

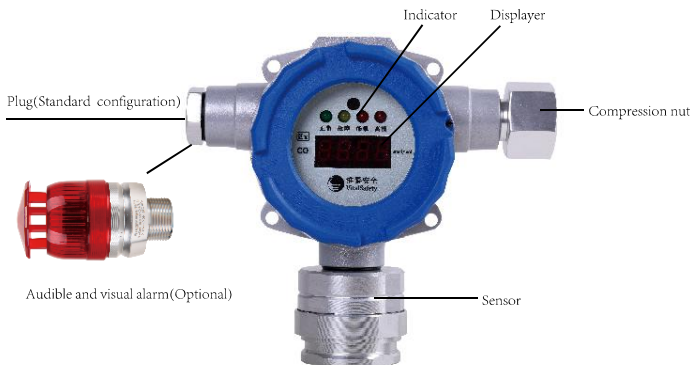
## ➤ Please Read before Use

1. Read this manual carefully before use and installation of this product ;
2. This project belongs to explosive-proof product with anti-explosion label of Exd II CT6Gb, The use conditions and environment of products shall comply with scope of environmental parameters. Due to safety and other reasons, completely cut off power before dismantling this product. It is forbidden to uncover with power on;
3. Illustrations in the manual are for reference only.

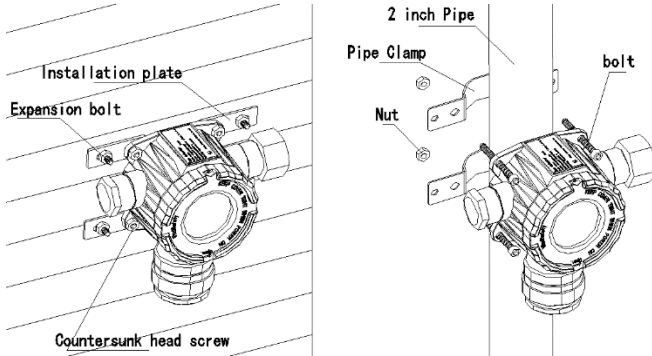
## ➤ Technical parameters

Detection principle	Electrochemical principle	Sample mode	Diffuse type
Power supply	DC (10~30) V	Power dissipation	≤2W
contact rating	DC24V、2A	Alarm	Audible and visual alarm(Optional)
Response time	T90: <60s	Alarm error	±5%FS
Protection Level	IP66	Electrical interface	3/4" NPT Internal thread (standard configuration)
Display	4-digit LED digital display	Operation	Infrared remote control
Operating temperature	(-20~+55)°C	Weight	1.38kg
Environment humidity	(10%~95%)RH (non-condensing)	Boundary dimension	163mm×187mm×82mm
Environment pressure	(86~106)kPa	Explosion-Proof	ExdIICT6Gb
output	(4~20)mA Output; One level passive digital output (2A)		
Installation Mode	Tube clamp/wall-mounted		

## ➤ Detector structure

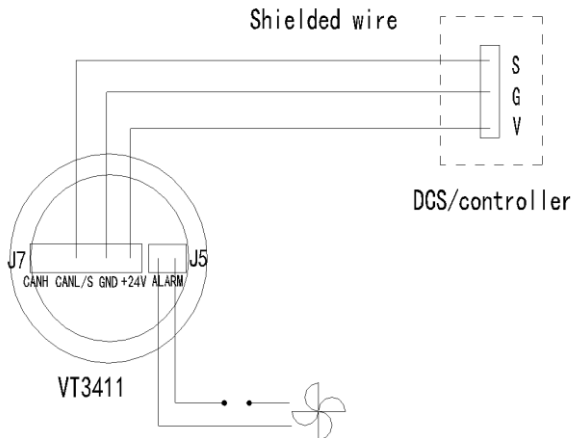


## ➤ Installation method



As shown in Fig, the detector can be installed by tube clamp or wall-mounted method according to site operating conditions. For tube clamp mode, the general 0.75~2inch steel tube; for wall-mounted mode, the wall surface shall have enough strengthen to support and firmly fix the detector.

