ST40 Instruments

| Depth | Compass | Wind |

Compact yet powerful, ST40 instruments feature extra large characters and razor sharp displays for outstanding visibility in all light conditions. Fully compatible with Raymarine SeaTalk® networking ST40 integrates seamlessly with Raymarine autopilots and multifunction navigation displays.

ST40 SPEED

The ST40 Speed instrument is available as a system with a transducer or as a repeater display. **Display features:** current, max and average speed in either knots (kts), miles per hour, (mph) or kilometers per hour (kph). Log and trip, and sea water temperature indicator.

ST40 DEPTH

The ST40 Depth instrument is available as a system with a transducer or as a repeater display. **Display Features:** 200Khz frequency, digital depth display of minimum depth, shallow and deep anchor alarms. Depth can be displayed in feet (ft), meters (m) or fathoms (fa).

ST40 COMPASS

The ST40 compass instrument is available as a system with a compass transducer or as a repeater display for Raymarine autopilot systems. **Display Features:** Analog compass display with true or magnetic mode.

ST40 BIDATA

ST40 Bidata offers all the features of the ST40 speed and ST40 depth units in a single display. Available as a system with transducers or as a repeater display. **Display Features:** 200Khz frequency, digital depth display of minimum depth, shallow and deep anchor alarms. Current, max and average speed display. Log, trip and sea water temperature indicator.

ST40 WIND

ST40 Wind instrument features wind speed and direction in both apparent and true. Wind angle can be locked manually or automatically. **Display Features:** Deviation and course-to-steer to achieve locked wind angle. System supplied with rotavecta type wind transducer.

Interactive product tours available online! Go to **www.raymarine.com**

ST60 Plus Instruments

ST60 Plus instruments combine maximum performance and versatility with bold, easy-to-read displays that sets the standard for instrument systems. Based on the award winning ST60 instruments, ST60 Plus feature a new bezel design that compliments Raymarine's multifunction navigation displays. SeaTalk networking enables each instrument to receive 12 volt power and data from single easy-to-install cable. Plug and play compatibility with Raymarine Autopilots and Multifunction displays.

SPEED

The ST60 Plus speed provides accurate speed through water. Calibration is easy using SOG data from SeaTalk (GPS required). Available as a system with transducer or as a repeater display. **Display Features:** Speed (0 – 60 in kts, mph or kph), max/average speed, cumulative log, trip log with reset, 1/100 knot resolution, sea temp ,stopwatch/lap time, 10 and 5 minute race start timer, and VMG (Velocity Made Good).

ST60 Plus with optional low profile mounting bezel

DEPTH

The ST60 Plus delivers reliable depth performance and accuracy. Available as a system with 200 KHz transducer or as a repeater display. **Display Features:** Depth performance from 2.6' to 600' (0.8 – 180 m), maximum and minimum depth display, depth trend indicator, adjustable display response, transducer, keel or waterline offset.

WIND

The ST60 Plus wind display and systems offer reliable and accurate performance. ST60 Plus Wind offers a choice of vane or rotavecta wind transducers. Add the ST60 Plus Close Hauled repeater for precise wind measurements between 20° and 60°. **Display Features:** Apparent wind speed and direction, true wind speed and direction (relative), max wind speed, max wind speed alarm, beaufort scale, adjustable display and pointer response, and heading on opposite tack
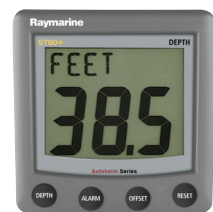
GRAPHIC

A versatile repeater of SeaTalk data from compatible Raymarine instruments, autopilots, GPS, and multifunction displays. The ST60 Graphic is also NMEA 0183 compatible* for integration with other brands of marine electronics. **Display Features:** Easy-to-use chapter and page control, depth, speed, SOG, sea temp, VMG, log and trip, true and apparent wind speed & direction (relative), beaufort scale, cardinal point, GPS Lat/Lon,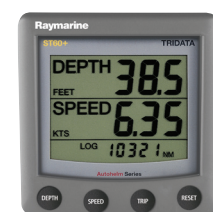 COG, cross track error, bearing to waypoint/ distance to waypoint, pilot rudder angle, heading, autopilot status indicator, battery voltage/battery and voltage alarm

*Visit www.raymarine.com for a complete list of compatible NMEA 0183 sentences

TRIDATA

The versatile Tridata combines the functions of the ST60 Plus speed and depth instruments into a single display. Choose a Tridata system with transducers or a Tridata repeater display. **Display Features:** Depth performance: 2.6' – 600' (0.8 – 180 m), max and min depth with trend indicator, transducer keel or waterline offset, speed with max/average display with 1/100 knot resolution, cumulative log, trip log with reset, sea temperature, stopwatch/lap timer, VMG (Velocity Made Good), SOG (requires data on SeaTalk)

COMPASS AND RUDDER

Compass and rudder displays are available as systems with transducer or as a repeater for Raymarine autopilot systems. The Compass display can also repeat GPS course over ground (COG) data (from SeaTalk).

