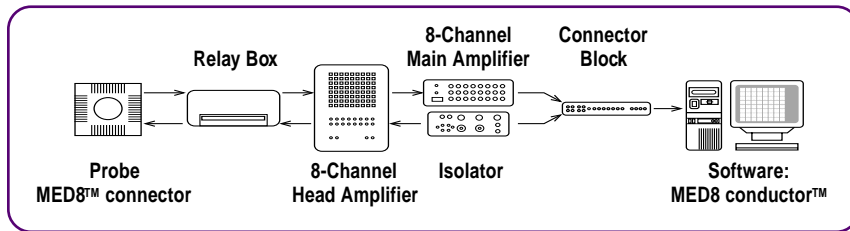


Panasonic MED8™ system



The MED8™ system is a versatile 8 channel electrophysiology recording and stimulation system. It uses the same MED probe as the MED64™ system for stimulation and recording for more details. This system is a more economical version of the MED64™ system. The modular design of this system also allows researchers to use their existing data acquisition hardware and software to perform field recordings from cell or tissue cultures or acute tissue slices.

The MED probe is inserted into the MED8™ connector which links the probe to the MED8™ head amplifier. The head amplifier provides x10 amplification to the raw signal and also serves as the interface for isolated stimulators and the MED8™ main amplifier. The MED8™ head amplifier is the access point for all stimulation and recording. Patch cables, which are provided with the system, are used to select the specific electrodes used for stimulation and recording. One or two biphasic stimulus isolators, can be controlled by the MED8™ system. The MED8™ system controller and MED8™ acquisition software are used to control the output train of the stimulator as well as record signals from up

to 8 of the 64 available MED probe micro-electrodes. The MED8™ amplifier enables simultaneous recording at sampling rates of up to 20 kHz from up to 8 micro-electrodes. The broad bandwidth (0.1 Hz to 10 kHz) maximizes the faithful amplification of both slow and fast electrophysiological signals.

Complete turnkey systems can be configured to suit your research application. Additional equipment is required to successfully perform these experiments from start to finish.

Catalog No.	Product
CGS 8006.74	MED8™ connector
CGS 8007.74	MED8™ Head Amplifier, 110 VAC, 60 Hz
CGS 8008.74	MED8™ Head Amplifier, 220 VAC, 50 Hz
CGS 8009.74	MED8™ Main Amplifier, 110 VAC, 60 Hz
CGS 8010.74	MED8™ Main Amplifier, 220 VAC, 50 Hz
CGS 8011.74	MED8™ system Controller and Software
CGS 8012.74	BSI-2 Biphasic Stimulator

- MED8™ system: simultaneous 8 channel recording from the MED8™ probe
- Interface for and software control of up to two biphasic isolated stimulators
- Basic hardware system includes MED8™ connector, head amplifier, main amplifier, software and system controller

Specifications

MED8™ connector	
Contact Resistance (with MED probe)	< 30 mΩ
Printed Wiring	6 layer (rejects hum noise by multi-shield structure)
Dimensions, W x H x D	95 x 110 x 30 mm (3.7 x 4.3 x 1.2 in)
Weight	140 g (4.9 oz)
8-Channel Head Amplifier	
No. of Channels	8
Input Impedance	1 MΩ
Common Mode Rejection	> 80 dB
Internal Noise Level	100 mV (with 50 W source impedance)
Gain	x 10
Main Output Voltage	8 V
Power Supply	AC 120 V, 50/60 Hz U.S.A.; AC 220 V, 50 Hz Europe
Power Consumption	1.3 W
Weight	3.1 kg (6.8 lb)
Dimensions, W x H x D	260 x 87 x 305 mm (10.2 x 3.4 x 12 in)
8-Channel Main Amplifier	
No. of Channels	8
Input Impedance	10 kΩ
Output Impedance	100 Ω
Gain	x 1000 1 mV/V x 100 10 mV/V x 10 100 mV/V
Hi-Cutoff Filter	1, 5, 10 kHz and OFF (20 kHz)
Lo-Cutoff Filter	0.1, 1, 10, 100 Hz
Band Width	0.1 to 20 kHz, + 0 dB--3 dB
Notch Filter	50 or 60 Hz (internal switch)
Internal Noise Level	4 mV (gain: x 1000)
Power Supply	AC 120 V, 50/60 Hz U.S.A.; AC 220 V, 50 Hz Europe
Power Consumption	9 W
Weight	4.3 kg
Dimensions, W x H x D	270 x 85 x 327 mm (10.6 x 3.6 x 12.9 in)
MED8™ Specialized Software: MED8 conductor™	
No. of Input Signals	8
Max. Sampling Rate	20 kHz/ch
No. of Stimulation Output Channels	1 (TTL)