TRAXON

TX Smart Addresser

USER MANUAL

V1.0

Content

For your own safety and that of the product, please read this configuration guide carefully before beginning setup and installation.

1. Introduction

In landscape LED control, the DMX512 drive mode is widely used for LED lamp applications. Due to the specific requirements of the DMX512 protocol, accurate addressing of DMX512 channels is essential for optimal operation.

The Smart Addresser by Traxon offers a fast and convenient solution for DMX512 address assignment. It features built-in test animations to verify the accuracy of the configured addresses.

The Smart Addresser supports standard RDM protocol, allowing users to search for RDM-compatible lamps, perform static detection, and write DMX512 addresses by UID (Unique Identifier), along with other advanced functions.

It also supports SD memory cards for storing multiple offline scene files, enabling looped playback or the selection of individual scenes. The Smart Addresser can function as a basic DMX512 console, transmitting data across channels 1-512 for testing and control.

Additionally, the device provides various quick test modes to verify lamp operations, such as running point checks and color change tests. It supports parameter settings for MR Series chips, output current adjustment, brightness control, and firmware upgrades.

With an integrated color palette function, users can select precise color values and utilize multiple four-color modes for enhanced control. The Smart Addresser is powered via a USB Type-C connection for added convenience.

ATTENTION	· Please pay attention to dust and water · Avoid direct sunlight for a long time · Keep away from heat and fire sources · Do not place in an explosive gas environment · Keep the product in a secure position to prevent damage or personal injury · Please keep packing cases and packaging materials available when storing and transporting products

NOTE	This manual is based on the current v113 firmware version. Future firmware updates may result in changes to the interface or functionality. Please refer to the actual product for the most accurate information.

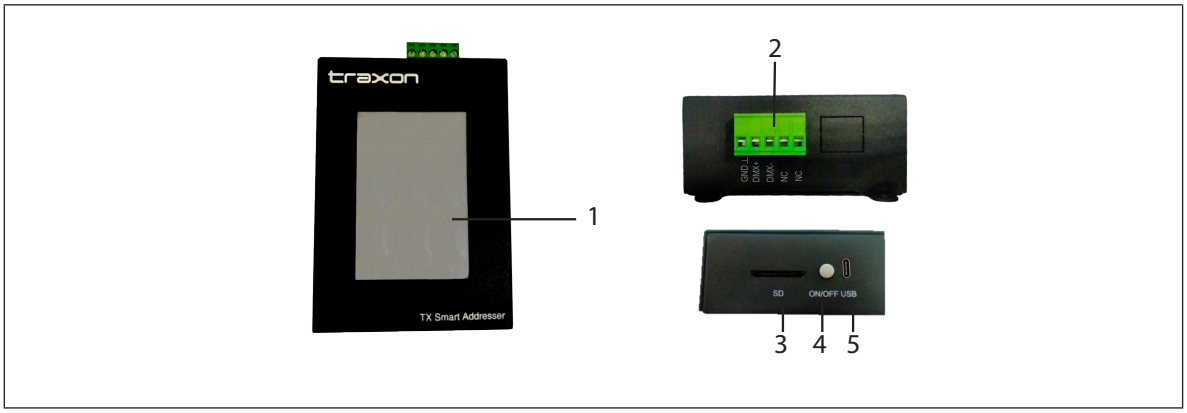
2. Function Overview

1. The Smart Addresser allows flexible configuration of loaded channels, baud rate, playback speed, color count, and other parameters.
2. Equipped with a single DMX512 signal output port, it supports differential mode addressing for reliable operation.
3. Capable of outputting at a 2M clock frequency, it supports up to 6,144 channel loads.
4. Users can specify the starting channel, the on-load channel of individual chips, and lamp numbers, with address verification through automatic or manual test modes.
5. Built-in test animations include color gradients, running points, and overall gradients, allowing easy functional testing.
6. Supports both global and individual channel brightness adjustments for detailed control.
7. An SD card slot enables storage of animation data, selection of playback scenes, and adjustable playback speed.
8. Gamma correction settings and the ability to toggle positive/negative data output directions enhance flexibility.
9. Simulates a DMX512 console, allowing arbitrary data transmission across channels 1–512 for testing and basic control tasks.
10. Compatible with the standard RDM protocol, enabling RDM lamp searches, static detection, and DMX512 address assignments via UID.
11. Supports parameter adjustments such as current output and brightness for chips from various brands, including SM, UCS, and MR.
12. The integrated color palette allows users to select precise color values and supports multiple four-color modes for advanced control.
13. Powered via a modern USB Type-C port, ensuring convenience and compatibility.
14. Supports addressing for a wide range of DMX512-compatible chips, including MR, UCS, SM, TM, HI, HM, GS, and custom chip types.
15. Offers offline firmware upgrades and touch screen updates to maintain and enhance device functionality.

3. Specifications and Parameters

3.1 Controller Appearance

FIG.1: Addresser Appearance

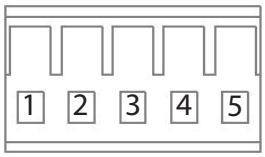


1. Touch display screen
2. DMX512 / RDM Signal terminal
3. SD card slot
4. ON/OFF switch
5. Power Input (USB Type-C)

3.2 DMX512 Output Port Definition

The 5-pin terminals are arranged sequentially from left to right, as illustrated below.

FIG.2: DMX512 Output Port Definition

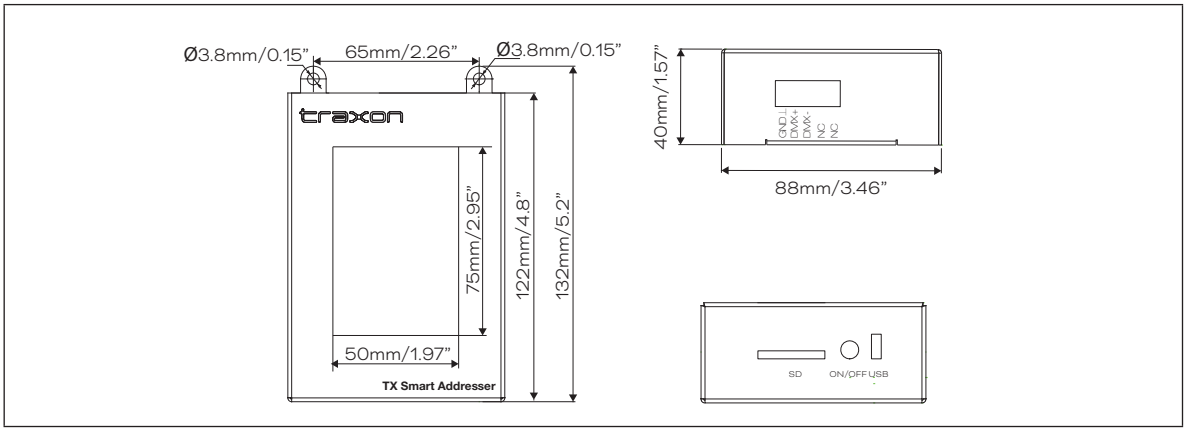


	1	2	3	4	5
DMX signal	GND	DMX+	DMX-	NC	NC

3.3 TX Smart Addresser Dimension

The dimensions are shown below.

