

# Holter ECG: Holter Analysis Softwares Cardioscan 10, 11, 12



**NEW STANDARDS IN DIAGNOSTIC HOLTER ECG**

**UNIQUE PERFORMANCES IN THE WORLD OF HOLTER ECG**

- ⌘ Holter analysis of arrhythmias (VE's, SVE's, Bigeminy, Trigeminy, Pairs, Runs, V-Tach, Min HR, Max HR), ST, Pauses, QT/QTc, Bundle Branch Blocks
- ⌘ 24h ECG full disclosure scanning with colour coded events for immediate visual verification
- ⌘ 24H Histograms of HR, ST, QT/QTc, VE, SVE, Pauses, and SDNN
- ⌘ Patient Event Monitoring with 3 or 12-Lead ECG strips print outs (XYZ)
- ⌘ QT/QTc Analysis Validation Program
- ⌘ Atrial Fibrillation / Flutter Analysis
- ⌘ Time Domain and Spectral Heart Rate Variability
- ⌘ "VE Chaos" Analysis (HR Turbulence)
- ⌘ 3/12-Lead ST Analysis with 3D graph and FCGADgram (CAD location Graph)
- ⌘ Late Potentials SAECG, VectorCardioGraphy
- ⌘ Holter Analysis of Pacemaker Recordings
- ⌘ Sleep Apnea Monitoring with detection of SAS episodes
- ⌘ Standard Resting 12-Lead Analysis Menu
- ⌘ T-Wave Alternans analysis ("T-Wave Alternans")
- ⌘ Functions "E-mail", "PDF Output", "Export ASCII", and "Data Base Management System of multi ECG tests NIS"
- ⌘ Windows 2000, NT, XP, 7 compatible

## INNOVATION AND EXPERIENCE

CardioScan has redefined diagnostic Holter ECG systems : the association of a new Holter ECG recording technology and multiple diagnostic tests never achieved in Holter ECG software prior to us ! No additional hardware being required for the PC or the Printer, this new technology can be installed on any desktop or laptop under almost any windows operating system. The entire system installation process is performed in less than one minute. The new series DMS 300-3 of Mini Digital Holter Recorders bring Holter recording to a new standard in the industry. Not only does it record 3 to 12 leads of continuous ECG with either 4, 7 or 10 electrodes from 24h to 30 days, but it can send the ECG corresponding to symptomatic events recorded by the patient as well as the holter ECG analysis of the past 24h via any analog telephone line. It only weighs 38g, has a built in memory of 512 Mb, and thanks to a patient isolation cable it is also used as a 12 Lead resting ECG acquisition device and a 12 Lead Stress Test ECG device with the appropriate 10 electrodes cable and appropriate Resting ECG or Stress Test ECG software. The unique sampling rate in Holter ECG recording technology of 1.024 samples per second associated to a Frequency of 0,05 to 500 Hz provide the required ECG signal superior quality for the above functions, as well as a valid recording of the Late Potentials SAECC file, and the best Pacemaker Spike detection in the Holter industry. This enables doctors, clinics and hospitals to obtain the highest level of ECG signal quality and provide their patients with the best diagnostic results possible. And the 3 leads recorders allow the playback of 12 leads recordings with 7 electrodes using XYZ placement , providing a signal quality equivalent to standard 12 lead ECG recordings.

Mn to Mn Correlation of HR, ST, VE,  
V-Tach, SVE, SV-Tach, Pauses, QT/QTc,  
And HRV

Full Editing Menu of Arrhythmia Templates,  
Significant ECG Events with Ultra  
Fast & Accurate editing functions

Immediate access to any and all  
portion of the 24h ECG in 3-lead  
or 12-lead format




Ultra Small & Light Built in Memory Mini Holter recorder  
or Compact Flash Card LCD Holter Recorders



## THE BEST OF HOLTER ECG ANALYSIS SOFTWARE

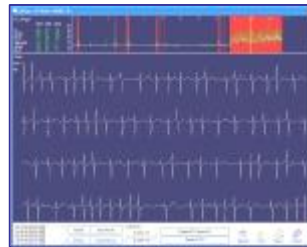
And how the pleasure of reading a Holter recording begins with CardioScan... In less than 45 seconds the entire 24 hours of holter ECG is transferred to the Hard Disk of the PC and analysed. In addition to the now standard full disclosure, arrhythmia, Blocks, ST, and Heart Rate analysis, CardioScan offers new cardiac diagnostic tests never yet provided in Holter to such level : (1) Time Domain and Spectral HRV analysis, with Lorenz & Poincaré plots, 3D Power Graphs, Medication Management, Sympathetic / Parasympathetic ratio and « Interbeat-Interval-Increment » percentages; (2) 12 Lead ST Validation with Histograms, Superimposition, Slope comparisons, 3D ST Graph; (3) QT Dispersion with precise location of end of T Wave by Vectorcardiography (VCG); (4) new QT/QTc validation modules and a unique technology of end of T-Wave editing for a precise QT Dispersion analysis; (5) Atrial Fibrillation / Flutter Analysis (6) Vectorcardiography for location of polymorph VE's; (7) Time Domain and Spectral SAECG Late Potentials Analysis; (8) Unique T-Wave Alternans Analysis & Validation program; (9) Detection of Sleep Apnea Episodes (10) New FCG CADgram technology for detection & localisation of coronary blockages (CAD - Coronary Artery Disease) without using the stress test method; (11) ESV Chaos program to analyse patients "Heart Rate Turbulence"; (12) P Wave Trending and (13) Internet function for real time scanning or immediate transfer at low cost of complete Holter recordings and reports. Numerous functions, either practical or for research purposes, make CardioScan the best technology available in Holter ECG analysis. And since modern technology is now fully integrated in software development, it is available at surprisingly very economical levels, and can be installed on any windows based PC.



