DMX/RDM Setup Tool

CD-MT512

Client	
Project	
Order Code	
QTY	

Thank you for purchasing the Colordreamer DMX/RDM Addressing Tool!

Our manual will describe the installation and mounting of the product as well as description of how to use

it. Please read and understand this manual in its entirety before using the product.

Package Contents:

1XDMX Addressing Tool

Product Warranty is void if product is not installed as per installation instructions and in compliance with all local and provincial codes.

SAFETY RECOMMENDATIONS AND WARNINGS

Only use this device in dry environments (indoor use)

Do not make modifications or alter the product

Keep away from flammable material.

Do not use chemicals or abrasives to clean the device as this many voids the warranty.

Ensure installation complies with local electrical rules and regulations.

Do not connect or disconnect the device while the power is connected.

Connectors are to be kept clean and dry at all times.

Input Voltage range 12-24VDC

Power off the device during service or when not in use.

Twisted pair cable is recommended for data transmission

Avoid unwanted voltage on the DMX cables at all times.

Do not remove any parts from the unit including the plug ground pin or connect to an ungrounded circuit.

To supply this unit with power, first connect the provided power cord to the unit and then to a suitable power outlet.

Product Overview

The CD-MT512 is a powerful DMX/RDM Addressing and test tool.it allows for DMX Addressing and Color testing of Lighting products. This Tool is a must for anyone involved with DMX512 installation.

Compatible with DMX512(1990) protocol and return-to-zero code protocol

Supports SM18522PH/SM18522PS/SM18512P/SM18512PS/SM17500P/UCS512H4LB/UCS512DH/UCS512C1/UCS512C7/UCS512C8/UCS512C4/UCS512CN. Additional IC types will be supported with future firmware updates.

We offer regular address writing, repeated address writing, and unified address writing functions. Regular address writing sets one IC to one pixel; repeated address writing sets several ICs to one pixel; and unified address writing sets all ICs in a signal loop to one pixel. After successful address writing, we offer manual and automatic point-checking to verify correct address writing.

Supports color testing and point-checking verification for zero-code ICs.

Customizable default display effect upon power-on of DMX IC OUT R/G/B/W ports

Change lamp power by altering the gain current of DMX IC OUT R/G/B/W

Set the starting address of the first lamp; other lamps in series signal loops can automatically obtain the address.

Simple color control of lighting fixtures can be performed to check their functionality, such as overall RGBW gradient and color adjustment of each RGBW channel.

Optimized stability of large-scale RDM device search

Added 180s timeout protection to RDM discovery single round to prevent infinite blocking during single-round scans

After RDM search completion, the device list is sorted in ascending order by UID, ensuring stable list order

Only the currently selected device's Identify function is lit during search/page turning; the rest are automatically disabled

- Automatically exits main scan and rescan after searching 128 devices

Supports online firmware upgrades to unlock new features without returning to the factory for program updates.

Colordreamer

Product Specification

Models	CD-MT512
Electrical	
Input Voltage	12-24VDC
USB Port	USB Type C, cable not included
Power Consumption	2W
Display	4.0-inch (diagonal) all-screen LCD Multi-Touch display
Control	
DMX Outputs	512 DMX Channels
Supported DMX IC	SM18522PH/SM18522PS/SM18512P/SM18512PS/SM17500P/UCS512H4LB/UCS512DH/UCS512C1/UCS512C7/UCS512C8/UCS512C4/UCS512CN/CD
RZ Code Outputs	SPI
Supported RZ Code IC	SM16703,SM16704,SM16824,SM18703/ UCS2903,UCS2904B,UCS8903,UCS8904
IC Current Gain	Support
RDM Setup	Support
Physical	
Housing Material	Aluminium
Finish Color	Black
Connector	Removable multi-pin terminal blocks
Dimensions(LXWxH)	114X71.2X24.8mm
Weight	200g
Environment	
Operating Temperature	-10℃ to +50℃
Storage Temperature	-20℃ to +70℃
Humidity	0-80% non-condensing

IP Rating	Dry, Indoor IP20
Certification	CE

Description of Status LED:

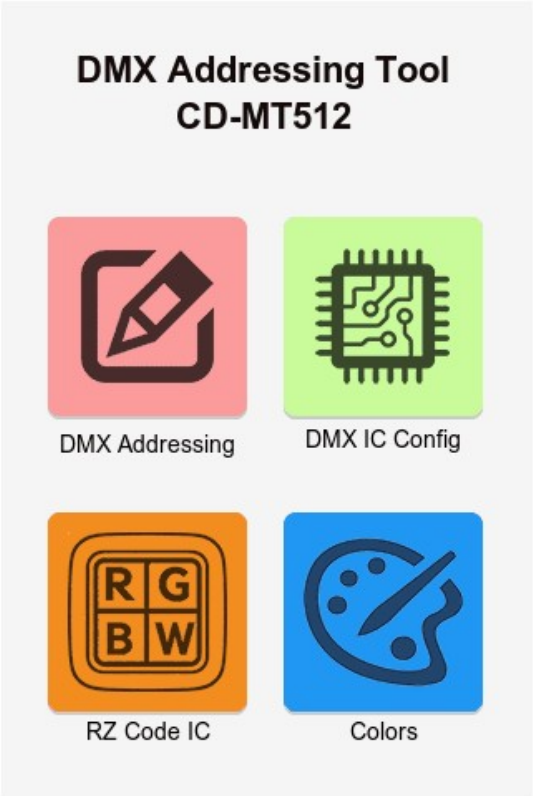
Status LED for Power

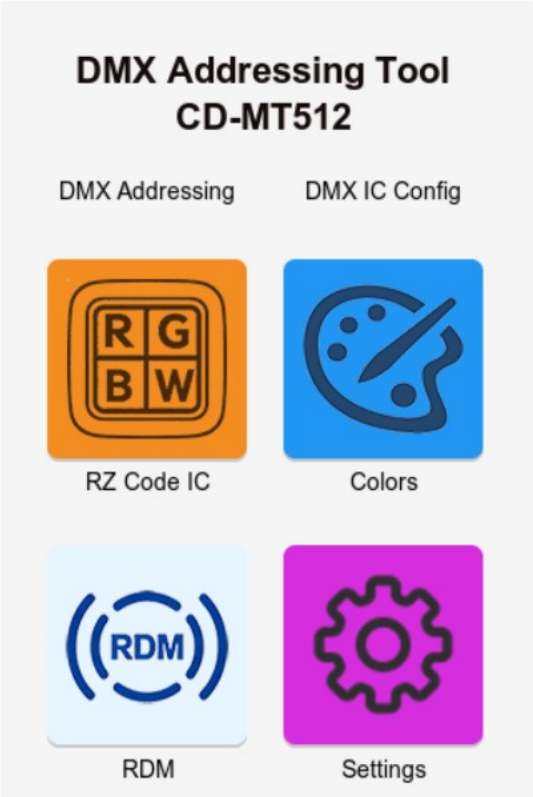
Status	Description
Powered Off	Power cable not connected. The device has no power
Permanently Red:	Connected to Power. Power is on.

User Guide

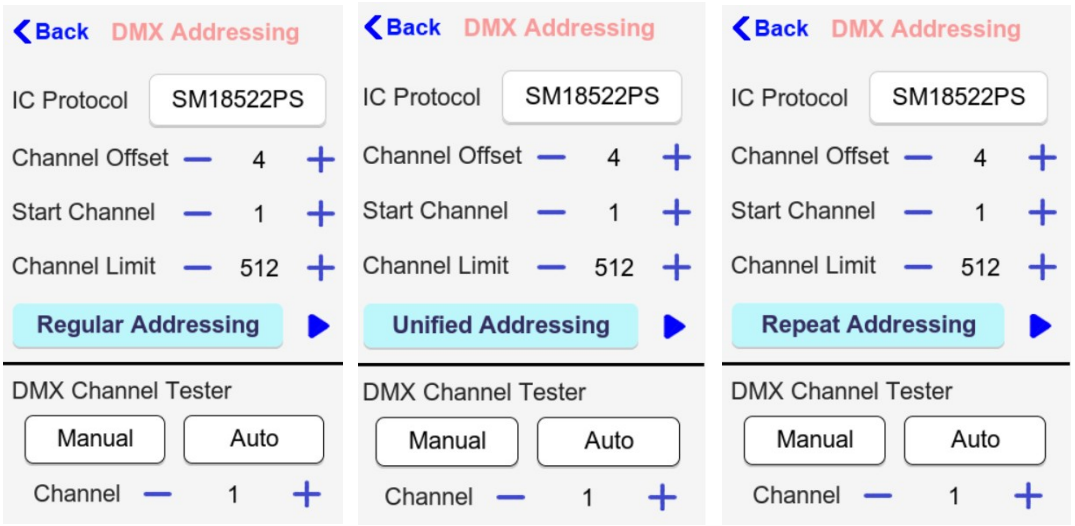
Home Screen

The CD-MT512 has a total of 6 icons. Clicking on different icons will take you to different function settings.





DMX Addressing



You can set and verify the address of your DMX lighting fixture by clicking the DMX Addressing icon.