FIG.3: Product Dimension



3.4 Basic Parameters

Product Name	Smart Addresser
A Storage Medium	High-Speed SD Card (Standard)
Rated Power	About 5W
Touch Screen	3.5" Resistive Touch LCD Screen
Output	DMX512 / DMX512-A / RDM
Relative Humidity	About 95% (Non-Condensing)
Operating Temperature	-20°C to 80°C / -4°F to 176°F
Storage Temperature	-40°C to 80°C / -40°F to 176°F
Length	122mm / 4.8”
Width	87.4mm / 3.4”
Height	41mm / 1.6”
Power Supply	Type-C Power Supply, DC5V
Shell Material	Iron (Dusting Process)
What’s in the box	Smart Addresser, SD Card x1, Warranty Card x1, Flat-blade screwdriver x1

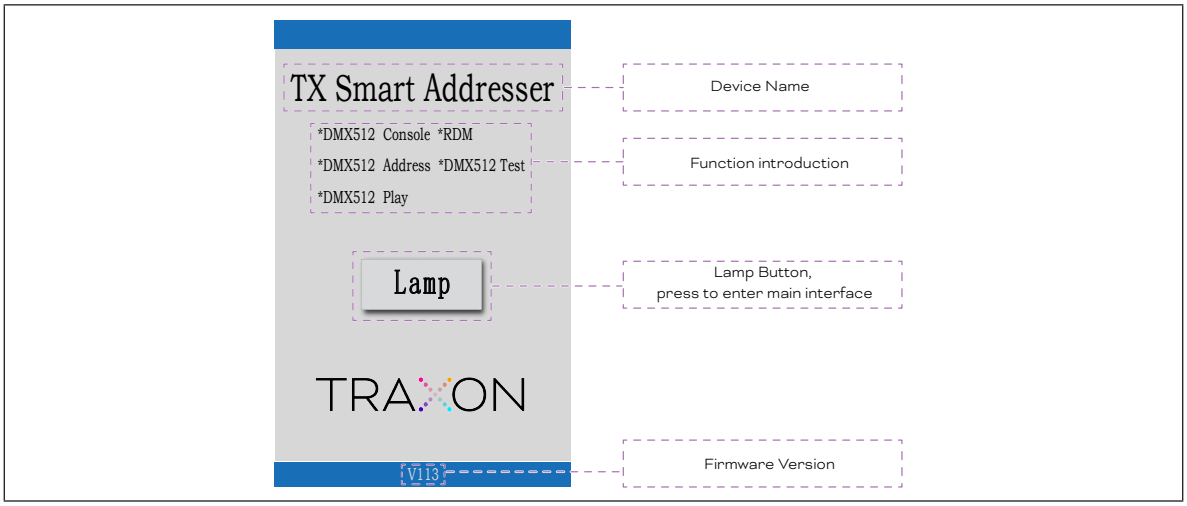
4. Main interface and Functions

4.1 Welcome Screen

Press the ON/OFF button at the bottom of the device to power it on and enter the welcome screen. Upon startup, the following information will be displayed:

- The upper section displays a brief introduction to the device's main functions.
- Lamp Button: A central button labeled "Lamp" allows access to the main interface.
- TRAXON Logo: The TRAXON logo is displayed below the "Lamp" button.
- Firmware Version: The current firmware version is shown at the bottom of the screen.

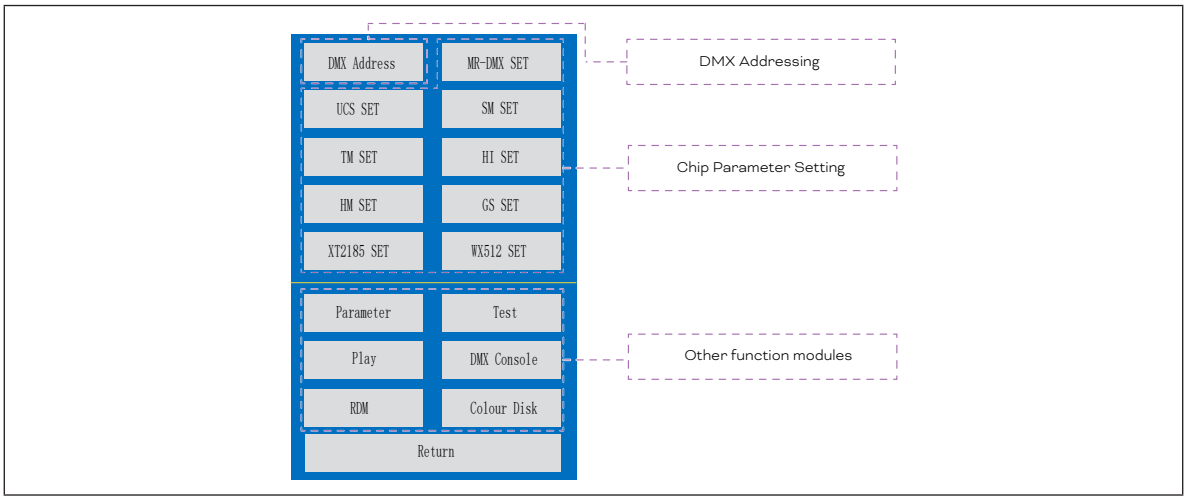
FIG.4: Welcome Screen



4.2 Main Interface

Click the "Lamp" button to enter the main interface of the handheld device, as shown below:

FIG.5: Main Interface

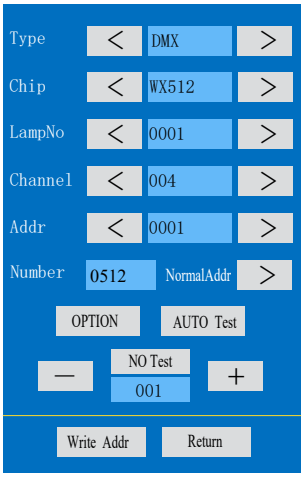


5. Address Writing

5.1 Addressing Interface

Click “DMX Address” on the main operation interface to access the address writing screen, as shown below:

FIG.6: Addressing Interface



Type:

DMX is selected by default. Press the two Buttons of “<” or “>” to switch to select the corresponding chip type. Currently, the supported types include DMX / UCS / SM / TM / HI / HM / GS.

Chip:

Type	Chipset
DMX	DMX05 / DMX05_JDQ / DMX02 / SL_DMX01 / QED512P / LX5123 / LX5124 / WX512 / WX512 Start / WX512 Stop
UCS	UCS512A / UCS512B / UCS512C / UCS512C4 / UCS512CN / UCS512D / UCS512E / UCS512F / UCS512G6 / UCS512H4 / UCS512KH / UCS512KL
SM	DMX512AP / SM16512 / SM16511 / SM16522 / SM17511 / SM17512 / SM17522 / SM17500 / SM17500_A / SM18522P / SM18522PH / SM18512P / SM19522PG / SM19522PHG
TM	TM512 / TM512AC / TM512AL / TM512AD / TM512AB / TM512AE
HI	HI512A0 / HII512A0Zi / HI512A4 / HI512A6 / HI512D / HI512E
HM	HM512G / HM512GH / HM512GF / HM612R
GS	GS8512 / GS8513 / GS8515 / GS8516

LampNo:

The fixture’s position in the chain, with a default value of 1. Click the blue background value box, input the desired number on the pop-up numeric keypad, and press the “Enter” button at the bottom-left corner to confirm the value setting.

Lamp Number	Which fixture to start the addressing from 0001 > Fixture 1

Channel:

The number of DMX channels occupied by each decoder chip. Note that the number of decoder chips is not equivalent to the number of pixels. Typically, one decoder chip controls one pixel, but in some cases, a single decoder chip may control multiple pixels. Please refer to the specific parameter settings for different Traxon fixtures (please see “5.2 Default Address Settings for Standard Products” on page 11).

Channel	Select number of channels occupied by each dot 0001 White 0002 Dynamic White 0003 RGB 0004 RGBW

Addr:

The DMX starting address of the first light in the daisy chain.

