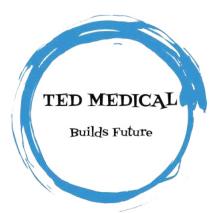


# ECG-1103G Digital Three-Channel ECG



# **Features**

- 12-lead simultaneously display
- Powerful digital filters: HUM, EMG, ADS, Low pass
- Detection and alarm on lead-off and low battery capacity
- Automatic adjustment of baseline for optimal printing
- 12 ECG files can be save in the ECG
- 250 ECG files can be save to SD card (Optional)
- Data management software on PC (Optional)
- Reliable automatic measurement & Interpretation tested with CSE&AHA database





# ECG-1103G

# Digital 3-channel ECG

# Specifications:

Safety Standard:	IEC Class I, type CF			
Acquisition Mode:	12 lead acquisition simultaneously			
Input Circuit:	Floating, protection against defibrillator and pacemaker			
A/D Converter:	12 bit			
Time Constant:	≥3.2s			
Frequency Response:	0.05Hz ~ 165Hz			
Sensitivity:	2.5, 5, 10, 20, 40 (mm/mV), Auto			
Input Impedance: ≥50MO				
Input Circuit Current:	≤50nA			
Calibration Voltage:	1mV±2%			
Noise Level:	<15μVp-p			
Anti Baseline Drift :	Automatic			
Filter:	EMG Filter: 35Hz~45Hz (-3dB)			
	ADS Filter: Auto (0.15-0.50Hz)			
	HUM Filter: 50Hz/60Hz (-20dB)			
CMRR:	>100dB			
Patient Current Leakage	:<10μΑ			
Paper Speed:	5/6.25/10/12.5/25/50mm/s			
Recording Paper:	63mm/80mm(width), 20m/30m(length), roll			
Power Supply:	AC: 110/220V, 50/60Hz			
	DC: 12V, built-in rechargeable lithium battery			
Dimension:	345mm×300mm×80mm; 415mm×195mm×380mm(Cartor			
Net Weight:	nt: 2.5kgs			
Gross Weight:	4.5kgs			



Patient cable



Limb electrode



Chest electrode

# Features and functions of ECG-1103G

MODEL	AUTO MEAS	AUTO ANA	LCD SIZE	DISPLAY	PAPER WIDTH	Storage	USB	Built-in SD card
1103G	Yes	Yes	3.8"	12CH	63mm	Yes	Optional	Optional











# ECG-1106L

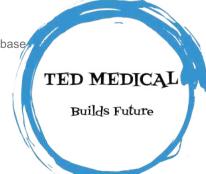
Digital Six-Channel ECG



## **Features**

- 5.6 inch color LCD touch screen, 12-lead simultaneously acquisition
- 180 ECG files can be saved in the ECG
- Over 5000 ECG files can be saved to SD card(optional) more ECG files can be stored via USB port
- Freeze, Pre-10-second print and Trigger print function to observe any abnormal ECG waveforms
- HR detection alarm and pacemaker detection supported
- Cine-loop function: saved ECG waveform can be played back
- Auto-save function: users can choose whether to automatically save the files with the printout or not
- Support magnetic card reader, bar code scanner, make information input more conveniently
- Support external laser printer to achieve A4 size report output
- Data management software on PC(optional)
- Reliable automatic measurement & Interpretation tested with CSE&AHA database

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# ECG-1106L

# Digital Six-Channel ECG



## **Basic Specification**

Input Circuit: Floating, protection against defibrillator and

pacemaker detection

Lead: Standard 12-lead

 $\begin{array}{lll} \mbox{Input Impedance:} & \geq 50\mbox{MO} \\ \mbox{Input Circuit Current:} & \leq 50\mbox{nA} \\ \mbox{Leakage Current:} & <10\mbox{$\mu$A} \\ \mbox{Calibration Voltage:} & 1\mbox{$mV$$\pm}2\% \\ \mbox{A/D Convertor:} & 24\mbox{bits} \\ \end{array}$ 

Frequency Response: 0.05Hz~165Hz (-3dB)

Time Constant:  $\geq 3.2s$ Noise Level:  $\leq 12\mu Vp-p$ 

Filter: AC: 50/60Hz (-20dB); EMG:25Hz/35Hz/45Hz(-3dB);

ADS and Baseline auto-adjustment

Sensitity: AUTO, 2.5, 5, 10, 20, 40 ( mm/mV ±5% )

**Record Data** 

Measurement: HR, PR/QT/QTC Interval, P/QRS/T Axis etc.

