

USER MANUAL

# AQ 110

## Air Quality

### Description of the device

1. OK key
2. Backlight key
3. Select key
4. On/Off/Esc key
5. Hold/min/max key



### General features

Measuring elements	CO <sub>2</sub> : infrared sensor. Temperature: NTC
Connector	Retractable, 0.45 m length, extension: 2.4 m
Display	4 lines, LCD technology. Dimensions 50 x 36 mm. 2 lines of 5 digits with 7 segments (value) 2 lines of 5 digits with 16 segments (unit)
Housing	ABS, protection IP54
Keypad	5 keys
European directives	2014/30/EU EMC; 2014/35/EU Low Voltage; 2011/65/EU RoHS II; 2012/19/EU WEEE
Power supply	4 batteries AAA LR03 1.5 V
Battery life	20 hours
Ambience	Neutral gas
Conditions of use (°C, %RH, m)	From 0 to +50 °C. In non condensing conditions. From 0 to 2000 m.
Storage temperature	From -20 to +80 °C
Auto shut-off	Adjustable from 0 to 120 minutes
Weight	340 g

### Technical specifications

Parameters	Measuring units	Accuracy <sup>(1)</sup>	Measuring range	Resolution
CO <sub>2</sub>	ppm	±3% of reading ±50 ppm	From 0 to 5000 ppm	1 ppm
Temperature	°C, °F	±0.4% of reading ±0.3 °C	From -20 to 80 °C	0.1 °C

<sup>(1)</sup> All the accuracies indicated in this technical datasheet were stated in laboratory conditions, and can be guaranteed for measurements carried out in the same conditions, or carried out with calibration compensation.

## Perform a measurement

- Turn on the device by pressing on "On/Off/Esc".  
The device displays its name "AQ110".  
When it turns on, the device performs a pre-heating phase. This phase lasts 10 seconds. The count of this pre-heating time displays on screen.  
**The measure probe must be left to the open-air during this pre-heating phase.**
- Put the probe to the required location.  
The device displays the CO<sub>2</sub> and temperature measurements.

## Freeze the measurement

During the measurement:

- Press "Hold/min/max" to freeze the measurement.  
"Hold" appears on the screen and the measurements are frozen.
- Press "On/Off/Esc" to exit the hold function.  
The device returns to the measurements display.

## Display the minimum and the maximum

Once the measurement is frozen:

- Press "Hol/min/max".  
The device displays the maximum value of CO<sub>2</sub> measured since the last questioning at the top of the screen and the minimum value of CO<sub>2</sub> measured since the last questioning at the bottom of the screen.
- Press again "Hold/min/max".  
The device displays the maximum value of temperature measured since the last questioning at the top of the screen and the minimum value of temperature measured since the last questioning at the bottom of the screen.
- Press "On/Off/Esc" to return to the measurements display.

## Adjust the device

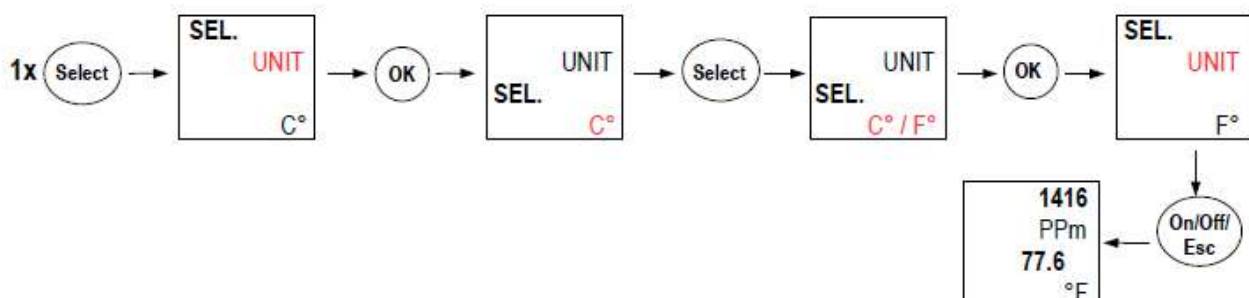
### Device drop-down menu



### Select the measuring unit in temperature

The device is on and displays the measurements.

