


# Evolve.



**MIDTRONICS**

## MDX-600 Series Battery Conductance and Electric System Analyzers



Introducing the MDX-600 Series from Midtronics, worldwide leader in battery and electrical diagnostics. The new MDX-600 Series combines over 20 years of experience and innovation gained from selling essential tools to nearly every car and truck OEM in the world, with the industry standard conductance technology for battery testing, which makes testing safe, fast, and simple.

**SAFE** to use anywhere, even in front of the customer

**FAST** and accurate testing of the battery or electrical system in seconds

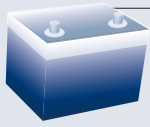
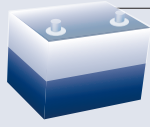
**SIMPLE**, proven user interface eliminates guesswork and user error to provide an accurate analysis every time

The MDX Series advanced features include:

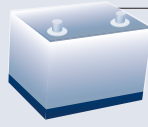
- Multiple vehicle applications, battery types, and rating systems
- Large back-lit screen and improved user interface
- Integrated printer option
- Improved Removable Cable Design

Which helps to:

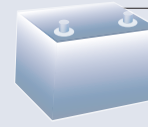
- Save time and money by improving battery and electrical diagnostic productivity
- Improve customer service by reducing wait time
- Increase sales by proactively testing batteries and electrical systems
- Increase customer satisfaction by identifying potential problems before they occur

**PATENTED CONDUCTANCE TECHNOLOGY IS AT THE HEART OF OUR ANALYZERS****NEW BATTERY**Rating: 500 CCA  
Measured:  
600 CCA**DURING LIFE**

450-600 CCA

**APPROACHING  
END OF LIFE**

430 CCA

**REPLACE  
BATTERY**

350 CCA

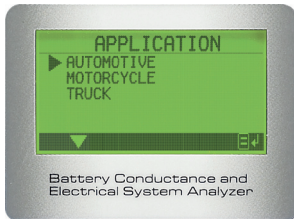
Conductance is a unique electrical measurement that determines the ability of a battery to transmit current through its internal structure.

Years of laboratory and field research have proven that conductance provides a reliable indication of battery state-of-health 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 for determining battery condition and controlling 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, anywhere from 10% 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
- Truck

**Battery Type**

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

**Global Systems**

- JIS, SAE, EN, DIN, IEC
- 6 and 12 volt batteries

**Advanced Starter/Alternator Testing**  
(655 / 655P Only)

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

**Additional Features**

- VIEW/PRINT – to view last test from memory or print another copy
- Large back-lit display keeps operation simple for all levels of users
- Data card reader for future software upgrades
- 122 cm or 305 cm Removable cable set for running the test from the driver's seat.
- QC MODE for performing quality control testing
- Multiple Languages
- COUNTER Information to track activity, including good vs. replace, batteries and system test results

*Removable Cable set*



MDX-645

## AVAILABLE MODELS

- **MDX-645**  
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 the consumer.

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

**MIDTRONICS  
MDX-655P**

CONFIG: 192-110040B

**TEST REPORT**

MIDTRONICS  
LAGE DIJK-NOORD 6  
3401 VA  
IJSELSTEIN  
THE NETHERLANDS  
0031 30 6868 150

29-05-2008  
15:52

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**BATTERY TEST**

**GOOD, RECHARGE**

|          |            |
|----------|------------|
| VOLTS    | 12,43V     |
| MEASURED | 451 SAE(A) |
| RATING   | 525 SAE(A) |

|                  |                 |
|------------------|-----------------|
| BATTERY TYPE     | REGULAR FLOODED |
| BAT. LOCATION    | IN VEHICLE      |
| APPLICATION      | AUTOMOTIVE      |
| BAT. TEMPERATURE | ABOVE 0°C       |

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**STARTER TEST**

CRANKING NORMAL

|          |        |
|----------|--------|
| CRANKING | 10,58V |
| TIME     | 0,78S  |

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**CHARGING TEST**

NO PROBLEMS

|                |               |
|----------------|---------------|
| <u>NO LOAD</u> | <u>LOADED</u> |
| 14,53V         | 14,47V        |

