

HDL[®]

A photograph of a modern office interior, overlaid with a semi-transparent purple filter. The office features a large open space with a high ceiling, glass partitions, and contemporary furniture including white sofas and a small table. On the right wall, a large 3D HDL logo is visible. The text "DMX Controller HDL-MC48IP-DMX.431" is centered in white.

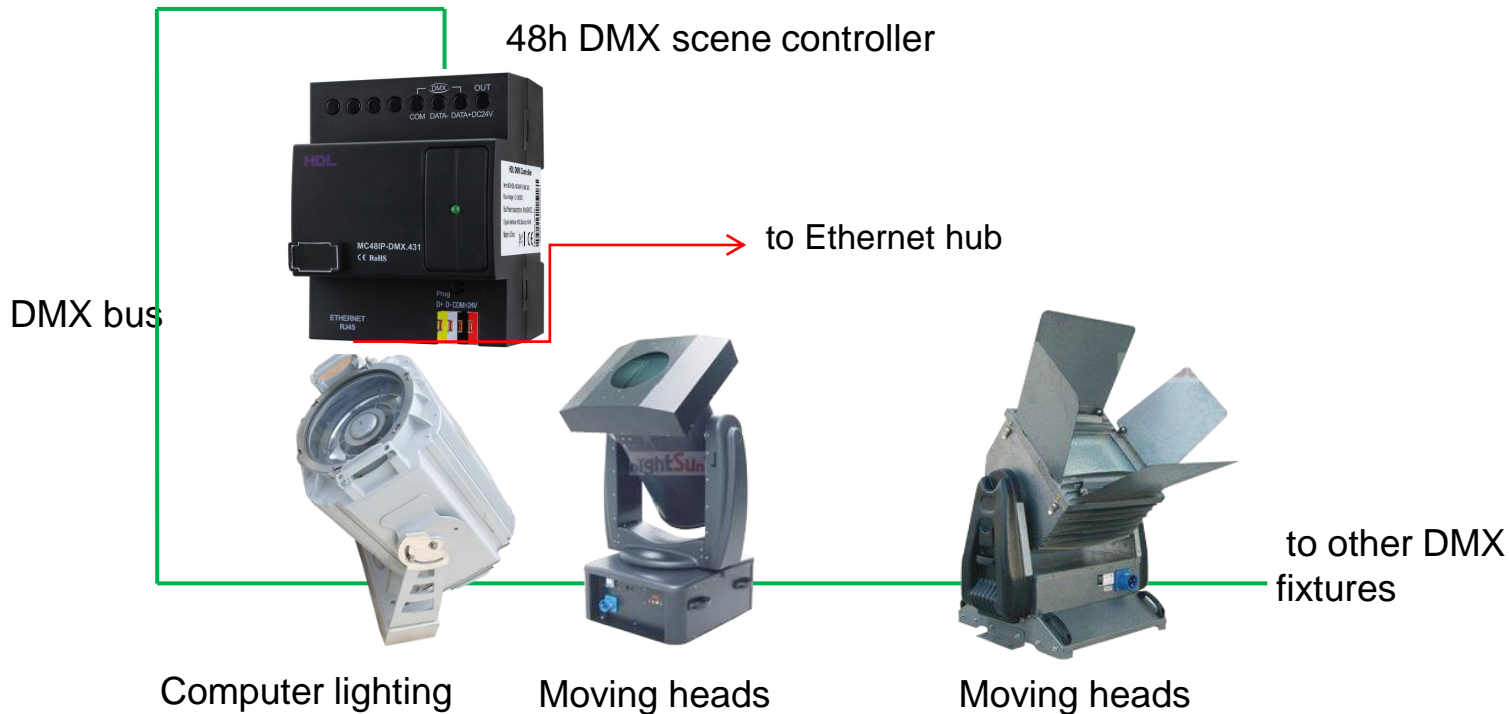
DMX Controller HDL-MC48IP-DMX.431

Description

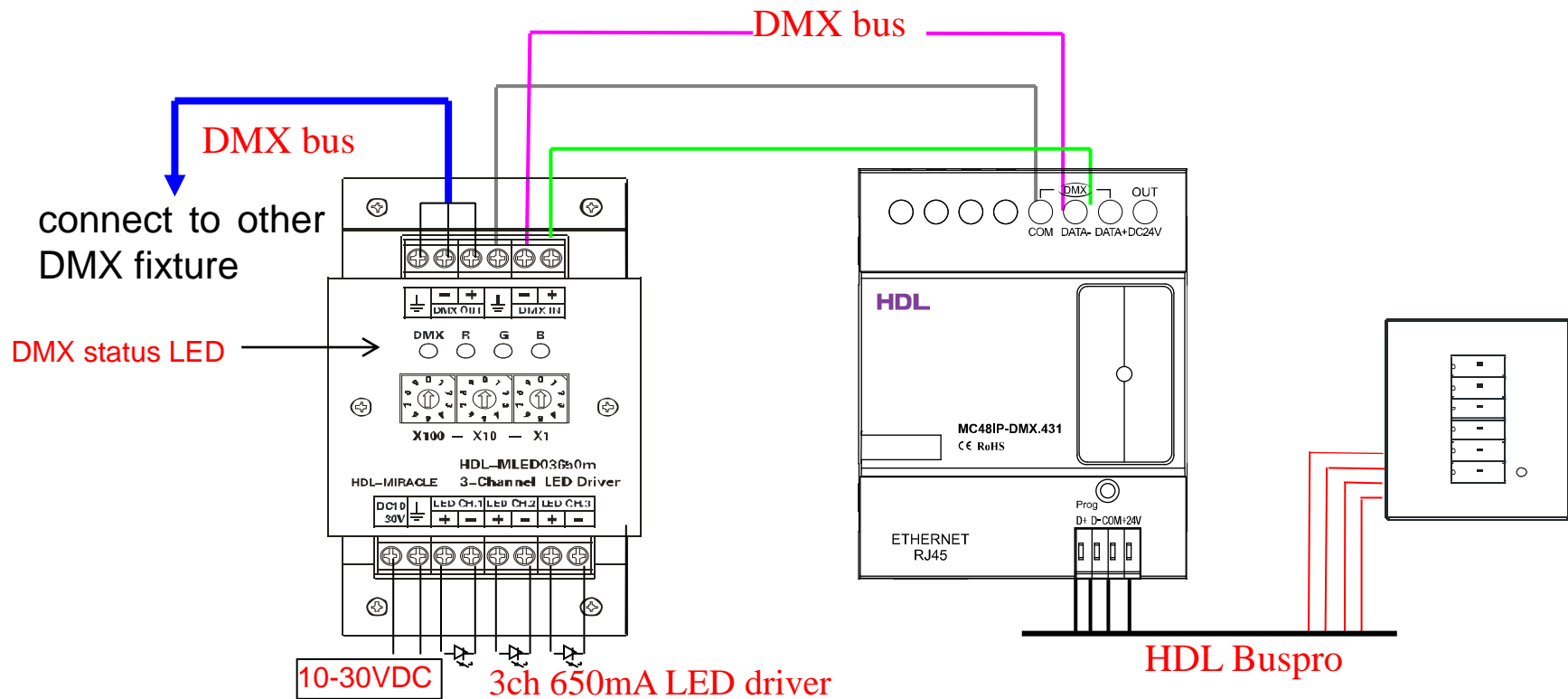