Addr	0001 or any other DMX start address you need for the first fixture

TIPS

Understanding the Relationship Between “LampNo”, “Channel”, and “Addr”

The DMX start address is commonly calculated based on these parameters as follows:

DMX Start Address = (LampNo - 1) × Channel + 1

Calculation Examples:

Let’s consider an RGBW fixture, which uses 4 channels per dot:

- Example 1: Addressing a Fixture at Installation Position 10
  - If you set LampNo to 10.
  - Start Address = (10 - 1) × 4 + 1 = 9 × 4 + 1 = 36 + 1 = 37
  - This fixture’s DMX starting address would be 37.
- Example 2: Addressing the First Fixture (Default LampNo)
  - If you set LampNo to 1 (its default value).
  - Start Address = (1 - 1) × 4 + 1 = 0 × 4 + 1 = 1
  - The first fixture in the string would start at DMX Channel 1.

Numbers:

In Normal Addr mode, the “Number” parameter specifies the quantity of decoder chips to be addressed.

In Repeat Addr mode, it indicates how many dots form the same pixel(i.e., share the same DMX start address).

Numbers (Normal mode)	Address the number of dots in Numbers in ascending order
Numbers (Fix mode)	Address the number of dots in Numbers to the same address
Numbers (Repeat mode)	Set how many dot(s) forms one pixel

To avoid insufficient “Numbers” settings, it is recommended to set Numbers to 512 when addressing DMX512 fixtures in Normal Addr mode. Note that the number of fixtures is not equivalent to the number of fixtures. For instance, a 10-pixel fixture typically contains 10 fixtures internally. If a daisy chain includes 9 such fixtures, the “Numbers” parameter in Normal Addr mode should be set to 90, for instance.

Addressing Mode:

The device supports three addressing modes: Normal Addr, Fixed Addr, and Repeat Addr. The default mode is Normal Addr. Press the ">" button on the right to switch between the modes.

- Normal Addr: The default manual addressing mode. The addresses of fixtures in the daisy chain will be assigned sequentially in ascending order based on the number of decoder chips specified in the "Numbers" parameter.
- Fix Addr: Fixed addressing mode. All fixtures will be assigned the same DMX start address.
- Repeat Addr: Repeated addressing mode. In this mode, the "Numbers" parameter determines how many decoder chips share the same address. For example, if Numbers = 2, the first two decoder chips will have the start address Addr, the next two will have the start address Addr + Channel, and so on, with addresses assigned sequentially in ascending order.

TIPS

Understanding the "Numbers" Parameter and Different Addressing Modes

In Normal Addr mode, "Numbers" specifies the total quantity of dots to be addressed. Similar as Normal mode, In Fix mode, the "Numbers" parameter defines the upper limit of dots that will share the same DMX start address.

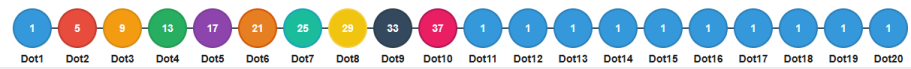
But in Repeat mode, "Numbers" determines how many dots will share the same DMX address to form one logical pixel unit.

The following example demonstrates the concept in practice. Example Setup:

- Total dots: 20 (RGBW type, 4 DMX channels per dot)
- Factory default DMX start address: 1 for all dots

1. Normal Addr Mode (Numbers = 10)

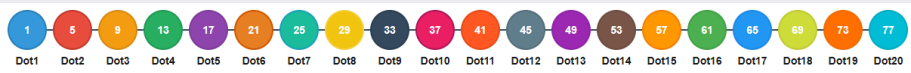
Only the first 10 dots are addressed sequentially. Dots from #11 onward keep their original DMX start address (1).



It is recommended to set "Numbers" to 512 when using Normal Addr to ensure all dots are addressed sequentially. So next step, we set Numbers to 512.

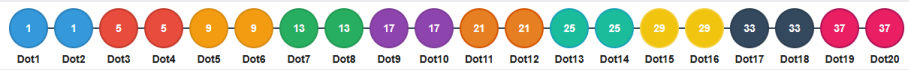
2. Normal Addr Mode (Numbers = 512)

All dots are addressed sequentially.



3. Repeat Addr Mode (Numbers = 2)

Every 2 dots share the same DMX start address, forming one logical pixel.



4. Fix Addr Mode (Numbers = 512)

All dots go back to the same DMX start address (1).

AUTO Test:

The “Automatic Test” button. Click to automatically run the chase test.

Write Addr:

The “Write Address” button. Select the desired parameters and click this button to initiate addressing.

MANUTest- / MANUTest+:

Use these buttons to manually perform the run chase test.

Return:

Returns to the previous menu.

5.2 Default Address Settings for Standard Products

The following list outlines the factory default address mode and parameter settings for standard products during the address programming process.

Product Category	Product	Color Type	Default Addressing Setting				
			Type	Chip	LampNo	Channel	Addr
Linear	Archishape Linear 2.0	RGBW	MR	DMX05	1	4	1
		RGB	MR	DMX05	1	3	1
		W	MR	DMX05	1	1	1
Linear	Linear Go Maxi AC/DC	RGBW	MR	DMX05	1	4	1
		W	MR	DMX05	1	1	1
Linear	Linear Go Midi	RGBW	MR	DMX05	1	4	1
		W	MR	DMX05	1	1	1
Linear	Linear Go Mini	RGBW	UCS	UCS512G6	1	4	1
		W	UCS	UCS512G6	1	1	1
Media - Dots	Media Dot Go S/M	RGBW	SM	SM19522PG	1	4	1
		RGB	SM	SM19522PG	1	3	1
		DW	SM	SM19522PG	1	2	1
Media - Dots	Media Dot Go L	RGBW	SM	SM19522PG	1	4	1
		RGB	SM	SM19522PG	1	3	1
		DW	SM	SM19522PG	1	2	1
Media - Dots	Media Dot Plus S/M/L	RGBW	SM	SM19522PG	1	4	1
		RGB	SM	SM19522PG	1	3	1
		DW	SM	SM19522PG	1	2	1
Media - Flexible	Media Pixel Ribbon	RGBW	UCS	UCS512C4	1	4	1
		RGB	UCS	UCS512C4	1	3	1
		DW	UCS	UCS512C4	1	2	1
		W	UCS	UCS512C4	1	1	1
Media - Flexible	Ribbon Go	RGBW	SM	SM19522PG	1	4	1
Media - Tube	Archishape Media Tube	RGBW	SM	SM18512P	1	4	1
		RGB	SM	SM18512P	1	3	1
		DW	SM	SM18512P	1	2	1

Product Category	Product	Color Type	Default Addressing Setting				
			Type	Chip	LampNo	Channel	Addr
Media - Tube	Allegro Media Tube Lite	RGBW/ RGB/DW	DMX	WX512	1	4/3/2	1
Media - Tube	Media Tube Go	RGBW	SM	SM18512P	1	4	1
		DW	SM	SM18512P	1	2	1
		W	SM	SM18512P	1	1	1
Media - Tube	Media Tube Plus	RGBW/ RGB	DMX	WX512	1	4/3/2	1
Washer	Archishape Washer 2.5	RGBW	MR	DMX05	1	4	1
		RGB	MR	DMX05	1	3	1
		W	MR	DMX05	1	1	1
Washer	Washer Go	RGBW	MR	DMX05	1	4	1
		RGB	MR	DMX05	1	3	1
		DW	MR	DMX05	1	2	1
		W	MR	DMX05	1	1	1
Washer	Washer Go Cube	RGBW	UCS	UCS512H4	1	4	1
		W	UCS	UCS512H4	1	1	1

NOTE

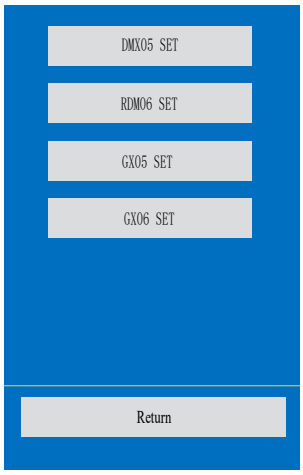
- The Number in the above table is set to 512, and the Address mode is set to NormalAddr.
- With these settings, the addresses of the dots in this light strip will be assigned in ascending order. If you want all dots to share the same address, please use FixAddr mode. If you want multiple dots to form a single pixel, please use Repeat mode.