Additional information and specifications available at **www.raymarine.com**

ST290 Instruments

ST290 ADVANCED INSTRUMENT SYSTEM

The ST290 instrument system offers big, bold, user-friendly displays with intelligent transducers and super-fast SeaTalk**2** and NMEA 2000 networking. More than just an instrument system, ST290 combines autopilot, navigation, heading and environmental data with depth, speed and wind to create a comprehensive instrument data network.

| GRAPHIC | DATA | WIND | KEYPADS |

DPU

| DEPTH TRANSDUCER | SPEED TRANSDUCER | WIND TRANSDUCER |

ST290 SYSTEM

Displays and keypads connect you to the system, while behind the scenes the advanced DPU (data processing unit), intelligent transducers and SeaTalk2 technology work in harmony to deliver fast and accurate data. Each system starts with an ST290 Starter Pack consisting of one Graphic display, DPU, Speed and Depth Pod.

ST290 GRAPHIC DISPLAY

The 5.5" dot matrix ST290 Graphic display provides complete control and display of every available information source in the network. The display features easy-to-read characters with intuitive icons and graphics. Simple 'chapter and page' control keys give quick and easy access to graphs, diagrams or numeric displays, in giant or multiline formats.

ST290 WIND DISPLAYS

Precise analog wind gauge combined with a digital display. Displays True and Apparent wind direction and speed, max wind speed, tack angle and VMG. Closed Hauled display provides wind measurements between 20° and 60°.

ST290 DATA PROCESSING UNIT

Essential to every ST290 system, the DPU (Data Processing Unit) serves as an easy connection point for SeaTalk, SeaTalk2, NMEA 0183, NMEA2000, alarm and DC power.

ST290 DATA DISPLAY

The ST290 Data Display features a 5.5" segmented LCD with a dual line display. Large 1"(25mm) characters are easy to read and provide concise uncluttered access to the most important onboard data.

ST290 TRANSDUCERS

ST290 transducers are equipped with intelligent transducer pods that share information via SeaTalk2 and the entire ST290 system.

ST290 COMPASS AND RUDDER

Easy-to-read analog displays with digital LCD. Compass provides heading, steering indication, and GPS COG data. Rudder offers real time rudder location from the autopilot

ST290 KEYPADS

One remote keypad provides remote control to up to 8 different Graphic or Data displays. The Autopilot keypad provides total autopilot control and calibration (SmartPilot corepack required)

Interactive product tours available online! Go to **www.raymarine.com**

SeaTalk® Instruments

Raymarine's comprehensive range of instruments sets the standard for integrated instrument systems. Designed to be both flexible and expandable using Raymarine SeaTalk and SeaTalk2 networking technology, Raymarine instruments offer a complete solution for every helm or cockpit. Our instrument systems expand even further through seamless integration with our complete range of Raymarine autopilots, multifunction displays, chartplotters, fishfinders and radar systems.

ST40 INSTRUMENTS

ST40 instruments offer compact performance with an oversized LCD display. Perfect for stand alone applications or as part of a SeaTalk network

ST60 PLUS INSTRUMENTS

On the dash or in the cockpit, ST60 Plus will keep you informed. Every ST60 Plus display is engineered for maximum visibility. Easy-to-read LCD displays feature large, bold characters and color-coded analog displays are easy to interpret at a glance. Years of experience combined with rigorous testing ensures ST60 Plus will meet the demands of the most challenging conditions.

ST290 INSTRUMENTS

The ST290 instrument system offers big, bold, user-friendly displays with intelligent transducers and super-fast SeaTalk2 and NMEA 2000 networking. More than just an instrument system, ST290 combines autopilot, navigation, heading and environmental data with depth, speed and wind to create a comprehensive instrument data network.

WIRELESS SMARTCONTROLLER

Take control of your Raymarine SeaTalk network with the powerful SmartController wireless handheld remote. Access instrument data from ST40, ST60 Plus and ST290 in the palm of your hand. Plus SmartController is a full function autopilot remote control. The bright display and ergonomic keypad offer straightforward operation with access to up to eight user defined SeaTalk instrument data pages.


