

Corporate Associates and Projects

OPERATING MANUAL FOR FG & VOLT CALIBRATION STAND



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1.INTRODUCTION

1.1 Company Profile

NEUROTRONIX SYSTEMS (INDIA) PVT.LTD SYSTEMS (INDIA) PVT .LTD., a reputed manufacture of micro, power electronic products, test jigs and fixtures. These electronic products represent the fruits of successful design and development work undertaken by NEUROTRONIX SYSTEMS (INDIA) PVT.LTD R & D wing. Before their introduction, NEUROTRONIX SYSTEMS (INDIA) PVT.LTD products have been tested and proven in field trials at different places. They are therefore designed to offer trouble to offer trouble free efficient service in the specific and arduous environment.

1.2 TEST JIG:

This jig has been designed with versatility that provides user-friendly environment. This jig can be used to test 12 numbers of FG and VOLT Calibration systems . The system is easy to operate and completely electronic. Control card is provided in the jig. Individual timer and variable voltage is provided.

2.SPECIFICATION.

- 1.This unit has the facility to inspect 12 Gauges.
- 2.The system is used to test FG and VOLT.
- 3.The 5 scale resistance values are differential by five LEDs.
- 4.The Digital Timer (0.1-9.9min) SET (Green switch) and RESET (Red switch) has been provided for individual Gauge
- 5.A thumb wheel has been provided to set the time delay between full to half.
- 6.To avoid voltage drop at system point the power supply wires has been provided. Individually from each checkpoints.
- 7.All switches and operator controls has been easily accessed and it has been properly labeled
- 8.A knob is provided for voltage variation.
- 9.A Switch is provided to interchange the output polarity(+ve, -ve and sensing)

3.OPERATING PROCEDURE

- 1.Plug the mains chord into the mains socket and switch on the mains.
- 2.Plug the Gauge to be calibrated into the fixture.
- 3.The resistance card should be plugged to the control board at the front.

4. The delay time is to be set using the thumb wheel.
5. When the set switch (Green) is pressed once the first resistance value will be selected
6. The needle in the Gauge will be deflected to full within the time set.
7. After the set time the indication LED will blink.

4. TESTING PROCEDURE

- Plug in the main socket.
- Connect the power supply and switch on it.
- Set the voltage to be given to the gauge.
- Plug the gauge into the fixtures.
- Select Full or Half or Empty by using the set switch.
- Watch that the needle in the gauge is deflecting to the selected position within the set time.
- The lamp will start to blink indicating that the set time is over.
- Like wise all the three positions in the gauge can be calibrated.

7. PCB Connector Details

- 1) The Connector details in the component side of the 5 Relay card is mentioned clearly for your ready reference..
- 2) If any problem exists, the first step is to check whether the 12V supply is given to the connector section (1).
- 3) The second step is to check whether 5V supply is given to the 40th pin of the 89C51 micro controller.
- 4) When the SET switch (Green) is pressed it should be checked whether the low is active in the 12th pin of the 89C51 microcontroller. If not, check the wires and connector(3) of the switch is in loose contact.
- 5) If the indicating LED is not glowing, check the LED or else check the wire connections in connector (4).
- 6) In case if the Timer is not functioning check the connectivity in connector(2).
- 7) If the Resistance value is not indicating check whether the Resistance card is connected and resistance card is connected to the control card.
- 8) If any SET switch is pressed it should be checked whether the Relay (1) is in ON condition. And if it is pressed again it should be checked whether the Relay (1) is OFF and Relay (2) is in ON condition. The same condition applies for other relay's also.

8. SERVICE TIPS:

- Each control card are numbered serially 1,2,3,4...
- The resistance cards are also numbered.
- The first control card controls first system, the second control card controls the system number 2

respectively up to 12 systems.

- Whenever a problem is noticed in the system, the problem can be traced to the corresponding control card or resistance card. [For example, If the problem is noticed at the system numbered 8, this may be due to problem in the control card 8 or the particular resistance card.] Hence the problem can be attended easily
- All the wirings are done in a systematic way for easy trace ability.
- All the circuit diagrams are enclosed for your reference and to the service.
- In case of any help, telephone number is notified in first page, for immediate attention.