

The premium choice

Humphree equipment is designed and manufactured to deliver world-class quality and reliability. Customer support and spare parts are available wherever and whenever needed, through our Head Office in Sweden or via our expanding network of local representatives around the world.

stabilisation

FOR 25FT BOATS TO LARGE YACHTS



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HUMPHREE®

Trim and stabilisation systems

Improve your boating

During the past 15 years, our naval engineers have developed premium products which make all the difference at sea: The difference between enjoyment and seasickness, the difference between low and high fuel consumption, the difference between excellent visibility from the helm or poor visibility from the helm, the difference between a fantastic boating experience and a mediocre one.

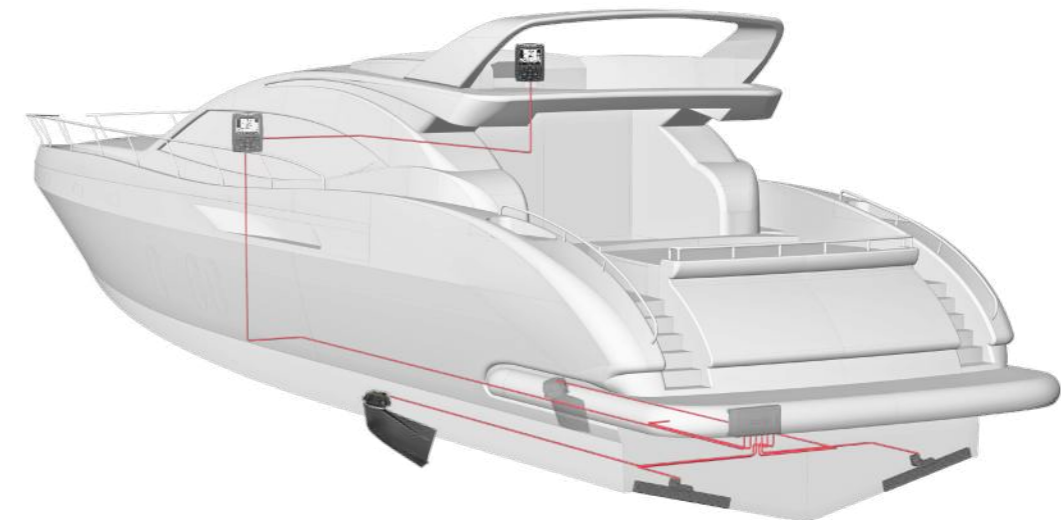
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HUMPHREE®

It's all about comfort and safety

For semiplaning and planing boats, our interceptor based stabilisation systems will make you enjoy less roll and pitch motions, best performance, lowest fuel consumption and comfortable turns. The interceptor trim tabs provides the most efficient trim and stabilisation system on the market. Our electric fin stabilisation system will stabilise your boat at anchor and throughout the whole speed range with unique performance also during turns integrating with the steering of the boat. The combination of interceptors and fin stabilisers will provide an exclusive ability to fully control your boat comfortable and safe no matter if you are at anchor or out there cruising.



Two electric fin stabilisers in combination with two interceptor trim tabs, control panels and control unit.

interceptors

Automatic Interceptor Trim Tab Systems

With Humphree ACTIVE stabilisation, everyone on board will feel as safe and steady as on dry land. This system lowers roll and slamming by up to 50% and it feels like even more. Your boat ride will be an entirely new experience.

Humphree interceptor trim tabs are the premium choice for any semi-planing or planing boats and yachts 25ft(8m) or larger. During navigation, ultrafast electric servo motors actuate the large stroke interceptor blades to counteract roll and pitch motions, and to control the trim and list of the boat. With coordinated turn, the system will adjust the heel angle for unbeatable comfort as well.

For the perfect fit, Humphree offers different interceptor models and sizes. A Humphree representative will assist you in selecting the appropriate Interceptors.

