AccuSync® 71
ECG Trigger Monitor
Model 15-710-3000

Introduction
The new AccuSync 71 ECG trigger monitor for gated cardiac studies automatically detects the R wave with precision and reliability. Its menu-driven Color Active Matrix Display combines ease of use with increased functionality and flexibility while its light and compact design makes it portable.

Applications
The AccuSync 71 ECG is a necessary accessory for every facility performing SPECT or PET Nuclear Cardiology Studies. Gated studies are reimbursable, adding a revenue stream to the department. Since the Gated Wall Motion Study is acquired at the same time the perfusion images are acquired, no additional camera time is required.

The AccuSync 71 ECG also has uses in the ultrasound suite as well as the MRI* department. Anywhere that gated studies are needed, the AccuSync 71 ECG is at home.

Specifications

- **Patient leakage current**: Less than 10 µA with 230 V~, 60 Hz applied to leads. Patient related circuitry is isolated from ground by more than 4000 V, 500 V peak
- **Defibrillator protection**: 5000 V, 10 ms duration
- **Common mode rejection ratio**: 90 db with 51 k ohm imbalance
- **Input impedance**: 100 M ohm
- **Bandwidth**:
  - **Diagnostic**: 0.05 to 100 Hz
  - **TFT LCD display**: 0.5 to 50 Hz
- **Printer**: 0.5 to 100 Hz
- **Patient cable**
  - **3 lead system**: RA, LA, and LL with 6 pin AAMI connector
  - **5 lead system**: RA, LA, RL, LL, and C with 6-pin AAMI connector
- **Input bias current**: 50 nA DC
- **Electrode offset potential**: ± 0.5 V
- **Sensitivity**: 100 mV peak
- **Display area**: 5.25 (w) x 4 in (h) (13.34 x 10.16 cm)
- **Display indicates**: Heart rate, R-R interval, ECG size, ECG lead selection, audio, freeze, print, R trigger event marker and programmed delay
- **Outputs**
  - 1) The R trigger is a 5 V TTL/CMOS compatible (or 12 V) square wave for the computer trigger; independent of ECG signal polarity. R wave detection and trigger to computer is indicated by audio signal and by presence of a superimposed dot on the R wave which appears on the display. The trigger may be delayed up to 100 ms. The output can deliver 35 mA of current or drive up to 150 feet long RGU 174/U cable. R trigger is compatible with all computers including Adac, DEC, Elscint, GE, Hitachi, MDS, Picker (Marconi), Sorin, Technicare, Toshiba, Siemens, SMV, and Digirad
  - 2) RS-232 interface available to transmit and receive information via an IBM or compatible computer. In transit mode, the interface will send the ECG data to the computer while in receiver mode the computer will control the parameters of the instrument
  - 3) ECG Output: Variable gain analog ECG up to x3000 available on a BNC connector
- **Dimensions**: 9 (w) x 7 (d) x 6 in (h) (23 x 18 x 15 cm)
- **Construction**: Aluminum
- **Power rating**: 115/230 V~ 60/50 Hz, 0.30/0.15 A
- **Weight**: 8 lb (3.6 kg), with print 9 lb (4 kg)

EMC/regulatory compliance
Unit is certified to meet or exceed the specifications in EN 60601-1-2. Certified to UL 2601-1, CSA 601.1 by TUV Rheinland (NRTL). CE certified (No. 41313680)

Manufacturer’s quality system is certified to ISO9001/EN46001 and compliant with US FDA Quality System Regulations

Optional accessories

- **ECG Simulator** (Model 15-110)
- **Paper speed**: 25 mm per second. When Freeze is selected, recorder prints only data displayed on screen
- **Printing method**: thermal line dot system
- **Resolution**: Horizontal - 8 dots per mm. Vertical -16 lines per mm
- **Event marker**: When R wave is detected, a mark is superimposed on the R wave to indicate the presence of an R trigger signal triggering the computer

- **Rechargeable Battery** (Model 87-710)
  - 12 V Rechargeable (approximately 3.5 hr)

Available model(s)

- **15-710-3000** AccuSync 71 ECG Trigger Monitor Three Lead System without printer
- **15-713** AccuSync 71 ECG Trigger Monitor Three Lead System with printer
- **15-710-5000** AccuSync 71 ECG Trigger Monitor Five Lead System without printer
- **15-715** AccuSync 71 ECG Trigger Monitor Five Lead System with printer

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4606, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.

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* The AccuSync device is not to be taken into the MRI room without first ascertaining its magnetic properties.
Introduction
The AccuSync 41 R Wave Trigger automatically and reliably detects the R wave. It is a proven device that is compatible with nearly all commercially available acquisition systems. The AccuSync 41 R Wave Trigger can be attached to an external ECG system to display the cardiogram for real-time patient monitoring while being used in the acquisition mode.

Applications
The AccuSync 41 R Wave Trigger is an economical 3-Lead R Wave Trigger system that is perfect for those clinics that need a reliable no-frills gating system. The AccuSync 41 R Wave Trigger also has uses in the ultrasound suite as well as the MRI* department. Anywhere that gated studies are needed, the AccuSync 41 R Wave Trigger can be used.

Specifications
- **Patient leakage current**: Less than 10 µA with 230 V~, 60 Hz applied to leads
- **Defibrillator protection**: 5000 V, 10 ms duration
- **Common mode rejection ratio**: 90 db minimum with 51 k ohm imbalance
- **Input impedance**: 100 M ohm
- **Bandwidth**: 0.05 to 100 Hz
- **Patient cable**: 3 Lead System: RA, LA, and LL with 6 pin AAMI connector
- **Input bias current**: 100 nA DC
- **Electrode offset potential**: ± 0.5 V
- **Sensitivity**: 100 mV peak

**Outputs**
1) The R trigger is a 5 V TTL or CMOS compatible square wave for the computer trigger; independent of ECG signal polarity. No delay. The output can deliver 35 mA of current or drive up to 150 feet long RGU 174/U cable
2) ECG Output: Variable gain analog ECG up to x2000 available on a BNC connector. All AccuSync instruments are equipped with an audio indicator activated on each R wave detection. R trigger is compatible with all computers including Adac, DC, Elscint, GE, Hitachi, Marconi, MDS, Picker, Sophia, Technicare, Toshiba, Siemens, and Digirad

**Power (selectable)**
- 115/230 V~ 60/50 Hz, 0.055/0.027 A

**Construction**
- Aluminum

**Dimensions**
- 7.188 (w) x 6.375 (d) x 3.058 in (h)
- 18.3 x 16.2 x 7.8 cm

**Weight**
- 3 lb (1.4 kg)

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EMC/regulatory compliance
Unit is certified to meet or exceed the specifications in EN 60601-1-2. Certified to UL 2601-1, CSA601.1 by TUV Rheinland (NRTL). CE certified (No. 41313680)
Manufacturer’s quality system is certified to ISO 9001 / EN 46001 and compliant with US FDA Quality System Regulations

**Available model(s)**
- 15-410 AccuSync 41 R Wave Trigger

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For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.
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