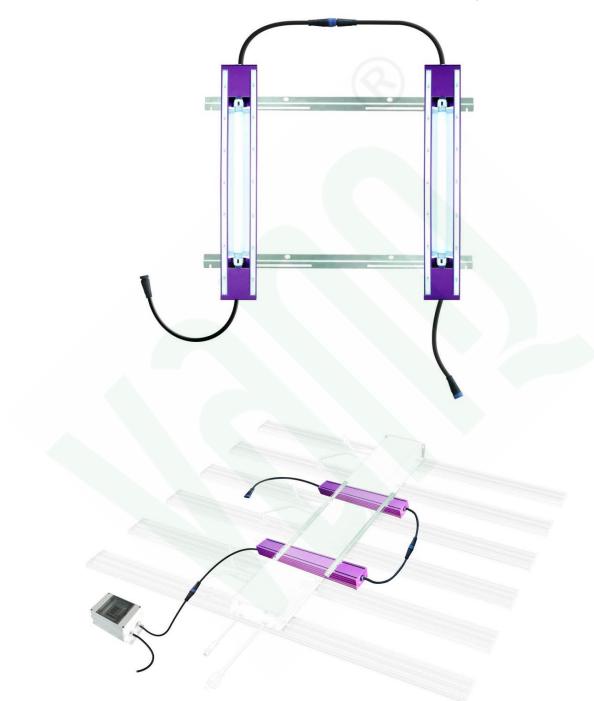
## MM Shenzhen VANQ Technology Co., Ltd.

Supplemental Lighting-

VQ-GLCP Series THCMax Bloom Light



#### Manufacturer: Shenzhen VANQ Technology Co., Ltd.

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# **VQ-GLCP** Series

## **THCMax Bloom light**

## 1 Lamp Introduction

#### **1.1 Brief Introduction**

Thank you for purchasing VQ-GLCP series lamps. VQ-GLCP series lamps are specially designed for horticultural auxiliary lighting, in conjunction with VANQ other series grow lighting, aiming to increase THC content of industrial hemp flowers for indoor planting.

This manual not only introduces the purpose and parameters of lamps, but also introduces the installation methods of lamps. Please read this manual carefully before installing the lamps and time switch. If you have any questions, please feel free to contact us.

#### **1.2** Lamp functions and characteristics.

- 1. Improving photosynthetic efficiency, shortening the flowering cycle;
- 2. Improving crop quality, increasing THC content, estimated yield up by 20-25%;
- 3、Reduce fungi,molds and plant pests and maintain a healthy growing environment;
- 4. Useful for the formation of plant, flowering, fruit coloring and vitamin C;
- 5, Full range of models, UV only and UV+Far-red different models for customer choices;

6. Optimized optical design, together with main light source use, the even illumination distribution, make sure high consistency of plant flower growth;

7、Far-red and UV circuits are designed separately, in combination with THCMax bloom lamp timing switch (two channels and 16 timers) to meet the lighting needs of crops from growth to flowering.

## **2** THCMax Bloom light information and Specification

#### 2.1 Basic Information

Item name	THCMax Bloom light
Manufacturer	ShenZhen VANQ Technology Co.,Ltd
Waterproof rate	Non-waterproof
Size	445Lx 472Wx42H(mm)
Working Temperature	-20°C ~ 40°C   -4°F ~ 104°F
Beam angel	120°
Dimmable function	No
Warranty	1 Year

In order to simplify the content, in some chapters, THCMax bloom light are abbreviated as lamps.

