



ECG Amplifier 3 Lead Electrodes

- 3Lead Electrodes Real Time ECG Trainer
- ECG output 0 to 10Vpp± adjustable. By placement of Electrodes see I, II, III leads
- Gain & Self test Cal adj.set of 3 Clamp Electrodes. DSO output through 4mm socket
- Test point on the top of instrument through 2mm socket
- Power Supply 230 ±10%, 50Hz, Dimensions 250 X 75 X 250 mm±

Study on ECG Amplifier

Study of Placement of Electrodes. Measuring the electrical activity generated by the heart. Different Lead combination. Study of normal ECG waves, intervals and segments. The waves an ECG include the P wave, Q wave, R wave, S wave, T wave & signal processing Placement of Electrodes, Amplification, Filters, Gain, Self test, Voltage & Frequency responses & etc

Other Models

SN.	Order Code	Name of Item
01.	BM2101	ECG Amp. 3 Leads
02.	BM2102	ECG Amp. 12 Leads Selector
03.	BM2103	ECG Amp. 12 Leads with Simulator
04.	BM2104	ECG Amp. 3 Lead with Heart Rate + Hi-Lo
05.	BM2105	ECG Amp. 12 Leads Selector with USB
06.	BM2106	ECG Amp. 3 Leads with Plethysmograph
07.	BM2501	ECG Simulator Portable
08.	BM2502	ECG Simulator Table Model
09.	BM2503	ECG Arrhythmias Simulator 12L, 15A

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



ECG Amplifier 12 leads with selector switch

- ECG Amplifier 12 Leads with selector switch Trainer
- 12 leads real time amplified. ECG output up to 10Vpp±, I, II, III, aVR, aVL, aVF, V1 to V6 Chest lead, Standard Unipolar and Bipolar Leads, Gain adjustable, Self-Test Clamp & Suction Electrodes. DSO o/p through 4mm socket, Test point on the top of instrument
- Power Supply 230 ±10%, 50Hz, Dimensions 250 X 75 X 250 mm±

Study on ECG Amplifier

Measuring the electrical activity generated by the heart. Different Lead combination I, II, III, aVR, aVL, aVF, V1 to V6 Chest lead. Study of normal abnormal ECG waves. The waves an ECG include the P wave, Q wave, R wave, S wave, T wave & signal processing Placement of Electrodes, Amplification, Filters, Gain, Self-Test, Voltage & Frequency responses & etc

Other Models

SN.	Order Code	Name of Item
01.	BM2101	ECG Amp. 3 Leads
02.	BM2102	ECG Amp. 12 Leads Selector
03.	BM2103	ECG Amp. 12 Leads with Simulator
04.	BM2104	ECG Amp. 3 Lead with Heart Rate + Hi-Lo
05.	BM2105	ECG Amp. 12 Leads Selector with USB
06.	BM2106	ECG Amp. 3 Leads with Plethysmograph
07.	BM2501	ECG Simulator Portable
08.	BM2502	ECG Simulator Table Model
09.	BM2503	ECG Arrhythmias Simulator 12L, 15A

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



ECG Amplifier 3 Lead with Heart Rate + Hi-Lo

- ECG with Heart Rate Indicator Real Time Trainer
- 3 Lead ECG systems, Unipolar Lead RA, LA & RL, Output up to 10Vpp±. Gain & Threshold Adjustment, R Wave Detector, Self-Test. 16 X 2 LCD Display. Switches Set, Up, Down & Enter. Setting Bradycardia, Tachycardia, Etc. Audio & Visible indication. Self-Test for Heart Rate indication, DSO output through 4mm socket. Test point on the top of instrument socket 2mm.
- Power Supply 230 ±10%, 50Hz, Dimensions 250 X 75 X 250 mm±

Study on ECG Amplifier

Measuring the electrical activity generated by the heart R wave Detection. Heart Rate Measurement. Study of arrhythmias & signal processing, Placement of Electrodes, Amplification, Filters, Gain, Detector, setting, LCD Display Self-test, Voltage & Frequency responses & etc.

Other Models

SN.	Order Code	Name of Item
01.	BM2101	ECG Amp. 3 Leads
02.	BM2102	ECG Amp. 12 Leads Selector
03.	BM2103	ECG Amp. 12 Leads with Simulator
04.	BM2104	ECG Amp. 3 Lead with Heart Rate+Hi-Lo
05.	BM2105	ECG Amp. 12 Leads Selector with USB
06.	BM2106	ECG Amp. 3 Leads with Plethysmograph
07.	BM2501	ECG Simulator Portable
08.	BM2502	ECG Simulator Table Model
09.	BM2503	ECG Arrhythmias Simulator 12L, 15A

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting,

Note: Specifications are subject to change.



ECG Amplifier 12 leads Selector with USB

- ECG Amplifier 12 Leads with selector switch Trainer Kit
- 12 leads real time amplified. ECG output up to 10Vpp±
- I, II, III, aVR, aVL, aVF, V1 to V6 Chest lead, Standard Unipolar and Bipolar Leads
- Gain adjustable, Self Test Clamp & Suction Electrodes.DSO o/p through 4mm socket
- Test point on the top of instrument through 2mm socket.
- Power Supply 230 ±10%, 50Hz, Dimensions 250 X 75 X 250 mm±

Study on ECG Amplifier

Measuring the electrical activity generated by the heart. Different Lead combination lead. Study of normal abnormal ECG waves. & signal processing Placement of Electrodes, Amplification, Filters, Gain, Self test, Voltage, Frequency responses, etc.

BIOWAVE Software

Software for measurement of ECG single. Measurement of Voltage, Time & Frequency of each point. Setting Voltage & Time Expand the signal, Save as, Open, Print, etc. For advance study Excel values, offset setting, etc.

Other Models

SN.	Order Code	Name of Item
01.	BM2101	ECG Amp. 3 Leads
02.	BM2102	ECG Amp. 12 Leads Selector
03.	BM2103	ECG Amp. 12 Leads with Simulator
04.	BM2104	ECG Amp. 3 Lead with Heart Rate + Hi-Lo
05.	BM2105	ECG Amp. 12 Leads Selector with USB
06.	BM2106	ECG Amp. 3 Leads with Plethysmograph
07.	BM2501	ECG Simulator Portable
08.	BM2502	ECG Simulator Table Model
09.	BM2503	ECG Arrhythmias Simulator 12L, 15A

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



ECG Amplifier 3 Leads with Plethysmograph

- 12 Lead Real Time ECG & PPG Trainer Kit
- Selector switch I, II, III, aVR, aVL, aVF, V1 to V6 Chest leads
- ECG & PPG output up to 10Vpp±, Clamp & Suction Electrodes.
- PPG finger Photoelectric Transducer, DSO output through 4mm socket.
- Gain & Self test adjustable, Test point on the top of instrument through 2mm
- Power Supply 230 V, 50Hz. Dimensions 250 X 75 X 250 mm±

Study on ECG & PPG Amplifier

Measuring the electrical activity generated by the heart. R wave Detection. Hear arte Pulse Measurement. Study of PPG Signal & signal processing, Placement of Electrodes, Amplification, Filters, Gain, Self test, Voltage & Frequency responses, etc

Other Models

SN.	Order Code	Name of Item
01.	BM2101	ECG Amp. 3 Leads
02.	BM2102	ECG Amp. 12 Leads Selector
03.	BM2103	ECG Amp. 12 Leads with Simulator
04.	BM2104	ECG Amp. 3 Lead with Heart Rate+Hi-Lo
05.	BM2105	ECG Amp. 12 Leads Selector with USB
06.	BM2106	ECG Amp. 3 Leads with Plethysmograph
07.	BM2501	ECG Simulator Portable
08.	BM2502	ECG Simulator Table Model
09.	BM2503	ECG Arrhythmias Simulator 12L, 15A

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Optional PC connectivity

Note: Specifications are subject to change.



EEG Amplifier 3 Lead Electrodes

- EEG (Electroencephalography) Real Time 3 Lead amplifier trainer kit
- 3 Lead Bipolar Real Time EEG amplifier trainer kit
- With High Pass, Low Pass, Notch Filters & Gain adjustment
- Mode EEG & Self Test, Disc with Velcro & disposable Electrodes
- EEG output to DSO through 4mm socket
- Test Point on the top of Instrument
- Amplifier available with & without USB connectivity
- Study of eye & Brain activity & signal processing
- Power Supply 230V \pm , 50Hz, Dimensions 305 X100 X 250 mm \pm

Other Models

SN.	Order Code	Name of Item
01.	BM2121	EEG Amp. 3 Lead Electrodes
02.	BM2122	EEG Amp. 10-20 method Single 1Ch.
03.	BM2123	EEG Amp. 10-20 with Simulator 1Ch
04.	BM2124	EEG Amp. 10-20 with USB 1Ch
06.	BM2521	EEG Simulator

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



EEG Amplifier 10-20 Method Single Channel

- EEG 10-20 Method Single Amplifier Real time Trainer
- Electrodes placement select by Mode & Right & Left switch. High Pass, Low Pass, Notch Filters, Gain Adjustable, Output 0 to 10V. Mode EEG Left, Right &
- Self Test. Channel selection 1 to 8 Right & 1 to 8 Left. Disc & Disposable
- Electrodes, EEG, DSO output through 4mm socket. Power Supply 230 \pm 10%, 50Hz, Dimensions 305 X100 X 250 mm \pm

Study on EEG Amplifier

Study of electric potentials generated by the Brain. Study of patterns as Beta, Alpha, Theta, and Delta. Study & Analyses of Neurology & signal processing Placement of Electrodes 10-20 Method, Amplification, Filters, Gain, Self-Test & Frequency responses & etc.