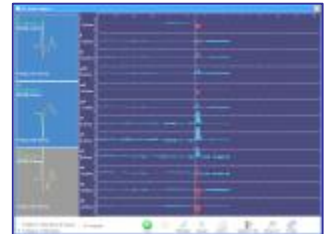
**Mini Holter recorder 1-30 days**  
 Built-in 512 Mb flash memory  
 1 « AAA » battery for 7 days  
 1024 / 512 per sec sampling rate  
 Event Recorder with built in phone  
 Transmission

**DMS 300-7, 7L, 8, 12, 12L Recorders**  
 3-Lead LCD screen (for L)  
 3 or 12-Lead with 4 to 10 wires  
 1 to 2 AA Alkaline batteries  
 Compact Flash Card Memory 64/128Mb

**A-Fib/Flutter Analysis**

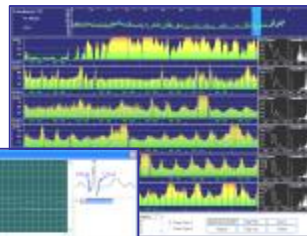


**12-Lead ST Analysis with superimposition**

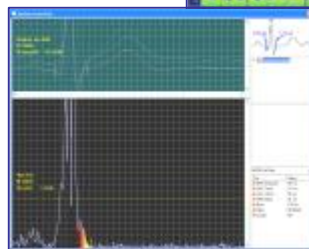
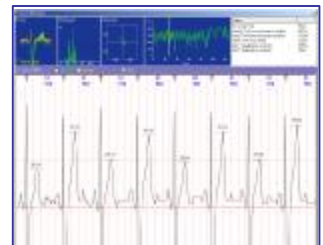


**VE Chaos (HR Turbulence)**

**Sleep Apnea Detection**

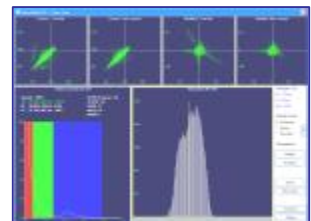


**T-Wave Alternans**

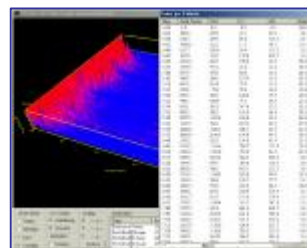


**Late Potentials SAECG**

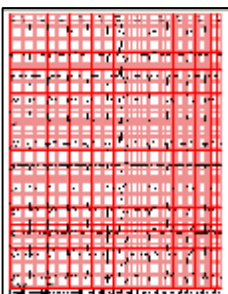
**Enhanced Time domain and Spectral Heart Rate Variability**



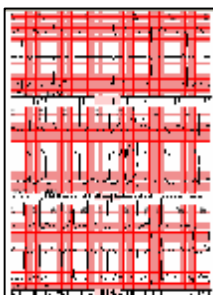
**Suivi Traitement et Ratio Sympathique/Parasympathique**



**12-Lead ECG Strips**



**3-Lead ECG Strips**



## CardioScan Softwares Comparison

CardioScan  
10

CardioScan  
11

CardioScan  
12

### Mini-Holter Recorders:

3-Lead, 2-Day, 7-electrode, 1024 Sample Rate	X	X	X
3-Lead, 7-Day, 5-Electrode, 1024 Sample Rate	X	X	X
12-Lead, 3-Day, 10-Electrode, 256 Sample Rate			X
3-Lead, 30-Day, 4-Electrode with Phone Event ECG			X

### Processing Software:

15-seconds for 24-Hour Multi-Parameter Analysis	X	X	X
24-Hour Auto Baseline Straightening	X	X	X
Auto-Holter	X	X	X
Color-Coded Full Disclosure Print-Outs	X	X	X
Full Disclosure at 1, 2, and 4 Hours per Page	X	X	X
Pacemaker Analysis	X	X	X
VE Template Editing	X	X	X
SVE Template Editing	X	X	X
Aberrant Beat Template Editing	X	X	X
Bundle Branch Blocks	X	X	X
ST Analysis with 3D Graph	X	X	X
Pediatric Analysis	X	X	X
Retrospective and Prospective Modes	X	X	X
12-Lead ECG Strips from XYZ	X	X	X
Remote Internet Processing	X	X	X
Remote On-Line Internet Installation and Tutorial	X	X	X

Atrial Fibrillation analysis and report		X	X
Heart Rate Variability: Time Domain & Frequency		X	X
SAECG Late Potentials		X	X
Vectorcardiogram (VCG) from SAECG file		X	X
QTc Analysis and Validation		X	X

VE Chaos			X
T-Wave Alternans			X
Sleep Apnea			X
SAECG Late Potentials from any part of 24-Hour Holter			X
Vectorcardiogram (VCG) from any part of 24-Hour Holter			X
Event ECG Phone Transmissions and Reports			X
12-Lead Holter Recordings Processing			X
Resting 12-Lead processing and analysis from Holter			X
12-Lead ST Analysis			X
12-Lead QT Analysis			X
Sleep Apnea Research Package			X
R-R and N-N Full Disclosure			X
QT-Dispersion from selected 12-Lead ECG Displays			X
FCG CADgram for Ischemia Detection			X