UNDERWATER
LOCATING
DEVICES

PT9 NINETY

The extra long breath beacon.

It was the first – and is now the first choice 90-day ULB. PT9 NINETY meets the requirements of IMO.

International Maritime Organization

Recommended by IMO: All ships built after July 1, 2014 must be fitted with Underwater Locating Devices (ULDs) that ensure transmission for at least 90 days MSC.333(90) / 163(78)

Corrosion-resistance guaranteed

A new formulated ceramic coating topped the already excellent corrosion protection. Hence the PT9 NINETY withstands the extreme environmental conditions on sea even longer. Approved in long term testing and guaranteed by us.

The world-wide available ULB

The PT9 NINETY's world-wide distributor network guarantees a fast availability on site.

The PT9 NINETY power source

A self-contained lithium metal battery. Field replaceable and non-restricted for transport! (UN3091/ PI970)

Minimum performance standards according to SAE AS8045a:

Dimensions Weight	**Length**	100 mm (3.92 inches)
	Diameter	33 mm (1.3 inches)
	Weight	187 g (6.6 ounces)
Operating Details	**Operating Depth**	Surface to 6096 m (20 000 ft)
	Temperature Range	
	– Operating/Transport	–55°C (–67°F) to +85°C (185°F)
	– Operating Temperature	–2°C (+28°F) to +38°C (+100°F)
	Operating Frequency	37.5 ± 1 kHz
	Pulse Length	minimum 9.0 ms
	Repetition Rate	minimum 0.9 pulse/s
	Radiation Pattern	minimum 80 % of a spherical pattern
	Operating Life	minimum 90 days
	Initial Operation	106 N/m² (1060 dyne/cm²) r.m.s. pressure normalized
		to 1 m range, that is, at a level of 160.5 dB vs 1 µPa at 1 m
	Continuous Operation	
	– Immediately after 90 days	70 N/m² (700 dyne/cm²) r.m.s. pressure normalized at
		1 m range, that is, at a level of 157 dB vs 1 µPa at 1 m
Acoustic Outputs on Activation	**Actuation**	Automatically by both, fresh- and salt water,
		at all depths from 0.15 m (0.5 ft) to 6096 m (20 000 ft)
		within 4 h after immersion
	Acoustic Output	
	– initial	mininimum 160.5 dB vs 1 µPa at 1 m (106 N/m)
	– after 90 days	mininimum 157 dB vs 1 µPa at 1 m (70 N/m)

Leading locator beacons for the entire shipping industry.

With the PT9 Ninety and PT9 C-Proof, Novega offers two generations of ULBs, which are the flagships in maritime industry.

Market and technological leader

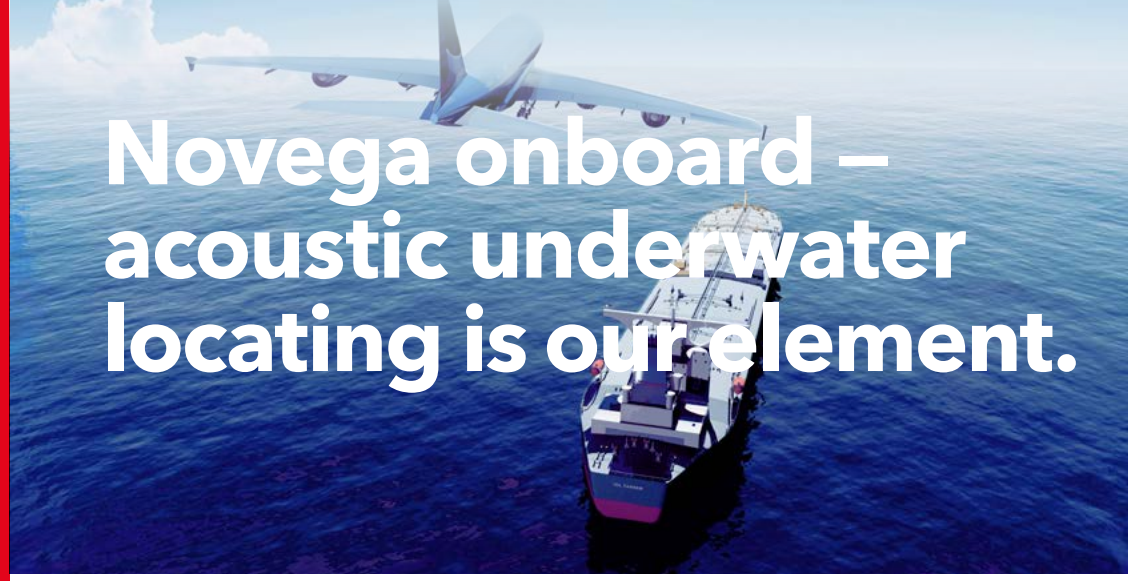
Over a decade Novega has been the leading manufacture for maritime underwater locating beacons.

