Raymarine®

ST70
Multifunction Color Instruments

New

SeaTalkng
The Next Generation Data Bus

ST70 Multifunction Instruments

MULTIFUNCTION INSTRUMENTS

ST70 multifunction instruments offer a brand new way of visualizing instrumentation. Featuring a graphical user interface and high resolution color displays, ST70 provides unmatched versatility and ease of use. Designed for simple setup and extensive customization, ST70 delivers an array of intuitive digital, graphical and historical display options. ST70 systems are built on Raymarine's new SeaTalk*ng* Next Generation data bus. A fast CAN based network, SeaTalk*ng* enables the simple interconnection of multiple ST70 instruments, transducers and NMEA2000 compatible devices.

ST70 FEATURES INCLUDE:

- 3.5" Sunlight viewable display
- Eight user defined data pages with 16 screen layout options for each data page
- Easy-to-use menu and icon driven interface
- Fast SeaTalk*ng* next generation data bus interface for creating an ST70 instrument network
- NMEA2000 compatible for engine instrument integration
- Simple start up wizard configures every ST70 display on the SeaTalk*ng* data bus
- Combine with SeaTalk*ng* transducer pods for depth, speed and wind data
- Compatible with Raymarine SeaTalk and SeaTalk2 instrument systems as well Raymarine autopilots and multifunction displays
- Backed by Raymarine's worldwide service and support network

Intuitive graphical displays for visualizing data

Customize the display with analog, digital, bar graphs and historical data displays

3D isometric autopilot steering repeater (Raymarine autopilot required)

ST70 APPLICATIONS

The ideal companion instrument system for Raymarine MFDs, creating a full color helm solution

- Choose multiple ST70 instruments and transducer pods for a full featured, information rich instrument system
- Utilize ST70 as a navigation data repeater with a Raymarine multifunction display
- Add ST70 to an existing ST290 SeaTalk2 network

GPS and Waypoint Navigation display

Engine instrumentation using NMEA2000

TECH TIP: ST60 PLUS INTEGRATION

- Add color to your ST60 instrument system with an ST70 multifunction instrument
- Each ST70 instrument is supplied with a first generation SeaTalk adapter cable for plug and play connectivity with ST60/ST60 Plus instruments
- ST70 intelligently converts first generation SeaTalk data to SeaTalk*ng*

NEW **SEATALK^{ng} NEXT GENERATION DATA BUS**

SeaTalk^{ng} is a robust CAN based network that delivers the seamless integration of Raymarine instruments, autopilots and multifunction displays with NMEA2000 devices and networks. Small diameter cables and color coded connectors make SeaTalk^{ng} networks easy and straightforward to install. In addition to networking, ST70 displays and transducer pods receive power from the SeaTalk^{ng} bus, eliminating the need for additional power cables and simplifying installation.

SEATALK^{ng} FEATURES INCLUDE:

- Color coded and keyed connectors for foolproof installation of backbones and spurs
- Very small diameter connectors (11.0mm) for passing through bulkheads and in areas with limited access
- Rugged and waterproof (IP67) with positive locking connectors
- Quick and easy to install (including blind and limited access conditions)
- NMEA2000 compatible using optional SeaTalk^{ng} to NMEA2000 adapter cables

TYPICAL SYSTEM CONFIGURATION

SeaTalk^{ng}
The Next Generation Data Bus

Wind Transducer & Pod ▶

5-Way Connector & Terminator ▼

◀ Spur

Spur ▶

◀ Spur

SeaTalk^{ng} Backbone ▼

T Piece & Terminator ▼

◀ Spur

◀ Spur

Power Cable ▲

ST70 Instruments ▲

Speed Transducer & Pod ▶

◀ Depth Transducer & Pod

SEATALK^{ng} TRANSDUCER PODS

SeaTalk^{ng} transducer pods for use with depth, speed and wind transducers (pods and transducers are sold individually)
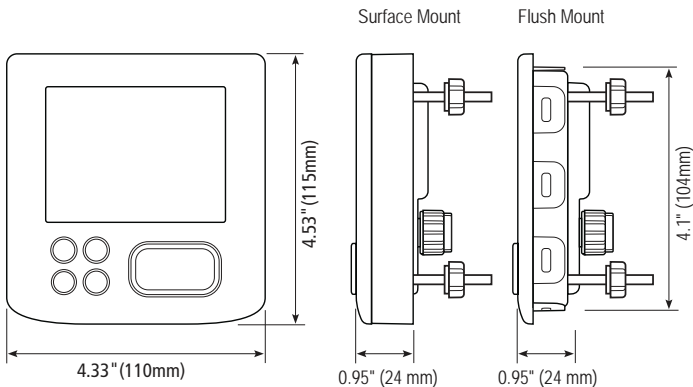