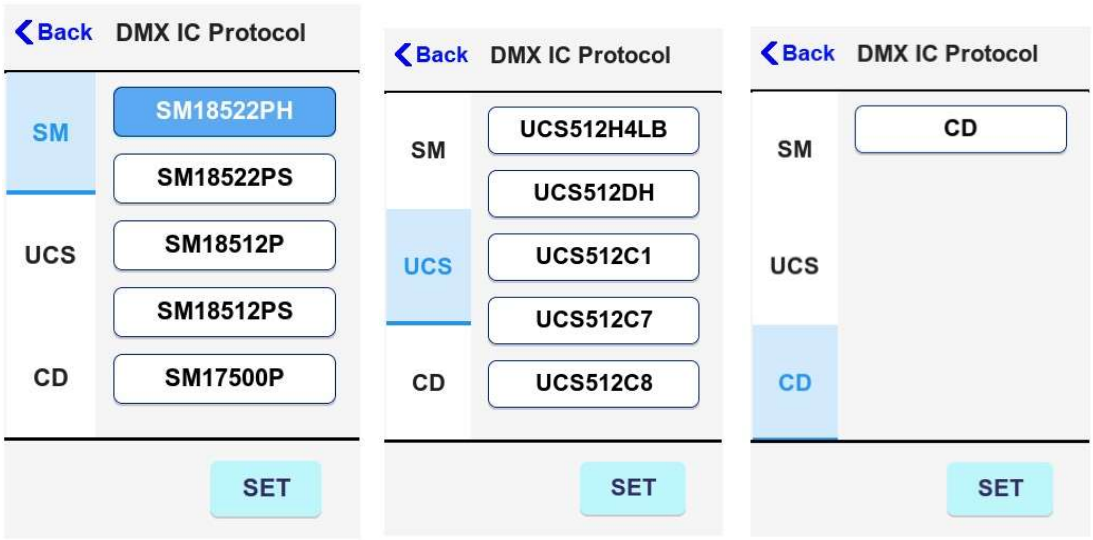
1: The IC protocol can be SM/UCS or CD.

SM: SM18522PH, SM18522PS, SM18512P, SM18512PS, SM17500P

UCS: UCS512H4LB, UCS512DH, UCS512C1, UCS512C7, UCS512C8,UCS512C4 and UCS512CN

CD: CD

If you cannot find your currently used IC in our supported IC list, please contact our sales team and provide the IC information. We will update the firmware to meet your needs as much as possible.



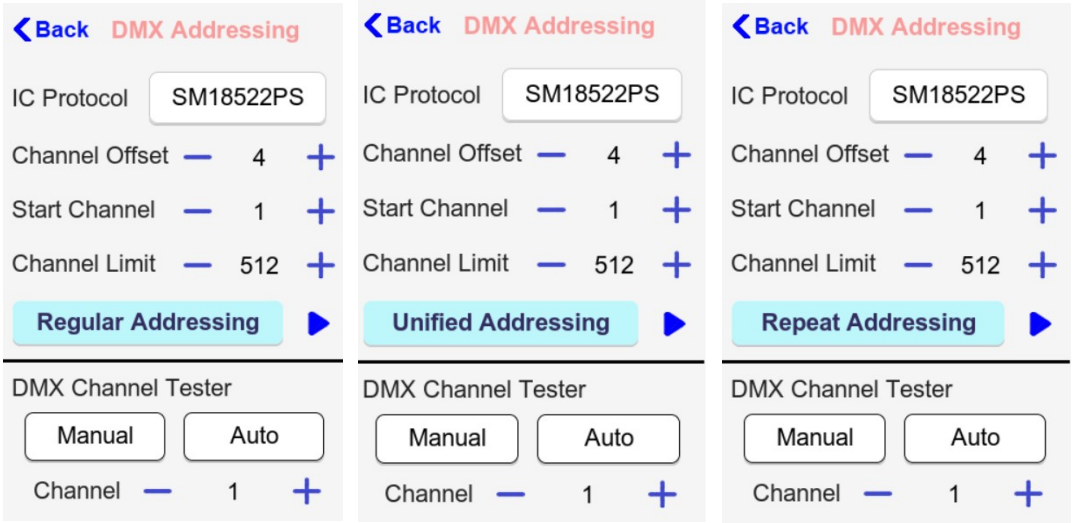
2:You can set the CHANNEL OFFSET to 1, 2, 3, or 4. For a single-color lamp, OFFSET is 1. For a dual-color temperature lamp, OFFSET is 2. For an RGB lamp, OFFSET is 3. For an RGBW lamp, OFFSET is 4.

3: “Start Channel”: Default is 1

You can set the starting address of a signal loop to 1, and the addresses of the remaining lights will be automatically assigned.

4: “Channel Limit”: max 512

5:We offer regular address writing, repeated address writing, and unified address writing functions.



Regular address writing sets one IC to one pixel; repeated address writing sets several ICs to one pixel; and unified address writing sets all ICs in a signal loop to one pixel.

After successful address writing, we offer manual and automatic point-checking to verify correct address writing.

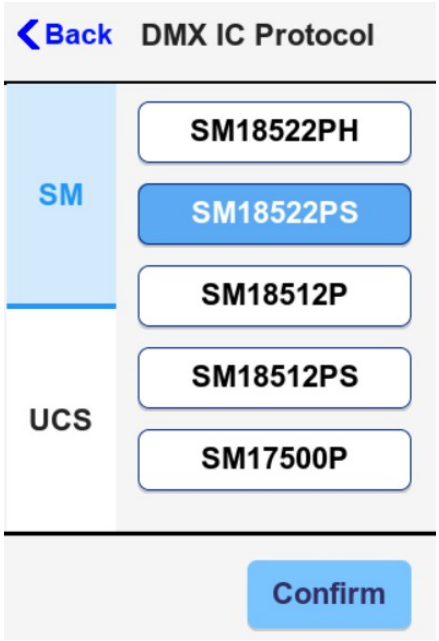
Example:

For DMX flexible strip.10Pixels per meter, RGB Color, if you set start address 1, then address will be 1, 2, 3, 4, 5, 6……automatically