INTERCEPTORS FOR ANY SIZE OF BOAT & YACHT

- **X-SERIES** X series interceptors are suitable for boats measuring 25 to 60 feet. Available in five standard sizes: 300 – 900 mm. All with 50 mm blade stroke
- **H AND HA-SERIES** The H and HA series with 50 mm blade stroke can be produced in any size between 350 and 1500 mm, and can also be custom-shaped to fit a specific hull design, such as a propeller tunnel.
- **HE AND HAE-SERIES** When more lift force is needed, the HE and HAE series with 75 mm blade stroke are used. Sizes range from 400 to 1500 mm and can also be custom-shaped.
- **HLS-SERIES** For yachts over 50 m, the HLS series may be the right choice. The blade stroke is 110 mm and can be produced in various sizes as well as custom-shaped.



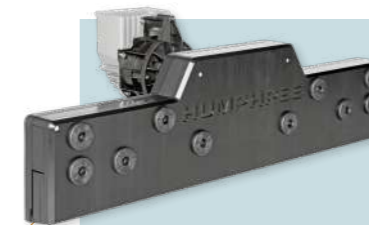
CONTROL PANEL

- Large colour screen readable in sunlight
- Night Mode Display
- Easy and intuitive to operate



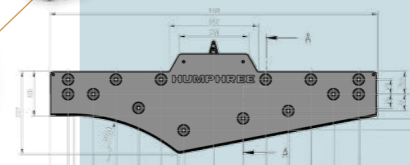
HUMPHREE CONTROL UNIT

- Real-time data processing
- Includes motion sensors
- Integrated power distribution, 12-24V



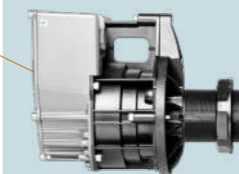
INTERCEPTOR

- Robust design in corrosion-free composite materials
- Light and compact unit with low maintenance
- Available in a variety of sizes and types
- Easy to install



Custom shape

It is common to customize the interceptors according to the boat shape



SERVO UNIT

- The heart of the Humphree systems
- Ultra fast 0.7 sec. full stroke for superior control
- Mounted inside the boat for accessibility and easy maintenance

control systems

Boat control systems for all needs

The fine-tuned control options provide optimum comfort and performance regardless of whether the captain is a professional or a less experienced operator.

Auto Trim functionality is included standard on all our interceptor systems to ensure the lowest fuel consumption and lowest impact on our environment.

SEPARATE FUNCTIONS OR FULL DYNAMICS PACKAGE

- Automatic Trim Control Included
- Automatic List Control Option
- Coordinated Turn Control Option

PACKAGES

- **ACTIVE** Stabilisation:
Auto Trim, Auto List & Stabilisation
- **ACTIVE+** Stabilisation:
Auto Trim, Auto List, Coordinated Turn & Stabilisation



Automatic Trim Control



Accelerating and operating at different speeds means that the boat will run at various trim angles. In many situations this results in a poor trim angle, high resistance, bad visibility and reduced comfort. The Auto Trim Control makes sure that the boat trims perfectly at all speeds, thereby reducing fuel consumption and environmental impact. The operator can manually override the auto functions at any time if they choose.



Features

- Automatic control of running trim
- Easy set-up via the control panel

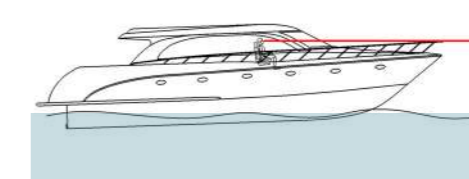
Benefits

- Improved fuel economy, visibility and speed
- Less environmental impact
- Faster acceleration

