



## **Instruction manual TAG 2550-C Tester + Analyser and software: PT9 – Report – Creator**

**Manual for initiation and maintenance  
No.: 350-18216-A2e**



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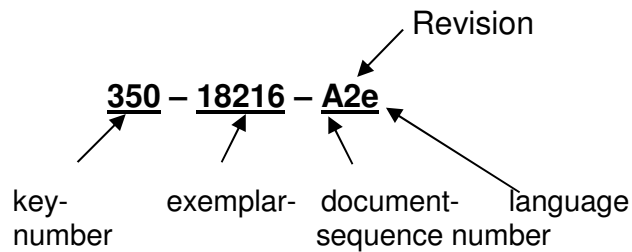
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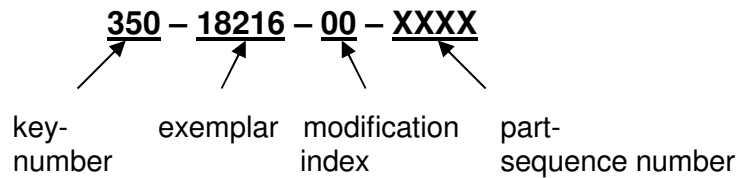
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**THIS MANUAL IS TO BE READ TO ITS FULL EXTENT PRELIMINARY TO ANY INITIATION OR OPERATION, ANY TESTING OR MAINTENANCE OF THE TAG 2550-C.**

**Annotation of the number of this manual:**



**Annotation of the part- and serial number system of TAG 2550-C:**



**Type plate:**



Figure 1: Type plate

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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



Figure 2: Scope of delivery

## 3. Symbols and Abbreviations

PT9	Acoustic Beacon for VDR / S-VDR
ULD	Underwater Locating Device
°C	Grad Celsius
mm	Millimeter
s	Second
kHz	Kilo Hertz
LED	Light emitting Diode
PC	Personal Computer
TAG	Testing and analysing Unit
CD	compact disc

## 4. Description TAG 2550-C

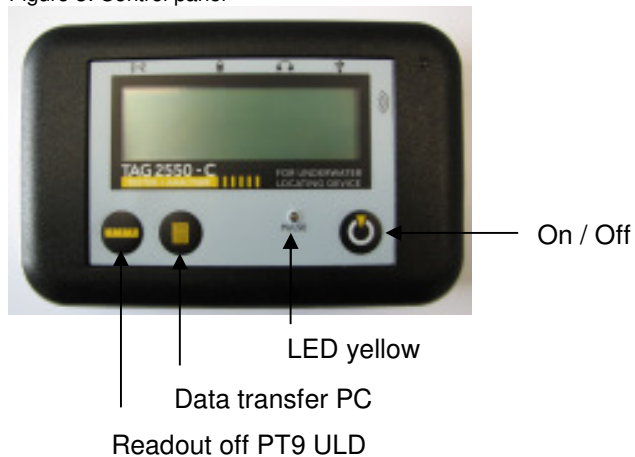
### 4.1. General

The TAG 2550-C is a battery powered receiver for ultrasonic signals with a frequency of 25 to 50 kHz. Protocol files of von PT9 ULD's can be read out and analysed. The TAG receives ultrasonic signals via the integrated microphone. The received signals are played back optically via a yellow LED and acoustically by dint of an integrated loudspeaker, same as by an earphone. Parallel on this, data can be read out from the PT9. For data protection, the readout data can be transmitted to a PC by a connection lead. The TAG 2550-C is a sensible instrument which is to be protected from humidity and crushes!

**Advice:** The TAG 2550-C cuts off automatically 5 minutes after the last operation, but the data of the lastly read out PT9 remain recorded on the TAG 2550-C.

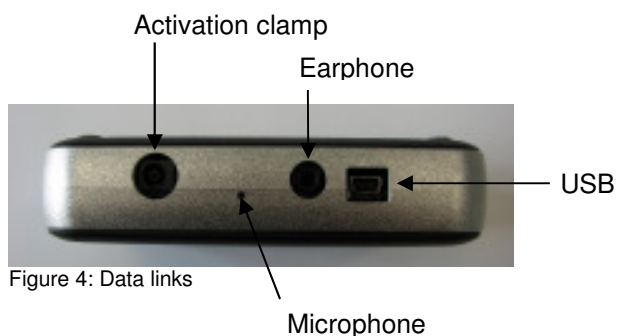
### Control panel:

Figure 3: Control panel



**Advice:** The acoustic signal can be cut off by keeping the data transmission button (4 s) (beep off). On restarting the device or repeatedly keeping the data transmission button this function is reset and the signal is switched on again. (beep on).