HDL-MC48IP-DMX.431 48-channel DMX show controller with DMX1990 protocol. It is designed to control the RGB LED Strips, RGB Lights and other DMX devices.



Wiring

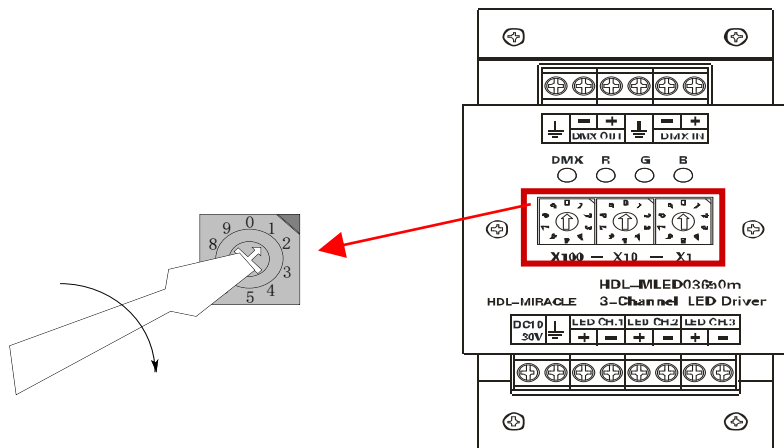


Wiring Diagram



3CH 650mA LED Driver

Set the DMX start channel



Special function: mainly for testing whether the device works or not

- 513 light B ON
- 514 light G ON
- 515 light R ON
- 516 lights R&G&B ON

Start channel(range001-512):

e.g., If you use screw driver to set the start channel as 004, then the rest two channels will be ch5 & ch6, so R channel=4, G channel=5, B channel=6.