Specifications

ST40 Ordering Information

Part #	Description
E22037	Speed Display
E22038	Depth Display
E22041	Wind Display
E22039	Bidata
ST40 Systems	
E22047	Wind System
E22045	Bidata System (TH)
E22054	Bidata System (TM)
E22053	Depth System (TM)
E22044	Depth System (TH)
E22052	Speed System (TM)
E22043	Speed System (TH)
E22048	Compass System

ST290 Ordering Information

Part #	Description
T22071	Starter Pack
E22057	Graphic Display
E22056	Data Display
E22059	Wind Display
E22061	Close Hauled Wind Display
E22060	Compass Display
E22062	Rudder
E22063	Remote Keypad
E12094	Autopilot Keypad
E22064	MOB Keypad

SmartController Ordering Information

Part #	Description
E15023	SmartController with base station

ST60 Plus Ordering Information

| Part #	Description
A22004-P	ST60 Plus Tridata Display
A22013-P	ST60 Plus Tridata System
A22002-P	ST60 Plus Depth Display
A22010-P	ST60 Plus Depth System
A22001-P	ST60 Plus Speed Display
A22009-P	ST60 Plus Speed System
A22005-P	ST60 Plus Wind Display (Analog)
A22011-P	ST60 Plus Wind System Analog Rotavecta
A22012-P	ST60 Plus Wind System Analog Vane
E22049-P	ST60 Plus Clubhouse Wind Display
A22016-P	ST60 Plus Clubhouse Wind Analog System
E22075-P	ST60 Plus Graphic Display
A22006-P	ST60 Plus CH/VMG Display
A22017-P	ST60 Plus Tridata Repeater
A22007-P	ST60 Plus Compass Display
A22014-P	ST60 Plus Compass System
A22008-P	ST60 Plus Rudder Angle Indicator Display
A22015-P	ST60 Plus Rudder Angle Indicator System
T22050-P	ST60 Plus Tridata w/Speed & Retractable Depth Transducer
T22052-P	ST60 Plus Wind System Analog Vane w/50M Cable

ST40 Dimensions
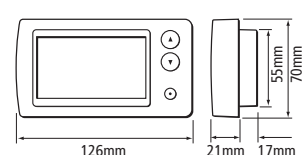
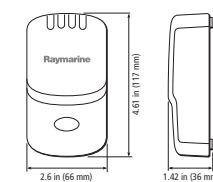**ST60 Plus Dimensions**
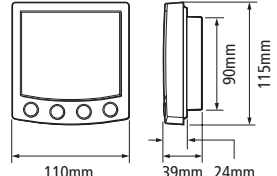
SmartController Dimensions
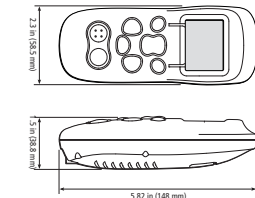
ST60 Plus and ST290 Speed and Depth Transducer Dimensions
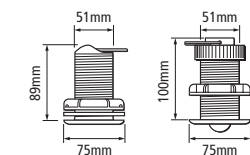
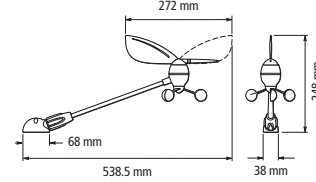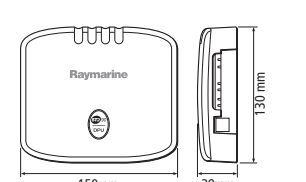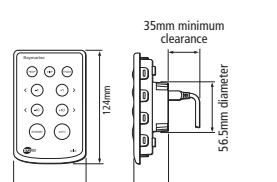**ST290 Dimensions**
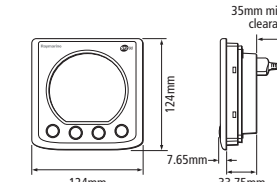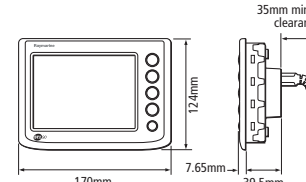
ST290 Transducer pod

Wind Transducer Dimensions
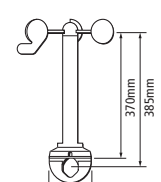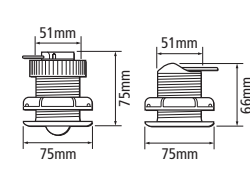
ST290 DPU Dimensions

ST290 Keypad Dimensions

Rotavecta Wind Transducer

ST40 Speed and Depth Transducer Dimensions

Raymarine®

INSTRUMENTS

ST40
ST60 Plus
ST290
SmartController