Patient Data: Date, Time, ID, Name, Gender, Age, Height, Weight etc.

System Data: Sensitivity, Speed, Institution etc.

Analysis Report: On/Off selectable

### **Print System**

Printer: High speed and sensitivity thermal dot recording system

Speed: 5, 6.25, 10, 12.5, 25, 50(mm/s, ±3%)
Paper: Roll paper112mm×20m(30m)

## **Power Source**

AC:  $100V-240V(\pm 10\%)$ ,  $50/60Hz(\pm 1Hz)$ 

DC: More than 2-hour continuous operation time with lithium battery

after fully charged

## Input&Output

Safety Classification: Type CF

Safety Standard: MDD93/42/EEC,IEC60601-2-25,

IEC60601-1,IEC60601-2-51:2003, ANSI/AAMI EC-11,EN 1441-1997

## Input&Output

External Input:  $10 \text{mm/V} \pm 5\%$ ;

Input Impedance=100KO

ExternalOutput: 1.0V/mV±5%;

Output Impedance=1000

## Size&Weight

EquipmentSize: 345 x 300 x 80mm

Carton Size: 400 x 180 x 355mm

Net Weight: 2.5Kg(battery included)

GrossWeight: 4.5Kg









# ECG-1112L Twelve Channel Electrocardiograph

# **Technical Specifications**

Input Circuit: Floating, protection against defibrillator and pacemaker  Lead: Standard 12 lead  Input Impendence: \$50MΩ  Input Circuit Current: \$50nA  Patient Current Leakage: \$10µA  Calibration Voltage: 1mV±2%  Depolarization Voltage: ±500mV  Sampling Rate: 1.0ms(1000Hz)  A/D Convertor: 12 bits  Frequency Response: 0.05Hz~165Hz (-3dB)  Time Constant: >3.2s  Noise Level: \$15µVp-p  CMRR: \$100dB  Digital Filters: HUM, EMG, ADS  Sensitivity: Auto, 2.5, 5, 10, 20, 40mm/mV (±2%)  Measurement: Heart rate, PR Int., Vent. Rate, P/QPS/T Axis  Patient Data: Sensitivity, paper speed, filter on/off, hospital name, etc.  Print-out: Waveform, waveform + measurement report or waveform + measurement report + analysis report  Printing Paper 210/216mm roll paper  Power Supply  AC: 100V-240V ( 50/60Hz )  DC: 19V/3.5A  Battery: 1.44V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Screen Size:	Class L 6 inch
Input Impendence: ≥50MΩ Input Circuit Current: ≤50nA Patient Current Leakage: <10µA Calibration Voltage: 1mV±2% Depolarization Voltage: ±500mV Sampling Rate: 1.0ms(1000Hz) A/D Convertor: 12 bits Frequency Response: 0.05Hz~165Hz (-3dB) Time Constant: >3.2s Noise Level: ≤15µVp-p CMRR: ≥100dB Digital Filters: HUM, EMG, ADS Sensitivity: Auto, 2.5, 5, 10, 20, 40mm/mV (±2%) Measurement: Heart rate, PR Int., Vent. Rate, P/QPS/T Axis Patient Data: Date, time, ID, name, gender, age, height, weight, blood pressure, etc. System Data: Sensitivity, paper speed, filter on/off, hospital name, etc. Print-out: Waveform, waveform + measurement report or waveform + measurement report + analysis report Printing System: High speed, high sensitivity thermal matrix printing system Paper Speed: 5/6.25/10/12.5/25/50mm/s (±3%) Printing Paper Power Supply AC: 100V-240V ( 50/60Hz ) DC: 19V/3.5A Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Input Circuit:	Floating, protection against defibrillator and pacemaker
Input Circuit Current:≤50nAPatient Current Leakage:<10μA	Lead:	Standard 12 lead
Patient Current Leakage:<10 μA	Input Impendence:	≥50MΩ
Calibration Voltage: 1mV±2%  Depolarization Voltage: ±500mV  Sampling Rate: 1.0ms(1000Hz)  A/D Convertor: 12 bits  Frequency Response: 0.05Hz~165Hz (-3dB)  Time Constant: >3.2s  Noise Level: ≤15µVp-p  CMRR: ≥100dB  Digital Filters: HUM, EMG, ADS  Sensitivity: Auto, 2.5, 5, 10, 20, 40mm/mV (±2%)  Measurement: Heart rate, PR Int., Vent. Rate, P/QPS/T Axis  Patient Data: Date, time, ID, name, gender, age, height, weight, blood pressure, etc.  System Data: Sensitivity, paper speed, filter on/off, hospital name, etc.  Print-out: Waveform, waveform + measurement report or waveform + measurement report+analysis report  Printing System: High speed, high sensitivity thermal matrix printing system  Paper Speed: 5/6.25/10/12.5/25/50mm/s (±3%)  Printing Paper 210/216mm roll paper  Power Supply  AC: 100V-240V ( 50/60Hz )  DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Input Circuit Current:	≤50nA