WITHOUT AUTOMATIC TRIM



WITH AUTOMATIC TRIM



Automatic List Control



TRIM 4.0°
LIST 0.0°



OPTION

Coordinated Turn Control



TRIM 4.0°
LIST 0.0°



OPTION

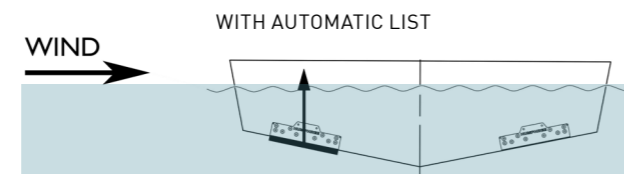
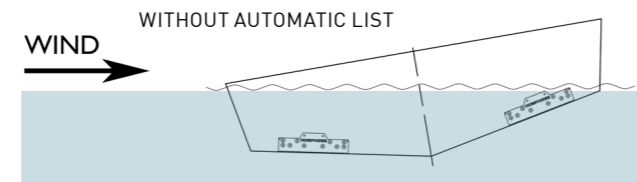
Uneven loading, crosswinds and varying conditions will normally cause the boat to list. When running on a straight course, Automatic List Control will bring the boat to even keel. The captain can adjust target list for specific sea conditions. Fifteen years of continuous improvement has resulted in numerous safety, comfort, and performance features, including smart entry into, and exit out of turns. During the turn, the system will allow the boat to heel naturally, and then re-engage as the vessel resumes a straight course. Everything is automatic, which allows the captain to concentrate on navigation.

Features

- Automatic control of list
- Smart enter and exit of turns
- Adjustable list target angle

Benefits

- Improved comfort and safety



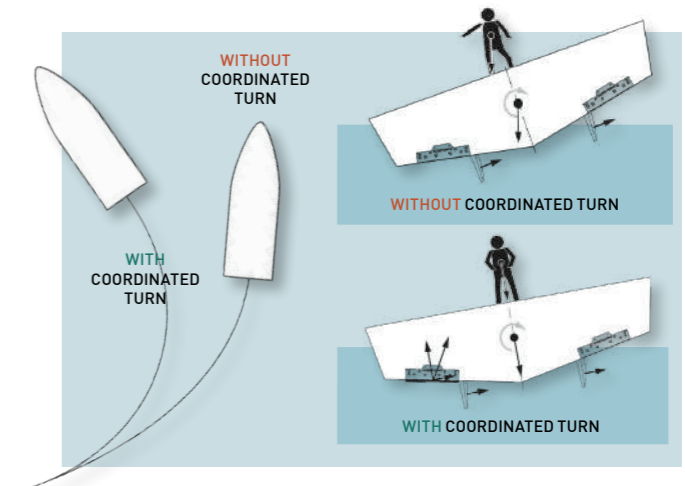
For most applications, on-board comfort and safety when turning can be significantly improved by correcting the boat heel angle through the turn. The Coordinated Turn Control monitors the rudder position and the interceptor blade is coordinated with rudder movement during turns. On top of greatly improved comfort, the boat will better maintain speed during the turn and a tighter turn can also be achieved.

Features

- Automatic control of heel angle during turns
- Rudder position interface for most steering systems
- Easy setup in control panel for excellent performance

Benefits

- Controlled heel angle during turns for improved comfort and safety
- Ability to make tighter turns
- Maintain higher speed during turns



ACTIVE Stabilisation



ALL SYSTEMS IN ONE - OPTION

When in the open sea, boats are constantly exposed to waves which cause roll and pitch motions resulting in poor comfort on board. With Humphree Active Stabilisation, and thanks to our ultra fast servo motors, the interceptors are instantly actuated to counteract undesired motions. The ACTIVE Stabilisation includes an advanced RCU (Ride Control Unit), which uses a digital controller with adaptive control algorithms and an advanced sensor package consisting of GPS, gyro and accelerometers.

The combination of responsive, electrically actuated, large stroke interceptors and a sophisticated control system provides effective stabilisation for any size boat operating at semi planing and planing speeds. Easy operated by the user-friendly control panel. Using interceptor trim tabs for stabilisation is extremely efficient since there is no added resistance or added weight to consider. This is unique among marine stabilisation systems.

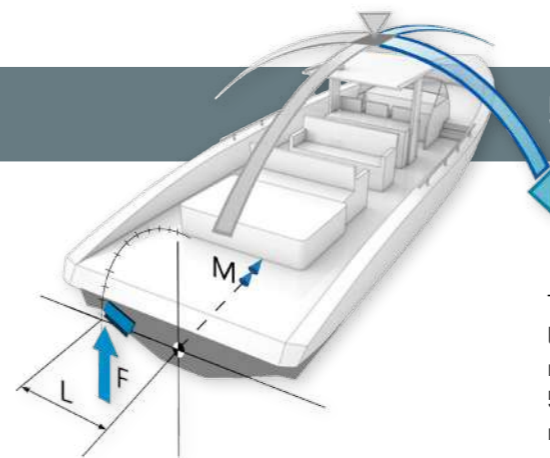
The ACTIVE Stabilisation software also includes the Auto List function. This means that Trim, List and Stabilisation are all included in the package. For the full package, choose **ACTIVE+** Stabilisation including Coordinated turn.

