

USER MANUAL

CO 110

COmeter

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 element	CO: electrochemical sensor. Temperature: NTC
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)
Connector	Retractable, 0.45 m length, extension: 2.4 m
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	200 hours
Ambience	Neutral Gas
Conditions of use (°C, %HR, 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 min
Weight	310 g

Technical specifications

Parameters	Measuring units	Accuracy ⁽¹⁾	Measuring range	Resolution
CO	ppm	±3 ppm ±3% of reading	From 0 to 100 ppm From 100 to 500 ppm	0.1 ppm
Temperature	°C, °F	±0.4% of reading ±0.3 °C	From -20 to +80 °C	0.1 °C

⁽¹⁾ 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 "CO 110" then performs an autozero during 5 seconds.
The probe must be left to the open-air during this autozero.
- Put the probe to the required location.
- The device displays the CO 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 measurements are frozen:

- Press "Hold/min/max".
The device displays the maximum value of CO measured since the last questioning at the top of the screen and the minimum value of CO 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.

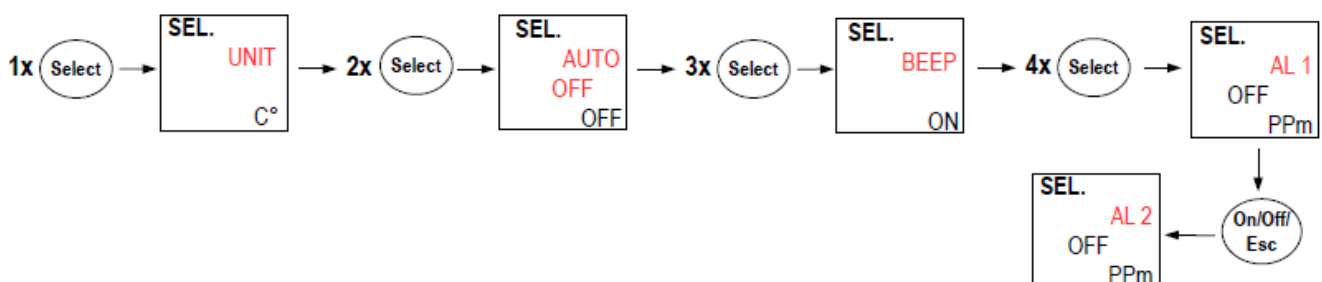
Perform a CO max measurement

During the measurement:

- Press "OK".
"CO MAX" displays on screen with below the measuring time to adjust. This time is between 0:00 and 5:00.
- Press "Select" to adjust the first digit then "OK" to validate, perform the same procedure for the following digits.
- When the first digit is adjusted, press "OK".
"START" displays on screen.
- Press again "OK" to start the measuring time.
The device displays the measuring time count. At the end of this count, the CO max measurement displays on screen.