6. Chip Parameter Settings

6.1 MR-DMX Set

Click “MR-DMX SET” from the main interface, you can enter the parameter settings sub-interface for the MR series chips, as shown in the image below. You will see that the parameters for the four MR chips—DMX05, RDM06, GX05, and GX06—are available for configuration or program upgrades. The next section will provide a detailed explanation of the parameter settings interface for the DMX05 chip.

FIG.7: MR-DMX Settings



6.1.1 DMX05 Set

Click “DMX05 SET” button on the above interface to enter DMX05 parameter setting sub interface:

6.1.1.1 DMX05 PAR Set

Click “PAR SET” to enter the interface of DMX05 main parameters setting, as follows:

FIG.8: DMX05 PAR Chip Settings

The parameters are detailed as follows:

Parameter	Specific Parameter Values	Note
Chip	PWM_OUTPUT, UCS, SM, TM, MY, MBI, WS, etc	Type Chip
Gray	65536 Levels (16bit), 32768, 16384, 8192	Grayscale Levels
Refresh	PWM: 60Hz-3840Hz	PWM Refresh Rate
Channel	PWM: 1-6 Channels SPI Decoding: 100 Channels	DMX Channels
Para Out	Normal / 2Combine / 3Combine / 4Combine	Parallel
Baud Rate	Auto:250K-1M/250K	250K is the standard baud rate
Polar	High / Low	Output Polarity
Self-Test	OFF / R→G→B / A Light on / B Light on / C Light on / D Light on / All Light on / 7 Color / Fix Color / Last Frame	Chip self-test when on DMX IN
Color	1 / 2 / 3 / 4	Number of Colors
PowrOnQue	OFF/ON	Power-on Queue

Refresh: PWM Refresh Rate, affecting flickering in photos or videos.

Self-Test: Sets the default state of the fixture when powered on without a signal or when the signal is lost.

PowrOnQue: When set to ON, the fixture will be assigned a sequential order starting from DMX start address 1 each time it is powered on. When set to OFF, the DMX start address remains unchanged unless manually addressed.

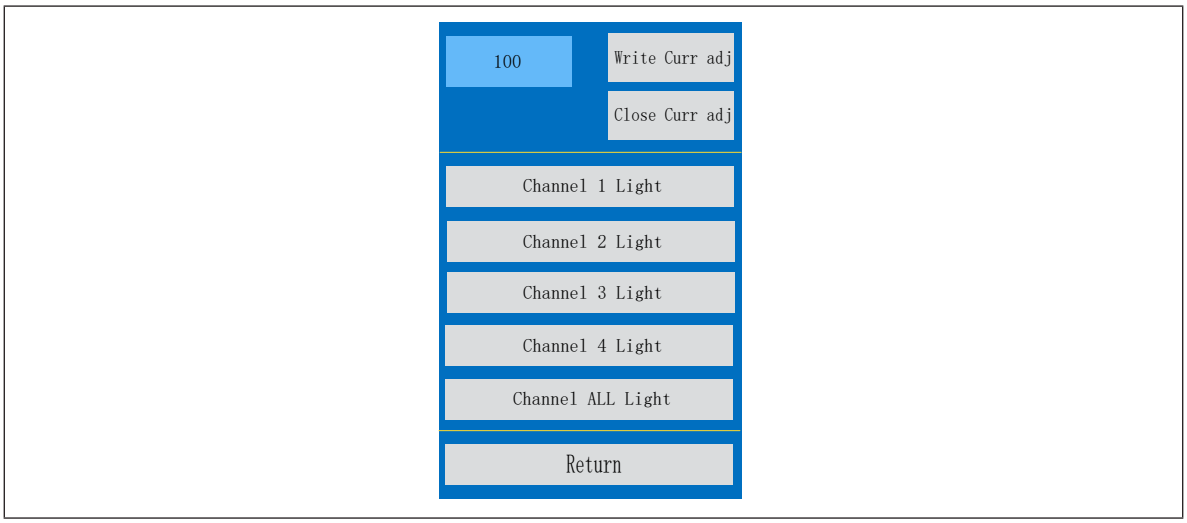
Once all parameters are set, click the "Write" button to transfer the current parameters to the light fixture. The "Write" button will turn dark red during the process and will return to gray once the writing is complete. Click "Return" to go back to the previous level.

NOTE The above parameters are related to the specific hardware circuit design of the fixture. Please refer to the corresponding fixture specifications for adjustments.

6.1.1.2 DMX05 CURR Set

Click "CURR SET" to enter the interface of DMX05 current gain setting, as follows:

FIG.9: DMX05 CURR Chip Settings



Curr Set is the current gain setting for the driver chip. This needs to be implemented in conjunction with the corresponding hardware circuit, such as an SPI driver chip that supports current gain.

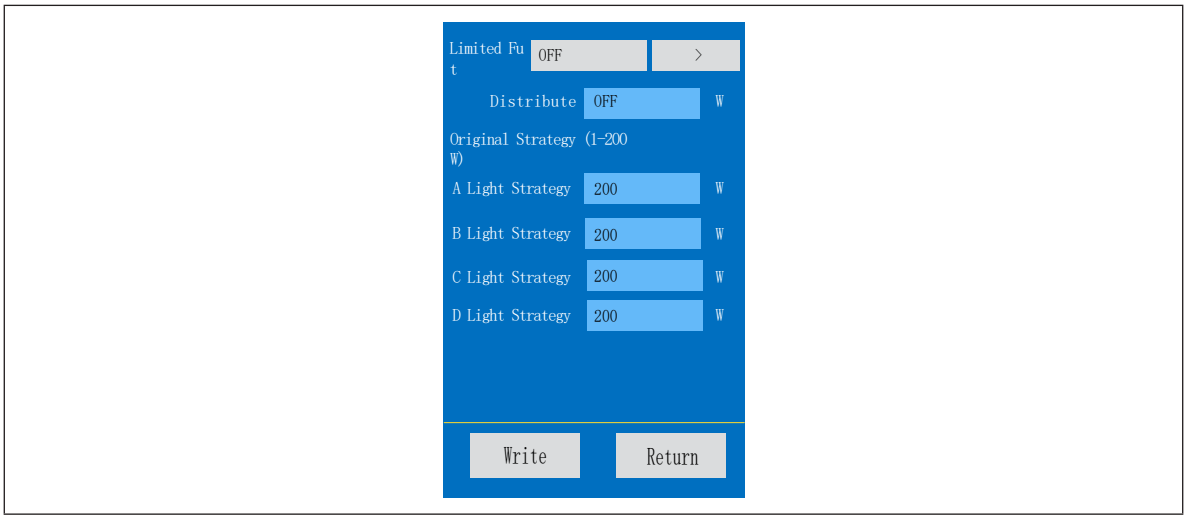
Click the blue block on top left corner to modify the percentage value of current gain.

Click “Write Curr adj” to set up the current gain. You can adjust the current gain for a specific color by clicking Channel 1 / 2 / 3 / 4 Light.

