

**MIDTRONICS**Advancing  
Battery Management

## MDX-600 Series

### Battery Conductance and Electric System Analyzers

The Midtronics MDX-600 Series combines 30 years of experience and innovation gained from selling essential tools to nearly every car and truck OEM in the world. With industry standard conductance technology for battery testing, the MDX Series is:

**SAFE** Worry-free operation anywhere, even in front of customers

**FAST** Accurate testing of the battery or electrical system in seconds

**SIMPLE** Proven user interface eliminates guesswork and user error to provide an accurate analysis every time

The MDX Series delivers solid benefits:

- Save time and money with improved battery and electrical diagnostic productivity
- Improve customer service by reducing wait time
- Increase sales by proactively testing batteries and electrical systems
- Promote customer satisfaction by identifying potential problems before they occur

MDX Series advanced features include:

- Multiple vehicle applications, battery types, and rating systems
- Large back-lit screen and improved user interface
- Integrated printer option
- Replaceable cable design



### Patented Conductance Technology is at the Heart of Our Analyzers



#### NEW BATTERY

Rating: 500 CCA  
Measured:  
600 CCA

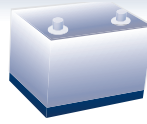
Conductance is a unique electrical measurement that determines the ability of a battery to transmit current through its internal structure. Years of laboratory and field research have proven that conductance provides a reliable indication of battery State of Health (SOH) and a correlation to the battery's cranking ability.



#### DURING LIFE

450-600 CCA

Conductance Technology can be used to detect cell defects, shorts, and normal aging. Midtronics Conductance Technology is recognized globally as the standard to determine battery condition and control battery charging. Conductance is the required test method for battery warranty decisions at most automotive OEMs.



#### APPROACHING END OF LIFE

430 CCA

A new battery, when fully charged, will have a high conductance reading of anywhere from 10% to 15% higher than its full CCA rating.



#### REPLACE BATTERY

350 CCA

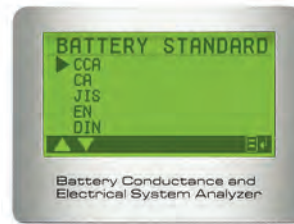
As a battery ages, its internal components wear out through corrosion, disintegration, and shedding. Performance of the battery is significantly degraded and can be measured through its conductance value.

### The Complete Tool for all vehicle and battery applications



#### Vehicle Applications

- Automotive
- Motorcycle
- Marine Cranking
- Lawn and Garden
- Group 31
- Commercial 4D/8D



#### Global Systems

- CCA, CA, MCA, JIS, SAE, EN, DIN, IEC
- 6 & 12 volt batteries
- 12 & 24 volt charging system testing (650/650P only)



#### Battery Type

- Regular flooded
- AGM flat plate
- AGM spiral
- Gel



#### Advanced Starter/Alternator Testing (650 / 650P only)

- Quick starter analysis without disabling the ignition
- Advanced menu-driven interface for a complete charging system analysis in seconds



# Specifications



MDX-640



Sample Printout



MDX-650P

## Available Models

- **MDX-640**  
Battery Conductance Analyzer for battery testing only (6 and 12 volt batteries)

MDX-600 Series products can be purchased with an integrated printer or a portable IR printer to provide a professional diagnostic report to your customers.

- Increase customer satisfaction by identifying potential problems before they occur
- Complete system information in an easy-to-read format
- Date and time for accurate records
- User-definable header

- **MDX-650**  
Battery and Electrical System Analyzer combines the full MDX-640 capabilities for battery testing with in-vehicle capabilities to analyze starting and charging systems (6 & 12 volt batteries and 12 & 24 volt charging systems)
- **MDX-650P**  
All of the MDX-650 features, plus an integrated printer



MDX-640



MDX-650



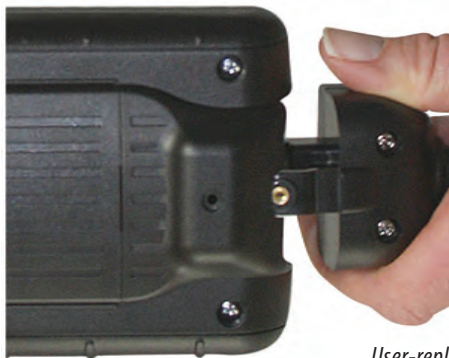
MDX-650P

**SPECIFICATIONS:****Models:**

- **MDX-640** Battery Conductance Analyzer  
Includes: MDX-600 Series Analyzer, MDX-640 software (installed), manual, lead stud adapter set, 4-ft cable set
- **MDX-650** Battery Conductance and Electrical System Analyzer  
Includes: MDX-600 Series Analyzer, MDX-650 software (installed), manual, lead stud adapter set, 10-ft cable set, carrying bag
- **MDX-650P** Battery Conductance and Electrical System Analyzer with Integrated Printer  
Includes: MDX-600 Series Analyzer with integrated printer, MDX-650 software (installed), manual, lead stud adapter set, 10-ft cable set, carrying bag

**Available Accessories:**

- A156 Universal Soft Carry-All Bag
- A207 4-ft Replaceable Cable
- A208 10-ft Replaceable Cable
- A033 Lead Stud Adapter Set (2 male, 2 female)
- A095 6-Pack Thermal Printer Paper\*  
*\* Replacement paper rolls available at most office supply stores*
- A087 Infrared Printer with Charger (for MDX-640)



*User-replaceable cable sets*

**Applications:**

- Automotive
- Motorcycle
- Marine Cranking
- Lawn & Garden
- Group 31
- Commercial 4D/8D
- 6 & 12 Volt batteries
- 12 & 24 Volt charging systems (650/650P Only)

**Display:**

5-line Text/Graphical Backlit Display

**Operating Temperature:**

0°C to +50°C (32°F to +122°F)

**Test Range:**

- CCA: 100-2000 BY 5
- CA: 100-2000 BY 5
- MCA: 100-2000 BY 5
- JIS#: By Part Number
- EN: 100-2000 BY 5
- DIN: 100-1200 by 5
- SAE: 100-2000 by 5
- IEC: 100-1200 by 5

**Voltage Range:**

1Vdc – 30Vdc

**Cable Length:**

- 4-ft/122cm (MDX-640)
- 10-ft/305cm (MDX-650/650P)

**Power Requirements:**

Uses the power of the battery under test and 6AA internal batteries

**Languages:**

- English
- Spanish
- French-Canadian
- Portuguese

**Housing Material:**

Acid-resistant ABS plastic

**Dimensions:**

MDX-640/ MDX-650: 7.7" x 3.9" x 2.4"  
(19.5cm x 10cm x 5cm)

MDX-650P: 10.6" x 3.9" x 2.4" (27cm x 10cm x 5cm)

**Weight:**

MDX-640/650: 1.2 lbs (544g)

MDX-650P: 1.7 lbs (771g)