Other Models

SN.	Order Code	Name of Item
01.	BM2121	EEG Amp. 3 Lead Electrodes
02.	BM2122	EEG Amp 10-20 method Single1Ch
03.	BM2123	EEG Amp 10-20-1Ch + Simulator
04.	BM2124	EEG Amp. 10-20-1Ch with USB
05.	BM2521	EEG Simulator

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



EEG 10-20 Method single Amplifier with USB Trainer Kit

- Real Time EEG Amplifier output, 10-20 Electrodes placements
- Electrodes placement select by Mode & Right & Left switch
- Study of Brain activity & signal processing
- EEG Left, Right & Self Test Mode, Gain Adjustable,
- Disc Electrodes Bipolar one electrodes set. Disc & Disposable Electrodes
- EEG DSO & USB output through 4mm socket & USB
- Software BIOWAVE, 6 Channel, Save, Open, Print, Excel Values, Measurement Voltage, Frequency, Time, Offset, Select 1 or 6 Channel, etc
- Test Point on Top of Instrument, 2mm Socket.
- Power Supply 230 \pm 10%, 50Hz, Dimensions 305 X100 X 250 mm \pm

Other Models

SN.	Order Code	Name of Item
01.	BM2121	EEG Amp. 3 Lead Electrodes
02.	BM2122	EEG Amp. 10-20 method Single 1Ch.
03.	BM2123	EEG Amp. 10-20 with Simulator 1Ch
04.	BM2124	EEG Amp. 10-20 with USB 1Ch
05.	BM2521	EEG Simulator

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



EOG Amplifier 3 Lead

- Bipolar Real Time EOG Amplifier 3 Lead Trainer
- 3 Lead Electrodes placements Active, Reference & Ground. Electrodes Disc with Velcro & Disposable Electrodes. Mode Self Test & EOG, Gain & Self-Test Adjustable. LED indication, DSO output through 4mm socket. Test Point on Top.
- Power Supply 230 \pm 10%, 50Hz, Dimensions 305 X100 X 250 mm \pm

Study on EOG Amplifier

Study of electric potentials generated by the eyes movements of a stationary subject. Detection Moment Right, Left, Up & Down. Study of Pick voltage & Duration of Moments & signal processing Placement of Electrodes, Amplification, Filters, Gain, Self test, Voltage & Frequency responses & etc

Other Models

SN.	Order Code	Name of Item
01.	BM2126	EOG Amplifier 3 Lead Electrodes
02.	BM2126-VEP	Visually Evoked Potential Amplifier 3 Lead
03.	BM2127	EOG Amplifier 3 Lead with Simulator
04.	BM2128	EOG Amplifier 3 Lead with USB BIOWAVE
05.	BM2526	EOG Simulators
06.	BM2527	EOG Simulator with light simulator

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



EOG Amplifier 3 Lead with USB BIOWAVE

- Bipolar Real Time EOG Amplifier 3 Lead Trainer
- 3 Lead Electrodes placements Active, Reference & Ground. Electrodes Disc with Velcro & Disposable Electrodes. Mode Self Test & EOG, Gain & Self-Test Adjustable. LED indication, DSO output through 4mm socket. Test Point on Top.
- Power Supply 230 \pm 10%, 50Hz, Dimensions 305 X100 X 250 mm \pm

Study on EOG Amplifier

Study of electric potentials generated by the eyes movements of a stationary subject. Detection Moment Right, Left, Up & Down. Study of Pick voltage & Duration of Moments & signal processing Placement of Electrodes, Amplification, Filters, Gain, Self test, Voltage & Frequency responses & etc

BIOWAVE Software

Software for measurement of EOG single. To measure Voltage, Time & Frequency of Signal Pattern. Setting Voltage & Time Expand the signal, Save As, Open, Print, etc. For advance study Excel values, offset setting, etc

Other Models

SN.	Order Code	Name of Item
01.	BM2126	EOG Amplifier 3 Lead Electrodes
02.	BM2127	EOG Amplifier 3 Lead with Simulator
03.	BM2128	EOG Amplifier 3 Lead with USB BIOWAVE
04.	BM2526S	EOG Simulators
05.	BM2527	EOG Simulator with light simulator

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



EMG Amplifier 3 Lead with Audio

- Bipolar Real Time EMG Amplifier 3 Lead with Audio Trainer
- Real time EMG wave measurement, Unipolar & Bi-polar Mode Disc Electrodes with Velcro & Disposable Electrodes, EMG & Self Test Mode, Gain & Test adjustable. DSO output through 4mm sockets Audio output CW 1wat ±., Test point on the top of instrument 2mm Sockets

Study on EMG Amplifier

Study of electric potentials generated by the muscles, muscle activity, Nerve Conduction Velocity, Muscle feedback, Muscle strength & signal processing Placement of Electrodes, Amplification, Filters, Gain, Self test, Voltage & Frequency responses & etc
Power Supply 230 V, 50Hz. Dimensions 305 X100 X 250 mm±

Other Models

SN.	Order Code	Name of Item
01.	BM2131P	EMG Amp. 3 Lead with Audio Portable
02.	BM2531	EMG Simulator 3 Lead
03.	BM2132	EMG Amp. 3 Lead with Simulator
04.	BM2133	EMG Amp. 3 Lead with Stimulator
05.	BM2134	EMG Biofeedback 3 Lead
06.	BM2135	EMG Amp. with USB + Software
07.	BM2136	EMG Amp. 2 channel
08.	BM2137	EMG 3,4 ----- Amplifiers (Channels)
09.	BM2138	EGG Amp. 3 Lead with Audio

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



EMG Amplifier 3 Lead with Simulator

- Bipolar Real Time EMG Amplifier 3 Lead with Audio & Simulator Trainer Kit
- Real time EMG wave measurement, Unipolar & Bi-polar Mode
- Disc Electrodes with Velcro & Disposable Electrodes,
- EMG & Self Test Mode, Gain & Test adjustable. DSO output through 4mm sockets
- Audio output CW 1wat \pm , Test point on the top of instrument 2mm Sockets

Simulator

- Differential 3 Led as Active, References & Common (Ground). Adjustable Conduction i.e.
- Voltage & Time Response i.e. Frequency. Universal output Sockets, Multiple Pattern by
- Adjustment of Voltage & Frequency.

Study on EMG Amplifier

Study of electric potentials generated by the muscles, muscle activity, Nerve Conduction Velocity, Muscle feedback, Muscle strength & signal processing Placement of Electrodes, Amplification, Filters, Gain, Self test, Voltage & Frequency responses, Simulator & etc
Power Supply 230 V, 50Hz. Dimensions 305 X100 X 250 mm \pm

Other Models

SN.	Order Code	Name of Item
01.	BM2131	EMG Amp. 3 Lead with Audio
02.	BM2132-USB	EMG Amp. 3 Lead with Simulator
03.	BM2133	EMG Amp. 3 Lead with Stimulator
04.	BM2134	EMG Biofeedback 3 Lead
05.	BM2135	EMG Amp. with USB + Software
06.	BM2136	EMG Amp. 2 channel
07.	BM2137	EMG 3,4 ----- Amplifiers (Channels)
08.	BM2138	EGG Amp. 3 Lead with Audio

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



EMG Amplifier 3 Lead with Stimulator

- Bipolar Real Time EMG Amplifier 3 Lead with Stimulator Trainer Kit
- Disc Electrodes with Velcro & Disposable Electrodes,
- EMG & Self Test Mode, Gain & Test adjustable. DSO output through 4mm sockets
- Audio output CW 1wat \pm ., Test point on the top of instrument 2mm Sockets
- Power Supply 230 V, 50Hz. Dimensions 305 X100 X 250 mm \pm

Stimulator

- Intensity control & Duration Control. Output 4mm sockets, Conductive electrodes set of two. Stimulator Output 0 to 160 volts \pm , Pulse duration 0.1 mS & 0.3 mS \pm ,

Study on EMG Amplifier 3 Lead with Stimulator

Diagnose conditions Muscle disorders, muscular dystrophy. Connection between the nerve and the muscle. By electrical impulses how the muscles work. EMG measures the electrical activity of muscles both at rest and during contraction. Nerve conduction velocity studies & signal processing, Placement of Electrodes, Amplification, Filters, Gain, Self test, Voltage & Frequency responses & etc

Other Models

SN.	Order Code	Name of Item
01.	BM2131	EMG Amp. 3 Lead with Audio
02.	BM2532	EMG Simulator 3Lead
03.	BM2132	EMG Amp. 3 Lead with Simulator
04.	BM2133	EMG Amp. 3 Lead with Stimulator
05.	BM2134	EMG Biofeedback 3 Lead
06.	BM2135	EMG Amp. with USB + Software
07.	BM2136	EMG Amp. 2 channel
08.	BM2137	EMG 3,4 ----- Amplifiers (Channels)
09.	BM2138	EGG Amp. 3 Lead with Audio

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



EMG Biofeedback 3 Lead

- Bipolar Real Time EMG Biofeedback 3 Lead Trainer
- No of Channel One, Also available 2, 3, 4 ...8 Channels
- Biofeedback available with USB connectivity
- EMG & Self Test Mode, Gain, Threshold & Audio adjustable
- Indication Mode Dot-Dot, Bar-Dot, Dot-Bar, Bar-Bar
- Disc or disposable Electrodes with Velcro.DSO output through 4mm socket
- Audio output CW 1wat \pm . Test Point on Top of Instrument
- Power Supply 230 \pm 10%, 50Hz, Dimensions 305 X100 X 250 mm \pm

Study on EMG Biofeedback

Study of Muscle activity, Muscle Response, with & Without Stimulator Responses & signal processing, Placement of Electrodes, Amplification, Filters, Gain, Self test, Voltage & Frequency responses & etc

Other Models

SN.	Order Code	Name of Item
01.	BM2131	EMG Amp. 3 Lead with Audio
02.	BM2532	EMG Simulator 3Lead
03.	BM2132	EMG Amp. 3 Lead with Simulator
04.	BM2133	EMG Amp. 3 Lead with Stimulator
05.	BM2134	EMG Biofeedback 3 Lead
06.	BM2135	EMG Amp. with USB + Software
07.	BM2136	EMG Amp. 2 channel
08.	BM2137	EMG 3,4 ----- Amplifiers (Channels)
09.	BM2138	EGG Amp. 3 Lead with Audio

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



EMG Amplifier 3 Lead with Audio and USB output

- Bipolar Real Time EMG Amplifier 3 Lead with Audio and USB Trainer
- Real time EMG wave measurement, Unipolar & Bi-polar Mode
- Disc Electrodes with Velcro & Disposable Electrodes,
- EMG & Self-Test Mode, Gain & Test adjustable. USB & DSO output.
- Audio output CW 1wat \pm ., Test point on the top of instrument 2mm Sockets
- Power Supply 230 V, 50Hz. Dimensions 305 X100 X 250 mm \pm

Study on EMG Amplifier

Study of electric potentials generated by the muscles, muscle activity, Nerve Conduction Velocity, Muscle feedback, Muscle strength & signal processing Placement of Electrodes, Amplification, Filters, Gain, Self test, Voltage & Frequency responses & etc

BIOWAVE Software

Advance software for measurement of EMG single. It is with measurement of Voltage, Time & Frequency. Setting Voltage & Time, Save as, Open, Print, offset setting, etc. For advance study values in Excel.

