

# **NEW ECHOPRO** ULTRASONIC FLAW DETECTOR

# Introducing our newest Flaw Detector... ECHO PRO

**Danatronics ECHO PRO** is our latest portable ultrasonic flaw detector. Designed with more than 70 years of digital ultrasonic flaw detection experience and always with our users in mind; you will be amazed at the speed and ease of use of its operations.

The ECHO PRO comes standard with many common software features such as a powerful datalogger with export of thickness readings to Excel, 2 gates, AWS, API 5UE, DAC, single hand and touch screen operation along with a powerful 600 Volt pulser and continuous 8-10 hour battery operation. Advanced features include damping, digital filters, analog and alarm outputs, wifi and Bluetooth. Optional Features include interface gate, floating and tracking gates, extended range, and back echo attenuator.

ECHO PRO can handle your most challenging ultrasonic inspections while being very simple to operate.

Call, click or write to us for a demonstration or quotation.

# Contraction <thContraction</th> <thContraction</th>

#### **ECHO PRO Features**

- 7" sunlight readable Multi-Touch Display
- 2 independent gates
- Color change and vibrate on alarm
- Designed for IP67
- 8-10 hour battery life
- Made in the USA

Standard features include datalogger, 2 gates, DAC, AWS, B-Scan, API-5UE, WiFi, Bluetooth

Advanced Features include Extended Range, TVG, Back ECHO Attenuation, Interface Gate, Damping and energy

# ECHO PRO is ideal for a wide variety of applications and :

- Weld inspection
- Delaminations
- Porosity
- Disbond
- Forgings
- ■Castings
- Refining

- Power generation
- Oil and gas
- Pipeline inspection
- Tank inspection
- Thickness surveys
- Inspection companies



# **NEW ECHOPRO** ULTRASONIC FLAW DETECTOR

# Introducing our newest Flaw Detector... ECHO PRO

**Danatronics ECHO PRO** is our latest portable ultrasonic flaw detector. Designed with more than 70 years of digital ultrasonic flaw detection experience and always with our users in mind; you will be amazed at the speed and ease of use of its operations.

The ECHO PRO comes standard with many common software features such as a powerful datalogger with export of thickness readings to Excel, 2 gates, AWS, API 5UE, DAC, single hand and touch screen operation along with a powerful 600 Volt pulser and continuous 8-10 hour battery operation. Advanced features include damping, digital filters, analog and alarm outputs, wifi and Bluetooth. Optional Features include interface gate, floating and tracking gates, extended range, and back echo attenuator.

ECHO PRO can handle your most challenging ultrasonic inspections while being very simple to operate.

Call, click or write to us for a demonstration or quotation.



#### **ECHO PRO Features**

- 7" sunlight readable Multi-Touch Display
- 2 independent gates
- Color change and vibrate on alarm
- Designed for IP67
- 8-10 hour battery life
- Made in the USA

Standard features include datalogger, 2 gates, DAC, AWS, B-Scan, API-5UE, WiFi, Bluetooth

Advanced Features include Extended Range, TVG, Back ECHO Attenuation, Interface Gate, Damping and energy

# ECHO PRO is ideal for a wide variety of applications and industries:

- Weld inspection
- Delaminations
- Porosity
- Disbond
- Forgings
- Castings
- Refining

- Power generation
- Oil and gas
- Pipeline inspection
- Tank inspection
- Thickness surveys
- Inspection
- companies



# **NEW ECHOFD** PORTABLE ULTRASONIC FLAW DETECTOR

Ultrasonic inspectors have long asked for 3 key items when it comes to portable ultrasonic flaw detection; low cost, easy to use and long battery life.

ECHO FD meets all these requirements and then some.

**ECHO FD** is a portable, hand-held ultrasonic flaw detector capable of performing the majority of your flaw detection needs at an extremely low price.

**ECHO FD** is capable of being your everyday flaw detector for weld inspections, delaminations, disbonds and more.

**ECHO FD** comes standard with 2 independent gates, DAC, AWS, API 5UE, B-scan software and 2 Gb of datalogging memory, 13 hour battery life with internal rechargeable batteries. **ECHO FD** also allows for one hand operation with a simple, intuitive user interface all for the price of equal or less than you are paying for your high end thickness gages.

Mechanically the **ECHO FD** has been designed from the ground up to offer the latest in ergonomic design. **ECHO FD** has a convenient rubber boot with stand, 4 point chest harness, padded strap and even a finger hole for the ultimate in instrument balance. We even designed in the ability to use a magnetic pipe stand. All keys can easily be reached with your thumb and the keys are raised rubber keypad with superior tactile feedback. The "F" keys light up for alarm and charging conditions.

