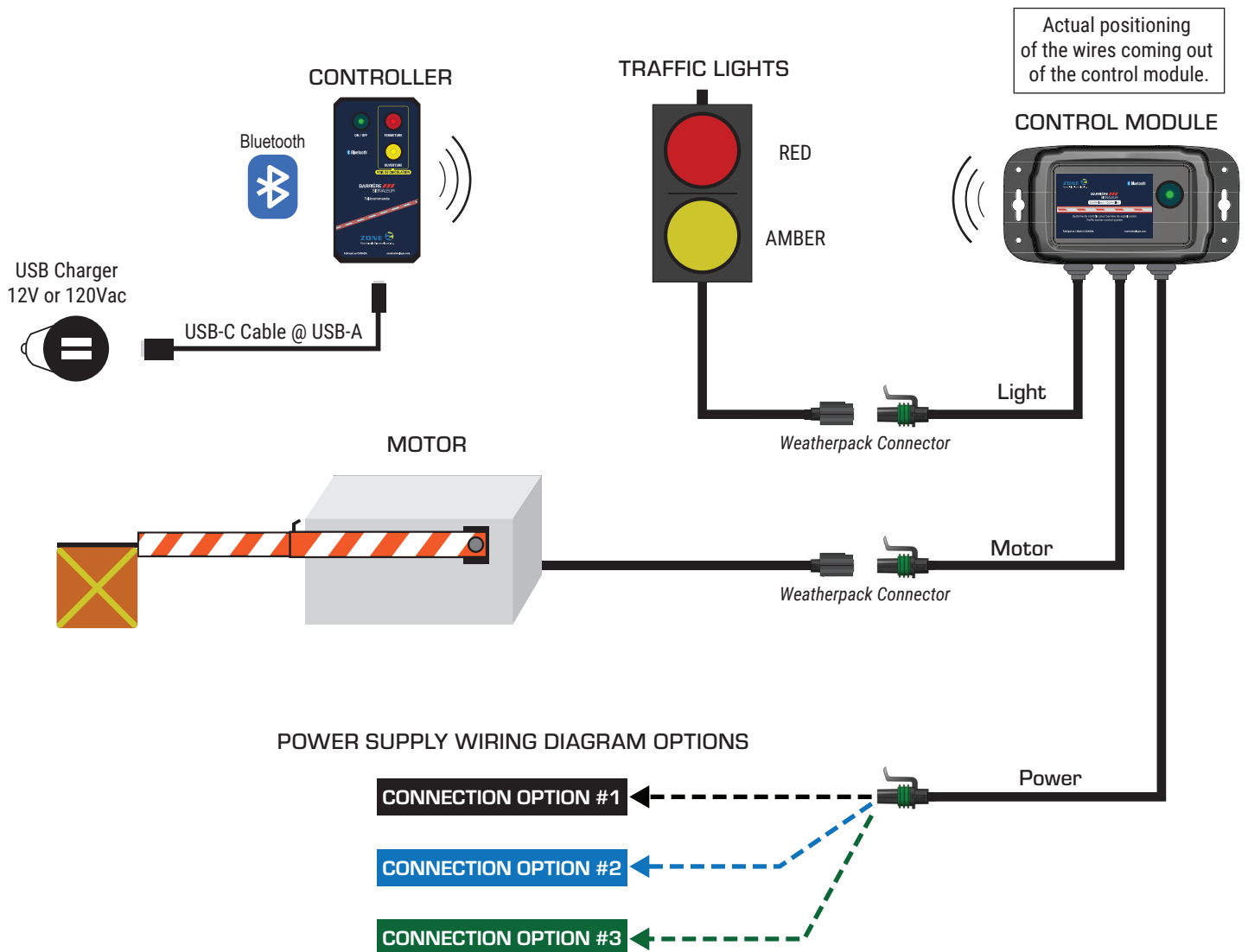


**It is important to maintain a safe distance while the barrier is in operation.**





## WIRING DIAGRAM



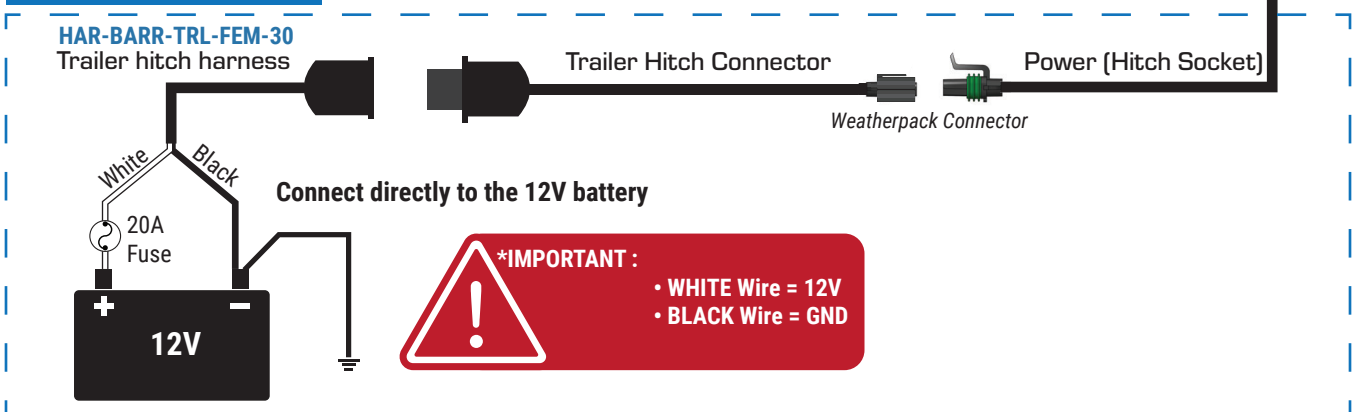
See the connection options on the following page (page 6).

## POWER SUPPLY WIRING DIAGRAM OPTIONS

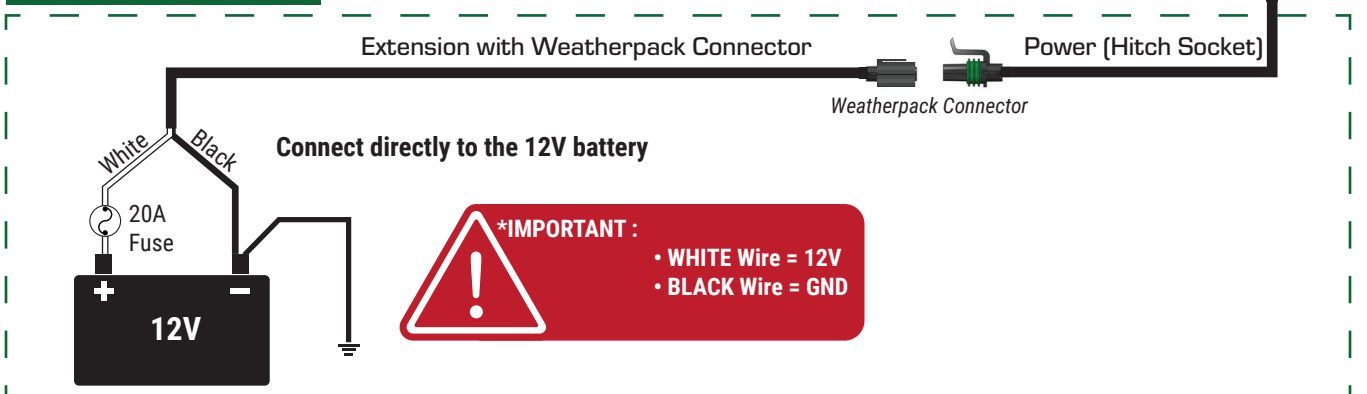
### CONNECTION OPTION #1



### CONNECTION OPTION #2



### CONNECTION OPTION #3





## LIMITED WARRANTY

Zone Technologie Électronique Inc. guarantees every component that it produces for a period of 24 months starting on the date of the purchase or of the delivery. The products of **Zone Technologie Électronique Inc** are verified, inspected and recognize as exempt of any fabrication default.

If a product is found to be defective during the warranty period of 24 months, the product will be repaired or replace at the workshop of the **Zone Technologie Électronique Inc.** society.

All installation, using or modification of the **Zone Technologie Électronique Inc.** products which is not recommended by the manufacturer leads to a voiding of the actual warranty.

