

BW TECHNOLOGIES

Automatic Test Station

Instruction Sheet

Introduction

The Automatic Test Station (“the station”) provides an acknowledgment that the detector accurately responds to a test gas. The Station provides testing for the GasAlertClip Extreme, GasAlertClip, GasAlert Extreme, GasAlert, GasAlert100, Toxyclip2 and Toxyclip O₂ detectors.

Order Number	Description
TC-TS01	Test Station for ToxyClip/ToxyClip2
GA-TSO2	Test Station for GasAlertClip GA24-(x)-EL or GA24-(x) and GasAlertClip Extreme GA24XT-(x) versions
GA-TSO3	Test Station for GasAlertClip GA24A-(x) versions/GasAlert/GasAlert LEL/GasAlert Extreme
GA-TSO4	Test Station for GasAlert100

Add suffix (-UK) for United Kingdom mains plug, (-EU) for European mains plug, (-AU) for Australian mains plug.

Note: This Station may not support all gasses. For a complete list, contact BW Technologies.

- ⚠ Safety Information - Read First
- ⇒ Do not use the Station if it is damaged. Before you use the Station, inspect the case. Look for cracks or missing parts.

⇒ If the Station is damaged or something is missing, contact BW Technologies immediately.

⇒ We recommend that the Station be attached to a venting system or that the Station be used in a well-ventilated area.

⇒ Confirm that all gas bottles contain enough gas.

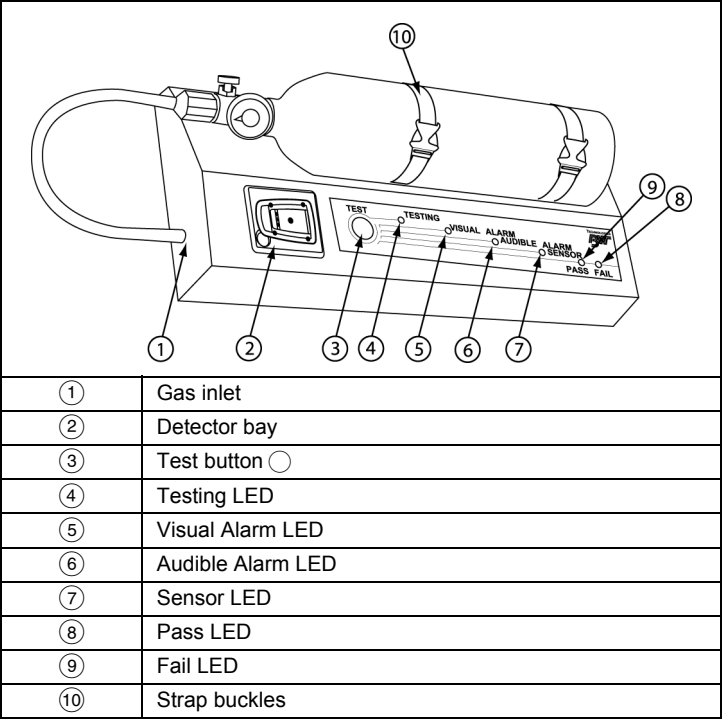
⇒ Do not expose the Station to electrical shock and/or severe continuous mechanical shock.

⇒ The Station warranty will be void if the unit is disassembled, adjusted, or serviced by non-BW Technologies personnel.

⇒ Do not allow liquids to condense and/or use high power sprays on the Station.

⇒ Read this entire manual and follow the instructions and recommendations therein in order to ensure proper and safe installation and functioning of the Station.

Parts of the Automatic Test Station



Getting Started

The following items are included with your Station. If the Station is damaged or something is missing, contact the place of purchase immediately.

- 1/8" ID Tygon Tubing.
- Power adapter
- One 9-volt battery (installed)
- Quick Reference Card
- Instructions

To order replacement parts, see the section "Replacement Parts and Accessories".

