



FORWARD LOOKING SONAR

## FLS 3D

### Introduction

The FLS 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 will connect to any third party display via its HDMI and VGA video output. Simply connect the video cable to the displays video input and you are up and running.

The FLS 3D also 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 scans the seabed in a 60 degrees horizontal plane and 90 degrees in the vertical plane. The forward range is up to 200m and 100m depth.

The FLS 3D is equipped with a new technology called Average Forward Depth.

The Average Forward Depth is the average depth of the water ahead, based on sonar readings. Knowing the average depth you are sailing towards is a vital tool for navigating compared to the normal depth sounder that only gives you the depth underneath your vessel.

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.

Visual Processor



Transducer Interface



FLS 3D Dual Transducers



On/Off Button Or Keypad

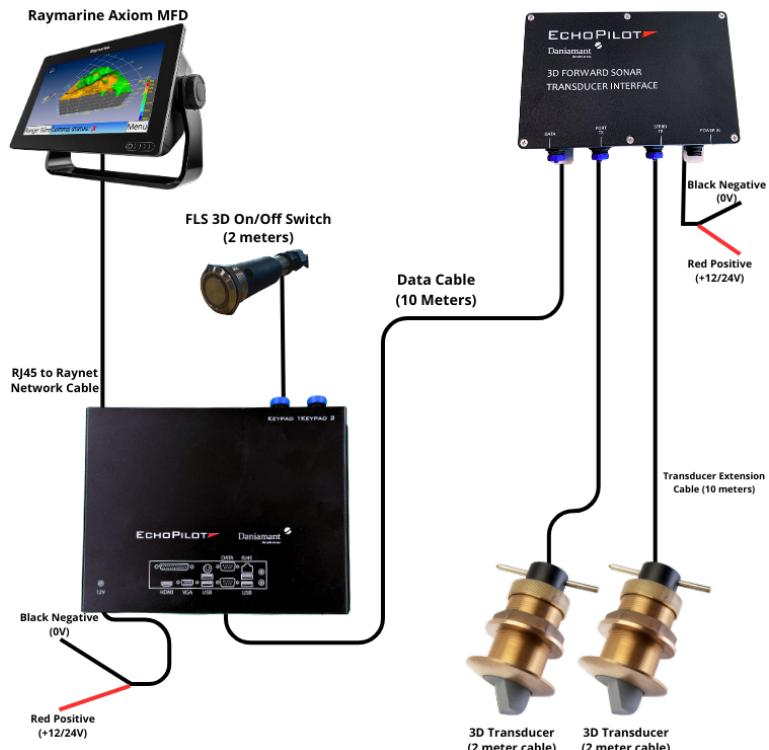




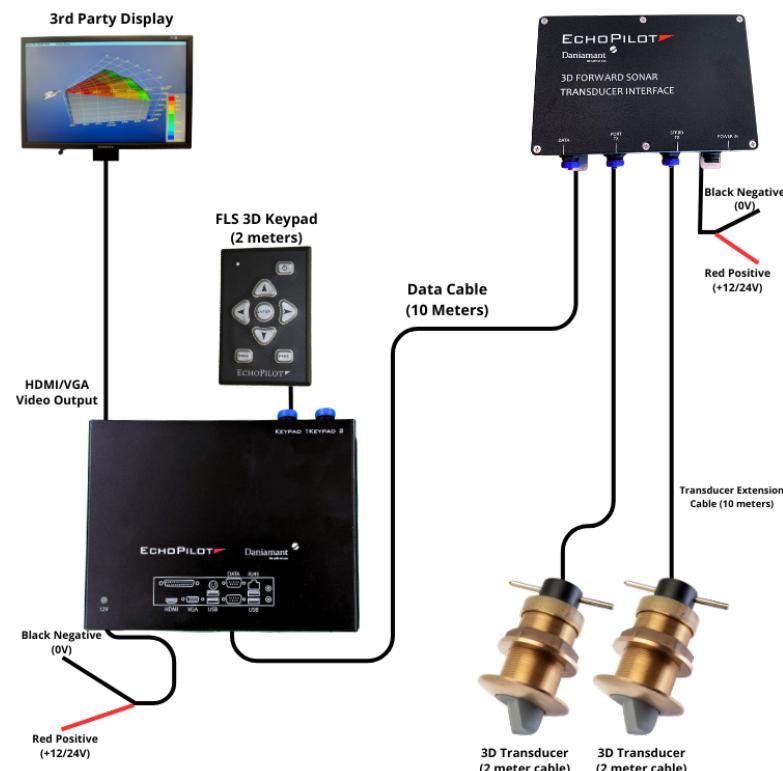
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**FLS 3D**

**Overview FLS 3D Gen 4 - For Raymarine Integration**



**Overview FLS 3D - For 3rd Party Display**



**Standard Kit FLS 3D Gen4**

- 2 x FLS 3D 5" Transducer
- 2 x 5" Bronze Thru Hull Skin Fitting
- 2 x Transducer Extension Cable
- 1 x FLS 3D Transducer Interface Box
- 1 x FLS 3D Data Cable
- 1 x FLS 3D Visual Processor
- 1 x On/Off Switch
- Power cables

**Optional Parts FLS 3D Gen4**

- 10" Transducers
- 10" Thru Hull Skin Fitting
- Steel Skin Fitting
- Aluminum Skin Fitting
- Custom Data Cable 20 - 100 meters
- Additional Transducer Extension Cables
- Additional On/Off Switch
- Extension Cable for On/Off Switch

**Standard Kit FLS 3D**

- 2 x FLS 3D 5" Transducer
- 2 x 5" Bronze Thru Hull Skin Fitting
- 2 x Transducer Extension Cable
- 1 x FLS 3D Transducer Interface Box
- 1 x FLS 3D Data Cable
- 1 x FLS 3D Visual Processor
- 1 x FLS 3D Keypad
- Power cables

**Optional Parts FLS 3D**

- 10" Transducers
- 10" Thru Hull Skin Fitting
- Steel Skin Fitting
- Aluminum Skin Fitting
- Custom Data Cable 20 - 100 meters
- Additional Transducer Extension Cables
- Additional Keypad
- Extension Cable for Keypad