

# DAKOTA ULTRASONICS

## MMX Multi-Mode Thickness Gauges

Two Words:

### Versatility & Convenience

The MMX Series has arrived! These gauges are the answer to both versatility and convenience in every way! The MMX series defines versatility by combining features like: Fast Scan, Alarm (audible/visual), and data logging, along with multi-mode for reading through and eliminating the thickness of painted or coated materials. The MMX demonstrates convenience by making all these features available to the user with just the touch of a button.

Conveniently toggle between pulse-echo mode (detect flaws & pits), and echo-echo mode (eliminate paint & coating thickness), to cover all your inspection requirements. No need to remove or allow for errors due to paint and coatings. The MMX gauges use a highly damped dual element style transducer for both modes, eliminating the need to switch between transducer types.

The MMX gauges are packaged in an all aluminum sealed case, making them rugged and resistant to the working environment—Dakota's trademark.

5 Year Limited Warranty

SOUND SOLUTIONS

# THE MMX SERIES

DAKOTA ULTRASONICS' has succeeded in adding the final touches to the rugged MX line with the new multi-mode MMX series. The MMX-6 and MMX-6DL have not only been combined with all the durability and features of the MX series gauges, but have also been equipped with the ability to measure through painted or coated materials and eliminate the thickness of the paint or coating. Our 5 year limited warranty indicates how we feel about the reliability and durability of the new **MMX Series**.

**APPLICATIONS:** Corrosion & Pitting • Tube & Pipe • Tanks • Boilers • Glass • Variety of Applications

## SPECIFICATIONS

### Physical

**Weight:**

10 ounces (with batteries).

**Size:**

2.5 W x 4.5 H x 1.24 D inches  
(63.5 W x 114.3 H x 31.5 D mm).

**Operating Temperature:**

-20P to 120PF (-30P to 50PC).

**Case:**

Extruded aluminum body with nickel-plated aluminum end caps (gasket sealed).

### Keypad

Sealed membrane that is resistant to both water and petroleum products.

Nine tactile-feedback keys.

### Transducer

Dual-element (transmit and receive).

1 to 10 MHz frequency range.

Special high-damped transducers available for Through Paint & Coating measurements.

Locking quick disconnect LEMO connectors.

4 foot cable.

Custom transducers available for special applications.



### Power Source

Two 1.5V alkaline or 1.2V NiCad AA cells.

Typically operates for 200 hours on alkaline and 130 hours on NiCad.

Display flashes when battery is low. Unit turns off automatically when battery is too low to operate reliably.

### Display

Multi-function 4.5 digit liquid crystal display with 0.500 inch numerals, backlit for use in poor light conditions.

Backlight is selectable on/off/auto (illuminates only when taking a measurement).

Measurements displayed in inches, inches/microsecond, millimeters, and meters/second.

Bar graph indicates stability of reading.

### Internal Data Logger (MMX-6DL only)

Automatic numeric Data Logging system 1 to 1000 readings.

OBST indicates no reading.

### Certification

Factory calibration traceable to national standards.

### Warranty

5 year limited.

### Measuring

**Range:**

**Pulse-Echo Mode** (Pit & Flaw Detection) measures from 0.025 to 19.999 inches (0.63 to 500 millimeters).

**Echo-Echo Mode** (Through Paint & Coatings) measures from 0.1 to 1 inch (2.54 to 25.4 millimeters). Extended range modification available on request: .2 to 4 inch (5 to 100 mm).

Switch to select English or Metric units.

**Resolution:**

0.001 inch (0.01 millimeter)

**Velocity Range:**

0.0492 to .3937 in./ $\mu$ s.  
(1250 to 10,000 meters/second)

**Built in:**

Stainless steel reference disk for probe zeroing.

Four readings per second for single point measurements or 16 per second in **Scan Mode**—captures the minimum thickness.

Single and two point calibration option included.

### Features

**Multi-Mode:**

Toggle between Pit & Flaw Detection (Pulse Echo Mode), and Through Paint & Coatings (Echo-Echo Mode) with the single press of a button.

**Alarm Mode:**

Enter a minimum acceptable thickness value. If measurement falls below minimum, red LED will illuminate and sound beeper. If measurement is above minimum value, green LED will illuminate.

**Data Output:**

RS232 output sends data to a serial printer, a computer or other external storage device.

A S O N A T E S T P L C G R O U P C O M P A N Y

Distributed by:



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