IP Setting

If you do not know the IP of 48DMX, you can long press the PROG button for 10s, then the IP will turn back the default one: 192.168.10.250. If the IPs between 48DMX and PC are different, you can not search 48DMX via buspro software, you need to change your PC' s IP first:

Step:

- 1- change the IP segment of PC as 190.168,10.xx . (xx is any value);
- 2- run HBST, search the 48DMX, and change its ID as which you want, and save it;
- 3- change the IP of PC as the previous one;
- 4- repower the 48DMX.



Basic Information

1-99\

Basic information Channels Zone setting Scene setting Sequence setting Logic channel Dimming profile

Network information

IP: 192 . 168 . 10 . 251 Port: 6000

Router IP: 192 . 168 . 10 . 1 DMX channel: 1

Mask IP: 255 . 255 . 255 . 0 DMX port: 4000

IP MAC: 48:44:4C: 00 00 00

Fill the DMX channel and DMX poort.

The IP information of 48DMX

Refresh scenes level [Icon] [Icon] Save & Close

Device: 1-99\

Channel

Channel remark

Use for test the load

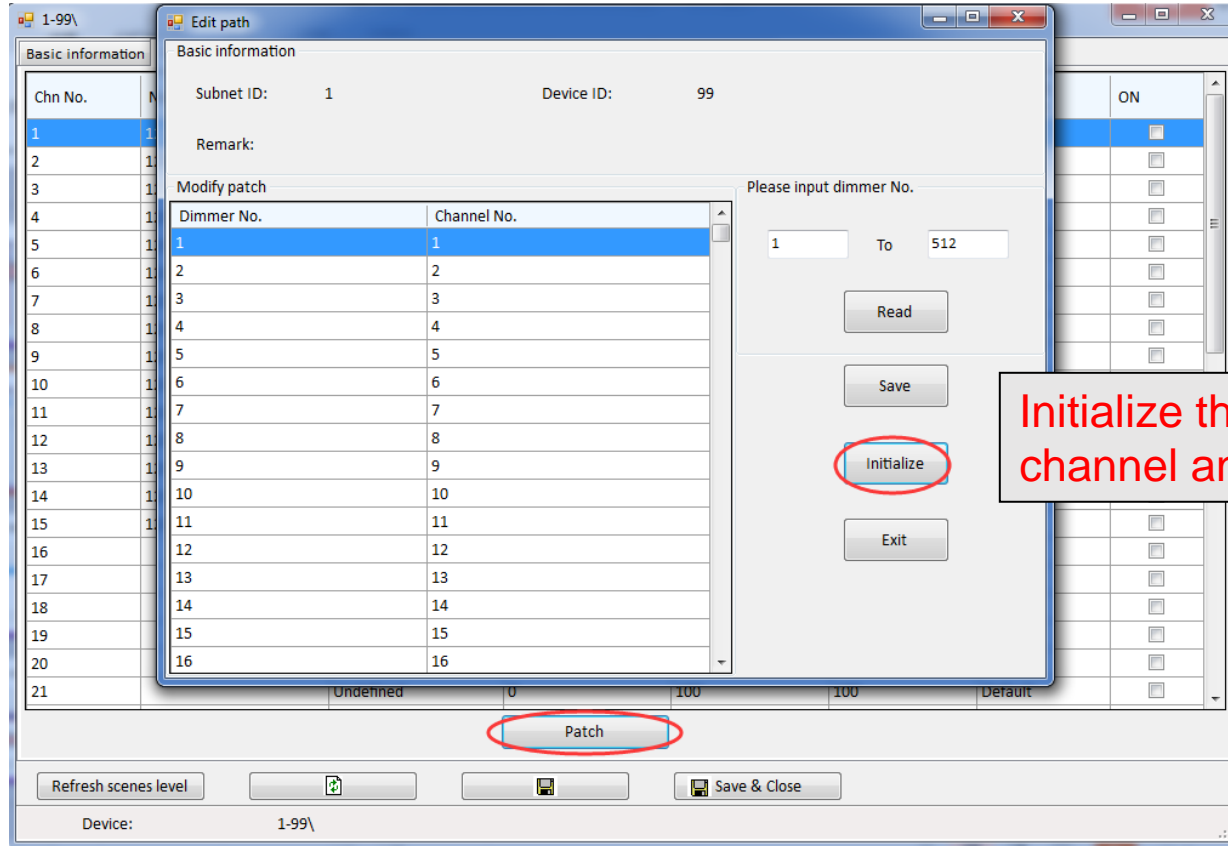
Make sure that Lower limit \leq Higher limit \leq Max limit, setting range: 0% - 100%

