StarFish 453 OEM

Product Information

0739-SOM-00001-01

Tritech

Outstanding Performance in Underwater Technology

A Moog Inc. Company

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Warning Symbols

Throughout this manual the following symbols may be used where applicable to denote any particular hazards or areas which should be given special attention:

Note

This symbol highlights anything which would be of particular interest to the reader or provides extra information outside of the current topic.

Important

When this is shown there is potential to cause harm to the device due to static discharge. The components should not be handled without appropriate protection to prevent such a discharge occurring.

Caution

This highlights areas where extra care is needed to ensure that certain delicate components are not damaged.

Warning

DANGER OF INJURY TO SELF OR OTHERS

Where this symbol is present there is a serious risk of injury or loss of life. Care should be taken to follow the instructions correctly and also conduct a separate Risk Assessment prior to commencing work.

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1. Introduction

The StarFish 453 OEM is a sidescan system designed to be integrated with existing, or newly developed ROV and AUV applications.

The OEM equipment includes:

- Two StarFish transducers
- One StarFish control PCB
- Various connecting cables

The StarFish control PCB uses USB communication to link to a controlling PC and will interface with either the StarFish Scanline software, or custom software built with the StarFish SDK.

Note

Both Scanline and the SDK are available for download from the *Tritech International Ltd* website: www.tritech.co.uk.

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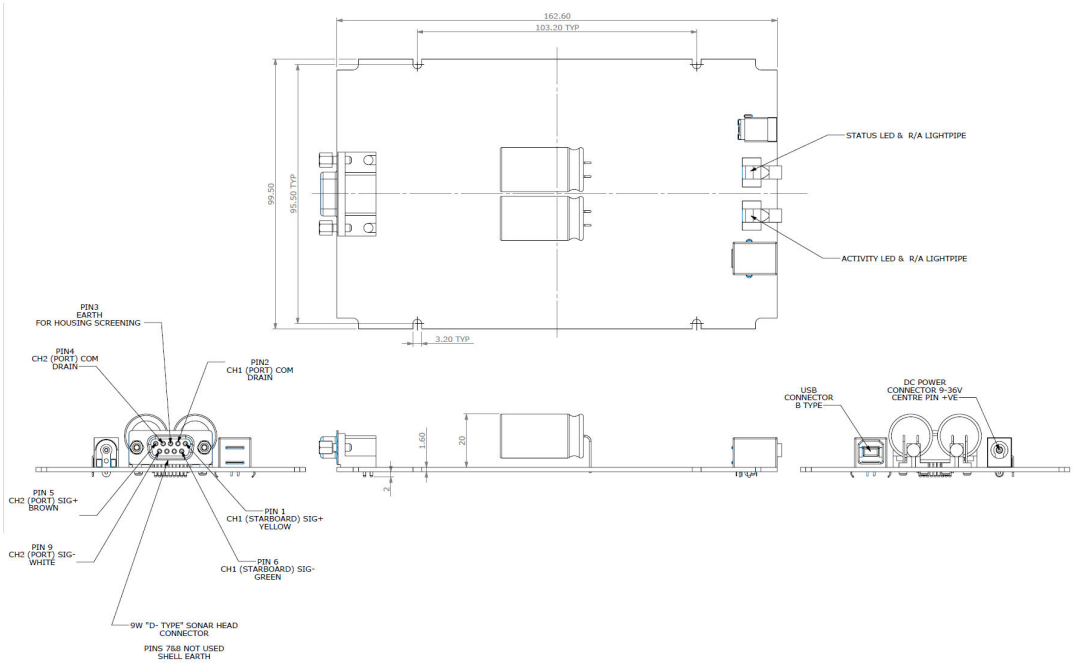
2. Specification

