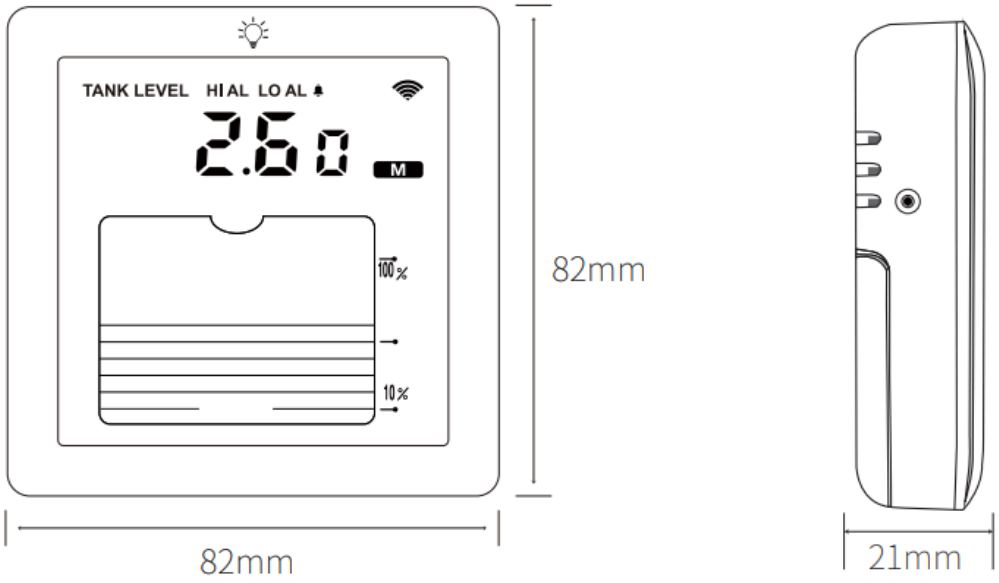
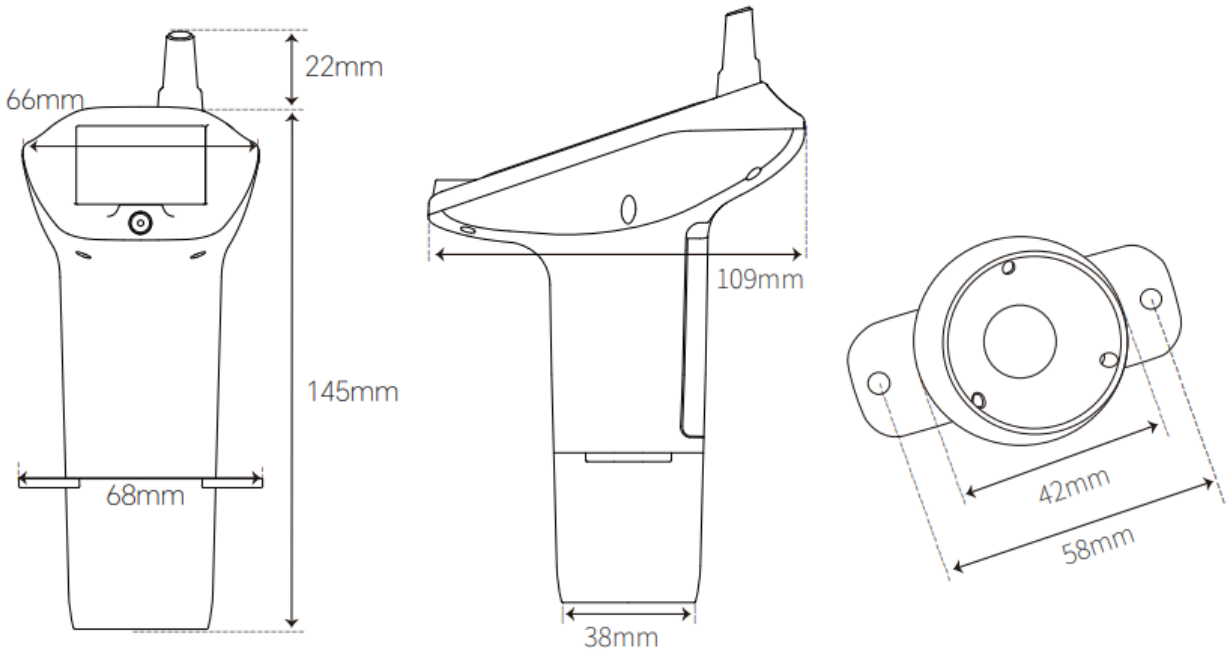
TS-FT007 Ultrasonic Water-Level Monitor with Low Water Alarm