	Name	Load type	Low limit	High limit	Max level	Changing attribute	ON
1	12345	Undefined	0	100	100	Default	<input type="checkbox"/>
2	12345	Undefined	0	100	100	Default	<input type="checkbox"/>
3	12345	Undefined	0	100	100	Default	<input type="checkbox"/>
4	12345	Undefined	0	100	100	Default	<input type="checkbox"/>
5	12345	Undefined	0	100	100	Default	<input type="checkbox"/>
6	12345	Undefined	0	100	100	Default	<input type="checkbox"/>
7	12345	Undefined	0	100	100	Default	<input type="checkbox"/>
8	12345	Undefined	0	100	100	Default	<input type="checkbox"/>
9	12345	Undefined	0	100	100	Default	<input type="checkbox"/>
10	12345	Undefined	0	100	100	Default	<input type="checkbox"/>
11	12345	Undefined	0	100	100	Default	<input type="checkbox"/>
12	12345	Undefined	0	100	100	Default	<input type="checkbox"/>
13	12345	Undefined	0	100	100	Default	<input type="checkbox"/>
14	12345	Undefined	0	100	100	Default	<input type="checkbox"/>
15	12345	Undefined	0	100	100	Default	<input type="checkbox"/>
16		Undefined	0	100	100	Default	<input type="checkbox"/>
17		Undefined	0	100	100	Default	<input type="checkbox"/>
18		Undefined	0	100	100	Default	<input type="checkbox"/>
19						Default	<input type="checkbox"/>
20						Default	<input type="checkbox"/>
21						Default	<input type="checkbox"/>

