

The Midtronics logo features the word "MIDTRONICS" in a bold, white, sans-serif font. A stylized white lightning bolt graphic is positioned below the letter "I". The logo is set against a dark blue background with a white border.

**Advancing  
Battery Management**

The background of the advertisement features a large, semi-transparent image of the Midtronics GRX-3000 Battery Diagnostic Station. The device is a rugged, black, rectangular unit with a control panel on the right side. The panel includes a small LCD screen at the top, a numeric keypad below it, and several function buttons. A red and black alligator clip is attached to the front of the device. In the upper left, there is a faded image of a battery with diagnostic cables connected to it. The overall background is a dark blue with faint, glowing circuit board patterns.

# GRX-3000 BATTERY DIAGNOSTIC STATION

**Easy-to-use scalable solution designed to support  
full-service battery management programs**

Fast, accurate and reliable, the GRX can determine—often in less than five minutes—the difference between a recoverable battery and one that is not.

Diagnostic charging is uniquely designed to continuously monitor the charging progression. Each session is customized and highly controlled—charging stops

as soon as a battery can be returned to the customer or is determined to require replacement. Defective batteries with open welds and shorts are identified rapidly and recoverable batteries are quickly and safely charged, putting your customers back on the road faster.

The GRX diagnostic station delivers better efficiency in the shop, clearer test results and more accurate preventative maintenance decisions by helping to eliminate guesswork and wasted time charging defective batteries.

# GRX-3000 Battery Diagnostic Station

## Saves Money

### SCALABLE

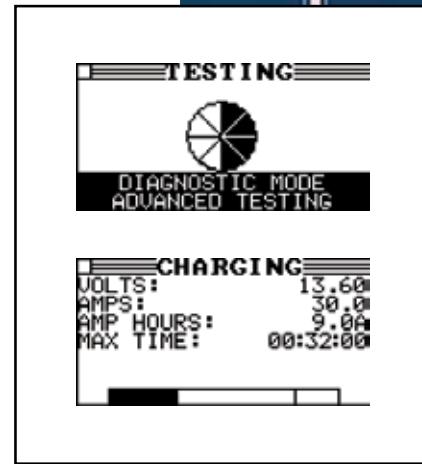
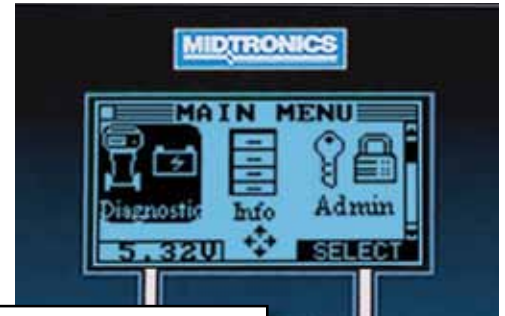
- Modular design enables you to easily adapt the product to fit your needs
- Buy the features you need now, but retain the flexibility to add more functionality later

### VERSATILE

- Works with 6-volt and 12-volt vehicle batteries—regular flooded, AGM and Gel
- Integrates seamlessly with existing testing equipment
- Includes standard USB port and data card slot for field upgrades and data collection
- Easy-to-install optional communications modules allow you to add Ethernet, WiFi, Bluetooth, Zigbee, or add-on features like barcode scanners or RFID devices via serial port
- Optional integrated thermal printer enables you to print out reports for customer education and sales support
- 7-foot replaceable cables facilitate easy service in the field with minimal downtime
- Integrated temperature sensors in each cable improve safety

### SUPERIOR WARRANTY MANAGEMENT

- Encourages compliance with warranty testing procedures—easy, step-by-step, “error-free” process improves test execution
- Rapidly determines whether a battery will benefit from a charge or should be replaced



Large backlit screen and intuitive icon-based menu make the GRX easy to use with little or no training.

GRX continuously monitors, collects and displays charge session data.



Optional self-installed modules make it easy and economical to add functionality without having to replace the product.



## Increases Customer Satisfaction

- In models equipped with printer, GRX generates a clear, easy-to-understand early status report on battery health in five minutes or less so store personnel can review results with the customer, reinforcing role as trusted advisor
- Identifies batteries that need charging and recovers good batteries quickly to get the customer back on the road
- Conditions batteries to reduce early life failures and improve customer service

## Saves Time

### IMPROVED EFFICIENCY

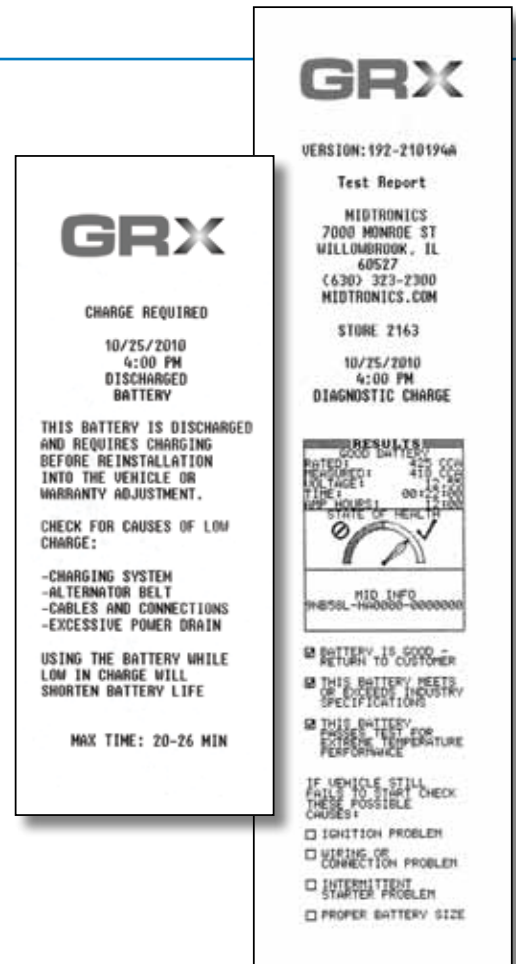
- Easy to use with little or no training
- Intuitive icon-based menus and step-by-step process reduce errors
- Identifies batteries with defects like open welds or shorts to eliminate wasted time charging bad batteries