Depolarization Voltage: ±500mV  Sampling Rate: 1.0ms(1000Hz)  A/D Convertor: 12 bits  Frequency Response: 0.05Hz~165Hz (-3dB)  Time Constant: >3.2s  Noise Level: ≤15µVp-p  CMRR: ±100dB  Digital Filters: HUM, EMG, ADS  Sensitivity: Auto, 2.5, 5, 10, 20, 40mm/mV (±2%)  Measurement: Heart rate, PR Int., Vent. Rate, P/QPS/T Axis  Patient Data: Date, time, ID, name, gender, age, height, weight, blood pressure, etc.  System Data: Sensitivity, paper speed, filter on/off, hospital name, etc.  Print-out: Waveform, waveform + measurement report or waveform + measurement report+analysis report  Printing System: High speed, high sensitivity thermal matrix printing system  Paper Speed: 5/6.25/10/12.5/25/50mm/s (±3%)  Printing Paper 210/216mm roll paper  Power Supply  AC: 100V-240V ( 50/60Hz )  DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Patient Current Leakage:	<10µA
Sampling Rate: 1.0ms(1000Hz)  A/D Convertor: 12 bits  Frequency Response: 0.05Hz~165Hz (-3dB)  Time Constant: >3.2s  Noise Level: ≤15µVp-p  CMRR: ≥100dB  Digital Filters: HUM, EMG, ADS  Sensitivity: Auto, 2.5, 5, 10, 20, 40mm/mV (±2%)  Measurement: Heart rate, PR Int., Vent. Rate, P/QPS/T Axis  Patient Data: Date, time, ID, name, gender, age, height, weight, blood pressure, etc.  System Data: Sensitivity, paper speed, filter on/off, hospital name, etc.  Print-out: Waveform, waveform + measurement report or waveform + measurement report+analysis report  Printing System: High speed, high sensitivity thermal matrix printing system  Paper Speed: 5/6.25/10/12.5/25/50mm/s (±3%)  Printing Paper  Power Supply  AC: 100V-240V ( 50/60Hz )  DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Calibration Voltage:	1mV±2%
A/D Convertor: 12 bits  Frequency Response: 0.05Hz~165Hz (-3dB)  Time Constant: >3.2s  Noise Level: ≤15µVp-p  CMRR: ≥100dB  Digital Filters: HUM, EMG, ADS  Sensitivity: Auto, 2.5, 5, 10, 20, 40mm/mV (±2%)  Measurement: Heart rate, PR Int., Vent. Rate, P/QPS/T Axis  Patient Data: Date, time, ID, name, gender, age, height, weight, blood pressure, etc.  System Data: Sensitivity, paper speed, filter on/off, hospital name, etc.  Print-out: Waveform, waveform + measurement report or waveform + measurement report + analysis report  Printing System: High speed, high sensitivity thermal matrix printing system  Paper Speed: 5/6.25/10/12.5/25/50mm/s (±3%)  Printing Paper  Power Supply  AC: 100V-240V ( 50/60Hz )  DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Depolarization Voltage:	±500mV
Frequency Response: 0.05Hz~165Hz (-3dB)  Time Constant: >3.2s  Noise Level: ≤15µVp-p  CMRR: ≥100dB  Digital Filters: HUM, EMG, ADS  Sensitivity: Auto, 2.5, 5, 10, 20, 40mm/mV (±2%)  Measurement: Heart rate, PR Int., Vent. Rate, P/QPS/T Axis  Patient Data: Date, time, ID, name, gender, age, height, weight, blood pressure, etc.  System Data: Sensitivity, paper speed, filter on/off, hospital name, etc.  Print-out: Waveform, waveform + measurement report or waveform + measurement report+analysis report  Printing System: High speed, high sensitivity thermal matrix printing system  Paper Speed: 5/6.25/10/12.5/25/50mm/s (±3%)  Printing Paper 210/216mm roll paper  Power Supply  AC: 100V-240V ( 50/60Hz )  DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Sampling Rate:	1.0ms(1000Hz)