### Data links:



## Display:

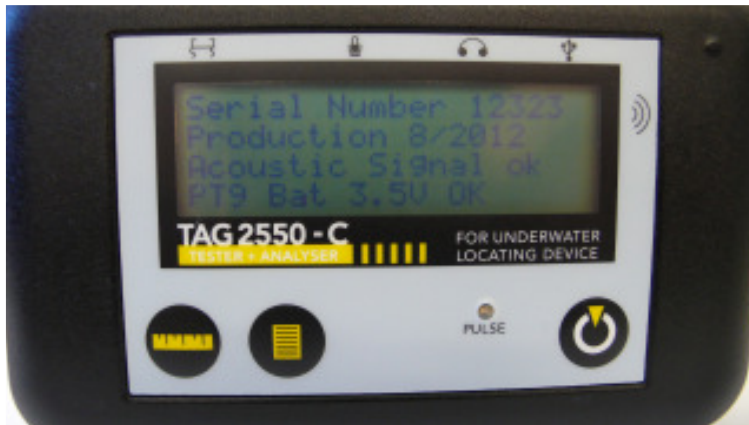


Figure 5: Display 1

**Advice:** The display is updated every 5 sec. The value PT9Bat (voltage average value) is updated with every change. If the power supply of the TAG 2550-C falls below a voltage limit (8V), there is shown a second scale (Low Tester Battery).

Display 1 Figure 5	Description	Unit	Definition	Example
Serial Number	serial number	number	fixed value	12323
Production	date of manufacture the electronics	MM/JJJJ month /year	fixed value	8/2009
Acoustic Signal	receiving an ultrasonic signal (...=no signal; o.k. = signal received)	—	variable	o.k.
PT9 Bat	average voltage (value > 2,5V = ok)	volt	variable	OK 3.2V

## 4.2. Specification of the TAG 2550-C

Receiver frequency	25 kHz to 50 kHz
Power supply	Alkali-Battery 9V block PP3
Operating voltage	9 Volt
Operating temperature range	0 °C to + 40 °C
Size	120mm x 76mm x 28mm (L x B x H)
Weight	180 Gramm



## 5. Test-/ Analyse procedure

### 5.1 Configuration



Figure 7: Configuration

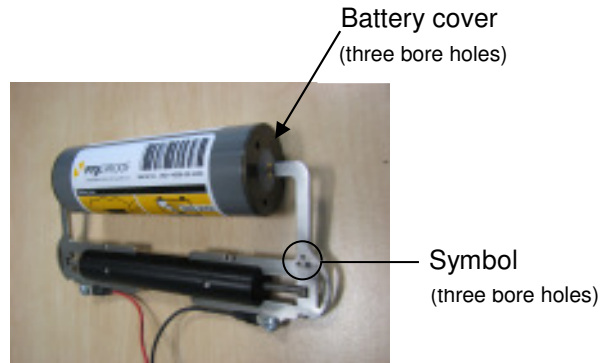




Figure 8: Positioning

Figure 7 shows a possible configuration for the functional test and analysis of a PT9 ULD. Please pay attention to the correct position of the PT9 in the activation clamp. The battery cover is situated on the symbol's side, see figure 8. The two test prods of the activation clamp have to abut at the poles of the PT9.

**Advice:** It is not necessary to connect a PC to the TAG 2550-C during the functional test and the analysis of the PT9. The data of the lastly readout PT9 stay recorded on the TAG 2550-C and can be read off or transmitted to a PC later.

### 5.2 Functional test and readout

- Switch on the TAG 2550-C by using the der On-/Off-button .
- Pressing the button readout PT9  causes the activation of the PT9 for 60 sec. The data of the PT9 are read out and the voltage is measured simultaneously.
- Functional test: Level the microphone of the TAG 2550-C at the PT9 with a distance of ca. 10 cm. The functional test is successful if the TAG 2550-C shows the received signal optically by the yellow LED and acoustically by the integrated loudspeaker or by the earphone.

**Advice:** On wrong position of the PT9 in the activation clamp, the display shows No Data, the PT9 will be activated for 60 sec though. After duration of 60 seconds please insert the PT9 as shown in fig. 8 and restart the procedure.

## 5.3 Installation of Data transmission from the TAG 2550-C

- Step 1: Install the software "PT9 Report Creator" from the attached CD.
- Step 2: Connect the TAG 2550-C by dint of the connecting cable to the PC. Turn on the TAG 2550-C.
- Step 3: Start the program „PT9 Report Creator“.
- Step 4: Select the USB-Port in the program window „PT9 Report Creator“and then press the button „connect“ (e.g. COM7).

