



EIVA

SCANFISH TROPHEUS

EDGETECH 4205 SETUP AND MOBILISATION

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1 Introduction

This document guides the user through the setup and mobilisation of a ScanFish Tropheus with an EdgeTech 4205 sidescan sonar. If the user needs details on how to operate the ScanFish or details related to the EdgeTech configurations, we advise you to refer to their respective manuals accordingly.

2 Hardware installation

To use a ScanFish with an EdgeTech 4205, a DC2DC converter junction box needs to be installed in the ScanFish.



Figure 1 ScanFish Tropheus DC2DC junction box

The DC2DC junction box should replace the MUX, if you have this installed, otherwise it can simply be installed in the top of the starboard side of the ScanFish. To install the box, first remove the two locknuts labelled on the picture below. These are located on the starboard side of the controller.



Figure 2 The top shelf of the ScanFish skeleton seen from the underside on the starboard side just next to where the controller is installed

Take the bolts out and put them into the same two holes from the opposite side and align them with the two threaded holes from the underside of the DC2DC junction box as the picture illustrates below. The bolts should be tight.



Figure 3 The underside of the DC2DC junction box with two threaded holes for the mounting

The DC2DC serves the purpose of converting the 300 V DC output from bulkhead connector number 8 on the port side of the ScanFish controller to a 24 V DC output for the EdgeTech 4205 sidescan sonar.

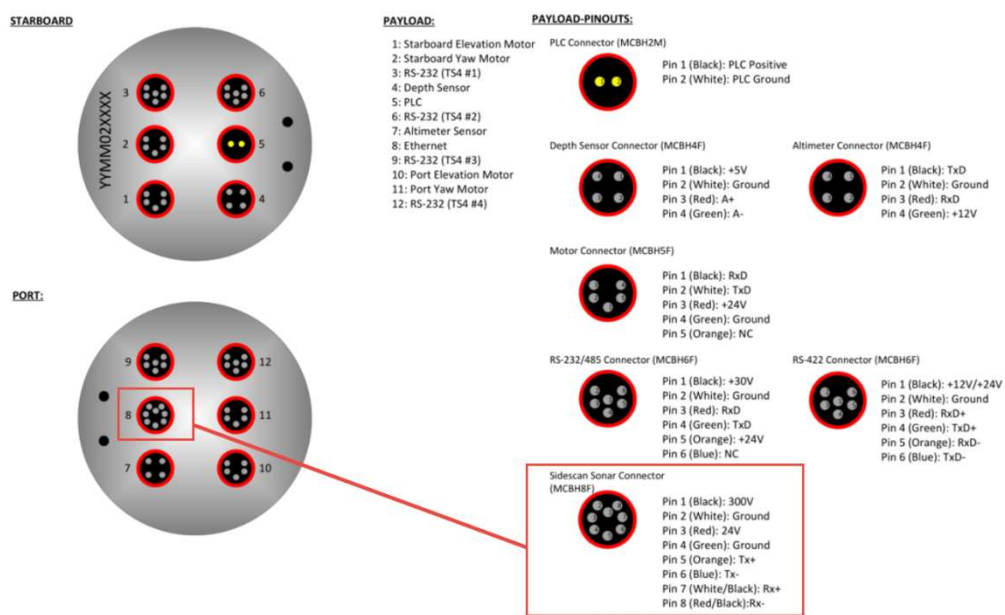


Figure 4 Overview of ScanFish Tropheus controller with bulkhead connectors

The Edgetech 4205 is attached to the ScanFish by an EdgeTech tow arm. The tow arm is connected to the ScanFish tow point on the outside of the winch termination. No washers are needed.