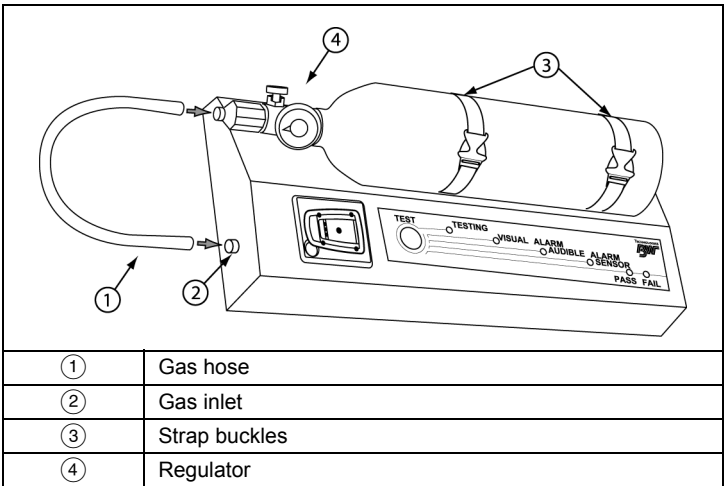
Installation

Mounting the Station

The Station can be used on a test bench or wall mounted. Wall mounting slots are located on the back of the Station.

Note: Locate the Station in a low noise environment.

Installing the gas cylinder



1. Connect the regulator to the gas cylinder
2. Place the gas cylinder into the holder and close the strap buckles
3. Attach all gas connections
4. Open regulator valve fully.
5. Connect the gas outlet (located beside the AC connection point) if gas venting is required.

Note: Ensure that the regulator valve is fully open.

Note: The Station cannot determine if the flow is adequate or if the proper gas type has been installed.

Power

The Station is shipped from the factory with a 9-volt battery installed. The Station can also be powered from a VAC outlet.

Testing a detector

Note: Ensure an adequate gas supply is connected to the Station

Note: Ensure that the test gas concentration is above the detectors low alarm setpoint.

Note: Vibrator alarms are not tested.

Note: The supply of test gas automatically shut offs at the end of the test (you do not need to close the regulator valve).

The Station tests a Detector in approximately 5 to 10 seconds. The test provides an acknowledgment that the detector accurately responds to a gas. The Station tests the detectors audible alarm, visual alarm and sensor. As each of the responses are checked the corresponding LED advises if the Detector passes or fails. Red=Fail, Green = Pass

1. Insert the Detector firmly into the Detector bay.
2. Press the Test Button ○
3. "TESTING" LED flashes
4. Gas is automatically released

Pass

If the detector passes all the tests - the "PASS" LED will light Green. The detector is now ready for use.

Fail

If the "FAIL" LED lights, see the section "Troubleshooting".

Maintenance

Note: An operations log should be kept of all maintenances.

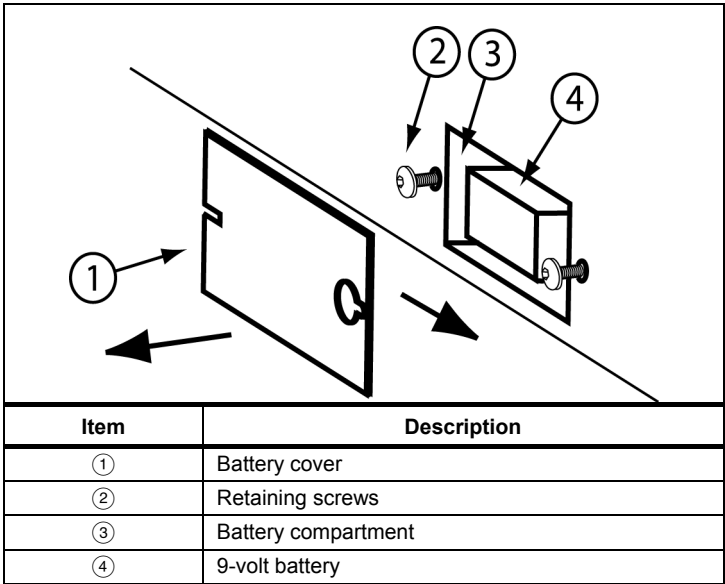
To keep the Station in good operating condition, perform the following basic maintenance as required:

- Clean the exterior with a soft, damp cloth. Do not use solvents, soaps, or polishes.

Battery Replacement

Follow these steps to replace the battery within the Station.

- 1. Loosen, but do not remove the retaining screws from the station.
- 2. Slide the cover to the right, remove it and set it aside.
- 3. Insert the new battery into the battery compartment.
- 4. Replace the battery cover and tighten the retaining screws.