6.1.1.3 DMX05 POWER Set

Click on “POWER SET” to enter the Dynamic Boost mode settings interface, as shown in the image below:

FIG.10: DMX05 POWER Chip Settings



The following parameters are available for configuration:

Limited Fut: Determines whether to enable Dynamic Boost. Set to ON to enable constant power, or OFF to disable it.

Distribute: Sets the constant power value.

A/B/C/D Light Strategy: Sets the power boost value for each individual color channel.

Example configurations:

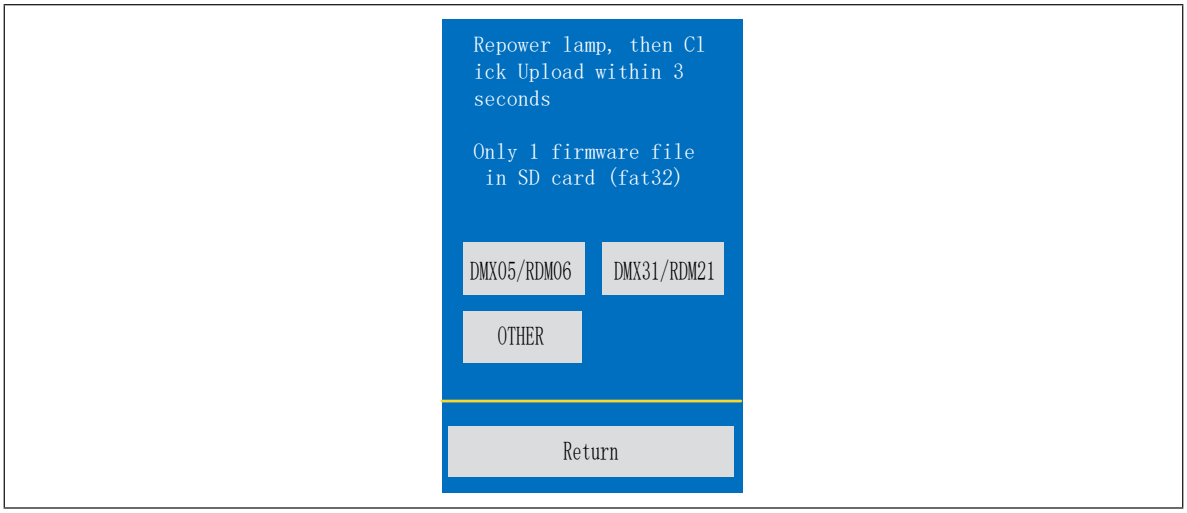
If Distribute is set to 200W and A / B / C / D Light Strategy is set to 50W: When all colors are full-on, the power will be 200W, and when a single color is full-on, the power will be approximately 50W. This is equivalent to the standard mode.

If Distribute is set to 200W and A / B / C / D Light Strategy is set to 200W: When all colors are full-on, the power will be 200W, and when a single color is full-on, the power will be approximately 200W. This is the true smart constant power mode.

6.1.1.4 Update

Click “UPDATE” to enter the firmware update interface, as shown in the image below:

FIG.11: Update Interface Settings

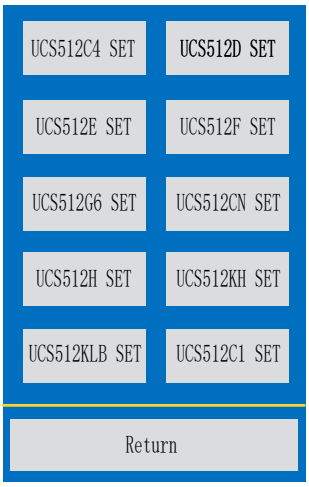


1. Connect the Smart Addresser to the light fixture and ensure that the Addresser can control the fixture properly.
2. Copy the firmware of the fixture (.bin file) to the root directory of an SD card.
3. Insert the SD card into your Smart Addresser device.
4. After powering on the light fixture, click DMX05/RDM06 within 3 seconds to begin the firmware update.
5. The update button will turn dark red, and the screen will display “update running...” along with a green progress bar.
6. Once the update is complete, the screen will display “Update OK.”

6.2 UCS Set

Click “UCS SET” on the main interface to enter the following screen, which includes common decoder chip models from the UCS series.

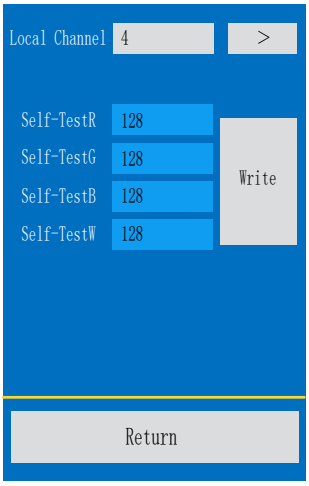
FIG.12: UCS Interface Settings



6.2.1 UCS512C4 Set

Click “UCS512C4 SET” button on the above interface to enter UCS512C4 parameter setting sub interface:

FIG.13: UCS512C4 Interface Settings

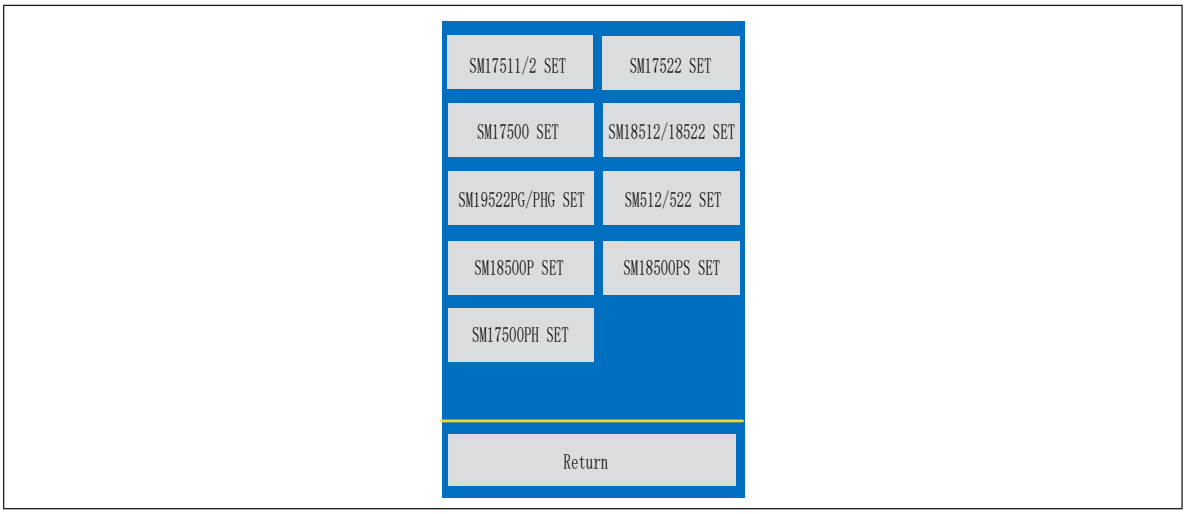


- Local Channel: The DMX footprint required for each chip. Available options: 1 / 2 / 4.
- Self-Test R / G / B / W: The default brightness level of the fixture’s colors when powered on without a signal. Adjustable range: 0–255.

6.3 SM Set

Click “SM SET” on the main interface to enter the following screen, which includes common decoder chip models from the SM series.

