

Air Quality Monitor

Household ten-in-one multifunction Air Quality Detector

Model: HTO-131

Operating instructions

Packaging list:

1*HTO-131 Air Quality Monitor

1*Charging Cable

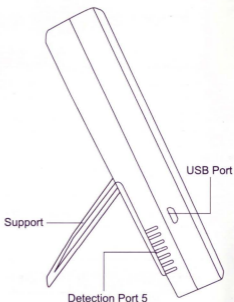
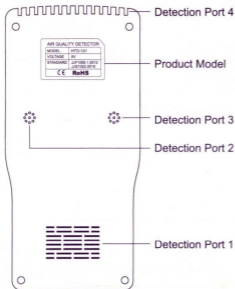
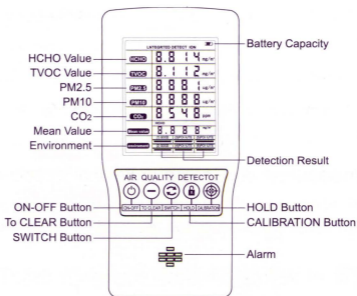
1*Instruction Manual

The logo for Yvelines, featuring the brand name in a blue, sans-serif font. The letter 'Y' is stylized with a gap in the middle. Below the logo is a decorative green wavy line that spans the width of the page.

Yvelines

Supervise the air constantly Care for your health

Schematic Diagram



Product Description

1.HTO-131 air quality monitor is a multifunctional intelligent household(indoor) small-scale air quality monitoring equipment. It is a non-professional testing instrument. The measured data can only be used as a reference for the change of household air environment.

2.This monitor can detect: CO₂, HCHO(formaldehyde), TVOC, PM_{2.5} and PM₁₀. Those readings involve detection of toluene,harmful chemical substances and pollutants in the air such as carbon dioxide, carbon monoxide,smoke,fog,dust,alcohol,glue,paint,ink and others.

3.The instrument appearance designed by the famous master heart-to-heart design, design key in household,office,business,government,schools,etc.

Basic parameter indication

Application Technology: Air Natural Flow Detection	
Technology Display Mode: LCD Color Screen Digital Display	
Product Specification: 148*70*30mm	
Product Model: HTO-131	Detection float:3%-30%
Start-up preheating: 120 seconds (only for formaldehyde TVOC CO ₂ sensor)	
Battery Capacity: 2000mAn	Working Voltage: 5V
Full Charging time: About 4-6 hours	Standby time: About 8-12 hours

Product Operation

<p>ON-OFF Button --Power on/off</p>	<p>Press 3 seconds to turn on or off. Tips: 120 seconds preheating is required for the HCHO(formaldehyde) TVOC CO2 sensor after booting; PM 2.5/PM 10 sensor can work at once after power on.</p>
<p>TO CLEAR BUTTON --Data clear</p>	<p>Long Press 3 seconds, the HCHO (formaldehyde) TVOC CO2 real-time data will be clear and restart to detect. It will also need 120 preheating, please kindly be more patient to wait. PM2.5/PM10 readings cannot be cleared.</p>
<p>SWITCH BUTTON --Switch to check each reading's mean value</p>	<p>HCHO Mean Value-60 Minutes Update;TVOC Mean Value-30 Minutes Update;CO2(Carbon Dioxide) Mean Value-10 Minutes Update;PM2.5 Mean Value-30 Minutes Update; PM10 Mean Value-10 Minutes Update; Tips: Just press switch button to check these value one by one.</p>

Usage requirements

<p>HOLD--Locking and unlocking value</p>	<p>Press once can lock the real-time data of monitor(mg/m³, ug/m³, ppm flicker means lock.) Press again, then unlock.</p> <p>Tips: If you found the detect value is always the same for a long time, please kindly check the device whether it is locked by accidentally.</p>
<p>CALIBRATION --Sensor Calibration</p>	<p>Long press 3 seconds sensor calibration to restore factory settings.</p> <p>Tips: Please use this function cautiously. Actually all our device has calibrated before shipped, so you no have to calibrate it for first use if the device can test in normal. But if you think your HCHO/TVOC/CO₂ readings is not normal, you can use this function. Please kindly note that PM_{2.5}/PM₁₀ cannot be reset.</p>