DMX IC Configuration

You can configure certain IC functions, such as power-on effects and current settings for the IC's RGBW channels, by clicking the IC configuration icon.

choose the IC Protocol what you need: SM/UCS/CD series



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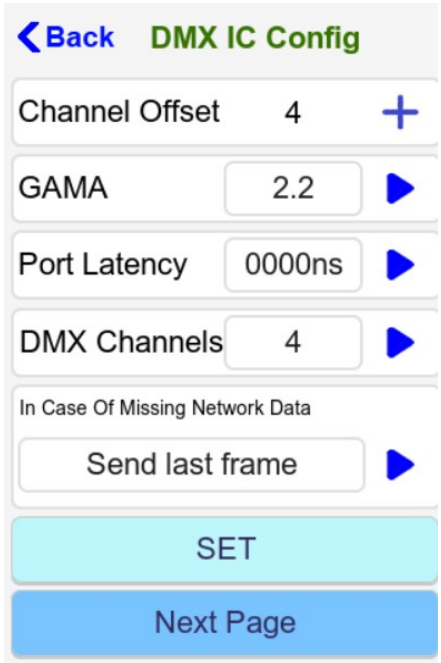
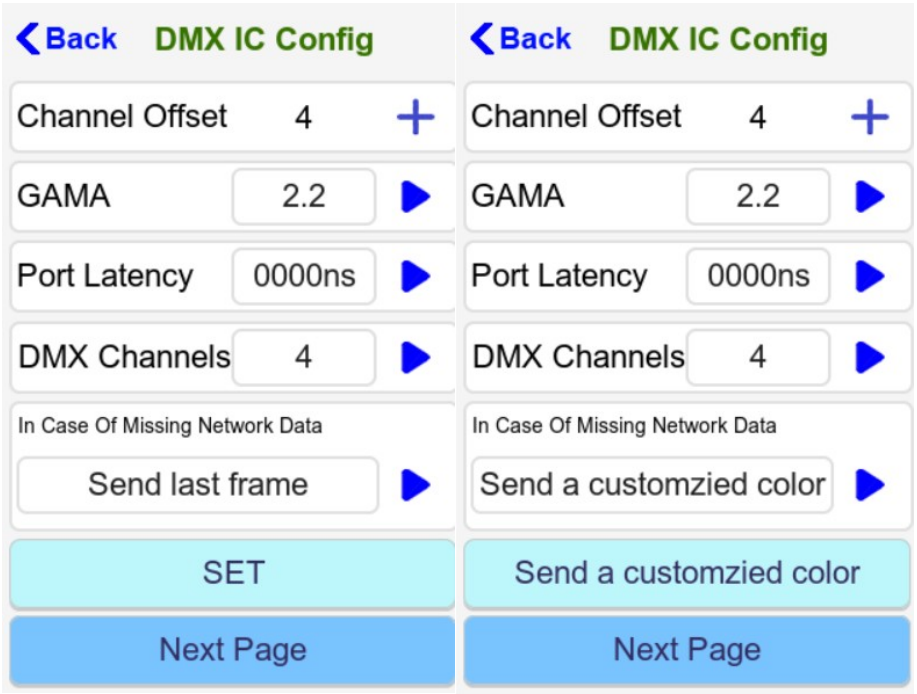
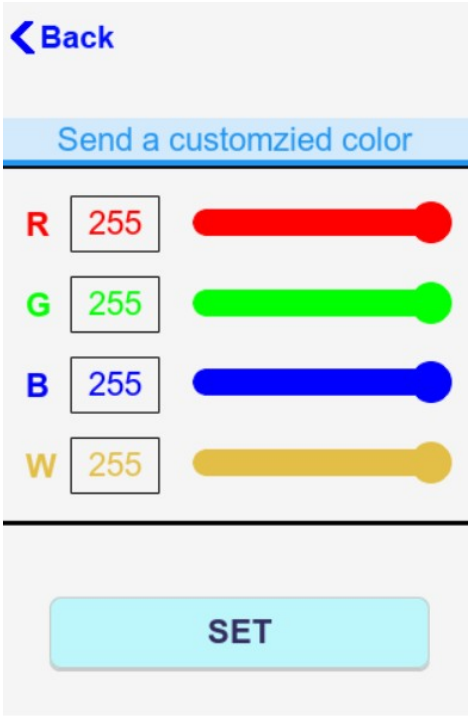


You can set “Send last frame” / “Send a customized color” in case of missing network data