Refresh scenes level Save & Close

Device: 1-99\

Patch



Zone

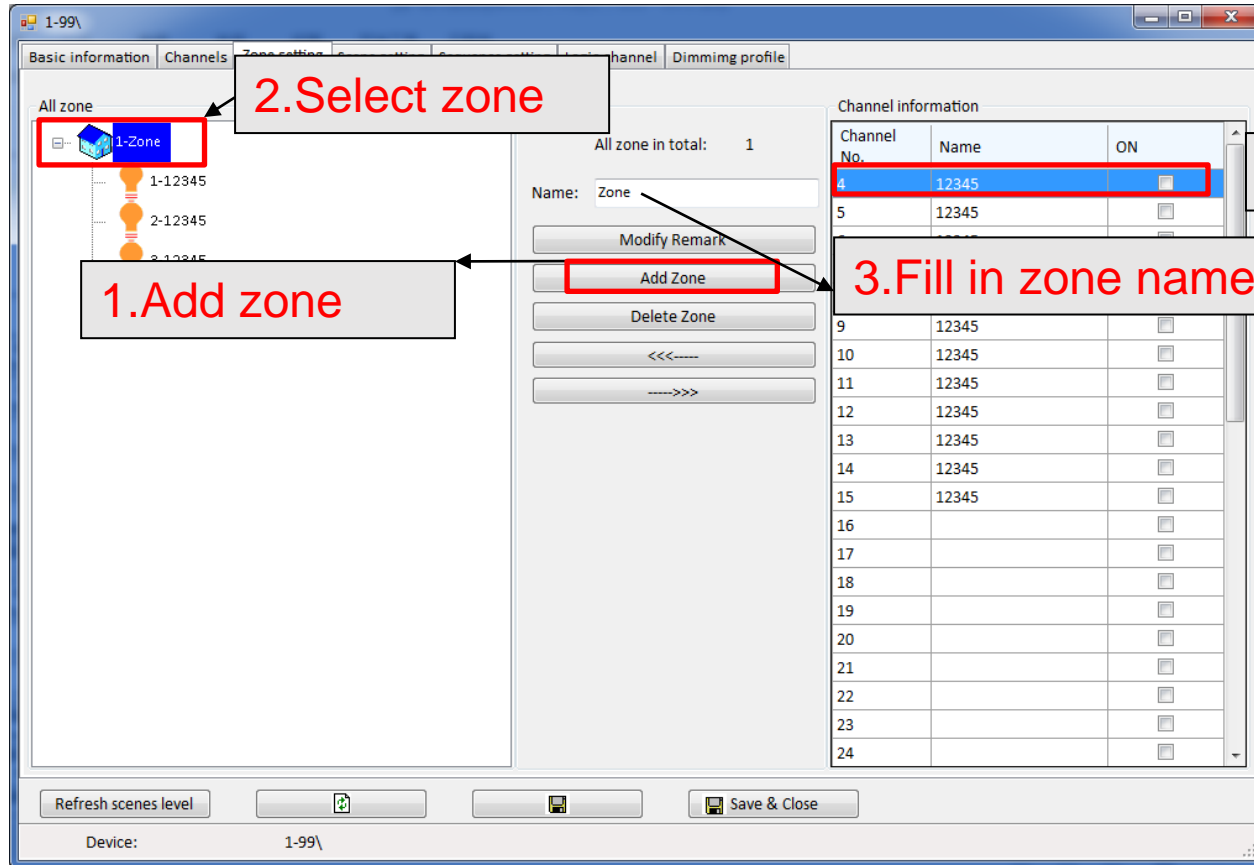
The screenshot displays the 'Zone setting' tab in the HDL software. The interface is divided into three main sections:

- Left Sidebar:** A tree view showing the hierarchy of zones. The '1-Zone' entry is highlighted with a red box, and an arrow points to a callout box labeled 'Current zone'. Below it, three entries are listed: '1-12345', '2-12345', and '3-12345', each with a light bulb icon. These three entries are grouped by a red box, with an arrow pointing to a callout box labeled 'Channels of current zone'.
- Central Panel:** A configuration area for the selected zone. It includes a 'Name' field with the value 'Zone', and buttons for 'Modify Remark', 'Add Zone', 'Delete Zone', and navigation arrows. The zone number '1' is displayed in the top right corner of this panel.
- Right Panel:** A table titled 'Channel information' showing the status of 24 channels. The table has three columns: 'Channel No.', 'Name', and 'ON'. The first four channels (4, 5, 6, 7) are highlighted in blue, indicating they are part of the current zone.

Channel No.	Name	ON
4	12345	<input checked="" type="checkbox"/>
5	12345	<input checked="" type="checkbox"/>
6	12345	<input checked="" type="checkbox"/>
7	12345	<input checked="" type="checkbox"/>
8	12345	<input type="checkbox"/>
9	12345	<input type="checkbox"/>
10	12345	<input type="checkbox"/>
11	12345	<input type="checkbox"/>
12	12345	<input type="checkbox"/>
13	12345	<input type="checkbox"/>
14	12345	<input type="checkbox"/>
15	12345	<input type="checkbox"/>
16		<input type="checkbox"/>
17		<input type="checkbox"/>
18		<input type="checkbox"/>
19		<input type="checkbox"/>
20		<input type="checkbox"/>
21		<input type="checkbox"/>
22		<input type="checkbox"/>
23		<input type="checkbox"/>
24		<input type="checkbox"/>

At the bottom of the interface, there are buttons for 'Refresh scenes level', a green plus icon, a save icon, and 'Save & Close'. The status bar at the very bottom shows 'Device: 1-99\'.

