USER MANUAL

This is a GRB landscape light system, which is controlled by DMX512. Here we set up a series of scenes, which can be controlled through the panel or through the PC interface, and new scenes can be programmed. Here we give a detailed description of the entire system.

1. System list

No	Name	Qty (pcs)	Function	Parameter
1	FL30-216W flood light	1	Flood light with CREE-RGB chips insider	3535 chips with 3*1 RGB color
2	LED driver with DMX decoder	2	Power supply and color change for RGB chips	Rated Power: 108W(2PCS) Input Voltage: 100-277V AC Frequency: 50-60Hz; IP66
3	Control panel	1	Direct control for each mode(scene), brightness, speed and color	Input: 12V DC, Connection: Internet cable with light`s signal line and USB cable with PC
4	Small driver for control panel	1	Supply DC power to control panel	Max output Power: 25W Input Voltage: 100-240V AC Output Voltage: 12V DC
5	Control software	1	Whole system control	Programming, mode change and Scene demo according to clients` requirements

2. Introduction of each part

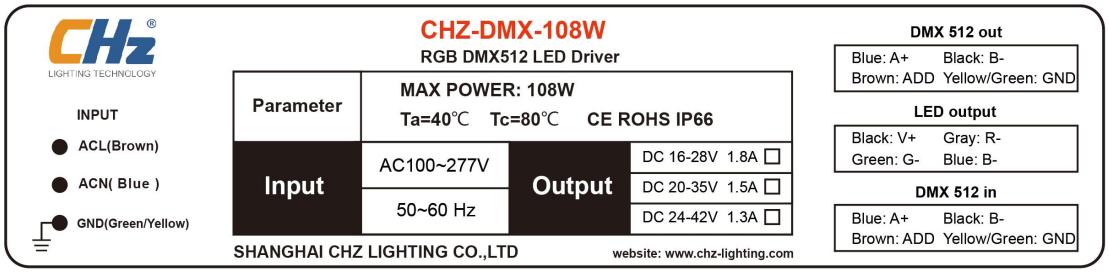
The whole system is divided into 5 parts: lamps, drivers and decoders, DC power supply, control panel, PC interface, etc.

1) FL30 flood light(RGB)

We use FL30 flood light, RGB light source as the light source, through the control system, the lamp can emit a variety of colors, and changing effects, such as static, gradual change, jump and so on.

The lamp adopts RGB lamp beads of CREE-3535, each lamp bead has three colors of R/G/B, and each light color can be controlled by DMX512, so as to realize the dynamic change of various different colors.

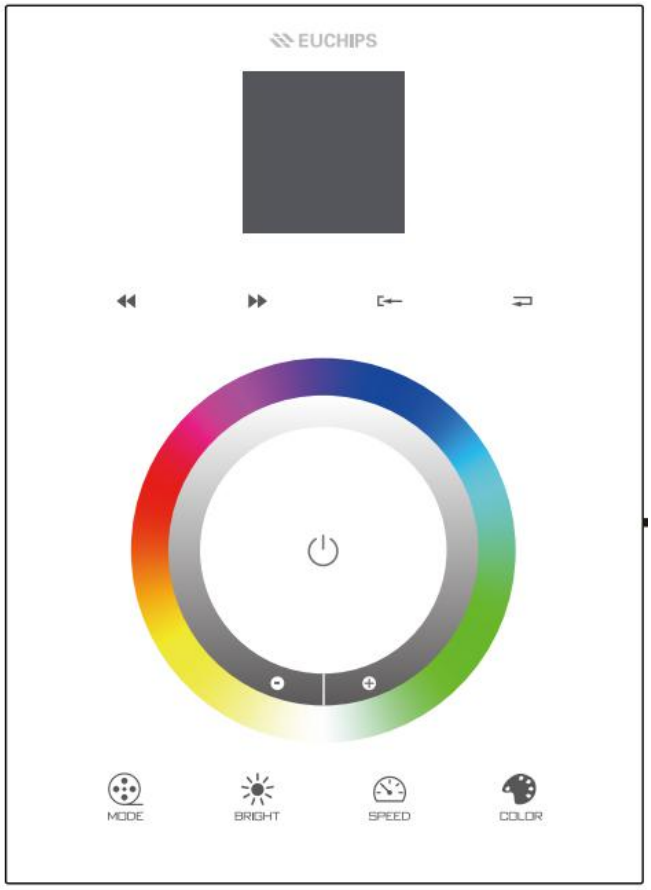
2) Drive (built-in DMX decoder)



