

**SIMRAD**

# New AP24

## Autopilot



Simrad Autopilots are attractive, sophisticated and technically perfect, winning 39 NMEA awards since 1983.

# Compact design, fully featured...

The all new AP24 combines space saving design with state of the art auto steering, making it the perfect choice when space is at a premium. A new SimNet plug & play network, provides simplified installation and enhanced integration with other Simrad products.

- Complete set of Turn Patterns – including Depth Contour Tracking, programmable S-turn, Zig-Zag, Continuous turn, Square patterns and many more.
- Improved steering algorithms – full Rate Of Turn (ROT) control provides smooth and precise turns in any condition and improves tack and gybe performance on sailboats.
- No Drift Course – Maintain set Course Over Ground even in severe wind and current conditions.

## Installation & Integration

The AP24 utilizes the Simrad Intelligent Marine Network – SimNet, which features plug and play operation and Slim Line connectors for easy cable routing, so you'll be up and running in very little time.

The ability to 'daisy chain' SimNet instruments in any order allows you to use the most efficient cable runs possible when installing the equipment.

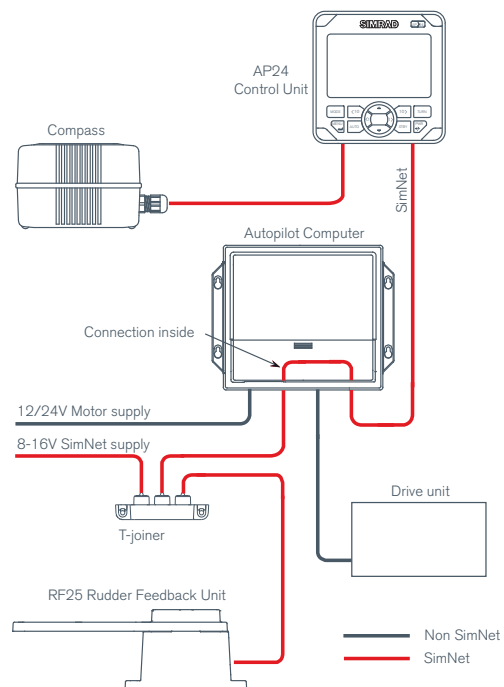


## Virtual Rudder Feedback

This unique feature, recently introduced to Simrad autopilots means that no rudder feedback unit is needed for outboards and stern drive boats. In terms of installation, you will save a huge amount of time and aggravation thanks to this sophisticated new feature.



Virtual Rudder Feedback



Installation & Integration

## Automatic Tuning

The AP24 include a number of self calibrating features that automatically compensate for the unique handling characteristics of your boat and sea conditions, insuring optimum performance without the need for expert manual calibration.

# Do you have confidence in your autopilot?

Simrad engineering ensures that you can always go to sea in the confidence that your Autopilot is pin-point accurate and highly reliable. The AP24 boasts state of the art technology so you know you'll be safe, you know you'll hit your waypoints and you know that you'll arrive on time. But what about en-route? What can the AP24 do for you?

## Contour Steering

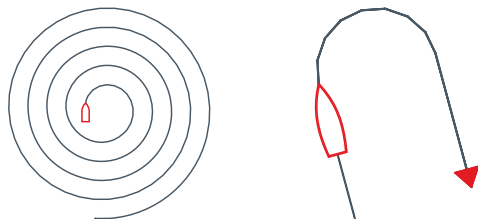
This unique Simrad feature utilizes data from your fishfinder or depth instrument to maintain a set water depth, just as if you were manually steering your boat along depth contours on a paper chart. This leaves you free to concentrate on the big catch, enjoy the shoreline view or trim your sail.



Depth Contour tracking (DCT)

## Integrated Turn Patterns

When fishing or looking for a wreck, you might choose from a variety of automatic steering patterns that can help you in your search.



Examples

## Advanced Wind Steering



The AWS feature provides unbeatable autopilot performance for any sailing vessel. AWS is ideal for single-handed sailing or racing. Utilizing wind and GPS data simultaneously, it is possible to hit long distance waypoints dead-on,

without deviating from the original course line or build-up of significant cross track error.

## Rate Of Turn Control

The AP24 is equipped with advanced control algorithms that enable smooth and precise turns regardless of sea conditions. This feature also improves tack and gybe performance on sailboats.

## Data Pages

The AP24 includes a number of data pages where you can view autopilot parameters such as compass heading, set course, rudder position, as well as information received from other SimNet compatible equipment such as GPS navigation data and IS20 wind, depth and speed data.

## Multi-Station Operation

Expanded multi-station compatibility offers several control options including use of the AP28 control unit. Any future autopilot control units will also work thanks to the SimNet system.