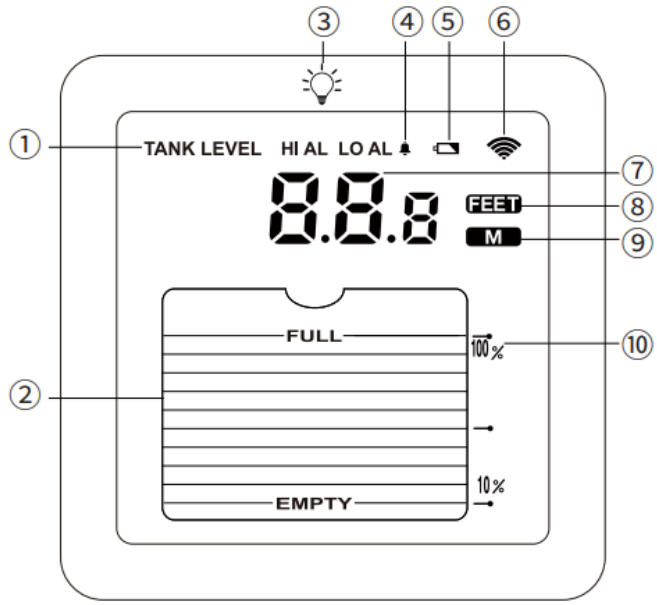
Receiver size



Transmitter size



Full display image



1. Water level of tank
2. Water level display with LCD bar
3. Touch-type backlight switch
4. Alarm for highest and lowest water level
5. Low battery reminder for the transmitter
6. Signal receiving icon
7. Water level display value
8. Unit: Feet
9. Unit: Meter
10. Water level percentage

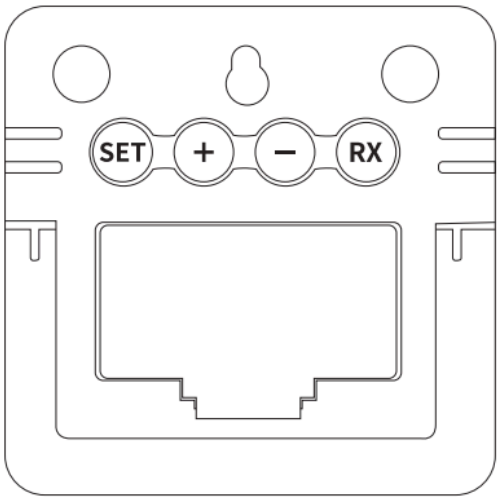
Product Specification

Receiver:
The depth display range of the water tank is 0-4.75 meters
Powered by a USB-to-DC power cord
2*AAA battery-powered (battery not included in the shipment)

Transmitter:
Water level resolution ratio: 0.01m
Accuracy: ±0.05m
The maximum measurement distance for water tank is 5 meters
6*AAA battery-powered (battery not included in the shipment)

Note: The transmitter and the receiver are wirelessly transmitted via 433MHz.
Transmission distance: 100Meters (open distance).

Button Indication



SET Setup button

\+ Increase button/Switch depth unit (feet)

− Decrease button/Switch depth unit (metres)

RX Signal button

Main functions

- Backlight
- Tank water level display: metres/feet (power-on default: meters)
- Water level depth on 10- element LCD bar display "▬▬"
- Transmitter low battery reminder "▭"
- Signal indication icon "📶"
- Highest water level icon "FULL"
- Lowest water level icon "EMPTY"
- Max./min. water level alarms

Power supply

When installing the batteries, please pay attention to the positive and negative polarity of the batteries. If the batteries are installed with the wrong polarity, it may cause permanent damage to the product. Faulty or poor performing batteries can affect data transmission.