Time Constant: >3.2s  Noise Level: ≤15µVp-p  CMRR: ≥100dB  Digital Filters: HUM, EMG, ADS  Sensitivity: Auto, 2.5, 5, 10, 20, 40mm/mV (±2%)  Measurement: Heart rate, PR Int., Vent. Rate, P/QPS/T Axis  Patient Data: Date, time, ID, name, gender, age, height, weight, blood pressure, etc.  System Data: Sensitivity, paper speed, filter on/off, hospital name, etc.  Print-out: Waveform, waveform + measurement report or waveform + measurement report+analysis report  Printing System: High speed, high sensitivity thermal matrix printing system  Paper Speed: 5/6.25/10/12.5/25/50mm/s (±3%)  Printing Paper  Power Supply  AC: 100V-240V ( 50/60Hz )  DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	A/D Convertor:	12 bits
Noise Level: ≤15µVp-p  CMRR: ≥100dB  Digital Filters: HUM, EMG, ADS  Sensitivity: Auto, 2.5, 5, 10, 20, 40mm/mV (±2%)  Measurement: Heart rate, PR Int., Vent. Rate, P/QPS/T Axis  Patient Data: Date, time, ID, name, gender, age, height, weight, blood pressure, etc.  System Data: Sensitivity, paper speed, filter on/off, hospital name, etc.  Print-out: Waveform, waveform + measurement report or waveform + measurement report+analysis report  Printing System: High speed, high sensitivity thermal matrix printing system  Paper Speed: 5/6.25/10/12.5/25/50mm/s (±3%)  Printing Paper 210/216mm roll paper  Power Supply  AC: 100V-240V ( 50/60Hz )  DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Frequency Response:	0.05Hz~165Hz (-3dB)
CMRR: ≥100dB  Digital Filters: HUM, EMG, ADS  Sensitivity: Auto, 2.5, 5, 10, 20, 40mm/mV (±2%)  Measurement: Heart rate, PR Int., Vent. Rate, P/QPS/T Axis  Patient Data: Date, time, ID, name, gender, age, height, weight, blood pressure, etc.  System Data: Sensitivity, paper speed, filter on/off, hospital name, etc.  Print-out: Waveform, waveform + measurement report or waveform + measurement report+analysis report  Printing System: High speed, high sensitivity thermal matrix printing system  Paper Speed: 5/6.25/10/12.5/25/50mm/s (±3%)  Printing Paper 210/216mm roll paper  Power Supply  AC: 100V-240V ( 50/60Hz )  DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Time Constant:	>3.2s
Digital Filters: HUM, EMG, ADS  Sensitivity: Auto, 2.5, 5, 10, 20, 40mm/mV (±2%)  Measurement: Heart rate, PR Int., Vent. Rate, P/QPS/T Axis  Patient Data: Date, time, ID, name, gender, age, height, weight, blood pressure, etc.  System Data: Sensitivity, paper speed, filter on/off, hospital name, etc.  Print-out: Waveform, waveform + measurement report or waveform + measurement report+analysis report  Printing System: High speed, high sensitivity thermal matrix printing system  Paper Speed: 5/6.25/10/12.5/25/50mm/s (±3%)  Printing Paper 210/216mm roll paper  Power Supply  AC: 100V-240V ( 50/60Hz )  DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Noise Level:	≤15µVp-p
Sensitivity: Auto, 2.5, 5, 10, 20, 40mm/mV (±2%)  Measurement: Heart rate, PR Int., Vent. Rate, P/QPS/T Axis  Patient Data: Date, time, ID, name, gender, age, height, weight, blood pressure, etc.  System Data: Sensitivity, paper speed, filter on/off, hospital name, etc.  Print-out: Waveform, waveform + measurement report or waveform + measurement report+analysis report  Printing System: High speed, high sensitivity thermal matrix printing system  Paper Speed: 5/6.25/10/12.5/25/50mm/s (±3%)  Printing Paper 210/216mm roll paper  Power Supply  AC: 100V-240V ( 50/60Hz )  DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	CMRR:	≥100dB