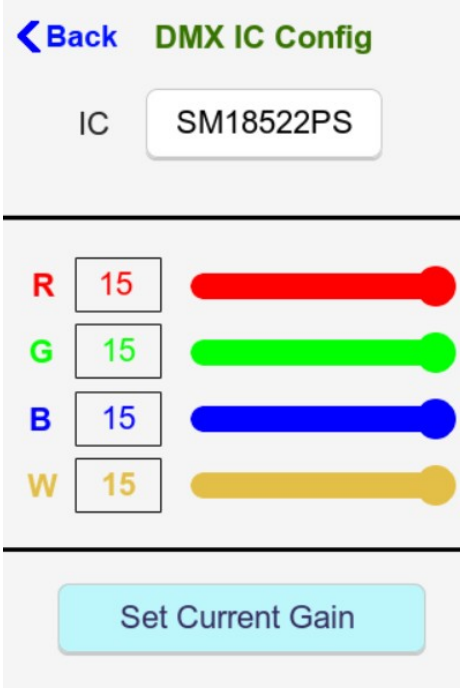




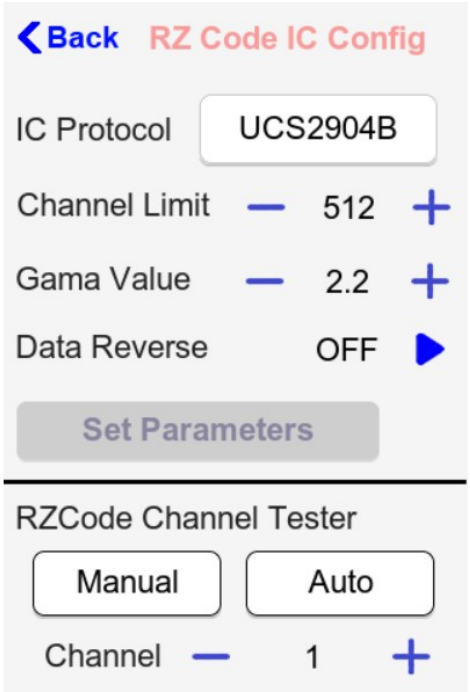
Set the default power-on effect by changing the values of each RGBW channel.

Clicking the next page allows you to set the drive current for each channel of the IC RGBW.

If one meter DMX LED strip with RGBW fully lit is 16W, you can adjust the current gain values to lower the wattage of the LED strip according to the table in the IC data sheet.



RZ Code IC Config



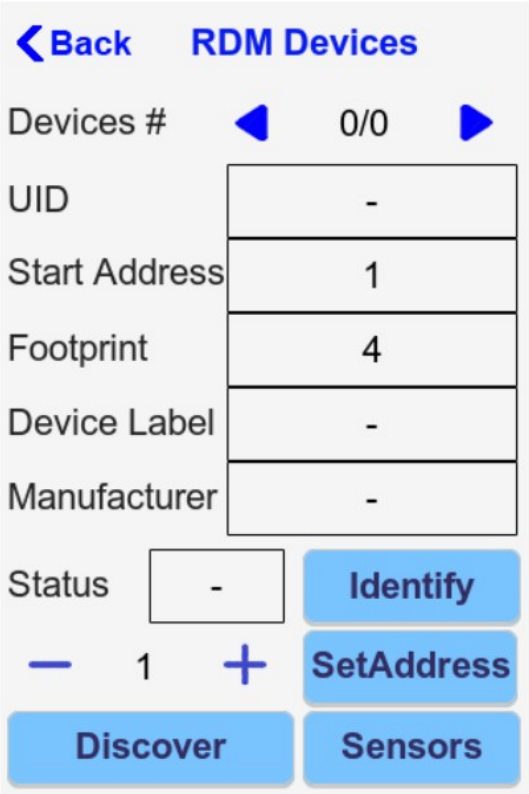
Touch "**RZ Code IC**", choose the IC you need, IC Type:

SM: SM16703, SM16704, SM16824, SM18703

UCS: UCS2903, UCS2904B, UCS8903, UCS8904

RZ Code only support Channel Testing

RDM



Device Discovery: First, send the "Discover" command through the RDM interface. The CD-MT512 will automatically search for and list all RDM lights connected to the DMX encoder.

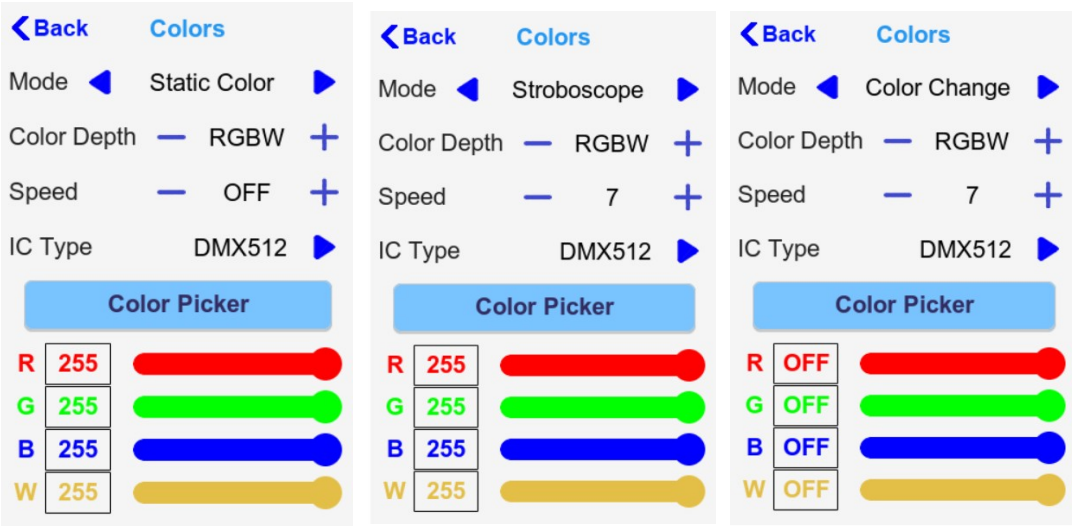
If you have connected 80 lights, Devices# will display 1/80, 2/80...80/80. The more lights connected, the longer the search time. Use the left and right arrows to select the lights you want to configure.

