Instruction Manual

MG-06

(UV Radiometer)

Genuine UV Technology

GenUV

1. Product Features and Application

1) Features

Display is 3 types : Relative Power (RP), Accumulative Time (AT)

Output type : Relay contact

Standard panel : DIN 48 * 48 (LED display)

2) Applications

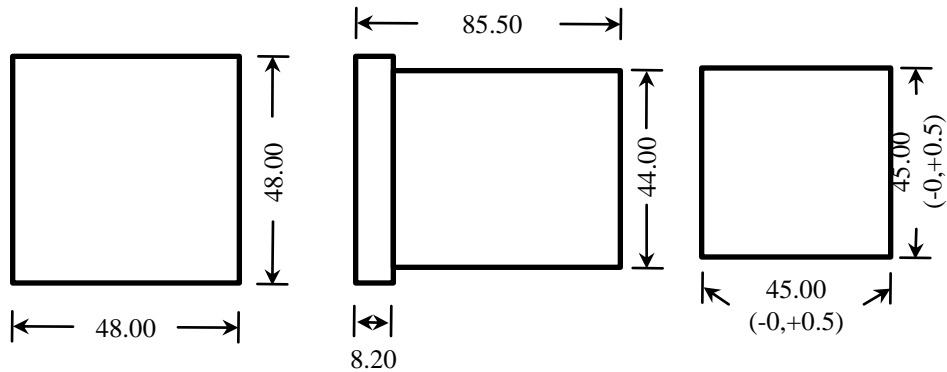UV Lamp Monitoring / Water Sterilizer / Air Cleaner/ UV Hardener / UV Irradiator

2. Product Specification and Configuration

1) Display Panel

- Panel Size: $48 \times 48 \times 85.5$ ㎣ , Panel cutting size : 45×45 ㎟ (Tolerance : -0, + 0.5 ㎜)

- Power Supply: 85 ~ 265 VAC (50/60 ㎐), Consumption : ≤ 3 W

- Operating Temperature: 0~50 ℃, Operating Humidity: 35 ~ 85 % RH

- Relay : 250AC 3A, 30VDC 3A.

| (1) Display Panel | (2) Size of Display Panel [Front view] | (3) Size of Display Panel [Side view] | (4) Panel Cutting Size(mm) |

Fig. 1 UV Radiometer 6.0

2) Sensor Probe

Brown Line : #3, Black Line : #4, Blue Line : #5

Information of Sensor Probe is in the enclosed Certificate of Quality (CQ)

3) Power cable and output cable are not included.

3. Production Installation

1) Mounting the Sensor Probe

 a. Operation temperature of Sensor Probe is -30 ~ 85 ℃ (-22 ~ 185°F)

 b. UV sensor of Sensor Probe and UV light source should be fixed in set distance to do verticality.

   Once a mounting distance has been determined, make sure to use the same distance for any additional sensors used

   for other lamps; doing so will provide a more accurate comparison of irradiance among different lamps.

 c. In LW series, Sensor Probe connects after close teflon tape 3~4 times in screw page.

 d. After mounting and positioning the sensor probe, make sure the window of Sensor Probe is clean and dry.

   If it is not clean, then gently wipe it off with a lint free swab.

2) Mounting the Display Panel

 a. Mount the Display Panel in a temperature & humidity of less than 50 ℃ (122°F) & 35 ~ 85 %RH.

 b. 3 wires of Sensor Probe connect to #3, #4 and #5 of Display.

   [3 : +5V (Brown), 4 : GND (Black), 5 : Vin (Blue)].

 c. Power cable connect to #9 and #10 of Display. (Power is AC voltage. Be careful!)

 d. Alarm for UV lamp running overtime #1 and #2 of Display.

 e. Relay can use the 5A / 230VAC, and its criterion is the setting value of C-01.

   #8 is N/O (Normal Open), #6 is N/C (Normal Close) and # 7 is Comm (Common).

   If you want to get the short signal under 70 %, you should set 70 in C-01and connect the each wires

   in #7 and #8 of Display.

