

## Introduction

TYM-A series water leak detector is a new generation of intelligent leak detector specially designed for leakage of indoor pressure pipes. This series of instruments is suitable for leak detection of indoor tap water and floor heating pipes. It has sound and signal acquisition and analysis capabilities, and can quickly and accurately locate leaks. Equipped with a clear display screen and simple operation interface, it is convenient for users to understand the test results intuitively. Different detection modes and parameters can be set according to actual needs to adapt to various complex pipeline environments.

## Working principle

TYM-A series indoor water leak detector is mainly used for indoor ground detection. The sensor collects pipe sounds and signals, the collected signals are processed by the host and displayed on the host machine in the form of waveform, spectrum, and intensity signal column. At the same time, the sound will be input to the earphones through the host, and the three knobs of sensitivity knob, sound knob and filter gear will be adjusted to cooperate with each other, and the leakage point will be located through "listening" and "seeing".

## Components TYM-1A



## Components TYM-2A



## Description



- ① **[ON/OFF]** button: Turn on/off the host.
- ② **[Mode]** button: Switch the display mode. Click once to switch the interface, and you can switch between the intensity, spectrum, and waveform interfaces.
- ③ **[Denoise]** button: The instrument turns on the noise reduction function by default. Press the button to turn off the noise reduction function.

- ④ **[Headphone]** interface: used to connect headphones.
- ⑤ **[Sensitivity]** Adjustment knob: Adjust the sensitivity of the display area. The higher the sensitivity, the larger the displayed value. Clockwise sensitivity +, counterclockwise sensitivity -.
- ⑥ **[Volume]** Adjustment knob: Adjust the listening volume. Clockwise volume +, counterclockwise volume -.
- ⑦ **[Filtering]** adjustment knob: 4-level filter adjustment, the gear increases clockwise, and the environmental noise reduction effect is enhanced. Counterclockwise the gear decreases and the environmental noise reduction effect is weakened.
- ⑧ **[Charging port]** used for charging the host.
- ⑨ **[Aviation socket]** Connect the probe, and the navigation sockets must correspond one to one.
- ⑩ **[Strap buckle]** Connect the strap.

## Parameters

Model	TYM-1A	TYM-2A
Sensor	Horizontal sensor	Vertical sensor
Application	Household tap water and floor heating pipes	
Frequency Range	300Hz-3000Hz	
Sensitivity	Knob adjustment	
Volume	Knob adjustment	
Filtering	4 levels of filtering (300Hz-3000Hz, 300Hz-2000Hz, 300Hz-1000Hz, 300Hz-800Hz)	
Working temperature	-20°C ~ +50°C	
Charging time	5h	
Standby time	16h	
Power	≈ 1W	
Charger	8.4V charger	
Weight (host)	0.35Kg	
Weight (total)	2.2Kg	
Host size	155mm*110mm*40mm	
Packing size	360mm*240mm*270mm	

## Operation ▶▶

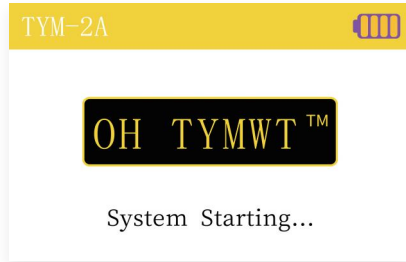
The instrument is only suitable for indoor water leakage detection.

Connect the strap to the host.

Connect the aviation plug of the sensor connection line to the host, insert the aviation jacks one by one.

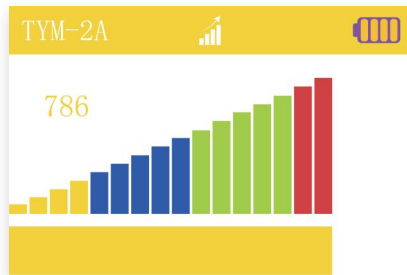
Connect the headphone and host with headphone cable.

Press and hold the "On/Off" button to turn on the host and enter the boot interface, as shown in Figure 1



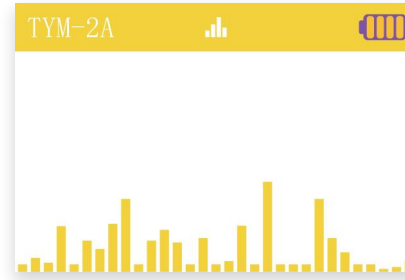
(Figure 1)

Figure 2 shows the intensity interface, which displays the collected signal size through the signal column. Compare each point by listening to the sound in the earphones and looking at the changes in the interface data and the signal column. When the value and the signal column remain high and the sound signal intensity is heard through the earphone at the same time, it can be judged that the location is suspected of leaking point.



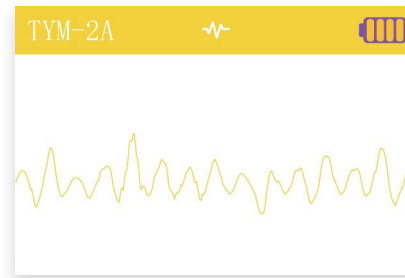
(Figure 2)

Figure 3 shows the spectrum interface, which can display the signal spectrum. The signal spectrum interface displays the signal frequency domain value. Compare each point by listening to the sound in the earphones and watching the fluctuation of the signal bar on this interface. When the signal bar remains high and the sound signal intensity is heard through the earphones at the same time, you can It was determined that this location was a suspected leak point.



(Figure 3)

Figure 4 shows the waveform interface, which can display the original waveform of the collected signal. The numerical fluctuation amplitude of this interface directly displays the signal data collected at this time. Compare each point by listening to the sound in the earphones and looking at the waveform of this interface. When the amplitude of the waveform is larger, the sound signal intensity heard through the earphones is the highest, so it can be judged that this location is a suspected leak point



(Figure 4)

This instrument is mainly about "listening" and "seeing" as a supplement. We provide three interfaces for signal strength, spectrum and waveform for you to choose. All three interfaces can be used to observe the signal data of the measurement point. Determine the location of the leak point based on the interface display and earphone listening.

### Precautions

- (1) There is a ceramic piece inside the sensor, please handle it with care.
- (2) The whole machine is not waterproof. Please do not immerse the instrument in water or use it during thunderstorms.
- (3) When the device is not in use, please place it in a cool and dry place and ensure that it is charged at least once a month.
- (4) After the device has been left for a long time, it must be fully charged before it can be used.
- (5) It is strictly prohibited to use in flammable and explosive environments.

OH TYMWT™



# TYM-A Series Indoor Water Leak Detector Manual

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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.