General Description

The CL11 is an accurate desktop digital meter that displays & records relative humidity, temperature, CO2 and external probe temperature.

Programming

Most of the settings, such as memory clear, CO2 alarm, time on/off, CO2 status indicator, units (°C/F), sampling rate, pressure compensation and real time clock can all be changed using the function keys.

Power Supply

- The CL11 uses a 9VDC adapter (standard accessory) as the only power supply.
- Connection to PC or Laptop

Connect the CL11 via mini USB cable to a PC or Laptop. Recorded data can be easily downloaded with the software included.

Functions Keys

SET

- In normal mode, press longer to enter setup mode.

START/ESC

- "START" is the automatic logging mode.
- "ESC" is stop logging mode.
- "ESC", Exits setup & calibration mode
- "ESC", Stop logging mode

Shortcuts

- For the power on, hold down the "SET" key for 2 seconds until entering setup mode. Press "UP" or "DOWN" key to select the program (P 88, displayed in right bottom corner) and press "ENTER" key to enter.
- The first time format as 24 hours or 12 by press "UP" or "DOWN" key and then press "ENTER" key to confirm. Now, start to input the real time clock value from year, month, day, hour, minute to second. Press "UP" or "DOWN" key to adjust and the press "ENTER" key to confirm.
- When the data are set, a clearing of the memory must be performed. Press "UP" or "Down" key to select P 10 and press "ENTER" key to enter. Press "UP" or "Down" key to choose "YES" to clear previous memories and press "ENTER" key to confirm.
- When the "ESC" key to return to normal mode.

Best set setup

- Hold down the "SET" key for 2 seconds until entering setup mode. Press "UP" or "DOWN" key to select the program (P 38, displayed in right bottom corner) and press "ENTER" key to enter.
- Press "UP" or "DOWN" key to select "F 1°C" and the press "ENTER" key to confirm. Press "ESC" key to return to normal mode.

START/AVG/END

- The middle lower display shows the measured humidity/temperature.
- Press "MOD" key to switch the displayed temperature parameter on left lower display. The selectable parameters are temperature & external probe temperature. While there is no external connection, it shows "---..." on display (Fig. 3, 4).

Display

The backlight will be activated for 10 seconds by pressing any key.

CO2

- The display allows you to check the minimum, maximum, STEL, ATWA value from the moment you power on the meter. Under normal mode, press "MIN/MAX" key to view the minimum, maximum, 15 min average (STE/6 hour average (ATWA) in turns (Fig. 5-6). STEL/ATWA are only for CO2/MAX/MIN functions are for all parameters. If the device is powered on for shorter than 15 mins or 8 hours, the STEL and ATWA value will be displayed as "---..." to indicate the time interval is not long enough for calculation.

The meter features acoustic & light alarm to give warnings when CO2 concentration exceeds the limit. See “Meter Setting” section for setting alarm threshold.

- The meter emits beeps (~80dB) & red LED light when CO2 level goes over the set value and stops only when the readings fall below the set value or manually turn beep off. It beeps again when value goes over the limit. Please note, if the beeper is selected as OFF, device until light warning only, no beeping.
- To manually turn beep off, hold down "SET" key for more than 3 seconds until entering setup mode. Press "UP" or "Down" key to select P22 (beeper on/off) and the press "ENTER" key to enter. Then, press "UP" or "Down" key to switch the mode as "OFF" to turn the beeper off all of the time.

Humidity Calibration

This meter can be calibrated either via 35% & 80% salt bottles. The ambient condition is recommended to be around 25°C.

- Do not calibrate the humidity without the default calibration settings. Otherwise, it will cause permanent damage. Contact Rotronic for calibration salt or services.
- When the meter features acoustic & light alarm, it will cause an error code 1 or incorrect readings. Always do both point calibration to complete a process. We strongly suggest to start a calibration with the lowest humidity standard.

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Technical Data

- Model: CL11
- CO2 sensor: 400ppm accuracy
- CO2 accuracy: ±2%, 80°C/10%RH, non condensing
- Operating limit at electronics: 5, 35°C for CO2, 36°C for RH not condensing
- Memory: 40000 records auto logging
- Dimension: 157(L)x120(W)x45(H)
- Weight: About 193g
- CO2 power type: 5VDC, 40mA at least
- PC connection: mini USB port

Calibration with humidity standards

While the meter is powered on, plug the sensor probe into 35% salt. Press "SET" + "START" + "DOWN" key simultaneously for 3 seconds to enter calibration mode. Press "UP" or "DOWN" key to select 35.3% calibration and press "ENTER" to start. After 2 minutes, press "ENTER" key to start 35% calibration.

While the meter is powered on, plug the sensor probe into 80% salt. Press "SET" + "START" + "DOWN" key simultaneously for 3 seconds to enter calibration mode. Press "UP" or "DOWN" key to select 80.4% calibration and press "ENTER" to start. After 2 minutes, press "ENTER" key to start 80% calibration.