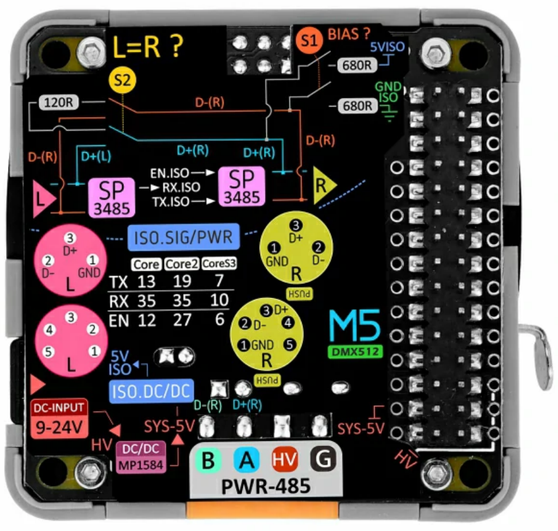
DMX_Base

SKU:M128



Description

`DMX-Base` is a functional base specially designed for `DMX-512` data transmission scenarios, communicating and enabling control with `M5 host` through `serial port`, equipped with `XLR-5 and XLR-3` male and female interfaces, convenient for users to connect DMX devices with different interfaces, in addition, the module has HT3.96 pitch 485 interface to facilitate connection to `Expansion 485 devices`. The communication signal adopts `high-speed optocoupler isolation`, and the power supply adopts a special `isolated power module`; `Two independent RS-485` circuits can be used to transmit and receive DMX data, and two independent or parallel operation can be selected through the internal `double-throw switch`, and the DC-JACK interface and the corresponding `DC-DC circuit` can provide power to the entire equipment. `This product is suitable for stage lighting control, sound equipment control, landscape lighting control and color lighting control`.

Features

- XLR-5 and XLR-3 male and female connectors for easy connection of DMX devices
- Support communication and enable control with M5 host through serial port
- Built-in two double-throw switches allow users to control the connection mode and transmission path
- The power supply DCDC isolation method is adopted to improve stability and consistency
- Programming platform: Arduino, UIFlow

Includes

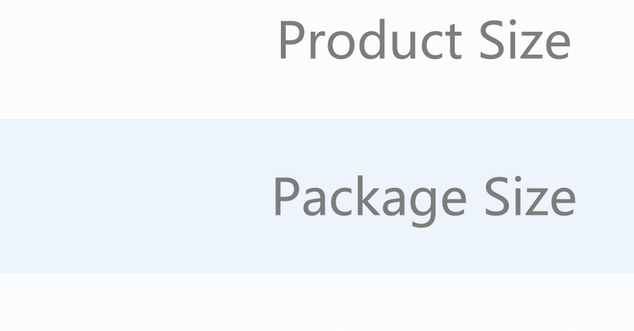
- 1x DMX_Base
- 1x M2 Hex Key
- 1x 3.96-4P terminal
- 1x XLR-3 terminal

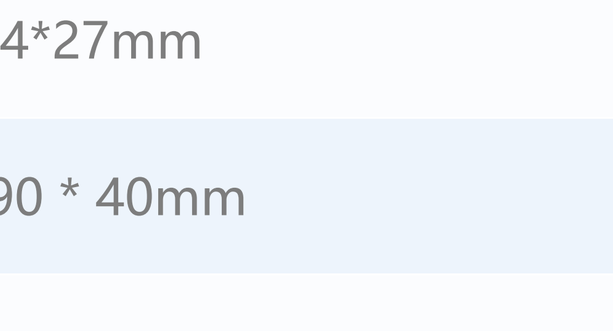
Applications

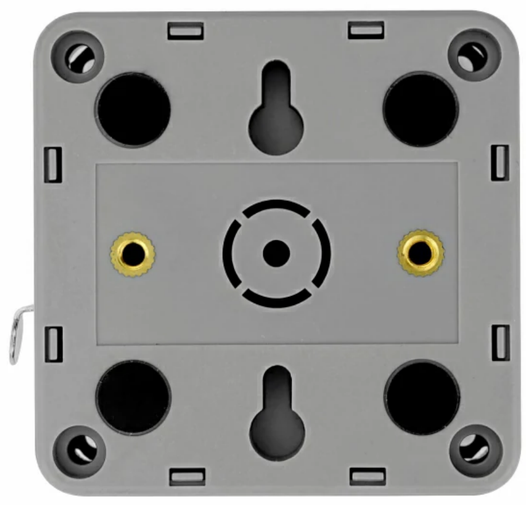
- Stage lighting control
- Sound device control
- Landscape lighting control
- Colored light control