The LED driver and DMX512 decoder are combined together, and the internal glue filling process reaches IP66; the biggest advantage is that the wiring is convenient and the customer's on-site operation is convenient.

3) Control panel

The control panel using EUCHIPS can be placed on the desktop or embedded in the wall. The content is rich and the operation is simple. The functions are: you can choose the scene, adjust the brightness, adjust the speed and color.

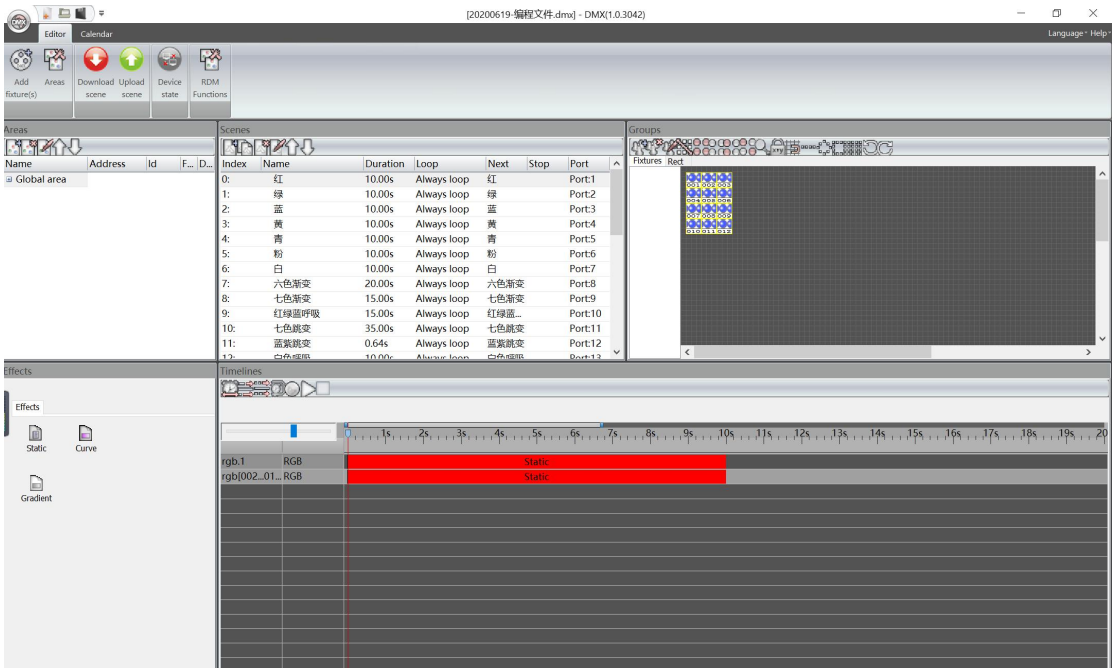


4) MW DC drive

The above control panel needs 12V DC power supply; then we use the MW's small power drive, input 220V, output 12V DC, to supply power to the control panel.