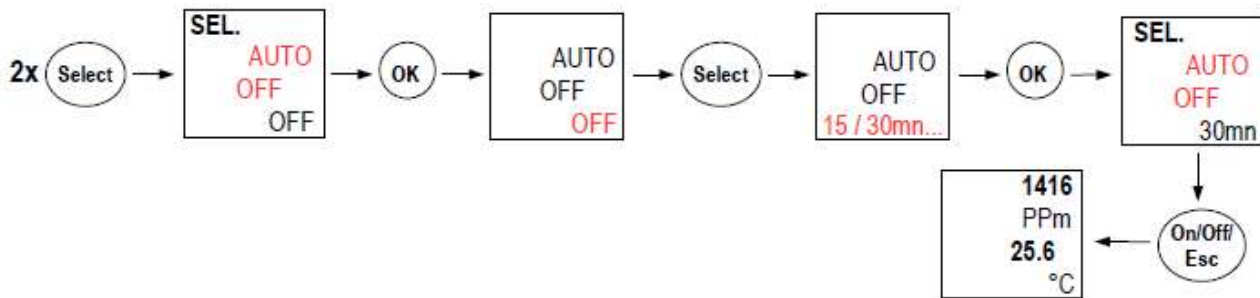
- Press "Select".  
"UNIT" blinks on screen.
- Press "OK".  
The unit currently used blinks at the bottom of the screen.
- Press "Select" until the required unit appears: °C or °F.
- Press "OK" to validate.  
"UNIT" blinks on screen.
- Press "On/Off/Esc" to return to the measurements display.



### Adjust the auto shut-off

The device is on and displays the measurements.

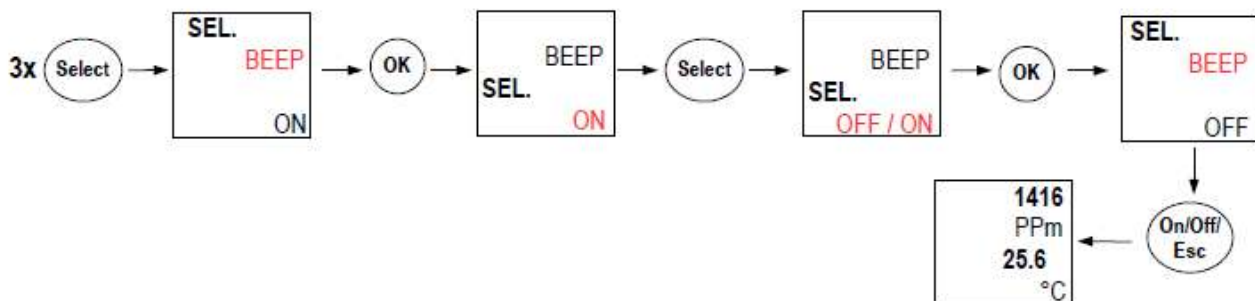
- Press "Select" until "AUTO OFF" blinks on screen.
- Press "OK", the time before device auto shut-off blinks at the bottom of the screen.
- Press "Select" to select the time before device auto shut-off: 15, 30, 45, 60, 75, 90, 105, 120 minutes or OFF.
- Press "OK" to validate.  
"AUTO OFF" blinks on screen.
- Press "On/Off/Esc" to return to the measurements display.



### Activate or deactivate the keys beep

The device is on and displays the measurement.

- Press "Select" until "BEEP" blinks on screen.
- Press "OK".  
"OFF" or "ON" blinks on screen.
- Press "Select" to activate the keys beep "ON" or deactivate it "OFF".
- Press "OK" to validate.  
"BEEP" blinks on screen.
- Press "On/Off/Esc" to return to the measurements display.



### Adjust the atmospheric pressure

To have a precise and representative measurement, the atmospheric pressure of the place where the measurements are performed must be entered in the device.

The device is on and displays the measurements.

- Press "Select" until "P\_ATM" blinks on screen.
- Press "OK".  
The first digit of the atmospheric pressure blinks on screen. The atmospheric pressure is between 800 and 1200 hPa.
- Press "Select" to select the first digit value and press on "OK" to validate.  
The following digit blinks on screen.
- Perform the same procedure for the following digits (press "On/Off/Hold" to return to the previous digit).
- Press "OK" when the last digit is adjusted.  
"P\_ATM" blinks on screen.
- Press "On/Off/Esc" to return to the measurements display.

## Activate the backlight

The device is on and displays the measurements.

- Press on "Backlight" to activate the backlight.
- To deactivate it press again on "Backlight".



## Change the batteries

- Remove the front part at the back of the device.
- Change the old batteries by AAA LR03 1.5V batteries.
- Replace the front part.