Measurement:  Patient Data:  Date, time, ID, name, gender, age, height, weight, blood pressure, etc.  System Data:  Sensitivity, paper speed, filter on/off, hospital name, etc.  Print-out:  Waveform, waveform + measurement report or waveform + measurement report+analysis report  Printing System:  High speed, high sensitivity thermal matrix printing system  Paper Speed:  5/6.25/10/12.5/25/50mm/s (±3%)  Printing Paper  Power Supply  AC:  100V-240V ( 50/60Hz )  DC:  19V/3.5A  Battery:  14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Digital Filters:	HUM, EMG, ADS
Patient Data: Date, time, ID, name, gender, age, height, weight, blood pressure, etc.  System Data: Sensitivity, paper speed, filter on/off, hospital name, etc.  Print-out: Waveform, waveform + measurement report or waveform + measurement report+analysis report  Printing System: High speed, high sensitivity thermal matrix printing system  Paper Speed: 5/6.25/10/12.5/25/50mm/s (±3%)  Printing Paper 210/216mm roll paper  Power Supply  AC: 100V-240V ( 50/60Hz )  DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Sensitivity:	Auto, 2.5, 5, 10, 20, 40mm/mV (±2%)
System Data:  Sensitivity, paper speed, filter on/off, hospital name, etc.  Print-out:  Waveform, waveform + measurement report or waveform + measurement report+analysis report  Printing System:  High speed, high sensitivity thermal matrix printing system  Paper Speed:  5/6.25/10/12.5/25/50mm/s (±3%)  Printing Paper  Power Supply  AC:  100V-240V ( 50/60Hz )  DC:  19V/3.5A  Battery:  14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Measurement:	Heart rate, PR Int., Vent. Rate, P/QPS/T Axis
Print-out: Waveform, waveform + measurement report or waveform + measurement report+analysis report  Printing System: High speed, high sensitivity thermal matrix printing system  Paper Speed: 5/6.25/10/12.5/25/50mm/s (±3%)  Printing Paper 210/216mm roll paper  Power Supply  AC: 100V-240V ( 50/60Hz )  DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Patient Data:	Date, time, ID, name, gender, age, height, weight, blood pressure, etc.
Printing System: High speed, high sensitivity thermal matrix printing system  Paper Speed: 5/6.25/10/12.5/25/50mm/s (±3%)  Printing Paper 210/216mm roll paper  Power Supply  AC: 100V-240V (50/60Hz)  DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	System Data:	Sensitivity, paper speed, filter on/off, hospital name, etc.
Paper Speed: 5/6.25/10/12.5/25/50mm/s (±3%)  Printing Paper 210/216mm roll paper  Power Supply  AC: 100V-240V ( 50/60Hz )  DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Print-out:	Waveform, waveform + measurement report or waveform + measurement report + analysis report
Printing Paper 210/216mm roll paper  Power Supply  AC: 100V-240V ( 50/60Hz )  DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Printing System:	High speed, high sensitivity thermal matrix printing system
Power Supply AC: 100V-240V ( 50/60Hz ) DC: 19V/3.5A Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Paper Speed:	5/6.25/10/12.5/25/50mm/s (±3%)
AC: 100V-240V ( 50/60Hz )  DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Printing Paper	210/216mm roll paper
DC: 19V/3.5A  Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	Power Supply	
Battery: 14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged	AC:	100V-240V ( 50/60Hz)
	DC:	19V/3.5A
Safety Standard IEC Class I. Type CF	Battery:	14.4V/4400mAh, more than 2-hour operation time after lithium battery fully charged
120, 510051, 1,700 61	Safety Standard:	IEC, Class I, Type CF

