

AUTOPILOT SYSTEMS

AP380, NS3300

A rate gyro is standard with every Northstar Autopilot. This daylight viewable color TFT display provides crystal-clear information on heading status and key pilot data. See and feel the difference that a gyro stabilized pilot can make to your power or sail boat.

Northstar autopilots are serious blue water tools that provide total reliability and performance whether you are crossing the bay or crossing an ocean



NORTHSTAR NS3300 ▲



NORTHSTAR EXPLORER AP380 ▲



NORTHSTAR AUTOPILOT FEATURES:

- Rotary control dial
- One button dodge and jog keys
- Selection of tack, gybe, 90 and 180 degree turns
- Autopilot solid state rate gyro supplied standard for maximum course stability.
- Steer to wind angle, compass heading or GPS waypoint at the press of a button.
- Dodge obstructions with a simple button press.
- Auto Tack tacks the boat through a preset angle.
- Auto Cal allows for automatic correction of deviation errors.
- Interfacing with either Northstar's proprietary NavBus protocol or industry standard NMEA 0183.
- Info data is displayed in clear, large formats.
- Auto diagnostics continuously monitors all components in the Autopilot.

WHAT IS A RATE GYRO?

Northstar's Rate Gyro is a rate-of-turn sensor that provides a superior means of monitoring a vessel's heading. Changes in boat heading (yaw) are instantaneously measured and corrected by the Pilot's rudder control. With Northstar's autopilots, the gyro is used in conjunction with a fluxgate compass to provide accurate steering on all vessels, by minimizing rudder movement and as a result reducing fuel costs.

The master dial provides simple, precise access to course setting and menu items. Port and starboard LED's* indicate course adjustments.

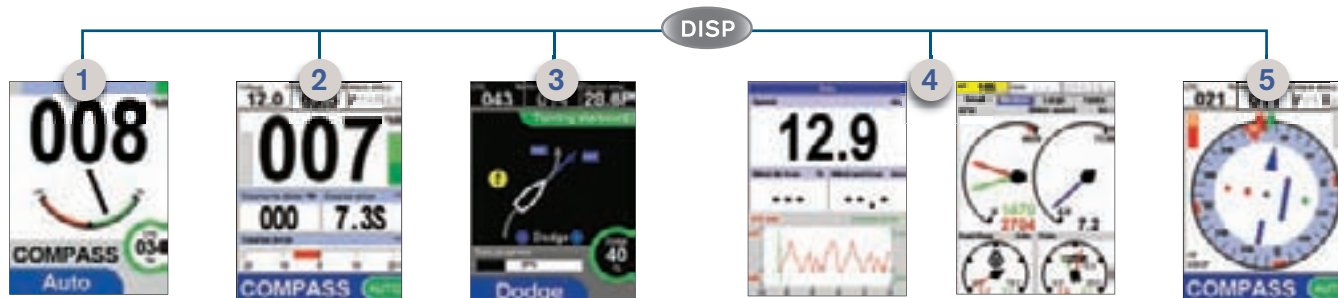
At a single glance from across the cockpit, the skipper gets general steering confirmation, even at night.

One-button dodge and jog keys, easy selection of 90° / 180° turns, tack / gybe selection, on-screen animations of the vessel's intended actions and progress through a turn: the Northstar Autopilots make controlling your boat a breeze.

*Course adjustment LED's are only available on the AP380

MODEL	PART
Northstar AP380 Head Only	NS003360
Northstar NS3300 Head Only	NS002881
Northstar Standard Core Pack	NS002874R
Northstar Verado Core Pack	NS002876R

ONE TOUCH ACCESS TO CORE FUNCTIONS



- 1 Simple Compass mode with rudder angle indicator.
- 2 PILOT mode with configurable data fields to display Autopilot or NavBus information.
- 3 Dodge Screen with animated boat demonstrating real-time turn progress.

The AP380 and NS3300 are true multi-function displays.

- 4 Complete repetition of all NavBus and SmartCraft™* data.
- 5 Aviation-style analog compass display with central deviation bar that shows course error, cross-track error or rudder position.

*SmartCraft™ data only available on the AP380

EASY "WIZARD" STYLE CONFIGURATION



Installation and configuration wizards eliminate configuration complexity. Clear, on-screen graphics walk you through calibrations, such as rudder and compass.

NORTHSTAR AUTOPILOT CORE PACKS:

**MERCURY
VERADO**

Choose between standard Core Pack and Verado Core Pack.

