

OXYGAS 500 TRAINING



■ Objectives


- EXPLAIN THE FUNCTIONS OF THE INSTRUMENTS
- HOW TO OPERATE

OXYGAS 500



- ROBUSTNESS
- PROTECTION
- CERTIFIED
- DISPLAY
- PUMP
- AUDIBLE / VISUAL ALARMS
- SEALED RUBBERISED SWITCHES
- INFRA RED COMMS POINT

■ Certification

- ATEX
 - » EEx iad IIC T4  II 2 G
- UNDERWRITERS LABORATORIES INC (UL)
 - » Class 1 Groups A B C D
- AUTHORISATION
- BATTERY COMPARTMENT

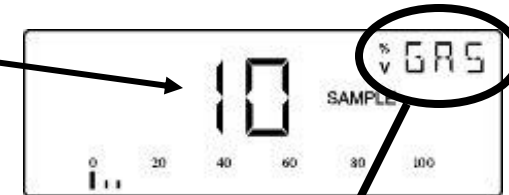


■ Ranges of Operation

- 0 - 100% LEL
- 0-100% Volume Gas
- 0-25% Oxygen
- Flammable Auto-ranging

■ Display - Flammable

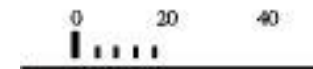
- CURRENT RANGE DISPLAYED
- DIGITAL
 - » RESOLUTION
 - 0 - 10 % LEL - STEPS OF 0.1%
 - 10 - 100% LEL - STEPS OF 1%
 - 0 - 10% GAS - STEPS OF 0.5%
 - 10 - 100% GAS - STEPS OF 1%
- ANALOGUE
 - » RESOLUTION
 - STEPS OF 4%