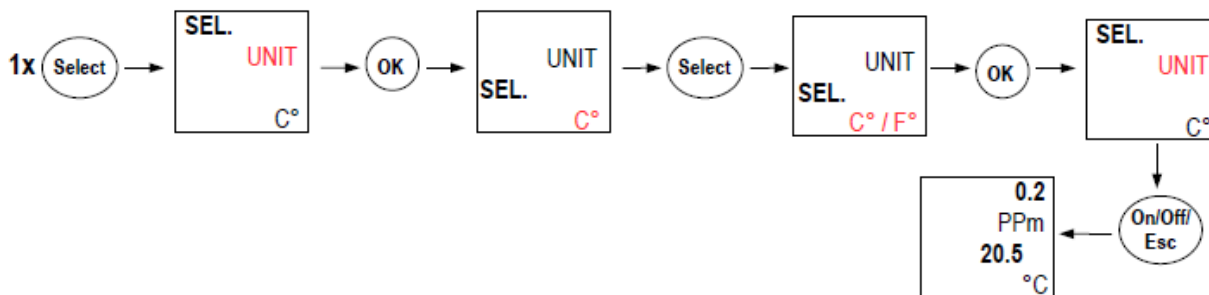
Adjust the device

Device drop-down menu



Select the measuring unit in temperature

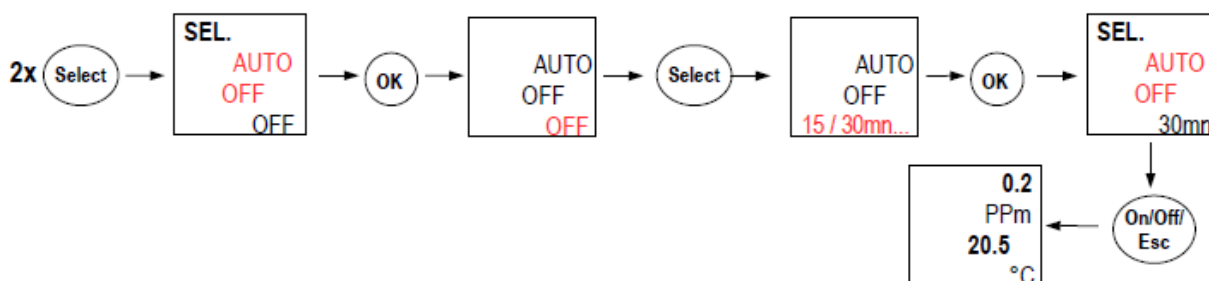
- Press "Select".
"UNIT" blinks on screen.
- Press "OK".
The unit currently used blinks at the bottom of the screen.
- Press "Select" until the required unit appears: °C or °F.
- Press "OK" to validate.
"UNIT" blinks on screen.
- Press "On/Off/Esc" to return to the measurements display.



Adjust the auto shut-off

The device is on and displays the measurements.

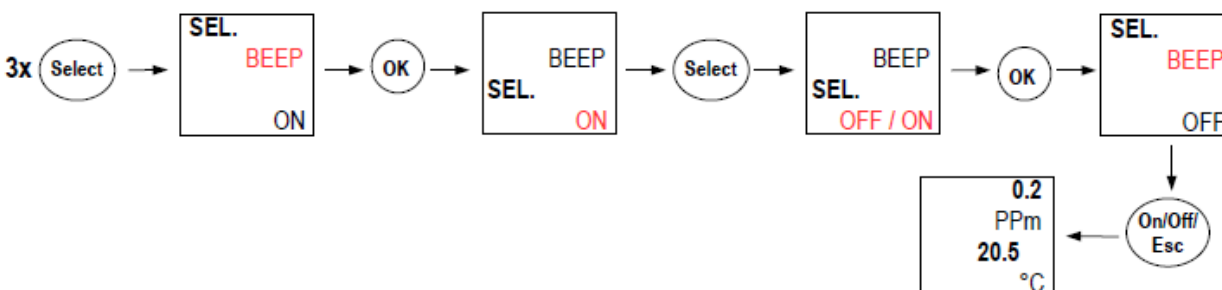
- Press "Select" until "AUTO OFF" blinks on screen.
- Press "OK".
The time before device auto shut-off blinks on screen.
- Press "Select" to select the time before device auto shut-off: 15, 30, 45, 60, 75, 90, 105, 120 or OFF.
- Press "OK" to validate.
"AUTO OFF" blinks on screen.
- Press "On/Off/Esc"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



Activate or deactivate the keys beep

The device is on and displays the measurements.

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



Adjust the alarms

The device is on and displays the measurements.

It's possible to adjust 1 or 2 alarms which will be triggered when the alarm threshold has been reached and/or exceeded. This threshold is between 0 and 500 ppm.

- Press "Select" until "AL 1" blinks on screen. "AL 1" corresponds to the level 1 alarm.
 - Press "OK".
The first alarm digit blinks.
 - Press "Select" to select the first digit value: between 0 and 5 or OFF to deactivate the alarm.
 - Press "OK" to validate and to pass to the following digit, perform the same procedure for the following digits (press "On/Off/Esc" to return to the previous digit).
 - Press "OK" when the last digit is adjusted.
"AL 1" blinks on screen.
 - Press "On/Off/Esc" to return to the measurement display.
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- To adjust the level 2 alarm, press "Select" until "AL 2" blinks on screen then follow the same procedure as the adjustment of the level 1 alarm.

Activate the backlight

The device is on and displays the measurements.

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



Change the batteries

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