- Standard Core Pack includes :
 - (a) Course Computer
 - (b) Fluxgate Compass and Rate Gyro,
 - (c) Robust hall-effect Rudder Feedback Unit
- Verado Core Pack includes:
 - (a) Course Computer
 - (b) Fluxgate Compass and Rate Gyro and the Mercury Verado adapter kit.

The Verado adapter kit combines the best of engine performance and navigation control. The Verado adapter kit contains: Cables, connectors and attachments engineered for Mercury Verado engines.



A)



B)



C)



BUILDING YOUR AUTOPILOT SYSTEM

AP380, NS3300

CHOOSE YOUR AUTOPILOT CONTROL HEAD (SEE PAGE 20)



AP380



NS3300

CHOOSE YOUR CORE PACK (SEE PAGE 21)



Standard Core Pack



Verado Core Pack

CHOOSE YOUR DRIVE SYSTEM (SEE PAGE 23)



COMBINE YOUR AUTOPILOT WITH OTHER
NORTHSTAR DISPLAYS



8000i



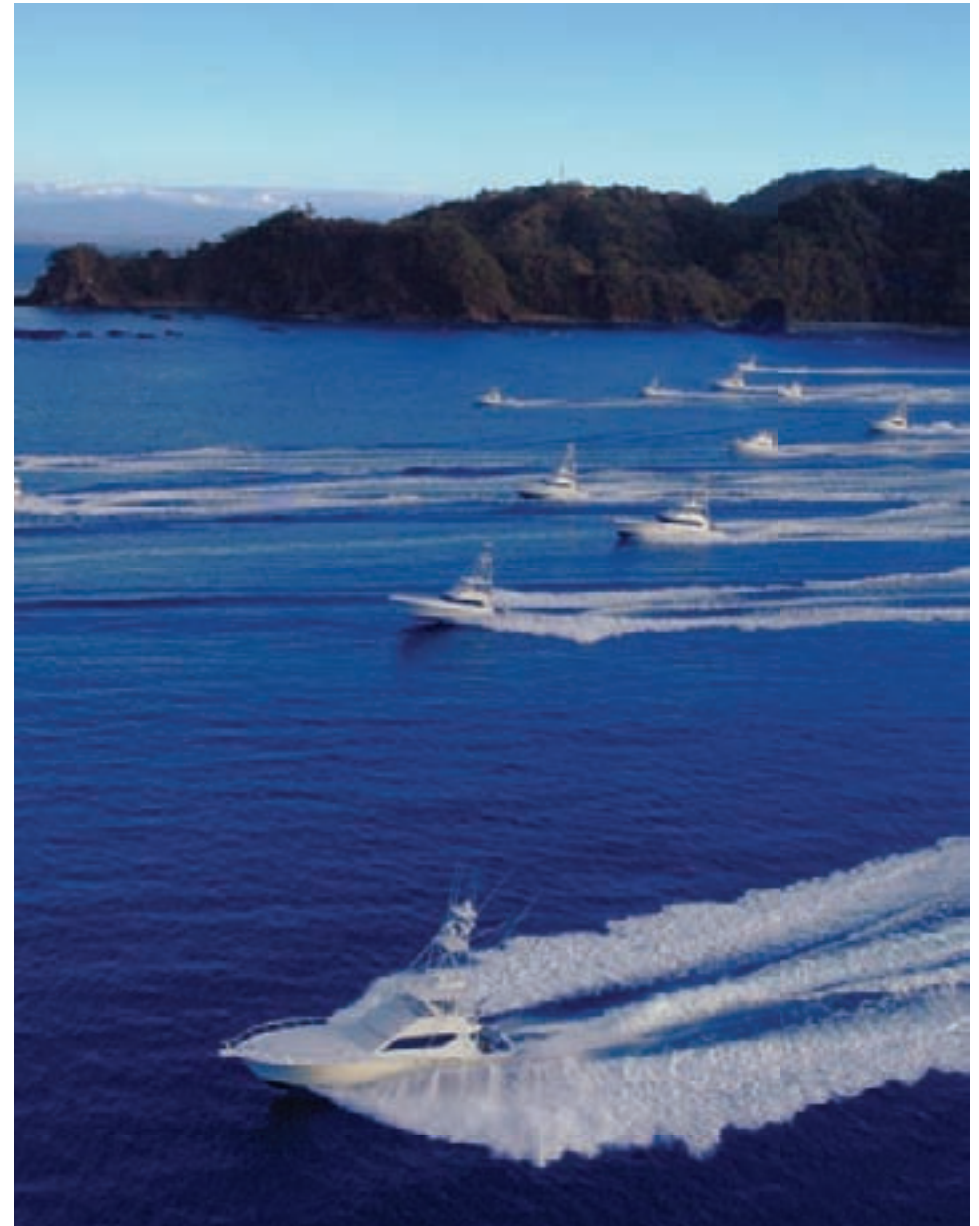
6100i Series



M Series



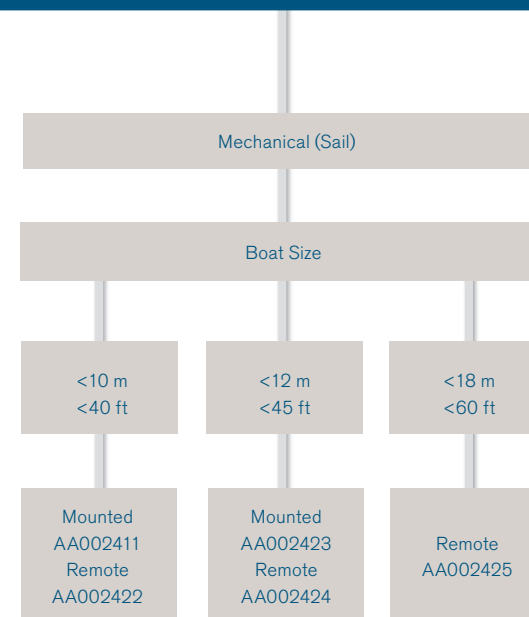
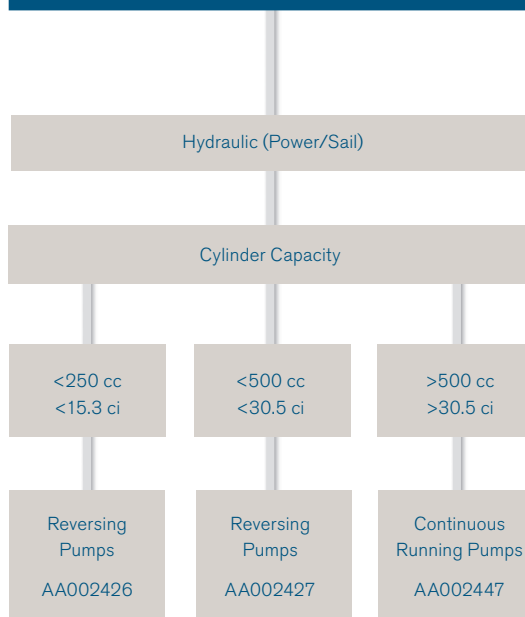
Explorer Series



STEERING SYSTEM

AUTOPILOT DRIVE SELECTION CHART