Range Indicator



Bargraph



■ Display - Oxygen



- CURRENT RANGE DISPLAYED
- DIGITAL

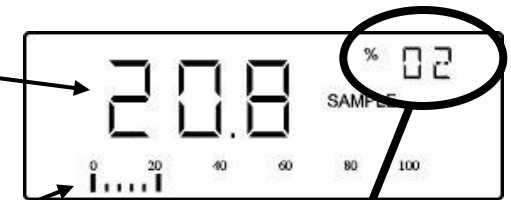
» RESOLUTION

- 0-21% in steps of 0.1% O₂
- 21-25% in steps of 1% O₂

- ANALOGUE

» RESOLUTION

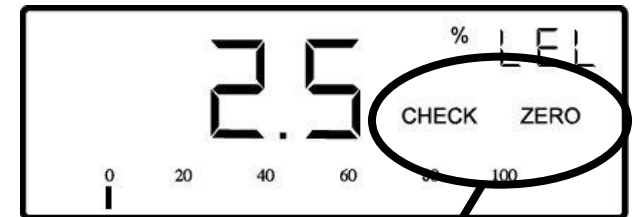
- STEPS OF 4%



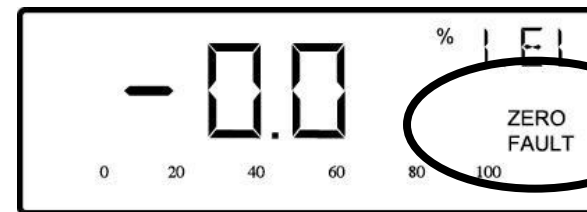
Range Indicator

■ Zeroing

- AUTO ZERO
- OPERATOR MESSAGES
 - » CHECK ZERO FLAG
 - » ZERO FAULT FLAG

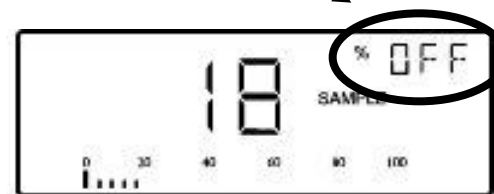
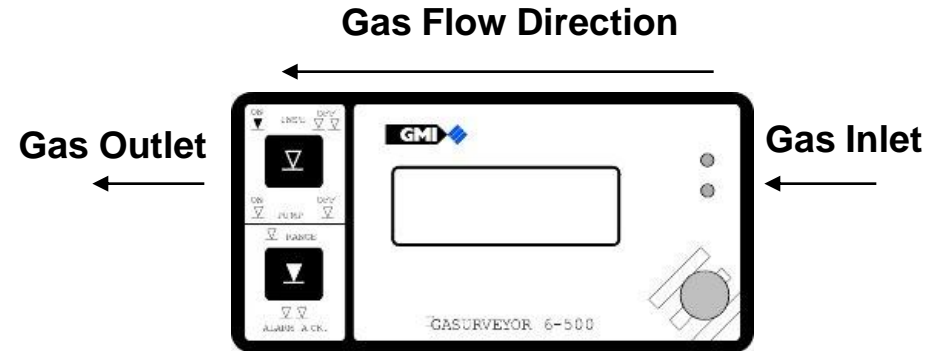


Operator Messages



■ Sampling

- PUMP
- 0.5 - 0.7 L PER MIN
- SAMPLE FLAG
- AUTO SWITCH OFF
 - » Display Message



■ Accessories

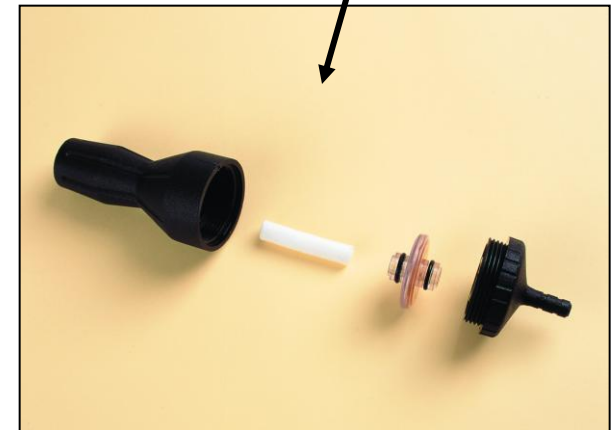
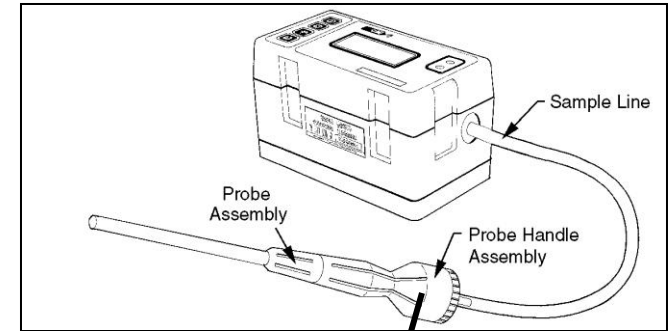
- Carry Case
- Filters
- Sample Line
- Sample Line Adaptor
- Probe
- Probe Handle Assembly
- Shoulder Harness
- Hex Driver
- Handbook



■ Probes / Probe Handle Assembly

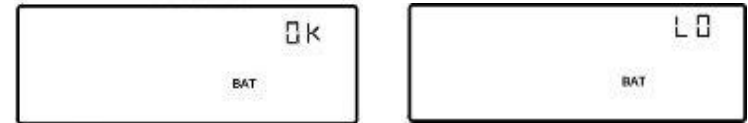


Range of Probes Available



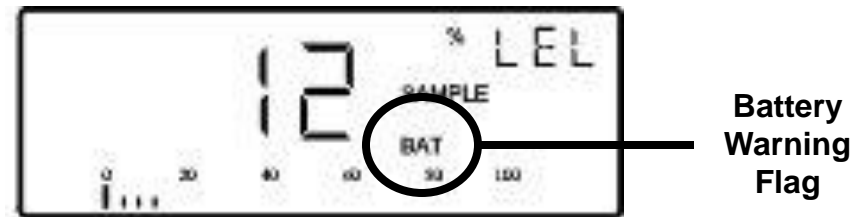
Cotton and Hydrophobic Filters within Probe Handle Assembly

■ Batteries



Battery life display

- Rechargeable (NiCd)
 - » approx. 9 hours runtime
 - » battery life displayed at power on
 - » 'BAT' flag approx. 30mins before switch off



- Alkaline
 - » approx. 15 hours runtime
 - » battery life displayed at power on
 - » 'BAT' flag approx. 60mins operating time remaining

