



Blood Pressure Measurement Sciencetech TechBook 2358 is an equipment to measure the human blood pressure, which consist of both systolic and diastolic pressure. Blood pressure is a very common physiological parameter which is having very useful biological information about the heart. Sciencetech TechBook 2358 is designed in such a manner that it can measure the accurate value of systolic and diastolic blood pressure, also you can listen korotkoff sound using the headphone. Blood pressure gives the information about many diseases.

In korotkoff method a cuff is tied around the upper arm of the patient and microphone is applied over the brachial artery. The corresponding electrical signal are fed to a pre amplifier and then passed from a band pass filter having bandwidth 25–125 Hz, with this band pass filter a good signal to noise ratio is achieved when recording the korotkoff sound from the brachial artery beneath the lower edge of the cuff.

The system is so designed that after getting first korotkoff sound switches the systolic pressure and lock the reading on the digital meter. In the same manner the diastolic value is fixed by the last korotkoff sound. The cuff is completely deflated automatically after an interval of 2-5 sec. after the determination of the diastolic value.

## Features

- Provide accurate value of systolic and diastolic pressure
- Separate test points to observe the waveform after each block
- Self contained and easy to operate
- Provide LCD display facility
- Korotkoff sound can also be detected using headphone
- Oscilloscope can be used to observe the waveform
- Specially designed for educational purpose

## Scope of Learning

- Study of human blood pressure i.e. Systolic and Diastolic pressure.
- Study and detection of Korotkoff sound.
- Study of real time blood pressure measurement.
- Study of basic instrumentation system for heart sound detection.

## Technical Specifications

<b>Display</b>	: Large screen crystal digital display
<b>Inflation</b>	: Automatic with built in pump
<b>Technology</b>	: Oscillometric method monitor attached arm Cuff
<b>Deflation</b>	: Automatic rapid air release method
<b>Sensor</b>	: Pressure detection mechanical capacitance Pressure sensor
<b>Measurement Range</b>	: 30-280 mmHg
<b>Accuracy</b>	: Blood pressure: $\pm 4$ mmHg
<b>Test Point</b>	: 8 nos.
<b>Product Tutorial</b>	: Online on <a href="http://www.SciencetechLearning.com">www.SciencetechLearning.com</a>
<b>Dimensions (mm)</b>	: W 326 x D 252 x H 52
<b>Power supply</b>	: 110V - 260V AC, 50/60Hz
<b>Weight</b>	: 1.5 Kg. (approximately)
<b>Operating Condition</b>	: 0-40°C, 85% RH
<b>Included Accessories</b>	: Phonocardiograph Transducer, Head Phone, Occluding Cuff, Power Supply - 1 no.