**ECHO FD** also allows for one hand operation with a simple, intuitive user interface and long battery life.



#### Features

- Fast, 60Hz update rate
- 2 independent gates
- 5 unique display formats
- One-hand operation
- 13 hour battery life
- Made In the USA

INITIAL	SETTINGS
LOCK	OFF
OPTIONS	
RESET	
RESOLUTION	0.001 IN
UNITS	IN
VIBRATE	OFF
ABOUT	V1.99.1
AUTOOFF	5 MIN
BEEPER	OFF CORROSION
CLOCK	07: PRECISION
GAGE TYPE	COR FLAW DETECTOR
UP/DOWN TO SELECT	92%
BACK	

Allows user to toggle amongst flaw detection as well as corrosion or precision thickness gaging if field upgradeable options are enabled.

# ECHO FD is ideal for a wide variety of applications and industries:

- Weld inspection
- De-laminations
- Porosity
- Disbond
- Forgings
- Castings
- Refining

- Power generation
  - Oil and gas
  - Pipeline inspection
  - Tank inspection
  - Thickness surveys
  - Inspection companies



# **ECHO Series**

Hand-Held Digital Ultrasonic Corrosion/Precision Thickness Gage and Flaw Detector



- Simple to Operate
- Hand Held
- Field Upgradeable Options
- IP67 Rated

- Corrosion, Precision, and Flaw Detection Modes
- Live A-scan
- Made in the USA

# **ECHO 7 Precision Thickness Gage**

ECHO 7 precision hand-held ultrasonic thickness gages are designed for use with single element contact, delay line and immersion transducers to provide a wide thickness range and up to 1 micron resolution. ECHO 7 can save up to 2,700 custom applications setups allowing the operator to quickly and easily switch transducers and setups on the fly for unique and separate tasks.



#### **Standard Features**

- 0.006-23" range in steel
- 1 micron resolution (0.0001" or 0.001 mm)
- Single element, contact, delay line and immersion transducers (1-30 MHz)
- Store and recall up to 2,700 setups
- Multiple modes for challenging applications
- 30 Mhz bandwidth
- Square wave Pulser
- Zoom Auto Tracking
- Auto Phase Reversal Detection with alarm
- Supervisor and other locks

SETUPS
DEFS3-DLK1225PP
DEFS3-DLK20125
DEFS3-DLK2025
DEFS1-DCK20125
DEFS3-DLK2025-THIN-ALUMINUM
DEFS3-DLK1025-COILED-STEEL
DEFS1-DCC250-FIBERGLASS
DEFS1-DCC110-RUBBER-TIRES
DEFS1-DCC537-RAY-DOMES
DEFS3-DLK2025-GLASS
DEFS3-DLK1225PP-TURBINE-BLADES
UP/DOWN TO SELECT 93%
MENU COPY DELETE RENAME

2,700 stored custom application setups.

# **Typical Applications**

- Castings
- Turbine blades and wax molds
- Plastic parts including bottles, pipes, trays and toys
- Coil steel and automotive body panels
- Fiberglass and gel coatings
- Velocity verification for ductile and gray iron (Velocimeter)
- Aluminum, glass, ceramics, zinc, and more



# **ECHO 8 Corrosion and Precision Thickness Gage**

ECHO 8 represents our most capable ultrasonic thickness gage combining both corrosion and precision thickness into one small instrument. Quickly switch transducers and "gage type" to essentially nondestructively measure any engineered material. The ECHO series can keep track of up to 2,700 stored setups, so switching from materials with different thicknesses and alarm values is simple.

## **Typical Applications**

- Inspection Companies—all-purpose gage for measuring any engineered material thickness
- Airplane Inspection (thin aluminum, plastic windows, and rubber tires)
- Marine Surveyors (fiberglass & steel)





ECHO series in split screen A and B-Scan with optional EZ-Scan 6 magnetic wheel encoder

#### **Standard Features**

- Includes all features from the ECHO 7 and ECHO 9
- Switch from dual to single element transducers
- Switch resolution from .01" to .001" to .0001"
- Store and recall up to 2,700 applications setups
- Rechargeable batteries good for more than 24 hr.
- ECHO 8DLW includes custom rubber boot with stand





# **Environmentally Tough, Ergonomically Superior!**



#### **Environmentally Tough!**

The ECHO series was designed from the ground up. With more than 85 combined years in designing, manufacturing and using hand held ultrasonic thickness gages, Danatronics left no detail uncovered. From its new case designed for IP67, to its easy to read sunlight readable 3.5" color display, you will find the ECHO series combines practical features with a simple, clean design built for years of field service and durability.