Northstar autopilots are designed to work with all kinds of systems. However the above G-PILOT solutions are a guide only and it is recommended that you contact a marine specialist prior to any installations.



HYDRAULIC REVERSE PUMPS - ADJUSTABLE FLOW

Part No.	Pump (for hydraulic steering)	Max Flow Rate	Max cylinder capacity	Type of Boat
AA002426	Hydraulic	1.2 l / min	250 cc	power / sail
AA002427	Hydraulic	21 / min	500 cc	power / sail

HYDRAULIC LINEAR DRIVES FOR MECHANICAL STEERING SYSTEMS

Part No.	Thrust	Stroke Length	Bore	Style	Type of Boat
AA002411	880 lb / 400 kg	7.12" / 178 mm	1.52" / 38 mm	Mounted	Sail Boat < 45' (8 m)
AA002422	880 lb / 400 kg	7.12" / 178 mm	1.52" / 38 mm	Remote	Sail Boat < 45' (14 m)
AA002423	880 lb / 400 kg	12.2" / 305 mm	1.52" / 38 mm	Mounted	Sail Boat < 60' (18 m)
AA002424	880 lb / 400 kg	12.2" / 305 mm	1.52" / 38 mm	Remote	Sail Boat < 60' (18 m)
AA002425	1320 / 600kg	12.2" / 305 mm	1.8" / 45 mm	Remote	Sail Boat < 70' (21 m)

SYSTEM OPTIONS

Integrate the Northstar autopilot system with virtually any steering system. Examples below show most common systems with pump options listed.