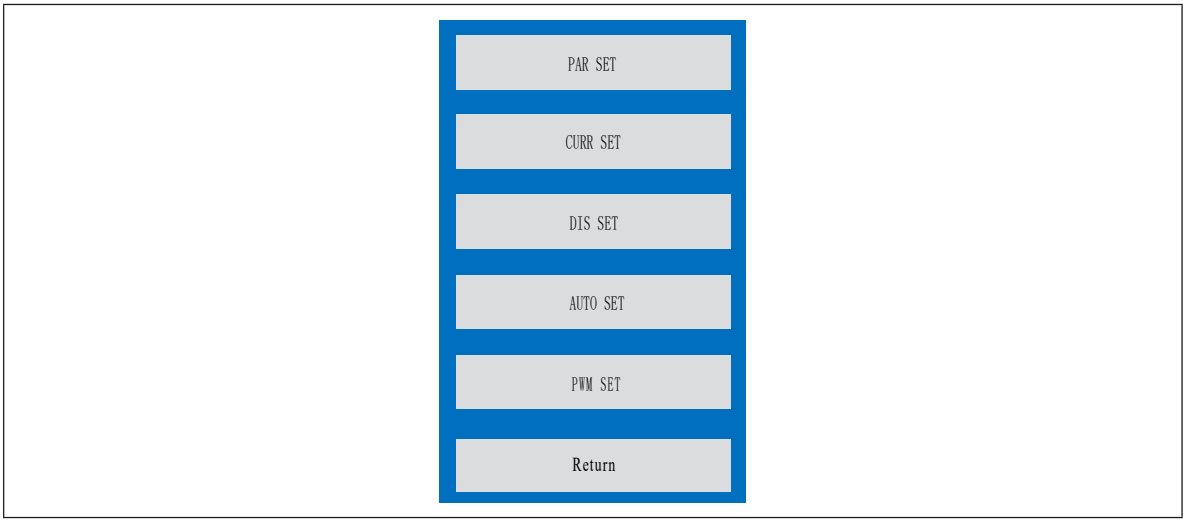
FIG.14: SM Interface Settings



6.3.1 SM19522PG / PHG Set

Click “PAR SET” to enter the interface of SM19522PG / PHG main parameters setting, as follows:

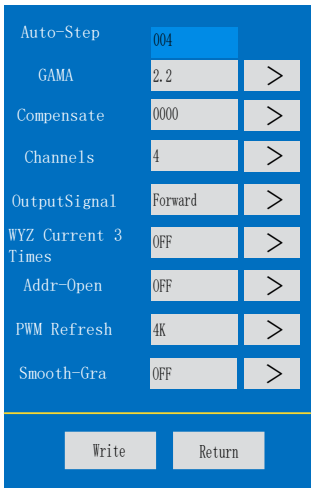
FIG.15: PAR SET Interface Settings



6.3.1.1 SM19522PG / PHG PAR Set

Click “SM19522PG / PHG SET” button on the above interface to enter SM19522PG / PHG parameter setting sub interface:

FIG.16: SM19522PG / PHG PAR SET Interface Settings



Parameters are described as follows:

Parameter	Specific Parameter Values	Note
Auto-Step	0-xx	Step channel counts per chip
GAMA	1.0 / 2.0 / 2.2 / 2.5	Gray Scale Level
Compensate	0/220/440/660/880/1100/1320/1540	Low gray scale compensation value
Channels	PWM: 1-6 Channels	DMX Channels
OutputSignal	Forward/Reverse	Output Polarity
WYZ Current 3 Times	ON / OFF	Parallel
Addr-Open	ON / OFF	/
PWM Refresh	250 / 4K / 16K / 32K	PWM Refresh Rate
Smooth-Gra	ON / OFF	Smoothing while dimming

Auto-Step: The step channel counts per chip for auto-addressing.

Compensate: Low grayscale compensation value. When DMX = 1, if the initial brightness is too low, you can increase this offset value to raise the starting brightness.

Channels: The chip has 6 default driver output pins, which can support 6 channels (or 6 colors). If an RGBW fixture only uses 4 pins, set the channel count to 4. If a mono white fixture only requires 1 channel, setting it to 1 will allow the 6 pins to be paralleled to drive the white LEDs.

WYZ Current 3 Times: W / Y / Z triple current mode. By default, the output current of the W, Y, and Z constant-current driver pins is the same as that of the R, G, and B pins. When the triple current mode is enabled via parameter settings, the output current of the W, Y, and Z pins becomes three times that of the R, G, and B pins.

Addr-Open: Address line open-circuit detection. After the self-check function is turned on, the chip will automatically detect whether the address line is normal every time the power is turned on. When the address line is abnormal, the lamp and the first lamp of the chip with abnormal address input will light up in red, and the rest of the lamps will not light up.

NOTE For chips with auto-addressing function turned on, the self-check function does not affect.

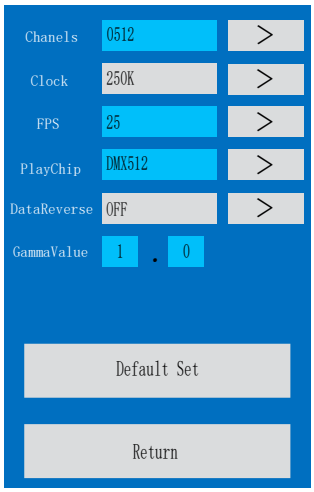
Smooth-Gra: Set whether to enable dimming smoothing. If you need to run content with fast changes in speed, set this option to OFF.

For other parameter settings of the SM19522PG / PHG or other chips in the SM series, since these are related to hardware design, please refer to the specific parameter setting recommendations and instructions for the fixture.

7. Device Parameter Setting

Click the “Parameter” button on the main interface to enter the parameter settings page for the Smart Addresser, as shown in the image below:

FIG.17: Device Parameter Settings



Parameters are described as follows:

Parameter	Specific Parameter Values	Note
Channels	16-6144	/
Clock	250k / 500k / 660k / 750k / 800k / 1M / 1.6M / 2M	Clock speed, unit: bps
FPS	05 / 10 / 15 / 20 / 25 / 30 / 35 / 40, max. fps is 40	Frame per second
PlayChip	DMX512 / TM1803 / TM1804 / UCS1903 / UCS2903 / MY9221 / UCS5603 / UCS9812 / UCS2603 / UCS8903 / UCS8904 / WS2815B	Supported protocol or chips
DataReverse	ON / OFF	Output Polarity
GammaValue	1.0-9.9	Parallel

Channels: Sets the maximum number of control channels for the Smart Addresser. The default DMX channel count is 512, but you can increase this value to control more channels.

Clock: Sets the communication clock frequency. The standard rate for the DMX512 protocol is 250 kbps. If you need to use an extended DMX protocol to control more channels, please increase the clock speed. High Clock speed won't demage the fixtures.If you set it to 500kpbs, it is actually equivalent to our ecue FAST DMX (500kpbs, 1024channels).

FPS: Sets the frames per second for animations.

PlayChip: Specifies the chip type used in the controlled fixture. The Smart Addresser only supports standard DMX512 fixtures. Do not select decoder chips using other protocols, such as the TM1803 single-wire protocol.

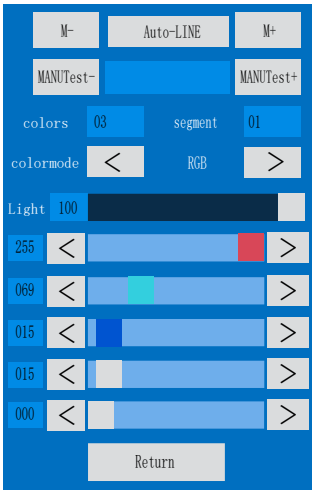
DataReverse: Selects whether to invert the default DMX output brightness values. When set to ON, a higher DMX value results in a lower brightness.

GammaValue: The gamma correction value applied to the DMX values before being sent to the fixture. If the gamma value is set to 1.0, the original DMX values are output without modification.