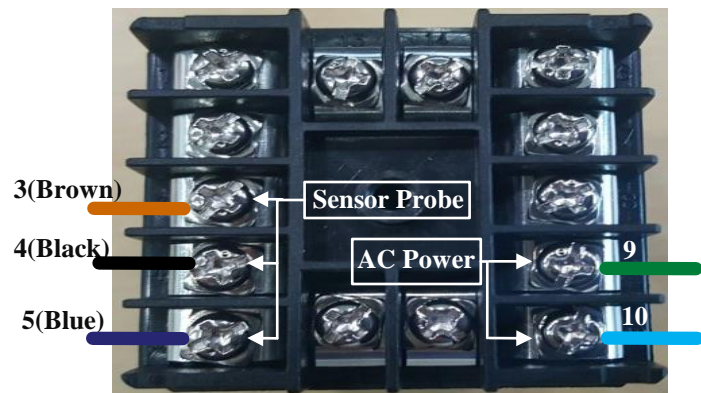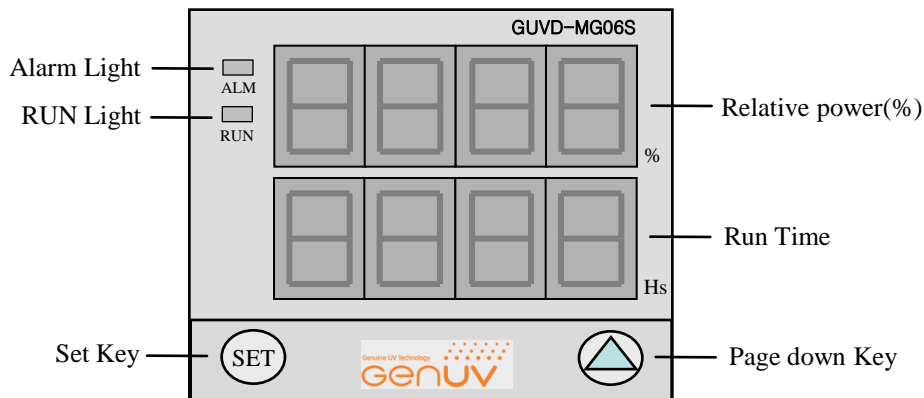**Fig. 2 Connection Diagram of UV Radiometer 6**

Fig. 3 Connection picture of UV Radiometer 6

4. Operation

1) Setting

Mark	Name	Range	Application
C-01	Lower limited value of the UV-low Alarm	0~100%	According the actual requirement, set the lamp low limited warming line. In case the inspected value lower than last value, warning up and the delay be actived.
C-02		0~19990 hours	After set the lamp using time. In actually run time, when the totally run time exceeds the original setting time. Warning up and delay be actived.

2) Panel Instruction

Alarm Light —— ALM

RUN Light —— RUN

GUVD-MG06S

%

Hs

Relative power(%)

Run Time

Set Key —— SET

Page down Key

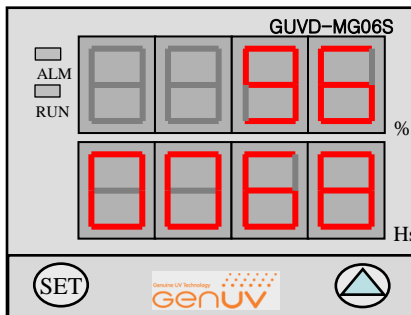3) Keys Function

  a. Set Key

    1. 100% resetting, Clear timer to zero.

    2. Setting parameter.

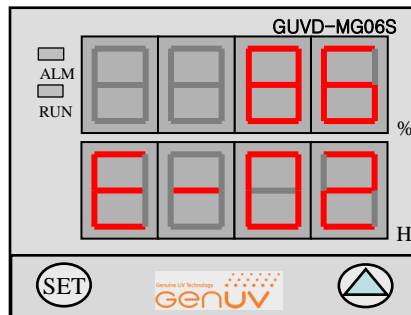   3. Page down and shifting the setting the bit.

  b. Page up Key : Pressing [Set Key] + [Page down Key] together can enter or quit the parameter displaying page.