#### 2.2 Parameter

	Model		VQ-GLCP-044UF-L	VQ-GLCP-044UF-S				
Electric	Rated	input voltage	110VAC 50/60HZ	220VAC 50/60HZ				
parameter	To	tal Power	44w±5%					
		Light Source	LED					
	Far-red	Specification	3535SMD					
	light	LED QTY	28PCS					
Light		Power	28*1=28W					
Source Parameter		Light Source	Fluorescen	t lamp				
Falametei	LIV/ light	Specification	T5					
	UV light	lamp QTY	2PCS					
		Power	2*8=16W					
	Light Spect	trum						
	Net Weig	ht	1.6kg IR and UV light					
	Feature	s	IR and U	IV light				
	Feature Manual atte		IR and U ICan not be used alone, to be c of THCMax Bloom light,instal	onnected with the time switch				
	- A -		!Can not be used alone, to be c	onnected with the time switch				
Electric	Manual atte Model		ICan not be used alone, to be c of THCMax Bloom light,instal	onnected with the time switch led onto the main lamps for				
Electric parameter	Manual atte <mark>Model</mark> Rated	ntion	ICan not be used alone, to be constructed of THCMax Bloom light,install	onnected with the time switch led onto the main lamps for VQ-GLCP-016UN-S				
parameter	Manual atte <mark>Model</mark> Rated	ntion input voltage	ICan not be used alone, to be constructionof THCMax Bloom light, instalVQ-GLCP-016UN-L110VAC 50/60HZ	onnected with the time switch led onto the main lamps for VQ-GLCP-016UN-S 220VAC 50/60HZ				
parameter Light	Manual atte Model Rated To	ntion input voltage tal Power	ICan not be used alone, to be constructionof THCMax Bloom light, instalVQ-GLCP-016UN-L110VAC 50/60HZ16w±5%	onnected with the time switch led onto the main lamps for VQ-GLCP-016UN-S 220VAC 50/60HZ				
parameter Light Source	Manual atte <mark>Model</mark> Rated	ntion input voltage tal Power Light Source	ICan not be used alone, to be constrained      of THCMax Bloom light, instal      VQ-GLCP-016UN-L      110VAC 50/60HZ      16w±5%      Fluorescent	onnected with the time switch led onto the main lamps for VQ-GLCP-016UN-S 220VAC 50/60HZ				
parameter Light	Manual atte Model Rated To	ntion input voltage tal Power Light Source Specification	ICan not be used alone, to be constructed of THCMax Bloom light, installVQ-GLCP-016UN-L110VAC 50/60HZ16w±5%FluorescentT5	onnected with the time switch led onto the main lamps for VQ-GLCP-016UN-S 220VAC 50/60HZ				
parameter Light Source	Manual atte Model Rated To	ntion input voltage tal Power Light Source Specification lamp QTY Power	!Can not be used alone, to be conference      of THCMax Bloom light, instal      VQ-GLCP-016UN-L      110VAC 50/60HZ      16w±5%      Fluorescen      T5      2PCS	onnected with the time switch led onto the main lamps for VQ-GLCP-016UN-S 220VAC 50/60HZ t lamp				
parameter Light Source	Manual atte Model Rated To UV light	ntion input voltage tal Power Light Source Specification lamp QTY Power	ICan not be used alone, to be conference of THCMax Bloom light, instal      VQ-GLCP-016UN-L      110VAC 50/60HZ      16w±5%      Fluorescen      T5      2PCS      2*8=16W	onnected with the time switch led onto the main lamps for VQ-GLCP-016UN-S 220VAC 50/60HZ t lamp				
parameter Light Source	Manual atte Model Rated To UV light Light Spect	ntion input voltage tal Power Light Source Specification lamp QTY Power	ICan not be used alone, to be conference of THCMax Bloom light, instal      VQ-GLCP-016UN-L      110VAC 50/60HZ      16w±5%      Fluorescent      T5      2PCS      2*8=16W      1.6kg	onnected with the time switch led onto the main lamps for VQ-GLCP-016UN-S 220VAC 50/60HZ t lamp				

### 2.3 Order Coding Rules

Item Series	Model	Input Voltage
	-044UF: Power 44W included UV and IR light	-L: 110-120VAC
VQ-GLCP	-016UN: Power 16W included UV,without IR light	-S: 220-240VAC

For example: VQ-GLCP-044UF-S refers to the VQ-GLCP series THCMax bloom light, total power 44W,

including UV and Far-red, input voltage 220-240VAC.

### **3** THCMax bloom light time switch introduction

!THCMax bloom light needs to be connected with the time switch for using, a separate purchase of lamps or time switch will be unable to work normally.

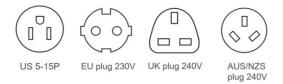
#### **3.1** Basic Parameters of Time Switch

Name	THCMax bloom light time switch
Model	VQ-GLCP-DTS8A
Input voltage	85-265VAC 50/60HZ
Timer function	two channels timer separately, each channel has 16 independent timers
Size	193L*118W*98H (mm)
Net weight	850g
Switch capacity	Single channel 8A
Time control range	1 Minute-168 Hours
Working temperature	-10°C ~ 40°C   14°F ~ 104°F

In order to simplify the content, some chapters of THCMax time switch abbreviation for time switch.