Zone Setup



Zone Setup

1-99\

Basic information Channels Zone setting Scene setting Sequence setting Logic channel Dimming profile

All zone

1-Zone

1-12345

2-12345

3-12345

5.Add the channel

All zone in total: 1

Name: Zone

Modify Remark

Add Zone

Delete Zone

<<<---

--->>>

6.Save

Channel information

Channel No.	Name	ON
4	12345	<input checked="" type="checkbox"/>
5	12345	<input type="checkbox"/>
6	12345	<input type="checkbox"/>
7	12345	<input type="checkbox"/>
8	12345	<input type="checkbox"/>
9	12345	<input type="checkbox"/>
10	12345	<input type="checkbox"/>
11	12345	<input type="checkbox"/>
12	12345	<input type="checkbox"/>
13	12345	<input type="checkbox"/>
14	12345	<input type="checkbox"/>
15	12345	<input type="checkbox"/>
16		<input type="checkbox"/>
17		<input type="checkbox"/>
18		<input type="checkbox"/>
19		<input type="checkbox"/>
20		<input type="checkbox"/>
21		<input type="checkbox"/>
22		<input type="checkbox"/>
23		<input type="checkbox"/>
24		<input type="checkbox"/>

Refresh scenes level

Save & Close

Device: 1-99\

Scene

The screenshot shows the 'Scene setting' tab of the HDL software. The interface includes several sections and tables. Red boxes and arrows highlight specific steps in the process:

- 1. Select the zone:** Points to the 'Choose zone:' dropdown menu where '1-' is selected.
- 2. Remark the scene:** Points to the 'Name' column in the 'All scenes' table.
- 3. Set the running time:** Points to the 'Runtime(mm:ss)' column in the 'All scenes' table.
- 4. Set the intensity for each channel:** Points to the 'Intensity' column in the 'Channel information' table.
- 5. Save:** Points to the 'Save & Close' button at the bottom of the interface.

All scenes table:

Scene No.	Name	Runtime(mm:ss)
0		0:0
1		0 : 0
2		0:0
3		0:0

Channel information table:

Chn No.	Name	Intensity
1	12345	100
2	12345	0
3	12345	0

Other interface elements include: 'Basic information', 'Channels', 'Zone setting', 'Scene setting', 'Sequence setting', 'Logic channel', 'Dimming profile' tabs; 'Scene restore mode after power on:' with 'Scene' selected; 'Input Scene No.(0-99):' with 'From 0' and 'To 3'; 'Read' button; 'exit the output on site' button; 'Read current level' button; 'Refresh scenes level' button; and 'Device: 1-99\' at the bottom.

Sequence

The screenshot shows the 'Sequence setting' tab in the HDL software interface. The interface includes a 'Choose zone:' dropdown menu, a 'Current sequence information' table, and a 'Save' button. Red boxes and arrows highlight the following steps:

- 1. Select zone**: Points to the 'Choose zone:' dropdown menu.
- 2. Select sequence**: Points to the first row of the 'Current sequence information' table.
- 3. Set the sequence name, steps numbers, run times and mode**: Points to the first row of the 'Current sequence information' table.
- 4. Set sequence information**: Points to the first row of the 'Current sequence information' table.
- 5. Save**: Points to the 'Save' button.

Current sequence information table:

Sequence No.	Name	Mode	Run times	Step count
1		Forward M...	3	5
2		Random M...	2	5

Current sequence information table:

Step No.	Scene	Duration(s)
1	0-	0:1.0
2	1-	0:1.0
3	2-	0:1.0
4	3-	0:1.0
5	4-	0:1.0

Channel Control

use button 1 to control channel 1 of 48DMX:

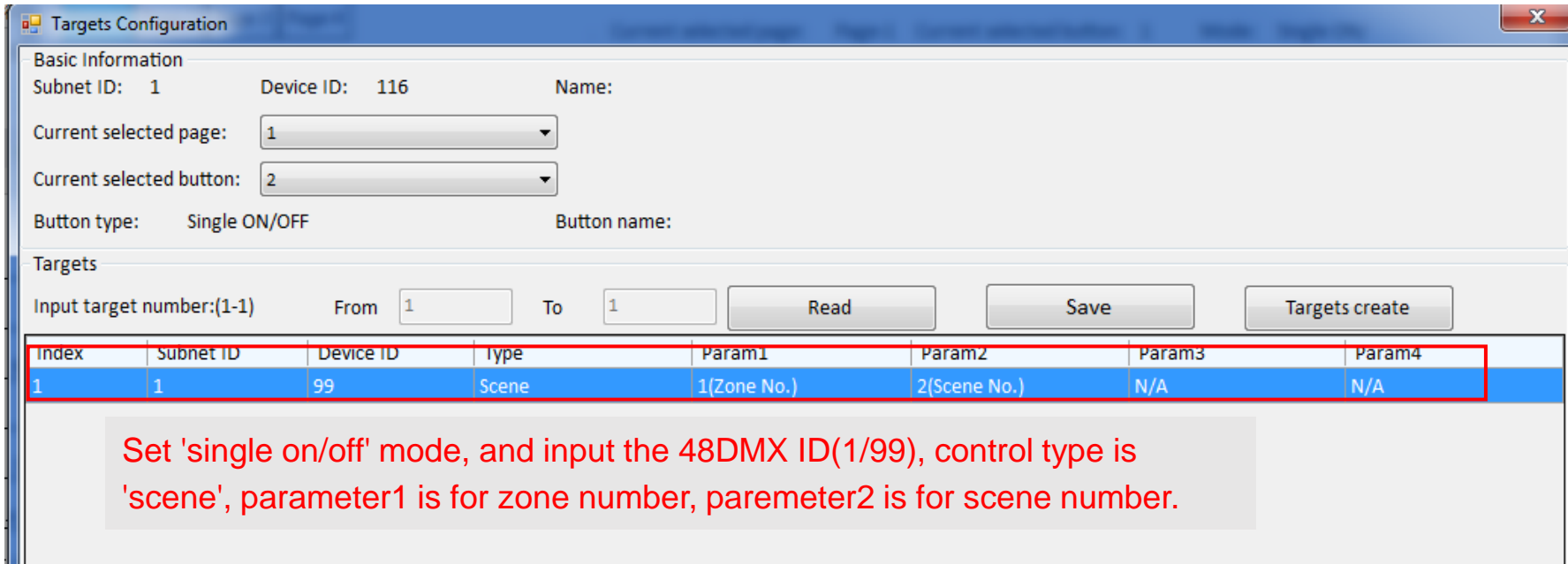
The screenshot shows the 'Targets Configuration' window. The 'Basic Information' section has 'Subnet ID: 1', 'Device ID: 116', and 'Name:' (empty). The 'Current selected page' is '1' and the 'Current selected button' is '1'. The 'Button type' is 'Single ON/OFF' and the 'Button name' is empty. The 'Targets' section has 'Input target number:(1-1)', 'From 1', 'To 1', and buttons for 'Read', 'Save', and 'Targets create'. Below this is a table with the following data:

Index	Subnet ID	Device ID	Type	Param1	Param2	Param2	Param4
1	1	99	Single Channel Lightin	1	100	0 : 0	Disable

Set 'single on/off' mode, and input the 48DMX ID(1/99), control type is 'single channel lighting control', parameter1 is for channel number(1-64), parameter2 is for brightness(0-100).

Scene Control

use button 2 to control scene 2 of 48DMX:



The screenshot shows the 'Targets Configuration' window. Under 'Basic Information', 'Subnet ID' is 1, 'Device ID' is 116, and 'Name' is empty. 'Current selected page' is 1 and 'Current selected button' is 2. 'Button type' is 'Single ON/OFF' and 'Button name' is empty. The 'Targets' section has 'Input target number:(1-1)' with 'From' 1 and 'To' 1. There are 'Read', 'Save', and 'Targets create' buttons. A table below shows the configuration for index 1.

Index	Subnet ID	Device ID	Type	Param1	Param2	Param3	Param4
1	1	99	Scene	1(Zone No.)	2(Scene No.)	N/A	N/A

Set 'single on/off' mode, and input the 48DMX ID(1/99), control type is 'scene', parameter1 is for zone number, parameter2 is for scene number.

Sequence Control

use button 3 to control sequence 2 of 48DMX:

Targets Configuration

Basic Information

Subnet ID: 1 Device ID: 116 Name:

Current selected page: 1

Current selected button: 3

Button type: Invalid Button name:

Targets

Input target number:(1-1) From 1 To 1 Read Save Targets create

Index	Subnet ID	Device ID	Type	Param1	Param2	Param3	Param4
1	1	99	Sequence	1(Zone No.)	2(Sequence No.)	N/A	N/A

Set 'single on/off' mode, and input the 48DMX ID(1/99), control type is 'sequence', parameter1 is for area number, parameter2 is for sequence number.

HDL[®]

Serious about smart buildings.