



# how to buy

## HOW TO BUY

The Lightning System can be bought from Humphree global dealer network. You will find your nearest dealer on our web page:

[humphree.com/contact-humphree-dealer-network/](http://humphree.com/contact-humphree-dealer-network/)



VISIT THE LIGHTNING WEB PAGE BY SCANNING THE QR CODE WITH YOUR SMARTPHONE

**HUMPHREE®**  
Trim and stabilization systems

# LIGHTNING™

BY HUMPHREE



## trim & stabilization

FOR 20-45FT BOATS

HUMPHREE. IMPROVING CONDITIONS FOR PEOPLE AT SEA SINCE 2002.

# *a new experience*

## A NEW EXPERIENCE

Lightning is an automatic trim & stabilization system suitable for 20-45ft boats. Its combination of our advanced technology, user-friendly interface, mobile app integration, and beautiful underwater LED lighting system is what truly sets it apart.

No matter which propulsion system you use; outboards, electric, stern-drive, inboard—this new system will be the perfect choice for new build boats or for when you refit a used boat. It will take you to the next level.





# *enjoyable rides*

## ENJOYABLE RIDES

Even the most modest waves can create motion on board, and the human body is simply not made for this.

Here at Humphree, we create technology that automatically measures and countermeasures boat motion and transforms the entire experience on the water.

Our technology takes seasickness out of an otherwise enjoyable ride, and greatly improves the conditions for people spending time at sea.





# *the benefits*

## THE BENEFITS

Enjoy a smoother ride with this groundbreaking new product from Humphree. With the automatic functions Auto Trim, Auto List, Pitch Control, Roll Stabilization and Turn Assistance you will reach the next level of boating.

Experience:

- WORLD CLASS COMFORT
- INCREASED SPEED
- FUEL SAVINGS

### EASY TO USE

The system is easy to handle. Just activate the automatic functions from your control panel and the advanced technology will do the job.

### UNDER WATER LIGHT

Light up the powerful 25W LED lights for any special moment onboard your boat. Adjustable colours. (RGBW)

### SUPERIOR TECHNOLOGY

The ultra fast electric actuator blades with 2" (50mm) stroke, makes the difference combined with advanced sensors. LIGHTNING™ is a result of 20 years of experience in the trim and stabilization industry and the advanced automatic interceptor system is suited for smaller boats between 20-45ft.

### OVER-THE-AIR UPGRADES

With the Lightning system you can easily update firmware and upgrade the system, simply by connecting the unit to the internet. Order function upgrades through your dealer or with the coming Humphree app.



### FUEL SAVINGS

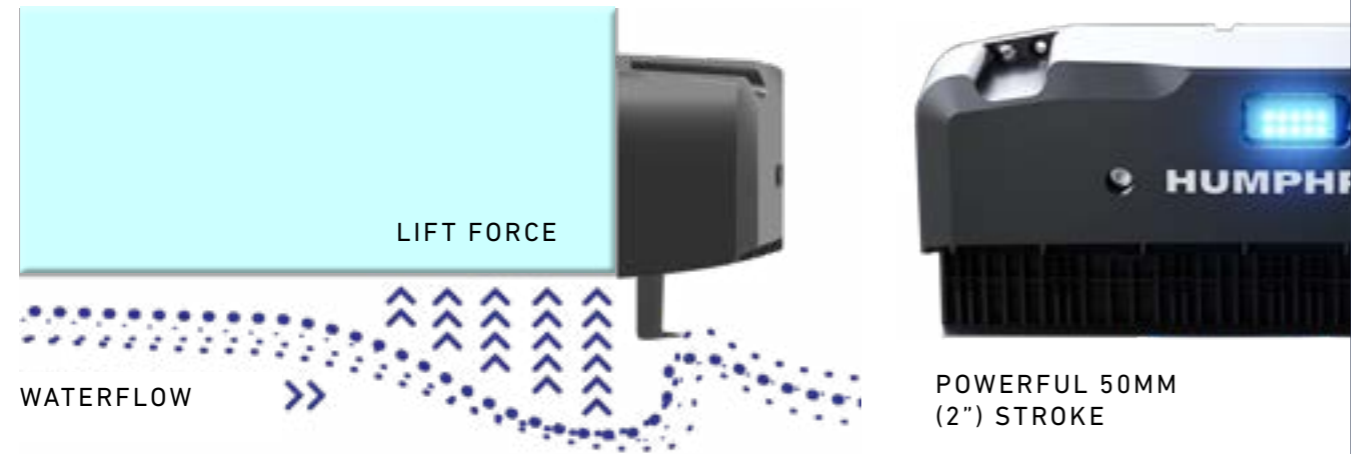
The efficient interceptors will help to reduce your fuel consumption with typically 5-20%, also great for our environment