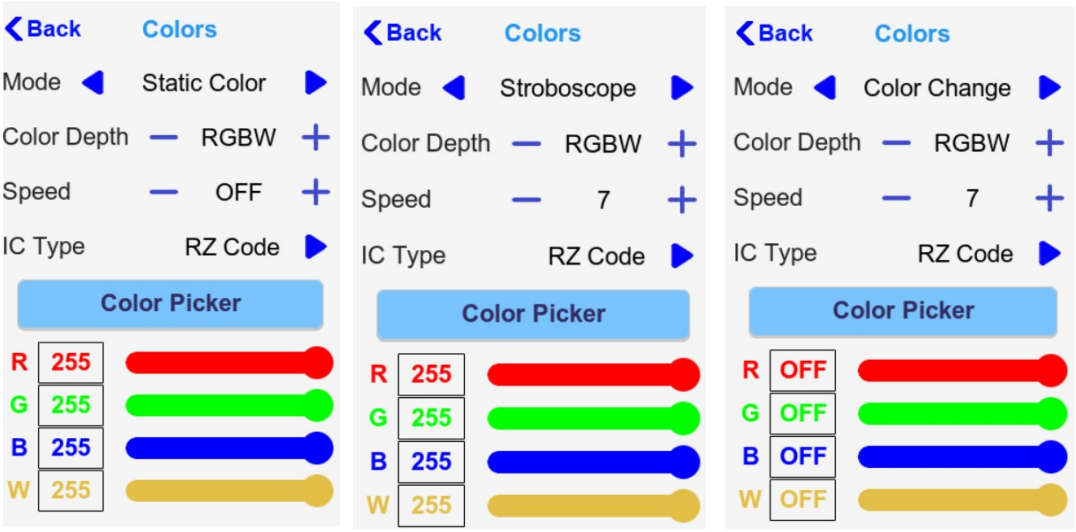
Use the Identify function to identify the selected lights. For example, if you select to configure the light 1/80, clicking the Identify button will show a light breathing and flashing, indicating its status is YES. Clicking Identify again will stop the light breathing, and the status will be NO.

You can also view the RDM light's manufacturer information, device label, and sensor information, such as temperature or voltage monitoring.

After identifying the lights, use the SET Address function to change the light's starting address.

Color Test





When your project control system is not yet ready, you can use the Color Test function of the CD-MT512 device to perform a simple color test on the lights to check if the lights are functioning properly.

Mode: “Static Color” / “Stroboscope” / “Color Change”

Choose IC Type of the led fixtures: DMX512 / RZ Code

Then touch “Color Picker” to set Color :

The color values for each RGBW channel is from 0 to 255.

0 is the lowest value.

255 is the highest value.

Settings

you can adjust the brightness of screen.

You can see the firmware version of your device. You can download firmware upgrade software and the latest firmware package from the official website to unlock new features.

Firmware Upgrade Guide

for CD-MT512 DMX Addressing Tool

Step 1:

