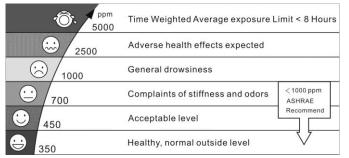
Multi IAQ Monitor Operating Instructions

Model: Aircontrol Vision

1. General Introduction

Indoor Air Quality is measure for the quality of air in interiors, the comfortable indoor environmental quality can make people feel fresh, work efficiency and good for the health. The CO2 concentration is the important factor of good indoor air quality. People breath in oxygen and breath out CO2, nowadays people often close the windows to avoid noise and enjoy the comfort living and working environment provided by air-conditioning systems, which results in the fact that the indoor concentration of CO2 is far higher than outdoor average. With the high CO2 concentration and non- proper ventilation, people will feel headaches, dull, drowsiness, lose of concentration and correspond to the high levels of dust, chemicals and bacteria in the air.



2. Aircontrol Vision ----- Multi IAQ Monitor (CO2 / Temperature /

Humidity)

Aircontrol Vision Multi IAQ monitor is a cost-effective, air quality indicator, the large single digit LED display with three most critical parameters of indoor air quality, the current CO₂ concentration, the ambient temperature and the relative humidity.

CO2-----CO2 concentration indicates the amount of fresh air ventilation being introduced to a space

Relative humidity----The relative humidity in air indicates the amount of moisture

Ambient temperature----The suitable ambient temperature brings the comfortable space.

Features:

- NDIR (Non-Dispersive-Infrared) technology used to measure CO2 concentration up to 3000 ppm (parts per million)
- The Large single digit LED clearly displays the CO₂ concentration, Relative humidity and ambient temperature
- The various (green, yellow and red) colors of LED's show the indoor air quality situation
- Reliable CO₂ sensor provides the long-term calibration stability
- Dimmer Function can automatically adjust the display of single digit LED to reach the power saving

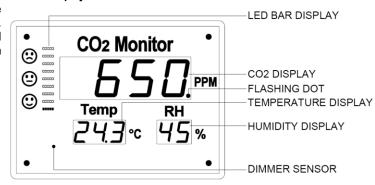
Benefits:

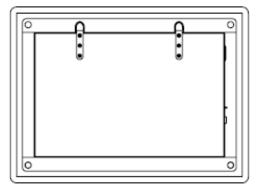
- Enjoy the more comfortable, healthy and hygienic Indoor Air Quality
- Save energy, get the proper ventilation, the over-ventilation of the building can be reduced.
- Improve the IAQ satisfaction in public.

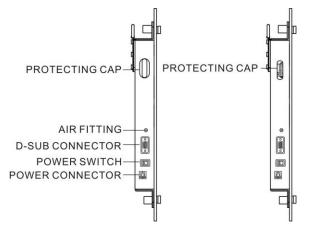
Application:

Aircontrol Vision has the widely application for classroom, kindergarten, meeting room, office building, shopping mall, theater, exhibition, hospital, hotel, sports center, gymnasium, railway station, bus station, airport and other public place where the comfort, healthy indoor air quality is important.

3. LED Display







Item		Description
SW1	SW2	
OFF	OFF	NGC function off
OFF	ON	NGC cycle:1 week
ON	OFF	NGC cycle:2 week
ON	ON	NGC cycle:4 week
SW3		
OFF		Teach mode off
ON		Teach mode on
SW4		
OFF		Temperature unit: °C
ON		Temperature unit: °F
SW5		
OFF		Self test off
ON		Self test on
SW6	SW7	
OFF	OFF	Dimmer off
OFF	ON	Dimmer on
ON	OFF	Dimmer at dark mode
ON	ON	Dimmer at bright mode
SW8		NA

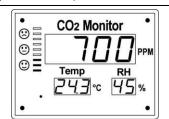
Dimmer function: The power saving mode, while the switch of "Dimmer Function" is on. When the ambient brightness is lower than 15 LUX, the display of single digit LED will become dark. When the ambient brightness is between the 15 LUX and 18 LUX, the display of single digit LED is normal. When the ambient brightness is high than 18 LUX, the display of single digit LED will become bright.

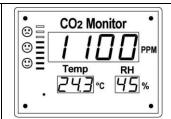
NGC Function: When the switch of "NGC Function" is on, Aircontrol Vision will enter into the automatic calibration mode.

