

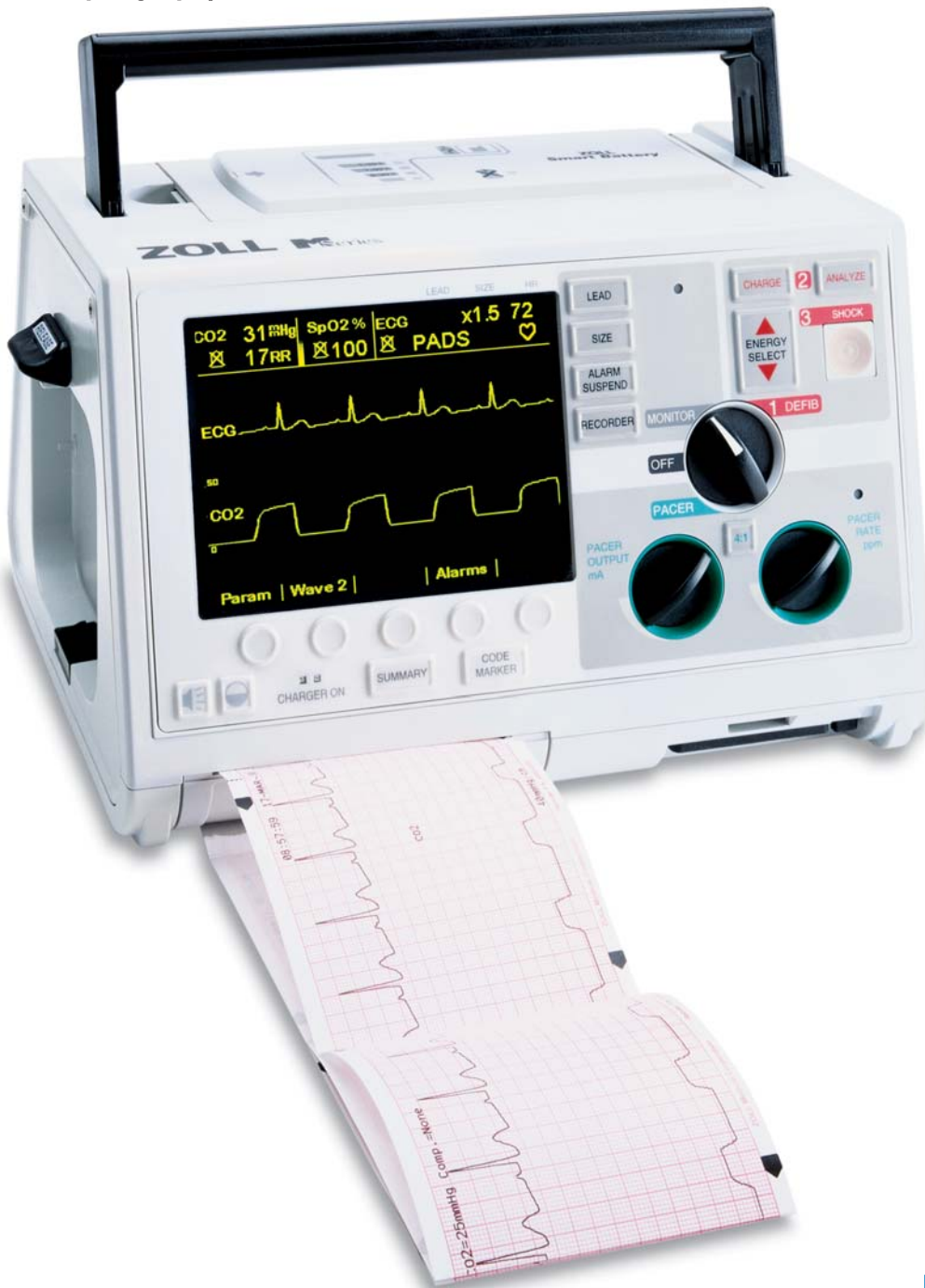
ZOLL

M Series

The Only Defibrillator Monitor Pacemaker with “Plug-and-Play” Mainstream and Sidestream End Tidal CO₂

M Series with Proven,
Reliable Capnography

EtCO₂



ZOLL
Advancing Resuscitation. Today.