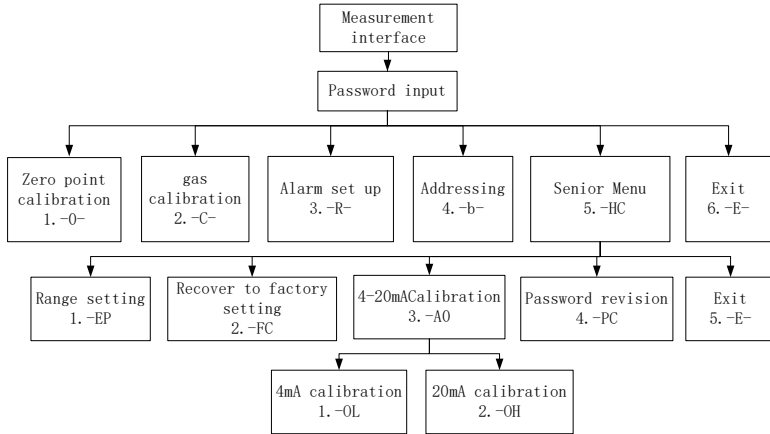
## ➤ Electrical Connection



The wiring of detector can be seen in Fig. Pay attention to the following contents when wiring:

1. Three-wire access, connected to the controller
2. Relay output interface, if the drive device current exceeds the rated current or drive the AC equipment, please connect the intermediate relay or consult the customer service department.
3. The connecting cable of detector shall comply with protection requirements of site environment and adapt to local laws and regulations.
4. Considering anti-explosion, protection and electromagnetic interference factors, the RVVP or KVVP (1.0 mm<sup>2</sup>~2.5mm<sup>2</sup> 2core) cable is recommended with external diameter of  $\Phi$  (8~10) mm in order to guarantee stable work of the system.

## ➤ Function Menu



## ➤ Detector self inspection

To ensure correct wiring in the system, then electrify the detector, the detector starts self-inspection. After self-inspection, the detector enters measurement interface. Enter the operation menu use remote control(VT3660). When carrying out detector menu operation, confirm that the detector environment is safe.

## ➤ Reading of password

Press the remote controller's shortcut key [addressing],The screen displays the password of the machine.

## ➤ Alarm set up

Press the remote controller's shortcut key [Alarmvalue] ,Operate the up and down keys and the OK key, after entering the correct password, submenu selection can be performed, Select "1-AL" (low limit alarm), input the low limit alarm value to be set , If "PASS" is displayed, the setting is successful. if "FAIL" is displayed, the setting fails

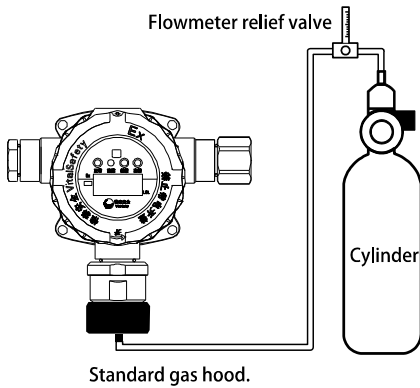
Note: "2-AH" means high limit alarm, The high limit alarm setting method is the same as above.

## ➤ Zero point calibration

Press the remote controller's shortcut key [Zero].Enter the password by operating the up and down keys, Enter the Zero point calibration interface, Countdown 30 seconds, If "PASS" is displayed, the Zero point calibration is successful. If "Failed" is displayed,Zero point calibration fails.

Note: zero calibration can only be executed in a normal operating state, the initial warm-up time required to power more than 2 hours. After the detector shows that the value is stable, zero point calibration can be performed in pure air or with pure nitrogen.

## ➤ Gas calibration



Prepare accessories for calibration such as gas with known concentration (cylinder), flow meter reducing valve, gas conduit and standard gas hood. Assembly as shown → Press the remote controller's shortcut key [calibration] → Enter the password by operating the up and down keys → Open the cylinder valve, and adjust flow meter reducing value to control output flow of standard gas at about 500mL/min (500mL/min permanent flow valve is recommended); after the airflow is stable, connect the standard gas hood to sensor contact of the detector → Enter the calibrated value, enter the corresponding concentration of the standard gas, and start the 60s countdown → If "PASS" is displayed, the Gas calibration is successful. If "Failed" is displayed, Gas calibration fails.

## ➤ Common Faults and Repairs

Fault Phenomenon	Cause	Elimination methods
NO output	Incorrect power line connection	Confirm that the line sequence is correct and there is no virtual phenomenon
	Circuit faults	Send back to our company for repair
Low reading in controller	Zero point is not adjusted	Calibrate gas again
	Sensor failure	Replace the sensor
High reading in controller	Zero point is not adjusted	Calibrate gas again
	Sensor failure	Replace the sensor
Unstable reading	Warm up time is not enough	Warming up time shall be larger than 2 hours
	Sensor failure	Replace the sensor
	Circuit faults	Send back to our company for repair
Response slow	Wrong measuring range adjustment	Calibrate gas again
	Sensor failure	Replace the sensor
Fault Warning	Error Calibration	Calibrate gas again
	Low(High) zero point	Adjustment again
Can't be set Zero	Circuit faults	Send back to our company for repair