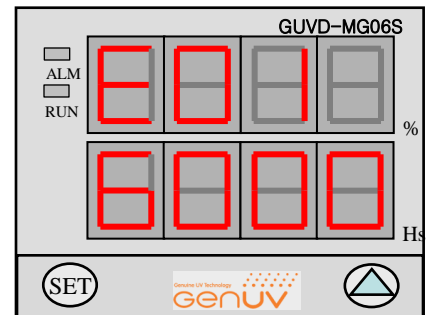 c. Parameters adjustment steps and displaying page :

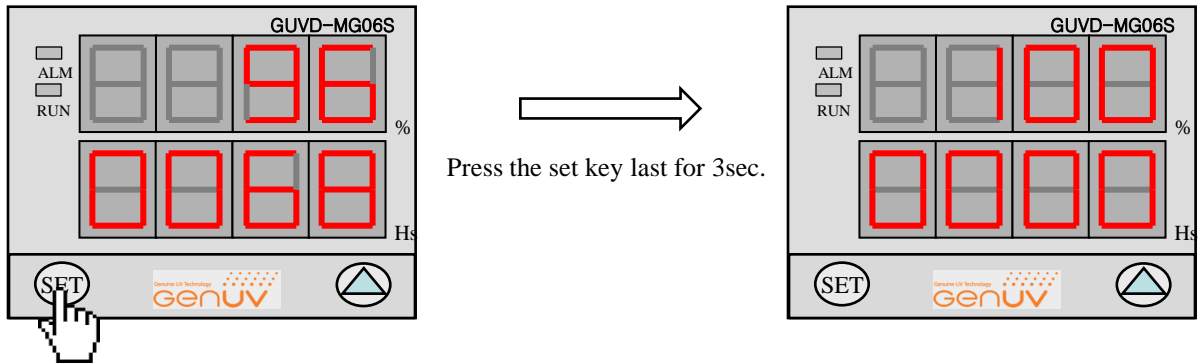   ②, ③ is fault page, which will appear when the E-01 and E-02 occurring.
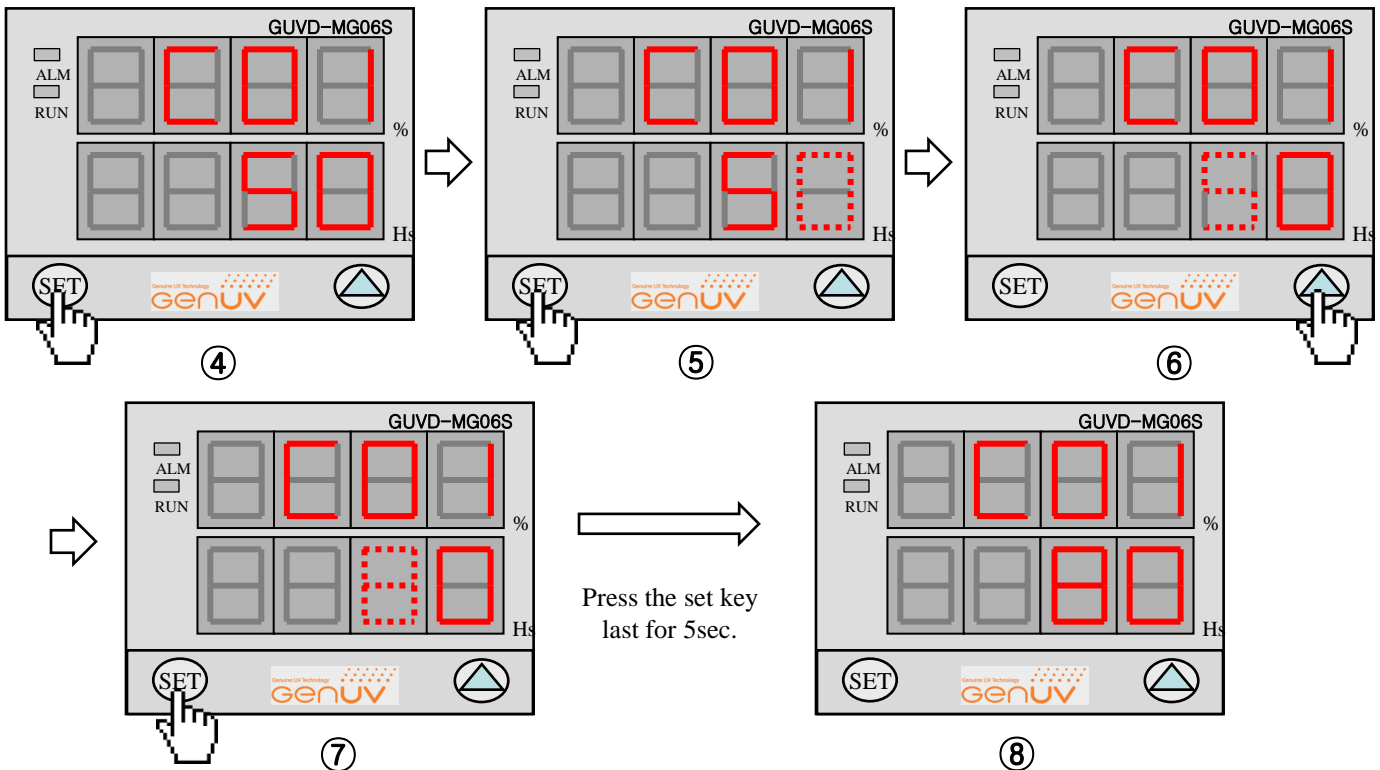
①   ②   ③

4). Process of Parameter Resetting to 100%

Press the set key last for 3sec.