Other Models

SN.	Order Code	Name of Item
01.	BM2131	EMG Amp. 3 Lead with Audio
02.	BM2532	EMG Simulator 3Lead
03.	BM2132	EMG Amp. 3 Lead with Simulator
04.	BM2133	EMG Amp. 3 Lead with Stimulator
05.	BM2134	EMG Biofeedback 3 Lead
06.	BM2135	EMG Amp. with USB + Software
07.	BM2136	EMG Amp. 2 channel

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



PCG Amplifier with 5 Filters

- Phonocardiogram Amplifier with 5 Filter Trainer Kit
- Real time amplified PCG output up to $15V_{pp} \pm$, PCG Transducer. Adjustable Gain & Adjustable Audio with Head Phone. Rotary switch to select 5 positions Filter.
- Filter Range $25Hz$ to $1400Hz \pm$, Heart beat indication. Output PCG through 4mm socket. Test points On the Top of Instrument Output through 2mm socket.
- Power Supply 230V, 50Hz. Dimensions $250 \times 75 \times 250 \text{ mm} \pm$

Study on PCG Amplifier

Study of phonocardiogram (or PCG) is a plot of high-fidelity recording of the sounds and murmurs made by the heart with the help of the machine PCG. Study of Heart Sound & Murmurs. Study of the condition of the heart. Study of Heart sound for analysis provides good information of these diseases- cardiovascular diseases. Study of rhythmic beating of heart. Study of a sound referred to as "Lub-Dub" . Study of the atrio-ventricular and the aortic-pulmonic valves

Other Models

SN.	Order Code	Name of Item
01.	BM2141-USB	PCG Amp. + 5 Filters & USB BIOWAVE

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



GSR Meter with Finger Electrodes Trainer

- Real time GSR. Operating Principal Conductivity
- Reusable Finger Disc Electrodes with Velcro.
- Measurements DC & AC level.
- Adjustable Balance Zero set Sensitivity & Gain.
- Visual Indication Analog Meter & LED for Pick Response.
- Two output I & II output with meter indication.
- Test point on top of instrument.
- Power Supply 230 V /50 Hz, Dimensions 300 X 100 X 300 mm±, Wight 1.2Kg±

Simulator

GSR Simulator to calibrate or to test GSR Meter. Output socket of simulator Button Female Type. Knob or selector switch to adjust or to set output.

Study on GSR Meter

Study of electrical properties of a skin i.e. GSR (Galvanic Skin Response). Galvanic Skin Response biofeedback. Instant change in skin & signal processing Placement of Electrodes, Amplification, Filters, Gain, Voltage & Frequency responses & etc

Other Models

SN.	Order Code	Name of Item
01.	BM2142-USB	GSR Meter with Finger Electrodes
02.	BM2145	GSR Meter with USB

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



Audiometer Educational Trainer

Audiometer Frequency selection in six positions 250, 500, 1000, 2000, 4000 & 8000 Hz \pm , Hearing loss in dB selection in steps -10 to 80dB \pm , Masking selection- No masking, Right & Left. Masking adjustable, Audible Visible Indications. Output EP for Head phone Right & Left, Patient response switch, Audio Output 4mm Sockets, Test point, Power Supply 230V 50Hz, Dimensions 250 X 300 X 100mm \pm

Study on Audiometer

Study of Audio frequency, dB responses, tests ability to hear sounds Study of Hearing Loss. Tests both the intensity and the tone of sounds, balance issues, and other issues related to the function of the inner ear, also measure ability to discriminate between different sound intensities, recognize pitch, or distinguish speech from background noise.

Other Models

SN.	Order Code	Name of Item
01.	BM2147	Audiometer with Microcontroller
02.	BM2148	Audiometer with USB

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



Transducer

Heart Rate Indicator LED

- Real Time Heart Rate Monitor, Finger Plethysmograph, LED Display 3 Digit.
- Optical Finger Transducer, Threshold adjustable. Output up to 5Vpp. Visible & Audible Indication. Real time wave measurement. DSO output through 4mm socket. Test point on the top of instrument through 2mm Socket. Power Supply 230 \pm 10%, 50Hz, Dimensions 250 X 75 X 250 mm \pm

Study on Heart Rate Indicator

Heart rate the number of heart beats per minute. Study of Heart Rate, Finger Optical transducer, signal processing, Placement of Electrodes, Amplification, Filters, Gain, Comparator, Frequency to Voltage Converter, Voltage & Frequency responses & etc.

Other Models

SN.	Order Code	Name of Item
01.	BM2151	Heat Rate Indicator LED
02.	BM2152	Heat Rate Indicator Microcontroller
03.	BM2153	Finger Plethysmograph
04.	BM2154	Peripheral Pulse Monitor
05.	BM2155	Pulse Oximeter

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



Heart Rate Indicator/Monitor using Microcontroller Trainer

- Real Time Finger Heart Rate Monitor, Finger Plethysmograph, Pulse Monitor.
- Monitor with using Microcontroller.
- LCD Display 16 X 2, Key Board 4x1 matrix
- Output Rate Pulse, PPG, HI, LO, Audio, Self Test.
- Optical Transducer, Threshold adjustable.
- Visible & Audible indication DSO output through 2mm socket.
- Test point on the top of instrument output through 2mm Socket.
- Power Supply 230 \pm 10%, 50Hz, Dimensions 260 X 75 X 200 mm \pm

Study on Heart Rate Indicator

Study of Microcontroller application for Heart Rate Measurement. Heart rate the number of heart beats per minute. Study of Heart Rate, Finger Optical transducer, signal processing, Placement of Electrodes, Amplification, Filters, Gain, Comparator, Pulse Measurement Technique, Voltage & Frequency responses, etc.

Other Models

SN.	Order Code	Name of Item
01.	BM2151	Heat Rate Indicator LED
02.	BM2152	Heat Rate Indicator Microcontroller
03.	BM2153	Finger Plethysmograph
04.	BM2154	Peripheral Pulse Monitor
05.	BM2155	Pulse Oximeter

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Optional PC connectivity

Note: Specifications are subject to change.



Respiration Rate Monitor Trainer

- Real Time Respiration Rate Monitor, Display 3 Digit, 7 Segment LED Display, Piezoelectric Transducer, Output up to $5V_{pp} \pm$, Real time wave measurement, DSO output through 4mm socket, Test point on the top of instrument.
- Power Supply $230 \pm 10\%$, 50Hz, Dimensions 250 X 75 X 250 mm \pm

Study on Respiration Rate Monitor

Respiration Rate the number of respiration beats per minute. Study of Rate, PZT transducer, signal processing, Placement of Transducer, Amplification, Filters, Gain, Comparator, Frequency to Voltage Converter, Voltage & Frequency responses & etc.

Other Models

SN.	Order Code	Name of Item
01.	BM2162	Respiration Rate LCD, Apnea Monitor
02.	BM2163	Respiration Rate with Simulator
03.	BM2164	Respiration Rate Simulator
04.	BM2165	Pressure Amplifier
05.	BM2166	Spiro meter / PFT
06.	BM2167	Ventilator
07.	BM2168	Nebulizer

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Optional PC connectivity

Note: Specifications are subject to change.



Respiration Rate Monitor using Microcontroller

- Respiration Rate Monitor Trainer using Microcontroller.
- Real Time Respiration Rate Monitor, LCD Display 16 X 2, Key Board 4x1 matrix. Piezoelectric Transducer, Output up to $5V_{pp} \pm$, Output Rate Pulse, Tachypnea and Apnea indicator, Self-Test. Set Apnea period & Indication. Real time wave measurement, DSO output through 4mm socket, Test point on the top of instrument.
- Power Supply 230/50Hz, Dimensions 250 X 75 X 250 mm \pm

Study on Respiration Rate Monitor

Respiration Rate the number of respiration beats per minute. Study of Respiration Rate, PZT transducer, Signal processing, Tachypnea & Apnea working, Placement Transducer, Amplification, Filters, Gain, Comparator, & etc.

Other Models

SN.	Order Code	Name of Item
01.	BM2161	Respiration Rate Meter LED
02.	BM2163	Respiration Rate with Simulator
03.	BM2164	Respiration Rate Simulator
04.	BM2165	Pressure Amplifier
05.	BM2166	Spiro meter / PFT
06.	BM2167	Ventilator
07.	BM2168	Nebulizer

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Optional PC connectivity

Note: Specifications are subject to change.



Real Time Pressure Measurement Trainer Kit

- Display 3 Digit, 7 Segment LED Display or LCD Display or
- Microcontroller with 16x2 LCD Display
- Air Pressure Transducer
- Output up to 4Vpp±
- Input from Mouth or Air Pump
- DSO output through 4mm socket
- Test point on the top of instrument
- Study & signal processing output for each Block
- Threshold & Output adjustable
- Power Supply 230 ±10%, 50Hz
- Dimensions 250 X 75 X 250 mm±

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Optional PC connectivity

Note: Specifications are subject to change.



Respiration Rate Monitor using Microcontroller

- Real Time ADC, 6 Channel USB Trainer Kit or
- 6 channel USB interfacing physiograph Trainer Kit
- 6 Analog Inputs through 3 pin connectors
- Amplified output to PC through USB
- Onscreen selection of Output, Select 1, 2, 3.... 6 signal at same time

Technical Specification:

- Number of Channels: 6 Channels, Configuration : Differential
- Voltage Measurement Range: $\pm 5V$ Full Scale
- Input impedance: $2 M\Omega$, differential, Isolation: none,
- Overall inaccuracy: $\pm 50mV$ (at $25^{\circ}C$)
- Minimum common mode rejection: 40db @ 50-60 Hz and @ $25^{\circ}C$
- Analog frequency response: -3db @ 10 KHz
- Power Supply No external power Supply
- Dimensions 250 X 75 X 250 mm \pm
- Scope of Study (Experiment):
- Study of Multiple Signals at a same time
- Measurement Voltage, Time, Frequency,
- Stop & Run Signal, Save, Open, Print & Study
- For depth study can be select on e signal.
- Change the colour, Mode, Digital Values, Excel, etc

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams & etc.

Note: Specifications are subject to change.



Multi-Para Monitor / Bio Amplifier / Physiograph / USB

- Real Time Physiograph / Multi -Para/ Bio -Amplifier, 3 Channel with USB
- Educational Trainer for ECG, EEG, EMG
- Amplified output to PC through USB & 2mm or 4mm socket output to DSO.
- Adjustable Gain output 0 to 5V \pm . Clamp Electrodes for ECG, Disc Reusable
- Electrodes for EEG & EMG with Velcro & one packet of Disposable Electrodes.
- Power Supply 230, 50Hz. Dimensions 250 X 75 X 250 mm \pm

Study on Multi-Para Monitor ECG, EEG, EMG

Study of ECG, EEG, EM G Study Signal Processing & Graph. Study of Responses of Subject. Study of Placement of Electrodes, etc

Software "BioWeave"

Signal Channel BioWave. Capture the signal & put on PC screen. Signal Store, Print, Open, Save As, Start, Close, Exit, Offset Setting. Set Voltage & Time. Voltage, Time & Frequency measurement. Signal Values in Excel. Multicolour Signal Wave, etc.