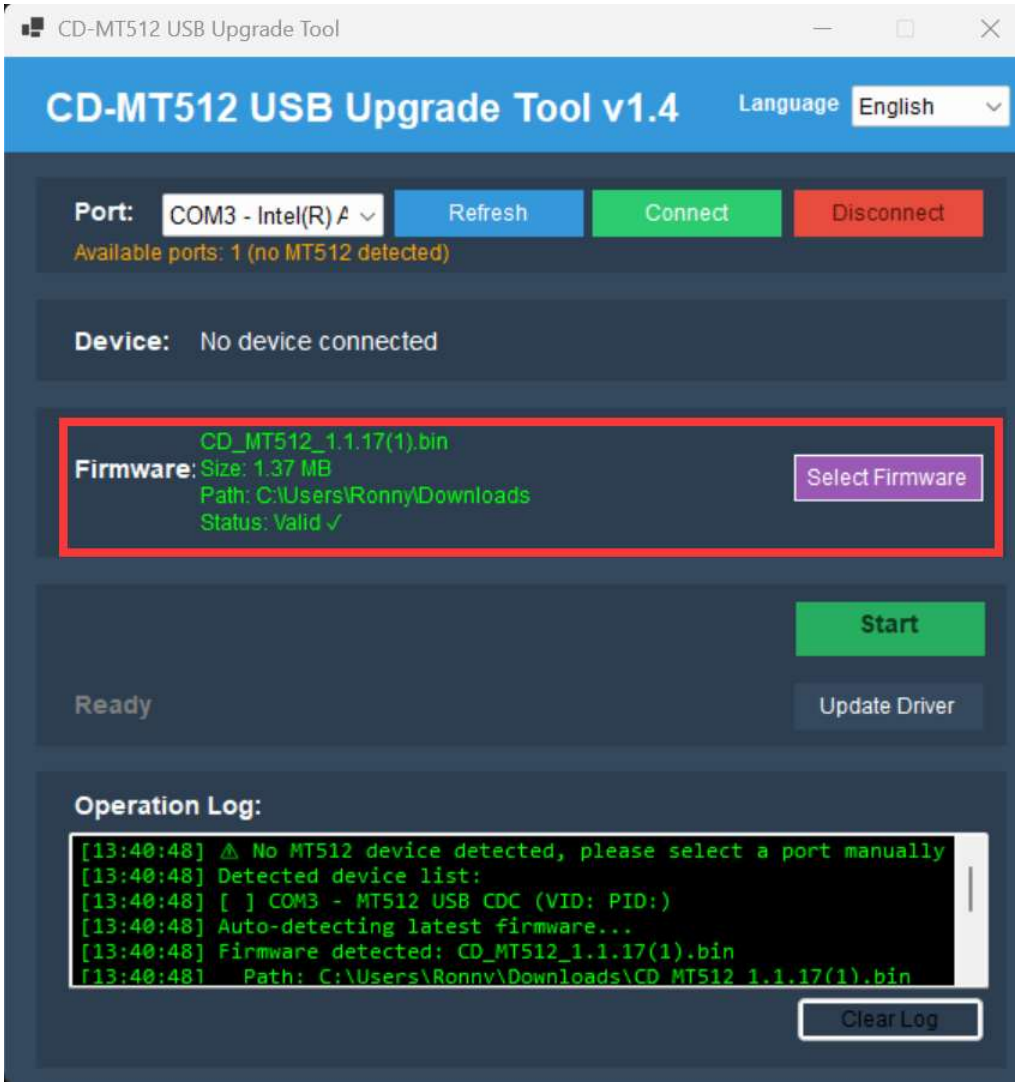
Connect the Addressing tool to the computer via USB cable.

Step 2:

Run the program ‘MT512 DFU TOOL’ as administrator

Step 3:

Select the firmware you need to update.