#### **Ergonomically Superior!**

With its new 3.5" sunlight readable display, The ECHO series offers many display formats to suit any age operator and reduce fatigue. So whether you want to view the largest possible numbers or would prefer more text on screen, ECHO has you covered.

ECHO is also perfectly balanced and makes holding it in one hand possible and simple, all keys can be reached you're your thumb...no clumsy joy sticks or second



functions needed. There is even a world's first vibrate on alarm to inform the operator any pre-set thickness threshold has been tripped which is great for tired operators and testing in loud environments.

# **Hardware Options**

- Rubber boot with built-in finger strap and bail (stand)
- Chest harness for rope access
- Magnetic wheel encoder
- Footswitch
- Remote power bank

- Magnetic pipe stand
- Heavy duty bail with variable angle adjustment and anti-slip base
- RS-232
- Bluetooth









Magnetic pipe stand

# Data XL and Data XL PRO

At Danatronics we believe managing your saved data should be simple. As such, we include with every thickness gage a free interface program we call Data XL. Data XL saves readings to .csv files that can be used in any spreadsheet program such as Microsoft Excel or Google Sheets.

Here are some advantages:

- Write custom batch programs
- Simple double click the file to be transfer and Microsoft Excel<sup>™</sup> with all i.d.'s and readings are displayed

- Create file and send them to the ECHO
- Merge files using Data XL
- Saved stored application setups can be sent to the ECHO or multiple ECHO units to ensure reliability and repeatability
- Update firmware (latest version of operating software is available on the support tab of www.danatronics. com)
- Send Bit Maps (screen shots) to further document your inspections

**Ultrapipe Interface** Echo interfaces with Ultrapipe and PSAIM software from Siemens.



# EGHO 9-YOU ASKED... WE LISTENED!

AS THE POPULARITY OF OUR HAND-HELD ULTRASONIC THICKNESS GAGES AND CUSTOMER BASE HAS GROWN, SO HAVE YOUR GREAT SUGGESTIONS TO REFINE OUR EXTENSIVE LINE; YOU ASKED AND WE LISTENED.

DESIGNED FOR IP67

*"I would like a bigger display"...* ECHO has a high resolution 3.5" color, sunlight readable display.

7ATE ANI

"I would like on board, re-chargeable batteries"... ECHO offers a high capacity, re-chargeable Li lon battery as well as an optional convenient Alkaline tray.

"I would like to continue to buy from Danatronics as you are extremely responsive"... As we grow, our commitment to immediate response and customer satisfaction remain the cornerstone of who we are. Our staff is fully committed to your complete satisfaction.



"I would like a longer filename, I.D. string and more memory"... ECHO has a micro SD card with capacity of up to 32GB, 32 character file name and 20 character I.D. and Bluetooth.

0.305 F

ALARM UNFREEZE BKLITE DISP

MAMATRONICS

ECHO 9



# **ECHO Series**

Hand-Held Digital Ultrasonic Corrosion/Precision Thickness Gage and Flaw Detector



- Simple to Operate
- Hand Held
- Field Upgradeable Options
- IP67 Rated

- Corrosion, Precision, and Flaw Detection Modes
- Live A-scan
- Made in the USA

# **ECHO 7 Precision Thickness Gage**

ECHO 7 precision hand-held ultrasonic thickness gages are designed for use with single element contact, delay line and immersion transducers to provide a wide thickness range and up to 1 micron resolution. ECHO 7 can save up to 2,700 custom applications setups allowing the operator to quickly and easily switch transducers and setups on the fly for unique and separate tasks.



#### **Standard Features**

- 0.006-23" range in steel
- 1 micron resolution (0.0001" or 0.001 mm)
- Single element, contact, delay line and immersion transducers (1-30 MHz)
- Store and recall up to 2,700 setups
- Multiple modes for challenging applications
- 30 Mhz bandwidth
- Square wave Pulser
- Zoom Auto Tracking
- Auto Phase Reversal Detection with alarm
- Supervisor and other locks

SETUPS
DEFS3-DLK1225PP
DEFS3-DLK20125
DEFS3-DLK2025
DEFS1-DCK20125
DEFS3-DLK2025-THIN-ALUMINUM
DEFS3-DLK1025-COILED-STEEL
DEFS1-DCC250-FIBERGLASS
DEFS1-DCC110-RUBBER-TIRES
DEFS1-DCC537-RAY-DOMES
DEFS3-DLK2025-GLASS
DEFS3-DLK1225PP-TURBINE-BLADES
UP/DOWN TO SELECT 93%
MENU COPY DELETE RENAME

2,700 stored custom application setups.

