

Nimrof

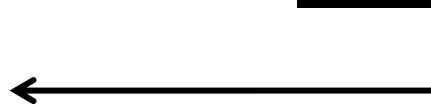


Technical User's Guide

Warnings and Safety Terms

- Check the connections before operating the device.
- Make sure the device is turned off after using the device.
- Before putting the device in its bag, check whether it is turned on or not.

Nimrof – XXXX



AT550 – Dirty water pipe, Clean Water pipe and Gas Leakages
AT560 – Dirty water pipe, Clean Water Leakages

Contents

Security Terms	1
Contents	2
1 introduction	3
1.1 General Description.....	3
1.2 Application.....	3
2 Technical Specifications	3
3 Content Delivery	4
4 Device Functions	4
4.1 AB Sensor Setup.....	5
4.2 Listening Sensor Setup.....	6
4.3 Gas Sensor.....	6
4.4 Functions on the Device	7
4.4.1 Function of AT550.....	7
4.4.2 Function of AT560.....	8
5 Measurement Menu	9
5.1 AB sensor.....	9
5.2 Listening Sensor.....	9
5.3 Gas Sensor.....	10
6 Garanti Koşulları	10
7 İletişim Bilgileri	10

1 – Introduction

1.1 General Description

AT550 and AT560 make point determination of dirty and clean water leaks in water pipe lines the device has two separate sensors, one is acoustic listening which helps to find clean water pipe network leaks. The other one is system that is not required headphone and obliged of connection to test pumps and the leak can be detected on a LCD screen.

1.2 Application

- Pipe Lines Leak
- Wastewater pipeline leaks
- Isolation Leaks
- Gas Leaks (for AT550)

2 – Technical Specifications

The technical specifications of the AT550 and AT560 devices are listed in figure

Nominal Ratings	AT550	AT560
Operating Voltage (DC)	14V(Li-ion Battery)	12V(Li-ion Battery)
Display	Numerical LCD	128x64 Graphic LCD
Resolution	16 bit	12 bit
Operating time	10 hours	10 hours
Operating temperature	10°C ...+50°C	10°C ...+50°C
Storage temperature	-25°C ...+70°C	-25°C ...+70°C
Weight	560 g	430 g
Device Dimensions	188 x 133 x 55 mm	105 x 201 x 41 mm
Warranty	2 years	2 years

Tablo 2.1: Specifications of the AT550 and AT560

3 – Content Delivery

- Device
- Headphone
- Gas sensor(it is valid for AT550 model)
- Listening sensor
- AB Sensors(A ve B Elektrotları)
- Extension Metal for A sensor
- 25 and 3 meters cable
- Listening sensor cable
- Adapter

4 – Device Function

Nimrof AT550 and AT560 devices detect dirty water and clean water leaks in water lines as a point. There are two separate sensors for water leaks, one of which is an acoustic listening sensor that will only help you find clean water leaks. The other is the AB sensor, which we call “non-listening”, which you can monitor both dirty water leaks and clean water leaks without wearing headphones, without connecting a test pump to the water leak line, via LCD. Natural gas leaks can also be found with the natural gas sensor, which is only in the AT550 model..

- With metal electrode sensors, it can find both dirty and clean water leaks.
- Detects earth ground water leaks.
- Shows acoustic listening in graphic form.
- Ability to use acoustic listening sensor and metal electrode sensor together.
- Ability to use more than 10 water leaks with a ones charge.
- No need for channel imaging or thermal camera thanks to electrode sensors.

4.1 AB sensor Setup

Images of A and B sensors in the figure



Sensor A : The sensor cable that will stay in the downstairs apartment or in the area where the water leak is located is 25 meters. Below is the threaded round metal piece to be connected to the A sensor This part should be touched to the leaking area.



Sensor B : It is the sensor that should be in the upstairs apartment or next to the user. It is touched to the suspected places and the values are observed on the screen.

Note: The ends of the cables are colored and must be connected to the 25-meter red sensor A. The end of the 3 meter cable is black and must be connected to the B sensor. The free ends of the cables should be connected to the A and B inputs of the device in color.

4.2 Listening Sensor Setup

Listening Sensor consists of three parts. Cylinder metal part, Short rod and Sensor



Note : The cylindrical metal piece attached to the end of the sensor is used in both A sensor and the listening sensor.

4.3 Gas Sensor Installation

The gas sensor consists of one piece. Applicable for At550 model only





Note: The cable used is the same as the listening sensor.

4.4 Functions on the Device

4.4.1 Function of AT550







Water Signal A	A sensor input
Water Signal B	B sensor input
Sensor	Gas and Listening Sensor input
Ear	Headphone jack
Volume	Volume Up and Down for listening sensor
Menu	It is the menu entry button and the confirmation key.
	Gas Shortcut key and up key in the menu
	AB sensor Shortcut key and down key in the menu

Nimrof Series Water Leak Detection Devices

4.4.2 Function of AT560




A	A sensor input
B	B sensor input
Sensor	Listening Sensor input
Ear	Headphone jack
Volume	Volume Up and Down for listening sensor
	It is the menu entry button and the confirmation key.
	Back button or cancel button
	The left button
	The right button also it is mute button in listening menu

5 – Measurement Menu

5.1 AB Sensor




- Activated from the menu button.
- Connections are made as described in 4.1
- The red electrode A is touched to the leaked area and fixed there (25 meters).
- The black B electrode is touched by the user to the suspected places in the upstairs apartment.
- The numbers on the LCD are observed, the highest values are noted.
- Then the A electrode is removed from the downstairs apartment to the upstairs apartment. This time, tap and water expenses are touched and compared with the values taken from the lower flat.
- The numbers appearing on the LCD screen are observed, the highest value is the area with the leak.
- The AT550 has a Shortcut button for this feature. 

Note:

- This feature can be used for both dirty drain water leaks and clean water leaks.
- You can also use the listening sensor while taking AB measurements
- The values you get from the wall indicate that there is a leak in the wall.
- Garden water leaks are used in the same way as in the apartment.

5.2 Listening Sensor




- Set the volume to the lowest level
- Turn on the device
- Activate the listening sensor from the menü
- Install the listening sensor as described in 4.2
- Plug in the headset
- Connect the listening sensor to the device
- In the Listening sensor menu, this button is the mute button. 

Note: You can also observe numerically and graphically on the LCD screen. but be sure of the water leakage by ear. Do not trust the values on the screen.

5.2 Gas Leaks



This feature is only valid for the AT550 product.

- Install the sensor as described in 4.3.
- Connect the cable to the sensor and the device.
- Shortcut key on homepage 

Note: Wait for the sensor to calibrate itself at each start.

6 – Terms and Conditions

Nimrof are warranted for 2 (two) year starting from the delivery date of the product. The consumables (cables, USB memory or CD .) supplied with the device are not covered by the warranty. All of the goods, including all parts (against defects that may occur due to production and assembly errors and/or defective parts), are within the scope of our company's warranty. In the event that the product fails during the warranty period, due to material and workmanship or assembly errors, it will be repaired without any charge under any other name, such as labor cost, replacement part cost or any other name. The repair undertaken with this guarantee will be made by authorized services of Birrenk Bilgisayar Sistemleri LTD

The Nimrof electronic products are out of warranty in case of user error, uses not in accordance with recommended practice presented in this datasheet, internal circuits are tampered with and/or the cover is removed. Probes, cables CD or USB sticks are out of warranty. In case of malfunction of the device, please send it to Birrenk Bilgisayar Elektronik Ltd Şti or authorized distributor.

7 – Contact

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