



Model No: C/O3-500-MC

Ozone | Temperature | Humidity

Monitoring | Control | Display.

## User Manual

### Important safety information warning

- Always cut off power before mounting, removing, and cleaning the monitor.
- Read all of the information in this manual before mounting the monitor.
- Notice the supply power voltage of the monitor: **24VAC/VDC**.

### Mounting and wiring Connection

- Cut off power first. Simultaneously depress the 2 clips on either of the sides of the Monitor gently with your nails or other unship tools, then move off the face part.
- Mount the monitor on the wall, 1.2-1.3 meters above the floor. Do not mount behind a door, in a corner, near diffuser, in direct sunlight, and near any heat or steam sources. Do not mount the monitor in the direction of the outlet of the Ozone generator or in places where wind passes through, because the internal Ozone sensor can be easily influenced by wind.
- Mount the wall plate: Two dimensions available (see figure1). Place the monitor against the wall at desired location; make sure wires can be drilled through the holes on the wall plate.
- Connect wires to terminal strips, (see fig.2). Make sure wiring connection is correct and secure.
- Cover the face part to the wall plate on the wall plate.

Figure 1 wall plate

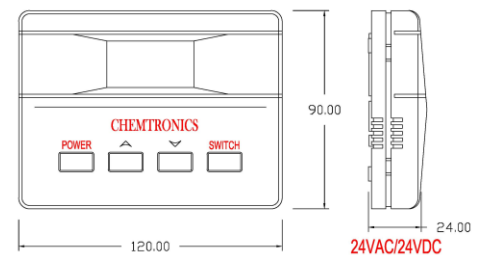
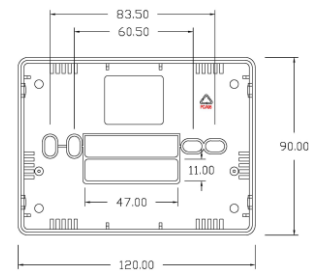
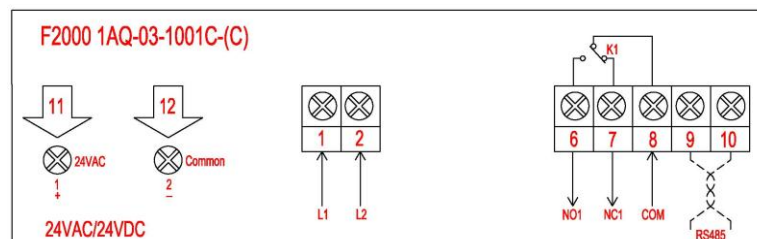
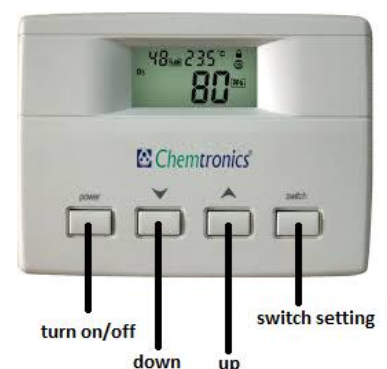
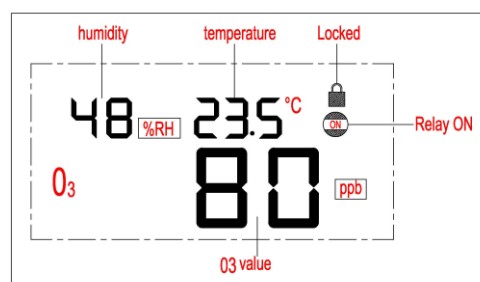