Air Quality Monitor Pollution Grade Reference Table

Environment:	(1)Good	(2)Good	(3)POIIUTE	(4)POIIUTE	(5)POIIUTE	(6)POIIUTE
HCHO	0-0.08	0.081-0.1	0.101-0.2	0.201-0.5	0.501-1.0	1.001-1.5
TVOC	0-0.5	0.501-0.6	0.601-1.5	1.501-3	3.001-6.0	6.001-10
CO2	0-450	451-1000	1001-1500	1501-2000	2001-3000	3001-5000
PM2.5	0-35	36-50	51-75	76-150	151-250	251-1000
PM10	0-50	51-75	76-100	101-200	201-300	301-2000

Tips:

- (1)Good--Excellent
- (2)Good--Good
- (3)POIIUTE--Mild pollution
- (4)POIIUTE--Moderately pollution
- (5)POIIUTE--Severe pollution
- (6)POIIUTE--Serious pollution

PM2.5&PM10

What is PM 2.5&PM10?

Fine particles are also called fine particles, fine particles, PM2.5. It can be suspended in the air for a long time. The higher the concentration in the air, the more serious the air pollution. Inhalable particulate matter, usually refers to particulate matter with a particle size below 10 microns, also known as PM10. Inhalable particulate matter lasts a long time in the ambient air, and has a great impact on human health and atmospheric visibility.

How to deal with it if has PM2.5&PM10 pollution?

1. Filter method

Including air conditioners, humidifiers, and

air fresheners, the advantage is that the concentration of PM_{2.5} is significantly reduced, and the disadvantage is that the filter membrane needs to be cleaned or replaced.

2. Water adsorption method

Ultrasonic atomizers, indoor water curtains, pools, fish tanks, etc., can absorb hydrophilic PM_{2.5} in the air. The disadvantage is that it increases humidity and hydrophobic PM_{2.5} cannot be effectively removed.

3. Plant absorption method

Plant leaves have a large surface area and can absorb harmful gases and PM_{2.5}. The advantage is that they can produce favorable gases. The disadvantage is that the absorption efficiency is low, and some plants produce harmful gases.

CO₂

What is CO₂?

Carbon dioxide (carbon dioxide), a carbon oxide compound with the chemical formula CO₂, is a colorless, odorless, colorless, odorless (no smell) but slightly acidic gas at normal temperature and pressure, and is also a common greenhouse and a component of air. Studies have shown that when the concentration of carbon dioxide in the air is less than 2%, there is no obvious harm to people. Exceeding this concentration can cause damage to the human respiratory organs, that is, carbon dioxide is generally not a toxic substance, but when the concentration of carbon dioxide in the air

exceeds a certain limit It can cause the body to be poisoned, and high concentrations of carbon dioxide can cause suffocation.

How to deal with it if has CO₂ pollution?

Before entering a work area with a high concentration of carbon dioxide, check whether the carbon dioxide concentration in the air exceeds 2%. If it exceeds, you need to take effective safety measures, such as:

- ① ventilate and detoxify, replace the workplace air, and make the carbon dioxide concentration in the air Not more than 2%;
- ② wear a ventilation mask, self-suction catheter gas mask, oxygen respirator and other commonly used gas masks.

TVOC

What is TVOC?

Indoor air quality researchers usually refer to all indoor organic gaseous substances they sample and analyze as TVOC; The various measured VOCs are collectively referred to as total volatile organic compounds TVOC (Total Volatile Organic Compounds). TVOC is one of three kinds of pollution that affect indoor air quality more seriously. TVOC refers to organic matter with a saturated vapor pressure exceeding 133.32pa at room temperature, its boiling point is in the air at 50 °C to 250 °C, it can be evaporated in normal temperature; Its toxicity, irritation, carcinogenicity and special odor can affect

the skin and mucous membranes and cause acute damage to the human body.

How to deal with it if has TVOC pollution?

To prevent TVOC damage, it is mainly from the source to eliminate non-environmental-friendly building materials; secondly, often ventilate and even heat and bake to accelerate the release of TVOC; fourthly, it is best to test to confirm that TVOC does not exceed the standard after ventilation and ventilate Check-in after three months, if the conditions are good ventilation half-year check-in; In addition, in the living room or courtyard can be placed rose, lily and gorilla, etc., they can absorb TVOC, but they should not be placed in the bedroom.