

Helping you improve patient care.

Welch Allyn  
**Holter Systems**



**WelchAllyn**<sup>®</sup>

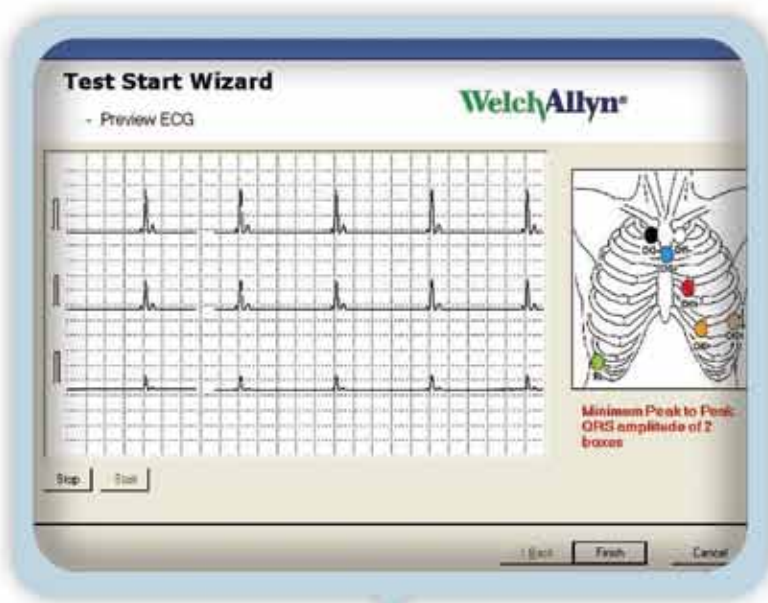
Advancing Frontline Care<sup>™</sup>



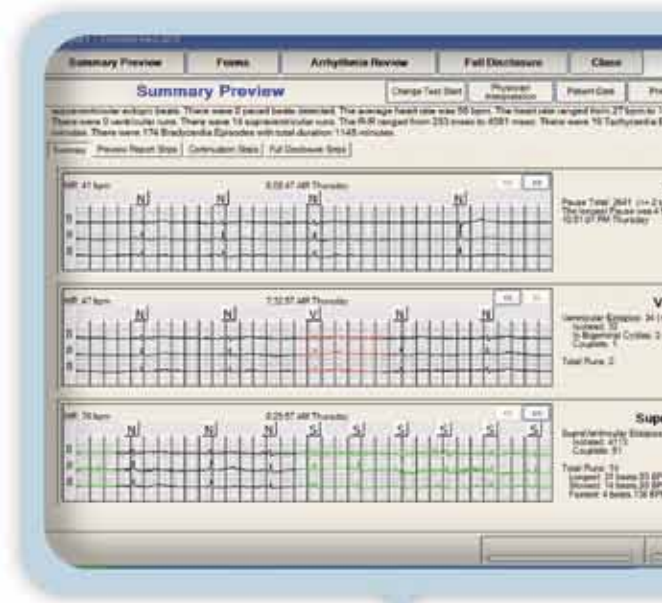
## Welch Allyn Holter Systems

User-friendly, powerful systems that are tailored to meet your needs.

Welch Allyn Holter Systems feature easy-to-use software and recorders that can improve patient compliance due to their lightweight, compact profile. Using Welch Allyn Office Holter software or Welch Allyn Expert Holter software, the systems can be configured with a compact digital recorder featuring 2- or 3-channel recording for a detailed evaluation. Either system provides you with fast, accurate data that helps to streamline your workflow and make your practice more efficient and EHR compatible.



*Wireless preview of patient's ECG in real time to verify signal quality and placement*



*Summary preview of patient ECG highlights serious abnormalities*

# Choose the software system that gives you the information you need.

## Welch Allyn Office Holter Software—PCH-100

### EASY TO USE

- Intuitive menus allow you to easily program your test using the Start Test Wizard

### DETAILED ANALYSIS

- Highlight key areas for further analysis with our unique summary results presentations
- View a live preview display of the ECG for lead quality verification

### FAST

- Transfer recordings in just minutes—the results can be ready for your immediate review even before your patient leaves the office

### POWERFUL

- Format your reports to provide information you need in the format you want
- Adjust clinical parameters to match your practice needs

## Welch Allyn Expert Holter Software—PCH-200

In addition to the features offered in the PCH-100 software, the PCH-200 offers the following:

### DETAILED ANALYSIS

- Review detailed views of results from any entry point: Forms, Arrhythmias, Heart Rate, and FD review modes
- Review and edit down to the beat level from every review mode

### COMPREHENSIVE EDITING TOOLS

- Relabel beats individually or as a form
- Manually mark/label/insert ECG strips as required
- Mark and relabel regions as atrial fib/flutter or artifact
- Multiple final report customization options
- Control speed and resolution of full-disclosure review with Autopaging function
- Record results as you move through the editing process with the Floating report interpretation window
- Email Holter reports for review and consult
- Administrative functions with password log-on controls to support your program for HIPAA compliance





Choose either recorder to work with your preferred software system.



