

Advancing Battery Management

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# **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



## **Specifications**



## Available Models

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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

TEST REPORT

YOUR STORE STREET CITY, STATE/PROU ZIP OR POST CODE COUNTRY

PHONE NUMBER WEBSITE

> 05/23/2008 08:29 RM

#### GOOD BATTERY

ERITERYTEST

VOLTS MEASURED RATED	12.400 739 CCR 600 CCR
BATTERY TYPE BAT. LOCATION APPLICATION	REGULAR FLOODED IN VEHICLE AUTOMOTIVE
starter test	
CRANKING NORMAL	
CRANKING	11 <b>.</b> 17V

TIME .96S



NO LOAD LOADED 14.250 14.080

CONFIG: 192-110023A1



#### • 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

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All of the MDX-650 features, plus an integrated printer

Sample Printout

Software Updates via Memory Card reader

## PATENTED CONDUCTANCE TECHNOLOGY IS AT THE HEART OF OUR ANALYZERS





**DURING LIFE** 450–600 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.

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. A new battery, when fully charged, will have a high conductance reading of anywhere from10% to 15% higher than its full CCA rating. 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

Regular flooded
AGM flat plate
AGM spiral

• Group 31

**Battery Type** 

• Gel

Commercial 4D/8D



#### BATTERY STANDARD CA CA JIS EN DIN DIN Battery Conductance and Electrical System Analyzer



## **Global Systems**

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

#### 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:**

#### 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 also available at most office supply stores
- A087 Infrared Printer with Charger (for MDX-640)

#### **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
- MCA: 100-2000 BY 5
- EN: 100-2000 BY 5
- SAE: 100-2000 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)

7650P Only) MDX-640 MDX-650

## <u>MID, TRONICS</u>

www.midtronics.com

🦸 @ midtronics

#### Corporate Headquarters Willowbrook, IL USA

 Phone:
 1.630.323.2800

 Toll Free in America:
 1.800.776.1995

 Toll-Free in Cananda:
 1.866.592-8053

#### European Sales Midtronics b.v.

European Headquarters Houten, The Netherlands Serving Europe, Africa, the Middle East, and The Netherlands Phone: +31 306 868 150 Midtronics China Office China Operations Shenzhen, China Phone: +86 755 8202 2036

#### Asia/Pacific (excluding China) Contact Corporate Headquarters Phone: +1.630.323.2800

Midtronics India Mumbai, India Phone: +91.989 237 6661

- JIS#: By Part Number
- DIN: 100-1200 by 5
- IEC: 100-1200 by 5

• CA: 100-2000 BY 5