Troubleshooting

Problem	Possible Cause	Solution
Nothing happens when TEST button is pressed	→ No power connection → Detector is incorrectly installed in detector bay	→ Replace battery or attach AC adaptor → Install detector correctly
Working detectors – do not pass the testing sequence	→ Test hose not connected → Gas Canister is empty → Poor quality of gas → Expired gas mixture	→ Attach test hose → Replace test gas
Station will not initiate the test sequence – or one of the lights blink when TEST is pressed	→ Detector is incorrectly installed in detector bay → Surrounding high ambient noise levels → Unit malfunctioning	→ Install detector correctly → Relocate station to quieter environment → Return Station to BW for repair.

Replacement Parts and Accessories

Model No.	Description	Qty
M108	Tygon Tubing	/ft.
M0931K	Quick connect fitting	2
E0008	9-volt Battery	1

Specifications

Tests		
	Model GA-TS02	GasAlertClip Detectors (Standard)
	Model GA-TS03	GasAlertClip Detectors (w/ internal vibrator)
	Model TC-TS01	Toxyclick2/Toxyclick Detectors
	Test Time	Approx. 5-10 seconds per Detector
	Test Sequence Verifies	Visual functions Audible alarm response Sensor responds to target gas Response meets detectors time specifications General Pass/Fail
Display		
	LED Indicators	Six (6) color-coded indicators
	PASS/FAIL Advise	Testing Visual Alarm Audible Alarm Sensor Response including Speed of Response meets specifications Test Pass Test Fail
Controls		
	Test Sequence	Push Button activated
	Power ON/OFF	Automatic
	Test Gas Flow	Automatic – flow release ON and flow shut OFF
Power Required		
	Wall Mount Adaptor	110 VAC standard
	Battery	9 Volt (Tests 350 units)

Regulator	Vertical-type constant flow with pressure gauge	
	Flow Rate	500 ml/minute
	Test Hose	Reinforced Teflon (1 foot, 0.25 inch n.p.t.)
PHYSICAL		
	Station	Composite materials c/w test well and gas cylinder holder with straps
	Hose Access	0.25 inch push fitting
	Power Jack	Accepts 110 VAC wall mount adaptor (included)
	Weight:	2.85 lbs (1.3 kg)
	Dimensions (l x w x h):	18.5 x 8 x 2.5 inches (47 x 20.3 x 6.3 cm)

Contacting BW Technologies

To contact BW Technologies call:

1-888-749-8878 USA

+44 (0) 1869-233004 Europe

+011-852-2974-1783 China

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Visit BW Technologies' Web site at: **www.gasmonitors.com**

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Warranty

LIMITED WARRANTY & LIMITATION OF LIABILITY

BW Technologies Ltd. (BW) warrants this product to be free from defects in material and workmanship under normal use and service for a period of two years, beginning on the date of activation. This Warranty is valid only if the detector is activated by the date on the package. This warranty extends only to the sale of new and unused products to the original buyer. BW's warranty obligation is limited, at BW's option, to refund of the purchase price, repair, or replacement of a defective product that is returned to a BW authorized service center within the warranty period. In no event shall BW's liability hereunder exceed the purchase price actually paid by the buyer for the Product.

This warranty does not include:

- a) fuses, disposable batteries or the routine replacement of parts due to the normal wear and tear of the product arising from use;
- b) any product which in BW's opinion, has been misused, altered, neglected or damaged by accident or abnormal conditions of operation, handling or use;
- c) any damage or defects attributable to repair of the product by any person other than an authorized dealer, or the installation of unapproved parts on the product; or

The obligations set forth in this warranty are conditional on:

- a) proper storage, installation, calibration, use, maintenance and compliance with the product manual instructions and any other applicable recommendations of BW;
- b) the buyer promptly notifying BW of any defect and, if required, promptly making the product available for correction. No goods shall be returned to BW until receipt by the buyer of shipping instructions from BW; and
- c) the right of BW to require that the buyer provide proof of purchase such as the original invoice, bill of sale or packing slip to establish that the product is within the warranty period.

THE BUYER AGREES THAT THIS WARRANTY IS THE BUYER'S SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. BW SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, INCLUDING LOSS OF DATA, WHETHER ARISING FROM BREACH OF WARRANTY OR BASED ON CONTRACT, TORT OR RELIANCE OR ANY OTHER THEORY.

Since some countries or states do not allow limitation of the term of an implied warranty, or exclusion or limitation of incidental or consequential damages, the limitations and exclusions of this warranty may not apply to every buyer. If any provision of this warranty is held invalid or unenforceable by a court of competent jurisdiction, such holding will not affect the validity or enforceability of any other provision.