Features

- Advanced Ride Control Unit (RCU)
- Easy to install on new or used boats
- Choose between:
 - ACTIVE** (Trim, List, Stabilisation)
 - ACTIVE+** (Trim, List, Coordinated Turn and Stabilisation)

Benefits

- Effective roll and pitch stabilisation at semi-planing and planing speeds
- Improved comfort and safety
- All-in-one system – Trim and Stabilisation
- Premium quality in all components
- No added drag and no added weight



50 mm (2") interceptor blades

To control boat list efficiently it is essential to position the lift force as far out from the keel as possible, creating a long righting arm. For this reason Humphree uses minimum 50 mm stroke on our interceptors. The interceptor force must quickly build up as close to the chine as possible, providing fast response and keeping the boat at even keel in a safe and comfortable manner.



50 MM STROKE



fin stabilisers

24DC electric fin stabilisers

The NEW state-of-the-art 24V DC fin stabilisers deliver a game changing package and offer a number of benefits compared to what has been available on the market previously. With 24V DC, the system can be operated without keeping a genset engine running. The main engine alternators will charge the batteries powering the system while underway, and, while at anchor, the system can operate for an extended time on battery power alone, using our power regenerating technology. Less noise, less fuel, less wear.

The system provides full stabilisation from zero speed all the way up to top speed. The sturdy servo actuators are also extremely compact and with the 24V power, no space-consuming hydraulic pumps or AC power modules are required. This also means an easier installation both for retrofits and new builds.

Best of all, the system can be fully integrated with our interceptor trim tabs, meaning that roll, pitch and yaw motions are all controlled by one system. The Coordinated Turn feature provides greater comfort during turns by coordinating both fin and rudder movement.

For large yachts, our QUAD function makes it just as easy to install four fin stabilisers on one yacht. Low draft, low weight.

Full stabilisation from zero up to top speed.

Suitable for yacht-size from 45ft (15m) – 164ft (50m)

Fins available in four sizes: 0.45m², 0.6m², 0.8m² and 1.0m²

all speed
STABILISATION



Customizable fin

Depending on hull design, a rotating fin can interfere with something on the hull like the chine or a spray rail. It is therefore common that some modification is required. We listened to our customers and developed a unique design making it very easy to adapt the fin to the hull design. The top of the fin is made solid, which means that it just needs to be cut to the desired shape with no need for costly and time-consuming fiber glass work.

Eliminates anchor walking

The unique ability to rotate the fins 360°, allows the fins to paddle away from the anchor line or mooring, providing a much more stable platform when at anchor. Resulting in minimal sway and greater comfort and safety.

unique
FEATURES

course stability

FOR WATERJET APPLICATIONS

Electric Rudders

The Humphree 24V DC electric rudders are used for superb course stability minimising yaw movements. The rudders are operated in manual or during auto pilot mode. Effective integration with waterjets minimizes thrust losses when steering, saving fuel and increasing vessel speed. The use of electric rudders also provides less wear and tear on the waterjet steering systems.



Course stabilising fixed fins

Many waterjet boats experience course-keeping problems. This is due to the absence of a lateral underwater area which helps the vessel to keep its course. An added lateral area is most effective when installed in the very aft of the hull. Having a wing profile fin provides a corrective force on yaw with minimum resistance. Humphree has developed a series of fixed fins which can be bolted to the hull. The bolts have been tested and verified to break off and keep the hull intact in order to limit the damage to the boat.



House of Humphree

Humphree was founded by a team of hydrodynamic engineers and marine engineers, active in the field of high-speed marine propulsion and ship hydrodynamics since the early 1990s. The company was established in Sweden 2002 with the mission to provide and develop innovative products and services to the market. Packaging our knowhow in hydrodynamics, electronics and digital control onto products easy to use and install. We are 100% committed to delivering products and services that out perform all others. Our commitment enables boat builders to stay ahead of their competition, and provides the boating community the safest, most comfortable, boating experience possible.



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