

TAG 2550 **TESTER**



Ultra Sonic Receiver for
Underwater Locating Device
25–50 kHz

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**Ultrasonic - receiver for Underwater Locating
Device (ULD)**

**Manual for initiation and maintenance
No. 350-17610-A4e**



This manual is developed by Novega Produktionssysteme GmbH. On non-compliance against the data content, the operating licence will be retracted and there will be no acceptance of any guarantee for the device.

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1. Introduction

This manual consists in the description as well as the operation - and maintenance directive of the TAG 2550 testing kit.

2. Scope of delivery



TAG 2550 (350-17610)

Earphone (350-17606)

Connection lead (350-17627)

3. Symbols and Abbreviations

ULD	Underwater Locating Device
°C	Grad Celsius
°F	Grad Fahrenheit
kg	Kilogram
m	Meter
ft	Feet
mm	Millimeter
min	Minute
h	Hour
s	Second
dB	Decibel
KHz	Kilo Hertz
LED	Light emitting Diode
PC	Personal Computer
TAG	Test und Auswertegerät
Testing and analysing Unit	

Description

3.1. General

The TAG 2550 is a battery powered receiver for ultrasonic signals with a frequency of 25 to 50 kHz. The TAG 2550 receives ultrasonic signals via an integrated microphone. The received signals are optically reflected by a yellow LED and acoustically via an integrated loudspeaker. The output signals can be demonstrated by the earphone or by the connection lead on the PC as well. The TAG 2550 is a sensible instrument. Therefore it is to be protected from moisture and crushes.



3.2. Mode of operation

The front side of the TAG 2550 consists in three elements. The push-button is situated in the middle of the device. The instrument becomes recipient by pressing the push - button, the green LED (“Ready”) glows. The received signals are reflected optically by a yellow LED (“Pulse”) and acoustically by an integrated loudspeaker.

3.3. Specification of the TAG 2550

Receiver frequency	25 kHz to 50 kHz
Power supply	button cell Lithium Type CR1632 350-17609
Operating voltage	3 Volt
Operating temperature range	0 °C to + 40 °C
Size	58mm x 36mm x 20mm (L x B x H)
Weight	24 gram

4. Testing

The ULD (e.g. PT9 C-Proof) is activated with the strap (conductive wire) of the TAG 2550 (vide figure 1), or according to the ULD producer's information. The PT9 C-Proof

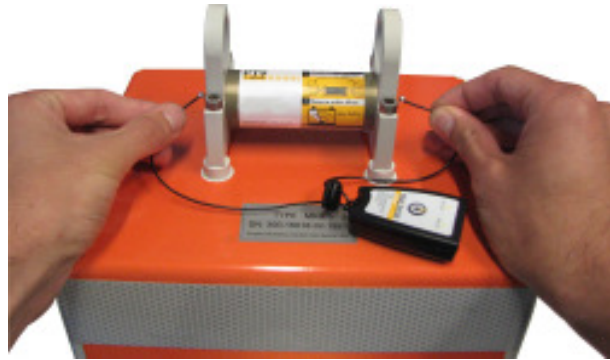


Figure 1: Testing of an ULD

activation is effected for three seconds after having connected the poles. Hereafter it is activated over a period of 60 seconds.

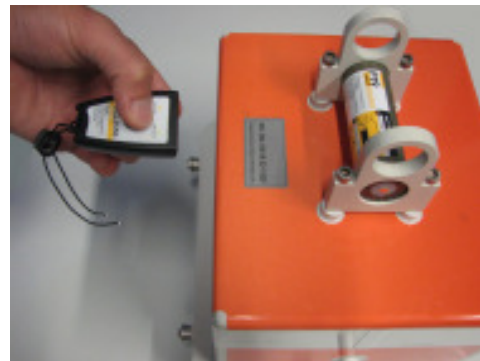


Figure 2: Minimum distance of 10 cm

The TAG 2550 is to be levelled to the ULD with its front side (vide figure 2). The distance measures approx. 10cm. The device becomes recipient by pressing the push - button, the green LED ("Ready") glows. The received signals are optically reflected by a yellow LED ("Pulse") and acoustically by an integrated loudspeaker. In loud environment, there can be used an earphone with a rotund clip (scope of delivery), which can be plugged into the TAG 2550 sideways (vide figure 3). If the signals shall be reflected on a PC (e.g. using an audiorecorder; PC is not included in the scope of delivery), the connection lead (scope of delivery) is to be used (vide figure 4).



