D185 - MEP Connection Headboxes

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These headboxes have been designed, after careful evaluation of users' needs, to offer simple solutions for connecting the D185 to standard electrodes.

The **D185-HB1** and **D185-HB4** offer permanent MEP stimulating electrode connections. The **D185-HB3** provides a remotely controlled, reversible, switched connection of the MEP electrodes which are normally isolated and also provides isolation of SEP recording electrodes from the preamplifier whilst MEP stimulation is in progress. The foot switch **D185-FS1** provides extra control when both hands are already busy.

D185-HB1 is a 4.5m extension of the output sockets terminating in a small box that can be positioned near the site of stimulation. The box has ten (10) 1.5mm DIN "Touch-proof" sockets for those who wish to use protocols with up to five (5) linked cathodes and/or up to five (5) linked anodes



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D185-HB3 extends the features of the D185-HB1 by including the facility to present either 'normal' or 'reverse' polarity stimuli. The control of the polarity is

provided by the D185-CB1 which is permanently wired to the D185-HB3.

It has been found that some EP systems do not perform well when the artefact from the MEP stimulus is coupled, via the SEP recording electrodes, into the same recording



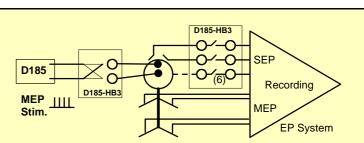
amplifier set as the recorded limb signals. The D185-HB3 provides six (6) channels of isolation for SEP recording electrodes that operate when the MEP stimulus is presented. The isolation of the MEP electrodes from the D185 stimulator, when not in use, also helps with minimised mains



interference.

The D185-CB1 provides the operator control

for the D185-HB3. The selection of a 'Normal' (Anode on Red sockets) or 'Reverse' (Anode on Black sockets) is made by the Pressing rocker switch. the Trigger button initiates command to the а appropriate relay in the headbox and a trigger pulse to the D185. This can also be initiated using a D185-FS1 foot switch.



This shows the 6 (3 shown) isolating circuits for the SEP recording electrodes that operate when an MEP stimulus is presented as well as the limb MEP recording electrodes.



D185-HB4 is like the D185-HB1, having a high grade electrical cable 4.5m long, but terminated with a single pair of 1.5mm DIN "Touch-proof" sockets moulded into the remote end.

D185-FS1 is a medical grade foot switch that is sealed to IP68 so as to meet all the requirements of EN 60601 for use within operating theatres.



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