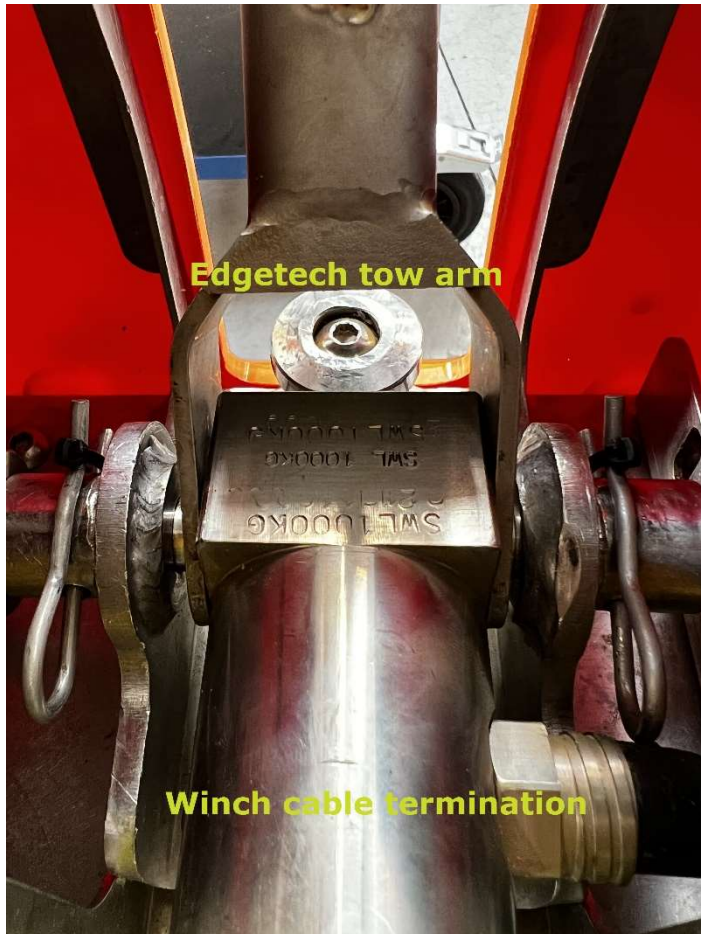


Figure 5 ScanFish tow point with winch cable termination and EdgeTech tow arm

Connect the tow arm with the Edgetech 4205 by a M12 shackle in the tow point.

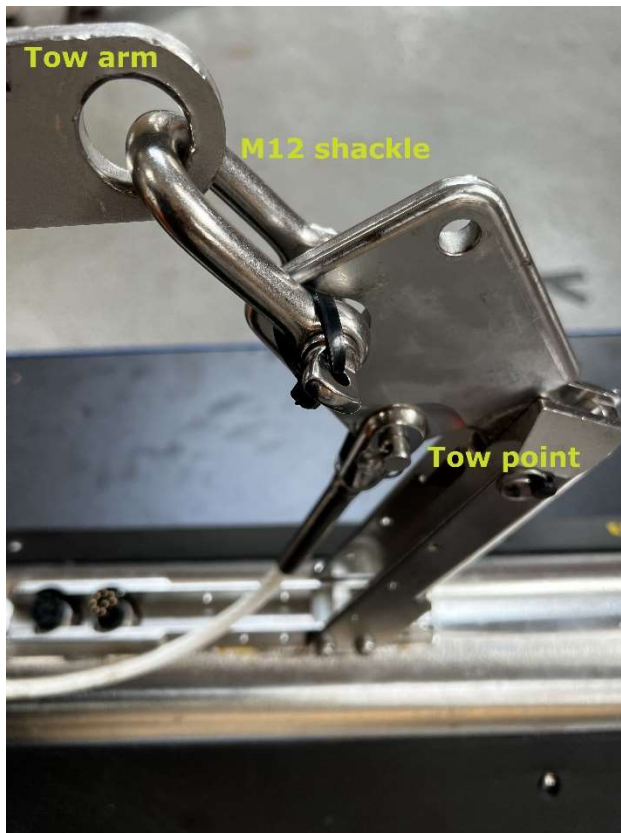


Figure 6 M12 shackle in the link between tow arm and EdgeTech tow point – Secure the shackle pin with a tie wrap

The tow cable should be secured to the tow arm by tie wraps but remember to leave enough slack so the moveable junctions of the tow arm can move freely.