# **Typical Applications**

- Castings
- Turbine blades and wax molds
- Plastic parts including bottles, pipes, trays and toys
- Coil steel and automotive body panels
- Fiberglass and gel coatings
- Velocity verification for ductile and gray iron (Velocimeter)
- Aluminum, glass, ceramics, zinc, and more



# **ECHO 8 Corrosion and Precision Thickness Gage**

ECHO 8 represents our most capable ultrasonic thickness gage combining both corrosion and precision thickness into one small instrument. Quickly switch transducers and "gage type" to essentially nondestructively measure any engineered material. The ECHO series can keep track of up to 2,700 stored setups, so switching from materials with different thicknesses and alarm values is simple.

## **Typical Applications**

- Inspection Companies—all-purpose gage for measuring any engineered material thickness
- Airplane Inspection (thin aluminum, plastic windows, and rubber tires)
- Marine Surveyors (fiberglass & steel)





ECHO series in split screen A and B-Scan with optional EZ-Scan 6 magnetic wheel encoder

#### **Standard Features**

- Includes all features from the ECHO 7 and ECHO 9
- Switch from dual to single element transducers
- Switch resolution from .01" to .001" to .0001"
- Store and recall up to 2,700 applications setups
- Rechargeable batteries good for more than 24 hr.
- ECHO 8DLW includes custom rubber boot with stand





# **ECHO FD Flaw Detector**



ECHO FD is the ideal instrument for portable applications such as rope access, storage tanks and bridges. ECHO FD offers the most ergonomically balanced unit on the market today allowing for easy left or right hand use with just one thumb to access all keys. Even operating the unit in complete darkness is simple. We are also the only manufacturer to offer changing of color while

vibration on alarm for operation in loud environments.

The ECHO, when in flaw detection mode, is an everyday instrument capable of performing a wide varietyof ultrasonic tests. You will be amazed at the many included standard features such as 2 independent gates, fast-60 Hz. display update rate, DAC, AWS, B-scan, Grid View and 2 GB of micro SD card memory as well as internal memory are all standard. Best of all, ECHO FD is designed and made in the USA so full factory support is only a call or click away.

ECHO FD offers a wide variety of unique and easy to use software features such as Grid View, Peak Pitch Memory, supervisor lock, floating and tracking gate, leg indicator, auto 80 FSH, triple DAC, 13 hour battery life,\* AWS software, Reference Gain, echo to echo and Grid View to view A-scan and grid simultaneously.



Leg indicator www.danatronics.com

#### **Standard Features**

- Peak Pitch Memory changes the audible chirp when a probe's peak signal is determined
- Supervisor lock allows the ability to lock parameters witha password to prevent accidental changes
- Floating and tracking gates see software options
- Custom color pallet allows changes to text, grid, background and more for easy viewing
- Auto 80, automatically places signal within the gate to 80 Full Screen Height (FSH)
- Triple DAC, allow the simple creation and storage of single, triple and Japanese (JIS) DAC curves
- Continuous 13 hour battery life under factory default settings
- AWS software, displays the D-rating along with A and C values in the 3 measurement boxes
- Reference gain...includes dB step to quickly add or subtract scanning gain such as 2 or 6 dB
- Echo to echo, ideal for measuring painted parts

#### **Additional Options**

**Floating gate:** allows for 60 Hz. update rate while maintaining consistent thickness readings while floating the gate. This feature also includes tracking gate for echo to echo thickness readings as well as V-path correction for a variety of dual transducers.

**Bluetooth:** allows Bluetooth interface with Bluetooth devices set up to interface with ECHO.



\*Battery life is 13 hours in flaw detection mode due to 60 Hz update rate.

# **Environmentally Tough, Ergonomically Superior!**



#### **Environmentally Tough!**

The ECHO series was designed from the ground up. With more than 85 combined years in designing, manufacturing and using hand held ultrasonic thickness gages, Danatronics left no detail uncovered. From its new case designed for IP67, to its easy to read sunlight readable 3.5" color display, you will find the ECHO series combines practical features with a simple, clean design built for years of field service and durability.

#### **Ergonomically Superior!**

With its new 3.5" sunlight readable display, The ECHO series offers many display formats to suit any age operator and reduce fatigue. So whether you want to view the largest possible numbers or would prefer more text on screen, ECHO has you covered.