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## HR-100

Holter recording in an incredibly small package

- 2- or 3-channel recording
- 24-48 hours of recording time
- Pacer detection
- Wireless transfer of patient's ECG in real time to verify electrode quality and placement



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## HR-300

Powerful features for the demanding user

In addition to the features offered in the HR-100, the HR-300 offers the following:

- Display for real-time ECG preview or test programming
- Programmable sampling rates of 200, 500 and 1,000 sps

## System Software Specifications

### Minimum System Requirements

- Windows® 2000 (32-bit) with SP4 or higher, or Windows XP (32-bit) with SP1 or higher, or Windows Vista (32-bit) Home Premium, Business or Enterprise, or Windows 7 (32-bit) Home Premium or Professional, or Windows 2003 Server
- 300 MHz Pentium processor or faster
- 256 MB RAM
- 40 GB hard drive
- Mouse and keyboard
- CD-ROM drive
- Printer with 300 dpi resolution
- USB 1.1 or 2.0—2 USB ports
- CD writer or equivalent for data backup
- 1024 x 768 screen resolution

## Ordering Information

### Kits and Systems

100710*	PCH-100 Office Holter Software Kit Includes software, 1 HR-100 Holter recorder, and 7-lead patient cable
100711*	PCH-100 Office Holter System Includes laptop with 15" display, laser printer, Holter software, 1 HR-100 Holter recorder, and 7-lead patient cable
100712*	PCH-200 Expert Holter Software Kit Includes software, 1 HR-300 Holter recorder, and 7-lead patient cable
100713*	PCH-200 Expert Holter System Includes laptop with 15" display, laser printer, Holter software, 1 HR-300 Holter recorder, and 7-lead patient cable

\*Note: The above models include:

- USB Bluetooth Adapter
- USB SD Card Reader

### Software

101510	PCH-100 Standalone Holter Software without Recorder
101511	PCH-100 LAN—3-user Holter Software without Recorder
101512	PCH-200 Standalone Holter Software without Recorder
101513	PCH-200 LAN—3-user Holter Software without Recorder

### Accessories

401700	HR-100 Holter Recorder with 5-lead cable
401701	HR-100 Holter Recorder with 7-lead cable
401704	HR-300 Holter Recorder with 7-lead cable
704545	5-lead Patient Cable, AHA, HR-100
704547	7-lead Patient Cable, AHA, HR-100
704549	7-lead Patient Cable, AHA, HR-300
704553	HR-100 Carrying Case
704554	HR-300 Carrying Case
08113-0002	3-channel Holter Hookup Kit
45002-0000	Holter Electrodes, 500/case



# Welch Allyn Holter Systems Specifications

## Holter Recorder Characteristics

	HR-100	HR-300
Length	3.8 in (96.5 mm)	4.4 in (112 mm)
Width	2.2 in (56 mm)	3.1 in (78 mm)
Height	0.7 in (18 mm)	1.4 in (36 mm)
Weight*	7 oz (198 g)	14 oz (397 g)
Keyboard (HR 300 only)	Elastomer keypad with navigational and soft menu keys.	

\*with battery (or batteries) and patient cable

## Operation

	HR-100	HR-300
Power Source	one size AA (size LR6) alkaline battery	two size AA (size LR6) alkaline batteries
Sampling Rate	200 sps	200, 500, 1,000 sps
Recording Period	Maximum 24-48 hours continuous	
Storage Capacity	Up to 16 GB (SD card)	
Storage Period	Data remains valid for >5 years or until memory card is initialized	
Battery Life	48 hours	
Pacemaker Detection	ANSI/AAMI EC38-1998	
Effective A/D Resolution	2.5 $\mu$ V	.5 mV
Dynamic Range	+/- 300 mV	+/- 300 mV
Frequency Response	0.05 to 100 Hz	0.05 to 250 Hz

## Environmental Specifications

Operating Temperature	32 °F to 113 °F (0 °C to 45 °C)
Storage Temperature	-10 °F to 149 °F (-23 °C to +65 °C)
Operating Humidity	10 to 95% noncondensing
Storage Humidity	5 to 95% noncondensing
Operating Altitude	700 to 1060 millibars
Storage Altitude	700 to 1060 millibars
Operating Shock	3 in (75 mm) drop to hard surface on any axis
Storage Shock	31.5 in (0.8 m) drop to hard surface on any axis
Operating Vibration	0.0002 G2/Hz from 5 to 350 Hz, ramping to 0.0001 G2/Hz from 350 to 500 Hz, random vibration spectrum, 10 minutes in each of three orthogonal axes

## Protection against ingress of water

IPX0—no protection against water

## Device Classification

Meets or exceeds Council Directive 93/42/EEC, MDD, Class IIb	
AECG, Device Type	Type 1
EMC	Class 2B

## Conforms to Regulatory Standards

International Electro-Technical Commission	CAN/CSA C22.2 No. 601.1-M90 UL 60601-1, IEC 60601-1-4, IEC 60601-1-1, IEC 60601-1-2, IEC 60601-2-47
American Advancement of Medical Instrumentation	ANSI/AAMI EC38-1998
Australian Safety Compatibility	AZ/NZS 3200-1-0

## CPT Codes

### CPT Coding Options for Holter Monitoring

93230	Electrocardiographic monitoring for 24 hours by continuous original ECG waveform recording and storage without superimposition scanning utilizing a device capable of producing a full miniaturized printout; includes recording, microprocessor-based analysis with report, physician review and interpretation
93231	Recording (includes hook-up, recording, and disconnection)
93232	Microprocessor-based analysis with report
93233	Physician review and interpretation

### A word about the coding information contained in this brochure.

Listed within this brochure are references to codes from the Current Procedural Terminology, Fourth Edition (CPT®). Please note that the coding information contained here is neither conclusive nor does it ensure that you will be successful in obtaining coverage and/or reimbursement from government and private payers.

Depending on circumstances that will vary from patient encounter to patient encounter, separate reimbursement may or may not be allowed for use of a Welch Allyn product used during a specific procedure or service. Use of the product may be included in the reimbursement for Evaluation and Management services provided by the physician. Please check with the specific payer to confirm whether or not the use of a separate code is acceptable. Welch Allyn does not assume any responsibility for the decisions made by payers regarding payment for procedures involving our devices when the coding information suggested in this brochure is used.

Please refer to this page for a full listing of the codes and their accompanying descriptors before determining if the code is suitable for submission on a claim to a payer.

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