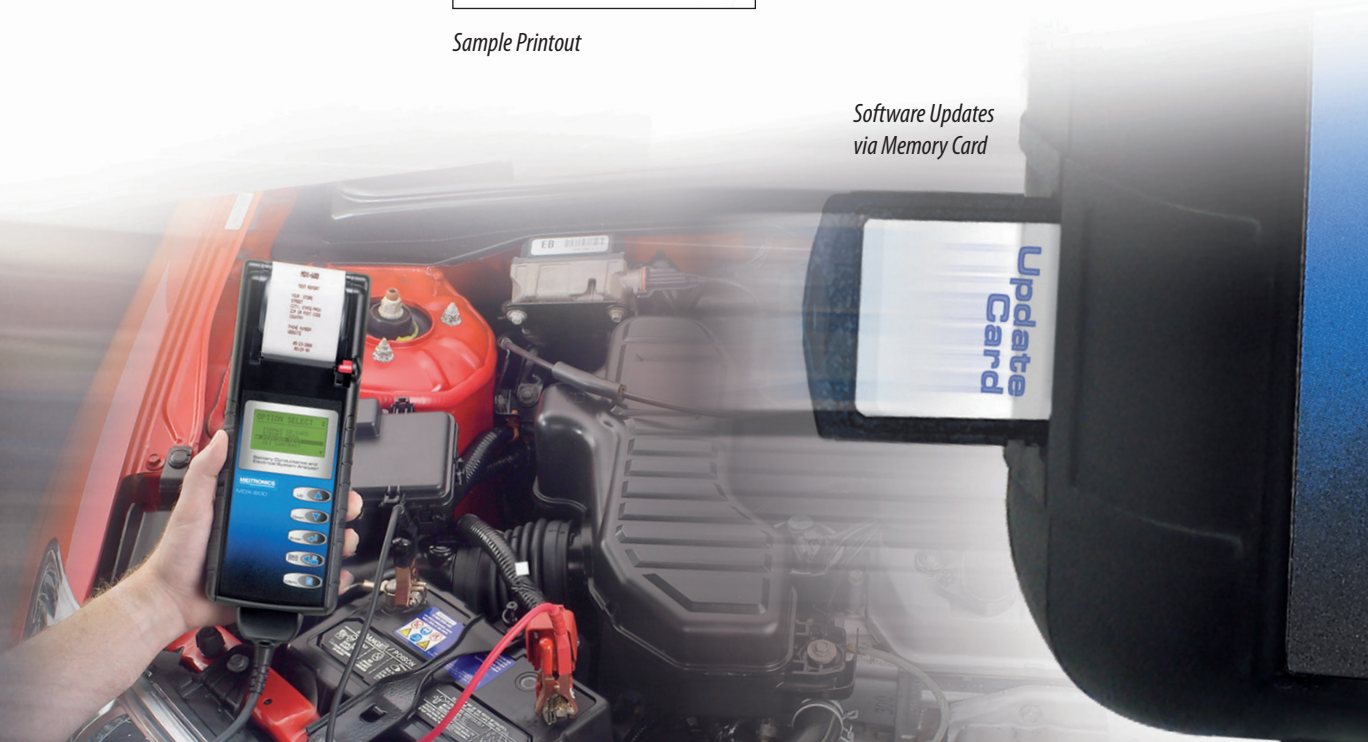
Sample Printout



MDX-655P

- **MDX-655**  
Battery and Electrical System Analyzer combines the full MDX-645 capabilities for battery testing with in-vehicle capabilities for analyzing the starting and charging systems (6 and 12 volt batteries and 12 and 24 volt charging systems)
- **MDX-655P**  
All of the MDX-655 features, plus an Integrated Printer

Software Updates  
via Memory Card



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

- **MDX-645** Battery Conductance Analyzer  
Includes: MDX-600 Series Analyzer, MDX-645 Software (installed), Manual CD, 122 cm cable set
- **MDX-645P** Battery Conductance Analyzer  
Includes: MDX-600 Series Analyzer with integrated printer, MDX-645 Software (installed), Manual CD, 122 cm cable set.
- **MDX-655** Battery Conductance and Electrical System Analyzer  
Includes: MDX-600 Series Analyzer, MDX-655 Software (installed), Manual CD, 305 cm cable set.
- **MDX-655P** Battery Conductance and Electrical System Analyzer with Integrated Printer  
Includes: MDX-600 Series Analyzer with integrated printer, MDX-655 Software (installed), Manual CD, 305 cm cable set.

**Available Accessories:**

|           |                                       |
|-----------|---------------------------------------|
| A207      | Replacement 122 cm Battery Test Cable |
| A208      | Replacement 305 cm Battery Test Cable |
| 85660/12  | 12 pack, thermal paper                |
| A088/A089 | IR Printer with Charger               |

**Applications:**

- Automotive
- Motorcycle
- Truck
- 6 & 12 Volt batteries
- 12 & 24 Volt charging systems

**Display:**

5-line Text/Graphical Backlit Display

**Operating Temperature:**

0°C to +50°C (32°F to +122°F)

**Test Range:**

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

**Voltage Range:**

1Vdc – 30Vdc

**Cable Length:**

- 122 cm /4' (MDX-645/645P)
- 305 cm /10' (MDX-655/655P)

**Power Requirements:**

Uses the power of the battery under test and 6 AA Internal Batteries

**Languages:**

24 Languages

**Housing Material:**

Acid resistant ABS plastic

**Dimensions:**

MDX-645/ MDX-655: 19,5 cm x 10 cm x 5 cm  
MDX-645P/MDX-655P: 27 cm x 10 cm x 5 cm

**Weight:**

MDX-645/655: 544g (1.2lbs)  
MDX-645P/MDX-655P: 771g (1.7lbs)

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