#### 3.2 Time Switch Order Code

Controlled lamp series	Model	Plug type
VQ-GLCP	-DTS8A: D-Dual, T-Timer, S-Switch, That is, two-channel time switch, 8A-single 8A output.	-US: USA type 120VAC 5-15P -EU: Europe type 220VAC -UK: United kingdom type 230VAC -AUS: Australia type 240VAC -CHA: China Type 220VAC -XXX: (Japen、Italy),etc country type, The number of digits in XXX shall
		be subject to the client needs.



For example: VQ-GLCP-DTS8A-CHA refers to: THCMax bloom light time switch used to control VQ-GLCP

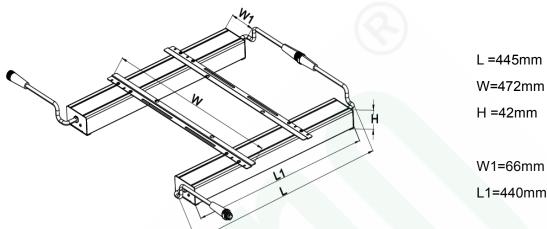
series lamps, two channels switches, single 8A output, CHINA plug.

#### Size and Package 4

!THCMax bloom light and THCMax bloom light time switch are separately packaged.

#### 4.1 Lamp

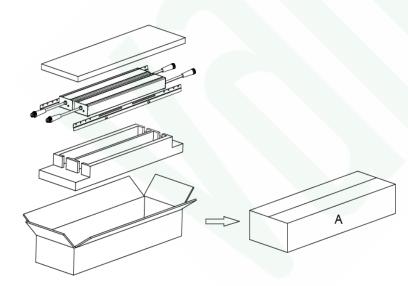
1. Lamp size



W=472mm H =42mm

L1=440mm

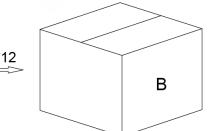
2 Package ways



Inner packing of lamp A:1pcs/box Gross weight:2.2kg Net weight:1.6kg Size A:615L x 200W x 110H(mm) Package material :Plastic bag+Foam+Cartons

Outer Packing of lamp B:12pcs/box Gross weight:28kg Size B:630L x 615W x 460H(mm) Package material:Plastic bag+Foam+Cartons

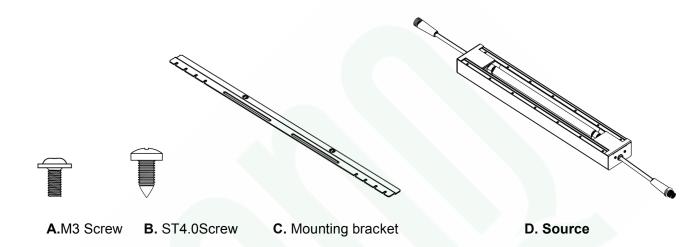
A\*12



Note: Inner Packing A can be shipped directly as standard packing.

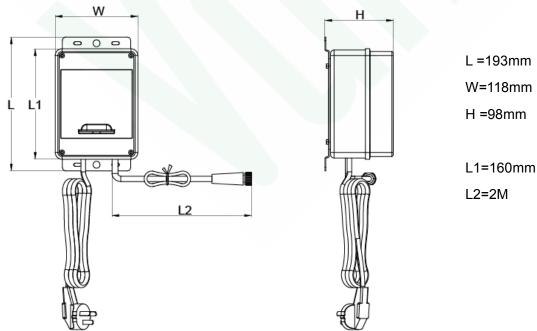
3、Inner Package (A) packing list

NO	Item Name	Specification			
A	M3 Screws	PWM-M3*6, round head cross screwed with medium thread	8		
В	ST4.0Screws	PA-ST4*8, Self tapping screws with round head and cross point tail	4		
С	Mounting bracket	Size: 472mm*26mm*3.2mm, Stainless steel material	2		
D	Source	Aluminum alloy 6063 radiator, single Fluorescent lamp (UV)light or LED Far-red(FR) light +Fluorescent UV light	2		

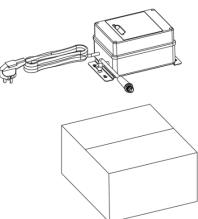


### 4.2 THCMax Bloom light time switch

1 Time switch



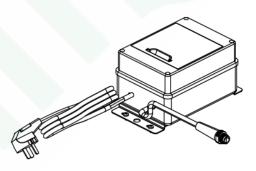
#### 2、Time switch package



Time controlled switch package:1pcs/box Gross weight: 1.1kg Net weight: 0.85kg Size:220L x 170W x 110H(mm) Package material:Carton

#### 3、Packing List

NO	Name	specification	Quantities
В	074.0	PA-ST4*8, Self tapping screws with round head	4
	ST4.0 screw	and cross point tail	
F	Protective Cover	Plastic material, not waterproof function	1
Е	Time controlled switch	two channels, 16groups time switch constrol	1





F.Safety Cap

E.Time switch

Please check the products and accessories carefully according to the contents of the list. If you find the actual product does not match the list, or product damaged, please contact us immediately and provide photos or videos!