## Control Options

Simrad offers a range of extra display and control options for the AP24:

- AP24 Second Control Unit
- IS20 RUDDER Display
- IS20 COMPASS Display
- JS10 NFU-Joystick
- R3000X NFU Remote Control
- AT10 NMEA 0183 to SimNet converter(s)
- WR20 Wireless Remote Control

## The Brains Behind the Brawn

The new compact SimNet enabled AC12 & AC42 autopilot computers are more powerful than ever and include all of the control functions expected from a Simrad autopilot. Both models are compatible with Hydraulic and Mechanical steering systems.



# Technical specifications

## AP24 Autopilot System

Multi-language display	✓	Advanced Wind Steering	✓
Transflective matrix LCD display	130x79 pixels	Automatic Tack and Gybe inhibit	✓
Dedicated mode keys	Stby, Auto, + soft keys	Wind Trim adjust	✓
Rotary course knob		Automatic adjust of steering parameters	✓
1° keys Dedicated/Selectable	D	Response control	✓
10° keys Dedicated/selectable	D	Boat type preset	✓
Instrument data pages	✓	Autotune	✓
Analog graphics		Multiple stations	✓
Remote station lock	✓	Off course alarm	✓
Button power steering	✓	Wind shift alarm	✓
Follow-Up power steering		Shallow alarm	✓
Rudder angle bargraph	✓	Overload alarm	✓
DODGE: Return to last or new heading	✓	SimNet interface and control	✓
Heading capture	✓	Virtual Rudder Feedback VRF™	✓
Automatic turn patterns	✓	Volvo Penta IPS interface	✓
Depth Contour Tracking DCT™	✓	Multiple data source input	✓
WR20 Remote Commander compatible	✓	Multiple NMEA0183 interface via AT10	✓

## Autopilot computer specifications

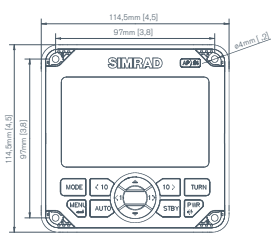
	Supply voltage	Motor current continuous/peak	Clutch/bypass current	Solenoid output	Weight Kg (lbs)
AC12	10-31VDC	8/12 Amperes	3 Amperes	Yes	1.3 (2.9)
AC42	10-31VDC	30/50 Amperes	3 Amperes	No	2.8 (6.2)

## Drive unit specifications

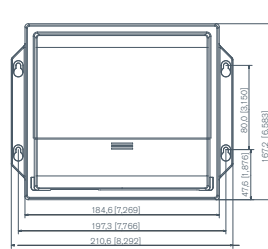
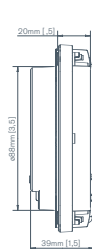


	RPU80	RPU160	RPU300	MSD50	DD15	HLD350	HLD2000L	HLD2000LD	SD10
Volts	12*	12*	12/24	12*	12 only	12*	12*	24	12
Current (Amps) 12V battery	2.5 – 6	3 – 10	5 – 20	0.8 – 2	1 – 4	2.5 – 6	3 – 10		2.5 – 7
Current (Amps) 24V battery			2.5 – 12					2.7 - 12	
Ram capacity cm³	80 – 250	160 – 550 9.8	290 – 960 17.7						
Ram capacity (inch³)	4.9 – 15.2	- 33.5	- 58.5						
Max. Pressure	50 bar	60 bar	60 bar						
Boat Length / displacement kg (lbs)	- 35 ft	35 – 50 ft	50 – 70 ft		45ft/10.500 (12.300)	10.000 (26.400)	20.000 (44.000)	35.000 (77.000)	37ft/6500 (14300)
Stroke mm (inch)				190 (7.5)		200 (8.0)	340 (13.3)	340 (13.3)	
Peak thrust kg (lbs)				60 (132)		350 (770)	500 (1.100)	1050 (2.310)	
Max. Torque Nm (lb.in)					1.370 (12.000)	610 (5.400)	1.460 (15.900)	3.180 (28.000)	450 (4000)
Tiller arm mm (inch)					250 (9.8)	175 (6.9)	298 (11.7)	298 (11.7)	354 (10)
Autopilot Computer	AC12	AC42	AC42	AC12	AC12	AC12	AC42	AC42	AC12

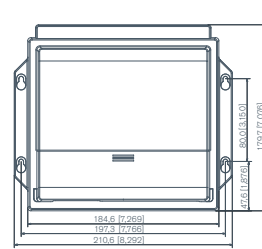
\* The Autopilot computer transforms the battery voltage to the correct drive unit voltage



AP24



AC12



AC42

