

MESHLE flex MINI – 5-Channel Universal LED Driver with Bluetooth Mesh Connectivity

Model M1N1-001



FC RoHS LVD RED

MESHLE flex FIVE Smart Bluetooth LED Controller is a control module for LED light strips of various types. The output channels of MESHLE



flex FIVE can be reprogrammed flexibly, depending on the type of LED strips. Thus, RGB+CCT, RGBW, RGB, CCT or Single Color LED light strips can be connected to the controller. Configuration and operation is done via MESHLE app, where you can set colors, scenes, animations, timers and many other features. No Wi-Fi, hub or other hardware is required. The controller is ready for use immediately after it has been connected. Each MESHLE flex controller automatically connects to another controller via Bluetooth, creating a Bluetooth mesh network. In this network, the controllers can be operated individually or in a group via smartphone.

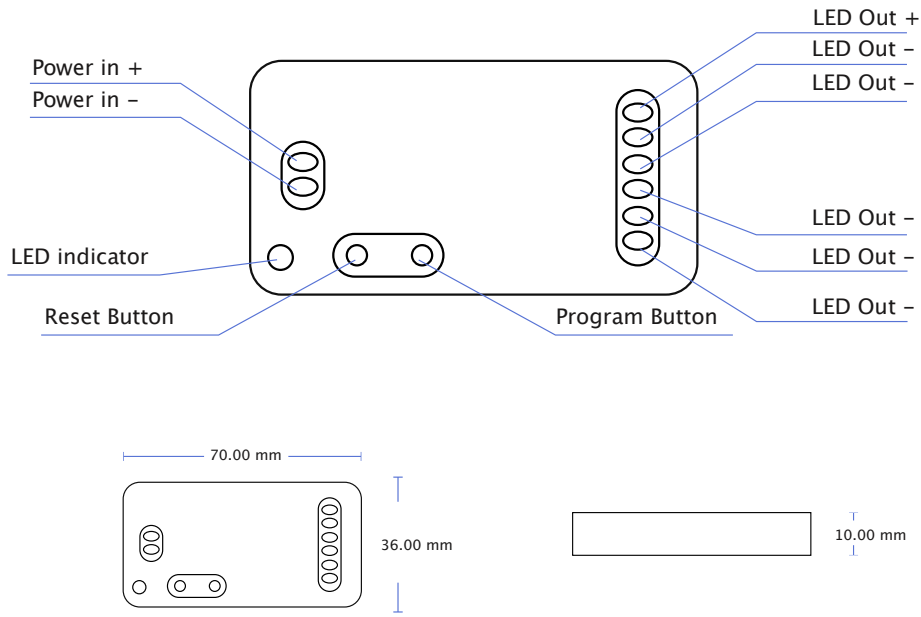
Features

- 5 in 1: designed for single color or color temperature (CCT), RGB, RGBW, RGB+CCT LED strip control.
- Equipped with a DC power socket input and 5-channel constant voltage output.
- Compatible with MESHLE: Enables wireless connection with other devices in a Bluetooth Mesh Network and control via the MESHLE App.
- Supports automation features: Timers (Week/Sunset, Sunrise), If-Else Rules.
- Adjustable settings include Power Up State and Fade transition duration.
- Offers group control capability: can be operated individually or as part of a group.
- When paired with an optional Gateway, enables control via the Internet or voice-activated platforms such as Amazon Alexa or Google Assistant.
- Compatible with both Battery-Powered and Battery-Free Switches and Sensors (see <https://meshle.com/ecosystem> for more details).