## Size & weight

Carton size: 415 x 195 x 380mm

Net weight: 3.5Kgs Gross weight: 5.5Kgs

**X** Specification subject to change without prior notice





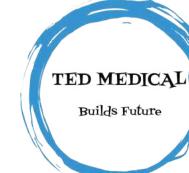


# ECG-1112L Digital 12-channel Electrocardiograph



## Features

- Design patent, software patent
- Application of CSE&AHA database, reliable measurement and analysis results
- 12-lead simultaneous acquisition
- 6'LCD,real-time display of 12-lead ECG waveforms
- Detection and alarm on lead-off and low battery
- Automatic adjustment of baseline for optimal printing
- Built-in ECG simulator for DEMO purpose
- Pre-10-second printing to print out any abnormal ECG waveform
- Unique 6CH+P printing mode, convenient for physical examination and printing report on A4 paper
- 3 kinds of operation mode: AUTO, MAN and ANA
- 3 kinds of filter: HUM,EMG and ADS
- 2 types lead mode:Standard and Cabrera
- 1000ECG files can be saved with SD card(optional)
- Communication with PC(optional)





# ECG-1112L

# Digital 12-channel Electrocardiograph

# • Design patent, software copyright patent

The design of ECG-1112L digital twelve channel electrocardiograph (ECG) complies with international standard IEC 60601-1, GB 9706.1 Medical Electrical Equipment: General Requirements for Safety and IEC 60601-2-25, YY1139 Particular Requirements for Safety of Electrocardiographs. The classification of this equipment is Class I, type CF, which means a higher degree of protection against electric shock and the patient connection is fully isolated and defibrillation protected.



# Multi-connecting Mode

Real-time ECG data can be transmitted to PC via ports of USB/ RS232 and wireless module(optional) case. ECG data can be further analysed, shared through internet or printed out with A4 paper.













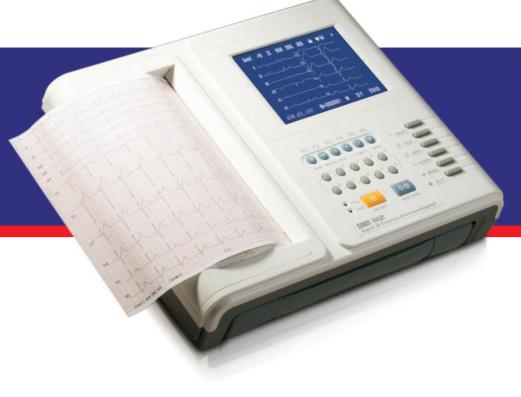


# Communication with PC









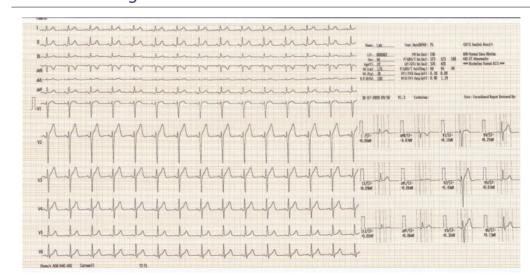
# • Alphameric keyboard, one touch operation







# Multi-Printing mode





# ECG-1112M Twelve Channel Electrocardiograph

# **Technical Specifications**

Safety standard:	MDD93/42/EEC, IEC60601-1 Safety level: class I, Type CF
Display:	7 inches 800×480 color LCD (touch screen)
Input circuit:	Floating, protection against defibrillator and pacemaker detection
Lead:	12 standard leads
Input impedance:	≥50MΩ(10Hz)
Input circuit current:	≤50nA
Patient current leakage:	≤10µA(a.c.)
Calibration voltage:	1mV±2%
Depolarization voltage:	±700mV
Sampling rate:	8000Hz for pace-maker detection
A/D convertor:	24 bits
Frequency response:	0.05Hz~165Hz
Time constant:	≥3.2s
Noise level:	≤15µVp-p
CMRR:	≥120dB
Digital filters:	HUM, EMG, ADS, Lowpass
Sensitivity:	Auto, 2.5, 5, 10, 20,40 (mm/mV) ±5 %
Measurement:	HR, PR/QT/QTC Interval, P/QRS/T Axis etc.
Patient data:	Date, time, ID, name, gender, age, height, weight, blood pressure, etc.
System data:	Sensitivity, paper speed, filter on/off, hospital name, etc.
Print-out:	Waveform, waveform + measurement report, waveform + measurement report+analysis report, etc
Printing system:	High speed, high sensitivity thermal matrix printing system
Paper speed:	5/6.25/10/12.5/25/50mm/s ( ±3% )
Printing paper:	210/216mm roll paper
Power supply:	AC: 100V-240V ( 50/60Hz )
	DC: 19V/3.5A
	Battery: 14.4V/4400mAh, built-in rechargeable lithium battery, over 3 hours working time

