DIGITAL STUDENT PHYSIOGRAPH

For recording of physiological parameters

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Orchid Scientific's Student Physiograph recorder is a highly sensitivity oscillograph mainly being used for teaching experiment physiology and pharmacology. The design concept is so that it is easily understood by the student at undergraduate and post graduate levels.

“ORCHID SCIENTIFIC" STUDENT PHYSIOGRAPH Comprises Of
1. Couplers  2. Transducers  3. Accessories

Couplers:
To record different parameters the standard range of couplers are as follows

a. Biopotential Coupler: Orchid Scientific's Bio-Potential coupler is designed to record almost all kinds of AC Phenomena like ECG, EEG, EMG, ERG or any other A.C. Phenomenon.

b. EKG Coupler: The EKG coupler provides a convenient means of recording the input of five electrodes in various combinations. For Recording Clinical EKG It is Supplied With 5 Pin Junction Box, Limb & Chest Electrodes & Jelly

Features:
- Stand alone unit having coloured TFT display for displaying online and offline recording data.
- Digital Physiograph with time and Event channel.
- Compact, light weight and easy to operate by a beginner.
- System has 6 couplers fitted in a single unit making it easy to carry.
- System has 8 transducers (Force, Pressure, Volume, Respiration, Temperature, Pulse, Respiration Belt and Isotonic)
- Facility to store recording data and review the same on TFT.
- Interface to the computer-Through USB.
- System is supplied with software to review and print the recorded data from PC.
c. Strain Gage Coupler: Coupler for recording from all ORCHID SCIENTIFIC’S Strain Gage Transducers. & Use to record muscle activity force, effect of Drug on heart activity etc

d. Pulse- Respiration Couplers : For recording Pulse or respiration using Photo-electric transducers.

e. Temperature Coupler : for recording internal or surface temperature through orchid temperature transducer if.


**Transducer:**
A transducer is a device which converts one form of physical energy to electrical energy or vice versa. To record parameter which are not available in electrical form e.g. Pulse, Respiration, Temperature, Phono Cardiogram etc., one need to use appropriate transducer.

**System Specification & Models:**

<table>
<thead>
<tr>
<th>Model</th>
<th>PHYSIO-1</th>
<th>PHYSIO-2</th>
<th>PHYSIO-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Channels</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Display</td>
<td>TFT Display</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Display Size</td>
<td>15.5 cm x 9.5 cm</td>
<td></td>
<td></td>
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<tr>
<td>Channel Width</td>
<td>80 mm</td>
<td></td>
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<tr>
<td>A/D Conversion</td>
<td>16 bit A/D</td>
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<tr>
<td>Sensitivity</td>
<td>50,100,200,500 μV/cm and 1,2,5,10,20,50,100 mV/cm</td>
<td></td>
<td></td>
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<tr>
<td>Sweep Speed</td>
<td>0.05,0.1,0.2,0.5,1,2,5,10,20,50 &amp; 100 div/sec</td>
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<tr>
<td>Data Sampling Frequency</td>
<td>&gt;256 Hz</td>
<td></td>
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<tr>
<td>Notch Filter</td>
<td>50 to 60 Hz</td>
<td></td>
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<tr>
<td>Input Impedence</td>
<td>&gt;1 Mega Ohm</td>
<td></td>
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<tr>
<td>CMRR</td>
<td>&gt;80 – 85 db</td>
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<tr>
<td>Power Supply Requirements</td>
<td>220/230V AC 50Hz</td>
<td>110/120V AC 50-60Hz*</td>
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<tr>
<td>Certification</td>
<td>CE</td>
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</table>

*Needs to be specified in order information

**Standard Accessories:**

- ECG Electrodes: 1 Set of 4 Nos.
- EEG Electrodes: 10 Nos.
- Bio-Potential Junction Box: 1 No.
- EG Disc Electrodes: 1 Set of 10 Nos.
- Ground Electrode: 1 No.
- EEG Paste: 1 Jar
- ECG Jelly: 1 Bottle
- Operating Manual: 1 No.

**Note:** Orchid's continuing product development makes specifications subject to change without prior notification.