# The **BURDICK**<sup>®</sup> HeartStride<sup>™</sup> Exercise Stress System

## A practical cardiac stress testing system with EMR connectivity

#### **Primary Users**

Physician practices and cardiology clinics

#### **Primary Benefits**

*Ease of use.* The system has easy-to-use, intuitive screens – just point and click.

User-friendly. The proprietary Logistep<sup>™</sup> feature highlights the next step as you move through the testing protocol.

Seamless. HeartStride can connect to your echo or nuclear system and you can select the output channel you want.

Connectivity. HeartStride is compatible with XML protocols and our HeartCentrix<sup>®</sup> connectivity solution, so connecting to other office systems and your electronic medical record (EMR) system is a snap.

Flexibility. HeartStride offers eight standard, preprogrammed protocols, a pharmacological protocol, and manual control options.

*Real-time*. The system's large screen displays all heartbeats, even during protocol changes.

Accuracy. The automated electrode-impedance check ensures the highest possible trace quality and minimizes the need for repeat tests.





### Easy to use with the features you need

Enjoy the simple graphical user interface while knowing you have access to enhanced clinical features and optional connectivity capabilities.

- + Easily connect the HeartStride to your echo or nuclear system, selecting the output channel you want.
- + Change testing protocols with a simple mouse click.
- + Use the full range of in-test and final report configurations to document exactly what you want.
- + Save time with the QuikList feature that provides conventional words or phrases for final report preparation.
- + Store virtually unlimited data and reports on the hard drive or export information to your EMR.
- + Add our optional HeartCentrix connectivity solution to enjoy bi-directional communications.

With a single sign-on within the EMR, you'll be able to download information and orders directly to the HeartStride and upload test results back to the EMR.

### Training and support to get you up and running

Adding a new system to your clinical repertoire is exciting and Cardiac Science wants to help you succeed.

- + Our implementation team can advise you on room layout.
- + Initial on-site operations training is included.

#### Get even more with a TM55 or TM65 treadmill

The HeartStride can be configured with a Cardiac Science TM55 or TM65 treadmill powered by Ultradrive<sup>™</sup>, a digitally controlled AC-drive system. These medical treadmills are the gold standard in the industry – smooth, quiet, and capable of carrying a 500-pound (227-kilogram) patient.

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TECHNICAL SPECIFICATIONS	
OPERATING SYSTEM	Windows XP / Vista Ultimate
POWER REQUIREMENTS	100/120 VAC 50/60 Hz 2.5 A nominal; 200/240 VAC 50/60 Hz 1.3 A nominal
PROTOCOLS	
Standard	Bruce, Modified Bruce, Modified Balke, Naughton, USAF/SAM 2.0, USAF/SAM 3.3, Persantine (pharmacological)
PATIENT MODULE	AHA 10-electrode with pinch or snap connectors
	IEC 10-electrode with pinch or snap connectors (available for International only)
ECG	
Capability	True 12-lead
Gain Lood Course	5 mm/mV, 10 mm/mV, 20 mm/mV
Lead Groups Display	Standard (Mason-Likar), Cabrera 12-lead, Frank, Canadian Bipolar 3 channels
Performance Standard	AAMI-EC II: gain accuracy, frequency response, CMRR, system noise, dynamic range, and input impedance
DISPLAY AND ANALYSIS FILTERS	Muscle artifact filter, baseline wander filter, 40 Hz low pass, line frequency. All filters can be turned on or off by the user
ECG COMPUTATIONS	
Heart Rate	Computation 6 second average updated every 2 seconds
ST Parameters	Level and slope
Reference Point	J Junction (QRS offset), user-selectable
QRS Detection	ASVV (Absolute Spatial Vector Velocity), user can select any three leads
Beat Detection	Enhanced Quinton Stress algorithm for improved beat detection
VISUAL AND AUDIO NOTIFICATIONS	ST level elevation, ST level depression, target HR achieved, ectopic rate, diastolic BP, systolic BP, systolic BP drop, heart rate,
REPORTS	stage changes, max heart rate and target HR achieved
In-Test	12-Lead, average beat, 1-page write screen, continuous write screen, ectopic detail
Final	Summary, tabular, worst case, average beats, in-test reports and peak exercise
	Reports can be viewed, printed, saved in PDF format, e-mailed or faxed. XML format for data export to other systems
OUTPUTS	TTL pulse for QRS detection (lead is user- selectable); 3 user-selectable analog outputs using any ECG lead
EXTERNAL DEVICE INTERFACES	
Treadmills	TM 55/65, ST 55/65 (Upgrade kit required)
Ergometers	Corival, Ergoselect, Rehcor
Blood Pressure Monitors	Colin BP412, SunTech Tango+
AVAILABLE PRINTER	Optional Laser printer: compact HP laser printer with high quality print
NETWORK INTERFACE	Optional Microsoft compatible networking for file storage, distribution and email
EXPORT/COMMUNICATION PROTOCOL/FORMAT	XML, PDF
REMOTE TECHNICAL SERVICE	Remote service increases system uptime availability and decreases the user's requirement to assist the troubleshooting process.
INTERFACE	Available via network or desktop connections (available only in the US)
DISPLAY	483 mm (19 in) LCD flat panel
ENVIRONMENTAL	
Operating temperature	50°F to 77°F (10°C to 25°C)
Operating relative humidity	20% to 80% non-condensing
Storage temperature	-14.8°F to 104°F (-26°C to 40°C)
Storage relative humidity	10% to 95% with condensation
Thermal paper storage	at or below 77°F (25°C)
Electrodes storage	at or below 86°F (30°C)
SAFETY AND STANDARDS	EN 60601-1, Type CF defibrillation proof applied part IEC 61000-4-6 IEC 61000-3-2
	IEC 61000-4-2 IEC 61000-4-4 IEC 61000-4-8 IEC 61000-3-3
CART DIMENSIONS AND WEIGHT	IEC 61000-4-3 IEC 61000-4-5 IEC 61000-4-11 RF emissions CISPR 11   20: 22: 25: (7/2) 55:0.0 000 ) 1/2 II (//4.1.)
CART DIMENSIONS AND WEIGHT	30 in x 22 in x 35 in (762 mm x 558.8 mm x 889 mm); 142 lb (64 kg)
WARRANTY	13 months

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