Receiver: 2*AAA batteries/USB to DC power cable (as shown in fig. ①).
Note: Batteries are only for backup power, when the backlight of the receiver becomes dark or flash, please replace the batteries in time, DC charging is the main supply.

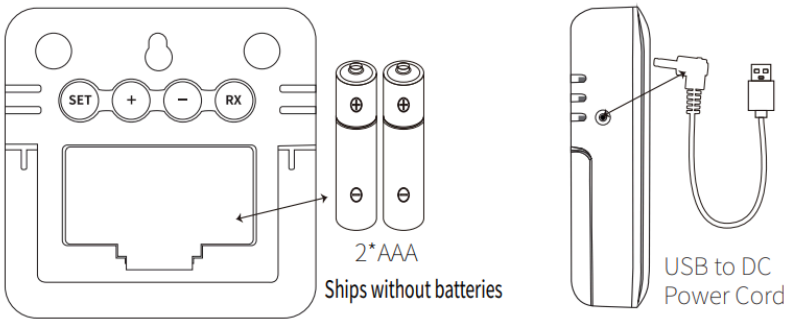


Fig.①

Transmitter: 6*AAA batteries, **shipped without batteries**.(As shown in fig. ②)

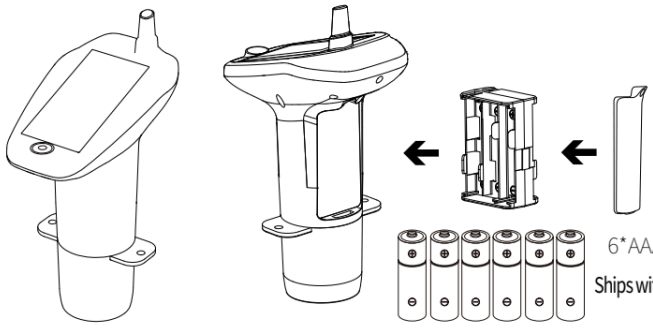


Fig.②

Installation instruction

Transmission distance between the two:

100m (open distance).(As shown in fig. ③)

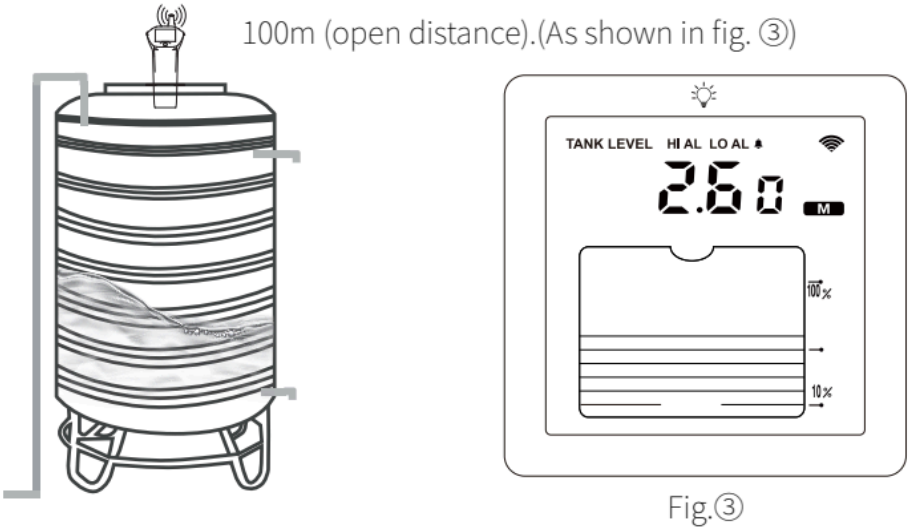
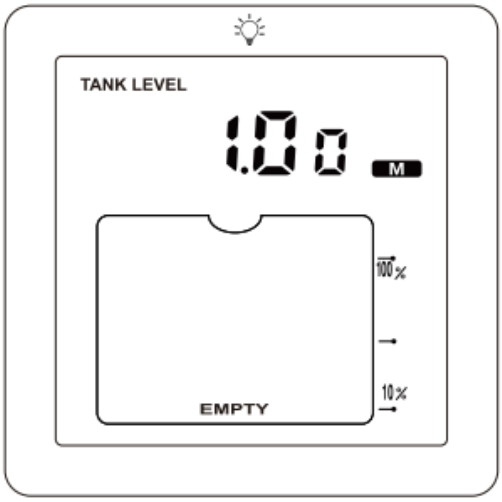