### **5** Lamp connection principle

According to the connection principle, customers determine the way of connection and installation of lamps, choose the number of THCMax Bloom light time switch.

#### 5.1 Connected Principle Diagram

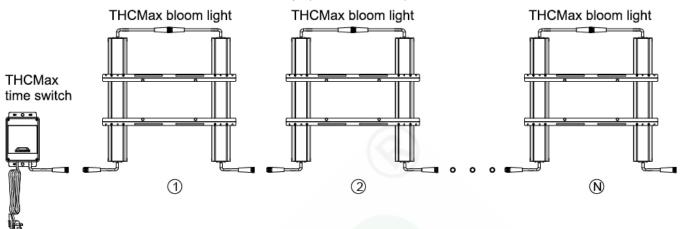
1. THCMax bloom light and time switch are connected as shown in the following diagram. Each time switch is

Shenzhen VANQ Technology Co., Ltd.

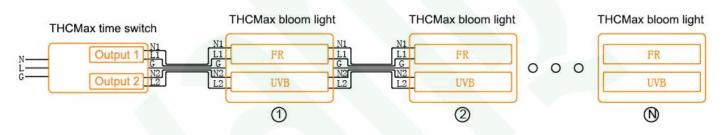
#### VQ-GLCP Series THCMax Bloom Light

connected with a number of lamps N ≤20, 1 set time switch can be connected with different types of

lamps(UV/FR/UV+FR).



2. The internal connection principle of THCMax Bloom light and its time switch is shown in the below photo. The time switch has two time-controlled outputs to control the Far-red light (FR) and the UV light (UV) of the lamps respectively. The bloom light and the time switch are connected by a 5-core cord. The same to different bloom lights.



## 6 Precautions

#### ! Please read the following items carefully before you install the product.

#### 6.1 Installation precautions

- 1. Only certified professionals are able to install the lights;
- 2. Make sure the power is switched off before installation;
- 3. Connect cables according to local safety regulations and electrical codes;
- 4. Time switch and bloom light can't touch or close to heating objects;
- 5. The number of bloom lights connect to a time switch can't exceed 20 units.

#### 6.2 Requirements of working environment

#### ! Our company does not provide warranty service for damage to lights and time switch caused by

#### improper working environment.

**1.** The power supply voltage needs to match the input voltage of the lights, and the lights are 110V or 220V single-voltage input products;

#### VQ-GLCP Series THCMax Bloom Light

2. he working temperature cannot exceed the specified range, the working temperature of lights is -20°C  $\sim$ 

40°C, and the working temperature of time switches is  $-10^{\circ}C \sim 40^{\circ}C$ ;

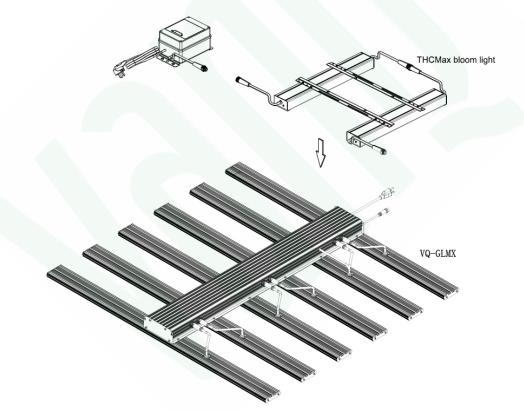
- 3. Do not use lights and time switches in environments with serious dust pollution;
- 4. Do not use lights and time switches near flammable and explosive objects;
- 5. Do not use lights and time switches outdoors;