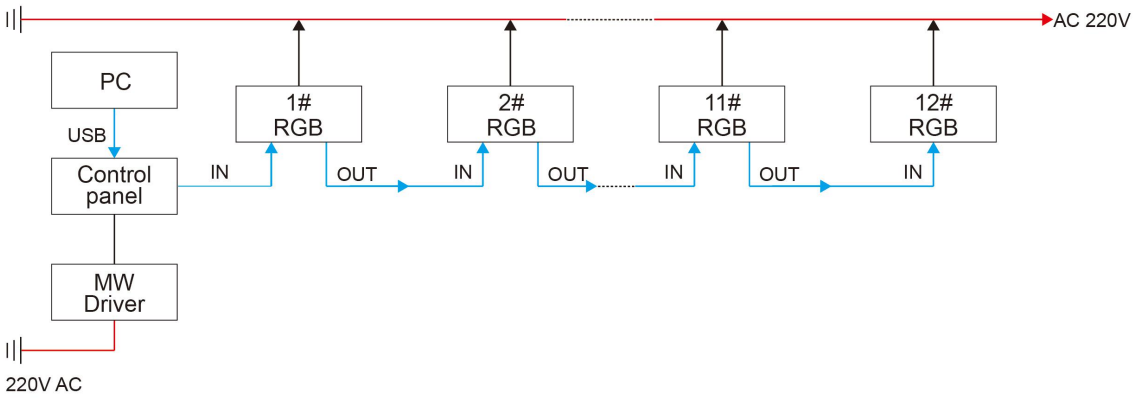
5) PC control interface

We also specially set up software control, which can switch the control scene on the PC side; at the same time, we can also set up different change scenes, and store them, write them into the control panel, visually clear, and easy to operate.



3. System topology

The topology diagram (working principle diagram) of the entire system is as follows,



Remark:

Red line is 220VAC power line (strong electricity) , blue line is 12VDC signal line (weak electricity)

1) On all lamps, there are 220VAC power cords and 12VDC signal lines; all lamps are connected in parallel or individually connected to 220V AC power; all 12VDC signal lines are connected in series to the control panel;

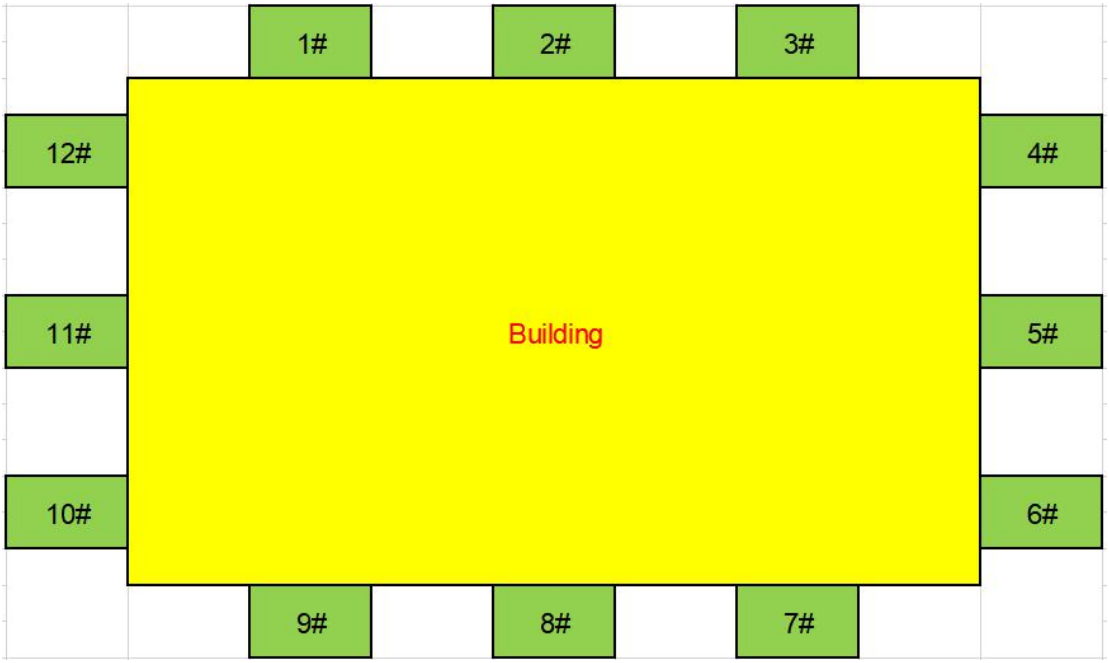
2) The control panel needs to be connected to a DC power supply, convert 220VAC to 12VDC, and then connect to the control panel; then, connect the control panel with super five types of network cables and the signal line of the first set of lamps (1#) Connection, 1# and 2#, 2# and 3#. . . , 11# and 12# signal lines are connected in series, so that the signal can be smoothly transmitted;