# *how it works*

## HOW IT WORKS

### NOT YOUR ORDINARY TRIM TAB

Imagine adding a powerful lift force in a split second to either both sides of the boat or just one side. Despite how it may look, this is much more efficient compared to a traditional trim tab and will increase speed and reduce fuel consumption as well as CO<sup>2</sup> emissions. This is what the system does, fast and automatically.



*The Lightning system creates a hydrodynamic lift force by intercepting the water flow underneath the hull. In that way the interceptor creates a lift force acting on the hull instead of on the trim-device itself.*



# function packages

CHOOSE YOUR PREFERRED LEVEL OF AUTOMATION  
WITH LIGHTNING FUNCTION PACKAGES

FUNCTION PACKAGES	FUNCTIONS INCLUDED					UWL
	Auto Trim	Pitch Control	Auto List	C-Turn	Roll Stabilization	
Comfort	✓	✓	✓			
Comfort PLUS	✓	✓	✓	✓		
Dynamic	✓	✓	✓		✓	
Dynamic PLUS	✓	✓	✓	✓	✓	
Underwater Light Activation						✓

## DESCRIPTION OF AUTOMATIC FUNCTIONS

- **AUTO TRIM**  
Perfect trim, faster acceleration, better visibility, higher speed, lower fuel consumption.
- **PITCH CONTROL**  
Eliminates a large amount of unwanted pitching.
- **AUTO LIST**  
Keeps the boat at even keel at speed, for unmatched comfort and safety.
- **COORDINATED TURN**  
Controlled heel angle during turning, improves safety and provides great comfort.
- **ROLL STABILIZATION**  
Reduces roll motions at speed. Improves comfort and reduces risk of seasickness.
- **UNDERWATER LIGHT OPTION**  
Each interceptor is factory equipped with 10 RGBW LED:s providing a total of 25W. Select this option to bring a bright and adjustable UW light to the waters.



# application

## INTERCEPTOR APPLICATION

Three easy steps to install the interceptor:

- Mark and drill holes for the mounting bracket and cable fitting
- Fasten the mounting bracket and thru hull cable fitting to the hull
- Fasten the interceptor to the mounting bracket

# overview

## SYSTEM OVERVIEW

- Suitable for boats 20-45ft and fits any propulsion type (Outboard, Sterndrive, Traditional propeller shaft, WaterJet)
- Available in two sizes L300 and L450, both with 2" (50mm) stroke
- 12/24V compatible
- New Control Panel with 3.5" colour touchscreen, possible to flush mount
- Built in GPS, Wifi and Bluetooth
- Automatic firmware updates
- HTML5 integration ready
- Control unit with built in Advanced Gyro and Accelerometers
- Waterproof components – Interceptor servo, Control Unit and Control Panel



INTERCEPTOR



CONTROL UNIT



CONTROL PANEL

- Integrated Servo unit with a robust gearbox
- Full 2" (50mm) stroke in 0,65sec
- Below or above water line thru hull cabling
- Easy installation thanks to new mounting bracket

### INTERCEPTOR Adaptable chine version

TRANSOM



### UNDER WATER LED LIGHT

Integrated RGBW LED:s is used in each interceptor to provide adjustable light under the water!