**Zone Technologie Électronique Inc.** can't be held liable for the damages or charges that arise because of misuse, a careless maneuver or any others attempts to repair or for any reparations made by a third party. No other warranty, written or verbal, then the one from **Zone Technologie Électronique Inc.** will be recognized.

**Zone Technologie Électronique Inc** also has the right to repair or replace any defective product to its sole discretion. **Zone Technologie Électronique Inc** can't be held liable for the charges that arise during the installation or the removal of a product that requires maintenance and/or repairing.

It is expressly specified that we shall be committed by no other warranty (express or tacit) of intrinsic quality, marketable quality or capacity in a particular use.

### To contact technical support:

Telephone: (450) 572-1476 / Toll Free: 1 (866) 362-9663  
e-mail : support@zonetechnologie.com

Zone Technologie Électronique Inc. reserves the right to bring changes to this document and/or product included, without notice, and this at any moment.

Zone Technologie Électronique Inc. can't be held liable regarding any possible mistakes and/or omissions in this document



Zone Technologies inc. | *Innovation in motion*

#### Contact Information

Telephone: 450-572-1476

Toll Free: 1-866-362-9663

Fax: 450-572-0898

E-mail: [info@zonetechnologie.com](mailto:info@zonetechnologie.com)

9000 Industrial Blvd, Chambly (Quebec), J3L 4X3