6. Do not use lights and time switches in environment with water, lights and time switches are not waterproof.

## 7 Installation

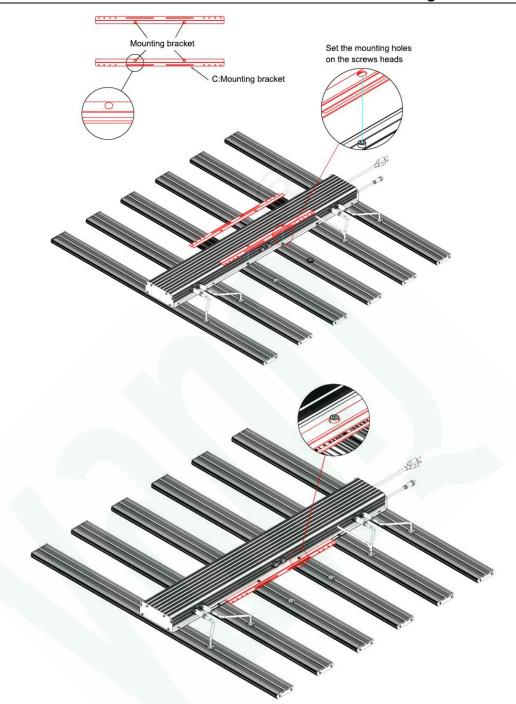
! Bloom lights must be installed to our series grow lights, it can't work individually. Bloom lights can work together with VQ-GLMX series, MG-Octopus640 and MG-Octopus800.

#### 7.1 Installation guides to VQ-GLMX series ligh



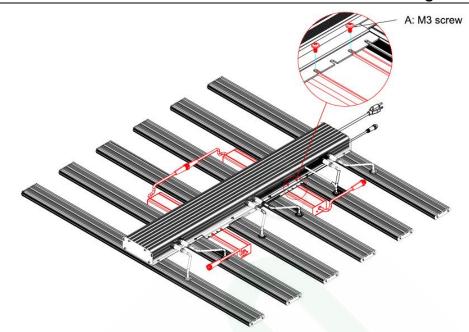
**1.** Installation of mounting bracket(c)

Set the mounting holes on the mounting bracket(c) to the screws of heat sink on VQ-GLMX series lights.



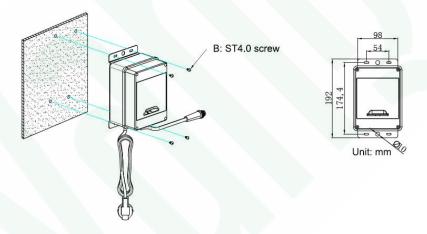
#### **2.** Fix the bloom lights

Fix the M3(c) screws on the slots of mounting bracket, and lock it to the nuts of groove on the back of THCMax bloom light, and then the THCMax bloom light and mounting bracket are fixed together.



**3.** Installation to time switch of THCMax bloom light

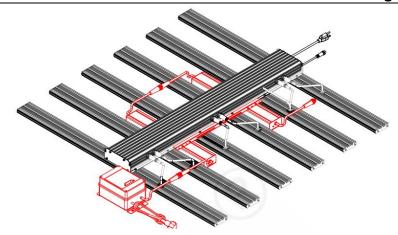
Fix the time switch next to the bloom light, make sure the distance can't exceed 2 meters.



#### 4. Cords connection

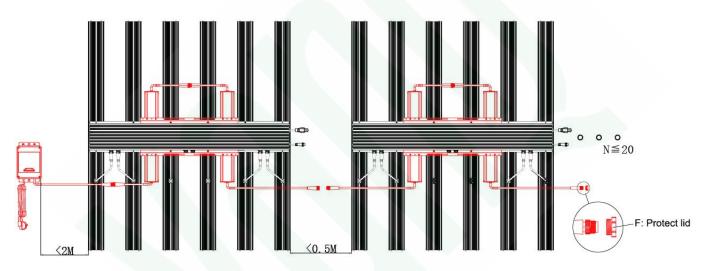
Connect the waterproof connectors of time switch and bloom light, and connect the waterproof connectors of bloom light and VQ-GLMX series lights, finally tighten the threaded cap. The waterproof cords should be connected above the VQ-GLMX series lights, avoiding to block the light, especially the cords will accelerate aging after be explored to UV light.

