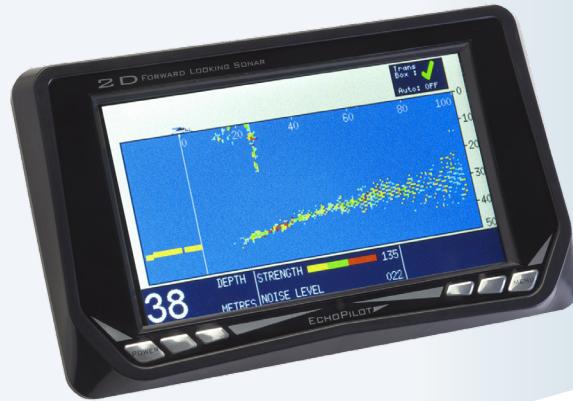


ECHOPILOT





BROCHURE

ECHOPiLOT

Forward Looking Sonar FLS 2D

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

Introduction

The FLS 2D is a stand-alone display, which comes with two different Forward Looking Transducers: A standard transducer and a professional transducer. These are made in two different sizes to fit the needs of your boat.

The transducers scan the seabed in a 90 degree vertical angle, which lets the captain see any underwater dangers ahead in time to avoid the dangers. The image displayed on the FLS 2D is an exact image of the seabed and even gives color coding to show what type of seabed you are sailing over. The green colors indicate a soft seabed like sand and mud, while red colors indicate a hard seabed like rock and coral.

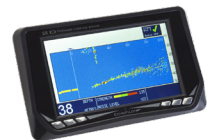
The FLS 2D shows the depth straight underneath the boat. This way you only have to look at the EchoPilot while navigating. Depth sounders are no longer needed except if you want depth sounders to show deeper depth than the 100 Meters.

The FLS 2D has a maximum depth range of 100 Meters and 200 meters ahead.

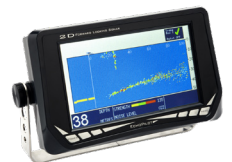
Compared to other Forward Looking Sonars the FLS 2D is unique. When speaking about forward looking sonar the depth to range ratio is a vital part of the technology. The depth to range ratio indicates how far ahead the forward looking sonar will see compared to the depth. The FLS 2D has a depth to range ratio of 10 x the depth, which allows you to see 50 meters ahead with 5 meters of water underneath your boat. This way you can see much further when navigating in shallow waters.

Features

- Patented Real Time Forward Looking Sonar
- Update time: 0.5 seconds
- Colour Translective TFT LCD
- Max Range Ahead 200m
- Max Depth Range 100m
- Digital Depth
- Forward Alarm
- Optional Swivel Bracket
- Dual Display option



TFT LCD Display



TFT LCD Display with bracket



Standard Transducer



Professional Transducer

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Standard or Professional transducer?

Having chosen the EchoPilot 2D for your boat the only remaining choice is: which transducer is most appropriate. Our larger professional transducer comes with a bronze 2" BSP thru-hull fitting and with 3" of useable thread is excellent for most larger boats.

The standard transducer fits through a glass filled Polypropylene thru-hull with 1" of useable thread. Most bottomed GRP hulls can take the standard transducer.

If however you have a thick hull, or a significant degree of dead rise requiring wedges or chocks to keep the transducer vertical then the professional is the choice to make.

Standard Kit

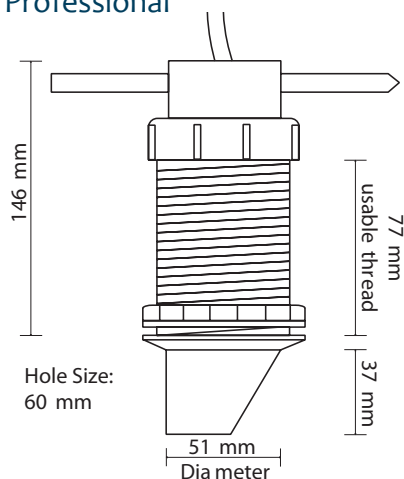
- Display
- Power Cable
- Transducer
- Thru-hull fitting & blanking cap
- White protective cover for display
- Shipping weight: approx. 4.5 kg

