

# LED MoonBoard Installation Guide

## & LED Replacement Guide

Version 3.2 October 2016



MOONBOARD  
TRAIN HARD  
CLIMB HARDER  
BEN MOON

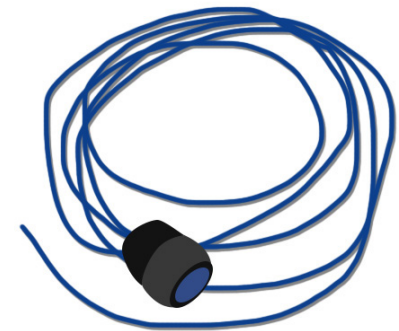
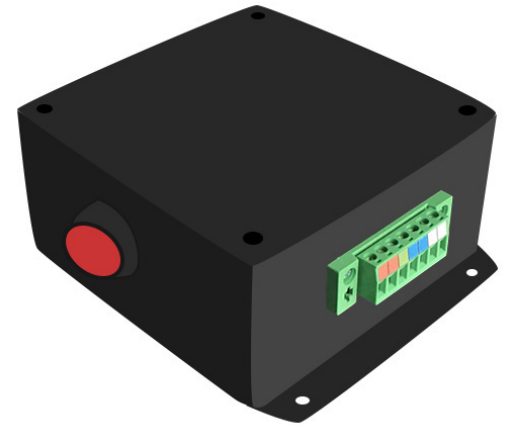


## Tools needed:

- Drill
- 1/2 inch (13 mm) drill bit
- 3/4 inch (19mm) drill bit
- Wire Strippers
- Measuring Tape
- Chalk Line
- Sandpaper

## LED system components:

- 1 x MoonBoard control box
- 2 x strings of MoonBoard LED lights
- 1 x reset button
- 1 x power supply (5V)
- 1 x mains power adaptor
- 2 x spare LEDs (at the end of the second string)





## Preparing your MoonBoard LED holes

Starting from the top of the Moonboard place a mark every **8 inches** (20cm) down each side of the board (half way between your pre-existing bolt holes). Use the chalk line to snap a horizontal line between the marks from one side to the other.

Each LED light is designed to be installed below the hold it lights-up. For example, the LED for hold B3 will be installed below the B3 t-nut.

Drill **1/2 inch** (13mm) holes on the chalk line below each t-nut. If necessary, use sandpaper to remove any sharp edges.

## Installing your LEDs

We recommend that you test the LED bulbs prior to installation. This can be done by connecting the LED strings to the Control Box, connecting the Control Box to the power supply and switching the Control Box on. The LEDs will illuminate and run through a start-up sequence. Once this is completed, switch off the power and disconnect the LEDs from the Control Box.

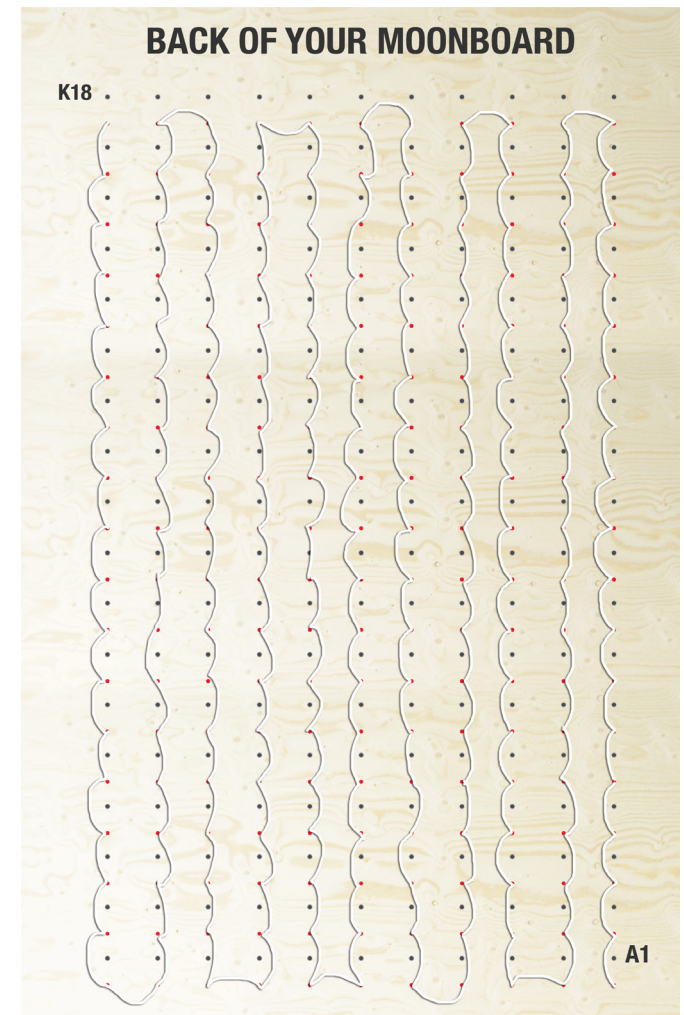
**Please take extra care when handling the LED strings to avoid causing damage.**