ZOLL M Series EtCO₂

- Lifetime warranty on solid-state sensor design.
- Superior technology provides continuous diagnostic information.
- Users can switch easily between Mainstream and Sidestream options since one operating mode covers any intubated and non-intubated patient (neonatal to adult).
- Rapid sensor warm-up provides accurate and timely information.

ZOLL Medical Corporation
Worldwide Headquarters
269 Mill Road
Chelmsford, MA 01824
978-421-9655

ZOLL Medical Canada
Mississauga, Ontario, Canada
905-629-5005

ZOLL Medical Latin America
Parkland, FL
954-345-4224

ZOLL Medical U.K.
Cheshire, United Kingdom
+44 1925 846 400

ZOLL Medical France
Coignières, France
+33 1 30 05 14 98

ZOLL Medical Europe
Dodewaard, The Netherlands
+31 488 411 183

ZOLL Medical Germany
Cologne, Germany
+49 2236 87870

ZOLL Medical Austria
Vienna, Austria
+43 650 4136222

ZOLL Medical Middle East and Africa
Athens, Greece
+30 210 6236691

ZOLL Medical Russia
Moscow, Russia
+70 95 936 2338

ZOLL Medical India
Mumbai, India
+91 22 28322423

ZOLL Medical China
Hong Kong, China
+852 3124 5066

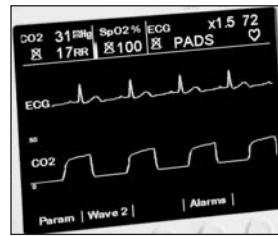
ZOLL Medical Japan
Yokohama City, Japan
+81 45 905 2864

ZOLL Medical Asia Pacific
Lisarow, Australia
+61 428 99733

ZOLL Medical Australia
New South Wales, Australia
+61 2 9420 8733

The Most Choices for EtCO₂ Monitoring

The ZOLL M Series™ with Respironics Novamatrix End Tidal CO₂ monitoring is designed for maximum ease of use in pre-hospital and hospital settings. Interchangeable, lightweight Mainstream and Sidestream sensor options allow you to manage and monitor every patient as you see fit.



The M Series provides a constant EtCO₂ readout during monitoring, pacing and defibrillation.

M Series Specifications

ECG Monitoring

Patient Connection: 3-lead ECG cable, paddles or MFE Pads. Selectable by front panel switch.

Input Protection: Fully defibrillator protected. Special circuit prevents distortion of ECG by pacer pulse. (Pacer version only)

Implanted Pacemaker Spike Display: Dedicated circuitry detects most implanted pacemaker spikes and provides standard display marker of spike on ECG trace.

Bandwidth: 0.5-27 Hz (-3 dB) standard/0.05-150 Hz diagnostic.

Lead Selection: Displayed on monitor.

ECG Size: 0.5, 1, 1.5, 2, 3 cm/mV — displayed on monitor.

Heart Rate: Digital display 0-300 bpm ±5%.

Heart Rate Alarm: On/Off displayed on monitor. User-selectable, tachycardia 60-280 bpm, bradycardia 20-100 bpm.

1 Volt ECG Out: 1.0 volt/cm of deflection on strip chart recorder <25 ms delay from patient ECG input.

Display Format: Non-fade moving bar display.

SmartAlarms™: Beeper/voice prompts indicate shockable rhythm.

Display

Screen Type: High-resolution display.

Screen Size: 5.66 inches (14.4 cm) diagonally.

Sweep Speed: 25 mm/sec.

Viewing Time: 4 seconds.

Channels: 2.

Information: Heart Rate, Lead/Pads, Alarm On/Off, SpO₂, EtCO₂, AED Functions and Prompts, Defibrillator Test Function, Error Corrections and Faults, Pacer Functions (optional), Code Markers, Alarm Selection and Limits, Delivered Energy.

Defibrillator

General:

Waveform: ZOLL Rectilinear Biphasic™.

Charge Time: Less than 7 seconds with a new fully charged battery (first 15 charges to max energy). Depleted batteries will result in a longer defibrillator charge time.

Energy Display: Monitor display indicates both selected and delivered energy.

Multi-Function Electrode (MFE) Pads: Specifically designed pre-gelled ZOLL *stat•pad*™ Multi-Function Electrodes packaged in pairs.

Built-In Defibrillator Tester: Tests defibrillator energy output and continuity of Universal Cable and paddles; documented on PCMCIA card and strip chart.

Multi-Function Electrode Impedance Measurement Range: 0-250 ohms.