Optional

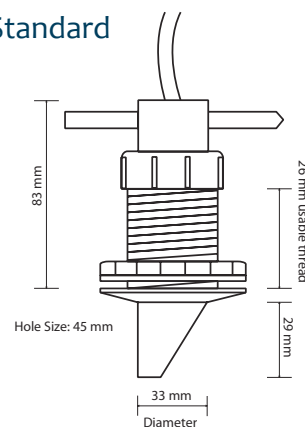
- Repeater Display
- Mounting Bracket
- Spare Transducer

Transducers

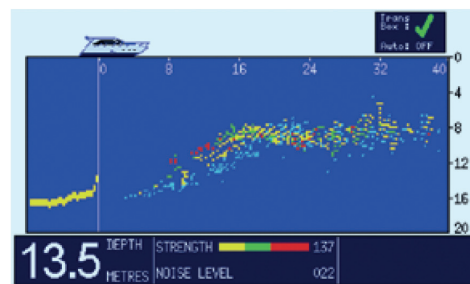
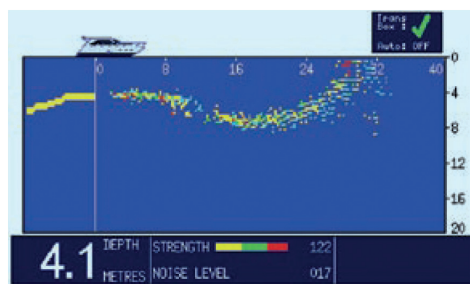
Professional



Standard



FLS 2D Screen Shots





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Forward Looking Sonar FLS 3D

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- Lifejacket Lights
- Liferaft Lights
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Further Information

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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.

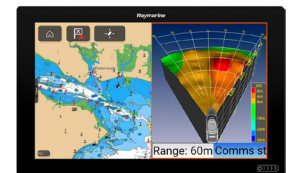
The Transducers comes in two sizes: 5" and 10" depending on the size of the hull. The transducers come with three different types of skin fittings to ensure they will fit any type of hull. You can choose between Bronze, steel or aluminum depending on your hull.

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!

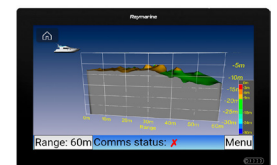
The FLS 3D Forward Looking Sonar has the ground breaking technology of Real-Time Forward Looking Sonar. The display updates every one second so the captain will always be updated on the seabed terrain and potential hazards ahead. The FLS 3D is also designed as a black box to work with any existing display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



Raymarine Integration



Split Screen View



Rotated Side View

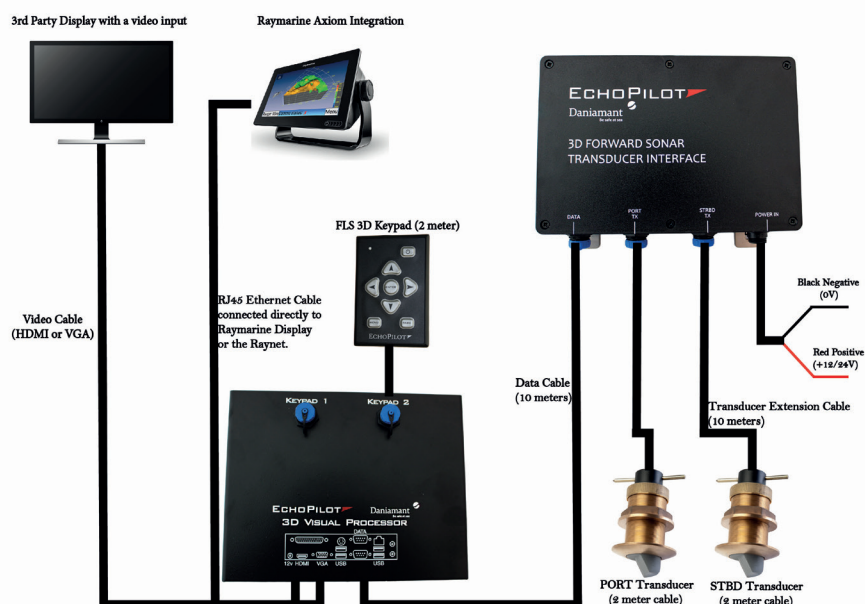
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Overview