Carefully unravel LED string A. The first LED will be labelled A1 (the first LED on the green wire). This LED will illuminate hold A1 on the MoonBoard.

From the back of your Moonboard, start at A1 and push the first LED into the hole you have drilled until the bulb is flush with the climbing side of the wall. The next LED on the string is A2, and so forth.

Install the LEDs in a zig-zag pattern going up one column and down the next. (see diagram on right of this page). For example: up column A, down column B, up column C etc...

Once you have used all of the LED's in string A, connect the LEDs from string B to set A using the push fit connector, and continue installing in the zig-zag pattern.





## Installing your reset button

The reset button is used to disconnect any connected Bluetooth device, so needs to be installed in a location that is easily accessible to the end user, but not in a location where it will be damaged. The reset button fits in a 3/4" (19mm) hole.

## The MoonBoard Control Box

Mount the Moonboard control box on the back of the wall, there is an on/off switch on the side of the box, so you may need access to this.

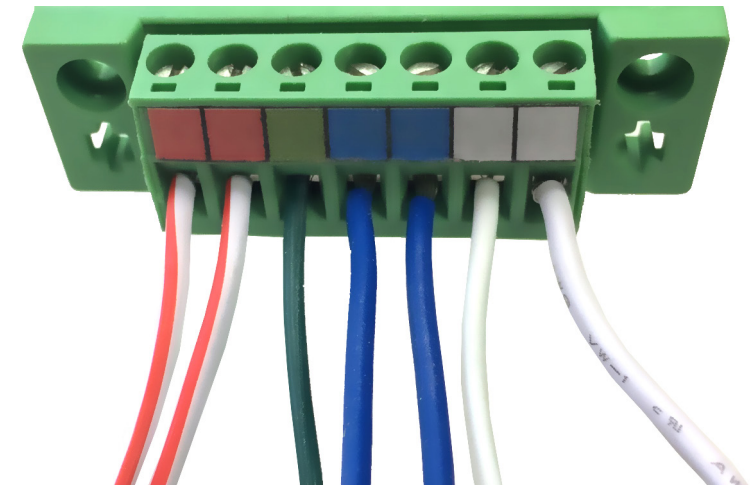
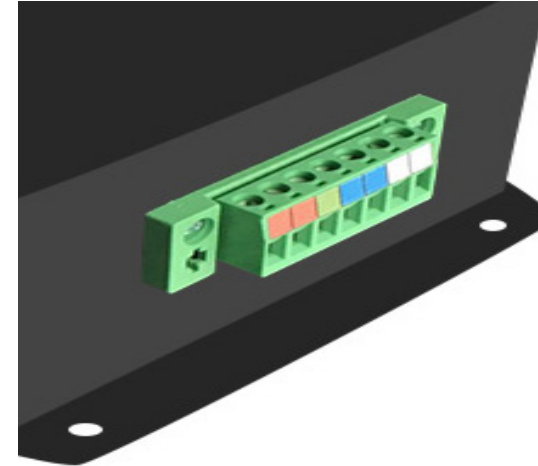
Connect the wires from the LEDs and reset button to their corresponding colored holes on the MoonBoard control box by stripping the wires a 1/4 inch (0.5cm) from the end and tightening up the screws to hold the wires in place. You can install the wires in either colored hole that corresponds to the wire color.

Connect the wires from the Reset button to the blue holes on the MoonBoard control box, it does not matter which way round you do this.

**Please ensure all wires are connected well. A poor connection may cause your MoonBoard LEDs to fault.**

Attach the appropriate adapter to the power supply and plug the power supply into the control box then plug into the mains. Do not use any other power supply than the one provided in your kit.

Install the MoonBoard app onto your smartphone or tablet...  
... and CLIMB.