### ACCURATE, QUICK DIAGNOSIS

- Quickly assesses the condition of the battery so you only spend time charging good/recoverable batteries
- Optimized algorithms to quickly charge good batteries for return to the customer

### EASY TO USE

- Large backlit screen and simple arrow keys
- Full, alphanumeric keypad
- Four LED lights enable easy monitoring of charge status, even at a distance
- Charge countdown timer improves time management and customer communication
- Rugged, durable housing stands up to heavy daily use



Early status printouts, delivered in five minutes or less, feature an estimated charge time and potential reasons for the low state of charge. (LEFT)

Easy-to-understand final test printouts reinforce customer education and include codes for warranty management programs. (RIGHT)

## Diagnostic Charging Overview

Diagnostic charging uniquely combines diagnostics and fast charging for maximum service efficiency. Midtronics created the diagnostic charging category by merging our patented conductance technology with additional load testing capabilities and dynamic measurements of current, voltage and conductance progression to establish a custom battery diagnostic and charging routine.

- Continuously monitors, collects and displays charge session data
- Controlled charge stops as soon as optimum charge is achieved or battery is deemed non-recoverable
- Customizes charge sessions by battery type
- Detects and compensates for degraded cables
- Successfully recovers a high percentage of deeply discharged or sulfated batteries

### TESTING STAGE 1

Quickly detects batteries with gross defects to eliminate wasted time charging them. Determines whether a battery is recoverable in a given timeframe.

### DIAGNOSTIC CHARGING

Diagnostic algorithms continuously monitor the battery to deliver optimal current, increase charge acceptance and decrease charge time. Detects previously masked battery defects, ensuring that only 'good' batteries are returned to customers.

### BATTERY DELIVERY TO CUSTOMER

Diagnostic charging ensures that the battery can and will hold an optimum charge and perform when needed—unlike fast chargers that may “charge” a battery only to have it fail again later due to unknown defects.



## Complete Your Battery Management Program

Already using a Midtronics battery and electrical diagnostic tool but need an effective way to charge batteries? The GRX is the solution to complete your battery management program. Using a tester by itself means that charging is still guesswork. Given the changes in battery chemistry, standard chargers often can't do the job and can even be dangerous.

Using the GRX in combination with other Midtronics products—like the EXP-800 Battery and Electrical Diagnostic Analyzer—enables you to assist your customers in every battery service situation. The EXP-800 delivers quick and accurate decisions for battery service and preventative maintenance and the GRX provides a professional solution when the battery needs to be charged. Using both tools provides maximum coverage and lets you service more customers faster.

## Advancing Battery Management

Since pioneering a new standard in battery testers with conductance technology, Midtronics has remained singularly focused on battery management innovation. Our original conductance technology has evolved into productivity-enhancing electrical diagnostic tools, diagnostic charging systems and information management.

Today, leading vehicle manufacturers, service centers and battery retailers around the world trust Midtronics testing and charging equipment and complete battery management programs. It's not just because our products are the most reliable, accurate and powerful in the industry, it's also because we're always looking for new ways to benefit their businesses.

Midtronics continuously develops new technologies to address the challenges of new battery designs and complex modern-day vehicle systems, including hybrid and electric vehicles. We are committed to extending the functionality and applications of our trusted technology through ongoing research, innovation and close relationships with customers.

## Product Specifications

**Model:** GRX-3000, includes 7-ft replaceable cables

**Applications:** Tests 6 and 12 volt batteries (including regular flooded, AGM and GEL batteries)

**Dimensions:** 18.0 in L x 17.0 in W x 9.7 in H (45.7 cm L x 43.2 cm W x 24.6 cm H)

**Weight:** 49.5 lbs

**Operating Temperature:** 32°F–120°F (0°C–49°C)

**Display:** LCD graphics display

**Rating System:** DIN, EN, IEC, JIS, SAE

**Battery Range:**

CCA, CA, MCA (Marine Cranking Amps)

**Charging Voltage:** Up to 17 volts, .1 resolution

**Charging Current:** 0–50 Amps, 1 Amp resolution

**Compliance:** ROHS, CUL

**Supported Languages:**

English, Spanish, French-Canadian

**Housing Material:** Acid-resistant ABS plastic

**Integrated Data Card Slot and USB Port**

**Optional Integrated Printer**

**Optional Communications Modules:**

- Ethernet port
- Wireless ports (WiFi, Bluetooth, Zigbee)
- Serial ports to support features like a bar code reader or RFID wand