

RO 3200

RO 3200



EN Instructions for use



rothenberger.com

MAN00146

1	RO 3200 Overview	4
2	General Operation	4
2.1	On/Off	4
2.2	Zero	4
2.3	Change units.....	5
3	Before using the meter for the first time	5
4	Before using the meter every time	5
5	Unit options	6
6	Measuring	7
8	Specification	8
9	Electromagnetic compatibility	9
10	Cold weather precautions	10
11	End of life disposal	10

1 RO 3200 Overview

- +/-200 mbar range
- 8 user selectable scales
- Temperature compensated
- One button zeroing
- Long battery life
- Robust case with integrally moulded protective boot
- Integral magnets for hands-free operation

2 General Operation

The meter is controlled using 2 buttons.

The two buttons have dual functions as follows:

2.1 On/Off

To switch ON press and hold  until all the display segments are operated and 3200 appears on the display.


The display will then show the following sequence:

1.0 the firmware version
HPA the units currently set
ZERO the zeroing sequence
04
03
02
01
00
00.0 the measured value


The meter is now ready to use.

To switch OFF press and hold  until OFF appears on the display. (During this period the meter will display the units currently set).

2.2 Zero

Press and hold  until ZERO appears on the display. The meter will then do a zero countdown for a count of 4.

2.3 Change units

Quickly press and release .

The display will show the units currently set eg HPA.

Now press  to scroll through the selection of units available.

When the units of choice are displayed, press  to select.

3 Before using the meter for the first time

Remove the cover and fit a new battery in the battery compartment. **Take great care to ensure that the battery is fitted with the correct battery polarity.** Then replace the battery cover. Always check that the meter is working correctly after replacing the battery.



4 Before using the meter every time

Remove the cover and fit a new battery in the battery compartment. **Take great care to ensure that the battery is fitted with the correct battery polarity.** Then replace the battery cover. Always check that the meter is working correctly after replacing the battery.



Warning

Never connect to a pressure source where you are not sure what the maximum pressure might be. Always ensure that the meter you are using is correctly rated for the pressure that you intend to measure. Excessive pressure (>5 times nominal range) can permanently damage the meter's pressure sensor.

NOTE: Use the  input for all single input measurement soft pressure or vacuum. Only use the  input when taking a differential measurement.

5 Unit options

PS UNITS

User selectable units are mBAR, inH2O, hPa, mmHg, PSI, kPa, Pa, mmH2O

These are displayed as follows:

kPa	_____•	K P A
PSI	_____•	P S I
mmHg	_____•	m m H g
hPa	_____•	H P A
inH2O	_____•	i n u b
mBar	_____•	m b a r
mmH2O	_____•	m m u b
Pa	_____•	P A

6 Measuring

Make sure you do not exceed the meter's operating specifications.

Do not exceed the meter's internal temperature operating range
Do not put the meter on a hot surface

When taking critical draft measurements always re-zero the meter in the position you are taking the readings and hold the meter still during the test.



Always use the top right hand port (Port 1) for taking single channel measurements (pressure or vacuum). Only use the left hand port for differential measurements.

If the pressure being measured exceeds the meter's design range the display will show ---- for "over-range".

When taking draft readings at very low pressure or draft levels, for maximum accuracy, re-zero the meter in the orientation that it is being used. This eliminated gravity effects on the very sensitive pressure transducer. It is also recommended that the meter is switched on for at least five minutes and then re-zeroed before taking such sensitive measurements.

8 Specification

Scale	Range	Highest resolution
Mbar	±200	0.01
Pa	±9999	1
hPa	±200	0.01
kPa	±20	0.001
PSI	±3.0	0.001
mm Hg	±150	0.001
mm Wg	±2100	0.1
In Wg	±80	0.01

NOTE: The nominal range is plus and minus 200 mbar. The meter does not fully auto-range and so when Pa units are selected the full operating range cannot be displayed and the user must select an alternative range for measurements above 9999 Pa.

ACCURACY: ± 0.5 mbar or ± 0.5% of reading whichever is greater. Maximum over-range without damaging the sensor is 1000 mbar.

BATTERY LIFE: Greater than 250 hours continuous operation with a 9 V PP3 alkaline battery.

AMBIENT TEMPERATURE RANGE: 0oC to 50oC

AMBIENT HUMIDITY: 10% RH to 90% RH non-condensing

DIMENSIONS:

Weight: 295 grams with battery

Handset: 160mm x 80mm x 40mm (180mm including spigots)

Ambient Operating Range: 0oC to 45oC 10% to 90% RH
non-condensing

Power Supply: 9 Volt PP3 alkaline battery

9 Electromagnetic compatibility

European Council Directive 89/336/EEC requires electronic equipment not to generate electromagnetic disturbances exceeding defined levels and have adequate immunity levels for normal operation. Specific standards applicable to this meter are stated below.

As there are electrical products in use pre-dating this Directive, they may emit excess electromagnetic radiation levels and, occasionally, it may be appropriate to check the meter before use by:

Use the normal start up sequence in the location where the meter will be used.

Switch on all localized electrical equipment capable of causing interference.

Check all reading are as expected. A level of disturbance is acceptable.

If not acceptable, adjust the meter's position to minimize interference or switch off, if possible, the offending equipment during your test.

At the time of writing this manual (April 2016) Kane International Ltd are not aware of any field based situation where such interference has occurred and this advice is only given to satisfy the requirements of the Directive.

Certification

This product has been tested for compliance with the following generic standards:

EN 61000-6-3 : 2011
EN 61000-6-1 : 2007



and is certified to be compliant

Specification EC/EMC/KI/KANE3200/1 details the specific test configuration, performance and conditions of use.

10 Cold weather precautions

It is important you keep your product in a warm place overnight

Electronic devices that become really cold, by being left in a vehicle overnight, suffer when taken into a warm room the next morning. Condensation may form which can affect the product's performance & cause permanent damage

Electrochemical sensors can be affected by condensation or water.

If you think that your product is affected by condensation or water ingress, it may be possible to rectify the problem yourself. Simply leave the product running in a warm place for a few hours (use mains adapter/battery charger if needed). If, after doing this, you still experience problems please contact our Customer Service centres.

11 End of life disposal

The Waste Electrical or Electronic Equipment (WEEE) Directive requires countries in the EU to maximise collection and environmentally responsible processing of these items.

Products are now labelled with a crossed out wheeled bin symbol to remind you that they can be recycled.

Please Note: Batteries used in this instrument should be disposed of in accordance with current legislation and local guidelines.

4

Register your RO 3200



Register your RO 3200 to create your

KAM dashboard:

- ★ Simple online booking on www.kane.co.uk
- ★ Automatic reminder when due for recertification
- ★ FREE POSTAGE returning your Rothenberger analyser
- ★ SAME DAY annual FGA recertification OR YOUR MONEY BACK*



Please **register** your RO 3200 at www.kane.co.uk

PLEASE READ ALL SAFETY WARNINGS IN THE MANUAL



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