

D440

Windows™ Compatible D440 Virtual Front Panel

Each D440 amplifier is supplied with Windows™ compatible software which enables amplifier settings to be modified. For programmers, a COM interface is provided which allows control of amplifier settings by other software, such as that used for data acquisition.



Manual Push button De-block control.

LED Status Indicators

Signal output connectors:-
BNC (Ch1) & 9-way "D" Connector
for Ch1-2 (D440-2) or Ch1-4 (D440-4)

1.5mm Common Electrode
Connection (linked to Common
of each 5-pin DIN socket)

USB Socket for connection
to host computer

External TTL De-block control (BNC).

Choice of a pair of 1.5mm DIN 42802
sockets or 5-pin DIN connector for electrode
inputs..



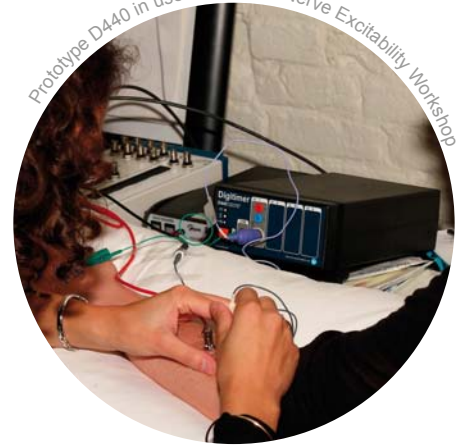
Supplied Accessories

As well as a mains lead, control software and operator's manual, the D440 is supplied with a selection of accessory cables to enable connection to the host computer (D-USB-F USB Cable), recording electrodes (D440-IL Input Lead, one per channel) and a BNC-based data acquisition system (D440-OL-2CH or D440-OL-4CH).

D440
Isolated Amplifier

D440

Prototype D440 in use at a recent Nerve Excitability Workshop



Features Overview

Two (D440-2) or Four (D440-4) Channels of amplification, filtering and isolation – with independent control of each channel.

Primarily designed as an AC amplifier, the D440 will also operate in DC mode.

Input impedance of each channel is 1Gohm.

On/off control of individual channels. The electronic inputs of individual channels can be grounded reducing cross-talk noise when recording from fewer channels. This also disconnects the patient from the electronics.

Inputs may be electronically switched between a differential and single-ended system.

Common 'Driven Right Leg' system with adjustable gain for lower noise.

Overall system GAIN for each channel x100 (10mV/V) to x20,000 (50 μ V/V).

Outputs have a $\pm 5V$ range. The rear panel has a BNC socket for monitoring the output of channel 1 (this signal is mirrored on a 9-way 'D' connector on the rear panel along with the output signals of channels 2, 3 and 4). A signal output cable terminated with an appropriate number of BNC connections is supplied with each amplifier.

LOW-CUT FILTER settings are selectable between 0 (DC), 0.159 Hz, 1Hz, 3Hz, 5Hz, 10Hz, 30 Hz and 50Hz for -3dB and are first order.

HIGH-CUT FILTER settings are selectable between 1kHz, 3kHz, 5kHz, and 10kHz for -3dB and are second order, low phase shift Bessel style filters.

The front panel contains three LEDs which are used to indicate the units power supply status, Internal-Error and Data-Bus Busy.

The rear panel contains a mains IEC inlet socket with mains voltage selection, fuses and mains on/off switch, as well as a 9-way "D" connector, for connecting channels to a data acquisition system and a USB port for connection to a Windows PC.

A push button Deblock control is present on the front panel with a TTL compatible Deblock facility available via a BNC connector on the rear panel.

Standalone Use - Previous amplifier settings will be maintained if a D440 is used without PC connection.

Supplied with "virtual front panel" control software to adjust the settings of a single D440 amplifier. For applications requiring more than 4 channels, we recommend our D360 8-Channel Isolated Patient Amplifier. The D440 includes a COM interface to allow other software applications to control the amplifier settings.

Mains operating voltage between 115V and 230V (switch selectable) at 50-60Hz. Note: for locations with low mains voltage (< 105V), such as some areas of Japan, a custom D440 with a replaced mains transformer will be required.

The Digitimer D440 is NOT a medical device and use is currently limited to human research applications