■ Rechargeable Battery Pack

- Standard Charger
 - » 14 hours to charge a flat battery
- Flatbed Charger
 - » 14 hours to charge a flat battery
- Smart Charger
 - » 60mins to 90% recharged, 120mins to fully recharged
 - » 2 batteries simultaneously
 - » Discharge and charge cycle



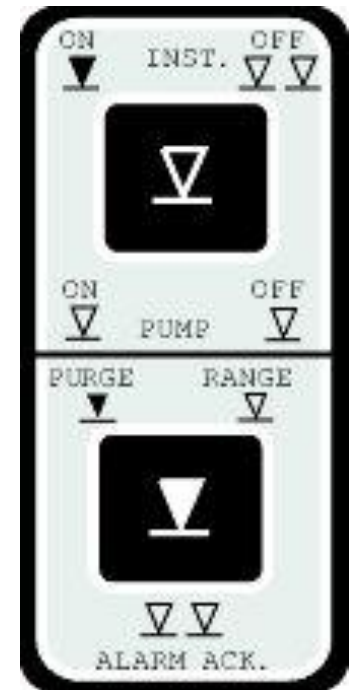
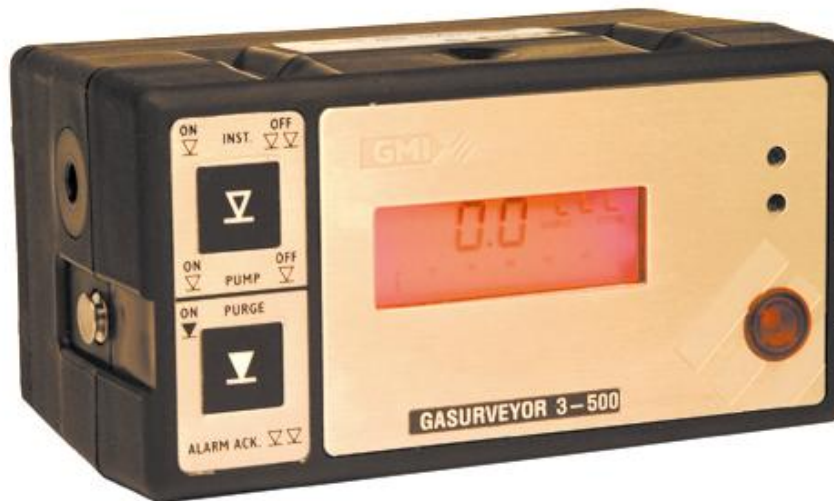
■ Before Use Checks

- Casing
- Display
- Filters
- Sample Line
- Battery Pack
- Calibration Label



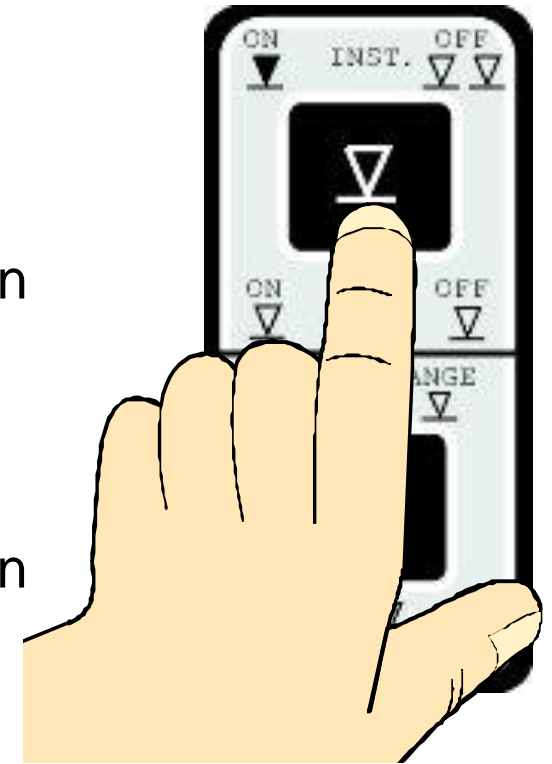
READ MANUAL BEFORE OPERATING		
RETURN FOR SERVICE	Flam. Cal. Gas	
BEFORE	<input type="text"/>	<input type="text"/>
MADE IN THE EC		