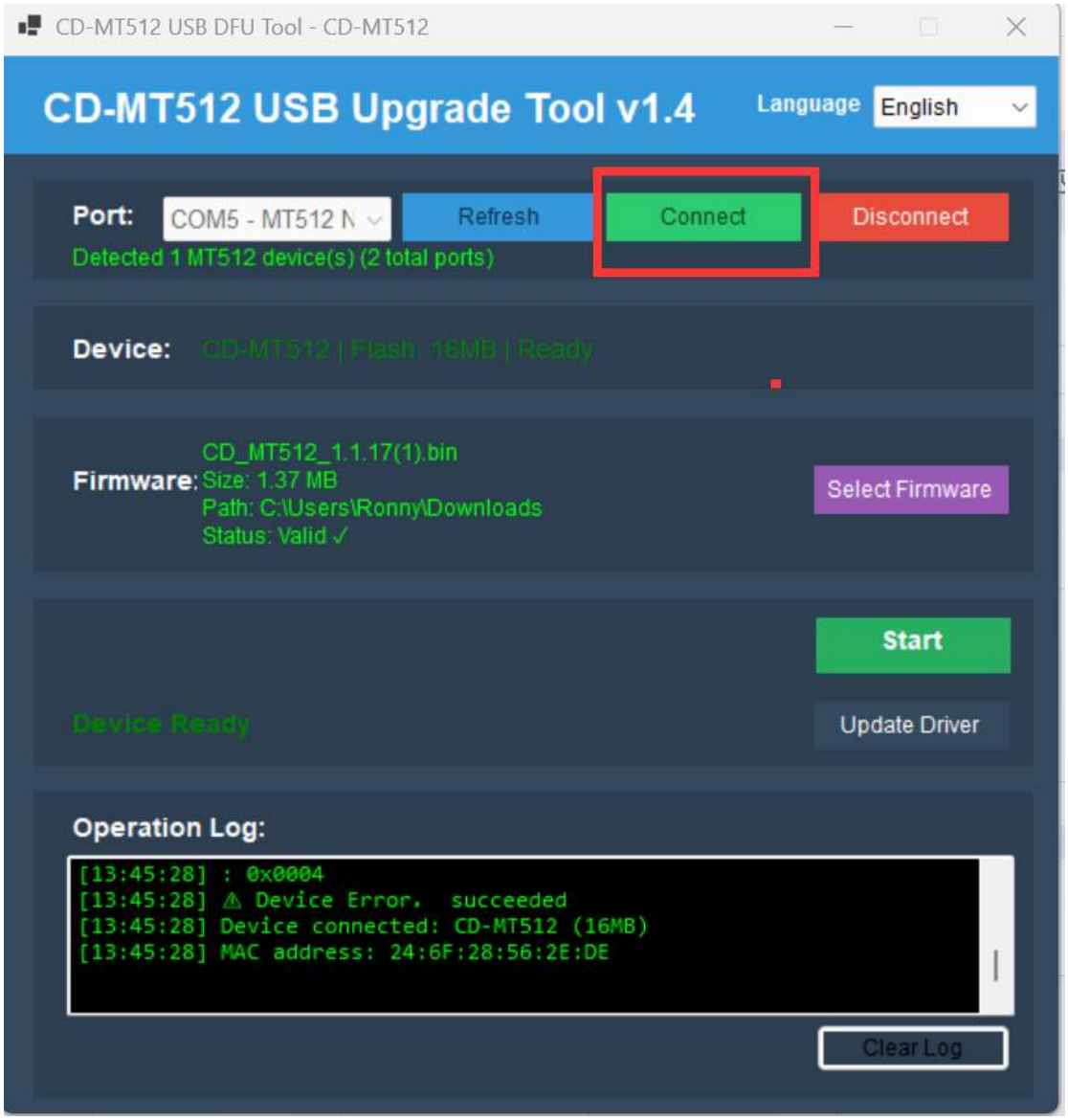


Step 4:

Clik “Update driver” as below:

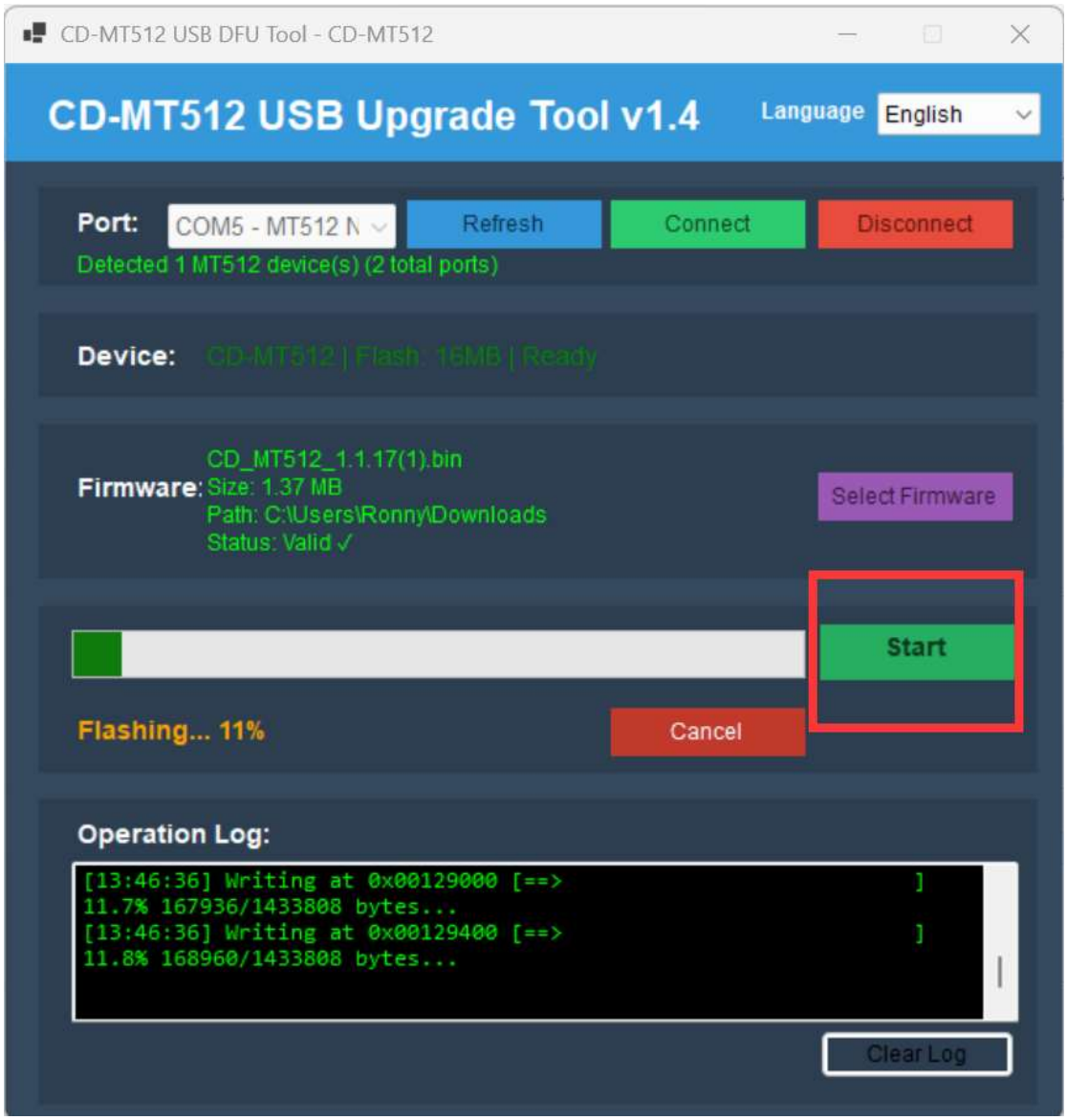
Step 5:

Do connection between CD-MT512 addressing tool to your PC



Step 6:

Click "Start" to Start Upgrade



Step 7:

When the interface displays as shown in the figure, the update is completed.