*When you set the relative power 100% , the AT time will set to 0 hrs.

e.x) Setting of C-01

a. Press [Set Key] + [Page down Key] together, enter picture ④.

b. Press [Set Key] entezzr picture ⑤. And then press the [Page down Key] can reduce the flashing number.

c. Press [Sett Key] second time, will appear picture ⑥, that flashing bit is shifted.

d. Press [Page down Key] flashing number will be reduce by one press. Press [Set Key] to chose the digit, then press

[Page down Key] chose the number. Fix it by press [Set Key] 3seconds.

e. Press shift back to picture ④.

f. Back from parameter setting : One way is, press [Set Key] + [Page down Key] together, the other way is leave it for 1minute.

g. Parameters adjustment steps for C-02 same as above C-01 setting steps.

Press the set key last for 5sec.

5) Alarm codes explanation

Mark	Name	Application	Reason and solution
E-01	UV low limited warning	As the UV relative value down to 50% of original setting, device be warning.	1. Quartz glass on the top of sensor is dirty. Cleaning it. 2. The irradiance of the lamp maybe weak, please replace the UV lamp.
E-02	UV lighting period exceeded warning	As the UV run time exceed to original setting run-time, device be warning.	Replace lamp

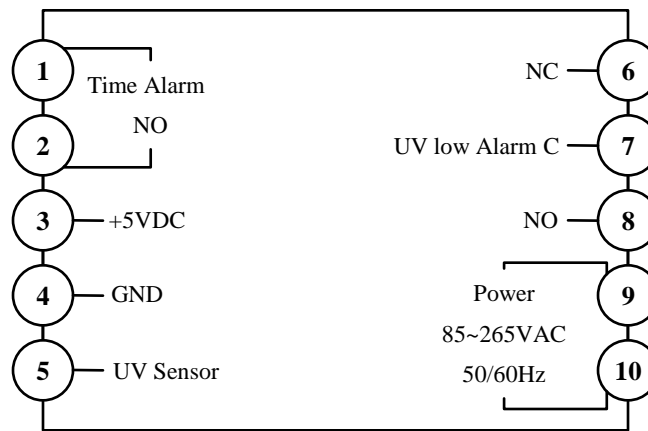## 5. Relay Operation method

1) Wiring diagram

Fig. 5 Wiring diagram of UV Radiometer 6

a. Connect AC power Terminal #9 and #10 and connect Sensor cable to terminal #5 (Blue wire), #3 (Brown wire), #4 (Black wire).

Please refer to Fig. 6.

b. Relay output terminal is (#6 ~ #8),

If you want to use relay output please use with #7 and #8 (N/O , Normal open , in normal case the terminal status is open, but if the signal is ON

the terminal will be closed. OR #6 and #7 (N/C , Normal Close, in normal case the terminal status is close, but if the signal is ON,

the terminal will be Open).

In normal status the relay will contact #6 and #7 and in abnormal status the relay will close #7 and #8