Other EMG Models

SN.	Order Code	Name of Item
01.	BM2171	Multipoint Amplifier (EMG)
02.	BM2172	Physiograph 6 Channel (without Amp.)
03.	BM2173-BW	Physiograph ECG, EEG, EMG (3Amplifiers)
04.	BM2174	Physiograph ECG, EEG, EMG, EOG + USB
05.	BM2175	Physiograph ECG/EEG/EMG/PCG/GSRUSB
06.	BM2176	Physiograph ECG/EEG/EOG/EMG/PCG/GSR/RRM/PMG/TEMP by Selection or 6
08.	BM2178	Patient Monitor ECG/SpO2/BP
09.	BM2179	Patient Monitor ECG/SpO2/BP/Temperature/Respiration Monitor

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



Respiration Rate Monitor using Microcontroller

- RMulti-Para Monitor / Physiograph / BioWave-USB
- Real Time Physiograph / Multi -Para/ Bio -Amplifier, 4 Channel with 1CH USB
- Output Educational Trainer for ECG, EEG, EMG, PCG
- Amplified output to PC through USB & 2mm or 4mm socket output to DSO.
- Adjustable Gain output 0 to 10±. Clamp Electrodes for ECG, Disc Reusable
- Electrodes for EEG & EMG with Velcro & one packet of Disposable Electrodes,
- PCG Transducer. Power Supply 230, 50Hz. Dimensions 250 X 75 X 250 mm±

Study on Multi-Para Monitor ECG, EEG, EMG, PCG

- Study of ECG, EEG, EM G, PCG. Study Signal Processing & Graph. Study of
- Responses of Subject. Study of Placement of Electrodes, etc
- Software SKRIP "BioWeave"
- Capture the signal & put on PC screen. Signal Store, Print, Open, Save As, Start,
- Close, Exit, Offset Setting. Set Voltage & Time. Voltage, Time & Frequency
- measurement. Signal Values in Excel. Multicolour Signal Wave, etc.

Other Physiograph Models

ECG/EEG/EMG/EOG/PCG/GSR/PPG/RRM/Temp/PSI/Etc

SN.	Order Code	Name of Item
01.	BM2171	Multipoint Amplifier (EMG)
02.	BM2172	Physiograph 6CH-USB-BioWave
03.	BM2173	Physiograph 3A-1CH-USB-BioWave
04.	BM2174	Physiograph 4A-1CH-USB
05.	BM2175	Physiograph 5A-1CH-USB-BioWave
06.	BM2176	Physiograph 6A-1CH-USB-BioWave
08.	BM2178	Patient Monitor ECG/SpO2/BP
09.	BM2179	Patient Monitor ECG/SpO2/BP/Temperature/Respiration Monitor

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



Student Physiograph with 6 Channel. **ECG/ EEG/EOG/EMG/PCG/GSR /RRM/PMG/TEMP** (any 6 or 9 by Switch). This is PC interfacing with test point on the top of instrument for each Signal output.

Features

Indigenous Digital Student Physiograph. It is Compact light weight and easy to operate by a beginner. On screen 6 channels select. By external switching can be set up to Input 9 Signal. Unit having PC Interfacing's USB output. Online recording data. Off line Data Read, Measurement Voltage, Time & Frequency. "BioWave" software for PC. Signal Select, Print, Open, Save As, Start, Close, Exit, Offset Setting, Multicolour Signal Wave,

Couplers

No couplers, Direct connect electrodes or transducer to instrument through 5 Pin & EP Pin. Inbuilt all amplifier with inbuilt power supply. Operating Voltage 230V/50Hz. Each signal has test point on top of Instrument to connect output to DSO & USB.

Transducers

Select Transducer Heart Pulse, Respiration, PCG, Blood Pressure, Pressure, Temperature-PT100 and Strain-gauge.

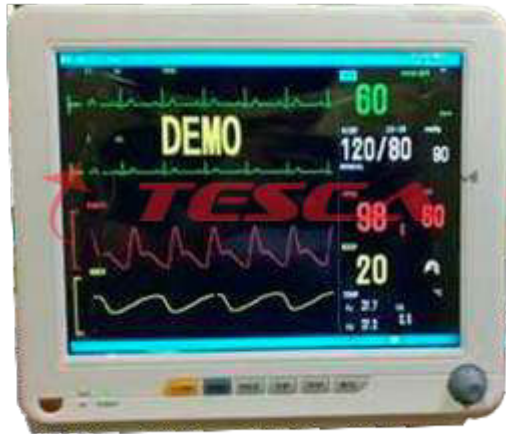
Electrodes

ECG, EEG, EMG,

Accessories

Disposable - 50 no's Electrodes box- 2 no, ECG jelly - 1 bottle, Connecting Wires, Mains Cord, Operating Manual, etc.

Note: Specifications are subject to change.



Order Code: Name of Item

- BM2178** : Patient Monitor ECG/SpO2/BP Patient Monitor
- BM2179** : ECG/SpO2/BP/Remp./Respiration Monitor

Product Details:

We are offering high quality "Multi Parameter Monitor" 12 inch Five Standard parameters: ECG, RESP, NIBP, SPO2, TEMP, PR/HR

Technical specification:

ECG:

Lead Mode: 5 Leads (R, L, F, N, C or RA, LA, LL, RL, V) Lead selection: I, II, III, avR, avL, avF, V, Waveform: 2 ch Lead mode: 3 Leads (R, L, F or RA, LA, LL) Lead selection: I, II, III, Waveform: 1 ch Gain: '2.5mm/mV, '5.0mm/mV, '10mm/mV, '20mm/mV, auto

HR and Alarm:

- Range Adult : 15 ~ 300 bpm
- Neo/Ped : 15 ~ 350 bpm
- Accuracy : ± 1% or ± 1bpm, which great
- Resolution : 1 bpm
- Sensitivity : >200 (uV P-P)
- Differential Input Impedance : >5 MΩ
- Monitor : >105 dB
- Operation : >105 dB
- Diagnosis : >85 dB
- Electrode offset potential : ±300mV
- Leakage Current : <10 uA
- Baseline Recovery : <3 S After Defi.
- ECG Signal Range : ±8 m V (Vp-p)
- Surgery : 1 ~ 15 Hz
- Monitor : 0.5 ~ 35 Hz
- Diagnostic : 0.05 ~ 100 Hz
- Calibration Signal : 1 (mV p-p), Accuracy : ±5%
- ST Segment Monitoring Range : Measure and Alarm -2.0 ~ +2.0 mV
- ARR Detecting
- Type : ASYSTOLE, VFIB/VTAC, COUPLET, BIGEMINY, TRIGEMINY, R ON T, VT>2, PVC, TACHY, BRADY,

Respiration:

- Method: Impedance between R-F (RA-LL)
- Differential Input Impedance: >2.5 MΩ
- Measuring Impedance Range: 0.3~5.0Ω
- Base line Impedance Range: 0~2.5 KΩ
- Bandwidth: 0.3~2.5 Hz
- Resp. Rate
- Measuring and Alarm Range
- Adult: 0 ~ 120 rpm
- Neo/Ped: 0 ~ 150 rpm
- Resolution: 1 rpm
- Accuracy : ±2 rpm
- Apean Alarm: 10 ~ 40 S

SpO2:

- Measuring Range: 0 ~ 100 %
- Alarm Range: 0 ~ 100
- Resolution: 1 %
- Accuracy : 70% ~ 100% ±2 %, 0% ~ 69% unspecified
- Actualization interval: about 1 Sec.
- Alarm Delay: 10 Sec

Pulse Rate:

- Measuring and Alarm Range: 20~300bpm
- Resolution: 1bpm
- Accuracy : ±2bpm

NIBP:

- Method: Oscillometric
- Mode: Manual, Auto, STAT
- Measuring Period in STAT Mode: 5 Min
- Pulse Rate Range: 40 ~ 240 bpm
- Alarm Type: SYS, DIA, MEAN
- Measuring and alarm range
- SYS: 40 ~ 270 mmHg
- DIA: 10 ~ 215 mmHg
- MEAN: 20 ~ 235 mmHg
- Pediatric Mode
- SYS: 40 ~ 200 mmHg
- DIA: 10 ~ 150 mmHg
- MEAN: 20 ~ 165 mmHg
- Neonatal Mode
- SYS: 40 ~ 135 mmHg
- DIA: 10 ~ 100 mmHg
- MEAN: 20 ~ 110 mmHg
- Resolution Pressure: 1mmHg
- Accuracy Pressure Maximum Mean error: ±5mmHg
- Maximum Standard deviation: ±8mmHg
- Adult Mode: 297±3 mmHg
- Pediatric Mode: 240±3 mmHg
- Neonatal Mode: 147±3 mmHg

Temperature:

- Channel: 2
- Measuring and Alarm Range: 0 ~ 50 °C
- Resolution: 0.1°C
- Accuracy : ±0.1°C
- Actualization interval: about 1 Sec.
- Average Time Constant : < 10 Sec.

Note: Specifications are subject to change.



Baby Incubator Trainer Kit

- Using microcontroller
- Two Sensor, Body & Canopy Temperature Sensor,
- Sensor PT 100, Heater 1000W±
- Temperature range 0 to 400C ±(Set)
- Key Set , UP, Down, Enter
- Indication High Low Indication
- 16x2 LCD Display
- Test point in the front panel of instrument
- Amplifier , Heater ON/ OFF, indication Output, etc
- Test Point- Output 2mm Socket
- Supply 230V/ 50Hz
- Dimension 600 X 300 x 500mm±

Standard Accessories

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual

Note: Specifications are subject to change.



Features

- Blood pressure measurement Trainer
- Oscillometric Measurement
- Real time BP measurement
- Pressure Range 20~280mmHg
- Pulse 40~180 Beats / Minute
- Sensor Semi Conductor
- Automatic Air Release Valve
- Arm Circumference Adult 24~36cm
- LCD Display
- Built in power Supply
- Test points AC & DC air pressure, Compressor, Valve, etc
- Dimensions 250 X 60 X 250 mm. +

Standard Accessories

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Optional PC Connectivity

Note: Specifications are subject to change.



