LED Lighthouse 36 Tread Stair Controller

Overview

The LED stair tread controller can control up to 36 separate pieces of single colour LED strip to work sequentially. It also has 2 separate connections to connect a digitally addressable LED strip which can be used for the stringers of the staircase. The digital LED strip can be RGB rather than just a single colour.

Installation Instructions

The stair treads will need their own LED strip which has its own connection to the stair tread controller, the LED strips cannot be wired in series. The bottom stair tread should be connected to connection number one on the stair controller. The stair treads should then be connected in ascending, numerical order. The LED stair controller features two PIR sensors. One sensor for the top of the stairs and one for the bottom. The bottom PIR sensor should be connected to position number one and the top PIR sensor should be connected to position number two.

In order to connect the digitally controlled LED strip which can be run on either side of the stair treads, the LED stair controller features 2 connections. The digital LED strip will need the data input and ground for the connections on the stair controller. The positive voltage supply will need to be take from power supply powering the LED stair controller. The digital LED strip should be fed from the bottom of the staircase in order to match the order of the stair treads. Connection from the top of the staircase will mean the digital LED strip will light in the opposite direction to the stair treads being illuminated.

The LED stair controller can work on either a 12v or 24v power supply. Please ensure the power supply is enough to cover the consumption of the LED strip connected to the controller.

Set-up Guide

The LED stair controller has multiple built in parameters that can be altered to customise each installation. In order to access the various parameters, press the 'SET' button to access and filter through the various settings. Use the '+' and '-' buttons to alter the values on the screen. Below is a list of the parameters that can be customised-

- L- Alters the length of the digitally controlled LED strip that can be fitted to both sides of the staircase. The value range is 1-999. 1 being the shortest length and 999 being the longest.
- LP- Changes the colour/ function of the digital LED strip. Each value has a different function.
- LH- Increases or decreases the time delay from the LED lights coming on again after being activated.
- LE- Increases or decreases the amount of time the digital LED lights are illuminated for.
- F- The number of stair treads that are being operated from the LED controller.
- FP- The values represent the different functions of control for the order of lighting for the LED stair treads. Value 1 is the standard, sequential setting.
- FH- The speed at which the individual stair treads light up. Values range from 1-99. 1 being the slowest and 99 being the fastest.

- FE- Increases or decreases the amount of time the stair tread LED lights are illuminated for.
- AA- no function.

<u>Data Guide</u>

Each of the 36 channels has a capacity of 2 amps. If using 24v LED strips each connection will have a capacity of 48w. At 12v each connection will have a capacity of 24w. Total wattage at 24v is 1728, total wattage at 12v is 864. The connection leads on the PIR sensors are 5m long each.

The product dimensions are 27cm long,11cm wide and 3cm high.

The SPI out puts are compatible with the following IC codes-

- 1903
- 1909
- 1912
- 1812
- 2811
- 16703
- 2813
- 8205
- 8206