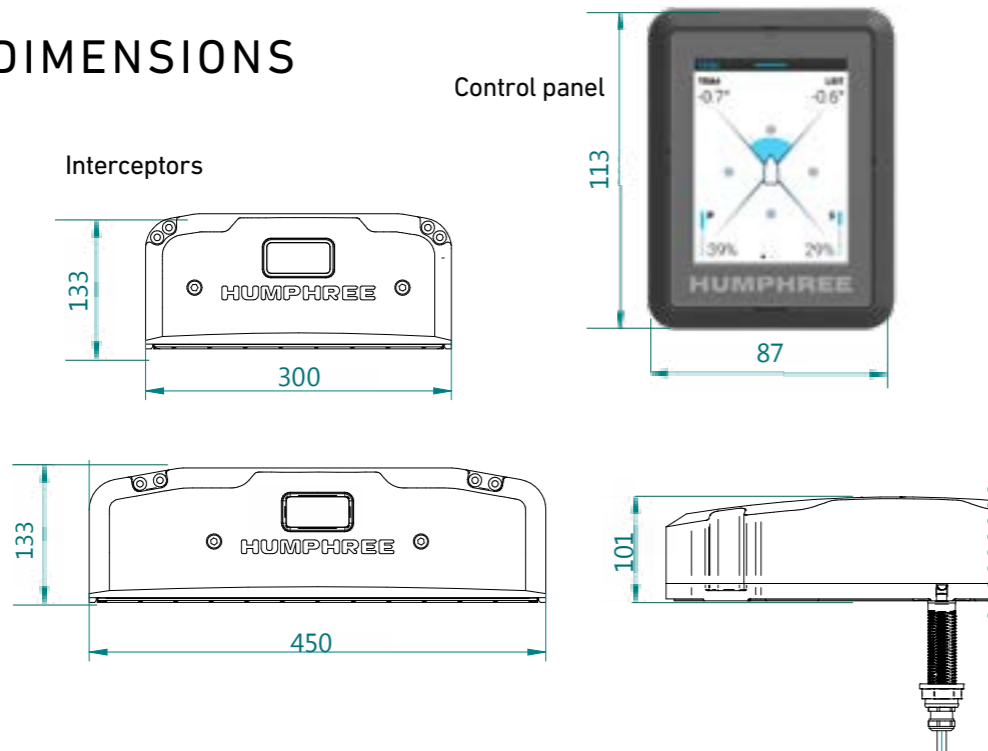
Change colour and brightness to suit your mood!



# hardware packages

INTERCEPTOR MODEL	INCLUDED HARDWARE				
	Interceptor	Control Panel	Control Unit	Cables	Customizable
L300	2 pcs	1pc	1pc	✓	
L300 Chine	2 pcs	1pc	1pc	✓	✓
L450	2 pcs	1pc	1pc	✓	
L450 Chine	2 pcs	1pc	1pc	✓	✓

## DIMENSIONS



## INTERCEPTOR SELECTOR GUIDE

Depending on how large and heavy your boat is, where your centre of gravity is positioned and the top speed of your boat, there are different sizes of interceptors to choose. A light boat may not need much interceptor to correct trim (bow rise) and the power-trim of the outboard motor or stern drive also helps to get on plane. A boat with high top speed has typically a centre of gravity further back to reach the high-top speed and then the boat may need more lift in the stern to get over the hump. Discuss with your Humphree representative when needed.

Fast planing speed hulls (Top speeds >40 knots)

Fast planing speed hulls (Top speeds >40 knots)

BOAT SIZE	Heavy / Dynamic level	Normal / Comfort level	Light/ Comfort level
20-27 ft	L300	L300	L300
28-30 ft	L300	L300	L300
31-33 ft	L450	L300	L300
34-36 ft	L450	L450	L300
37-39 ft	L450	L450	L300
40-42 ft	X-Series 600	L450	L450
43-45 ft	X-Series 600	L450	L450

Semi-planing and planing speed hulls (Top speeds <40 knots)

BOAT SIZE	Heavy / Dynamic level	Normal / Comfort level	Light/ Comfort level
20-27 ft	L300	L300	L300
28-30 ft	L450	L300	L300
31-33 ft	L450	L450	L300
34-36 ft	X-Series 600	L450	L450
37-39 ft	X-Series 600	L450	L450
40-42 ft	X-Series 750	X-Series 600	L450
43-45 ft	X-Series 900	X-Series 600	L450

### HEAVY / DYNAMIC LEVEL

- Optimal for stern heavy boats that need large help to get over the hump.
- Will give best results when using function package Dynamic that include roll stabilization.

### NORMAL / COMFORT LEVEL

- Suitable for boats that have a normal hump.
- Suitable for boats using Comfort and Comfort plus function packages.

### LIGHT / COMFORT LEVEL

- Suitable for boats that gets on plane with ease (low hump).
- Suitable for boats using Comfort and Comfort plus function packages.