If you use large capacity ballast , please use capacitor (220ᵖF/2ᵏV) as Fig. 7.
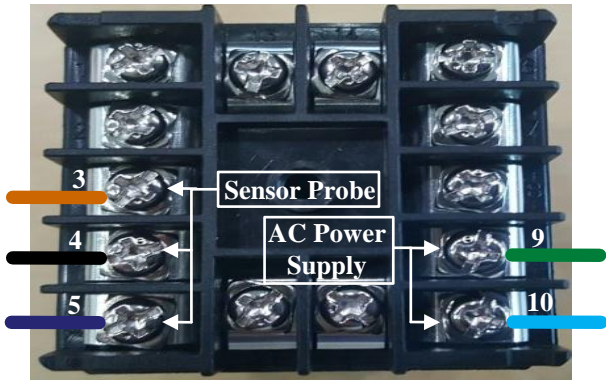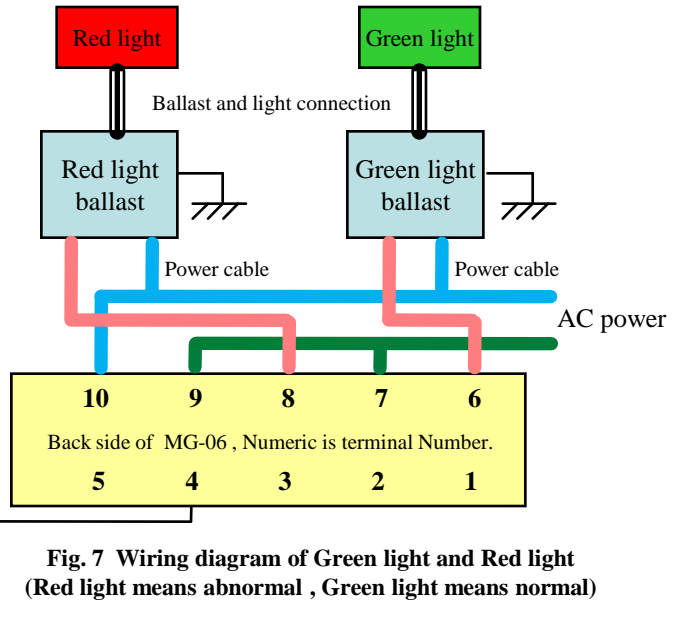
Fig. 6 Connect diagram of MG-06

Capacitor
220pF/2kV

Fig. 7 Wiring diagram of Green light and Red light
(Red light means abnormal , Green light means normal)

In normal status , the relay will connect #6 and #7 , the Green light will be ON and Red light will be off
In abnormal status , the relay will connect #7 and #8 , the Green light will be of and Red light will be ON.
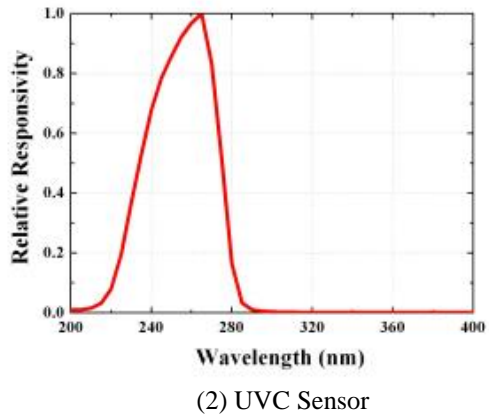
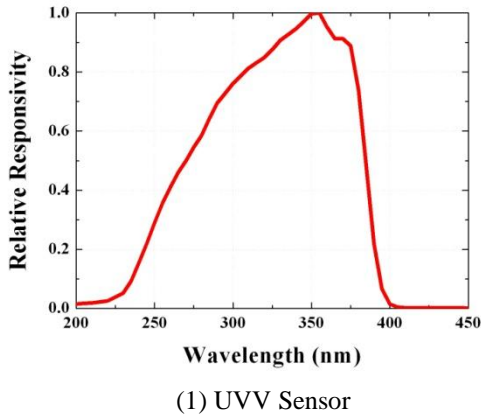## 6. Relative Reaction Curves of UV Sensors

(1) UVV Sensor

(2) UVC Sensor

Fig. 4 Relative Responsivity Curve of UV Sensor

7. A/S Request in Case of Product Failure

1) Should any failure is found in product, please call the sales company or customer center for A/S.

2) Product warranty period is 1 year from the date of procurement with no charge.

   However, failure which is caused by user's misuse or carelessness within warrant period or any failure after

   the warrant period shall be chargeable for it's A/S.

3) Product inquiry and on-line customer service

   Tel : +82-42-862-3982, Fax : +82-42-862-2982

   E-mail : uvsensor@geni-uv.com

   Web site : http://www.geni-uv.com

8. Notes

1) CAUTION

   TURN ALL POWER OFF. NEVER EXPOSE EYES OR SKIN TO UV LIGHT FROM ANY SOURCE

   WEAR GLOVES, FACE SHIELD/GLASSES(PER ANSI Z87.1)

   AND COVER ALL EXPOSED SKIN. DO NOT TOUCH LAMP GLASS WITHOUT GLOVES.

2) NOTE

   Read this entire instruction sheet before starting the installation.