## Size & weight

Carton size: 415 x 195 x 380mm

Net weight: 3.5Kgs Gross weight: 5.5Kgs

TED MEDICAL LTD

www.tedmedical.co.uk

9 Washburn Avenue, Ellesmere Port, United Kingdom,

**X** Specification subject to change without prior notice











# ECG-1112M

Digital 12-channel Electrocardiograph



## Features

- 7" inch LCD display ,12-lead simultaneously acquisition
- 180 ECG files can be saved in the ECG
- Over 5000 ECG files can be saved to SD card(optional) more ECG files can be stored via USB port
- Freeze, Pre-10-second print and Trigger print function to observe any abnormal ECG waveforms
- Quick acquisition and stability, waveforms get stable within 3s
- HR detection alarm and pacemaker detection supported
- Cine-loop function: saved ECG waveform can be played back
- Auto-save function: users can choose whether to automatically save the files with the printout or not
- Support magnetic card reader, bar code scanner, transferring information conveniently
- Support external laser printer to achieve A4 size report output
- Data management software on PC(optional)
- Reliable automatic measurement & Interpretation tested with CSE&AHA da



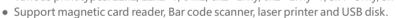


# ECG-1112M

# Digital 12-channel Electrocardiograph

# Outstanding Features of ECG-1112M

- Application of CSE & AHA database, reliable measurement and analysis results
- Multiple acquisition modes satisfy various clinical requirements;
- quick acquisition, waveforms get stable within 3s;
- full keyboard, touch-screen operation;
- any lead can be set as rhythm lead;
- 60s or 180s rhythm waveform can be acquisitioned for precise analysis;
- ST segment report and Minnesota code provide abundant reference information for accurate clinical diagnosis;
- Various print types: 12x1, 12x1+P, 6Tx2, 6x2+1rhy, 6x2+1rhy+P, 3x4+3rhy, 3x4+1rhy+P, Template+P;



# User-friendly system interface Two operating modes of keyboard and touch screen with new software interface make parameter setting, case management and report printing more convenient Carewell

# Design patent, software copyright patent

ECG-1112M digital 12 channel electrocardiograph configurated with 7" TFT color LCD display, it provides sufficient information on the analysis of arrhythmia and cardiovascular disease, helps to know pathological disorder caused by drugs, electrolyte or unbalance PH value. It is outstanding by modern design, sophisticated software packages, fine workmanship and compact size.







American Heart

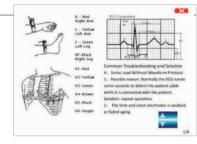
Learn and Live ...

Communication with PC LAN, RS232 module(option)

# Built-in Help function

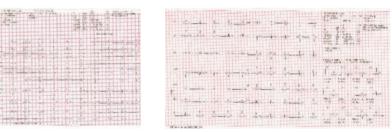
General knowledge on ECG operation and trouble-shooting are built-in the ECG machine.

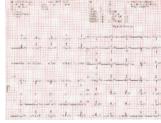
The user just needs to press Help key to read helpful information, 4 pages in total.



# Various print types

- Eight types under AUTO mode: 12x1, 12x1+P, 6Tx2, 6x2+1rhy, 6x2+1rhy+P, 3x4+3rhy, 3x4+1rhy+P, Template+P
- "...+P" mode: when user choose "...+P" mode, the ECG report will be A4 size and print time will be shorter





6x2+1rhy+p ( A4 Size )

# Communicate with PC for ECG data management (option)

- ECG files can be transferred to PC through Carewell ECG Workstation software PCECG-500A. ECG data can be edited, analyzed, saved or printed out as like.
- Combine optional specialized hospital magnetic card reader or Symbol LS1203 bar code scanner with external optional laser printer to improve work efficiency and save money.



# PCECG-500 ECG workstation

# PC operating environment :

Hardware:

CPU: Pentium CPU 1G Hz or better

Memory: 1G or better

Communication port: USB or RS232

Display: 1024\*768 or better

Software:

Operation system: Microsoft windows XP/ Vista/ win7

Licensing type: USB dongle software license.