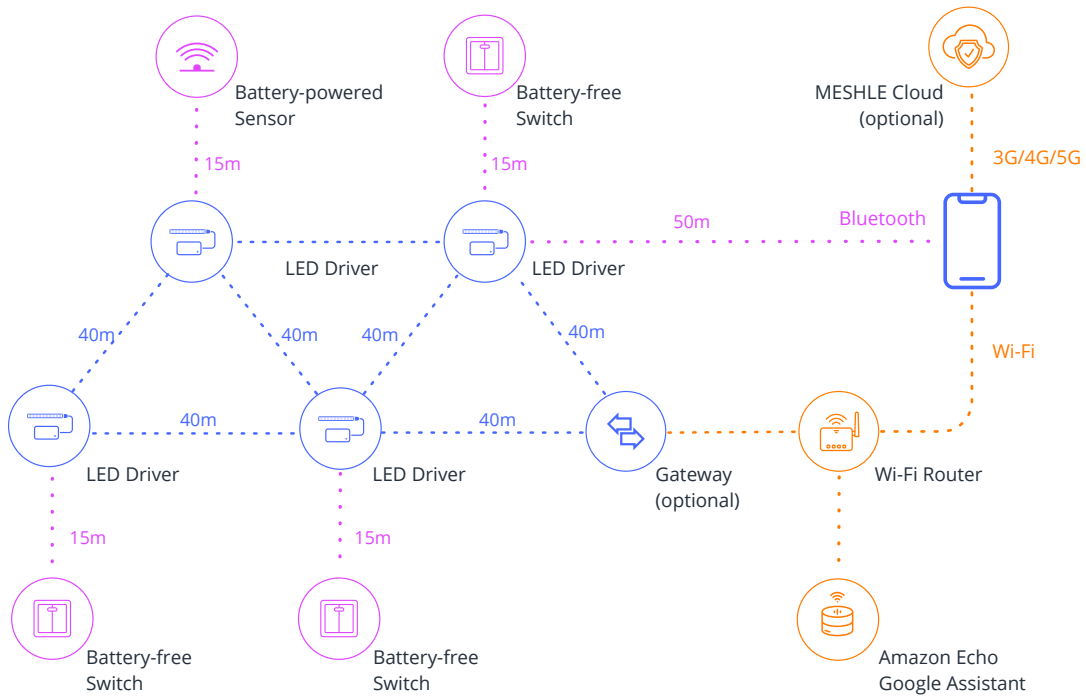
Technical Parameters

Input & Output		Safety and EMC	
Input voltage	5-24VDC	EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3
Output voltage	5 x (12-24)VDC		ETSI EN 301 489-17 V3.2.4
Output current	5CH,3A/CH (6A Total Max)	Safety standard(LVD)	EN 62368-1:2020+A11:2020
Output power	144W max	Radio Equipment(RED)	ETSI EN 300 328 V2.2.2
Output type	Constant voltage	Certification	CE,EMC,LVD,RED
Dimming data		Environment	
Input signal	MESHLE App, Bluetooth Mesh Network, Cloud or Local Network (Gateway needed)	Operation temperature	Ta: -30 OC ~ +55 OC
Dimming range	0 -100%	Case temperature (Max.)	Tc: +85°C
Dimming curve	Logarithmic	Warranty and Protection	
PWM Frequency	1000Hz (default)	Warranty	5 years
		Protection	Reverse polarity
			Over-heat
			Short circuit

Technical Specifications



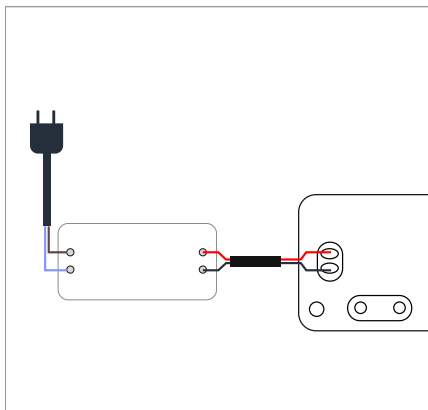
System Example



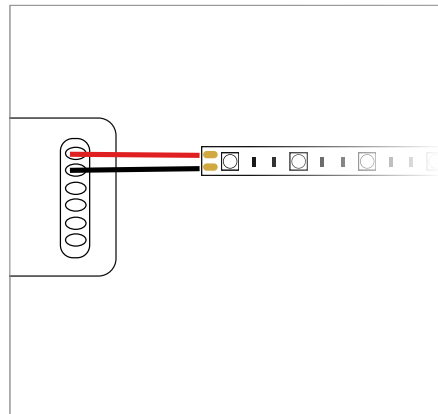
All MESHLE products and all devices labeled "Works with MESHLE" are compatible with each other and can be configured, managed and controlled via MESHLE App. Connection to the Cloud via MESHLE Gateway (optional). User can connect already existing Bluetooth mesh network to the MESHLE Cloud via MESHLE Gateway. This enables additional functions such as remote and voice control.

