Specification	
Range	0 - 100% Oxygen
Accuracy	+/- 1% of full scale
Response Time	90% step change < 10sec
Resolution	+/- 0.1%
Battery Type	2 x MN1500 LR6 1.5V
Battery Life	12 months (typical)
Sensor Type	R-17VAN (Galvanic)
Sensor Life (in air)	Expected 36 - 48 months (10 months in 100% O_2)
Sensor Output	7.0mV - 13.0mV in air
Dimensions	60mm x 120mm x 35mm
Weight	198g (including battery & sensor)
Storage Temp	0 - 50 °C (recommended 10 - 30 °C)
Operating Temp	0 - 40 °C
Case	Splash proof
Waterproofing	IP65 NEMA 4
ISO Standards	ISO EN 9001:2000
EMC CE	ISO EN 60601-1-2
RoHS	Complies with RoHS
WEEE	Complies with WEEE

Specification subject to change

Accessory Parts list	
9710018	R-17VAN Micro Fuel Cell
9730215	DINKIT Restrictor Kit
9711001	A-268 'T' Adaptor
9711002	B-50057 Flow Diverter
9711004	DM22M10 Male Adapter
9711003	BS111 Viton 'O' Ring
9711006	DIN22F Restrictor
9730210	Quick-Ox Gas Sampling Kit
9713022	Lanyard
9713040	Waterproof Box; Otter X-treme
9530002	Battery/Sensor Cover Seal
9520001	TEK-OX Sensor Extension

Trouble shooting	
Symptom	**Possible Cause**
No display	Not switched on. Batteries exhausted. Batteries in the wrong way.
Batt Low symbol	Replace low battery
Zero reading	Sensor exhausted. Sensor disconnected; rotate sensor whilst in the instrument. There may be a deposit on the jack plug or the sensor jack socket.
Not calibrating	Sensor nearly exhausted. Check the sensor in 100% oxygen then check again in air.
Reading drifts	Sensor nearly exhausted. In flowing gas. Temperature changing. Wind blowing on diverter.
Inaccurate reading	Move away from RF source. Boat VHF radio. Do not use flowing gas; use On/Off /On/Off system. Condensation on the sensor face; remove condensate by shaking.

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TEK-OX Oxygen Analyser User Manual

These instructions should be read before using the TEK-OX

Mixed gas diving should only be undertaken by divers trained by a recognised training organisation

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Contents

Please check you have the following items:
1 TEX-OX
2. Quick-Ox or DINKIT

The TEK-OX has been designed for the worldwide hostile diving environment. It is easy to use with either hand and has very large digits. It uses the proven R-17VAN oxygen sensor (as used in the VN202) with integral temperature compensation. It is powered by two internationally available AA alkaline batteries with an estimated life of 12-18 months.

The instrument is available in two versions:
1. Yellow On/Off button: automatic switch off.
2. Green On/Off button: non automatic switch off.

The instrument is sealed for water resistance (IP65) and designed to be drop resistant.

The battery and sensor are housed in a separate compartment from the sealed electronics and are accessible by removing the 3 screws in the base. Ensure batteries are fitted correctly (see internal labels).

A full comprehensive user manual is available to download from our website:
www.vandagraph.co.uk
(Just register your purchase).

How to use the TEK-OX

1. **Leave the flow diverter on; wave through the air.**

2. **Adjust calibration.**

3. **Add the 'Quick-Ox'.**

4. **Turn on the gas to a gentle flow.**

5. **Mate the 'Quick-Ox' to the cylinder outlet.**

6. **When the reading stops rising turn off the cylinder.**

Effects of Altitude & Humidity

At very high altitudes some sensors (with low outputs) may not calibrate to the level required. In this instance total pressure, ambient and altitude must be taken into consideration.

Feet	Metres	Pressure mb	Calibration
-1000	-305	1.03	21.5
0	0	1	20.9
1000	305	0.97	20.2
2000	610	0.94	19.4
3000	915	0.92	18.7
4000	1220	0,89	18.1
5000	1530	0.87	17.4
6000	1830	0.84	16.8
8000	2440	0.79	15.5
10,000	3050	0.74	14.4
12,000	3660	0.69	13.3

Although not substantial, humidity can affect the maximum accuracy that can be obtained. This accounts for the difference observed between ambient air calibration and calibration with dry gas from a cylinder.

	RH40%	RH60%	RH80%	RH100%
0°C/32°F	20.9%	20.8%	20.8%	20.8%
10°C/50°F	20.8%	20.7%	20.7%	20.6%
20°C/70°F	20.7%	20.6%	20.5%	20.4%
30°C/90°F	20.5%	20.3%	20.1%	19.9%
40°C/100°F	20.4%	20.1%	19.8%	19.5%

Using the TEK-OX with a DINKIT

Follow instructions 1-6 as with Quick-Ox