■ Operation



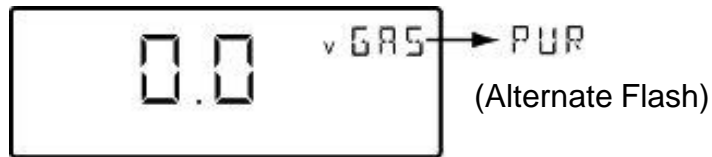
■ Operation

- Top Button
 - » Press and Hold - Switches ON in Measure Mode
 - » Double Press - Switches OFF
 - » Single Press - Toggles Pump On / Off

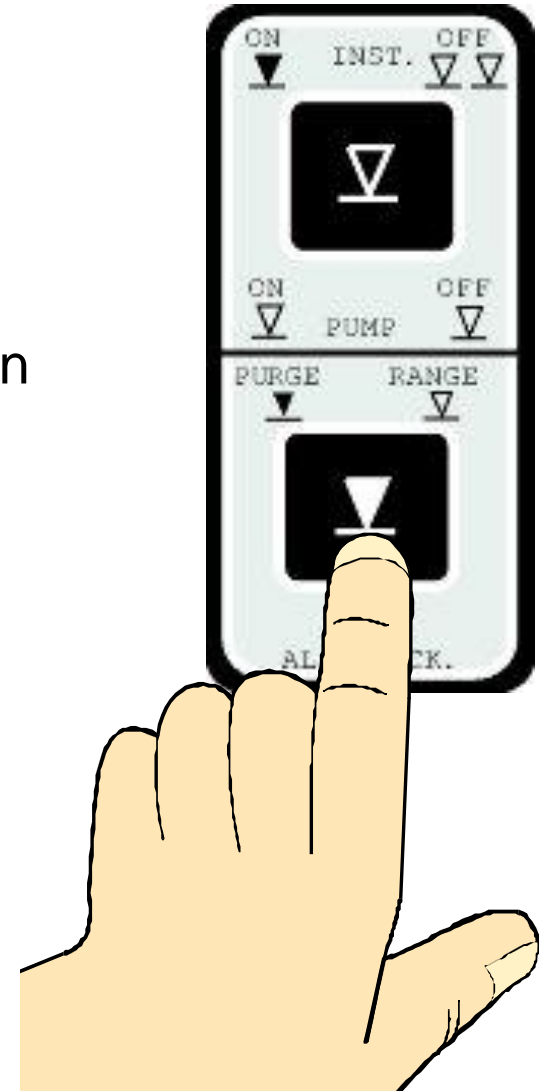


■ Operation

- Bottom Button
 - » Press and Hold - Switches ON in Purge Mode
 - » Changes range