Figure 3: Use of the earphone

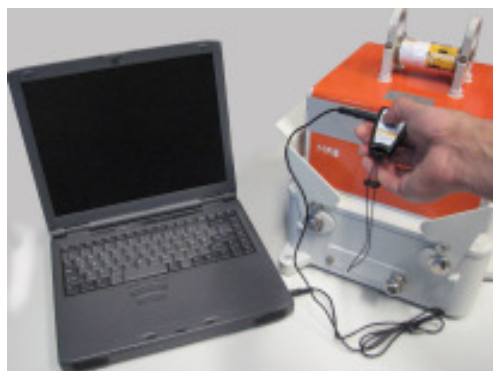


Figure 4. Connection with the PC

5. Maintenance

This item contains instructions for the battery replacement of the TAG 2550 and its cleaning, same as its storage and disposal.

5.1. General

The TAG 2550 battery replacement should be made in a maintenance room under clean conditions, to avoid impurities by dust, dirt or humidity in the interior of the TAG 2550.

Note

Replacement of the TAG 2550 battery is to be done by a qualified technician only.

5.2. Battery replacement

The TAG 2550 works with a button cell Type CR1632 (Novega Order - No.: 350-17609). If the green LED ("Ready") should not glow any more, or the sound of the loudspeaker should degrade, the battery is to be replaced. For this purpose, the screw on the reverse side of the TAG 2550 is to be removed (vide figure 5).

The covering can now be removed by soft pressing of the clip (vide figure 6).



Figure 5: removing the screw on the reverse side of the TAG 2550



Figure 6. Removal of the covering

The electronic unit is extracted by gripping the electronics at the loudspeaker (vide figure 7) and soft tilting. It is to be considered to not touch the circuit board at the braze point, to avoid damages. Please wear gloves to protect the electronic from electrostatic charging. In addition, a grounding wristlet is to be used.

The button cell is to be pushed out of the fitting and removed.



Figure 7. Ectraction of the electronic

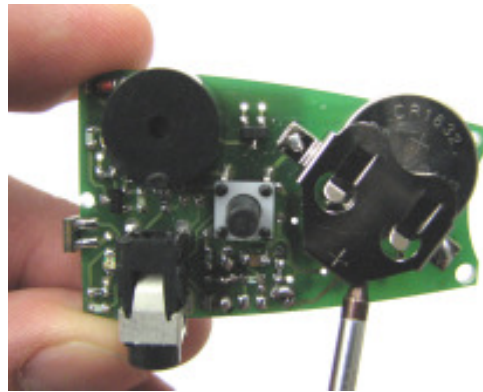


Figure 7. Battery replacement

Caution!

While replacing the battery, attend to the correct polarity!

(+ pole above; vide figure 8)

Shift the button cell into the battery clamp and inlay the circuit board into the box.

IT IS IMPERATIVELY TO BE CONSIDERED, THAT THE CIRCUIT BOARD BEARS ON THE SPIKES.

At closing the TAG 2550, the clip has to lock in place under low pressure.

The housing can now be screwed.

Warning:

AN INAPPROPRIATE INSTALLATION OF THE BATTERY MIGHT CAUSE A DAMAGE OF THE TAG 2550 ELECTRONICS.

5.3. Battery disposal

Dispose the battery in accordance with all local, state and federal regulations.
Keep away from children.

5.4. Cleaning of TAG 2550

Clean the TAG 2550 with a soft, anti- static and dry cloth.

6. Warranty

The warranty period of the TAG 2550 constitutes 2 years from the date of delivery by:

Novega Produktionssysteme GmbH

Gewerbepark 2

87477 Sulzberg (See)

Germany

Fon: (+49) 8376-92990-0

Fax: (+49) 8376-92990-20

E-Mail: service@novega.de

7. Reshipment

7.1. TAG 2550 return - defective

- In case of failure, which is determined to be within the warranty terms, the TAG 2550 will be repaired or replaced by Novega to the customer.

7.2. TAG 2550 return – no defect

- If a TAG 2550 is returned to Novega and it is found to be functional, the beacon will be returned to the customer, shipping collect. In addition, the customer will be informed, that an analysis fee applies.

7.3. Return TAG 2550 – out of warranty

- If the TAG 2550 is returned to Novega out of warranty, the customer will receive an estimate of costs.

7.4. Annual functional test

- The annual functional test is made by Novega. Please ship the TAG 2550 inclusive original packaging and documentation.

7.5. Battery replacement

- The TAG 2550 can be returned to Novega for battery replacement. (e.g. in case of the annual functional test). Please ship the TAG 2550 inclusive packaging and the original documentation.

7.6. Packaging of the return

- Ascertain, that there is provided a proper protection packaging for the Underwater Locating Device, i.e. protection against unintentional breakage, scratches or abrasions.

7.7. Documents to attach

- Reason for return
- Serial number of the TAG 2550
- Return Authorisation Number (vide 7.8.)
- Calibration Certificate

7.8. Return Authorisation Number

Prior to shipping the TAG 2550 to Novega, a Return Authorisation Number should be required at:

Novega Produktionssysteme GmbH

Gewerbepark 2

87477 Sulzberg (See)

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