



Electronic Sensor Trainer

Category: Electronic Engineering · Model reference: MZM-3007



SPECIFICATIONS

DESCRIPTION :

Electronic sensor trainer is the Science experiment tool set that contains the microcontroller main board, variety of sensor module, actuator and output with display device and software tools. They work together to make the new concept of science experiment and add programming experiences to develop the ultimate science projects.

FEATURES :

- Learn and experiment the behavior of each sensor to understanding their operation.
- Include the operation of BASIC Stamp2SX microcontroller.
- Learners can apply all knowledge to develop the new science experiment in different ways.
- Data collection system using DAQ Software.
- Experimenters can get data from system to collect and send to computer to process or plot the graph.
- Control the actuator device such as Relay, DC motor, Stepper motor, etc.
- To make the automatic control projects, modern science projects.

PRODUCT MODULES:

SMART SCIENCE EXPERIMENT BOARD

- Operation compatible with BASIC Stamp2SXmodule (BS2SX-IC)
- Use interpreter from Parallax
- 16 KByte memory for program and data
- Plug on 24-pin DIP socket similar BS2SX-IC

PRODUCT MODULES

1. SMART SCIENCE EXPERIMENT BOARD

- Operation compatible with BASIC Stamp2SXmodule (BS2SX-IC)
- Use interpreter from Parallax
- 16 KByte memory for program and data
- Plug on 24-pin DIP socket similar BS2SX-IC

2. 38KHz INFRARED MODULE

- Detect modulated 38kHz carrier frequency infrared light 38KHz INFRARED MODULE

- Detect modulated 38kHz carrier frequency infrared light

3. INFRARED DETECTOR

- Detect the infrared light in analog (voltage) and digital signal by using Photo-transistor

4. INFRARED LED

- Drive with logic HIGH TTL level 2-mode operations: Continuous drive
- Frequency drive

5. LIGHT DETECTOR

- Detect light density.
- 2 outputs: Positive and Negative voltage reaction when detect light

6. LIGHT REFLECTOR

- Includes Super-bright Red LED as light source and LDR that receive reflection light. Output very following reflection light density.

7. LED INDICATOR

- HIGH: Logic 1 apply,
- LED lights Red.
- LOW: Logic 0 apply,
- LED lights Green.
- If not: LED turns off

8. SOUND DETECTOR

- Detect sound level changing event. Output is logic

9. SWITCH INPUT

- HIGH: Logic 1 apply,
- LED lights Red.
- LOW: Logic 0 apply,
- LED lights Green.
- Not press: LED turns off

10. TEMPERATURE SENSOR

- Measure temperature change by Thermistor.

- 2 outputs voltage: Positive and Negative co-efficiency

11. RESISTANCE MEASUREMENT

- Measure resistance value

- Output: 1mv/ Ω

12. MAGNETIC FIELD SENSOR

- Measure magnetic field density.

- If no detect output: +2.5V

- Sensitivity: 1.3mV/Gauss.

13. VERTICAL POTENTIOMETER

- Type of variable resistor.

- Adjustable: 0...5V

14. CURRENT MEASUREMENT

- Measure DC current by series connection.

- Output: 5 mV/mA.

- Full Range is 1,000mA.

15. COMPARATOR

- Compare apply voltage between ch-A and ch-B.

- Output is logic 0 with indicator.

- Vin (max) is 3.5Vdc

16. ATTENUATOR

- Measure DC voltage.

- 2 attenuator ratios:

- 1:1 for 0 to +5V input

- 2:1 for 0 to +10V input

- not use to measure SCI-BOX internal system

17. SLIDE VARIABLE RESISTOR

- Type of variable

- resistor

- Adjustable: 0...5V

18. CAPACITANCE MEASUREMENT

- Measure capacitance value in Farad unit by RC time constant operation.

19. DC MOTOR

- Input: 6-12 VDC

20. STEPPER MOTOR

- Input: 12 VDC

Send Enquiry **Your Name**

Your Email

Tele Phone



MZFIRSTMOTION SDN BHD · Reg No. 1137962-V · No 53, Lorong 1/SS3, Bandar Tasek Mutiara, 14120 Simpang Ampat, Pulau PinangT: +604-505 7422 · E: sales@mzfirstmotion.com · <https://www.mzfirstmotion.com>