

# **E** SEN-0071 INSTALL

SEN-0071 - Indoor Air Quality Indicator & Transmitter

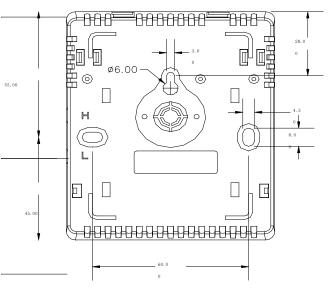
#### READ THESE INSTRUCTIONS BEFORE BEGINNING INSTALLATION

## **INSTALLATION**

- ♦ Always cut off power before mounting, removing, or cleaning the monitor.
- ◆ Notice the supply power voltage of the transmitter: 24VAC/VDC. Do not install the transmitter on voltages higher than marked on the transmitter. 24VAC/VDC.

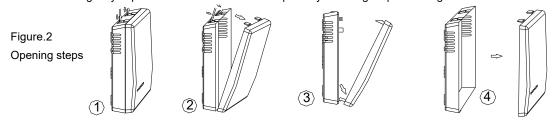


Figure.1



#### **Mounting and Wire Connection**

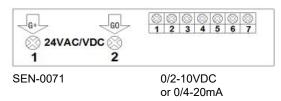
♦ With power off, put a flat head screwdriver deep inside of the hole on the top of the detector housing following step 1 in figure 2. Then slant the screwdriver and gently separate the cover from the wall plate by following steps 2 through 4.



The transmitter should be mounted near the place where you want to detect VOC level. However, do not mount the detector near a steam source, such as a diffuser, or in direct sunlight.

- ♦ Mount the wall plate first. Place the detector against the wall at the desired location. The wires must be able to pass through the notch on the wall plate. Reference figure 1 for dimensions.
- ◆ Connect wires to terminal strips, (see the label on the wall plate and fig.3). Make sure wiring connection is correct and secure.

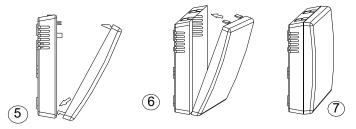
Figure.3 connection



<b>Connection Terminal</b>		Function	Electrical Data	
1	G+	Power (+)	24VAC/24VDC +	
2	G0	Power ground (-)	24VAC/24VDC	
3	OUT	Analog output (+)	0~10VDC (default)	
4	ON	Alarm output		
5	OP	Alarm Common		
6	В	RS485 interface	9600/14400/19200(default)/28800/38400bps (programmable selection),	
7	Α	110400 interlace	15KV antistatic protection.	

◆ Follow the steps in figure 4 to close the cover.

Figure 4 closing steps

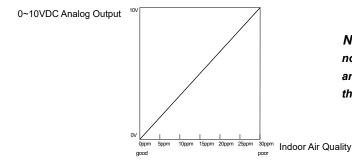


#### Select the Voltage of Output

The transmitter has been set at 0~10VDC analog output before leaving the factory. If you want to change the output voltage, please operate as noted in the table below: Cut off power and simultaneously depress the 2 clips on either of the sides of the transmitter to remove the faceplate from the wall plate. There are four jumpers on the top left of circuit (S1, S2, J1, J2) and choose a different output voltage through disconnection or connection as noted in the table below.

S2	S1	J1	J2	Analog Output
Upper two pins connection	Upper two pins connection	connection	Un-effective	4mA~20mA
Upper two pins connection	Upper two pins connection	disconnection	Un-effective	No analog output
Below two pins connection	Below two pins connection	connection	connection	1VDC~5VDC
Below two pins connection	Below two pins connection	connection	disconnection	2VDC~10VDC
Below two pins connection	Below two pins connection	disconnection	connection	0~5VDC
Below two pins connection	Below two pins connection	disconnection	disconnection	0~10VDC

## **Analog output and Corresponding VOC Values**



Note: When you test and install the transmitter, please take notice that it should be placed perpendicular to the ground and keep head-on. Because the air hole is at the bottom of the product, incorrect placement can affect the test result.

# **Specifications**

Gas detected	Combustive gases and odorous gases within a room (smoke, body odor, timber dope and toluene emitted by other building materials), low concentration odorous gases (ammonia, H2S, CO, alcohol, and natural gas)		
Sensing element	Semiconductor mixed gas sensor		
Measuring range	1~30ppm		
Power Supply	24VAC/24VDC		
Consumption	2.5 Watt		
Load (for analog output)	>5K		
Sensor query frequency	Every 1 second		
Warm up time	48 hours (first time); 10 minutes (operational)		
Six indicator lights	1 <sup>st</sup> green light on when VOC measurement ≤5ppm  1 <sup>st</sup> and 2 <sup>nd</sup> green lights on when 5ppm <voc 1<sup="" measurement="" ≤10ppm="">st yellow light on when 10ppm <voc 1<sup="" measurement="" ≤15ppm="">st and 2<sup>nd</sup> yellow lights on when 15ppm <voc 1<sup="" measurement="" ≤20ppm="">st red light on when 20ppm <voc 1<sup="" measurement="" ≤25ppm="">st and 2<sup>nd</sup> red lights on when VOC measurement &gt;25ppm</voc></voc></voc></voc>		
Analog output	$0{\sim}$ 10VDC (default) or 4-20mA linear output		
Output resolution	10Bit		
Communication rate	RS485, 9600/14400/19200 (default), 28800, 38400 bps (programmable selection), 15KV antistatic protection, 3 independent base address, 64 max network nodes		
Operation	0 $\sim$ 50 $^{\circ}$ C (32 $\sim$ 122 $^{\circ}$ F)/0-95%RH, noncondensing		
Storage conditions	0~50°C (32~122°F) /5~90%RH		
Net weight/ Dimensions	190g/100mm×80mm×28mm		
Installation standard	65mm×65mm or 2" × 4" wire box		
Housing & IP class	PC/ABS, fireproof material/IP30		
Version	V. E105		
Listings & Certifications CE			