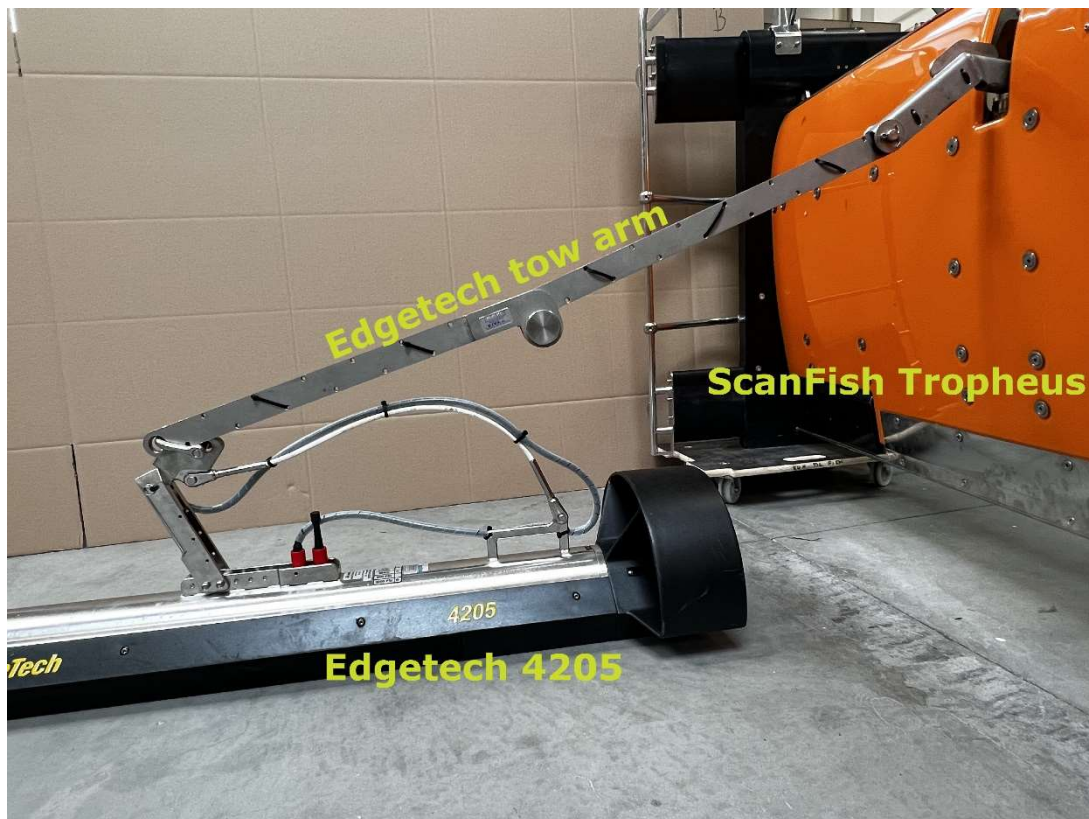


Figure 7 ScanFish Tropheus setup

In the case of a collision and breakage of the shear pin, the force will be transferred to the safety cable, and to avoid the tow cable from snagging, the tow cable should be secured to the safety cable and not directly to the tow cable connector via the tow point.