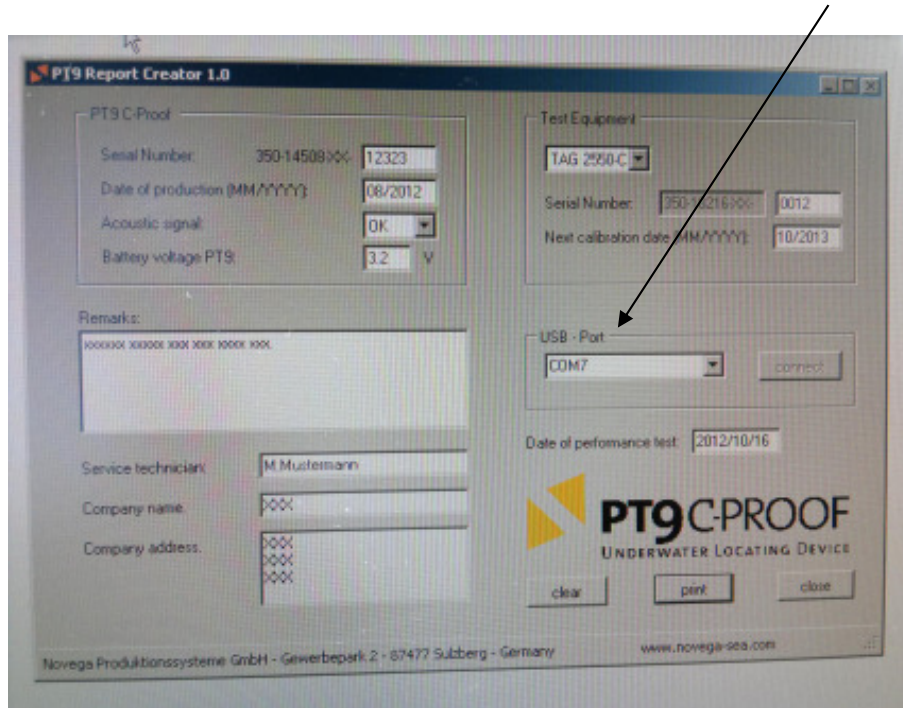



Figure 9: Description of the compound

**Advice:** The serial number is programmed only from the production date 01/2013, for all other devices displayed a "0". The serial number must be added in the program window.

## 5.4 Data transfer

The data, stored on the TAG 2550-C  are transmitted to the PC by pressing the button Data transmission PC.

**Advice:** If the TAG 2550-C cuts out, the connection is to be cut and restarted.



## 5.5 Software „PT9 Report Creator“

Press the button „print“ (see figure 9) and the report can be printed. All fields of the „PT9 Report Creator“ can be edited. In addition, under "Remarks" notes can be added to the tested ULD.

The image shows a printed test report form for the PT9 C-PROOF underwater locating device. The form is divided into several sections by horizontal lines. The top left features the logo for PT9 C-PROOF, which includes a stylized triangle and the text 'PT9 C-PROOF UNDERWATER LOCATING DEVICE'. The top right is titled 'Test Report'. The first section, 'Test equipment:', lists 'TAG 2550-C', 'Serial Number: 350-18216-XX-0012', and 'Next calibration date: (MM.JJ) 10/2013'. The second section, 'Read out data from PT9 C-Proof:', lists 'Serial Number: 350-14508-XX-12323', 'Date of production: 08/2012', 'Acoustic signal: OK', and 'Battery voltage PT9: 3.2 V'. The 'Remarks:' section contains the placeholder text 'xxxxxx xxxxx xxx xxx xxx xxx'. The 'Address:' section lists 'Service technician: M.Mustermann', 'Company name: XXX', 'Company address: XXX', 'Date of performance test: 2012/10/16', and a line for 'Signature service technician'.

<b>PT9 C-PROOF</b> UNDERWATER LOCATING DEVICE	<b>Test Report</b>
<b>Test equipment:</b>	TAG 2550-C
Serial Number:	350-18216-XX-0012
Next calibration date: (MM.JJ)	10/2013
<hr/>	
<b>Read out data from PT9 C-Proof:</b>	
Serial Number:	350-14508-XX-12323
Date of production:	08/2012
Acoustic signal:	OK
Battery voltage PT9:	3.2 V
<hr/>	
<b>Remarks:</b>	
	xxxxxx xxxxx xxx xxx xxx xxx
<hr/>	
<b>Address:</b>	
Service technician:	M.Mustermann
Company name:	XXX
Company address:	XXX XXX XXX
Date of performance test:	2012/10/16
<hr/>	
	Signature service technician

Figure 10: protocol

## 6. Maintenance

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

### 6.1. General

The TAG 2550-C 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-C.

### 6.2. Battery replacement



Figure 17: Battery replacement

For battery replacement, remove the screw and open the battery cover. Remove the used battery and insert a new one.

### **Caution!**

**While replacing the battery, attend to the correct polarity!**

At closing the TAG 2550-C, 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-C ELECTRONICS.

### 6.3. Battery disposal

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

### 6.4. Cleaning of TAG 2550-C

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

## 7. Warranty

The warranty period of the TAG 2550-C constitutes 2 years from the date of delivery by.

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## 8. Reshipment

### 8.1. TAG 2550-C return - defective

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

### 8.2. TAG 2550-C return -no defect

- If a TAG 2550-C 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.

### 8.3. Return TAG2550-C out of warranty

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

### 8.4. Annual functional test

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

### 8.5. Battery replacment

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

## **8.6. 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.

## **8.7. Documents to attach**

- Reason for return
- Serial number of the TAG 2550-C
- Return Authorisation Number (vide 8.8.)
- Calibration Certificate

## **8.8. Return Authorisation Number**

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

### **Novega Produktionssysteme GmbH**

Gewerbepark 2

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### **Germany**

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