Figure 2 Wiring Diagram



### LCD and Buttons



## Operation

1. If you use the monitor for the first time or it hasn't been used for a long time, then it should be energized for 96 hours before it come into normal use. If you have placed it in the direction of the outlet of the Ozone monitor/generator or in places where wind pass through, then the measurement of the Ozone monitor will be incorrect. In this situation, please place the Ozone monitor in normal environment and keep it energized for at least 24 hours. When the ozone measurement range overstep the maximum measurement, the ozone sensor can be resumed after a long time reset, and then it will return to normal use again.
2. Temperature measurement range is 0 ~ 50 °C, accuracy 0.5°C, temperature setting range is 5 ~ 45°C. Humidity measurement range is 5 ~ 99%RH, accuracy 1%RH, humidity setting range is 5 ~ 95%RH, Ozone measurement range is 10 ~ 500ppb, accuracy 1ppb and setting range is 10 ~ 500ppb, its maximum measurement limited is 500ppb.
3. Turn on: Turn on the monitor by pressing **power** for 2 seconds. Temperature measurement displays on the right of upper line of LCD, the humidity measurement displays on the left of upper line of LCD, The preheating time of ozone sensor displays on the below line and the time is set to 300 seconds(default). The preheating time can be changed in parameter setup. After it is counted down to 0, ozone level will be displayed.
4. Switch setting value: press switch key to exchange setting value from between ozone and temperature or between ozone and humidity.
5. Setting O<sub>3</sub> value: Once switching to ozone setting, the ozone number is blinking, it indicates that the O<sub>3</sub> value can be set by ▼ and ▲ key. Increase or decrease 1ppb each time by pressing and rapidly increase or decrease by pressing key continually for more than 2 seconds.
6. Lock setting value: Simultaneously depress the ▼▲ key about 6 seconds up to the symbol  appearing on the LCD. Then the setting value is locked to avoid wrong operation.
7. Unlock: Under the locked mode, simultaneously depress ▼▲ key about 6 seconds up to  disappear.
8. Relay output action is 50ppb as default. When DIP4 is set to OFF(details see below parameter setup); The relay will turn on when O<sub>3</sub> measurement ≤ O<sub>3</sub> setting with **on** symbol appearing on the right of LCD, When O<sub>3</sub> measurement ≥ O<sub>3</sub> setting, the relay will turn off with on disappearing. When DIP4 is set to ON(details see below parameter Setup); The relay will turn on when O<sub>3</sub> measurement > O<sub>3</sub> setting with on Symbol appearing on the right of LCD. When O<sub>3</sub> measurement ≤ O<sub>3</sub> setting, the relay will turn off with **On** disappearing.

### **The differential of ozone setting, please refer to Parameter Setup.**

9. The scale bars on the right of LCD indicates the analog output. It is un-effective to this model

### **Parameter Setup (Service Manual V.-10 ~ 500ppb\_A273.hex)**

Cut off power and simultaneously depress the 2 clips on either of the sides of the monitor gently with your nails or other unshp tools. Move the face cover, there is a set of 4 Dipswitches on the right of the circuit board.

DIP1	ON - set parameter	OFF - normal use	Leaving factory: OFF
DIP2	ON - Fahrenheit	OFF - Celsius	Leaving factory: OFF
DIP3	ON - Humidity control the second relay output		
	OFF - Temperature control the second relay output		Leaving factory: OFF
DIP4	ON - For decrease ozone (to control ventilation system)		
	OFF - For increase ozone (to control an ozone generator)		Leaving factory: OFF

---

Please put DIP1 to ON, press power key to turn it on, and set the following parameters. Press switch for switching parameters, ▼▲ for adjusting values.

LCD Display	Parameter	Setting Range	Default
-01	Temperature modification	±3.0°C	0.0°C
-02	Humidity modification	±9RH%	0
-03	Ozone value correction	±30 ppb	0.0
-04	Warm up time of the ozone sensor (No output use, neither 0 ~ 10VDC nor on/off before ozone measurement unstable)	1 ~ 900s	300s
-05	When the 0 ~ 10vdc output with ozone measuring value direct proportion, Oppb corresponding voltage setting range: 0 ~ 9.9eg; if the voltage setting value is 2.0, ozone measuring range: 1000ppb, Oppb=DC2V; 1000ppb =DC10V		0.0
-06	Temperature or humidity control the relay 2 control direction option. 0- relay 2 on when temperature(or humidity) setting value>temperature(humidity)measuring value 1- 1-relay 2 on when temperature(or humidity)setting value<temperature(humidity)measuring value.		0
-07	Minus differential of ozone of control the delay setting range: 5 ~ 30 E.g, the setting value is 10 and O3 setting is 50 ppb, if measured O3≥50-10ppb, the relay 1 will be turn on (DIP4=OFF) or will be off(DIP4=ON).		20
-08	Positive differential ozone of control the delay1 setting range;5 ~ 100 e.g, the setting value is 20 and O3 setting is 50 ppb, if measured O3≥50+20ppb, the relay will be off (DIP4=OFF) or will be off (DIP4=ON).		50
-09	1: turn off after electrify 2 : turn on after electrify 3: keep on the last state		3
-10	RS485 address 1 ~ 255		1
-11	RS485 communication rate selection	1: 4800bps 2: 9600bps 3: 14400bps 4:19200bps 5: 38400bps	4
-12	Zero point calibration value	0-200	0
-13	-----	-----	-----

RESET: Put the DIP1 to ON and press switch key for about 25 seconds until the monitor is off, then all the setting return to the default.