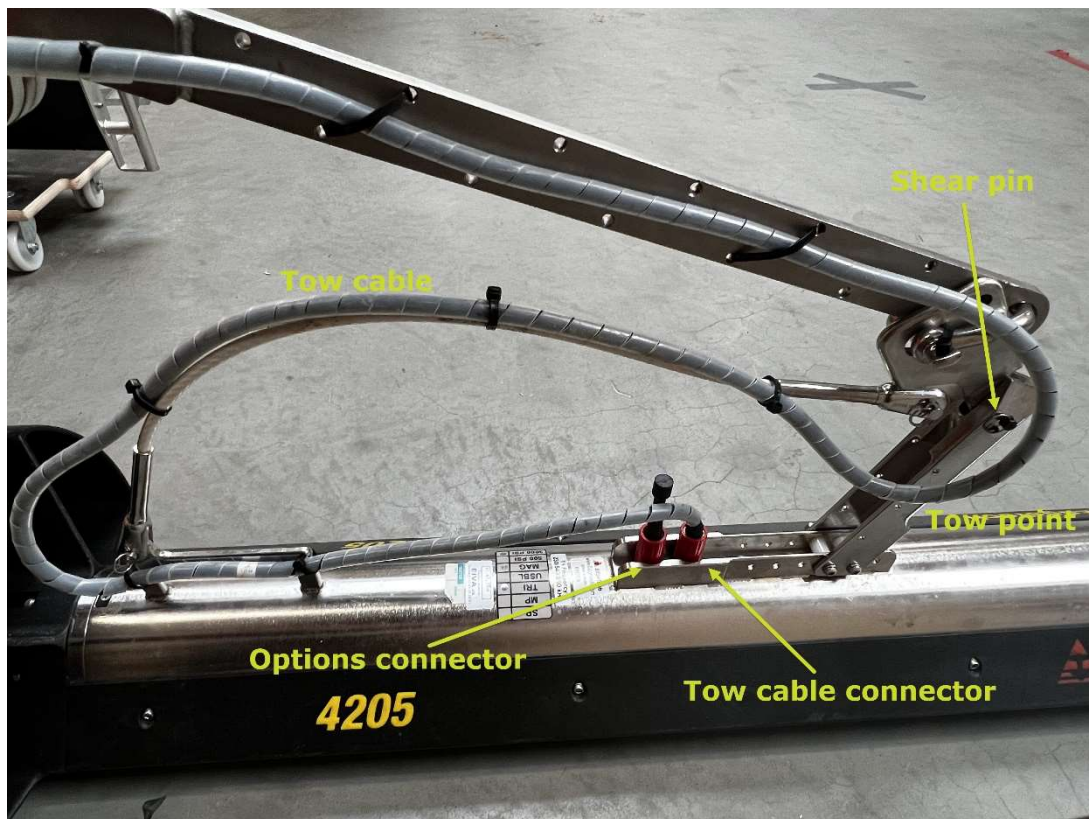


Figure 8 A safe way of securing the tow cable

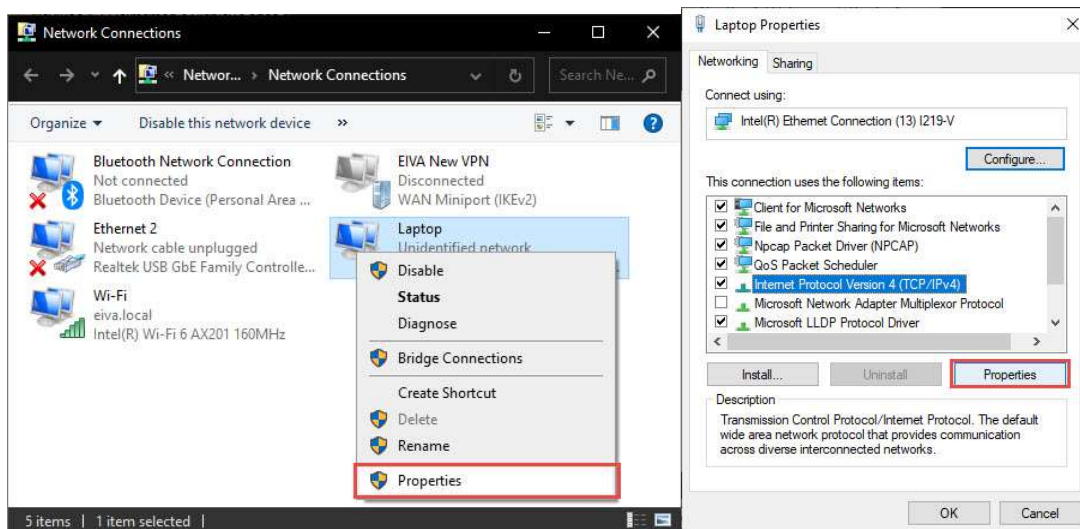
3 Software integration

On the ScanFish topside, the UHF connector should be connected with a deck cable to the slip ring in the towing winch. The RJ-45 connector should be connected to the ScanFish/EdgeTech control computer.