# Replacing an LED

Watch the video here: <https://youtu.be/-T5xaRkZ7wY>

## Tools needed:

- Wire Strippers
- Wire Cutters
- Electrical Tape
- 6 Butt Splice Wire Connectors (Image 1)
- Connector Crimping Tool

**Unplug the MoonBoard LED system from the power outlet.**

There are two extra LEDs at the very end of the LED string. Using wire cutters remove one of the extra LEDs at the end of the string by cutting the wires half way between the last LED and the one before it. Use electrical tape to protect the wires at the end of the LED string. (Image 2)

If you have not previously removed any LEDs then the last LED will have a connector on it that will need to be cut off. (Image 2)

## Identifying a damaged LED

A damaged LED will be identifiable in two ways:

If during the startup process the LEDs stop changing colors at a certain point and remain blue, then the first blue LED is the one you will need to replace. (Image 3)

If during the startup process all of the LEDs perform correctly except one, then this one LED is the one that will need to be replaced.

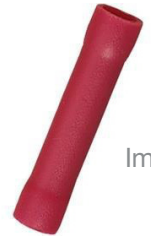


Image 1.



Image 2.

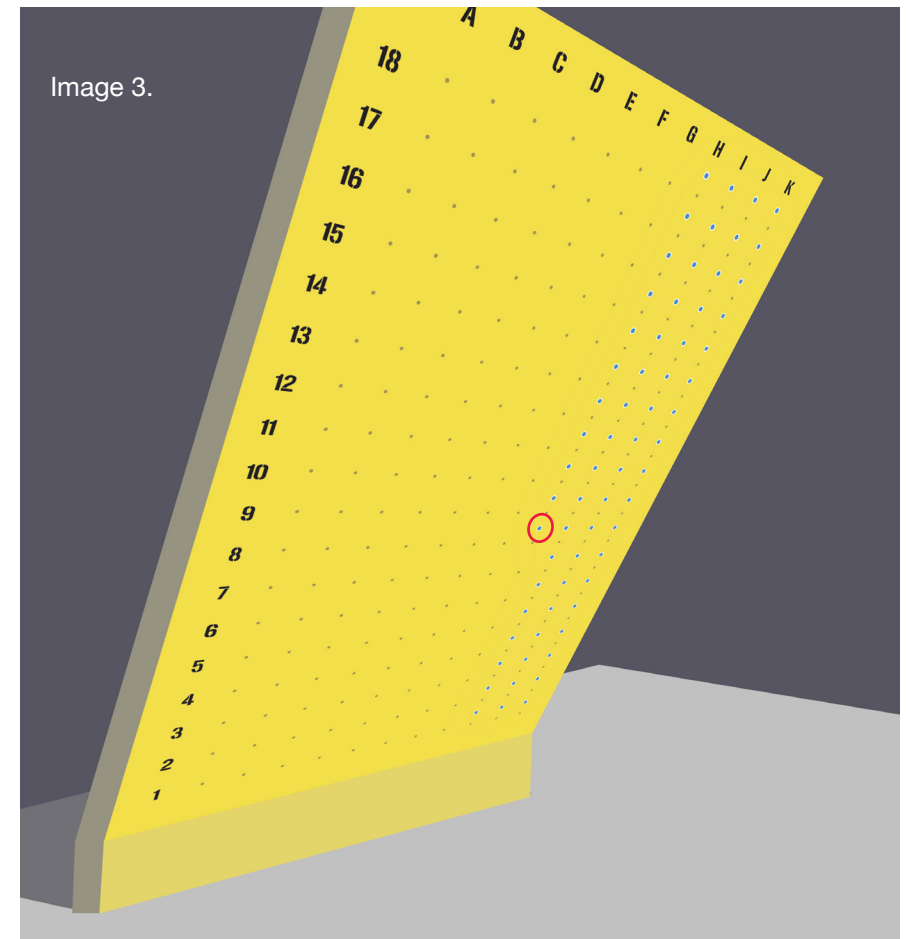


Image 3.





## Removing & Replacing a damaged LED

Remove the damaged LED by cutting the wires as close as you can to the damaged LED.

When connecting the new LED back into the string it is very important that you **follow the arrow pattern in the LEDs** (Image 4) so that the previous LED wires are crimped to the new LED following the flow from the beginning of the LED string into the replacement LED.

