

Introduction

TYM-3A AI intelligent leak detector is a high-precision indoor pressure pipe leakage detection instrument. It is suitable for water leakage detection and leak point location of indoor tap water, floor heating and other pressure pipes. The instrument detects the sound and vibration frequency signals of the leakage area. The collection and analysis, AI intelligent algorithm that filters and amplifies effective signals can accurately locate the leakage point and solve the problem of leakage detection of indoor pressure pipes.



Host



Bag



Triangle sensor



Square sensor



headphones



Probe



Host strap



Headphone cable



5V, Type-c charger

Description



- ① **Power button** (press and hold for about 3 seconds to turn on or off)
- ② **Reset button** (host reset)
- ③ **Micro_USB interface** (charging and data transmission)
- ④ **Headphone jack** (for connecting noise-proof headphones)
- ⑤ **Strap buckle** (connected to the host strap)
- ⑥ **Five-core plastic aviation plug** (used to connect the Sensor)
- ⑦ **Indicator light** (power on indicator light and charging indicator light)
- ⑧ **SD card slot** (system upgrade, file storage)
- ⑨ **Rotary encoder** (left to adjust gain, right to adjust volume)
- ⑩ **USB interface** (extension interface)

Parameter

Model	TYM-3A
Application	Indoor pressure pipeline
Function	AI smart analyze
Sensor	Triangle sensor, Square sensor
Operate mode	General, Locating
Frequency Range	100Hz-8000Hz
Signal-to-noise ratio	60dB
Sensitivity	-29dB, 70mv/g
Display	7 inch display
Resolution	800*480
Gain	10 levels adjustable
Volume	10 levels adjustable
Working temperature	-20°C~+50°C
Charging time	8h
Standby time	15h
Power	≈8W
Charger	5 V 2A USB charger
Weight(host,sensor)	Host:0.7Kg, Triangle sensor:0.35Kg, Square sensor:0.5Kg
Size(host,sensor)	Host:214mmX146mmX48mm Triangle sensor:72.95mmX68mmX60.2mm Square sensor:59mmX55mmX29.6mm

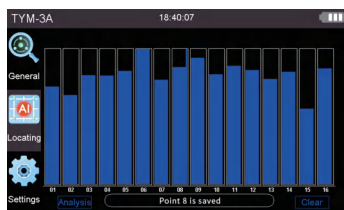
Operation (Under Night mode as an example)

1. Install the host strap, connect the corresponding probes, and the aviation sockets correspond one to one.
2. Press and hold the “On/Off” button to turn the host and enter the boot interface.



(Figure 1)

3. Enter the main interface and select mode. (Enter General mode by default)



(Figure 2)

Graphical display switching (default signal bar display)

(The detected water leakage signal jumps due to changes)

18:32:46 time show sensor have connect

100 8000

Frequency adjustment (the frequency range is adjustable from 100Hz to 8000Hz, which can effectively shield the interference from external noise and achieve crisp and high-fidelity sound quality)

Alsmart AI smart switch, the host can analyze abnormal point signals in real time, and read abnormal values through the AI judgment algorithm to provide more accurate intelligent judgment.

Sound Data display (The detected water leakage signal fluctuates due to changes big or small)

Effective volume: effective suspected water leakage signal collection.

Maximum volume: signal changes related to the environment

4. Locating mode

(1) The Locating interface can display signal columns at 16 points at the same time. By clicking anywhere in the column bar of the corresponding point, the signal column can be locked and refreshed.

(2) There are 16 signal columns from left to right, and the detection needs to start from 01;

(3) The signal column is divided into thick columnar bars and thin columnar bars. Thick columnar bars are stable and effective signals collected, and thin columnar bars are instantaneous environmental signals that will change with the external environment. We mainly observe thick columnar bar signals;

(4) Click anywhere in the column bar frame of the corresponding point, a blue column bar will appear, and a red data will be displayed. The column bar and the data will start to change according to the actual signal.

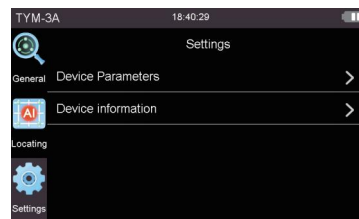
(5) After the thick columnar signal bar is completely stable without falling back, click anywhere in the columnar bar frame, and the blue columnar bar will be locked and still. The thin columnar bar no longer changes, indicating the locked state, indicating that the measuring point has been detected. Click any position within the columnar bar frame again to refresh the columnar bar and re-detect it. The operation can be repeated to confirm whether the point signal is true and valid;

(6) The Locating mode collects and compares signals at relevant points in the suspected water leakage area. Each detection point can be directly compared with the signal column. Starting from 01, the signal strength of each point is detected and compared sequentially. When the signal column of the measured point is the highest, the data Maximum, it can be judged as a suspected leak point.

Analysis button (After the detection is completed, click Analyze to analyze and determine abnormal points by comparing the signal columns)

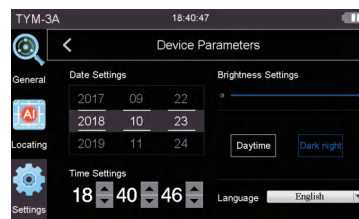
Clear button (Clear all signal columns)

5. Click the Settings to enter the settings interface



(Figure 3)

Machine Parameters



(Figure 4)

- 1 **Brightness adjustment** (adjust the brightness of the host screen and set it according to your needs)
- 2 **Language selection** (select the host language, can be customized)
- 3 **Time setting** (time display)
- 4 **Date setting** (date display)
- 5 **Daytime** (can be used during daytime operation)
- 6 **Night** (can be used during nighttime operation)

6. Machine Information (view host-related operating information)



(Figure 5)

OH TYMWT™



TYM-3A Indoor AI Smart Water Leak Detector Manual

Hunan Puqi New Energy Institute Co.Ltd

Web: www.tymdetector.com

Add: Puqi building, No. 769 Qingzhu Road, Qingzhu Street, Kaifu District, Changsha, Hunan, China 410000

Our company has the right to upgrade and improve the product in the future and no need written explanation, the actual product shall prevail and the final right of interpretation belongs to us.