ECHO is also perfectly balanced and makes holding it in one hand possible and simple, all keys can be reached you're your thumb...no clumsy joy sticks or second



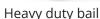
functions needed. There is even a world's first vibrate on alarm to inform the operator any pre-set thickness threshold has been tripped which is great for tired operators and testing in loud environments.

# **Hardware Options**

- Rubber boot with built-in finger strap and bail (stand)
- Chest harness for rope access
- Magnetic wheel encoder
- Footswitch
- Remote power bank

- Magnetic pipe stand
- Heavy duty bail with variable angle adjustment and anti-slip base
- RS-232
- Bluetooth









Magnetic pipe stand

# Data XL and Data XL PRO

At Danatronics we believe managing your saved data should be simple. As such, we include with every thickness gage a free interface program we call Data XL. Data XL saves readings to .csv files that can be used in any spreadsheet program such as Microsoft Excel or Google Sheets.

Here are some advantages:

- Write custom batch programs
- Simple double click the file to be transfer and Microsoft Excel<sup>™</sup> with all i.d.'s and readings are displayed

- Create file and send them to the ECHO
- Merge files using Data XL
- Saved stored application setups can be sent to the ECHO or multiple ECHO units to ensure reliability and repeatability
- Update firmware (latest version of operating software is available on the support tab of www.danatronics. com)
- Send Bit Maps (screen shots) to further document your inspections

**Ultrapipe Interface** Echo interfaces with Ultrapipe and PSAIM software from Siemens.



# **ECHO Series**

Hand-Held Digital Ultrasonic Corrosion/Precision Thickness Gage and Flaw Detector



- Simple to Operate
- Hand Held
- Field Upgradeable Options
- IP67 Rated

- Corrosion, Precision, and Flaw Detection Modes
- Live A-scan
- Made in the USA

# The Ultimate in Portable Ultrasonic Inspection

Our ECHO series represents a breakthrough in portable ultrasonic inspection. The ECHO series can quickly and easily switch from corrosion or precision thickness gaging, to flaw detector all offered in a rugged, custom package. The perfect size of fit and function! Hold the ECHO in your hand and you will agree no detail has been overlooked and the ergonomics are unmatched by any thickness gage in the industry! The new ECHO series comes in several configurations. ECHO 9 is our corrosion gage using dual transducers, ECHO 7 is our precision thickness gage with 1 micron resolution using single element transducers and ECHO 8 is the ultimate unit combining corrosion and precision thickness gage utilizing both dual and single element transducers. ECHO FD is our flaw detector.

ECHO series was designed specifically as a platform to allow the instrument total flexibility. What this means is you are never stuck with just a basic model, but rather, an instrument that can expand with you as your business and applications expand. The ECHO series is available in many configurations as listed in the models chart. An inspection company may be required to do every day thickness surveys requiring a live waveform and datalogger and also need to perform AWS weld inspection work; the model for you would be the ECHO 9FD allowing you to quickly and easily switch from corrosion to flaw mode in seconds. We also address a wide variety of features and budgets to meet your every need. The platform allows for quick updating of software directly from the keypad so unlocking the unlimited potential of the ECHO platform is simply a few keystrokes away.

The ECHO series has a remarkable sunlight readable 3.5" color display, up to 32 GB of micro SD memory, built-in rechargeable high capacity Li Ion battery all packaged in a custom case designed for IP67 rating. ECHO Series can measure from 0.020" to 23" in steel in corrosion mode or as thin as 0.006" in steel when configured as a precision thickness gage.



# **ECHO 9 Corrosion Thickness Gage**

Our ECHO 9 is our premier corrosion thickness gage with a wide thickness range, able to be used with a variety of dual transducers as well as a selection of single element and angle beam probes. Similar to our precision thickness gages, ECHO 9 can save and store 2,700 custom setups.

## **Typical Applications**

- Boiler tubes
- Pressure vessels
- Storage tanks
- Ship hulls
- Pipes
- Steel beams on bridges



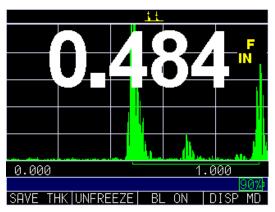
ECHO 9 – Base model includes Echo to Echo



ECHO 9DL – Includes Datalogger, B-scan, Temperature Correction. Gridview A-scan shown above.