3) The USB cable is used to connect between the control panel and the PC; all the lights on the PC

can be changed and the working mode can be changed; a new mode (working scene) can also be programmed. The new mode (scene) must be uploaded to the control panel before this new mode (scene) can be realized through the panel.

4. Arrangement of flood lights

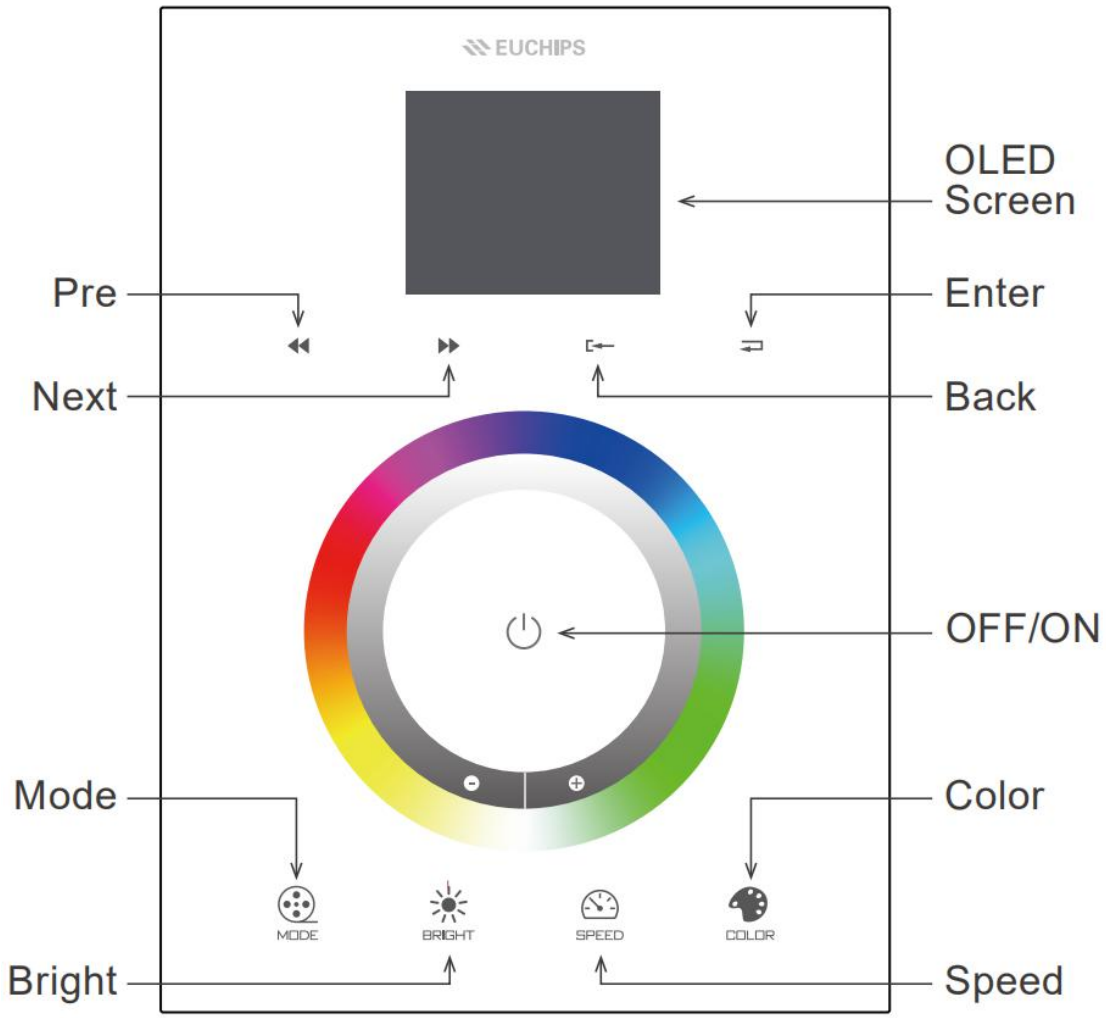
This building has 4 sides, then each wall will be placed with 3 sets of lamps, 12 sets of lamps are numbered 1#, 2#, 3#, 4#, 5#, 6#, 7#, 8#, 9 #,10#,11#,12#, will be arranged as shown below.



