

## General features

The Multi-Sensor Tester is a tool for regulating and checking actuators.

It is a single device incorporating a chronometer, a tester for analog and digital sensors, a peak detector, a cycle counter and a pulse counter. These functions have been included to monitor cycle time and actuator vibrations. In practice, by connecting two proximity sensors to the terminal blocks A and B, it is possible to test them and monitor characteristic times (instantaneous, average, max, min, etc.), as well as the number of system cycles.

Furthermore, with the peak detection function it is possible to operate the actuator in optimum motion conditions, and monitor instantaneous vibration levels.

Once the cycle has been optimized, endurance tests can be carried out with the pulse counter function. Each value is displayed on the back-lit LCD screen equipped with Zoom, Power Safe and Auto Power-Off functions.

Everything is supplied in a box including the tool, two magnetic proximity sensors with adapters, an analog sensor for vibrations, the power supply unit for endurance tests and two batteries for field adjustments.



## Description

- Backlit 128X64 LCD display.
- Switch ON button (5 sec) and confirmation selector.
- Switch OFF button (5 sec) and exit selector.
- Menu scroll keys.
- Magnetic sensor testing area.
- 12 Vdc power plug.
- Terminal board for sensor A, 18 Vdc (PNP; NPN; 2 wires; Analog).
- Terminal board for sensor B, 18 Vdc (PNP; NPN; 2 wires; Analog).
- 2x1.5 Vdc batteries (NON-RECHARGEABLE).
- The SB2T comes with 2x1.5 Vdc AA batteries, autonomy about 8 hours, for field settings. If setup operations take longer, it is advisable to connect up to the 12Vdc power pack provided in the carrying case.

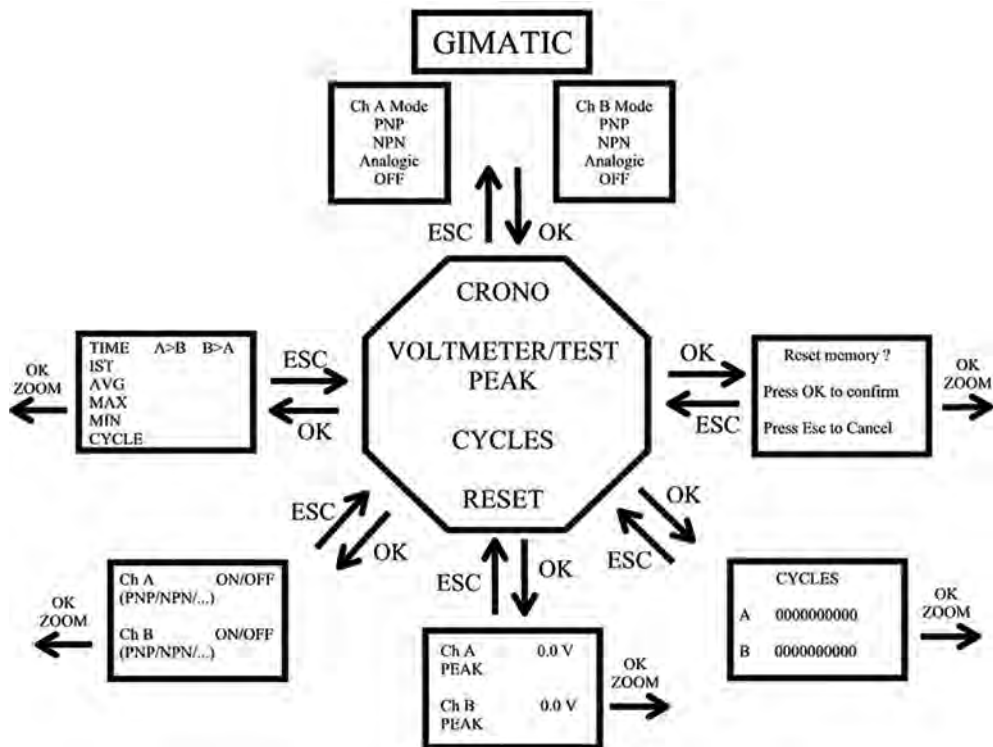
Connection



PNP NPN, 2-wire dry contact and analog sensors can be tested by connecting them suitably to the terminal boards.

| PNP   | NPN   | DRY CONTACT   | ANALOG  |
|---|---|---|---|
|   |   |   |   |
| <div style="border: 1px solid black; padding: 5px;"> <p>Ch B Mode</p> <p>PNP</p> <p>NPN</p> <p>Analogic</p> <p>OFF</p> </div> | <div style="border: 1px solid black; padding: 5px;"> <p>Ch B Mode</p> <p>PNP</p> <p>NPN</p> <p>Analogic</p> <p>OFF</p> </div> | <div style="border: 1px solid black; padding: 5px;"> <p>Ch B Mode</p> <p>PNP</p> <p>NPN</p> <p>Analogic</p> <p>OFF</p> </div> | <div style="border: 1px solid black; padding: 5px;"> <p>Ch B Mode</p> <p>PNP</p> <p>NPN</p> <p>Analogic</p> <p>OFF</p> </div> |

Software flow chart



## Start

Press OK (5 sec) to switch ON the tool and the Gimatic logo will be displayed on the screen. Select the type of sensor connected to each terminal board and enter the functions menu. If only working with one sensor, switch the unused terminal board OFF.



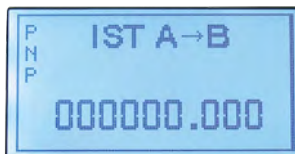
## Chronometer

The Chronometer function measures the time that lapses between switching off sensor A and switching on sensor B, and vice versa. The time is shown as instantaneous time (IST), average time (AVG), maximum time (MAX), minimum time (MIN) and cycle counter (CYCLE). Every function can be displayed full screen using the zoom function.



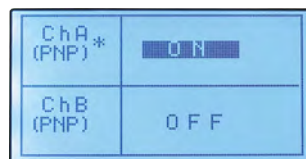
| TIME  | A→B    | B→A    |
|-------|--------|--------|
| IST   | 02.251 | 00.000 |
| AVG   | 01.125 | 00.000 |
| MAX   | 02.251 | 00.000 |
| MIN   | 02.251 | 999999 |
| CYCLE | 000001 | 000000 |

| TIME  | A→B    | B→A    |
|-------|--------|--------|
| IST   | 02.251 | 04.395 |
| AVG   | 01.125 | 02.197 |
| MAX   | 02.251 | 04.395 |
| MIN   | 02.251 | 04.395 |
| CYCLE | 000001 | 000001 |



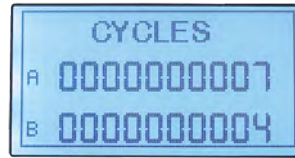
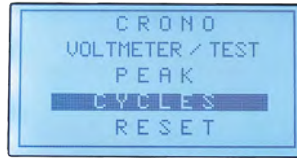
## Sensor tester

The voltmeter/test function can be used to test PNP NPN, 2 dry contact and analog sensors.



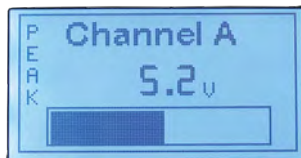
**Pulse counter**

The pulse counter is used to count the number of sensor pulses for each terminal board.



**Peak detector**

The PEAK function is used to display the analog output of Shock sensors in order to measure the vibration intensity.



**Reset**

The RESET function is used to delete all the data stored in the memory and make a new setup.

