

DIDSON Diver Held (DH)

INTRODUCTION

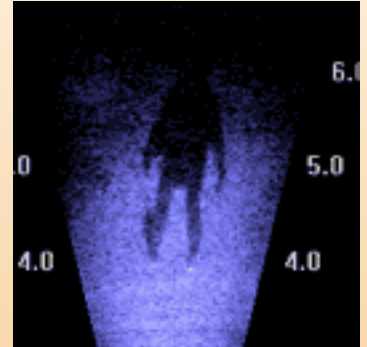
DIDSON-DH is an imaging sonar that allows divers to see through turbid or dark water. It uses acoustic lens technology that generates almost video-quality images and displays them on a mask-mounted display. The diver operates and holds the sonar in one hand. The sonar is extremely helpful to divers deployed in turbid or dark water where they otherwise resort to tactile means for search, identification and examination of objects. The sonar saves money in both manpower and time.

APPLICATIONS

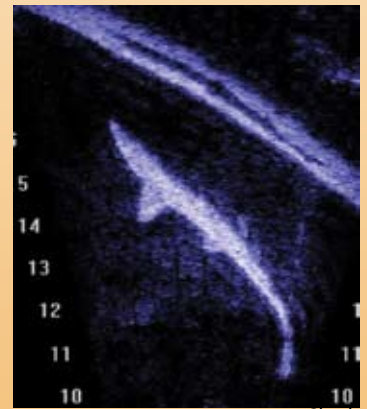
• Harbor Security • Inspection • Search and Rescue

FEATURES

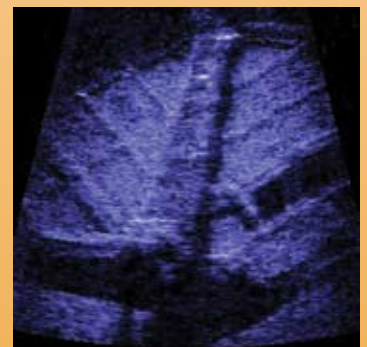
- Four easy to use thumb switches for power, focus, range, zoom and record
- Sensors for compass, roll, pitch and depth
- External battery pack for quick change during extended operations
- With optional cable attached (video/Ethernet uplink to surface) the topside personnel are able to simultaneously see what the diver sees
- Divers can exchange sonar and display while underwater
- Sonar has internal memory of 8 GB for 4 hr of recording at 10 frames/s
- A mask-mounted display with color SVGA resolution designed to mount on AGA, SCUBA and Kirby Morgan masks
- The mask mounted display shows acoustic images with range markers in feet, meters or yards updated at 4-20 frames/s
- Status Indicators include battery gauge (time left in hours), high temperature and potential leak



Mannequin



Shark



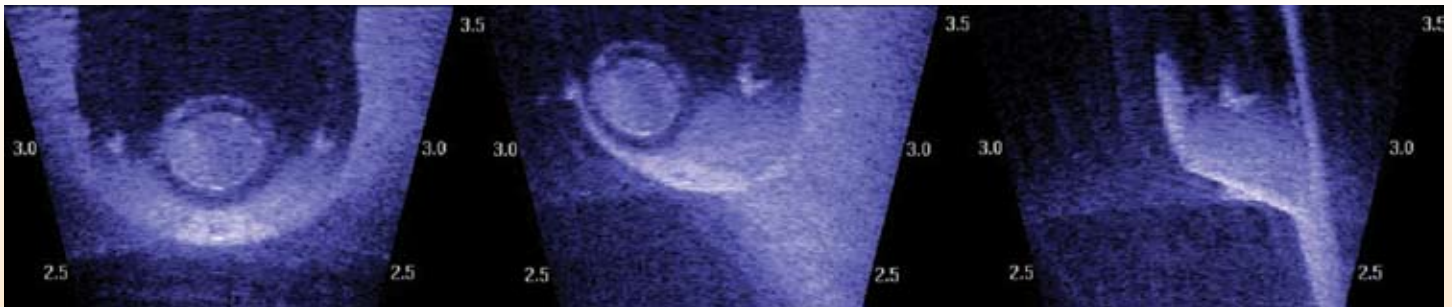
Sunken Helipad

The complete DIDSON system includes a mask display, battery packs and battery charger



The control switches





Rotation of DIDSON-DH 90° gives different views of an object on the sea bottom.

Specifications of the DIDSON-DH

Identification Mode

- Operating Frequency 1.8 MHz
- Beamwidth (two-way) 0.3° H by 14° V
- Number of beams 96
- Range 1 m - 15 m

Detection Mode

- Operating Frequency 1.1 MHz
- Beamwidth (two-way) 0.6° H by 14° V
- Number of beams 48
- Range 1 m - 35 m

Both Modes

- Max frame rate 4-20 frames/s
(window length dependent)
- Field-of-view 29°
- Focus 1 m to max range
- Battery Duration 2.5 hours
- Sonar weight in air 7.7 kg (17 lbs)
- Battery weight in air 2 kg (4.5 lbs)
- System weight in Water Neutral
- Sonar Dimensions 43 cm (including 13 cm handle) by 20 cm by 17 cm
- Battery Housing Dimensions 18 cm by 13 cm diameter
- Depth rating 100 m (330 feet)
- Control Four switches on handle or Ethernet



NOAA diver Dave Elliot uses DIDSON

The image as shown on the mask-mounted display. Depth and Heading (degrees magnetic) are provided as well as the image and its range from the sonar in feet.

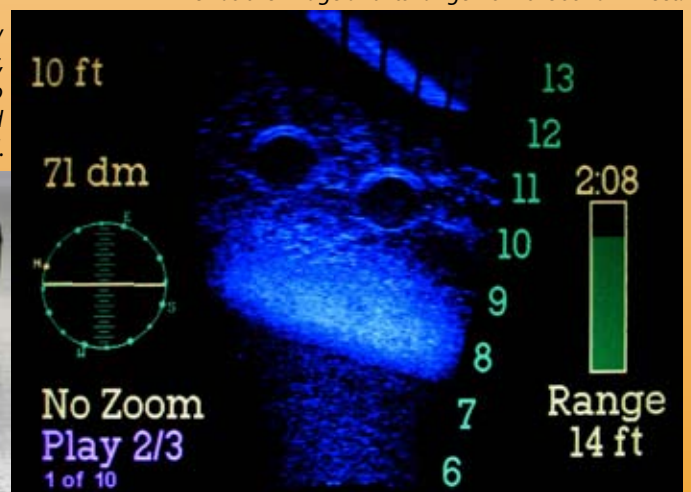
Scope of Supplies

- DIDSON-DH
- Manual
- Underwater Head Mask Display (UHMD)
- External battery packs (2)
- Battery charger
- 6-ft data transfer cable for transferring images from sonar to topside computer
- Software CD for topside computer
- Transit Case for sonar and accessories

Optional Accessories

- 100 Ft. Cable
- Topside Box for remote operation
- Transit Case for cable and topside box

Knob, shown below on left side of sonar, comes with sonar to allow for two handed operation if desired.



Visit www.soundmetrics.com for sonar movies and additional information