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 Extensions 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)



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Forward Looking Sonar FLS Platinum Engine

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Introduction

Daniamant is proud to present a new range of Forward Looking Sonar (FLS). EchoPilot's 'Black Box' sonar enables the modern yacht with integrated displays to add colour FLS with a minimum of fuss. Any chartplotter, radar, P.C. or screen with a video input can become a fully functional colour FLS.

FLS enables the skipper to enter strange harbours or difficult anchorages with the extra safety of a view of the sea bed and underwater obstructions ahead. Pilotage in unfamiliar or poorly charted waters, especially at night, becomes more relaxing.

EchoPilot's FLS uses an electronically controlled array to scan the sea bed from straight ahead through 90° to straight down, like an underwater radar.

Realtime FLS is a patented EchoPilot invention. This means that with the whole screen updating continuously should the boat turn towards an obstruction or bank this will appear almost immediately on the screen. (And will disappear as quickly when the boat turns towards safer waters).

Note that a steered transmit phased array system offered by some other manufacturers may take a considerable time to update a full 90° sector.

Features

- Composite Video Output
- Auto Gain Auto/Manual Range
- Max Range ahead 200m
- Max Range down 100m
- Digital Depth
- Speed Option
- Forward Alarm
- NMEA Input and Output
- S-video Output
- Colour Coded Echostrength



Video Interface Box



Transmitter Box



Professional Transducer



Keypad

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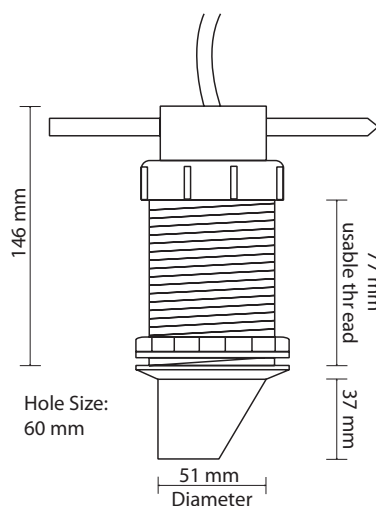
Standard Kit PLATINUM

- Video Box
- Keypad
- Power & NMEA cable
- Data Cable
- S Video cable (mini din)
- Composite video cable (phono)
- Transmitter box
- Pro Transducer
- Thru-hull pro skin fitting & blanking cap
- Shipping weight: approx. 4.5 kg

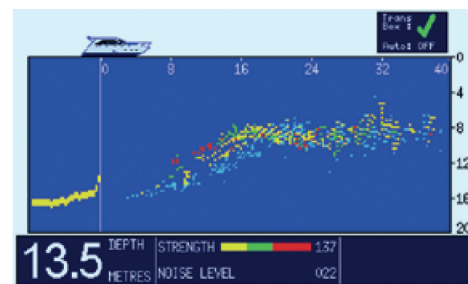
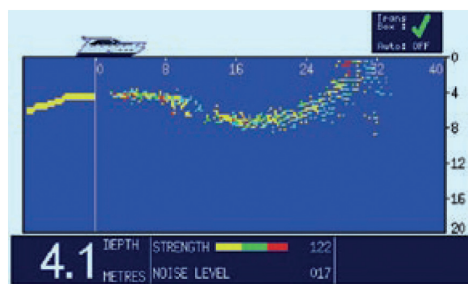
PLATINUM VIDEO

- Video Box
- Keypad
- Power & NMEA cable
- Data cable
- S Video cable (mini din)
- Composite Video cable (phono)
- Shipping weight: approx. 2.5 kg

Transducer



FLS Platinum Screen Shots



Third Party Screen Examples



Note: Screens are not included!