Fig.③

Power-on Defaults



Depth unit: TANK LEVEL M (meter): 1.00
Air gap value (meter): 0.25
Highest water level alarm: 0.8 (80% of max. water depth)
Minimum water level alarm: 0.2 (20% of max. water level depth)
Button tone: ON (button tone on)

Receiver setup Procedure

1. Firstly, power on the receiver, the screen will be fully displayed for 3 seconds with a “BI” sound, and the display will show “1.00” and the empty tank will be flashing (as shown in fig.④).
   The default depth for power-on is: 1.00 meter.

2. Enter the tank depth setting mode, depth range 0.25~5m/0.8ft~16.4ft. When setting, short press the“＋” button, plus one, long press “＋” button, keep increasing, short press “－” button, minus one, long press “－”button, keep decreasing.

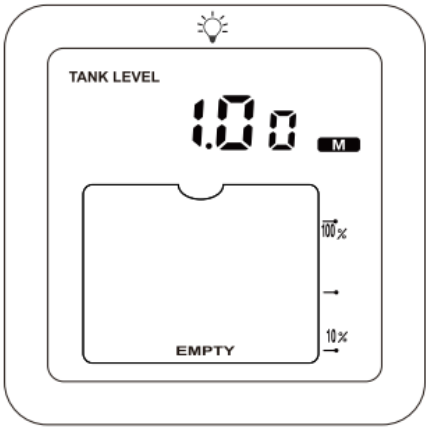
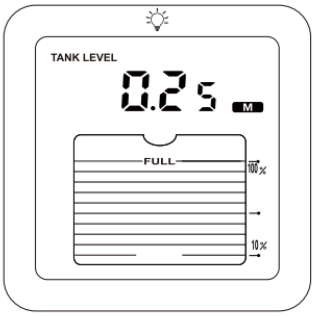


Fig.④

3. Then press “SET” button to set the air gap value, the default display “0.25” (as shown in fig. ⑤), the setting range is 0.25~5m/0.8ft~16.4ft.

When setting, short press the“＋” button, plus one, long press “＋” button, keep increasing, short press “－”button, minus one, long press “－” button, keep decreasing.



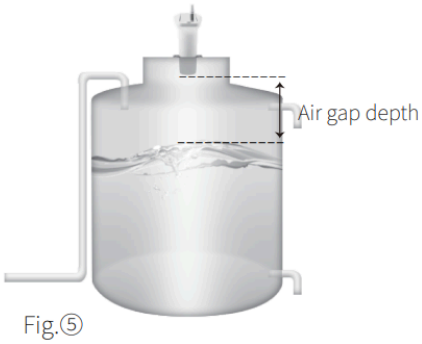
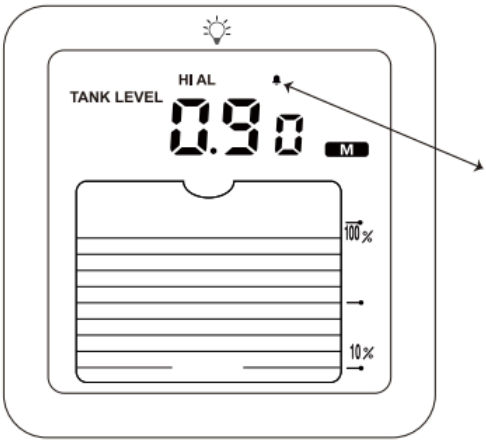


Fig.⑤

Note: The air gap value is the distance from the sensor at the bottom of the transmitter to the highest water surface of the tank, minimum 0.25m.

4. Press “SET” button again to set the highest water level alarm value (HI AL), setting range: 60%~100%.(As shown in fig.⑥)
5. Short press “RX” button to switch on or off the highest water level alarm (as shown in Fig⑦).