BP Cal & Measurement

Blood pressure Calibration & measurement Trainer Kit
Real time BP measurement using Sphygmomanometer, Aneroid (Dial), Digital

Sphygmomanometer

Hg Scale 0 to 300mmHg, Mercury 99.99% Purity, lock & Release Valve

Aneroid (Dial)

Hg Scale 0 to 300mmHg, Valve lock & Release Valve

Digital

Oscillometric Measurement,
Pressure Range 20~280mmHg, Pulse 40~180 Beats/Minute,
Sensor Semi Conductor, Automatic Air Release Valve
Arm Circumference Adult 24~36cm, LCD Display
Built in power Supply, 230 Volt, 50Hz. Dimensions 250 X 60 X 250 mm. +
Standard Accessories

Study on BP Cal & Measurement

Study of BP Measurement using different technique. Study of Sphygmomanometer, Aneroid (Dial), Digital Bp Apparatus. Comparer the pressure sensitivity, Readings, Stability, Accuracy. Effect of applied pressure on B lood Flow. Etc

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



Blood Flow Measurement Ultrasonic

- Ultrasonic Blood Flow Measurement Trainer Kit
- Real Time Measurement, Operating Frequency 8 MHz,
- Transducer Piezoelectric Doppler Type, Audio & visible indication
- Control Audio & Output Control, Output audio Head Phone & speaker
- DSO output 4mm Socket. Test point on Top of Instruments through 2mm socket.,
- Power Supply 230V / 50Hz, Dimension 250 x 75 x 250 mm
- Standard Accessories

Study on Blood Flow

Ultrasound is a non-invasive test. Study of Transducer & Placement of Transducer. Blood fluid frequency shift, which is used to measure velocity. Frequency shift Doppler Effect. Detect abnormal flow within an artery or blood vessel. & Study of signal processing, Voltage & Frequency Measurement, Study Blood vessel & etc

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list.

Note: Specifications are subject to change.



Blood Cell Counter

- Blood Cell Counter Demonstration Type Trainer Kit
- Operating on the principal of conductivity. Conductive Electrodes.
- Dummy Blood Cell Samples. Display shows the blood dummy parameters White
- Blood Cell, Red Blood Cell, Haemoglobin, PCV, MCV, MCH, Mean Cell
- MCHC, RCDW (Simulated ratings). Vacuum Pump 25 ml±
- Threshold control for Trigger the samples. Barker, Test Tube, BNC or EP Socket
- for Electrodes, Vacuum Socket. Indication Zero position, start Wait, End process
- LCD Display, Set, Rest, UP, Start Key Board. Audio & Visible Indications.
- Test Point, Power Supply 230V, 50 Hz, Dimension 375X125X250mm±

Study on Blood Cell Counter

Study of Blood Cell Counter technique. Study of Conductive Electrodes. Working Principal of Conductivity. Suction process, Study of Different Parameters, ratings. & signal processing Amplification, Filters, Gain, & etc

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list.

Note: Specifications are subject to change.



Solid State Electro Cautery Trainer

Modes Monopolar & Bipolar, Cut, Coug. Bicoug, Operating frequency $<350\text{ KHz.}\pm$ Output power 250 Watt \pm / 500 Watt \pm . Controls Output power Cut / Coug., Bicoug., Unipolar, Bipolar, Pure Blend, Audio, foot switch. Electrodes Monopolar, Bipolar and Patient plate. Output socket 4 mm for CUT / COUG, Bicoug, Patient plate, Pencil Switch & jack for Foot switch. Alarm Patient Plate open Audible and Visible alarm, Audio & Visible indication for Cut, Coug. Bicoug. Accessories Patent Plate, Unipolar & Bipolar Electrodes, Handle, Set of Electrodes, Foot switch, Pencil Switch. Test point on the top of instrument through 2mm socket Supply 230V/ 50Hz, Dimensions 375 X 150 X 300 mm \pm

Study on Solid State Electro Cautery

Study of Solid State Electro Cautery Machine. Study of Principal & Operating Procedure. Study of Electrodes, Monopolar & Bipolar, Pencil Switch, Foot Switch, etc. Study of different Modes & application of each Modes. Difference between bipolar and monopolar techniques.

Other EMG Models

SN.	Order Code	Name of Item
01.	BM2251	Ophthalmic Solid State Electro Cautery
02.	BM2253	Surgical Analyzer

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



Short Wave Diathermy

Diathermy uses high-frequency electric current to produce heat deep inside a targeted tissue. The diathermy machine does not apply heat directly to the body. Instead, the waves generated by the machine allow the body to generate heat from within the targeted tissue.

Operating Frequency 27.12 MHz & Wave Length 11.062 Meters.

Maximum Power Output 300 W. Output Mode Continuous.

Mechanical Timer 0 to 30 Minutes.

Power Supply 230 \pm 10%, 50Hz, Dimensions 250 X 250 X 250 mm \pm

Study on Short Wave Diathermy

Heat generation through short wave diathermy. Study of molecular activity within the tissue exposed. Differential heating is noted within bone, muscle and fat. Heat stimulation to superficial nerve endings. How increases blood flow through the heating area, so that the necessary oxygen and nutritive materials are supplied and waste products are removed.

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



Long Wave Diathermy

Long Wave Diathermy treatment is based on Capacitor Field. It uses 1 MHz Alternating Current Frequency. Long wave improves circulation, reduces pain and improves Mobility. Long wave gives penetration up to 4 cm. It uses a high frequency electric current to stimulate heat generation within body tissues. The heat can help with various processes, including: increasing blood flow.

Technical Specification

Power Supply- 230 Volt, 50Hz. Power Output-Cont. 25 Watts, Frequency-1 MHz, Display-LCD or LED, Digital Timer 0 to 99 Minute, Mode-Cont, Pulse, 0.5s, 1s, 1/2, 2/1s. Output Control-0 to 25 Watts, Pads-Conductive Rubber & SS or Bras, Model-SKRIP-LWD-1MHz. Dimension- 260 X 230 X 75 mm±.

Study on Long Wave Diathermy

Study of Operation Principal of Long Wave Diathermy machine. Study of effect on Body of Diathermy. Study advantages & disadvantages of Long Wave Diathermy & other Physiotherapy Machine. Study of placement of Electrodes.

Other Models of Physiotherapy

01. Short Wave Diathermy
02. Long Wave Therapy
03. TNS
04. Nerve & Muscle Stimulator
05. Balladeer Stimulator
06. Ultrasonic Therapy 1MHz
07. Ultrasonic Therapy 1 & 3 MHz
08. IR/RED/BLUE/ IR-RED Therapy
09. IFT

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list, etc.

Note: Specifications are subject to change.



TENS-2CH, 4CH, Pocket

TENS is transcutaneous electrical nerve stimulation. TENS units work as delivering small electrical impulses through electrodes to a Person's Body Skin. These electrical impulses flow in the nervous system, reducing pain.

Technical Specification

TENS is Microcomputer controlled, sophisticated tens. Model 2CH, 4CH & Pocket. Different frequency with control 2-40-80-130Hz. For Different treatment program Normal, Burst, Sweep, PWM. Digital timer for selection of treatment period. Technical specification depends on Model. Power Supply 230/50Hz, Battery for Pocket.

Study on TENS

Study of TENS operating. Study effect of TENS on Body. Study of Different frequency & its effect. Study of output signal. Study of Placements of Electrodes. Study of different models & it's applications. Study & analysis of effect of stimulation.

Other Models of Physiotherapy

01. Short Wave Diathermy
02. Long Wave Therapy
03. TNS
04. Nerve & Muscle Stimulator
05. Balladeer Stimulator
06. Ultrasonic Therapy 1MHz
07. Ultrasonic Therapy 1 & 3 MHz
08. IR/RED/BLUE/ IR-RED Therapy
09. IFT

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



Nerve & Muscle Stimulator

This Physiotherapy Instrument. Stimulate muscle.

Nerve & Muscle Stimulator Educational Trainer

Mode two Galvanic & Faradic, Pulse Duration selection 1 & 100ms \pm , Intensity 0 to 130 \pm Volts for Galvanic, 0 to 40 \pm Volts for Faradic, Indication Mode & Pulse Indication. Electrodes Conductive Rubber or Hand Electrodes, DSO Output 4mm Socket. Real time wave measurement. Test point on the top of instrument through 2mm Socket. Power Supply 230, 50Hz, and Dimensions 250 X 75 X 250 mm \pm .

Study on Nerve & Muscle Stimulator

Study of Normal Activity & after Stimulation activity of Muscle. Study of Intensive Galvanic (IG) & Search Faradic (SF) Signal. Study of Signal Duration & Effect on object. Study of Muscle activity using EMG & Stimulator. Study of Block Diagram. Study Signal Generation & Its effect, etc

Other Models of Physiotherapy

01. Short Wave Diathermy
02. Long Wave Therapy
03. TNS
04. Nerve & Muscle Stimulator
05. Balladeer Stimulator
06. Ultrasonic Therapy 1MHz
07. Ultrasonic Therapy 1 & 3 MHz
08. IR/RED/BLUE/ IR-RED Therapy
09. IFT

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



Ultrasonic Therapy 1MHz & 3 MHz

Therapeutic ultrasound is a treatment modality commonly used in physical therapy. It is used to provide deep heating to soft tissues in the body. These tissues include muscles, tendons, joints, and ligaments.

Technical Specification

Digital or Microprocessor based digital model. Digital treatment timer. Timer 0 to 15 Minutes. Select the Mode Pulse & Continuous. LCD/Digital Display. Key for Select the parameters. Operating Frequency 1MHz & 3 MHz, Continuous 15 Watts \pm / cm², Pulse 21 Watts \pm /cm². Power Supply 230, 50Hz. Dimensions 250 X 250 X 250 mm \pm .

Other Models of Physiotherapy

01. Short Wave Diathermy
02. Long Wave Therapy
03. TNS
04. Nerve & Muscle Stimulator
05. Balladeer Stimulator
06. Ultrasonic Therapy 1MHz
07. Ultrasonic Therapy 1 & 3 MHz
08. IR/RED/BBLUE/ IR-RED Therapy
09. IFT

Study on Ultrasonic Therapy

Ultrasound is often used to provide deep heating to soft tissue structures in the body. Deep heating tendons, muscles or ligaments increase circulation to those tissues, which is thought to help the healing process. Increasing tissue temperature with ultrasound is also used to help decrease pain.

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



IFT or Interference Therapy or IF- MF (Interference - Medium frequency).