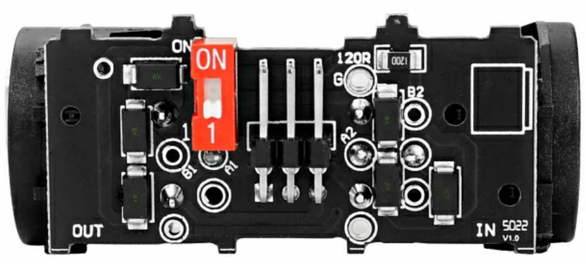
Specification

Resources	Parameters
Voltage input	DC9-12V
DMX interface	XLR-5, XLR-3 male and female connectors
485 interface	HT3.96 interface
Power output	DC 5V/3.3V
Operating temperature range	0-40°C
DMX signals are supported	DMX512
Product Size	54*54*27mm
Package Size	147 * 90 * 40mm
Product Weight	48g
Package Weight	88.2g





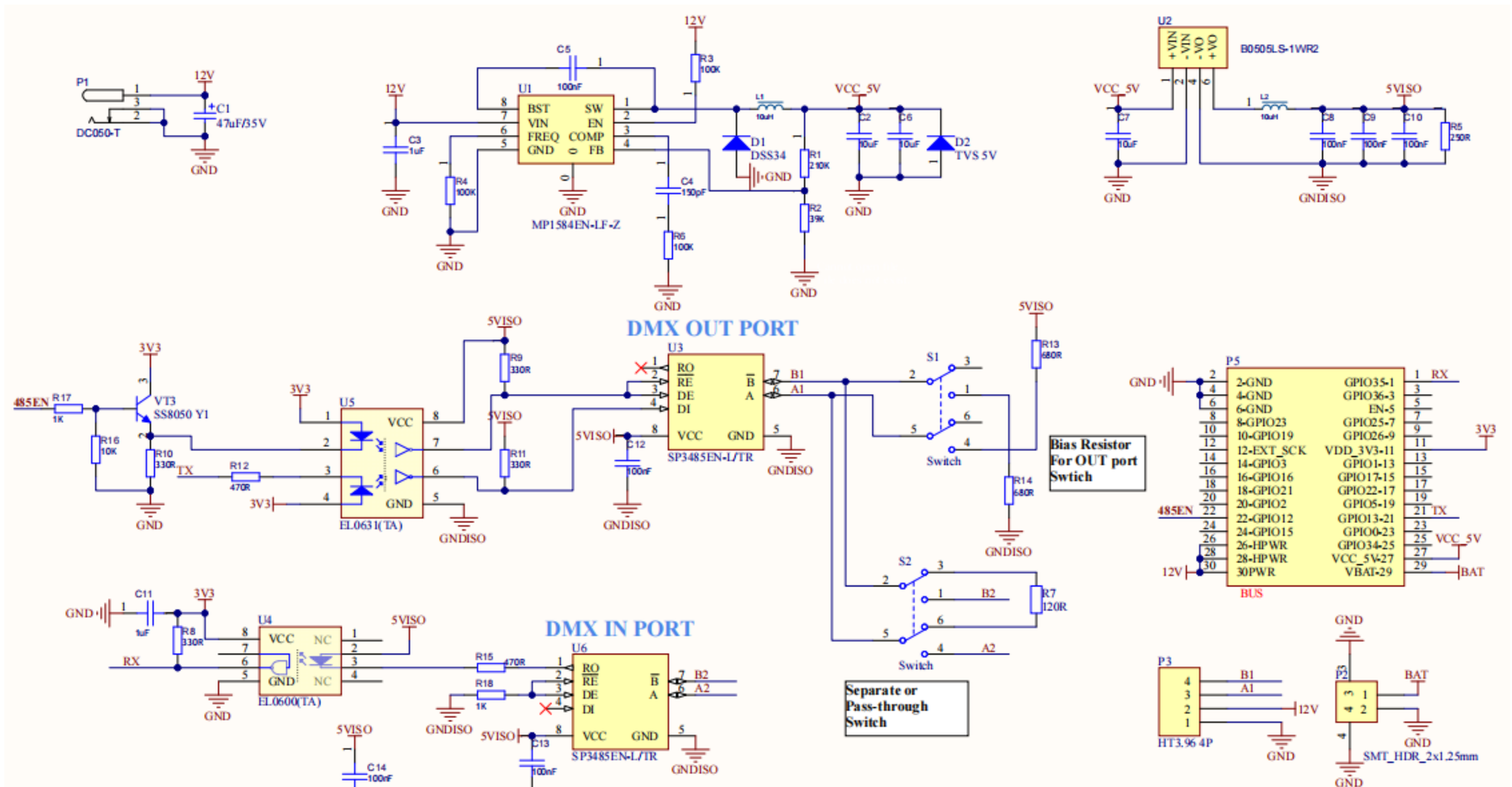




Related Link

- EL0660
- EL0631
- MP1584EN
- SP485EEN
- B0505LS-1WR2

Schematic



The role of the switch

S1: OUT port bias resistor

- switch that connects the bias resistor to the OUT port.
- opens when no device is connected to the IN side or when switch S2 is set to a separate configuration.
- the switch is connected to the bias resistor in the left position and the bias resistor is disconnected in the right position.

S2: Split or pass-through

- THIS SWITCH SELECTS WHETHER THE WIRING BETWEEN THE IN-OUT PORTS IS DIRECTLY CONNECTED OR SEPARATED.
- The left position of the switch is used for the Pass-through configuration and the right position is used for the Separate configuration.
- In a direct connect (pass-through) configuration, the signal input from the IN port is output directly from the OUT port.
- In a direct-connect (passthrough) configuration, if you output a signal from the DMX module while entering a signal from the IN port, the device on the OUT port side may fail.
- In the Separate configuration, the IN port and the OUT port are independent DMX signals, so it is necessary to use M5Stack to relay the signal.
- In a separate configuration, return signals from devices that support the RDM standard cannot be relayed from the OUT port side to the IN port side.
- If you are using a device that supports the RDM standard, select the Direct Connect (Passthrough) configuration.

S3: The termination resistance of the IN port

- switch that connects the termination resistor to the IN port.
- termination resistors are connected when the switch is in the up position and not when in the down position.
- On when no devices are connected to the OUT side, or when switch S2 is set to be configured separately.