HI AL(max. water level alarm value setting)

Fig.⑥



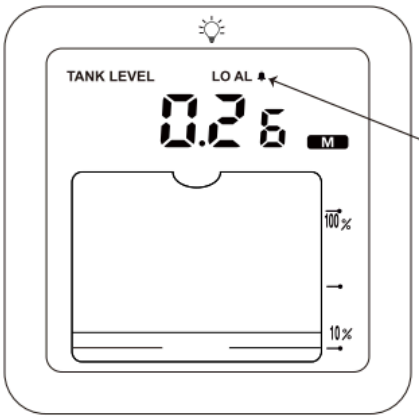
Displaying “ 🔔 ” is turning on the alarm

No display “ 🔔 ” is turning off the alarm

Fig.⑦

6. Then press the “SET” button, set the lowest water level alarm value (LO AL), set the range: 10% ~ 40%.(As shown in fig. ⑧). Alarm value setting, short press “＋” or “－” button to adjust the percentage of the alarm depth.
7. Short press “RX” button, open or close the lowest water level alarm (as shown in fig.⑨).

Turn on the high and low water level alarm, alarm sound default for 2 minutes, press any button (except the backlight button) to stop the alarm, no operation for 2 minutes the alarm automatically stops, “ ” icon continues to keep flashing, if not in the alarm range the icon is displayed normally.



LO AL (minimum water level alarm value setting)

Fig.⑧



Displaying “ ” is turning on the alarm

No display “ ” is turning off the alarm

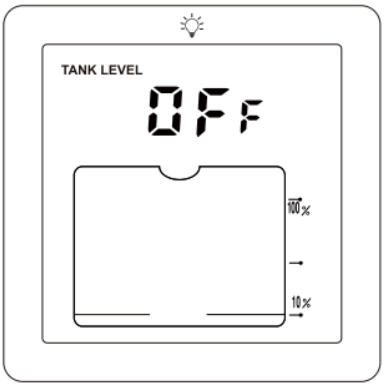
Fig.⑨

Note: (Maximum water level alarm value display 0.80 = maximum water level * 80%) for the highest water level alarm value; (Minimum water level alarm value display 0.20 = maximum water level * 20%) for the lowest water level alarm value.

8. Press the “SET” button again to set the button sound (as shown in fig.⑩), and press the “＋” or “－” button to select ON/OFF.

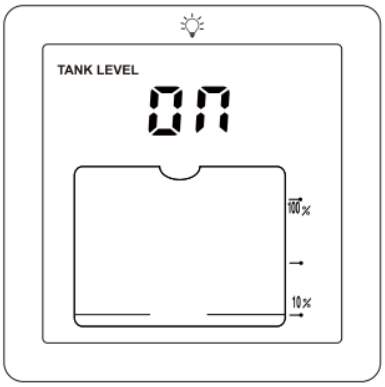
Note: Only for button sound, high and low water level alarm is not affected.

9. After the receiver has been set up in the above steps, then power on the transmitter. After the transmitter is powered on, the transmitter will send the first signal, and subsequent signals are sent for 30 seconds or 180 seconds each.



Turn off button tone

Fig.⑩



Turn on button tone

Fig.⑪

After receiving the data, “EEr” is displayed (as shown in fig.⑫), please check whether there is any error in the setting of tank depth and air gap value, and reset them. After setting, long press the “RX” button for 3 seconds, and the buzzer will sound “DI”, then the signal can be received again.

Received data displaying “EEr” may also indicate that the water level value is not within the set value, so please recheck the tank depth and set it again.