#### **Standard Features**

- Compatible with a wide variety of Danatronics dual and single element transducers
- Wide thickness range (.020" to 23" depending on gage type, material and transducer)
- Coating Thickness and substrate thickness displayed simultaneously on gage with live waveform using standard dual transducers
- High temperature probes available up to 950F/509C (intermittent use)
- Temperature correction
- File compare features shows old readings along with new readings for datalogger versions (real-time corrosion monitor)
- Available angle beam option
- Gridview
- Password lock
- Supervisor and other locks
- 2,700 stored setups
- Change color and vibrate on alarm



ECHO 9W – Includes Waveform, Coating Thickness, Temperature Correction



ECHO 9DLW – Includes Waveform, Datalogger, B-scan, Coating Thickness, Temperature Correction, Rubber Boot

# **ECHO 7 Precision Thickness Gage**

ECHO 7 precision hand-held ultrasonic thickness gages are designed for use with single element contact, delay line and immersion transducers to provide a wide thickness range and up to 1 micron resolution. ECHO 7 can save up to 2,700 custom applications setups allowing the operator to quickly and easily switch transducers and setups on the fly for unique and separate tasks.



#### **Standard Features**

- 0.006-23" range in steel
- 1 micron resolution (0.0001" or 0.001 mm)
- Single element, contact, delay line and immersion transducers (1-30 MHz)
- Store and recall up to 2,700 setups
- Multiple modes for challenging applications
- 30 Mhz bandwidth
- Square wave Pulser
- Zoom Auto Tracking
- Auto Phase Reversal Detection with alarm
- Supervisor and other locks

SETUPS
DEFS3-DLK1225PP
DEFS3-DLK20125
DEFS3-DLK2025
DEFS1-DCK20125
DEFS3-DLK2025-THIN-ALUMINUM
DEFS3-DLK1025-COILED-STEEL
DEFS1-DCC250-FIBERGLASS
DEFS1-DCC110-RUBBER-TIRES
DEFS1-DCC537-RAY-DOMES
DEFS3-DLK2025-GLASS
DEFS3-DLK1225PP-TURBINE-BLADES
UP/DOWN TO SELECT 93%
MENU   COPY   DELETE   RENAME

2,700 stored custom application setups.

# **Typical Applications**

- Castings
- Turbine blades and wax molds
- Plastic parts including bottles, pipes, trays and toys
- Coil steel and automotive body panels
- Fiberglass and gel coatings
- Velocity verification for ductile and gray iron (Velocimeter)
- Aluminum, glass, ceramics, zinc, and more



# **ECHO 8 Corrosion and Precision Thickness Gage**

ECHO 8 represents our most capable ultrasonic thickness gage combining both corrosion and precision thickness into one small instrument. Quickly switch transducers and "gage type" to essentially nondestructively measure any engineered material. The ECHO series can keep track of up to 2,700 stored setups, so switching from materials with different thicknesses and alarm values is simple.

## **Typical Applications**

- Inspection Companies—all-purpose gage for measuring any engineered material thickness
- Airplane Inspection (thin aluminum, plastic windows, and rubber tires)
- Marine Surveyors (fiberglass & steel)





ECHO series in split screen A and B-Scan with optional EZ-Scan 6 magnetic wheel encoder

#### **Standard Features**

- Includes all features from the ECHO 7 and ECHO 9
- Switch from dual to single element transducers
- Switch resolution from .01" to .001" to .0001"
- Store and recall up to 2,700 applications setups
- Rechargeable batteries good for more than 24 hr.
- ECHO 8DLW includes custom rubber boot with stand





# **ECHO FD Flaw Detector**



ECHO FD is the ideal instrument for portable applications such as rope access, storage tanks and bridges. ECHO FD offers the most ergonomically balanced unit on the market today allowing for easy left or right hand use with just one thumb to access all keys. Even operating the unit in complete darkness is simple. We are also the only manufacturer to offer changing of color while

vibration on alarm for operation in loud environments.

The ECHO, when in flaw detection mode, is an everyday instrument capable of performing a wide varietyof ultrasonic tests. You will be amazed at the many included standard features such as 2 independent gates, fast-60 Hz. display update rate, DAC, AWS, B-scan, Grid View and 2 GB of micro SD card memory as well as internal memory are all standard. Best of all, ECHO FD is designed and made in the USA so full factory support is only a call or click away.

ECHO FD offers a wide variety of unique and easy to use software features such as Grid View, Peak Pitch Memory, supervisor lock, floating and tracking gate, leg indicator, auto 80 FSH, triple DAC, 13 hour battery life,\* AWS software, Reference Gain, echo to echo and Grid View to view A-scan and grid simultaneously.



