

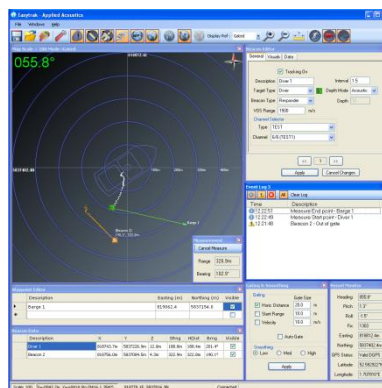
Easytrak Nexus USBL System, Model 2690



Key Features

- **Bi-directional Spread Spectrum acoustics**
- **Digital data telemetry**
- **Ten target tracking**
- **Improved range stability**
- **Embedded calibration software**

Easytrak Nexus is an advanced USBL positioning and tracking system that incorporates Spread Spectrum technology to provide a secure acoustic link. It determines the position of dynamic subsea targets through the transmission and reception of acoustic signals between the submerged transceiver and the target beacon. By incorporating Spread Spectrum technology the wide bandwidth transmissions reduce its susceptibility to interference and enables more accurate positioning. This technology also is better at rejecting unwanted reflected signals which improves operations in challenging locations.



Technical Specification

EASYTRAK NEXUS CONSOLE, MODEL 2690

Dimensions	19" Rack mount. 2U 482 x 88 x 345mm
Weight	5.4kg
Power requirements	90 – 250 Vac at 250 VA maximum
Connection to Transceiver	Rear-panel connector for 2682 Transceiver
Built-in PC.	Intel Atom board running embedded Windows XP Solid state hard disk
Front panel indicators	LED indicators for power and serial status
Serial Communications	5 x RS-232. Selectable Baud rates
Data Output	AAE format V1 and V2, TP-II2EC, TP-EC W/PR, Simrad 300P, Simrad 309, Simrad \$PSIMSSB, Pseudo \$GPRMC, NMEA \$GPGGA, NMEA \$GPVTG, NMEA \$GPTLL, Pseudo \$GPGGA, KLEIN 3000 (Quick set) Multiple outputs available
Compass Input	TCM-2.X, SGB-HTDS, SGB-HTDt, \$HEHDT, \$HDHDM, \$HDHDT, \$HDHDG

Easytrak Nexus Technical Specification continued...

VRU Input	TCM-2.X, \$HCXDR , TSS1
GPS / DGPS Input	NMEA; GLL, GGA, RMC
Target Heading Input	NMEA HDM, HDT, HDG, PNI TCM2
Target Depth Input	NMEA DBT, DBK, DBS, DPT, AAE
Time in	GPS Time synch
Responder Output	Positive 12V pulse 5ms long
USB	4 ports available
Ethernet	Rear panel standard RJ45 jack
Audio	Audible activity indicator

EASYTRAK TRANSCEIVER, TYPE 2682

(May be tilted by 20° for towfish tracking)

Material	Aluminium Silicon Bronze
Size	510 mm long x 100 mm diameter
Weight in air/water	13kg/10kg
Depth Rating	30 metres
Depth Sensor (Pressure Sensor)	5 bar, accuracy 0.25% between -10° to +40° C
Temperature sensor	1° resolution between -10° and +40° C
Power requirements	Powered from Nexus Console
Transducer	Multi-element transducer head moulded in polyurethane
Receiver	24 bit receiver capable of detecting Spread Spectrum and tone burst signals

TRANSCEIVER CABLE

Diameter	12.8 mm nominal
Colour	Yellow
Length	20 – 60 metre standard lengths. 100 metres maximum length
Connectors	Supplied
SWL	20 kg. Allows transducer to be deployed from cable

ACCURACY/PERFORMANCE

(Accuracy is based on the correct speed of sound being entered, no ray bending and an acceptable S/N ratio)

Slant Range accuracy	10cm. Accuracy dependent on correct speed of sound
Position accuracy	0.60 drms. 1.0% of slant range. Acoustic accuracy excluding heading errors
Bearing Resolution	0.1° displayed. Internally calculated to 0.01°
Heading sensor accuracy	0.5° rms standard; +/- 0.1° resolution/repeatability
Pitch/Roll sensor accuracy	+/- 0.20° rms +/- 0.1° resolution/repeatability
Frequency Band (MF)	Reception 22 - 30 kHz Transmission 17 – 26 kHz
Tracking Beam Pattern	> Hemispherical
Beacon Types	Transponders and Responders, Digital Depth Transponders' AAE Release and Telemetry Beacons
Interrogation Rate	Internally set or external key
Transmitter	Nominally 190 dB SPL
System	Externally assessed for immunity and emissions; conforms to 89/336/EEC. RoHS compliant



Due to continual product improvement, specification information may be subject to change without notice.
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