



The Reliable Choice for Hatch Cover Testing



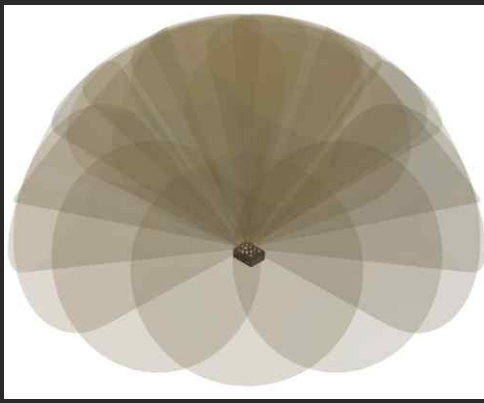
Now with Variable Output Transmitter



# Cygnus Hatch Sure

ULTRASONIC HATCH LEAK DETECTION

A lightweight ultrasonic system for testing the weather tightness of cargo hatch covers  
With variable output transmitter - ideal for watertight doors



## Transmitter Beam Spread Pattern

<< Oblique View

Side View >>



## Features

- Lightweight 3.8 kg (8 lbs) - suitable to be hand-carried onto aircraft
- Digital calibration controls
- Open Hatch (OH) value and sound level in Decibels (dB) are simultaneously displayed
- Powerful and robust transmitter
- Easy transportation in a rucksack-style carry case
- Receiver supplied with neck and waist straps for hands-free use
- The transmitter has 6 selectable pre-set power levels enabling the unit to be used in confined spaces
- Transmitter is fitted with shoulder strap for convenience and safety
- Inspections can be carried out with cargo in place
- Allows a rapid and thorough test of hatch cover tightness
- Environmentally friendly - can be used in place of hose testing
- 3 year warranty.

## Approvals

ABS type approved and accepted by P&I clubs.

## Applications

- Test the weather tightness of cargo hatch covers or doors
- Test seals in cargo access areas, such as bow, side and stern doors or any opening that needs to be sealed
- Sealing integrity checks on large yachts
- For testing watertight doors
- For use in confined spaces.

## Technology

Sea water ingress is one of the major sources of damage to cargo resulting in expensive insurance claims. Cygnus Hatch Sure provides a quick and effective method of evaluating hatch seals.

The system consists of a battery powered transmitter containing 19 ultrasound emitters (40 kHz). The emitters are arranged to produce an omni-directional sound field, uniformly distributed throughout the cargo hold.

The receiver part of the system displays the sound energy level that passes through gaps in the enclosed cargo hold to enable the location of leaks to be quickly and accurately identified.

## Kit Contents

- Hatch Sure receiver with protective case
- 2 rechargeable batteries for the receiver
- Neck and waist strap for the receiver
- Telescopic extension and cable
- 2 flexible inspection microphones
- Protective foam cover for inspection microphone
- Headphone 2-into-1 splitter cable
- Neck-band headphones
- Hatch Sure transmitter with protective case
- Shoulder strap for the transmitter
- 2 sets of 6 rechargeable batteries for the transmitter
- Fast charger for the rechargeable batteries
- External DC power lead for the transmitter
- Emergency microphone cable
- Rucksack style carry case
- Operation manual.





## Technical Specifications

### Hatch Sure Receiver

<b>Size</b>	110 mm x 185 mm x 45 mm (4.3 inch x 7.3 inch x 1.8 inch) W x H x D
<b>Weight</b>	500 g (17 oz) including batteries
<b>Power</b>	9v PP3 battery - 2 x MaxE Rechargeable batteries supplied
<b>Battery Life</b>	4 - 5 hours continuous with MaxE rechargeable battery 8 - 9 hours continuous with Alkaline battery
<b>Protection</b>	IP65 (IP66 in soft-pouch)
<b>Frequency</b>	40.000 KHz, +/- 200 Hz Bandwidth
<b>Enclosure</b>	ABS plastic with orange shock-absorbing outer boot Outdoor all weather soft-pouch with waist mounted belt strap
<b>Temperature Range</b>	Operating -20°C to +50°C (-4°F to 122°F) Storage -10°C to +60°C (14°F to 140°F)
<b>Warranty</b>	3 years

### Hatch Sure Inspection Microphone

<b>Size</b>	Length 240 mm (9.4 inch) Diameter 12 mm (0.47 inch) (15 mm (0.6 inch) with rubber sleeve fitted)
<b>Warranty</b>	1 year



### Hatch Sure Telescopic Extension

<b>Size</b>	Extended length 1.215 m (4 feet) Collapsed length 0.4 m (16 inch)
<b>Weight</b>	300 g (10 oz)
<b>Warranty</b>	1 year



### Hatch Sure Transmitter

<b>Size</b>	120 mm x 150 mm x 90 mm (4.7 inch x 5.9 inch x 3.5 inch) W x H x D
<b>Weight</b>	680 g (24 oz) including batteries
<b>Power</b>	12 x rechargeable MaxE 2100 mAh supplied with kit (Alternatively 6 x AA batteries) External 12-24 v DC power input socket (1 amp)
<b>Battery Life</b>	4.5 hours with 2100 mAh MaxE batteries
<b>Battery Charger</b>	A six cell charger is supplied 100 to 240 v AC 50-60 Hz supply Charge time is approx. 3 hours
<b>Protection</b>	IP40 in soft-pouch with transmitter elements exposed (normal use) IP42 in soft-pouch with cover flat secured (storage)
<b>Transmitter Frequency</b>	40.000 kHz, +/- 80 Hz Bandwidth Frequency modulated
<b>Transmitter Elements</b>	19 x 16 mm (0.63 inch) diameter 40 KHz ultrasound transmitters
<b>Max. Transmitter Power</b>	130 dB (SPL)
<b>Transmitter Output</b>	6 selectable pre-set power levels - full power and 5 selectable lower outputs in 11dB steps
<b>Enclosure</b>	ABS plastic Padded soft-pouch with protective weather cover and 4 points for attaching rope for lowering into holds
<b>Temperature Range</b>	Operating -20°C to +50°C (-4°F to 122°F) Storage -10°C to +60°C (14°F to 140°F)
<b>Warranty</b>	3 years
<b>Compliance</b>	CE, BS EN 60945:2002 (Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results)
<b>Environmental</b>	RoHS, WEE compliant

\*Specifications are subject to change for product improvements

## Cygnus Thickness Gauges



Intrinsically Safe



Hands Free



Data Logger



General Purpose



Underwater



DIVE  
(Underwater A-Scan)



Mini ROV Mountable



ROV Mountable

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