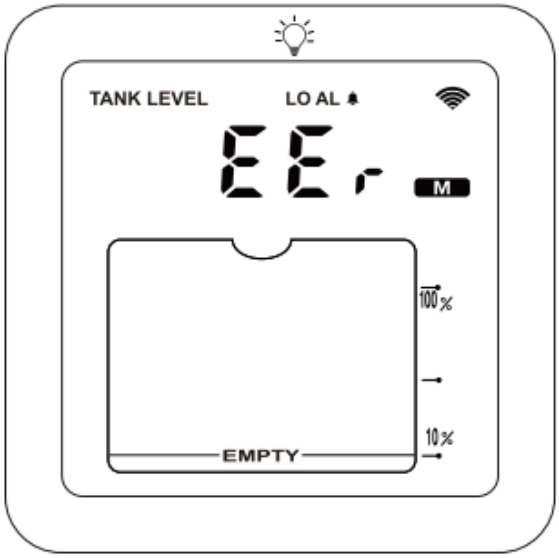


Fig.⑫

Receiver installation instruction

1. Transmitter installation

1. Antenna
2. Level
3. Mounting screws
4. Sensor
5. Water tank

NO	R(m)	H1(m)
1	⩾0.15	⩽1
2	⩾0.3	⩽2
3	⩾0.5	⩽3
4	⩾0.65	⩽4
5	⩾0.8	⩽5

Fig.⑬

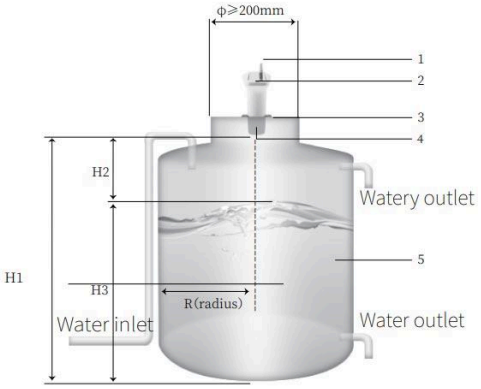


Fig.⑭

H3:Maximum depth that the transmitter can measure
R:Radius of the tank
Note: The radius R of the tank will affect the depth measurement. For R and H1, refer to fig. ⑬⑭.

2. Be aware of the following when install

1. The distance H2 between the bottom of the transmitter and the highest water surface must be 0.25m (0.8ft) or more.
2. The maximum vessel depth H1 that the device can measure is 5m (16.4ft).
3. Observe the level on the transmitter to ensure that it is mounted in a horizontal position with the bubble centered (as shown in fig. ⑮).

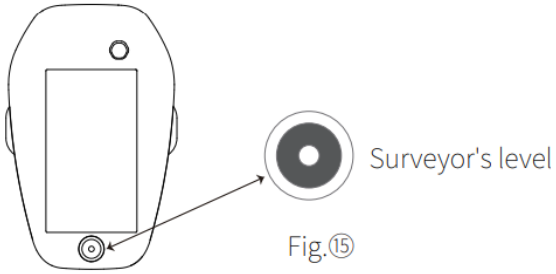
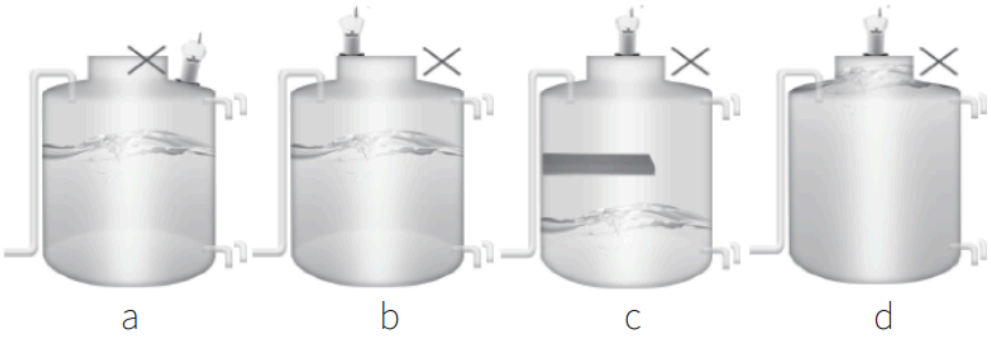


Fig.⑮

3. Examples of incorrect installations



a. The transmitter is not mounted in a horizontal position.
b. The transmitter is too close to the tank wall.
c. There are solid objects in the water tank.
d. The bottom of the transmitter is dipped in water (or other liquid in the tank).