# Modularized design (The relationship between four systems and modules)

Name of system		ECG Receiver	ECG Manager	ECG Vet Manager & Acquirer	ECG Manager& Acquirer
Туре		PCECG-500(R)	PCECG-500(M)	PCECG-500(VM)	PCECG-500(A)
Brief introduction to the functions		Can receive ECG files from several ECGs and support a variety file format conversion, storage and output	Can receive ECG files from several ECGs, and manage files, such as register, edit, waveform review, analysis and measurement	Except for all the function of receiver and manager systems, it can also support real-time lead acquisition, display and analysis.	Except for all the function of receiver and manager systems, it can also support real-time lead acquisition, display and analysis.
	File receiver module	•	•	•	•
Module	Data management module for human		•		•
composition	Data management module for veterinary			•	
	Acquirer module			•	•
Connected device		ECG (human / vet)	ECG (human)	ECG (Vet) & collecting box	ECG (human) & collecting box
Standard configuration		Software CD, RS232 cable, Dongle(R)	Software CD, RS232 cable, Dongle(M)	Software CD, RS232 cable, USB cable, Dongle (VA)	Software CD, RS232 cable, USB cable, Dongle (A)
Options		Network converter	Network converter	Network converter	Network converter

**X** Specification subject to change without prior notice







# PCECG-500 ECG workstation



# Main features

- Can be used in hospital, clinique, physical examination center, community health center and pet center
- $\bullet \ \ \mathsf{Application} \ \mathsf{of} \ \mathsf{CSE} \ \mathsf{and} \ \mathsf{AHA} \ \mathsf{database}, reliable \ \mathsf{automatic} \ \mathsf{measurement} \ \mathsf{and} \ \mathsf{analysis} \ \mathsf{result}$
- One key operation to install USB drive software, database and PCECG-500 system
- 12-lead simultaneous acquisition and display
- $\bullet \ \ High-precision\, electronic ruler, supporting\, adjust ment\, and\, analysis\, of\, any\, measuring\, point.$
- Up to 3600 seconds of ECG data can be stored, any 10 seconds can be picked out to analyze and print.
- Multiple, practical and user-definable ECG diagnosis dictionaries and modules
- Professional management database of 4G capacity, faster, safer and more stable
- 9 formats for option: XML, SCP, PDF, JPEG, DICOM3.0, HL7 aECG. WORD, BITMAP, MFER
- Multi-format printout of 12\*1, 6\*2+1 or 4\*3+1 on A4 paper vertically or horizontally.
- Quick search function: the doctor can set all kinds of searching terms, convenient for patient data recording and statistics.
- Can be connected to PC and hospital network





# PCECG-500

# **ECG** workstation

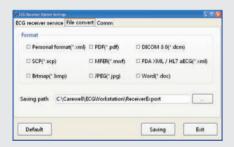
# • Network management

## Time-saving:

- Anytime, anywhere, fast collection for patient data
- One key installation

## Labor-saving:

- Up to 9 kinds of output formats
- For patients: stay in the wards and take ECG examination
   For nurses: upload files by PCECG-500
   For doctors: to review, analyze and print out the report in the office
- Mass data storage capacity and longtime preservation



File convert setting



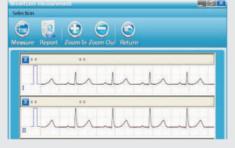
Main interface



PACS:Dicom3.0

HIS:HL7

Acquisition interface



Measurement interface

ECG Manager

Physical examination Dept.

Cardiac Dept.

**CAREWELL ECG workstation** 

Outpatient Dept.



Inpatient Dept.

ECG Manager & Acquirer

**ECG** Receiver

Analysis & Diagnosis interface



Hospital

network

• Every single ECG or several ECGs

can be connected to PCECG-500 to

• PCECG-500 can be communicated with PACS/HIS in hospital by

• Different systems of PCECG-500 can share the patient data through

DICOM3.0 and HI7.

.xml format.

realize data transfer or management.

Report interface

**Emergency Dept** 

# • Network management

PCECG-500

# Money-saving:

- A4 paper printout
- Fast and convenient second analysis on the network without printout
- Modulized design, four workstation systems for different ECG rooms
- Flexible upgrading solutions by changing a dongle



Network convert setting



Search interface