Leg indicator www.danatronics.com

#### **Standard Features**

- Peak Pitch Memory changes the audible chirp when a probe's peak signal is determined
- Supervisor lock allows the ability to lock parameters witha password to prevent accidental changes
- Floating and tracking gates see software options
- Custom color pallet allows changes to text, grid, background and more for easy viewing
- Auto 80, automatically places signal within the gate to 80 Full Screen Height (FSH)
- Triple DAC, allow the simple creation and storage of single, triple and Japanese (JIS) DAC curves
- Continuous 13 hour battery life under factory default settings
- AWS software, displays the D-rating along with A and C values in the 3 measurement boxes
- Reference gain...includes dB step to quickly add or subtract scanning gain such as 2 or 6 dB
- Echo to echo, ideal for measuring painted parts

#### **Additional Options**

**Floating gate:** allows for 60 Hz. update rate while maintaining consistent thickness readings while floating the gate. This feature also includes tracking gate for echo to echo thickness readings as well as V-path correction for a variety of dual transducers.

**Bluetooth:** allows Bluetooth interface with Bluetooth devices set up to interface with ECHO.



\*Battery life is 13 hours in flaw detection mode due to 60 Hz update rate.

# **Environmentally Tough, Ergonomically Superior!**



#### **Environmentally Tough!**

The ECHO series was designed from the ground up. With more than 85 combined years in designing, manufacturing and using hand held ultrasonic thickness gages, Danatronics left no detail uncovered. From its new case designed for IP67, to its easy to read sunlight readable 3.5" color display, you will find the ECHO series combines practical features with a simple, clean design built for years of field service and durability.

#### **Ergonomically Superior!**

With its new 3.5" sunlight readable display, The ECHO series offers many display formats to suit any age operator and reduce fatigue. So whether you want to view the largest possible numbers or would prefer more text on screen, ECHO has you covered.

ECHO is also perfectly balanced and makes holding it in one hand possible and simple, all keys can be reached you're your thumb...no clumsy joy sticks or second



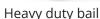
functions needed. There is even a world's first vibrate on alarm to inform the operator any pre-set thickness threshold has been tripped which is great for tired operators and testing in loud environments.

# **Hardware Options**

- Rubber boot with built-in finger strap and bail (stand)
- Chest harness for rope access
- Magnetic wheel encoder
- Footswitch
- Remote power bank

- Magnetic pipe stand
- Heavy duty bail with variable angle adjustment and anti-slip base
- RS-232
- Bluetooth









Magnetic pipe stand

# Data XL and Data XL PRO

At Danatronics we believe managing your saved data should be simple. As such, we include with every thickness gage a free interface program we call Data XL. Data XL saves readings to .csv files that can be used in any spreadsheet program such as Microsoft Excel or Google Sheets.

Here are some advantages:

- Write custom batch programs
- Simple double click the file to be transfer and Microsoft Excel<sup>™</sup> with all i.d.'s and readings are displayed

- Create file and send them to the ECHO
- Merge files using Data XL
- Saved stored application setups can be sent to the ECHO or multiple ECHO units to ensure reliability and repeatability
- Update firmware (latest version of operating software is available on the support tab of www.danatronics. com)
- Send Bit Maps (screen shots) to further document your inspections

**Ultrapipe Interface** Echo interfaces with Ultrapipe and PSAIM software from Siemens.

# MANATIONIES AFFORDABLE EHC-03 ULTRASONIC THICKNESS GAGE



With more than 75 years of world-wide experience in ultrasonic design, Danatronics is pleased to welcome our EHC-03 to our corrosion thickness gage family. The EHC-03 is designed to accurately and non-destructively measure metal structures subject to corrosion.

The EHC-03 is packaged in our field proven IP54 case used in our popular EHC-09 series.

The EHC-03 represents a quality, ultrasonic thickness gage designed to provide years of

unpressedented measurements all at an entry level price. With the new Q-bar, even the most inexperienced operators can quickly determine if a thickness reading is stable. The EHC-03 offers a wide measurement range, two point calibration and even multiple on-screen languages. The EHC-03 is proudly made in the U.S.A. and has a 2 year warranty. Contact Danatronics for more details.

#### **Specifications for EHC-03:**

**Size:** 5" (127 mm) (L) x 3" (76.2 mm) (W) x 1.25" (31.75 mm) (H)

Weight: 8 OZ (.23 kg)

Thickness range: .040"-20" (1mm-508mm) in steel

Material Velocity Calibration Range: 0.0200 - 0.7362 in/uS (0.508 - 18.699 mm/uS).

