



7800

Cardiac Trigger Monitor



The Model 7800 is Ivy Biomedical's fifth generation cardiac trigger monitor with the intended use primarily on patients in applications requiring precision ECG R-wave synchronization. Incorporating a simple, easy-to-use touchscreen interface, the 7800 displays two simultaneous ECG vectors, along with the patient's heart rate.

Intuitive Operation

Acquiring an ECG trigger can often be a challenging task, and selecting the right ECG vector can be problematic. The 7800's AUTO lead select feature (Trigger lead only) will determine which lead (I, II or III) provides for the best amplitude-to-noise ratio of the ECG signal and, thus, a more reliable cardiac trigger. The Model 7800 also has special hardware and software that measures skin-to-electrode impedance, ensuring a reliable scan.

Patient Monitoring

When required, high and low heart rate alarm limits can be adjusted to bracket a patient's heart rate, so that a violation of these limits produces an audible and visual indication of the alarm.

Imaging Applications

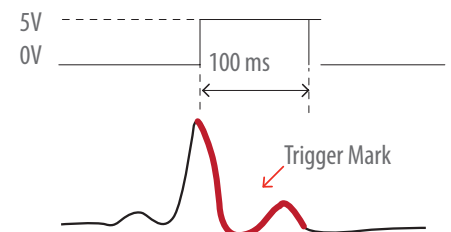
The 7800 Monitor provides world-class cardiac triggering for use in synchronized applications such as Multi-Slice Computed Tomography (CT) and applications requiring precision R-wave synchronization.

Precision Engineering

A color Trigger mark clearly indicates the timing of each synch pulse with respect to the ECG, providing a visual reference for timing and synchronization.

Improved Communications

The Model 7800 has an electrically isolated Ethernet connector with 2 channels, enabling communication between the monitor and the external console, as well as the gantry display. An integrated USB Drive allows users to store and retrieve ECG events for retrospective analysis. The Model 7800 is available with or without an integrated strip chart recorder.



UNITED STATES FEDERAL LAW RESTRICTS THIS DEVICE TO SALE BY OR ON THE ORDER OF A PHYSICIAN.

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P/N: 3290-00-16 Rev. 07 EN

November 16, 2015

AHA-Compatible



590435
RT Lead wires (Set of 4)



590432
Patient cable

IEC-Compatible



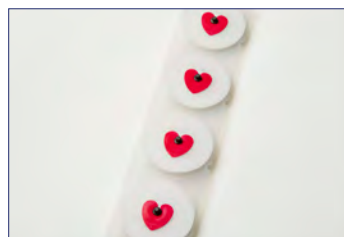
590451
RT Lead wires (Set of 4)



590446
Patient cable



590291
NuPrep Gel



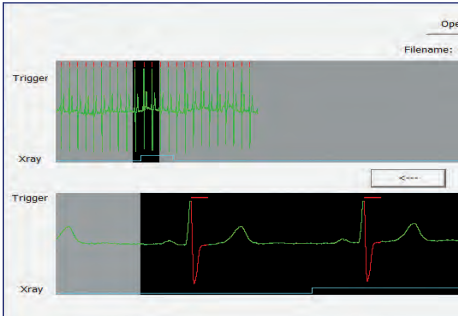
590436
ECG Electrodes (Box Of 40)



590386
USB with ECG Viewer Software

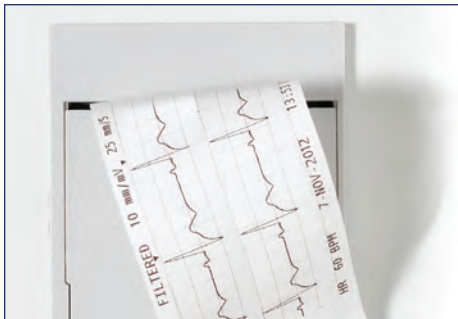


590035
Recorder Paper (10 Rolls)



ECG Viewer Software

Included on the USB drive is an easy-to-use ECG viewer specifically designed to enable detailed analysis of individual ECG waveforms.



Integrated Chart Recorder

Optional recorder prints ECG strips on demand for manual review.



Touch Screen Operation

Quickly adjust alarm limits, or make adjustments on the fly using the on-screen menus and buttons.