Wiring Diagram

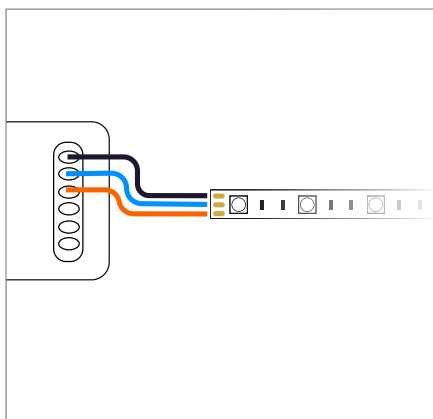
Power Supply & LED Strip & Push Switch



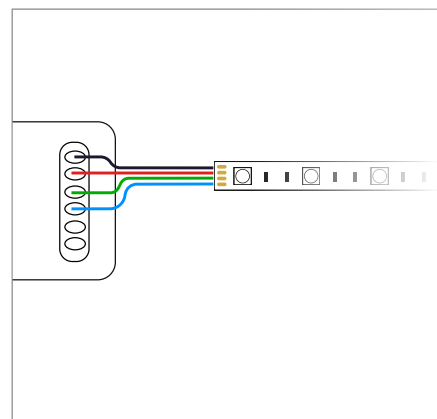
POWER SUPPLY



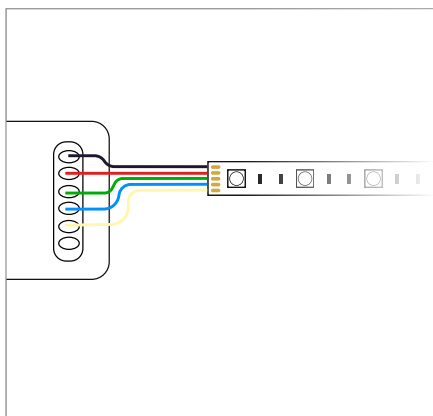
DIMMER



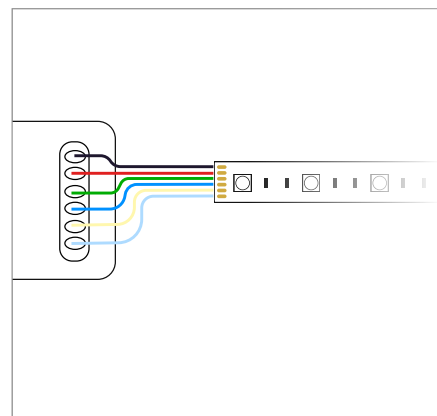
CCT



RGB



RGBW



RGB+CCT

*It is important that the voltage of the LED strip matches the voltage of the power supply, e.g. for a 12V LED strip you need a 12V power supply, for a 24V LED strip you need a 24V power supply and the power supply must provide sufficient watts.

Commissioning

1. **IMPORTANT:** The reprogramming of the controller (between CCT/ Single Color / RGB / RGBW / RGB+CCT) can only be performed when the device has been reset to factory settings (hold reset button for 4 seconds).
2. Step 1. Activate the programming mode: Hold program button for 4 seconds, the indicator light on the controller will start flashing. The number of short blink repetitions shows the current mode of the controller. E.g. 2x means (2-channel mode) the controller is in CCT-Mode, 1x (1-channel mode) Dimmer mode, etc.
3. Step 2. Select mode: With a short program button press, you can switch between the individual modes and thus select the desired mode.
4. Step 3. Confirm mode: After the selection has been made, it must be confirmed by holding the program button for 4 seconds. The controller flashes once and exits the programming mode.

***IMPORTANT: The reprogramming of the controller (between Dimmer / CCT / RGB / etc.) can only be performed when the device has been reset to factory settings (hold reset button for 4 seconds).**

Network Setup

New network

If this is the first device that is being setup follow the steps below:

1. Download MESHLE App and allow all required permissions and press "Start".
2. Power up the controller, now it should be listed in the search view of the app
3. Select the listed item and follow the instructions: create password for the new network and configure the controller
4. For every further device follow the steps described in "Add to existing network"



Video Tutorial

Existing network

If new device have to be added to existing network follow the steps below:

1. Download MESHLE App and allow all required permissions and press "Start".
2. Select existing network and enter the network password once requested
3. After joining the network press plus button in the bottom right corner of the app and select "Device"
4. Power up the controller, now it should be listed in the search view of the app
5. Select the listed item and follow the instructions to configure the controller



Video Tutorial

Factory Reset

Device

1. Hold the reset button for 4 seconds. Important, the settings of the output channels (CCT/ Single Color) will not be deleted. Only the customer settings are deleted.
2. In order to reset the output channels to the factory setting (Single Color), the reset button must be held for 10 seconds.

Network

In order to delete the network, all of the devices configured in this network must be reseted to factory settings.

App Screens

