

# DNC-250 DIVER NAVIGATION CONSOLE



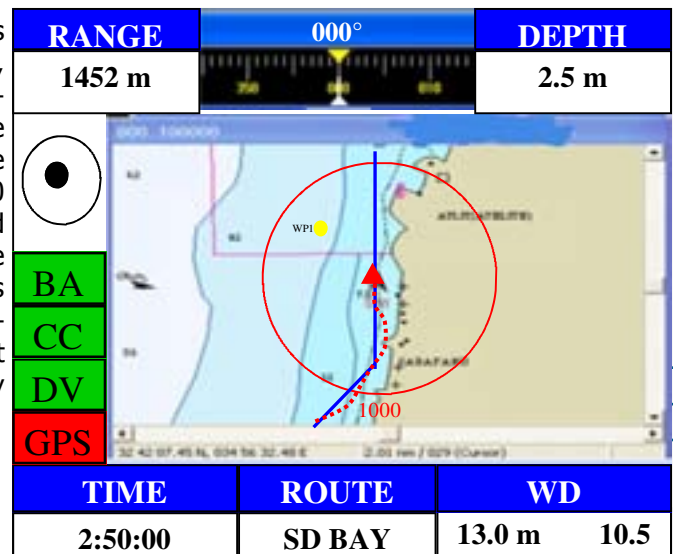
- **AUTONOMOUS NAVIGATION**
- **SMALL AND LIGHTWEIGHT**
- **RUGGED AND WATERPROOF TO 30 METERS**
- **SUPPORTED BY DIVE PLANNING SOFTWARE**



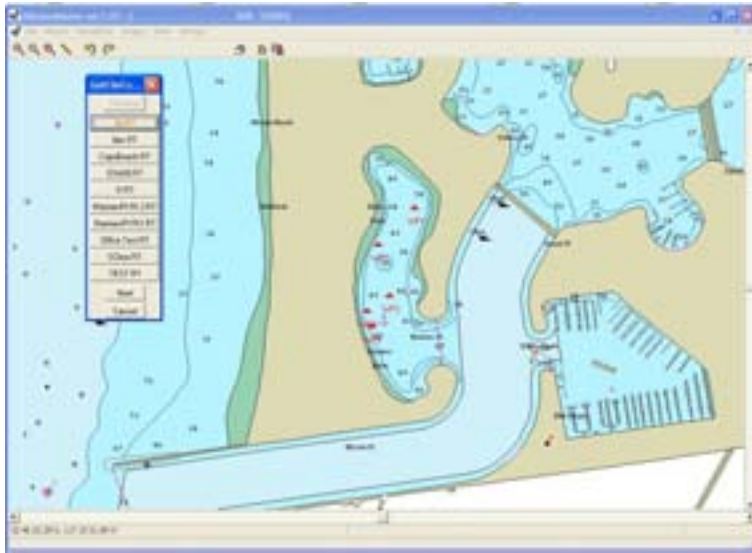
The DNC-250 Diver Navigation Platform is a small and rugged platform which allows a diver to navigate underwater autonomously without the need for acoustic baselines or floating GPS antennas. Completely self-contained, the DNC-250 arrives at a navigation solution using internal sensors which supply geodetic position, depth and heading while velocity information is provided Doppler Velocity Log. Built-in firmware takes this sensor information and plots the diver's position with the support of a preloaded dive plan. Distance and bearing to target waypoint, depth, and other navigation information is displayed, in real time, to the diver via a full color LCD display with adjustable backlighting.

Weighting only 5.1kg (14lbs.), the DNC-250 is easy to operate. Using specially designed piezo ceramic switches the operator can access all functions of the operational firmware to depth of 30M (99ft). Designed for the harsh marine environment, the sealed anodized aluminum housing provides protection for all internal components while rechargeable batteries allow the DNC-200 to be continuously operated for up to 8 hours.

Intuitive firmware and simple-to-read screens makes using the DNC-250 effortless. Once activated, the built-in GPS receiver immediately provides accurate geodetic position to the on-board computer. The diver then recalls, from the DNC-200 menu, a dive plan created and uploaded from the DiveNav 2.0 Planning Software. Once underwater, bearing and distance to the targeted waypoint is displayed on the DNC-250 easy-to-read screen along with divers depth, dive time and other important navigation information. All navigation position fixes and event marks are saved in the on-board computer's memory for later access and analysis.



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## DiveNav 2.0 Planning Software

Supporting the DNC-200 is a comprehensive dive planning software suite called DiveNav 2.0, which can be easily loaded on to any PC. DiveNav 1.0 Planning Software allows an operator to create mission profiles that include dive routes, multiple waypoints, and electronic charts and images. These mission plans can then be uploaded into the DNC-200. Once the dive is completed, the data that is stored in the DNC-200 can be downloaded. Once retrieve this can be analysis by DiveNav or other third party software. The unique architecture and flexible of the DNC-200 Firmware and DiveNav Planning Software allows for easy customization to meet your specific mission requirements.

## SPECIFICATIONS

Navigation Sensors		Power	
Heading Sensor		Battery	Rechargeable Lithium Ion
Accuracy	<0.5° to 1.5° RMS	Operational Life	8 hours
Pitch and Roll		<b>Single Board Computer and Display</b>	
Range	± 40°	Processor	500Mhz
Accuracy	± 0.4° @Tilt< 20° ± 0.6° @Tilt≥ 20°	Inputs	USB
GPS		Dive Data	ACSCII Format
Channel	L1, C/A Code, 12ch	LCD Display	Full Color, 6" (15.25cm)
Accuracy	< 8 Meters (90%)	LCD Backlight	Firmware Controlled
Acquisition		<b>Mechanical</b>	
Reacquisition	< 2 sec (90%)	Size	25cm(L)x15cm(W)x6.5cm(D) 9.6"(L)x6.0"(W)x2.5"(D)
Hot Start	< 13 sec (90%)	Weight	2.9kg (7.5 lbs)
Cold Start	< 84 sec (90%)	Housing Material	Anodized Aluminum
Doppler Velocity Log		Switches	Piezo Ceramic
Frequency	600 kHz	<b>Environmental</b>	
Accuracy	1% +/- 1mm/s	Depth Rated	30m (99 ft.)
Maximum Altitude	110 m (330ft)	Operating Temperature	-20°C to 55°C (-4°F to 131°F)
Minimum Altitude	0.3 m (1ft)	Storage Temperature	-40°C to 65°C (-40°F to 149°F)
Maximum Velocity	20 knots	Vibration	To Mil-Std-810E
<b>Navigation Accuracy</b>			
*Along Track Error	500m square ± 1 to 2m		
**Cross Track Error	500m square ± 1 to 3m		
* based on compass error			
** based on Doppler Velocity log			

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