NOTE: Under normal conditions of use, the transmitter will provide effective protection against rain spray from any direction.

Backlight Setting

When the receiver is battery-powered, short press any key, the backlight will turn on for 8 seconds, and turn off automatically without operation (as shown in fig. ⑯).

Note: The backlight is always on when the power cord is powered.

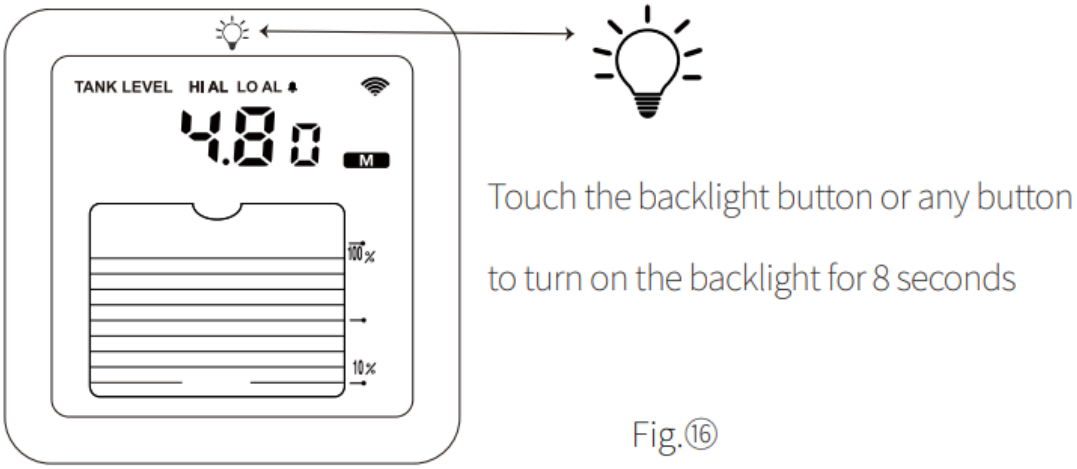
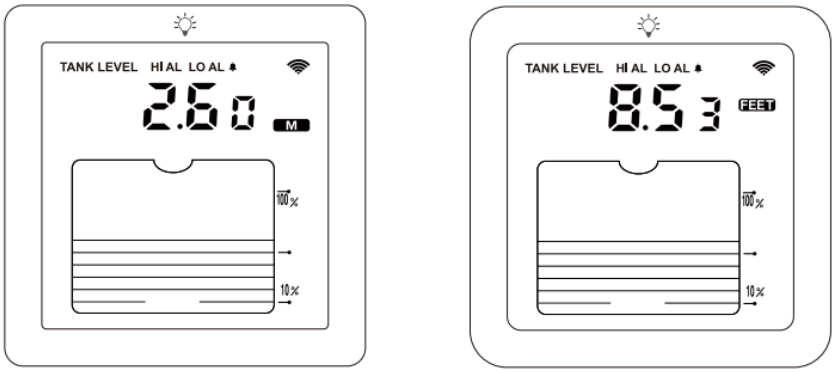


Fig.⑯

Unit switching setting

In normal mode, long press “＋” button to switch feet [FEET], long press “－” button to switch meters [M] as the unit of tank level. (As shown in Fig.⑰).



Unit: meters Unit: feet

Fig.⑰

How to re-receive signal

When the current transmitter signal is lost, the “ ” icon disappears, the receiver water level records the last measured value, and 7 minutes long reception is automatically turned on after every 2 hours.
When there is no signal, you can also long press the receiver “RX” button for 3 seconds, and with a “DI” sound, the receiver enters the 7-minute long receiving state, waiting for the current transmitter to transmit a signal and connect.
Remarks: The maximum interval of transmitter signal transmission time is 3 minutes/times.
Remarks: To re-pair or replace the new transmitter, long press the “RX” button of the receiver for 6 seconds, with the sound“DI” and “DI”, the receiver will enter into the 7-minute long reception state, and wait for the transmitter to transmit the signal and connect.

Low battery indication

When the receiver has low power, the backlight is dimmed or flash (please replace the batteries in time).

When the transmitter has low power, the low power icon “ ” flashes.