2.1. Dimensions

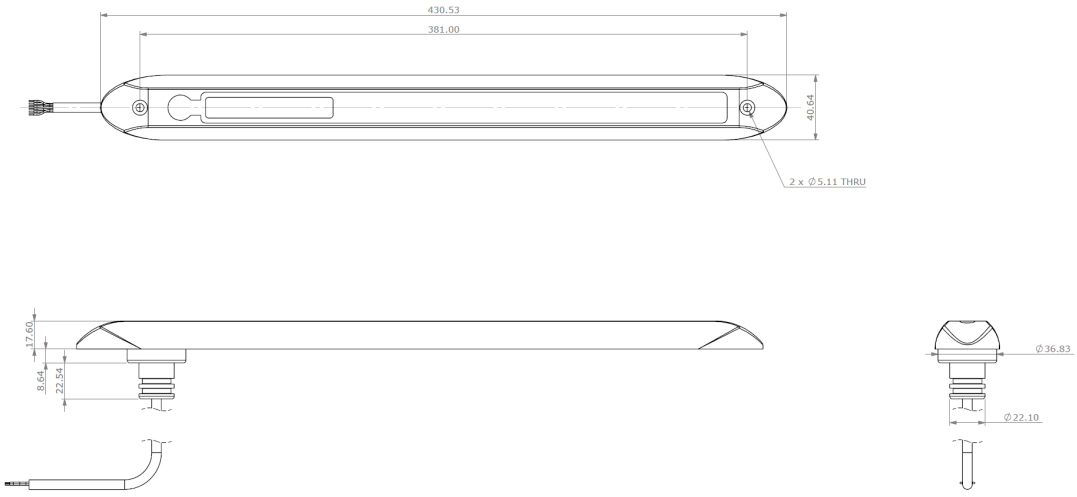
Control PCB



Note

Supplied units may differ slightly from image shown. The 9W D-Type connector may not be fitted in all cases.

Transducers



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2.2. Acoustic Properties

Property	Specification
Operating Frequency	450kHz CHIRP
Horizontal Beam Width	0.5°
Vertical Beam Width	60°

2.3. Physical Properties

Property	Control PCB Details	Transducer Details
Dimensions	15 x 100 x 163mm (H x W x L)	18 x 41 x 432mm (H x W x L)
Weight (in air)	0.1kg	0.35kg (per transducer)
Depth Rating	N/A - no IP rating	300m

Electrical Properties	
Property	**Details**
Power requirement	9 - 28VDC
Power consumption	6W (500mA at 12VDC)
Electrical connections	2.1mm DC jack socket USB 2.0 B-Type connector PIN Headers

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3. Installation

As the StarFish 453 is intended for OEM installations, *Tritech International Ltd* can only give general guidance as to the way the system should be integrated.

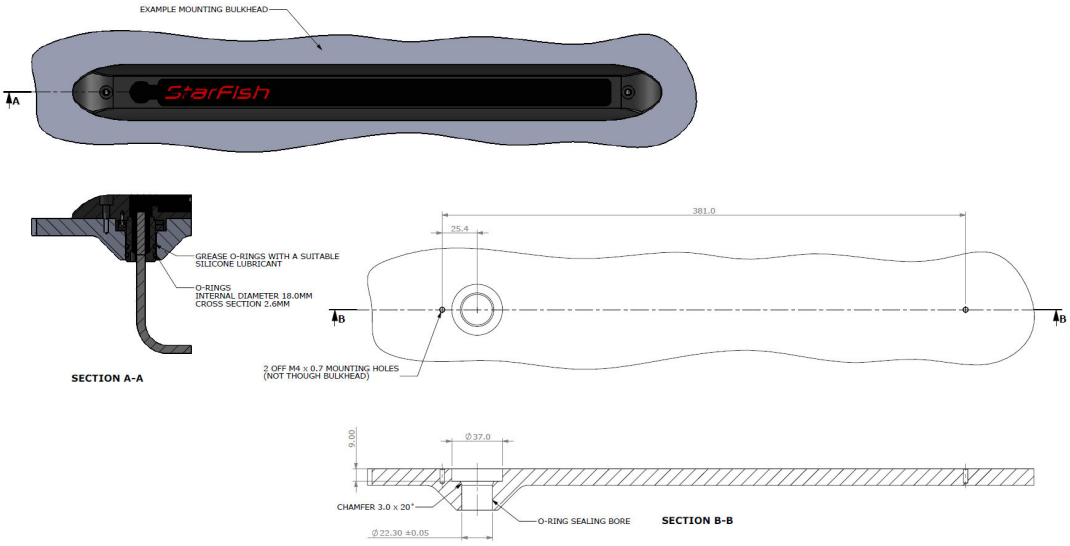
3.1. Control PCB

The Control PCB needs to be securely mounted within a waterproofed, dry enclosure in the ROV / AUV.

The interface cable that comes with the system should be plugged into the PIN header (or 9 Way Connector, depending on the OEM kit provided).

3.2. Transducers

The following diagram shows an example installation of the StarFish 453 Transducers.



The angle of installation for the transducers is left at the discretion of the OEM.

The cabling from the transducer should be appropriate glanded into the ROV / AUV and then connected to the Control PCB interface cable.

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4. Operation

The StarFish 453 OEM is fully compatible with the StarFish Scanline software. Please refer to the Scanline user manual; freely available from the *Tritech International Ltd* website (www.tritech.co.uk).

An SDK pack is also available, which comes with documented example code for generating your own software packages capable of controlling the StarFish hardware. This is also available from the *Tritech International Ltd* website.

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