Mounting Solutions

Ivy Biomedical has a custom-designed, light-duty roll stand that enhances the maneuverability of the 7800. Please contact us for more information, or for custom requirements.

590441

Roll stand (shown)*

*Requires **3302-00-15**
Roll stand Mounting Kit



ECG Lead Selection

Trigger Lead	I, II, III, and AUTO
Second Lead	I, II and III

Patient Cable

4 Lead cable with 6 PIN AAMI standard connector, isolated from ground related circuits by >4 kV rms, 5.5 kV peak

Frequency Response

LCD Display and Recorder	
Filtered	1.5 to 40 Hz or 3.0 to 25 Hz
Unfiltered	0.67 to 100 Hz
ECG Output	
Unfiltered	0.67 to 100 Hz

Electrode Impedance Measurement

Technique	10Hz ac signal < 10 uA rms
Range	200kΩ per lead
Accuracy	±3% ±1kΩ
Recommended Electrode	
	10% Chloride sponge type(590436)

Cardiotach

Pediatric/Neonate Range	10-350 bpm
Adult Range	10-300 bpm
Accuracy	±1% ±1 bpm
Resolution	1 bpm
Sensitivity	300 μV peak
Tall T Wave Rejection	T waves ≤ 1.2 * R-wave

Pacer Pulse Rejection

Width	0.1-2 ms at ±2 to ±700 mV
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Recorder

Feature	Optional
Writing Method	Direct Thermal

Synchronized Output (Trigger)*

Output Trigger Delay	< 2 ms
R to R Trigger Accuracy	±75 μs typical @ 1 mV input
Pulse Width Options	1, 50, 100 or 150ms
Pulse Amplitude Options	0V to +5V or -10V to +10V
Output Impedance	<100 Ω
* Test input signal at ECG leads	
Conditions:	½ sine wave, 60ms width, 1mV amplitude, 1 pulse/second

Alarms

High Rate	15-250 bpm (5 bpm increments)
Low Rate	10-245 bpm (5 bpm increments)
Asystole	R to R interval > 6 seconds
Lead Off	Detached lead
Check Lead	Imbalance between leads >0.5 V

Display

Active Matrix TFT Color Touch Screen	
Resolution	640x480
Screen Size	17.09cm x 12.82cm, 21.36cm (8.4in.) diagonal

Dimensions

Height	8.72in. (22.14cm)
Width	9.25in. (23.50cm)
Depth	6.10in. (15.49cm)
Weight	5.6 lbs. (2.54kg)

Operating Environment

Temperature Range	5°C to 40°C
Relative Humidity	0-90% non-condensing
Altitude	-100 meters to +3,600 meters
Atmospheric Pressure	500-1060 mbar
Protection against ingress of fluids	
IPX1 – Protection against vertically falling drops of water	

Storage Environment

Temperature Range	- 40°C to +70°C
Relative Humidity	5% to 95%
Altitude	-100 meters to +14,000 meters

Power Specifications

Voltage Input	100-120V~; 200-230V~
Line Frequency	50/60 Hz
Fuses Type and Rating:	T 0.5AL, 250V (Metric 5x20 mm)
Maximum ac Power Consumption:	45 VA
Power Recovery: Automatic, if power is restored within 30 seconds	

Communications

Ethernet RJ-45 10Base-T, IEEE 802.3 (2 Channels)

Data Storage

USB Flash Drive	minimum capacity 1GB
ECG storage	200 most recent events

Compliance/Certifications


ANSI/AAMI ES60601-1:2005
 UL60601-1 1st edition
 IEC 60601-1 3rd edition
 IEC 60601-1 2nd edition
 CAN/CSA C22.2 No 601.1-M90:2005
 CDN MDR (CMDCAS)
 CAN/CSA C22.2 No 60601-1:08
 IEC 60601-2-27
 ISO 13485:2003
 MDD 93/42/EEC
 CE 0413
 RoHS: 2011/65/EU
 WEEE 2012/19/EU
 FDA/CGMP

Notified Body

Intertek Semko AB
 Identification Number 0413
 MDD Classification IIb

Authorized Representative

Emergo Europe

 For additional specifications, refer to Operator Manual

(Specifications subject to change without notice)



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