5. Control method

If you do not connect to the control panel, there is no saying, just power on the lamps and do not connect the signal line, then there will be a scene inside; this is convenient for detecting the effect of RGB.

We set 33 scenes according to the conventional RGB conversion method, and the program corresponding to this scene has been input into the control panel, then we only need to switch the scene on the control panel.



6. Mode (Scene) explanation:

We set a total of 32 Modes (scenes), from 0~31, as follows,

No.	Name	Duration	Loop	Remark
0	Red	Static	Always loop	Free arrangement
1	Green	Static	Always loop	Free arrangement
2	Blue	Static	Always loop	Free arrangement
3	Yellow	Static	Always loop	Free arrangement
4	cyan-blue	Static	Always loop	Free arrangement
5	Pink	Static	Always loop	Free arrangement
6	White	Static	Always loop	Free arrangement
7	Six-color gradient	20s	Always loop	Free arrangement
8	Seven-color gradient	15s	Always loop	Free arrangement
9	Red-green-blue breath	15s	Always loop	Free arrangement
10	Seven colors jump	35s	Always loop	Free arrangement
11	Blue-violet jump	0.64s	Always loop	Free arrangement
12	White breath	10s	Always loop	Free arrangement
13	Six-color breath	12s	Always loop	Free arrangement
14	Red-green-blue breath	9s	Always loop	Free arrangement
15	Red-green breath	6s	Always loop	Free arrangement
16	Red-blue breath	6s	Always loop	Free arrangement
17	Green-blue breath	6s	Always loop	Free arrangement
18	Red breath	10s	Always loop	Free arrangement
19	Green breath	10s	Always loop	Free arrangement
20	Blue breath	10s	Always loop	Free arrangement
21	Fast jump	1.96s	Always loop	Free arrangement
22	Fast jump 2	2s	Always loop	Free arrangement
23	Red-green-blue transition	0.84s	Always loop	Free arrangement
24	Red-green transition	0.56s	Always loop	Free arrangement
25	Red-blue transition	0.56s	Always loop	Free arrangement
26	Green-blue transition	0.56s	Always loop	Free arrangement
27	White on-off	0.56s	Always loop	Free arrangement
28	Four-color static	Static	Always loop	Arranged by number
29	Four-color chase for 5 seconds	20s	Always loop	Arranged by number
30	Four-color chase for 3 seconds	12s	Always loop	Arranged by number
31	Four-color chase for 1 second	4s	Always loop	Arranged by number

Remarks:

From 0~27 Modes (scenes), it has no effect on the lamp number, because they are changed synchronously; from 28~31 Modes (scenes), it is asynchronous, then the lamp number is very important, must be arranged according to the above number.

7. PC control

Here, we provide control software, which can switch scenes from the computer; we can also compile new scenes according to the specific requirements of customers; at the same time, we can accurately control each set of lights.

We need to remind that the 32 scenes we have set can basically meet the needs. Try not to add new scenes or make changes to existing scenes, otherwise it will easily cause chaos in the system.