Figure 9 Backside of the ScanFish topside. 1: AC power connector. 2: UHF connector with cable to winch slip ring. 3: RJ-45 connector with LAN cable to ScanFish/Edgetech controller computer

On the ScanFish/EdgeTech control computer, the IP addresses for the network connection to the ScanFish and the EdgeTech 4205 should be configured. Do this by right clicking the network connection, then clicking **Properties** > **Internet Protocol Version 4 (TCP/IPv4)** > **Properties** as shown below. Type in an appropriate scope IP address for the ScanFish under 'IP address:' (eg 10.10.103.99) and click **Advanced...** > **Add...** and enter an appropriate scope TCP/IP address under 'IP address:' (eg 192.9.0.98) as shown below.



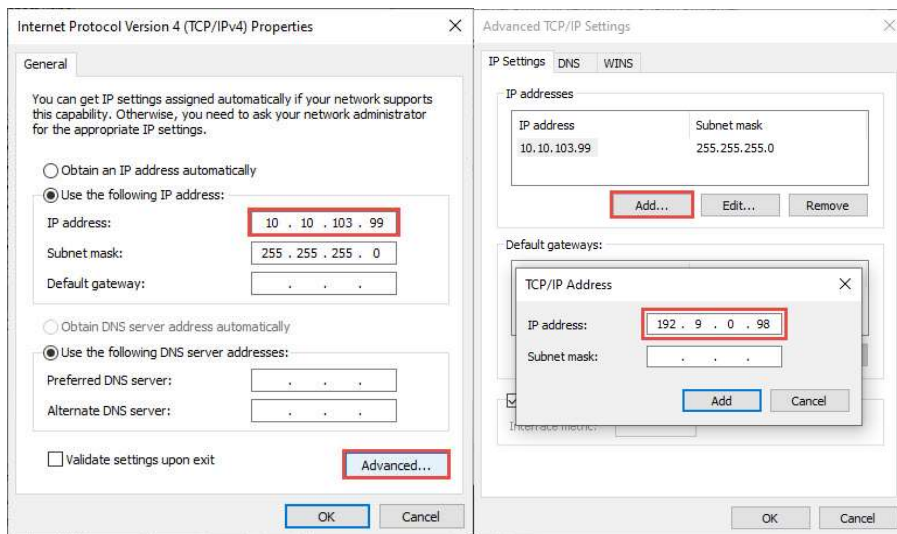


Figure 10 Network connection setup steps

Turn the ScanFish topside on and under Settings > Options > Fish, type in the IP address (10.10.103.XX, with XX being the last two digits on your ScanFish controller). A connection can now be established and the EdgeTech Discover software can be launched.

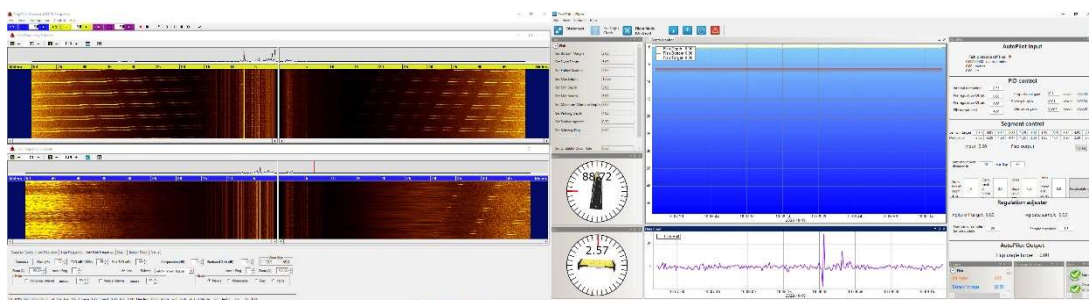


Figure 11 Screen dump from ScanFish(right)/EdgeTech(left) controller computer after setup