Two medium frequency currents are applied to the skin in such a way that they "interfere" with each other to produce a "beat" frequency. This beat frequency is the difference between the medium frequency currents.

Technical Specification

Some Technical Specification: LCD Display. Feather Touch Switches. Carrier frequency-2KHz & 4KHz. Digital Timer: 0 to 99 Min. Base & Sweep Frequency, Direct Beat Frequency-0 to 150 Hz, Spectrum - Rectangular 1/1 S, Trapezoidal 1/5 S, Linear 6/6 Sec, etc. Therapy Modes-4 Pole Interferential, 4 Pole Vector, 2 Pole Modulated. Intensity control-0-50 mA adjustable, Intensity Balance. Power Supply-230V/ 50 Hz.

Study on IFT or Interference Therapy

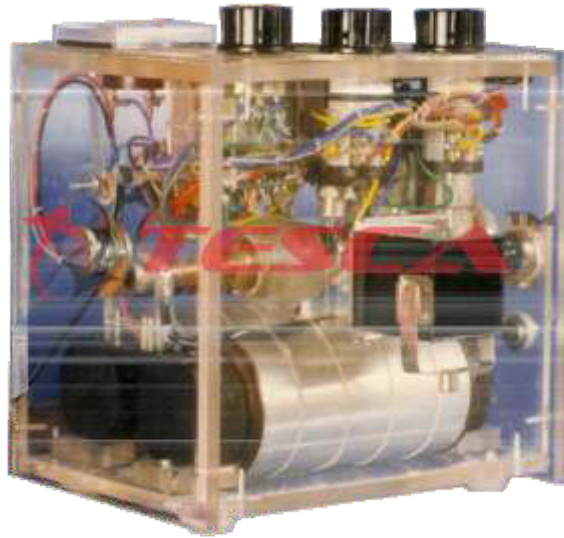
Study of basic principle of Interferential Therapy. Study of what is physiological effects of low frequency electrical stimulation of nerves. Study of effect of IFT & other Therapeutic instruments, as TENS and IFT. How currents to stimulate tissue which provides pain relief, reduction of swelling and many other health benefits

Other Modes of Physiotherapy Instruments

SN.	Order Code	Name of Item
01	BM2301	Short Wave Diathermy
02	BM2305	Long Wave Therapy
03	BM2311	TNS 2CH, 4CH, Pocket
04	BM2321	Nerve And Muscle Stimulator 1to 4CH. Mini
05	BM2328	Balladeer Stimulator
06	BM2331	Ultrasonic Therapy 1MHz, 1&3 MHz
07	BM2342	Interference Therapy microcontroller
08	BM2351	IR/RED/BLUE/ IR-RED Therapy 500mW

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



X-RAY system DEMO UNIT

Description

Portable 30mA mobile demo X-Ray Machine Complete , Demo X-ray Generator

Specification

Power supply-230 V / 50Hz, 5 Amp, X-RAY System-Demonstration
X-RAY Generation-Simulation, using dummy X-RAY tube.
X-RAY tube - Dummy tube with visible radiations to simulate X-RAY.

Controls

- MA and KVP, Timer. Volts-comp. ,
- Exposure - DUMMY.
- Timer - 0.06 to 6 Seconds
- MA output - 20 MA Simulated.
- KVP output-65 / 100 KVP simulated.
- Beam-Full field beam collimator.

Note: Specifications are subject to change.



Vibrosense

Diabetic Vibrosense Educational Trainer

Microcontroller based system, LCD Display 16X2, Time Duration control 0 to 15 minutes, Intensity 0 to 50V±, Key Board for setting time-Set, UP, Down, Enter & Start Keys, Indication LED Bar & Buzzer, Transducer with Switch (Hold Switch) & Indication. DSO Output 2mm Socket, Test point on the top of instrument.

Power Supply 230 ±10%, 50Hz, Dimensions 2276 X 83 X 200 mm±

Study on Verbosene

Study of Placement of Transducer. Measuring the electrical activity generated by the Transducer. Study of Human Body Vibration sensitivity. Study of Diabetic Patient & Normal Person. Study of Sensitivity of Human Body.

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Optional PC connectivity

Note: Specifications are subject to change.



ECG Arrhythmias Simulator 12 Lead 4A

12 Leads 4 Arrhythmias

Application

Testing & Calibration of any Make ECG Recorder, Monitor, Defibrillator, Amplifier & ECG Related any Machine. It can be use for Electrodes wire testing of ECG Machine. Etc

Advantages

Directly connect to any machine, No need any external Connection, No need Calibration, Portable, Single Button Use. Anyone can Use. No need training. Better for Hospital, Repairing Center, Manufacturer, Testing & Calibration Lab.etc

Technical Specifications

Compact & Portable.12 Lead 4 Arrhythmia - Bradycardia 30, Normal 60, 100, Tachycardia 120. Standard PQRST Waveform, Feather Touch Arrhythmias selection, LED indicates for each Arrhythmia. 10 Leads- RA, LA, RL, LL, & V1-V6 with Universal Sockets.1V±output through 2mm socket for DSO & other application. Operating Voltage DC Voltage 12V adaptor. Optional PC connectivity

Other ECG Simulator Models

SN.	Order Code	Name of Item
01.	BM2501	ECG Simulator Portable12L.4A
02.	BM2502	ECG Simulator Table Model
03.	BM2503	ECG Arrhythmias Simulator 12L,15A

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, & etc.

Note: Specifications are subject to change.



12 Lead Arrhythmia ECG Simulator
Table Model

Technical Specification:

12 Lead with 15 Arrhythmias
Feather Touch Arrhythmias selection
With & Without Display,
Display 16X2 LCD Display,
Leads- RA, LA, RL, LL, & V1-V6
1V \pm output through EP socket
USB Output socket for PC connect

15 Arrhythmias –

Normal 60, 90, Bradycardia, Tachycardia, Ventricular Tachycardia, Atrial Fibrillation, Pacid Arrhythmia, Missed Beat, Fusin Beat, R on T, Ventricular Fibrillation, Asystol, Pulse, etc

Universal Output Sockets for Button & 4mm Pin
Standard output PQRST Waveform,
Output for testing ECG amplifier, Recorder, Monitor, etc
No need to adjust output Voltage.
Directly connect any manufacture machine to this simulator
No extra wire or connecter required

Operating Voltage DC Voltage 12V

Note: Specifications are subject to change.



ECG Arrhythmias Simulator 12 Lead 15A

12 Lead 15 Arrhythmia Simulator.

Application

Testing & Calibration of any Make ECG Recorder, Monitor, Defibrillator, Amplifier & ECG Related any Machine. It can be use for Electrodes wire testing of ECG Machine. Etc

Advantages

LCD Display indicates arrhythmia Name. Directly connect to any machine, No need any external Connection, No need Calibration, Portable, Single Button Use. Anyone can Use. No need training. Better for Hospital, Repairing Center, Manufacturer, Testing & Calibration Lab.etc

Technical Specifications

Compact & Portable.12 Lead 15 Arrhythmia - Normal 60, 90, Bradycardia, Tachycardia, Ventricular Tachycardia, Atrial Fibrillation, Pacid Arrhythmia, Heart Block, Bigminy, Missed Beat, Fusin Beat, R on T, Ventricular Fibrillation, Asystol, Pulse, etc . Standard PQRST Waveform, Feather Touch Arrhythmias selection, Display 16X2 LCD Display, Display LCD indicates name of Arrhythmias.

10 Leads- RA, LA, RL, LL, & V1-V6 with Universal Sockets.1V±output through 2mm socket for DSO & other application. Operating Voltage DC Voltage 12V adaptor. Optional PC connectivity

Other ECG Simulator Models

SN.	Orde Code	Name of Item
01.	BM2501	ECG Simulator Portable12L.4A
02.	BM2502	ECG Simulator Table Model
03.	BM2503	ECG Arrhythmias Simulator 12L, 15A

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, & etc.

Note: Specifications are subject to change.



EEG Simulator Trainer Kit

Testing & Calibration of EEG Machine, Study of Signal Patterns.
Normal rhythms, Adjustable rhythms,
Rhythms Selection, Delta (d), Theta (f), Alpha (a), Beta (b), Gamma (g),
Amplitude adjustable 0 to 10mV±,
Output Lead A, G & R, Differential Output
Output socket 2mm or 4mm or Button Type,
Output to amplifier, recorder or EEG monitor or DSO
Red, Blue & White light for Eyes activity
Power Supply 250V, 50Hz, Dimensions 250 X 75 X 250mm±

Other EMG Models

SN.	Order Code	Name of Item
01.	BM2121	EEG Amp. 3 Lead Electrodes
02.	BM2122	EEG Amp. 10-20 method Single 1Ch.
03.	BM2123	EEG Amp. 10-20 with Simulator 1Ch
04.	BM2124	EEG Amp. 10-20 with USB 1Ch
05.	BM2521	EEG Simulator

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list,

Note: Specifications are subject to change.



EMG Simulator 3 Lead

EMG Simulator 3 Lead Educational Trainer kit

Testing & Calibration of EMG related Instruments or System

Multiple Patterns gradation by Conduction (Voltage) & Frequency knob

Output 0 to 10mV, For Differential Output Button type Male connector &
For DSO 2mm Sockets Red & Black, Test point on the top of Instruments.

Power Supply 230 V, 50Hz. Dimensions 2505 X 75 X 250 mm±

Study on SKRIP EMG Simulator

Study of electric potentials generated by the Simulator use EMG Amplifier, also see
& Measure different pattern by setting Voltage & Frequency. Check Voltage &
Frequency responses of EMG Amplifier. Find the gain of each Block. Etc

Other EMG Models

SN.	Order Code	Name of Item
01.	BM2131	EMG Amp. 3 Lead with Audio
02.	BM2132	EMG Simulator 3Lead
03.	BM2132	EMG Amp. 3 Lead with Simulator
04.	BM2133	EMG Amp. 3 Lead with Stimulator
05.	BM2134	EMG Biofeedback 3 Lead
06.	BM2135	EMG Amp. with USB + Software
07.	BM2136	EMG Amp. 2 channel
08.	BM2137	EMG 3,4 ----- Amplifiers (Channels)
09.	BM2138	EGG Amp. 3 Lead with Audio

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc

Note: Specifications are subject to change.