Strip the 6 wires on the replacement LED and 6 wires on the LED string a 1/4 inch and connect them using the Butt Splice Connectors and Crimping Tool (Image 5).

If you have any questions please contact us at:  
**[info@moonclimbing.com](mailto:info@moonclimbing.com)**

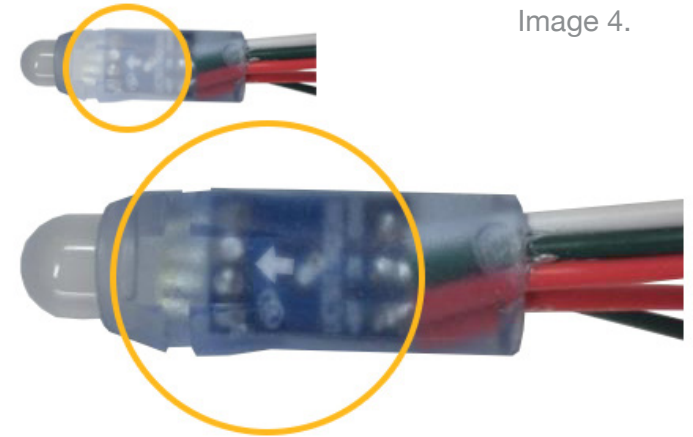


Image 4.

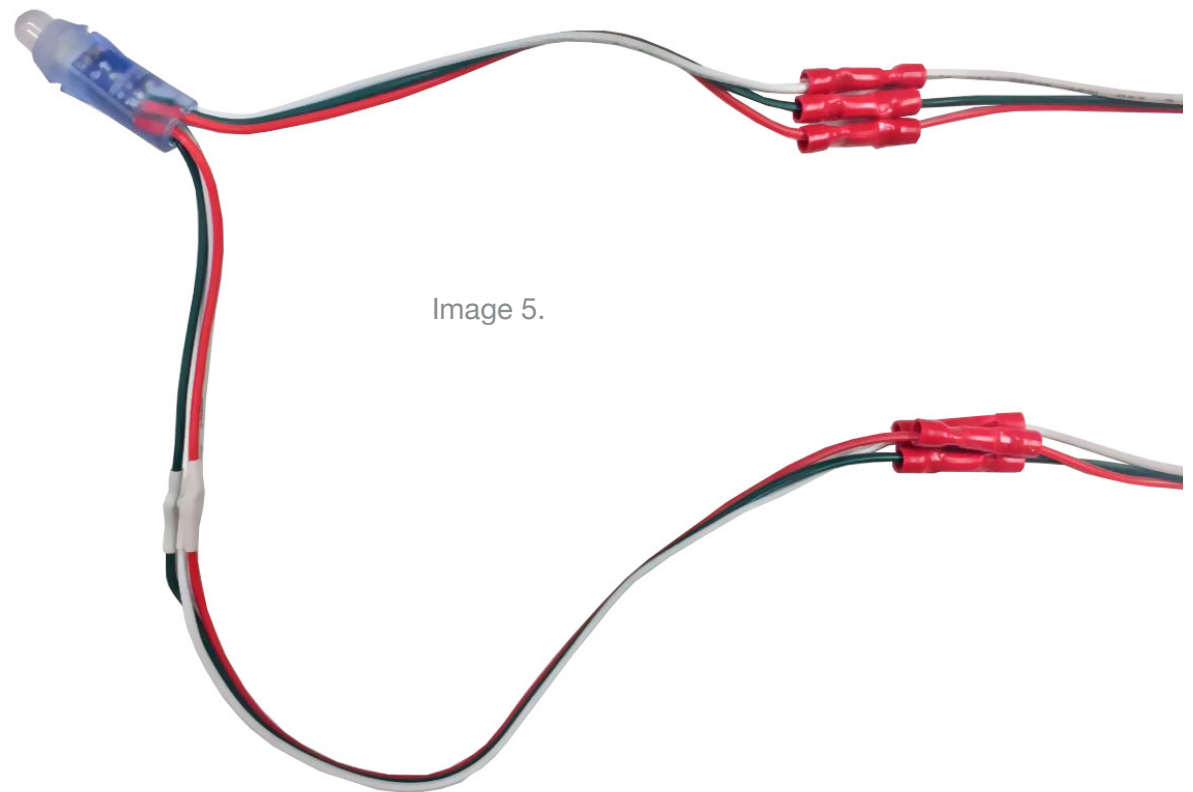


Image 5.