

POWER & CONTROL

SEASTAR OPTIMUS ADAPTIVE TRIM TAB SYSTEM

Sophisticated design provides accurate position feedback and complete integration with the Optimus Joystick and Electronic Power Steering systems

INNOVATIVE RUGGED DESIGN
INCREASED RELIABILITY

INTUITIVE DIAL CONTROLLER
EASY USER INTERFACE

INTEGRATED SYSTEM
INTEGRATES WITH N2K



Mobile living made easy.

 **DOMETIC**

INTELLIGENT DESIGN FOR INTUITIVE CONTROL



Actuator

Sealed and potted wiring and electronics

Built-in power electronics, position sensing and CAN communication

High torque DC Motor

Rugged & stylish housing

Planetary gearbox and inverted lead-screw design provides ultra-efficient and reliable high load transfer and quiet operation

Dual housing seals

Scratch resistant ground and chromed solid actuation shaft

Rear seal in protected bushing area

Wiper removes particles from shaft and protects rear seal

Thrust bearings fore and aft provide efficient, high load capability in extension and retraction

Smart Integration With Joystick And EPS

The Trim Tabs are integrated with the Optimus Joystick and Optimus EPS systems

- With Hole Shot Mode enabled, tabs automatically adjust at takeoff to get boat on plane efficiently
- Tabs move to Favorite position once set RPM or speed are achieved for optimum ride performance
- When throttle goes into reverse, or Joystick Mode is enabled, tabs automatically fully retract for safety and control
- Easy setup using the Optimus CANtrak display or the dial controller
- Easy connection to existing Optimus steering network
- 2nd station is an easy addition



ALL ELECTRIC DESIGN REDUCES COMPLEXITY AND INCREASES RELIABILITY.

Trim Tabs



Heavy duty 12 GA 304 stainless steel plate, electro polished

Trim tab kits contain marine grade stainless steel 316 fasteners

Thick 1/4" hinge pin to eliminate tab warping

Heavy duty 14 GA stainless steel hinge to ensure robust tab performance

Custom tabs available (volume required)

Available in a variety of standard and edge mount sizes

Adaptive Dial Controller



LEDs accurately indicate Trim Tab positions

Turn dial manually to level boat as conditions change

Each button push lowers bow in precise increments
Hold button to lower bow quickly

Multi-color LEDs indicate power and status of Trim Tab system
User adjustable LED brightness

Quickly move tabs to fully retracted home position

Enable automatic Hole Shot feature that helps to plane the boat faster and limit bow rise

Automatically learns and moves your tabs to your favorite tab position during cruising

Program your favorite position manually, and push button to quickly move the boat to the preferred position

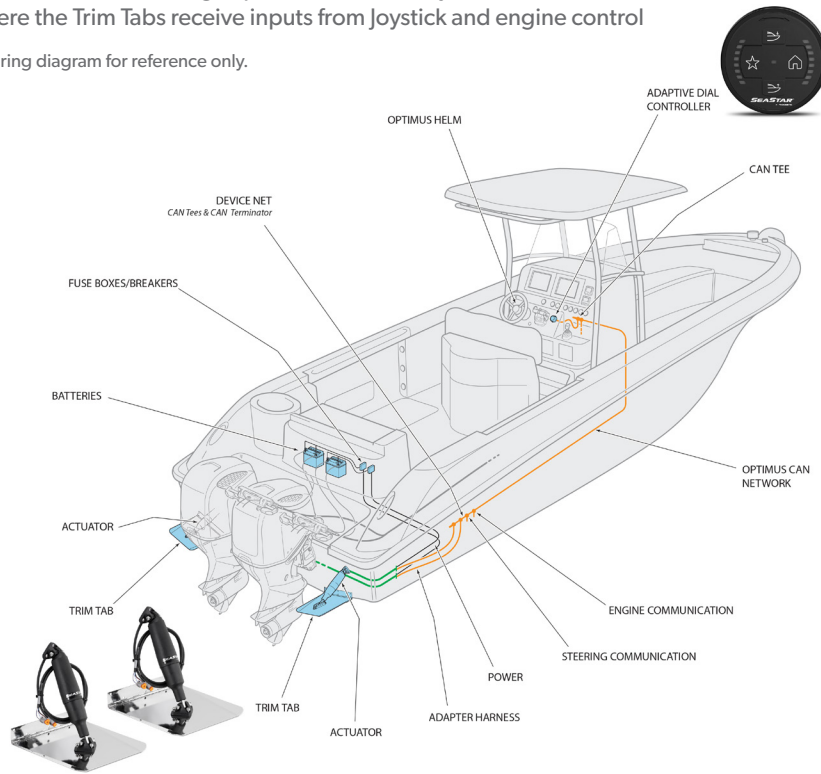
Each button push raises bow in precise increments
Hold button to raise bow quickly

