



The course in Basic Analogue Electronics is an excellent introduction to electronics. The Laboratory Package consists of the Base Unit and five laboratory cards.

The Base Unit serves as a card holder and as a power supply with fuses for the laboratory cards. The Laboratory Package covers the basics in electronics, with special emphasis on the system method.

M00005 is the most intricate and contains a power supply with which the student can learn the difference between component functions and to practice trouble shooting (fault finding), in order to get a better understanding of the system.

The educational package in Basic Analogue Electronics includes a Laboratory Exercise Book. Every effort has been put into the layout and teaching methods.

The course objectives are:

01. To understand the function of the components, identify them and connect them in simple circuits.
02. To complete fault finding and to be able to use the measurement exercises using M00006.
03. To complete a construction set which, after completing successive stages results in a DC voltage unit.

List of Experiments

Basic Electronics covers the following topics using the M00002-M00006:

01. Study the Type of Resistor
02. Study the Type of capacitor
03. To Study and test Diode as Half wave, Full Wave & Full Wave Bridge Rectifier
04. Study of Voltage regulator
05. Study of Voltage Transistor
06. Study of BreadBoard
07. Study of Power Amplifier

Note: Specifications are subject to change.

PROVIDED PANELS AND OPTIONAL ACCESSORIES

SN. Name	Order Code	Qty.
01 Analog Electronics Base Unit -----	M00001	1
02 Resistor Module -----	M00002	1
03 Capacitors Module -----	M00003	1
04 Diodes Module -----	M00004	1
05 Voltage Regulator Module -----	M00005	1
06 Transistors Module -----	M00006	1
07 Connection Board (Bread Board) -----	M00007	1
08 Power Amplifier Module -----	M00008	1
09 Lab Flex Set Shrouded Patch Cords -----	M00011	1
Optional		
01 Digital Storage Oscilloscope -----	DSO-1102	1
02 Digital Multimeter -----	17702C	2



ANALOG ELECTRONICS BASE UNIT

Order Code - M00001

The Base Unit is used throughout the system M00001. The unit supplies different output voltages suitable for the different lab cards used in the system. The Lab Cards put in slots and are automatically powered via a D-sub connector.

The base unit is accepted by CE standards.

TECHNICAL SPECIFICATIONS

Supply voltage: 230V AC 50 - 60 Hz

The unit has 6 outputs with following data:

Output 1 - 3 : DC 12 V / 200mA with LED indication and fuse

Output 4 - 6 : AC 12 V / 200mA with LED indication and fuse

Dimension: 200 x 300 x 73mm

Weight: 4 kg Approx



RESISTOR MODULE

Order Code - M00002

On Resistor Module there are 12 different hole mounted resistors, 2 potentiometers and 2 surface mounted (SMD) resistors.

With this card, measurement of components can be made, also recognition of values from the resistor code.

TECHNICAL SPECIFICATIONS

Dimension: 172 x 127 mm

Weight: 0.2Kg Approx

Note: Specifications are subject to change.



CAPACITOR MODULE

Order Code - M00003

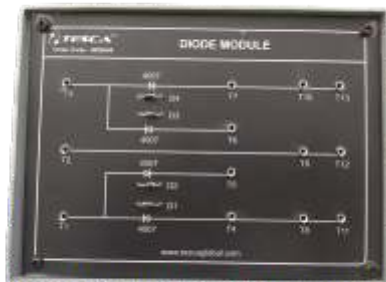
On Capacitor Module there are 15 different hole mounted capacitors, 1 trimming capacitor and 4 surface mounted (SMD) capacitors.

With this card measurement of components can be made, recognition of different types of capacitor.

TECHNICAL SPECIFICATIONS

Dimension: 172 x 127 mm

Weight: 0.2Kg Approx



DIODE MODULE

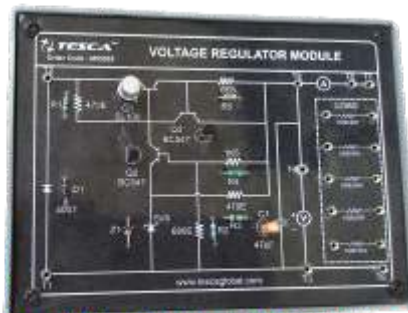
Order Code - M00004

Diode Module is used for measurement and documentation of the characteristics of diodes. A variable resistor 100 ohm is required to complete the exercises.

TECHNICAL SPECIFICATIONS

Dimension: 172 x 127 mm

Weight: 0.2Kg Approx



VOLTAGE REGULATOR MODULE

Order Code - M00005

This is a stabilised DC voltage unit having different possibilities for connection. Measurement exercises include full and half wave rectifiers, zener diodes, light emitting diodes (LED 's), transistors and electronic current limiters. There is also possibility to train in fault finding. Resistance 100E/5W 5nos. for Variable Load.

TECHNICAL SPECIFICATIONS

Variable output voltage approx. : 7-12V DC. 200 mA.

Power: 5W, **Resistance:** 100 Ohms X 5nos.,

Max Current: 1 A

Dimension: 172 x 127 mm

Weight: 0.2Kg Approx



TRANSISTOR MODULE

Order Code - M00006

This card is used for measurement of the transistors current, voltage, power development, and function control.

TECHNICAL SPECIFICATIONS

Dimension: 172 x 127 mm

Weight: 0.2Kg



CONNECTION BOARD

Order Code - M00007

This breadboard is easily connected to 2 contact plugs. The board is suitable for projects where the student connects up circuits on this unit for testing.

TECHNICAL SPECIFICATIONS

Dimension: 172 x 127 mm

Weight: 0.2Kg Approx

Note: Specifications are subject to change.



POWER AMPLIFIER MODULE

Order Code - M00008

Study of Power Amplifier

Technical data:

Dimension: 172 X 127 mm **Weight:** 0.2 kg



LAB FLEX SET SHROUDED PATCH CORDS

Order Code - M00011

01. 2mm Patch Cord Red 50cm 10nos.
02. 2mm Patch Cord Black 50cm 10nos.
03. Connecting Wire 5 colors 1mm². 1 mtr. each

OPTIONAL ACCESSORIES



DIGITAL STORAGE OSCILLOSCOPE

Order Code - DSO-1102

Digital Storage Oscilloscope 100MHz, 2 CH, Coloured LCD 7,
1GS/s, USB+Software



DIGITAL MULTIMETER

Order Code - 17702C

AC Current - 20A
AC Voltage - 750V
DC Current - 20A
DC Voltage - 1000V

Note: Specifications are subject to change.