



BROCHURE

ECHOPILOT

## Forward Looking Sonar FLS 3D

Daniamant design and manufacture all of our products in line with the relevant worldwide approvals, technical specifications, current legislation and International directives.

Our mission is to achieve World class performance through partnerships with our suppliers, customers and employees, providing products and services that enhance the safety and security of our customers.

### Daniamant products cover 12 key areas:

- Lifejacket Lights
- Liferaft Lights
- Lifebuoy Lights
- Intrinsically Safe Lights
  - Special Lights
  - LED Flares
- Forward Looking Sonars (FLS)
  - Bridge Navigational Watch Alarm System (BNWAS)
    - Salinometers
    - Oil Level Alarm
  - Electronic Inclinator
- Agency for a range of world-renowned safety product brands (supplied to the Danish market)

### Further Information

For further information on our products, please see our website: [www.daniamant.com](http://www.daniamant.com)

**Daniamant**   
Be safe at sea

### Introduction

The 3D Forward Looking Sonar is one of the best proven Forward Looking Sonars. The FLS 3D displays a 3-dimensional representation of the underwater scene ahead of the boat. The seabed terrain and potential hazards are shown, for the first time, with unparalleled realism.

The FLS 3D has direct integration to Raymarine Axiom Displays and is easily connected to the raynet via an RJ45 to Raynet cable. Once connected, the EchoPilot app will appear on the Axiom Display allowing users to see forward looking sonar on their display in real-time. Offering dual viewing of sea charts and forward looking sonar at the same time, the display can also be used in split screen for the ultimate in convenience. In full, three-dimensional, coloured display, when the FLS 3D is connected to the Axiom display, users will benefit from full 360 degree rotation of the 3D image via touch, as well as the zoom function. This will give a closer view of how the seabed terrain looks ahead and potential hazards are shown in real-time.

The FLS 3D comes with twin retractable transducers to ensure complete forward coverage whatever the hull form. The view ahead is 60 degrees in the horizontal plane and over 90 degrees in the vertical plane. The forward range is up to 200 m and 100 meters depth.

The Transducers comes in two sizes: 5" and 10" depending on the size of the hull. The transducers come with three different types of skin fittings to ensure they will fit any type of hull. You can choose between Bronze, steel or aluminum depending on your hull.

The importance of Forward Looking Sonar Technology is the depth to range ratio. The FLS 3D has a staggering 20 x depth ratio! This means that you will see 100 meters ahead with only 5 meters of water underneath your boat. This is the highest ratio in Forward Looking Sonar Technology!

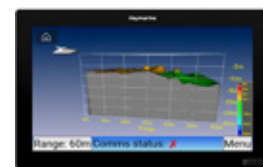
The FLS 3D Forward Looking Sonar has the ground breaking technology of Real-Time Forward Looking Sonar. The display updates every one second so the captain will always be updated on the seabed terrain and potential hazards ahead. The FLS 3D is also designed as a black box to work with any existing display that has a video input.



Raymarine Integration



Split Screen View



Rotated Side View

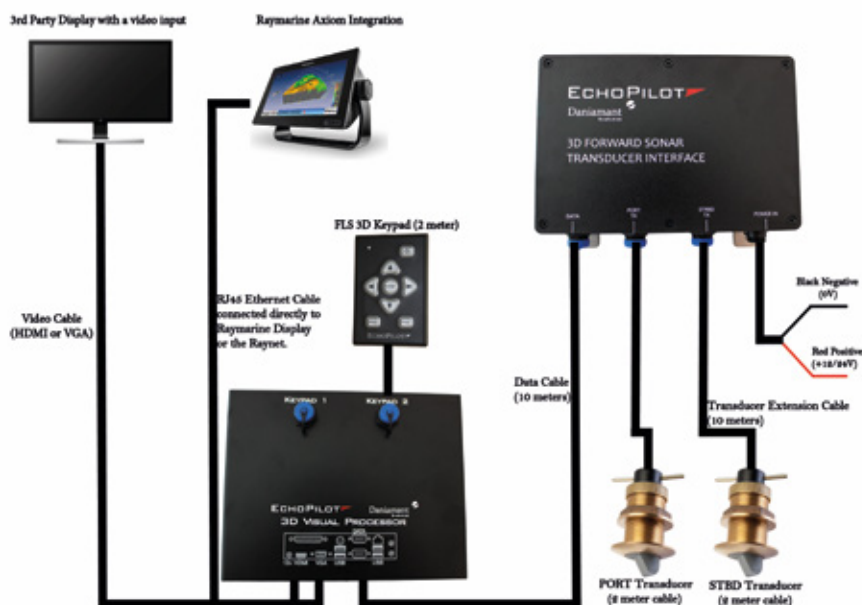
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## Overview



## Standard Kit

- Visual Processor
- Transducer Interface
- 2 x 5" Transducers with 2 meters cable
- 2 x 5" Bronze Skin Fitting
- Keypad - 2 meters
- Data Cable - 10 meters
- Power Cable
- HDMI Cable
- 2 x Transducer Extentions Cable, 10 meter

## Features

- Direct integration to Raymarine Axiom Displays
- Skin Fittings Available in Bronze, Steel and Aluminum
- 20 x Depth to range ratio. 5 meter depth = 100 meter range
- Real time system
- Screen updates every 1 second (depending on range)
- 200m forward range
- 100m depth range
- 200KHz frequency
- Multiple display options
- Outputs: HDMI, VGA
- Colour coded depth
- Data cable of up to 100m
- Beam width 90 degrees (vertical plane)
- Beam width 60 degrees (horizontal plane)