

## DIDSON (Diver Held - DH) Dual-frequency IDentification SONar



### Description

The DIDSON Diver Held (DH) sonar is a lightweight navigation and identification sonar ideal for divers operating in murky waters where optical visibility is low. It is designed to reduce the need for slow, tactile examinations in turbid water environments.

It combines the strengths of two high frequencies in one sonar and is a specially designed version of the successful standard DIDSON already in use in many turbid water environments at many depths.

### Lightweight and power efficient

The lightweight nature and lower power consumption (30 Watts @ 24V DC) makes it the ideal choice for divers, enabling the diver to identify and inspect objects of interest or for navigation.

It is an efficient alternative to blind searching by hand, and can reduce diver time and effort in the water searching for and identifying objects.

### High resolution and rapid refresh rate

Low visibility and turbid environments can limit the effectiveness of optical systems. DIDSON systems are unique high-definition sonar systems that use acoustic lenses to make near video quality real-time images in dark, murky waters.

The DIDSON DH system provides clear, real-time images, allowing safe and efficient diving in zero visibility conditions at depths of up to 100 metres.

For further information please visit: [www.macartney.com](http://www.macartney.com)

### Designed to view fixed and moving objects

DIDSON systems can observe moving and stationary objects. They are ideal for examining or identifying fixed objects in the water, such as conducting safety checks on vessel hulls and berths, and for object retrieval. Other uses also include monitoring fish and mammal movements.

### Practical to operate

The identification sonar is designed to make it easy for the diver to use underwater. System information is displayed on a head mask display for maximum detail. The diver can change the display, including range and images, via easy to use thumb switches.

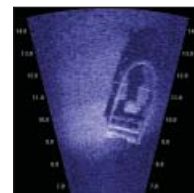
The hand held sonar also has an attachable handle so that it can be held with both hands if required.

The DIDSON-DH also features:

- Self-contained unit with batteries and display
- Rechargeable, exchangeable batteries
- Batteries have 2½ operating hours
- Can be fixed mounted and operated topside
- Mask-mounted SVGA colour display
- Neutral buoyancy in sea water

### Typical applications

- Military/Homeland Security
- Hull/Berth sweeps
- Underwater surveillance
- Obstacle detection and avoidance
- Fisheries management
- Underwater structure inspection
- Search and rescue operations
- Bottom typing and environmental analysis
- Crime evidence recovery



# Technical Specifications

## Mechanical Specifications

Dimensions: 43 cm long  
20 cm high  
17 cm wide

Weight in air: 7.7 kg

Weight in water: Neutral

## Electrical/Acoustic specifications

### Low Frequency Mode

Operating frequency: 1.1 MHz  
Beam width (two-way): 0.4° H x 14° V  
Number of beams: 48

### High Frequency Mode

Operating frequency: 1.8 MHz  
Beam width (two-way): 0.3° H x 14° V  
Number of beams: 96

### Both Modes

Frame rate: 4-21 Frames/sec.,  
max. range dependent  
Field of view: 29°  
Remote focus: 1 m to max. range  
(approx. 30 m)  
Power consumption: 30 W (24 VDC @ 1.25 A)  
Control: Ethernet

## Other information

### External battery pack

### Internal memory

8 GB (4 hours at 10 frames per second)

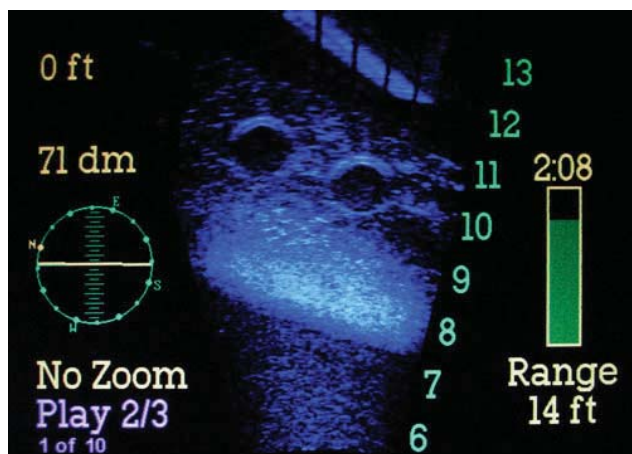
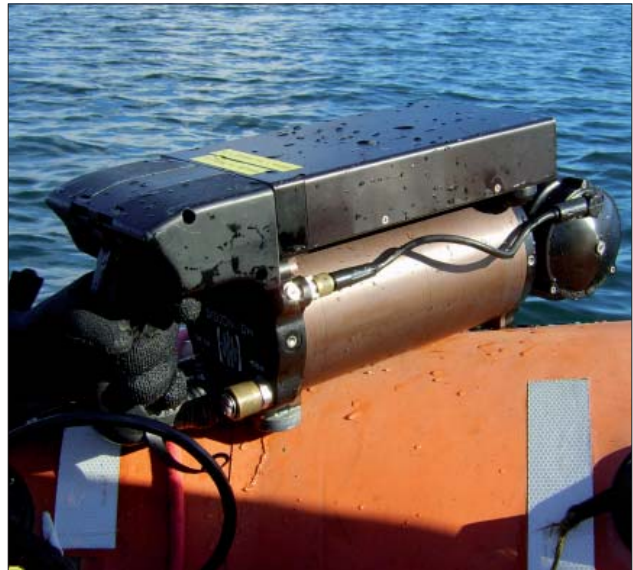
### Mask display

Resolution: SVGA display

### Status indicators

Battery life  
Temp leak  
Orientation compass

Specifications subject to change without notice



Typical head mask display