#### VQ-GLCP Series THCMax Bloom Light

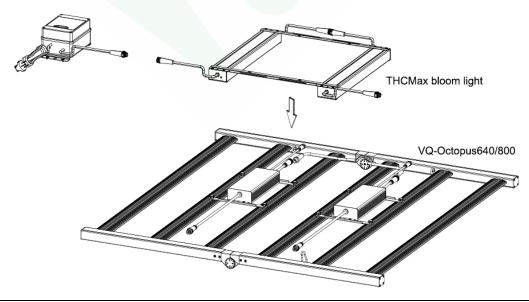


5. Connection to multi VQ-GLMX series lights

Each time switch can connect to max 20 units VQ-GLMX series lights. The distance of Time switch and main VQ-GLMX series light can't exceed 2 meters. The distance of VQ-GLMX series light to next one can't exceed 0.5 meters.

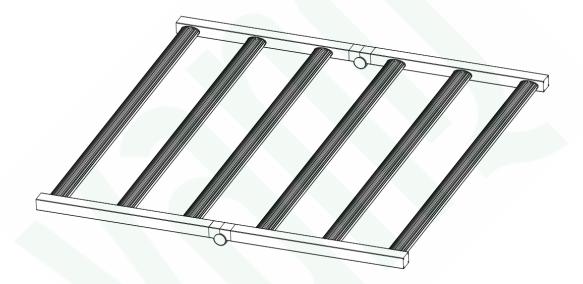


#### 7.2 Installation guides to MG-Octopus640 and MG-Octopus80

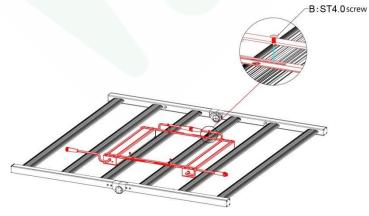


Shenzhen VANQ Technology Co., Ltd. VQ-GLCP Series THCMax Bloom Light 1. Install the THCMax bloom light. A: M3 screw C: Mounting bracket D: Bloom light

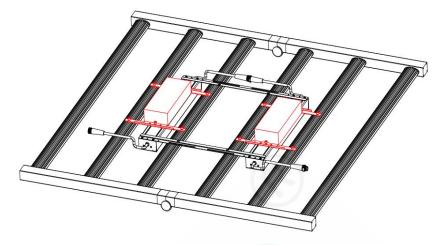
2. Disassemble the power supply from MG-Octopus640/800.



3. Put the Bloom light on the middle of the MG-Octopus640/800 and fix it tightly by screws.



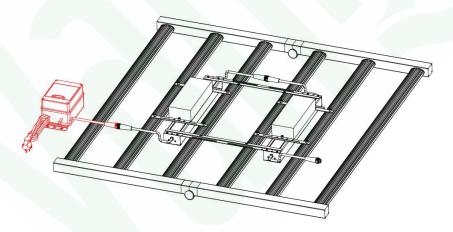
**4.** Re-assemble the power supply to MG-Octopus640/800, and fix it tightly by screws.



**5.** Installation time switch of THCMax bloom light. Same to installation of time switch to VQ-GLMX series.Please refer to **3<sup>rd</sup> sector in Item 7.1**.

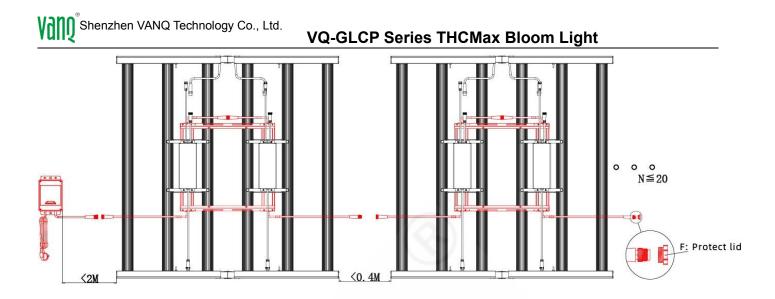
6. Cords connection

Connect the waterproof connectors of time switch and bloom light, and connect the waterproof connectors of bloom light and MG-Octopus640/800 lights, finally tighten the threaded cap. The waterproof cords should be connected above the MG-Octopus640/800 lights, avoiding to block the lights, especially the cords will accelerate aging after be explored to UV light.



7. Connection to multi MG-Octopus640/800 lights

Each time switch can connect to max 20 units MG-Octopus640/800 .The distance of Time switch and main MG-Octopus640/800 can't exceed 2 meters. The distance of MG-Octopus640/800 to next one can't exceed 0.4 meters.