Depth Transducer   Speed Transducer   Wind Transducer

ST70 SPECIFICATIONS

General	
Display Type	Sunlight viewable Color Transflective TFT
Display Size	3.5"
Resolution	QVGA (320x240 pixels)
Languages	UK English, US English, Spanish, French, German, Portuguese, Dutch, Italian, Norwegian, Danish
User Instrument Page options	8
User Page layout options	16
Interfaces	SeaTalk^{ng}, NMEA200, SeaTalk, SeaTalk2
Connectors	Two SeaTalk^{ng} connectors
Approvals	
CE	Conforms to 2004/108EC, EN60945:2002
Physical	
Dimensions (W x H X D)	4.3" (110mm) x 4.5" (115mm) x .95" (24mm)
Weight	.6lbs (.27kg)
Mounting	Low profile flush or surface mount
Power	
Voltage	9-16 Volts DC
Current Draw	220mA
Environmental	
Operating temperature range	-10° C to +70° C
Storage temperature range	-20° C to +70° C
Humidity	Up to 95%
Waterproofing standard	CFR-46

Ordering Information	
PART #	**DESCRIPTION**
E22105	ST70 3.5" Color Instrument Display
E22106	ST70 Depth Transducer Pod
E22107	ST70 Speed Transducer Pod
E22108	ST70 Wind Transducer Pod

SEATALK^{ng} CABLES AND CONNECTORS

Backbone Cables	
PART #	**DESCRIPTION**
A06033	1 ft 3 in (400mm) Backbone Cable
A06034	3 ft 3 in (1m) Backbone Cable
A06035	9 ft 10 in (3m) Backbone Cable
A06036	16 ft 4 in (5m) Backbone Cable
A06037	65 ft 7 in (20m) Backbone Cable
A25062	Backbone kit- Comprises: Two terminators, one 65 ft 7 in (20m) backbone cable, two 16 ft 4 in (5m) Backbone cables, four T-Piece connectors, one power cable, one SeaTalk^{ng} Reference Manual

Spur Cables	
PART #	**DESCRIPTION**
A06038	1 ft 3 in (400mm) Spur Cable
A06039	3 ft 3 in (1m) Spur Cable
A06040	9 ft 10 in (3m) Spur Cable
A06041	16 ft 4 in (5m) Spur Cable
A06042	1 ft 3 in (400mm) Elbow Spur Cable - For spurs in confined spaces
A06049	Power Cable- Connects SeaTalk^{ng} 12 V dc supply
A06043	1m Stripped end spur cable - Connects products which do not have plug in connectors (e.g. transducer pods)
A06044	3m Stripped end spur cable - Connects products which do not have plug in connectors (e.g. transducer pods)

Adapters, T Pieces & Connectors	
PART #	**DESCRIPTION**
A06028	T Piece- Connects one spur to backbone
A06064	5-Way Connector- Connects three spurs to backbone
A06030	Backbone Extender- Connects two backbone cables
A06031	Terminator- Fitted at each end of backbone
A06032	Blanking Plug- Inserted into unused spur connector positions in 5-way connector & T Piece
A06047	SeaTalk Adapter Cable- Connects SeaTalk^{ng} products to SeaTalk(1)
A06048	Seatalk2 Adapter Cable- Connects SeaTalk^{ng} products to SeaTalk[2]
A06045	DeviceNet Female Adapter Cable- Connects SeaTalk^{ng} products to NMEA2000
A06046	DeviceNet Male Adapter Cable- Connects SeaTalk^{ng} products to NMEA2000
A06061	E-Series Adapter Cable- Connects SeaTalk^{ng} products to Raymarine E-Series Displays

DIMENSIONS

Surface Mount

Flush Mount

4.53" (115mm)

4.1" (104mm)

4.33" (110mm)

0.95" (24 mm)

0.95" (24 mm)

Raymarine®