Display in Purge Mode

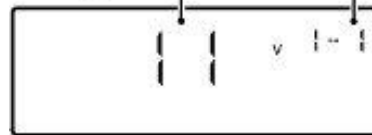


■ Warm Up

All LCD segments displayed



Instrument type Software version



Battery status

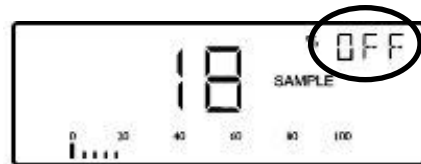


- ALL SEGMENTS
- ID & SOFTWARE VERSION
- BATTERY STATUS
- CALIBRATION DATE
- INSTRUMENT SAMPLING

■ Operator Messages



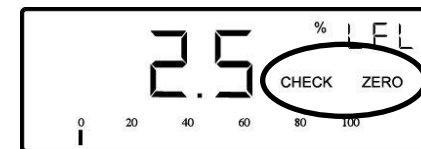
Pump is running and instrument sampling



Instrument about to switch off

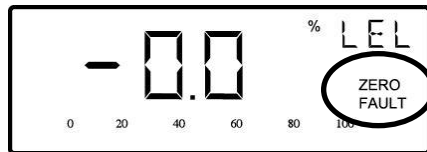


Batteries will soon require replacing

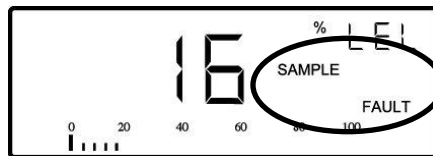


Possibility of zero shift

■ Fault Messages



Zero is outwith its calibration limit



Problem with the instrument's sample flow



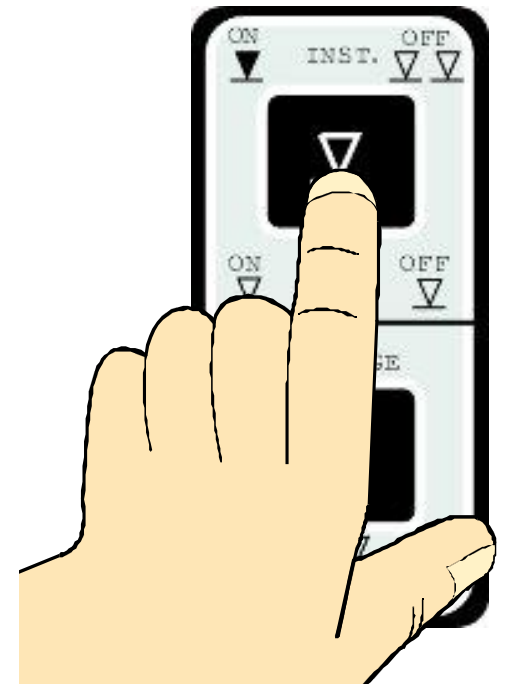
Batteries require replacing



Calibration error detected

■ Sample Fault

- Blockage
- Filters
 - » hydrophobic
 - » cotton
 - » check / change
- Restart Pump
 - » single press button one

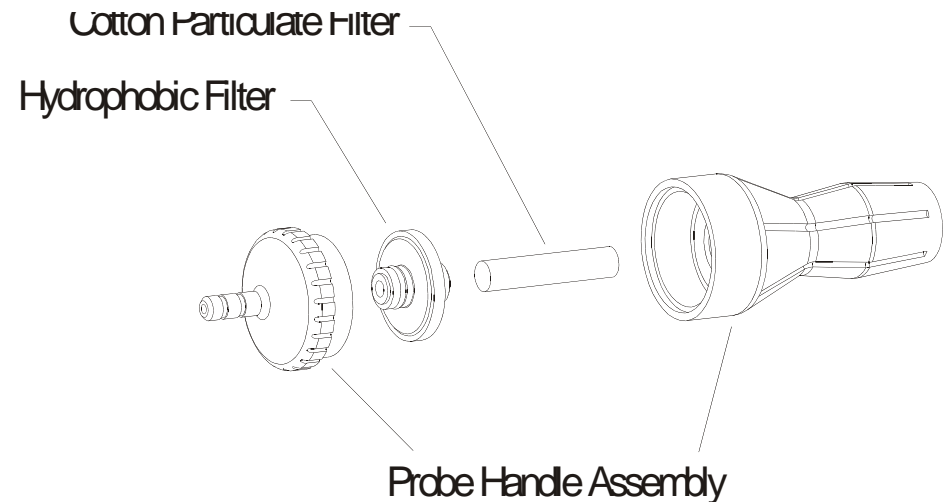


■ Filter Replacement

– Probe Handle

» Cotton

» Hydrophobic



■ Fault Finding

- Instrument not switching on
 - » check batteries
- Pump failure
 - » switch on

■ Battery Replacement

– Alkaline

- » Ensure the instrument is switched off
- » Loosen instrument base plate screws using tool provided (4mm hex)
- » Remove battery cover then remove batteries
- » Check battery compartment for damage to spring contacts or corrosion on springs
- » Insert new batteries, observing correct polarity
- » Replace base plate and fasten base screws
- » Check the instrument switches on and works to specification



Loosen base screws to remove battery cover

■ Battery Replacement

- Rechargeable

- » Ensure the instrument is switched off
- » Loosen instrument base plate screws using tool provided (4mm hex)
- » Remove battery pack
- » Insert new battery pack
- » Fasten base screws
- » Check the instrument switches on and works to specification



Loosen base screws to remove battery cover

■ Calibration

- 4 methods
 - » field calibration
 - » manual calibration
 - » automatic calibration
 - » instrument management system
- Annual
- Calibration Date Label