Bio-signal Simulator

- Bio-signal Simulator with four Parameter
- Calibration & Testing of ECG, EEG, EMG Instruments. Pulse output for Heart Rate or Respiration.
- Select 3 Parameters or any one by Selector switch.
- Power Supply 230V, 50Hz, Dimensions 300X100X 250 mm±

ECG

- 5 Lead RA, LA, RL, LL, & V with Universal Output Sockets
- Standard PQRST Signal with output amplitude adjustable 0 to 5mV±.
- Rate 30 to 120BPM± Adjustable. Audible & Visible Indication

EEG

- Differential 3 Lead with d, f, a, b & g with Universal Output Sockets
- Differential Output A, R & G, Adjustable Amplitude 0 to 20mV±.
- Fix Frequency d, f, a, b & g

EMG

- Differential 3 Lead Output with Universal Output Sockets
- Differential Output A, R & G, Adjustable Amplitude 0 to 20mV±
- Frequency Adjustable 0 to 1KHz±

Pulse

- This is related with ECG setting. Pulse output with Universal Output Sockets
- Output Pulse 9V±, Rate 30 to 120BPM± Adjustable.

Study on Bio-signal Simulator

Using Bio signal Simulator Calibrates or Testing of Instruments ECG, EMG, E EG, Herat Rate, Respiration Rate, etc. Amplifier, Recorder, Monitor Etc

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



Defibrillator Using Microcontroller

Defibrillator Using Microcontroller Trainer

This is Demo type instrument. Three is Instant and Sync Modes, Joules & Threshold Control. Low output Voltage. Output connects to DSO.

ECG Input sync pulse. Input EP stereo banana socket Indication Armed, Sync & Inst, Charging & discharging with audio indications 16x2 LCD Display, Set, Up, Down, Enter Key. Charge Key Up & Down Output EP stereo & 4mm Socket, 100mm Paddle Disc electrodes with switch Test point in the front panel of instrument through 2mm socket.

Supply 230V/ 50Hz, Dimension 150 X 150 x 250mm±, Standard Accessories

Study on Defibrillator

Study of Defibrillation technique. How to use in emergency. Study of an electrical shock to reset the electrical state of the heart so beat to a rhythm controlled by its own natural cells. Study of Different Block & output at test point. Study of Sync & Instant Mode. Measurement of Output Voltage. Study the Defibrillator Using Defibrillator Simulator actually working of Sync & Instant Mode. Etc

Other Models

SN.	Order Code	Name of Item
01.	BM2601	D.C. Defibrillator
02.	BM2602	D.C. Defibrillator using Microcontroller
03.	BM2603	D.C. Defibrillator with Simulator
04.	BM2604	D. C. Defibrillator Simulator

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list,

Note: Specifications are subject to change.



Defibrillator Using Microcontroller with Simulator

Defibrillator Using Microcontroller with Simulator Trainer Kit

This is Demo type instrument. Three is Instant and Sync Modes, Joules & Threshold Control. Low output Voltage. Output connects to DSO.

ECG Input sync pulse. Input EP stereo banana socket

Indication Armed, Sync & Inst, Charging & discharging with audio indications

16x2 LCD Display, Set, Up, Down, Enter Key. Charge Key Up & Down

Output EP stereo & 4mm Socket, 100mm Paddle Disc electrodes with switch

Test point in the front panel of instrument through 2mm socket.

Supply 230V/ 50Hz, Dimension 150 X 150 x 250mm±, Standard Accessories

Defibrillator Simulator

ECG 3 Lead Output, 4 ECG arrhythmia, Section Button, Sync Output, Input Test Paddle 25mm Disc.

Study on Defibrillator

Study of Defibrillation technique. How to use in emergency. Study of an electrical shock to reset the electrical state of the heart so beat to a rhythm controlled by its own natural cells. Study of Different Block & output at test point. Study of Sync & Instant Mode. Measurement of Output Voltage. Study the Defibrillator Using Defibrillator Simulator actually working of Sync & Instant Mode. Etc

Other Models

SN.	Order Code	Name of Item
01.	BM2601	D.C. Defibrillator
02.	BM2602	D.C. Defibrillator using Microcontroller
03.	BM2603	D.C. Defibrillator With Simulator
04.	BM2604	D. C. Defibrillator Simulator

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list,

Note: Specifications are subject to change.



Defibrillator Simulator Demo Type trainer Kit

Simulator

- Work as dummy Patient
- Output ECG 0 to 10mV \pm Adjustable, Pulse 9V \pm
- ECG Output RA, LA, RL
- Output to ECG amplifier
- Normal & three rhythms, Adjustable Threshold
- Rhythms Indication,
- Input From Defibrillator
- 2mm socket Red (RA), Green (LA), Black (RL) for ECG,
- Red & Black Pulse output to DSO
- EP socket this SYNC input to Defibrillator
- Dimensions 250 X 75 X 250mm \pm

Standard Accessories

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list

Note: Specifications are subject to change.



Int.- Ext. Pacemaker

Internal – External Pacemaker Demo. Type Trainer

Internal – External Pacemaker is External dives to Stimulate Heart.

Two Mode Fixed Mode and Demand Modes. Toggle switch for to select the mode. Rate Control knob to adjust Heart Rate Pulse Rate 30 to 150 BPM \pm . Positive Pulse Duration of Pulse wave 2mS. \pm (Fix or Adjustable), Out Put Intensity 0 to 9V Adjustable. Input ECG sync pulse 9V \pm . Disc electrodes. Audible & Visible Indication for each Pulse. Test points on the Top of Instrument through 2mm Socket. Power supply 230V, 50Hz. Dimensions 250 X 75 X 250 mm \pm

Study on Int.- Ext. Pacemaker

Study of Pacemaker working. Study & need of Mode Internal External. Study of Placement of Electrodes. Study of Demand & Fixed Mode. Study of Signal Processing, working of each Block & Etc

Other Models of Pacemaker

- | | | |
|-----|--------|--|
| 01. | BM2611 | Implantable Pacemaker |
| 02. | BM2612 | INT-Ext. Pacemaker |
| 03. | BM2613 | Pacemaker with Simulator |
| 04. | BM2614 | Pacemaker Simulator |
| 05. | BM2615 | Pacemaker with Simulator Microcontroller |

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Optional PC connectivity

Note: Specifications are subject to change.

13.11.2022 **Tesca Technologies Pvt. Ltd.**

IT-2013, Ramchandrapura Industrial Area, Sitapura Extension,
Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India,
Tel: +91-9829132777; Email: info@tesca.in, tesca.technologies@gmail.com
Website: www.tescaglobal.com



Pacemaker with Simulator

Internal – External Pacemaker Demo. Type Trainer

Internal – External Pacemaker is External dives to Stimulate Heart.

Two Mode Fixed Mode and Demand Modes. Rate Control knob to adjust Heart Rate Pulse Rate 30 to 150 BPM±. Positive Pulse Duration of Pulse wave 2mS.± Out Put Intensity 0 to 9V Adjustable. Input ECG sync pulse 9V±. Disc electrodes. Audible & Visible Indication. Test points on the Top of Instrument through 2mm Socket. Power supply 230V,50Hz. Dimensions 250X7 X250 mm±

Pacemaker Simulator

Pacemaker Simulator act as Subject for Pacemaker. It is with Adjustable Heart Rate 30 to 120BPM±. ECG output PQRST 5mV± with 4mm Socket. Heart Pulse i.e. Input as Sync to Pacemaker. Different arrhythmia A V Block, Bradycardia & Tachycardia. Adjustable Rate, rhythms & Threshold for Pacemaker Output as a Load or Subject. Simulation of Heart pulse on the top of Instrument.

Study on Int.- Ext. Pacemaker& Simulator

Study of Pacemaker working. Study & need of Mode Internal External. Study of Placement of Electrodes. Study of Demand & Fixed Mode using Simulator. Study of Simulator. Study of Signal Processing, working of each Block & Etc

Other Models

SN.	Order Code	Name of Item
01.	BM2611	Implantable Pacemaker
02.	BM2612	INT-Ext. Pacemaker
03.	BM2613	Pacemaker with Simulator
04.	BM2614	Pacemaker Simulator
05.	BM2615	Pacemaker with Simulator Microcontroller

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Optional PC connectivity

Note: Specifications are subject to change.



Pacemaker Simulator

Pacemaker Simulator Trainer Kit

Dummy Patient for testing & Calibration of Pacemaker. Simulated arrhythmia select by press switch. PQRST output, Pulse Rate adjustable 40 to 120 BPM \pm , Output Voltage adjustable 0 to 9V \pm , ECG Output 10mV \pm , Pulse Output 0 to 9V \pm Indication Pace Pulse, Sync, Arrhythmia AV Block, Bradycardia, Tachycardia, Adjustable Threshold for Pacemaker Input & to Indication of Power to Patient. Power Supply 23V, 50Hz, Dimensions 250 X 75 X 250mm \pm

Study on Pacemaker Simulator

Study of Signal pattern of Patients AV Block, Bradycardia, Tachycardia, Study Dummy Heart. Testing & Calibration of Pacemaker using Simulator. Study of Demand & Sync Mode, Etc.

Other Models

SN.	Order Code	Name of Item
01.	BM2611	Implantable Pacemaker
02.	BM2612	INT-Ext. Pacemaker
03.	BM2613	Pacemaker with Simulator
04.	BM2614	Pacemaker Simulator
05.	BM2615	Pacemaker with Simulator Microcontroller

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list

Note: Specifications are subject to change.



Medical Telemetry Pulse Signal Heart Rate / Respiration Rate Monitor

Real Time data transfer & Receive. FM Transmutation. Transmitting Range ± 2 to 3 Meter without obstacle.

Display LCD 16 X2, High, Low Setting, Key Board- Set, UP, Down, Enter Keys Output-HRI/RRM Signal pulse. Threshold & Signal Adjustment for Both unit Transmitter & Receiver. Indication Heart or Respiration Rate, High, Low & etc.

Input Self Test, Heart or Respiration & External Custom Pulse Voltage level of 3 to 5 Volt Pulse (No DC supply). Transducer for Heart rate Optical Transducer 7 For Respiration Piezoelectric. Test point on the top of instrument through 2mm Socket, Power Supply 230 , 50Hz. Dimensions 250 X 75 X 250 mm \pm

Study on Medical Telemetry

Study of Transmitter & Receiver, Study of Effect of Range, Study of Transducer, Study of Signal Processing, Filter, Amplifier, Microcontroller, etc

Other Models

SN.	Order Code	Name of Item
01.	BM2621	Medical Telemetry Pulse Signal HRI / RRM
02.	BM2622	Medical Telemetry Analog Signal ECG
03.	BM2623	Medical Telemetry 2, 3, 4 Channel Analog & Pulse

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Optional PC connectivity

Note: Specifications are subject to change.



Transmitter



Receiver

Medical Telemetry Analog Signal ECG

Real Time data transfer & Receive. FM Transmutation. Transmitting Range ± 2 to 3 Meter without obstacle.