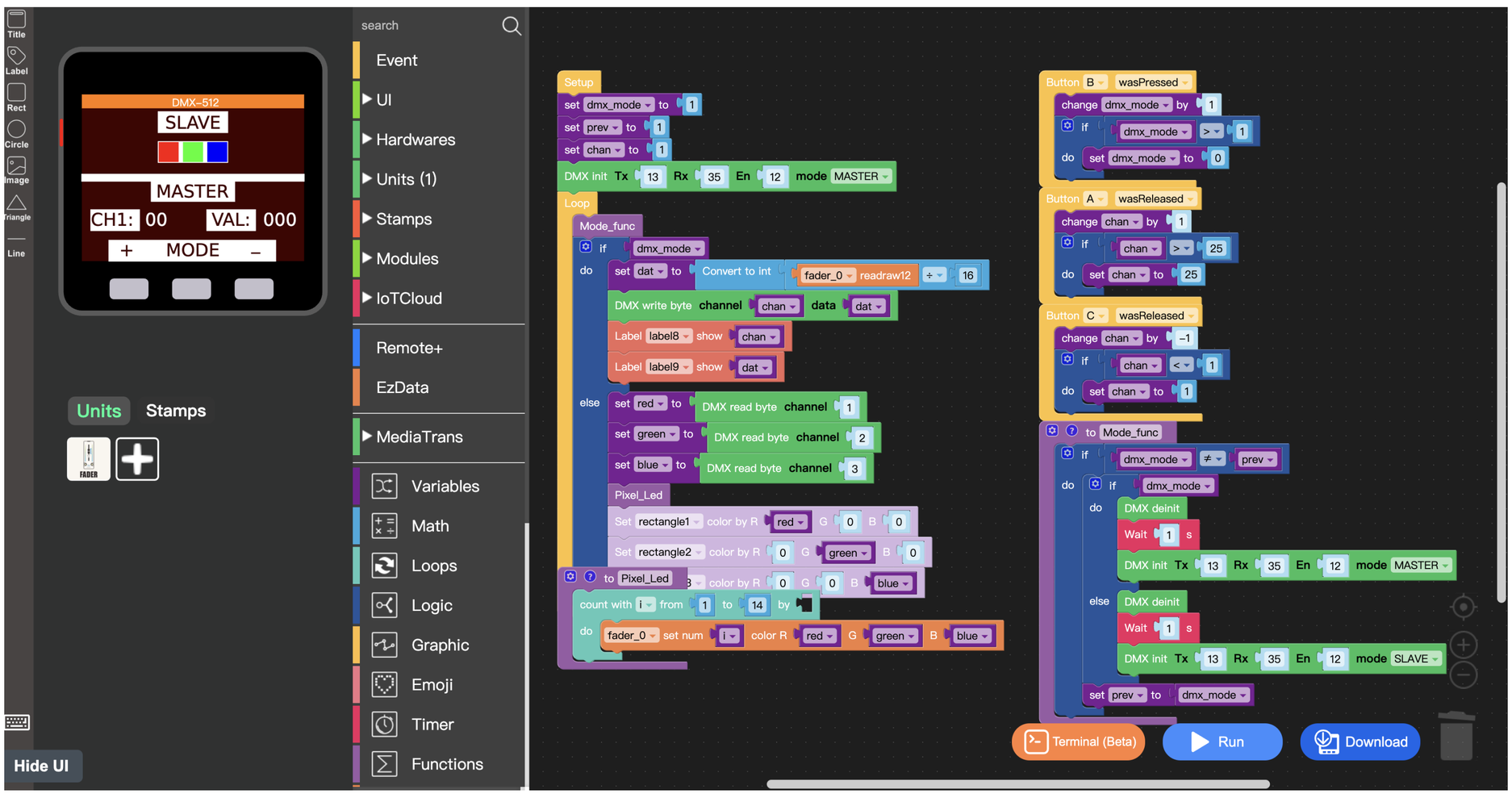
Examples

Arduino

- Arduino Library

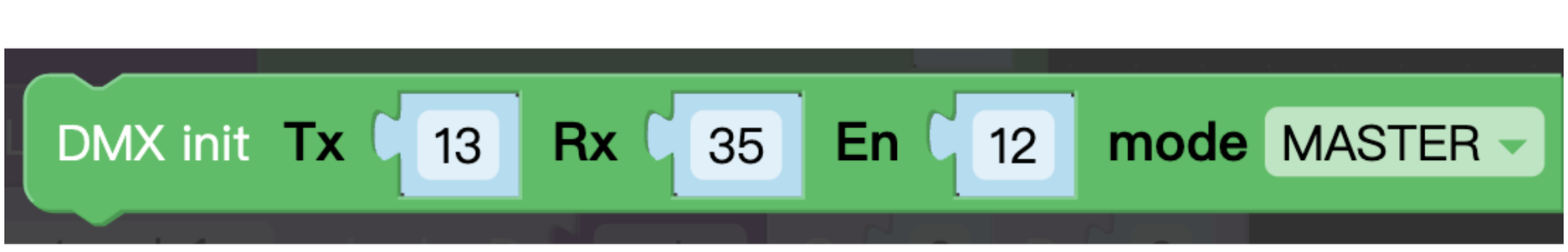
UIFlow

- DMX-Base UIFlow Example



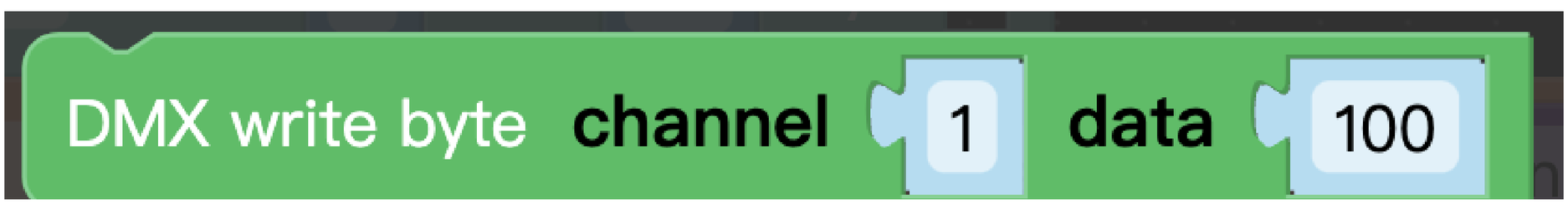
UIFlow Blocks

- DMX Init



- DMX deinit

- DMX write byte



- DMX clear data buffer

- DMX read byte