Temperature: Gage Operating: -4° F to 122° F (-20° C to 50° C)

Battery life: Up to 50 hours (20 hours with backlight on)

Battery type: 2 "AA" Alkaline

**Display:** 128 X 64 Graphics LCD monochrome, sunlight readable

Language support: multi language of English, French, Spanish, Italian, Czech, German, Chinese Portuguese, Slovak, Finnish, and Hungarian

**Q-Bar:** graphic display that confirms measurement stability

**Package:** IP54 rated custom, splash-proof, high impact plastic with rubber keypad

Bandwidth: 0.5-20 MHz (-3dB)

Units: English/Metric/Microseconds

**Backlight:** Auto on with valid reading or keypress for 10 seconds

**Optional Protective pouch:** Custom molded pouch with wrist strap and belt clip

**Transport case:** Hard plastic with high density molded foam cut out for gage and most accessories

Freeze mode: Freezes display

**Hold mode:** Holds display to retain last thickness reading

**Standard EHC-03 includes:** Ultrasonic thickness gage, DKS-537 5MHz 0.375 inch diameter potted cable, operational manual, NIST traceable calibration certificate

Note: The EHC-03 is only available with the DKS-537 and is not field upgradeable

**Warranty:** Limited 2 year warranty on parts and labor for gage only under normal use

#### **Typical Applications:**

- Boiler Tubes
- Pressure Vessels
- Storage Tanks
- Ship Hulls
- Containers Home
- Oil Tanks
- Pipes
- Steam Lines
- Compressor Shafts

#### **EHC-03 Additional Features:**

- Affordable hand held ultrasonic thickness gage
- Measures .040"-20" of steel
- Simple to operate
- 2 point calibration
- Q-bar to confirm measurement stability
- On screen display of multiple languages
- IP54 rated case
- Made in USA

N D Made Easy.

For more information, call us at 978-777-0081 or email sales@danatronics.com or visit www.danatronics.com to arrange a demonstration.

#### WWW.DANATRONICS.COM



**EZ-Scan 6** Magnetic Wheel Linear Axis Encoder

**EZ-SCAN 6** is a linear axis, magnetic wheel encoded scanner designed for manual B-scan applications up to 500°F (260°C). When combined with our ECHO Series hand-held ultrasonic corrosion gage/flaw detector, EZ-Scan 6 offers a portable and affordable solution to address your corrosion concerns.

This rugged, all aluminum constructed scanner with proprietary soft contact magnetic wheel system can smoothly scan on 3" OD pipe or greater and the spring loaded transducer will adjust to the surface, even over welds!

Longer scanner cables can be provided and easily changed utilizing our quick-change connectors.

#### **Features**

- Rugged aluminum construction
- Circumferential scans 3.5" OD pipe or greater
- Axial scans 3" OD pipe or greater
- Scans up to 500°F (260°C)\*
- High resolution encoder (<0.001 per inch)</p>
- Soft contact magnetic wheels
- Self adjusting spring loaded transducer
- Wateproof IP68 encoder
- Made In the USA



#### EZ-Scan 6 is ideal for a wide variety of applications

- Storage tanks
- Pressure vessles
- PipesBridges
- Ship hulls
- I-beams

\*Time base duty cycle





Compatible with some other ultrasonic flaw detectors

#### **UPG-07 Series**





For more information, call us at 978-777-0081 or email sales@danatronics.com or visit www.danatronics.com to arrange a demonstration.



Danatronics introduces the first ever hand held ultrasonic precision thickness gages with **COLOR** A-Scan. The UPG-07DLCW is a hand held ultrasonic precision thickness gage designed to non-destructively measure most engineering materials with the greatest thickness range. So if you are measuring coil steel, fiberglass thickness on boats, titanium golf club heads, plastic bottles or even rubber tires... *put us to test, we measure up*.

The UPG-07 series is also available in multiple models with either monochrome or color from basic to fully loaded. All gages within a family are field upgradeable so if you need to turn on the B-Scan or datalogger in the future – *it is all right there even without the use of a computer.* 

# UNPRECENDTED FEATURES INCLUDING:

- .0001 Resolution
- Live color A-Scan
- Vibration and color change on alarm
- Stored and recall of setups
- 30 Mhz. bandwidth
- Squarewave pulser
- Zoom auto tracking
- 100 K reading datalogger
- Multiple modes for challenging applications
- Gain, range and blanking adjustments
- Available in multiple models



© 2008 Danatronics. All rights reserved.

#### WWW.DANATRONICS.COM

#### **UPG-07 Series**