

# MESHLE flex Duo – 2-Channel Universal LED Driver with Bluetooth Mesh Connectivity

## Model 007T-1



FC CE RoHS emc LVD RED



MESHLE flex Duo Smart Bluetooth LED Controller is a control module for LED light strips of various types. The output channels of MESHLE flex Duo can be reprogrammed flexibly, depending on the type of LED strips. Thus, 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 MESHLE-enabled device via Bluetooth, creating a Bluetooth mesh network. In this network, the controllers can be operated individually or in a group via smartphone.

## Features

- Designed for single color or color temperature LED strip control.
- Equipped with a DC power socket input and 2-channel constant voltage output.
- Allows connection to an external push switch for on/off and 0-100% dimming control.
- 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).

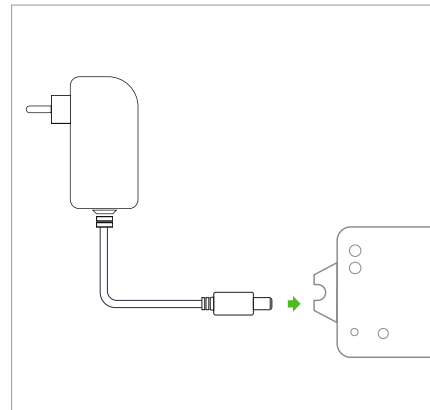
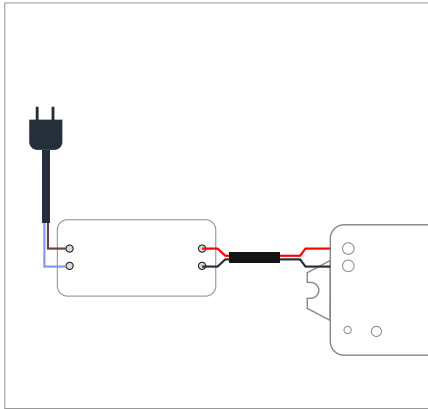
## Technical Parameters

Input & Output		Safety and EMC	
Input voltage	12-36VDC	EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3
Input current	10.5A		ETSI EN 301 489-17 V3.2.4
Output voltage	2 x (12-36)VDC	Safety standard(LVD)	EN 62368-1:2020+A11:2020
Output current	2CH,5A/CH	Radio Equipment(RED)	ETSI EN 300 328 V2.2.2
Output power	2 x (60-180)W	Certification	CE,EMC,LVD,RED
Output type	Constant voltage		
Dimming data		Environment	
Input signal	MESHLE App, Push Button, 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		
PWM Frequency	2000Hz (default)	Warranty and Protection	
		Warranty	5 years
		Protection	Reverse polarity
			Over-heat
			Short circuit

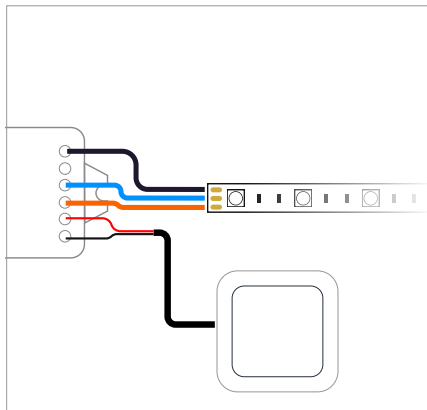


## Wiring Diagram

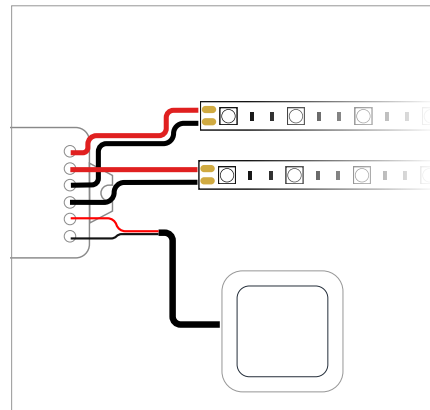
### Power Supply



### LED Strip & Push Switch



Single Color



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. Activate the programming mode\*: Hold reset 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
2. Select mode: With a short button press, you can switch between the individual modes and thus select the desired mode
3. Confirm mode: After the selection has been made, it must be confirmed by holding the reset button for 4 seconds. The controller flashes once and exits the programming mode.

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

## Push Switch

Single Color	Click	ON/OFF
	Double Click	Turn on at 100% or 10% (night light) and vice-versa
	Long press (>1 s) from OFF	Dimming UP / DOWN
	Long press (>1 s) from ON	Dimming UP / DOWN
CCT	Click	ON/OFF
	Double Click	Turn on at 100% or 10% (night light) and vice-versa
	Long press (>1 s) from OFF	Color temperatur UP/DOWN (turn off and turn on to return to dimming)

## 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