## 8 Operation guides to time switch of THCMax bloom light

#### 8.1 User manual

#### 1. Chinese & English display and button names comparison

Chinese				星期				开	自动	关	上午	下午
Chinese	-	1	[1]	四	Ŧī.	六	日	Л	日初	大	上十	ΓŦ
English	Мо	Tu	We	Th	Fri	Sa	Su	ON	Auto	OFF	AM	PM
Chinese	取消/	恢复	校明	寸	校分	校	秒	校星期	定时(设	时钟	手动/自动	复位
English	Car	ncel	Но	ur	Min	S	ec	Week	Prog	Clock	ON/Auto/OFF	Reset

#### 2. Lock and unlock of time switch

Only time switch is under unlock status, it is available to operate.

1) Unlock: There is a " $\exists$ " icon displayed on the left bottom of the screen. Short press the "Cancel" key four times, " $\exists$ " icon disappears, the time switch is unlocked.

2) Lock: short press the "Cancel" key four times or no operation in 30 seconds, the time switch will recover to lock status, there is a " $\exists$ " icon displayed on the left bottom of the screen.

#### 8.2 Time adjustment

Please make sure the displayed time on time switch is exact same to current time, please adjust it if the clock is incorrect.

Short press Cancel Key four times to unlock. Press "Hour", "Min"and "Sec"keys to adjust time switch to current time and week.

#### 8.3 Instructions

1. Operating Instructions

Procedure	Кеу	Function	Note
1	Press"Cancel"Key	Press the "Cancel" Key four times to unlock	
2	Press"Prog"Key	Enter the Timer 1"ON" setting	Note 1
3	Press"Hour"、"Min"Key	Set the specific ON time [hour, minute]	
4	Press"Week"Key	Set repeat cycle from 15 different "repeat modes"	Note 2
5	Press"ON/Auto/OFF"Key	Set the Working Channels ON (CH1 Or CH2 Or Both)	Note 3
6	Press"Prog"Key	Enter the Timer 1"OFF" setting	
7	Press"Hour"、"Min"Key	Set the specific OFF time [hour, minute]	
8	Press"Week"Key	Set repeat cycle from 15 different "repeat modes" (Should be same as Set of "ON")	
9	Press"ON/Auto/OFF"Key	Set the Working Channels OFF (CH1 Or CH2 Or Both)	Note 3
(1)	Repeat Operation 1-8	Set Timer 2/Timers 3Timers 16 ON/OFF Time ( If No Need,Disable the Timer by setting ON/OFF)	Note 4
(1)	Press"Clock"Key	Finish Timers Setting, Back to Start-up Screen	
(12)	Press"ON/Auto/OFF"Key	Press multiple times to switch working modes (Auto) Timer Enabled/(ON)Timers Disable With Lamps ON or Timers Disabled With Lamps OFF	Note 5

**Note:** Note 1 During the operation of the Timer Setting, the timers not work.

**Note 2** Press"Week"Key multiple times, you can change different repeat modes.

**Note 3** Press"ON/Auto/OFF"Key, Selet the Working Channels (CH1 Or CH2 Or Both).

Note 4

- Press "Cancel" Key To Disable the Timer by setting ON- -/OFF -(Not 00:00),Press"Cancel"Key again to enable the Timer.
- □ Inspection: Multiple press "Prog" Keys to confirm all setting are correct.
- Modification: If any timer is wrong, by pressing "prog" Key to locate the wrong timer, press
  "Cancel" key to clear the setting, reset the timer following the instruction.
- I If all correct, Press"Clock"Key, back to Start-up Screen.
- Note 5 Timers Enabled: Unlock the time switch, press "ON/Auto/OFF"Key multiple times to change modes, If under "Auto" mode, the timers will work normally as setting, if under "ON"mode, both UV and FR lamps will be on with all timers disabled, if under "OFF" mode, both UV and FR lamps will be off with all Timers disabled.

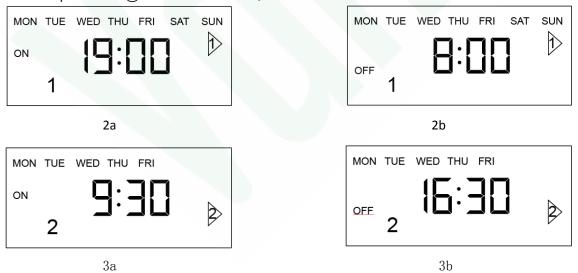
#### 2 Examples

Example 1: THCMax Bloom Light Far red and UV should be ON during 19:00-08:00 everyday.