Remark: When do with the new setting, please press the "Power Switch" to restart the Aircontrol Vision, after that, the new function will execute. When the power has been connected, Aircontrol Vision will begin to work.

There are three modes: CO₂, RH, Temperature measure mode.

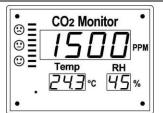
1) CO₂, RH, Temperature measure mode:

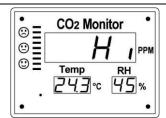




When CO₂ concentration is below 800ppm, the green LED will light.

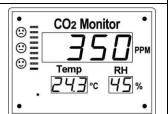
When CO2 concentration is below 1200 ppm, the green and yellow LED will light.

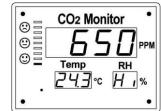




When CO₂ concentration is bellow 1600 ppm, the green, yellow and red LED will light.

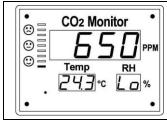
When CO2 concentration exceeds the CO2 measurement range (0-3,000ppm), the single digit LED will display with "Hi". It will disappear when the CO2 concentration returns to the measurement range.





When CO2 concentration is below 350 ppm, the single digit LED will display "350", and the first green LED will light. "350" means CO2 concentration is low, the indoor air quality is particularly good.

When RH exceeds the RH measurement range 90%, the single digit LED will display with "Hi". It will disappear when the RH returns to the measurement range.



When RH exceeds the RH measurement range 20%, the single digit LED will display with "Lo". It will disappear when the RH returns to the measurement range.

4. SPECIFICATIONS

Method - NDIR

Display - Single Digit LED

Sample Method - Diffusion or flow through (50 ~200 ml/min)

CO₂ & Temperature & RH Specification:

CO2	Measurement Range	0-3,000 ppm display
	Display Resolution	1ppm at 0~1,000ppm; 5ppm at 1,001~2,000ppm; 10ppm at 2,001~3,000ppm
	Accuracy	0~2,000ppm: ±70 ppm or ±5% of reading, whichever is greater; over 2000ppm: +/-7%
	Repeatability	±20 ppm
	Temperature Dependence	Typ.±0.2% of reading per °C or ±2 ppm per °C, whichever is greater, referenced to 25°C
	Pressure Dependence	0.13% of reading per mm Hg
	Response Time	About 2min for 63% of step change
	Warm-Up Time	<60 seconds at 22°C
Tamanahan	Temperature Range	0°C to 50°C (32°F to 122°F) display
	Display Resolution	0.1°C (0.1°F(when temperature display is within 100°F)
Temperature	Display Options	°C/°F
	Accuracy	±1°C(±2°F)
	Response Time	20-30 minutes (case must equalize with environment)
RH	Measurement Range	20%-90% RH
	Display Resolution:	1%RH
	Accuracy	±5%RH@23°C
	Response time	<5 min for 63% of step change
Operating & Storage condition	Operating Temperature	0°C to 50°C (32°F to 122°F)
	Humidity Range	0 ~ 95% RH non-condensing
	Storage Temperature	-20°C to 60°C(-4°F to 140°F)

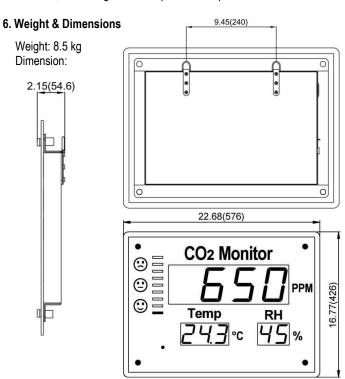
Power Supply	Power Supply	19 VDC from external AC/DC adapter which is included in package
	DC Output voltage	19 VDC / 1.26 Amp
	AC Input voltage & Frequency	100 ~ 240 VAC 50 / 60 Hz

5. Installation Instruction

Please carefully take out the Aircontrol Vision, screws, wire rope from package. There have two options to install Aircontrol Vision.

Installation Option 1: Hang up the Aircontrol Vision with wire rope

1. Choose a suitable location to install Aircontrol Vision, fix the screw to the wall, then using the wire rope to hand up the Aircontrol Vision.



♠ EMC/RFI

Readings may be affected if the unit is operated within radio frequency electromagnetic field strength of approximately 3 volts per meter, but the performance of the instrument will not be permanently affected.



Ref No : 032011