Adjustable pitch and roll control sensitivity

OPTIMUS ADAPTIVE TRIM TAB SCHEMATIC

Get the ultimate boating experience with a truly connected boat where the Trim Tabs receive inputs from Joystick and engine control

* Wiring diagram for reference only.



Trim tab position can be displayed on capable MFD's when adaptive dial controller is connected to public NMEA network

SPECIFICATIONS	SUMMARY
Stroke length	2.25" and 4.25"
Positional accuracy	+/- 0.050"
Operating voltage	9-16 VDC (SAE J1455)
Max Push/Pull Load Capability	1000 lbs
Impact Resistance	50G in Z-axis (ABYC P-27 / IEC60068)
Operating temperature	-18 to 77 C (ISO 25197)
Storage temperature	-40 to 85 C (ISO 25197)
Actuator power consumption under typical load	120 W (10 A)
Actuator water ingress protection	IP66M, IP68M, IP69K (High Pressure Wash Down)
Dial controller water ingress protection	IP56
Connections to tab actuator	3pin Deutsch for CAN 2pin Deutsch for power (Pos & Neg)
Dial controller	Private CAN network, 250 kbps (SAE J1939), position LED indicators Public CAN network
Regulatory	American Boat and Yacht Council (ABYC) European Union (EU) recreational craft directive 2013/53/EU (replacing 94/25/EC) CE,
Trim tabs	304 stainless steel, 12 gauge, electro-polished, and custom sizes/designs available with volume
Note: Subject to change	

Optimus Adaptive Trim Tab System Includes:
 (Qty 2x Actuators, Controller, Harnesses, 2x Electro Polished Tabs, Mounting Hardware)

DOMETIC SKU	PART NO	DESCRIPTION
9610001290	TT5103	Kit, 2.25" Stroke 11.5" P-P Adaptive Actuator And Controller, 9x12 Standard Mount, Electro Polished
9610001305	TT5105	Kit, 2.25" Stroke 11.5" P-P Adaptive Actuator And Controller, 12x12 Standard Mount, Electro Polished
9610001311	TT5205	Kit, 2.25" Stroke 11.5" P-P Adaptive Actuator And Controller, 12x12 Edge Mount, Electro Polished
9610001308	TT5203	Kit, 2.25" Stroke 11.5" P-P Adaptive Actuator And Controller, 9x12 Edge Mount, Electro Polished
9610001532	TT5207	Kit, 2.25" Stroke 11.5" P-P Adaptive Actuator And Controller, 12x9 Edge Mount, Electro Polished
9610002754	TT5210	Kit 2.25" Stroke 11.5" P-P Adaptive Actuator And Controller, 16x12 Edge Mount, Electro Polished, 5 Degree Tapered Edge
9610002828	TT5131	Kit, 2.25" Stroke, Adaptive Actuator And Controller, 9x12 Standard Mount, Electro Polished, Short Actuator 10" P-P
9610002829	TT5133	Kit, 2.25" Stroke, Adaptive Actuator And Controller, 12x12 Standard Mount, Electro Polished, Short Actuator 10" P-P
9610002830	TT5231	Kit, 2.25" Stroke, Adaptive Actuator And Controller, 12x12 Edge Mount, Electro Polished, Short Actuator 10" P-P
9610002833	TT5233	Kit, 2.25" Stroke, Adaptive Actuator And Controller, 12x9 Edge Mount, Electro Polished, Short Actuator 10" P-P
9610001655	TT5601	Kit, 2.25" Stroke 11.5" P-P Adaptive Actuator And Controller, Plus All The Components Minus The Tabs
9610001656	TT5701	Kit, 4.25" Stroke 13" P-P Adaptive Actuator And Controller, Plus All The Components Minus The Tabs

P-P = Pin to pin distance retracted
 Stroke = The distance the shaft extracts
 9x12 = 9 is the chord length and 12 is the hinge width