PT9 C-PROOF - the legacy ULB

The PT9 C-Proof is the first corrosion-resitant 30 days ULB with intelligent activation. Disruptive factors such as rain, spray, condesation, detergents etc. are ignored by this smart feature. Unintentional activations is reduced to a minimum.

PT9 NINETY - The world champion

The PT9 Ninety is the world`s most widely-used ULB for installation on protective data capsules attached to voyage data recorder systems. In the event of activation the ULB transmits a signal for at least 90 days.



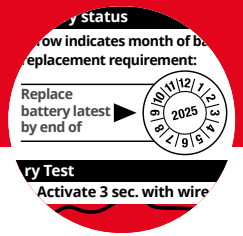
Novega onboard – acoustic underwater locating is our element.

Frequency, reliability and transmission time are crucial for the performance of devices for underwater acoustic detection. Novega stands for the best quality and top performance in all three areas – regardless of whether we are talking about ULBs for use in maritime or aviation industry. It's best to get us on board today.

Novega Milestones

1998	Company foundation
2002	First Novega black boxes for ocean-going vessels
2004	Proven quality – Novega is certified to ISO 9001
2008	Market launch of PT9 C-Proof for maritime applications
2010	Novega became the market leader for maritime ULDs
2014	Market launch of PT9 NINETY for maritime applications
2016	BLUE 90 – the first aviation ULD is ready for boarding
2017	EASA certifies Novega as Design Organisation under paragraph 21J
2018	SID88 – world's first EASA authorized low-frequency ULD is unveiled
2021	FAA certifies Novega as repair station
2022	Expansion of storage and production capacities
2023	25th anniversay of Novega

Keep your PT9 ULBs running. Quick and safe.



REPLACE DATE MARKING
The battery replacement information sticker indicates the expiration date of the beacon/ battery. At this date, the battery must be replaced at latest.

PRESSURE DISPENSE CLAMP
Facilitates opening of the ULB.

TAG 2550
For acoustic tests of the ULD.

DC-METER
Facilitates the measurement of the ULB sleep mode current during battery currenreplacement.

BATTERY REPLACEMENT KIT
Battery plus greased O-Ring for PT9 NINETY.

ULYSER
The analyser for ULBs. All necessary functional tests and date polling tasks are performed easily. The ULYSER can be connected to your PC. Final test documentation is done by the software »ULD Report Creator«.

TORQUE 3.0
3Nm torque wrench for a safe opening and closing of the ULB.

Top quality and service.

Novega's quality is not created by chance, but is the result of a systematic and consistently implemented quality process. In this way, we comply with the highest global standards set by maritime and aviation safety authorities, as documented by numerous certificates, as well as regular quality and safety audits. In addition, we offer you a service that truly deserves this name – without any ifs and buts, including personal availability and proximity.

Following the commands, each acoustic beacon is programmed and tested individually. Accuracy and calibration – a must to meet the requirements.

An automated production line with a series of linked workstations – efficient manufacturing and a stable process.

Up-to-date – Novega's inhouse testing capabilities for temperature, pressure, corrosion, vibration, shock and many more.

Novega stands for excellent quality. We achieve this with qualified staff and reliable manufacturing processes as well as systematic monitoring.

UNDERWATER
LOCATING
DEVICES

NOVEGA
Produktionssysteme
GmbH

Gewerbepark 2
87477 Sulzberg (See)
Germany
+49 8376 929900
Fax +49 8376 9299020
info@novega.de
www.novega.de

Concept and Design:
Mader-Design.com

Photography:
©Cover photo:
Carola Vahldiek/Fotolia
©Ship/Airplane:
Kovalenko I/Adobe
Products:
©Rupp-Fotografie.de
©Harrystahl.com
Printer: Royal Druck