ECG Input Signal from object or Simulator. Output - ECG PQRST Output, Output Adjustable 0 to $5V \pm$, ECG & QRS pulse. Threshold & Signal Adjustment for Both unit Transmitter & Receiver. Indication Signal, Pulse & etc. Input Self Test, ECG & External Custom Analog Signal (optional) Voltage level of 3 to 5 Volt & Frequency 20 to 40 Hz (No DC Input). Audible & Visible indications. Electrodes ECG Clamp Electrodes set of 3.

Test point on the top of instrument through 2mm Socket, Power Supply 230 , 50Hz. Dimensions 250 X 75 X 250 mm \pm

Study on Medical Telemetry

Study of Transmitter & Receiver, Study of Effect of Range, Study of Transducer, Study of Signal Processing, Instrumentation Amplifier, Filter High Pass & Low Pass, Notch Filter Amplifier, etc

Other Models

SN.	Order Code	Name of Item
01.	BM2621	Medical Telemetry Pulse Signal HRI / RRM
02.	BM2622	Medical Telemetry Analog Signal ECG
03.	BM2623	Medical Telemetry 2, 3, 4 Channel Analog & Pulse

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Optional PC connectivity

Note: Specifications are subject to change.



Medical Patient Safety Measurement Trainer Kit
Four Parameter Measurements.

Insulation Resistance, Short, Open,
Frequency & Voltage responses test. Differential output Active, References, Ground.
Frequency & Voltage Adjustable.
DC Voltage & Current Measurement. Voltage- 0 to 30V±, Current 0 to 2A±
AC Voltage Measurement. AC Output For to test Instruments.
Power Supply 230 ±10%, 50Hz, Dimensions 380 X100 X 250 mm±

Study on Medical Patient Safety

Study of Safety Measurement, Testing of Transformer open, short. Electrodes Testing, Body Conductivity or Insulation Measurement with Mains Supply. Wire Testing. Frequency & Voltage Response of ECG, EEG, EMG Machine. Voltage & Current Measurements. & etc

Other Models

SN.	Order Code	Name of Item
01.	BM2631	Medical Patient Safety Measurement
02.	BM2632	Medical Patient Safety Test

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list & etc.

Note: Specifications are subject to change.



Hemodialysis Machine

Hemodialysis Machine with microcontroller based Demo. Type Trainer Kit

This kit with Dialyzer, Blood Tank, Heater, Parasitic Pump (Blood Pump), Dialysate Pump. Standard adult Dialyzer.1000ML two Blood Tank, Heater 250W 500ML with control & indication, Parasitic Pump (Blood Pump) with standard pipe set with speed control. Dialysate Pump with flow control.

This is Demonstration type unit with all accessories. Dummy Blood & Dialysate. Microcontroller based system with LCD Display 16X2, Key Board Set, UP, Down, Enter. Indication High & Low Indication Temperature & Blood Pump. Detector Blood Leak & Air bubble. Temperature Controller 0 to 400C using PT100 sensor.

Study on Hemodialysis Machine

Study of Hemodialysis Machine, Study kidney, Study of Blood pump, Measure the Maximum & Minimum Speed of Blood Pump with & without load. Study Flow Dialysate & Blood Flow. Study of Detectors, Temperature Sensor PT100, How the process of removing waste products and excess fluid from the body. Etc

The Instrument with

Dialyzer, Blood Tank -2, Heater, Parasitic Pump (Blood Pump), Dialysate Pump, Detector Bubble & Blood, Display Board, Pt100 Sensor, Pipe set-6, Micro-control unit & etc.

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting , Experiments list.

Note: Specifications are subject to change.



Heart Lung Machine

Heart Lung Machine is microcontroller based Demo. Type Trainer Kit Heart Lung (Cardiopulmonary) Bypass for Surgery. A cardiopulmonary bypass machine (CBM) is commonly known as a heart-lung bypass machine. It is a device that does the work of providing blood (and oxygen) to the body when the heart is stopped for a surgical procedure.

This model with Reservoir, Oxygenator, Inffulant Pump, Blood (Parasitic) Pump, Heater, 1000ML two Blood Tank, Heater 250W 500ML with control & indication, This is Demonstration type unit with all accessories. Dummy Blood & Dummy Inffulant. Microcontroller based system with LCD Display 16X2, Key Board Set, UP, Down, Enter. Indication High, Low, Blood Bubble & Blood Leak Detector. Temperature & Blood Pump Control. Temperature Controller 0 to 400C using PT100 sensor.

Study on Heart Lung Machine

Study of Heart Lung Machine. Study of Reservoir & Oxygenator. Study of Temperature Control & PT100 sensor. Study of Blood Pump & Flow rate. Study of Blood Bubble Detector & Blood Leak Detector.

The Instrument with

Reservoir, Oxygenator, Blood Tank -2, Heater, Parasitic Pump (Blood Pump), Inffulant Pump, Blood Bubble & Blood Leak Detector, Display Board, Pt100 S ensor, Pipe set-8, Micro-control unit & etc.

Operating Manual with working of instrument, operating & installation procedure, Block diagrams, connection diagrams, Electrodes placement, Standard signals & actual output signal, Calculations, Tables, Trouble shooting, Experiments list,

Note: Specifications are subject to change.



Features:

Self Contained with Ease of Operation . Sensitive, Stable, Linear & Accurate, Digital Indicator . On-board Zero Adj .& Output Gain adjustment. Inbuilt AC Power Supplies

Experiments:

Study of measurement of Piezoelectric Transducer
Effect of zero adjust & Gain adjust. Determination of Linear Range of Operation . Determination of Sensitivity / Repeatability of the system

Additional Information:

Transducer - PZT 25mm is used. & segment LED Display. Different weights use for response measurement. Acrylic stand for transducer with MS (Metal) base.

Measurement Options

On-board Digital Panel Meter provided . Output available on 4mm Banana sockets for Monitoring . piezoelectric response. Different weights can be used for response.

Onboard Features

Onboard Instrumentation Amplifier provided . Block Description . Zero & Gain adjustment.

Interconnections

All interconnections are made using 4mm banana Patch cords. Test points are provided to analyze signals at various points.

Power Supply

230V, 50Hz, In-Built Power Supply of +5V/500mA

Note: Specifications are subject to change.



Load Cell Transducer Kit

Features:

Self Contained with Ease of Operation. Sensitive, Stable, Linear & Accurate, Digital Indicator. On-board Zero Adj., Output Gain & Fine Gain adjustment. Inbuilt AC Power Supplies

Scope of Learning:

Study of measurement of load using Load Cell Effect of zero adjust & Gain adjust. Determination of Linear Range of Operation. Determination of Sensitivity / Repeatability of the system

Additional Information:

Transducer - Resistive Load cell is used. Load in weights can be measured up to 5 KGs.

Measurement Options

On-board Digital Panel Meter provided. Output available on 4mm Banana sockets for Monitoring. Weights can be verified by Physical counting of weights

Onboard Features

Weights of different denominations provided. Onboard Instrumentation Amplifier provided. Block Description

Interconnections

All interconnections are made using 4mm banana Patch cords. Test points are provided to analyze signals at various points.

Power Supply

230V, 50Hz, In-Built Power Supply of +5V/500mA

Note: Specifications are subject to change.



Features:

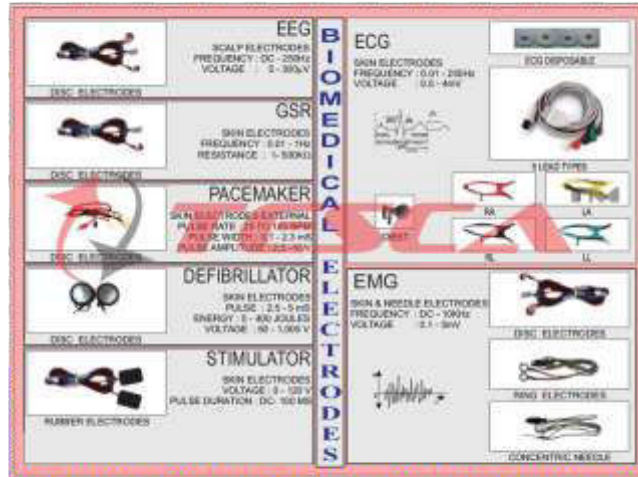
LVDT Displacement measurement system demonstrates the principle and working of the specialized dedicated transducer known as “Linear Variable Differential Transformer (LVDT)” and also shown is one of its unique application to measure linear physical displacement. A special micrometre arrangement to vary the displacement accurately, a variable excitation source, electronic instrumentation and digital readout all enclosed in a specially designed users friendly elegant powder coated metal cabinet with intelligently designed layout on imported acrylic front panel, are some of its other important features.

Technical Specifications:

- Parameter Measured : Linear Physical Displacement. Measurement System :
 - a. Micro meter.
 - b. Transducer with electronic instrumentation.
- Transducer : Linear Variable Differential Transformer (LVDT) based linear displacement.
- Type : Spring loaded core type. Configuration: Axial type.
- LVDT Full Stroke : + 10 mm range.
- Actual Displacement : By Micro meter arrangement.
- Pitch: 1 mm. Circuit : AC Excitations Source, Phase detector & digital display.
- Excitation Source : Sine wave of 2 KHz to 5 KHz variable frequency and 0 to 3V variable amplitude.
- Readout : 3.5digit digital display to measure 0 to 200 mV DC, indicating displacement in millivolts with core in / out indicated by + sign.
- Operating Voltage : 230V, + 10 % AC 1 f. Test Points : Multicoloured test points are provided at various stages in the circuit to observe the waveforms and voltages

Note: Specifications are subject to change.





Electrodes & Transducer Display

Electrodes

- ECG, EEG, EMG Disc Electrodes, EMG Ring, EMG Needle, Defibrillator, Pacemaker, Stimulator, GSR, IFT, etc

Transducers

- Heart Rate, Respiration, SpO2, PCG, Plethysmograph, IR, Spiro meter, Fetus Doppler
- Ultrasonic Therapy, Strange Gauge Element & Load Cell, Pressure, LVDT, PZT
- Temperature Pt100, Thermocouple, Thermostat, etc
- Electrodes & Transducer as per requirements
- Aluminum powder coated Frames, Acrylic Front
- Signal information Signal, Frequency & Voltage
- Approximately Size 42 x 30 x 4 inch (3.5 x 2.5 x 0.75 Feet).

Manual with technical specification of each Electrodes or Transducer, application, Placement, pin configuration, etc.

Note: Specifications are subject to change.