Manual:

Energy Selection: Selectable at 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 30, 50, 75, 100, 120, 150, 200 Joules. (Delivered into 50 Ω load.) Selected using controls on sternum paddle or device front panel.

Synchronized Mode: Synchronizes defibrillator pulse to patient's R-wave. "SYNC" message displayed on monitor. Marker on display and recorder paper identifies R-wave discharge point.

Paddles: External anterior/anterior adult and pediatric. Adult paddles slide off to expose pediatric paddles.

Charge Controls: Control on apex paddle and on device front panel.

Semi-Automatic:

AED Function: Auto analyze and charge x3 with programmable auto energy level selection, screen prompts and voice prompts.

Advisory Function: Single analysis or programmable auto re-analyze x3 with programmable auto energy level selection and screen prompts.

Shockable Rhythms: Ventricular fibrillation with amplitude >100 μV and wide complex ventricular tachycardia with rates greater than 150 bpm.

Charge Controls: Control on device front panel.

Energy Selection: Automatic, pre-set shock 1, 2, 3 energy levels — user-configurable. 120, 150, 200 Joules biphasic default. Selected using controls on device front panel.

Specifications subject to change without notice.
M Series, Rectilinear Biphasic, RescueNet Code Review, SmartAlarms, *stat•pad*, and Xtreme Pack are trademarks of ZOLL Medical Corporation. Capnostat and LoFlo are registered trademarks of Respironics Novamatrix.
© ZOLL Medical Corporation 2004. All rights reserved.
9656-0125 Printed in USA 20M 12/04



Mainstream or Sidestream for optimal patient care.

Voice Prompts

"Attach pads," "Check pads," "Check patient," "Stand clear," "Press shock," "No shock advised," "Check pulse," "Press analyze," "If no pulse, perform CPR."

Visual Prompts

"Analyze," "Shock adv," "No shock adv," "Joules selected," "Charging," "Press shock," "Check patient," "If no pulse do CPR."

PCMCIA Card Slots

Accepts two standard series Type II Flash Cards, 2, 4, and 16 MB: Fax modem card capability in slot 1.

PCMCIA Card

Records continuous ECG and device data; optionally records digitally compressed audio data (AED versions only); play on PC with Specified Card Reader and RescueNet Code Review™.

Battery Packs

Type: Rechargeable, sealed lead acid.

Recharge Time: 4 hours or less with integral charger.

Operating Time: (EtCO₂ and SpO₂ Options): For a new, fully charged PD 4410 battery pack at 20°C: 35 defibrillator discharges at maximum energy (200 J), or 1.5 hours minimum of continuous ECG monitoring, or 1.0 hour of continuous ECG monitoring/pacing at 60 mA, 70 beats/min. For a new, fully charged XL battery pack at 20°C: 60 defibrillator discharges at maximum energy (200 J), or 3.0 hours minimum of continuous ECG monitoring, or 2.75 hours of continuous ECG monitoring/pacing at 60 mA, 70 beats/min.

Additional parameters will affect operating time. Consult your operator's guide.

General

Size: 6.8 in. (17.3 cm) high x 10.3 in. (26.2 cm) wide x 8.2 in. (20.8 cm) deep.

Weight: 11.5 lb. (5.23 kg) with Universal Cable and battery; 13.5 lb. (6.14 kg) with paddles.

Design Standards: Meets or exceeds UL 2601, AAMI DF-39, AAMI DF-2 and IEC 601-2-4.

Patient Safety: All patient connections are electrically isolated.

Environmental: Operating Humidity: 5 to 95% relative humidity, non-condensing; Vibration: Mil Std 810E, Minimum Integrity Test; Shock: IEC 68-2-27, 50 g 6 ms half sine; Operating Pressure: 594 to 1060 mBar, Material Ingress: IEC 529, IP24; Electromagnetic Compatibility (EMC): CISPR, II Class B Radiated and Conducted Emissions; STET Immunity: AAMI OF-39, IEC 60601-1-2 to 15 V/m; Electrostatic Discharge: AAMI DF-2; IEC 1000-4-2; Conducted Susceptibility: IEC 1000-4-4, 1000-4-5, 1000-4-6.

AC Power: Meets all IEC, UL and AAMI safety requirements.

Options: Xtreme Pack™ I Carry Case, Xtreme Pack™ II Durable Rubber Case for added protection.



ZOLL
Advancing Resuscitation. Today.