8. Test

Click the “Test” button on the main interface to access two options: “Routine Test” and “QingHua Test”. The “QingHua Test” is a simplified version of the “Routine Test” in terms of both interface and functionality. The following instructions apply only to the “Routine Test” interface, as shown in the figure below:

FIG.18: Test Interface



Parameters are described as follows:

Parameter	Description	Note
M- / M+	Switch between built-in test animations. See the table below for details	/
MANUTest+ / MANUTest-	Manually light up individual pixels. See the table below for details	/
Colors	Sets the number of colors per pixel. For an RGB fixture, set it to 3; for an RGBW fixture, set it to 4, etc.	Range: 1-5
Segment	This determines how many dots make up a single pixel. For example, if the segment is set to 2, every two dots will be treated as one pixel	Only applies to Auto-LINE and Manu-LINE
ColorMode	Sets the arrangement order of LEDs within the fixture. Adjust according to the specific fixture configuration	/
Light	Sets the overall intensity of the output animation	Range: 0-100
Red Brightness Slider	Manually adjusts the brightness of the red LED (or the first color). Sliding this control changes the built-in animation to static color (RGBWY) mode	Range: 0-255
Green Brightness Slider	Manually adjusts the brightness of the red LED (or the 2nd color)	Range: 0-255
Blue Brightness Slider	Manually adjusts the brightness of the red LED (or the 3rd color)	Range: 0-255
CW/WW White Brightness Slider	Manually adjusts the brightness of the cold white or warm white LED (or the 4th or 5th color)	Range: 0-255
Return	Go back to the upper level	/

Test Effect in Automatic / Manual Mode:

Preset Effect Name	M- | M+	Preset Effect Name	MANUTest- | MANUTest+
Auto-LINE	Auto run point	Manu-LINE	Manual run point
Auto-RED	Auto red gradient	Manu -RED	Manual red gradient
Auto-GREEN	Auto green gradient	Manu-GREEN	Manual green gradient
Auto-BLUE	Auto blue gradient	Manu-BLUE	Manual blue gradient
Auto-WHITE	Auto white gradient	Manu-WHITE	Manual white gradient
Auto-CHING	Auto cyan gradient	Manu-CHING	Manual cyan gradient
Auto-YELLOW	Auto yellow gradient	Manu-YELLOW	Manual yellow gradient
Auto-PURPLE	Auto purple gradient	Manu-PURPLE	Manual purple gradient
R→G→B→W→	RGBW Jump	——	——
R~G~B~W~	Multi color gradient	——	——
7Color mode0	Seven color effect 0	——	——
7Color mode1	Seven color effect 1	——	——
7Color mode2	Seven color effect 2	——	——
RGBWY	Specified color value	——	——

NOTE

- RGBWY mode is the static color mode. When you adjust any of the five Brightness Sliders below, the built-in animation will switch to this static color mode, allowing you to mix different colors by adjusting the brightness sliders.
- Colors : refers to the number of colors in the animation playing mode. The value range is 1 / 2 / 3 / 4 / 5.
- ColorMode: support color selection, such as R, RG, RGB, RGBW, color channel order can be freely selected.

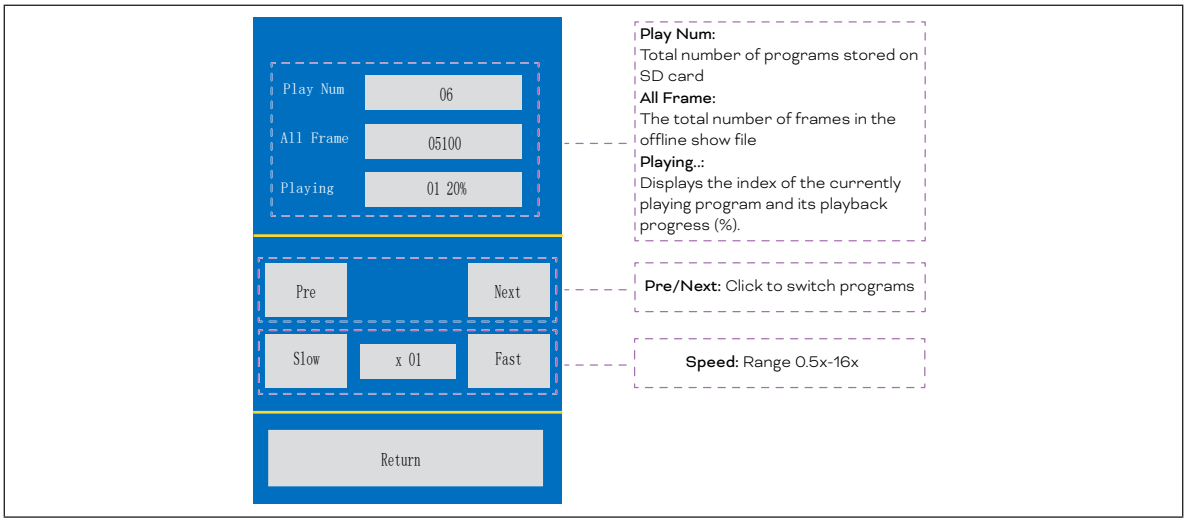
To stop the test, tap the “Return” button at the bottom of the interface to exit the test.

9. Play

(Requires PC lighting control software. Not recommended. Remove it?)

Click “Play” on the main interface to enter the interface for playing offline show files in SD, as follows:

FIG.19: Play Interface



The Play function is used to run show files that were created on a Windows-based lighting control software.

For details on how to create a show file, please refer to the Help documentation of the corresponding lighting control software on Windows.

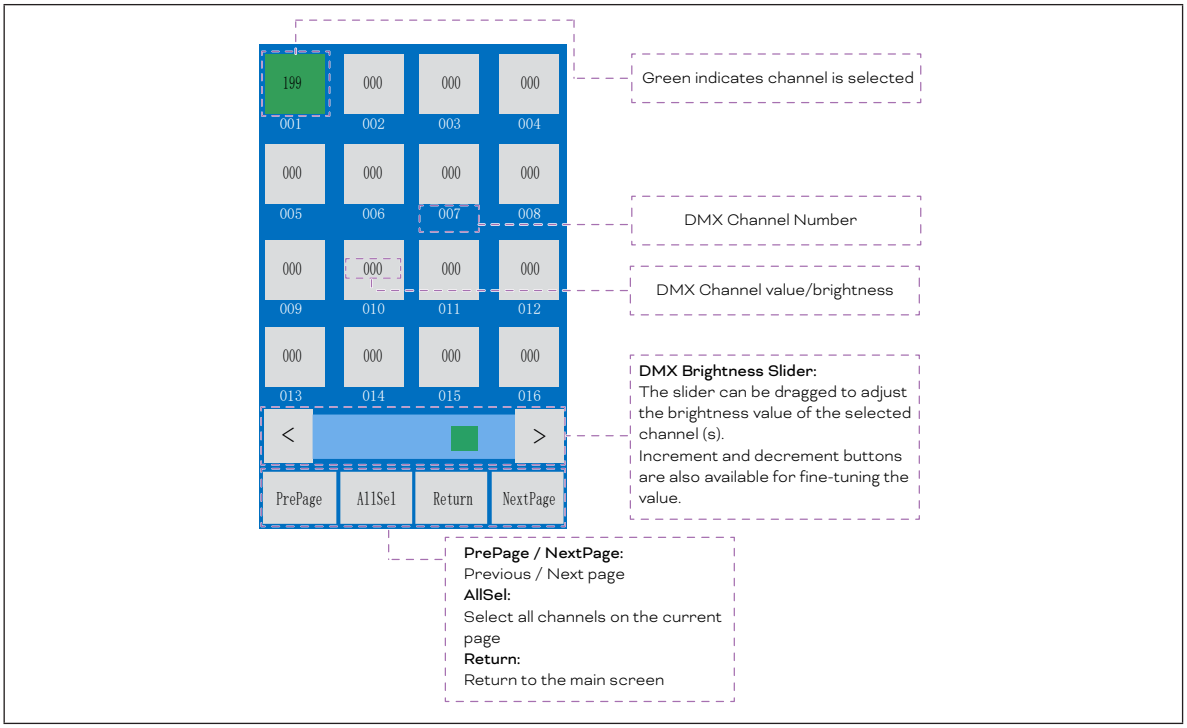
10. DMX Console

Tap “DMX Console” on the main screen to enter the DMX console interface, each square represents a DMX channel. After selecting a channel, its brightness can be adjusted using the slider at the bottom.