- 1) Follow procedure  $1^{5}$ , make sure Timer 1 setting as below figure 1a show.
- 2) Follow procedure  $6^{0}$ , make sure Timer 1 setting as below figure 1b show.

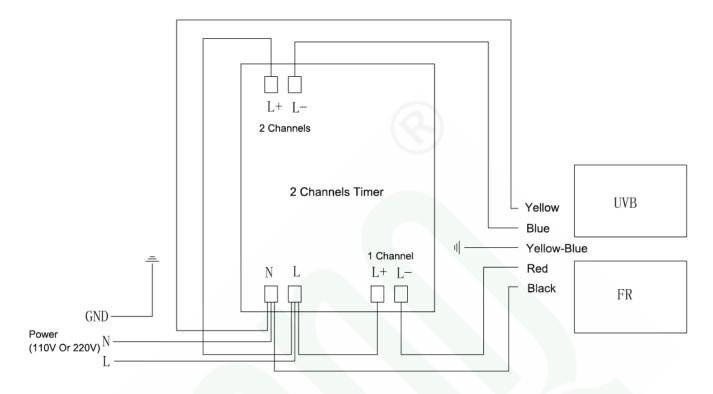


- 3) Follow procedure (1), disable Timers2, Timers3.... Timers 16.
- 4) Multiple press "Prog" Keys to confirm all setting are correct. If not correct, please repeat 1)-3).
- 5) Follow procedure (1), Finish Timers Setting, Back to Start-up Scree.
- 6) Follow procedure (12), Make sue the switch under "AUTO" mode.
- Example 2: THCMax Bloom Light Far red should be ON during 19:00-08:00 everyday,and UV should be ON during 09:30-16:30 everyday.
  - Follow procedure ①~⑨, make sure Timer 1 setting as below figure 2a,2b show;Timer 2 setting as below figure 3a,3b show.
  - 2) Follow procedure (10), disable Timers 3, Timers 4.... Timers 16.



- 3) Follow procedure (1), Finish Timers Setting, Back to Start-up Scree
- 4) Follow procedure 1, Make sue the switch under "AUTO" mode.

## 8.4 Time Switch Internal Circuit



## 9 THC Max Bloom Light -UVB band light radiation distribution test

Unit: µW/cm<sup>2</sup>

17	34	34	35	16		Î		
23	76	109	83	28				
36	95	132	92	30		120cm		
24	78	104	80	27		=		
16	37	42	36	19				
		120c	m			,		

Height=45cm

Height=ouch										
	12	21	35	22	13					
	26	50	67	52	27					
	34	67	80	67	34					
	25	45	65	52	28					
	12	18	36	20	10					
	120cm									

120cm

#### Height=60cm

## **10** USE, Storage and Disposal

#### **10.1** Precautions for use

**1**. This lamp contains UV light, and the human body cannot be exposed to the irradiation range for a long time;

2. When the lamp is working, do not touch the lamp directly; the temperature of the lamp will be high after working for a period of time, and touching the lamp directly may cause burns;

3. Regularly check the wires of lamps and time switch, and do not use them if they are damaged;

**4.** When the lamps or time switch are damaged, do not disassemble and repair by yourself. There is high voltage inside ; VANQ company will no longer provide warranty services after repairs;

**5** Do not modify lamps or time switch by yourself. There is a high voltage inside, VANQ company will no longer provide warranty services after modification;

**6** Do not use wet towels or any chemical reagents to clean lamps and time switch, and gently wipe with a dry duster.

#### **10.2** Storage, Disposal

1. Store in a dry and clean environment, the ambient temperature is -20~75°C;

2. Products can not be disposed as unsorted municipal waste, must be collected separately for disposal, recycling and environmental friendly.

## **11** Warranty Services

1. The warranty period is one year. During the warranty period, VANQ will provide free warranty service for any product quality problem. Warranty services include replacement of new products, replacement of product parts, and repair of defective products. The method to be adopted is at the discretion of VANQ. If repair is required, please send the product and invoice back to VANQ. Even VANQ provide warranty service for the product, the remaining warranty period is still one year from the date of purchase of the original product

2. Warranty services are not provided in the following cases

- 1) Product damage caused by more than 20 lamps connected to one time switch.
- 2) Product damage caused by violation of "6.2 Requirements of working environment".
- 3) Product damage caused by violating 4, 5, 6three points Of"10.1 Precautions for use" .