

C-ECG-IE 3-Way Indifferent Cable

Technical Note



C-ECG-IE

Overview

When electrocardiograms are recorded using the chest leads, the active electrode is referenced against an indifferent point formed by combining the outputs of the limb electrodes. On a clinical ECG monitor, this summation is performed by the ECG lead selector switch. In the teaching laboratory, the indifferent point can easily be created by joining together the outputs of the limb electrodes with a three-way indifferent electrode cable that sends the combined signal to the input of the ECG amplifier. This combined signal is used as the reference for the recording electrode.

How to Use the C-ECG-IE 3-way Indifferent Cable

The C-ECG-IE 3-Way Indifferent Cable has three electrode lead wires, each with a snap connector for attachment to electrodes. The other ends of the lead wires join together at a single connector that fits the sockets on the isolation block of a standard ECG patient cable. Use all three wires to connect the electrodes on the right arm, left arm, and left leg to form the indifferent point needed for recording electrocardiograms from the chest leads. If two of the three wires are attached to the appropriate limb electrodes, the indifferent point used for recording an electrocardiogram from an augmented limb lead can be created in LabScribe2.



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Experiments

Experiments using the C-ECG-IE include:

- **Experiment HH-7: ECGs from the Six Chest Leads** (found in the **Human Heart** category of the LabScribe2 **Settings** menu as **ChestLeadECG-LS2**)



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