Selected channels are displayed with a green background; unselected channels appear in gray.

Channels 1 to 16 are shown by default. To access channels 17 and above, use the “PrePag” or “NextPag” buttons to navigate between pages.

FIG.20: DMX Console Interface



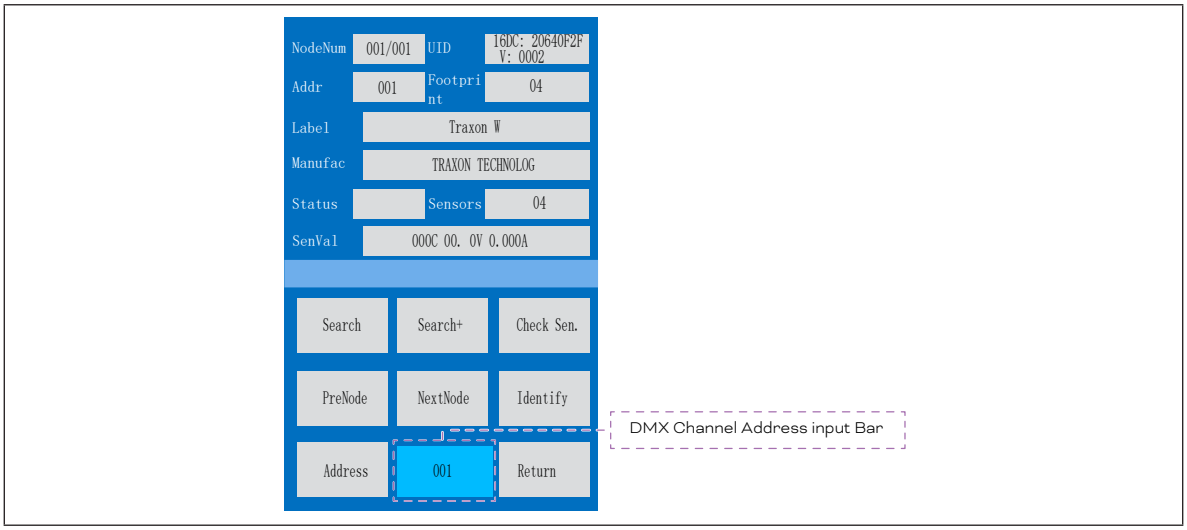
11. RDM

Tap “DMX Console” on the main screen to enter the DMX console interface, each square represents a DMX channel. After selecting a channel, its brightness can be adjusted using the slider at the bottom.

Selected channels are displayed with a green background; unselected channels appear in gray.

Channels 1 to 16 are shown by default. To access channels 17 and above, use the “PrePag” or “NextPag” buttons to navigate between pages.

FIG.21: RDM Interface



NodeNum: This field shows the serial number of the RDM fixtures found. The format “00X/00Y” means that a total of “Y” fixtures have been found, and the information for fixture number “X” is currently displayed. (e.g., “001/003” means the first of three fixtures is selected).

UID: This is the Unique ID code assigned to the RDM fixture.

Addr: This shows the DMX start address of the RDM fixture.

Footprint: This indicates the number of DMX channels the RDM fixture occupies.

Label: The device’s custom label.

Manufac (Manufacturer): Information about the manufacturer of the equipment.

Status: The online/offline status of the device.

Sensors: The number of sensors on the RDM fixture.

SenVal (Sensor Value): The current values detected by the sensors, such as temperature, voltage, and current.

Search: Searches for all RDM fixtures connected to the system.

Search+: Searches for any newly added RDM fixtures.

Check Sen: Performs a non-real-time inspection of the RDM fixture’s status.

PreNode/NextNode: Press these buttons to select the previous or next RDM fixture. The current fixture number is shown in the display.

Identify: Lights up the currently selected RDM fixture to help identify it physically.

Address: Writes a new DMX start address to the selected fixture, based on the value specified on the right.

Return: Returns to the main menu.

12. Color Disk

Tap “Color Disk” on the main operation screen opens the color picker interface, as shown below.

FIG.22: Color Disk Interface

4COLOR Mode: This setting defines how the 4th color channel, typically used for single white, behaves based on the RGB values. The available modes are:

1) **OFF** – The 4th color remains off.

2) **(R + G + B) / 3** – The average of the RGB values is used.

3) **Max (R, G, B)** – The maximum value among R, G, and B is used.

4) **Min (R, G, B)** – The minimum value among R, G, and B is used.

The R, G, B, W values of the selected point are shown below the color disk. Press Return to go back to the main menu.

13. Firmware Upgrade Procedure

The firmware of the Smart Addresser is periodically updated to improve existing features or introduce new functionalities.

To perform a firmware upgrade, prepare a compatible SD card and download the latest firmware files from the product documentation. Follow the steps below to complete the upgrade process.

Upgrade Steps:

1) Ensure the SD card is formatted in FAT32 before copying the firmware files.

2) Copy both the .bin and .tft files to the root directory of the SD card.

3) Insert the SD card into the Smart Addresser device.

4) Power on the device. The system will automatically detect the firmware files and begin the upgrade process.

5) Wait for a few minutes until the upgrade is completed. Once finished, the device will enter the main interface displaying the Traxon logo and the new firmware version, indicating a successful upgrade.

NOTE After the upgrade is complete, remove the SD card or delete the firmware files from it. Otherwise, the device will automatically re-enter the upgrade process on the next startup.

14. Frequently Asked Questions

1. **In the Smart Addresser application, what are the standard settings for load channels and clock frequency according to the DMX512 protocol?**

   According to the DMX512 standard:
   - Number of channels: 512
   - Clock frequency (baud rate): 250 kbps

   If the parameter settings are uncertain, factory defaults can be restored by tapping the “Default Set” button in the Parameter interface.

2. **What type of USB power interface does the Smart Addresser use? Can a mobile power bank be used for charging?**

   The Smart Addresser uses a USB Type-C power interface.
   It can be powered by a mobile power bank. While typical power banks can output up to 3 A, they do not provide constant current. In practice, the current drawn by Smart Addresser will not exceed 0.5 A.

3. **Can the Smart Addresser be used as an offline master in engineering applications?**

   Yes. The Smart Addresser can function as an offline DMX master through multiple modes:
   - Showfile Playback: It can play showfiles stored on the SD card to output DMX512 signals.
   - Routine Test: It supports built-in playback of predefined patterns for testing purposes.
   - DMX Console: It allows manual control of specific DMX channels to adjust color and brightness directly.

4. **Why does address or parameter writing sometimes fail when using the Smart Addresser?**

   Before writing, check the DMX wiring and ensure the Parameter settings are correct. This includes both the addressing setting and the device configuration parameters (e.g., channel count, clock, FPS, protocol). If parameters are incorrect, adjust them accordingly.
   Then use Routine Test or DMX Console to verify communication with the fixtures.
   Only proceed with address or parameter writing after confirming proper communication.

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www.traxon-ecue.com