

Water Depth Sensor

YS7905-UC



Installation & User Guide

Revision Jun. 29, 2023

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A Welcome!

Thank you for purchasing YoLink products! We appreciate you trusting YoLink for your smart home & automation needs. Your 100% satisfaction is our goal. If you experience any problems with your installation, with our products or if you have any questions that this manual does not answer, please contact us right away. See the Contact Us section for more info.

Thank you!

Eric Vanzo
Customer Experience Manager

User Guide Conventions

The following icons are used in this guide to convey specific types of information:



Very important information
(can save you time!)



Good to know info but may not
apply to you

B Before You Begin

Visit our Water Depth Sensor support page on our website, for the latest installation guides, additional resources, information and videos by visiting:

<https://shop.yosmart.com/pages/water-depth-sensor-product-support>

Or by scanning the QR code:



Download the most current version of the user guide by scanning the QR code:

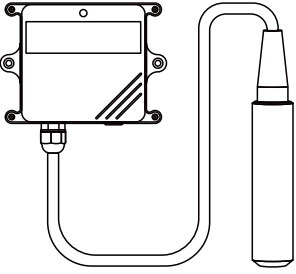


B Before You Begin

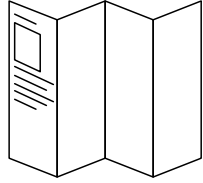


Your Water Depth Sensor connects to the internet via a YoLink hub (SpeakerHub or the original YoLink Hub), and it does not connect directly to your WiFi or local network. In order for remote access to the device from the app, and for full functionality, a hub is required. This guide assumes the YoLink app has been installed on your smartphone, and a YoLink hub is installed and online (or your location, apartment, condo, etcetera, is already served by a YoLink wireless network).

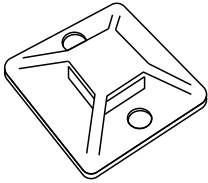
C What's Included



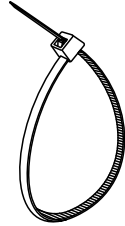
Water Depth Sensor



Quick Start Guide



4 x Cable Tie Mount



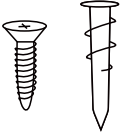
8 x Cable Tie



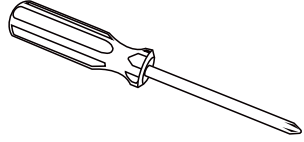
1 x G.34615 Battery
Pre-Installed

D Required Items

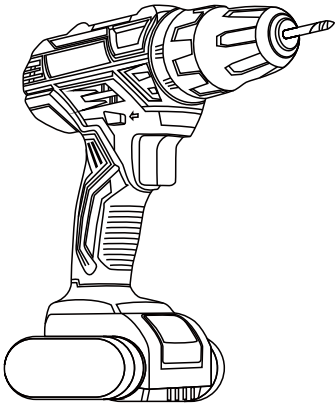
The following items may be required:



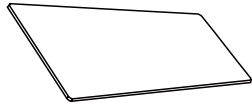
Screws and Anchors



Medium Phillips Screwdriver



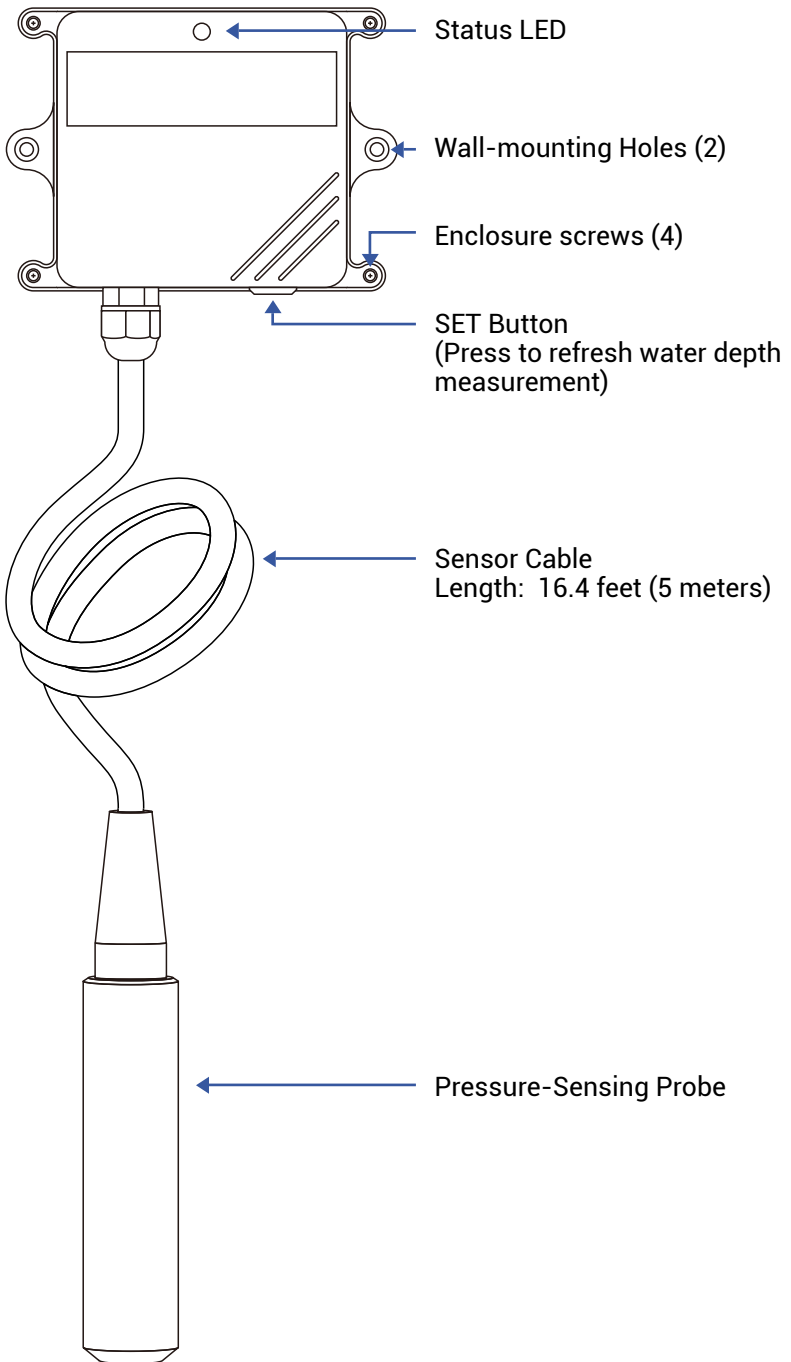
Drill with Drill Bits



Double-sided Mounting Tape

E

Get to Know Your Water Depth Sensor



E

Get to Know Your Water Depth Sensor, Continued

LED Behaviors



Blinking Red Once, Then Green Once
Device Start-Up



Blinking Red And Green Alternately
Restoring to Factory Defaults



Blinking Red Once
Updating Water Depth Measurement



Quick Blinking Green
Control-D2D Pairing in Progress



Quick Blinking Red
Control-D2D Unpairing in Progress



Slow Blinking Green
Updating

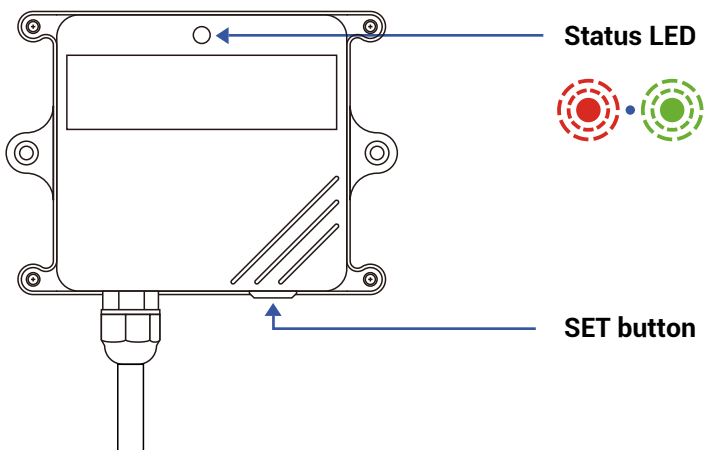


Fast Blinking Red Once Every 30 Seconds
Low Battery, Replace Batteries Soon

F

Power Up

To power up the sensor for the first time, press the SET button briefly, until the LED flashes red, then green.



G Install the App

If you are new to YoLink, please install the app on your phone or tablet, if you have not already. Otherwise, please proceed to the next section.

Scan the appropriate QR code below or find the “YoLink app” on the appropriate app store.



Apple phone/tablet
iOS 9.0 or higher



Android phone/tablet
4.4 or higher

Open the app and tap **Sign up for an account**. You will be required to provide a username and a password. Follow the instructions, to set up a new account. Allow notifications, when prompted.

You will immediately receive a welcome email from no-reply@yosmart.com with some helpful information. Please mark the yosmart.com domain as safe, to ensure you receive important messages in the future.

Log in to the app using your new username and password.

The app opens to the **Favorite** screen. This is where your favorite devices and scenes will be shown. You can organize your devices by room, in the **Rooms** screen, later.



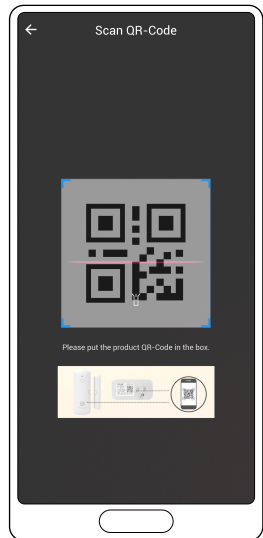
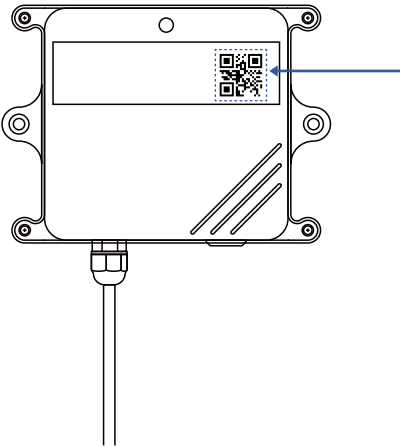
Add Your Water Depth Sensor to the App

1. Tap **Add Device** (if shown) or tap the scanner icon:

Scanner icon



2. Approve access to your phone's camera, if requested. A viewfinder will be shown on the app.



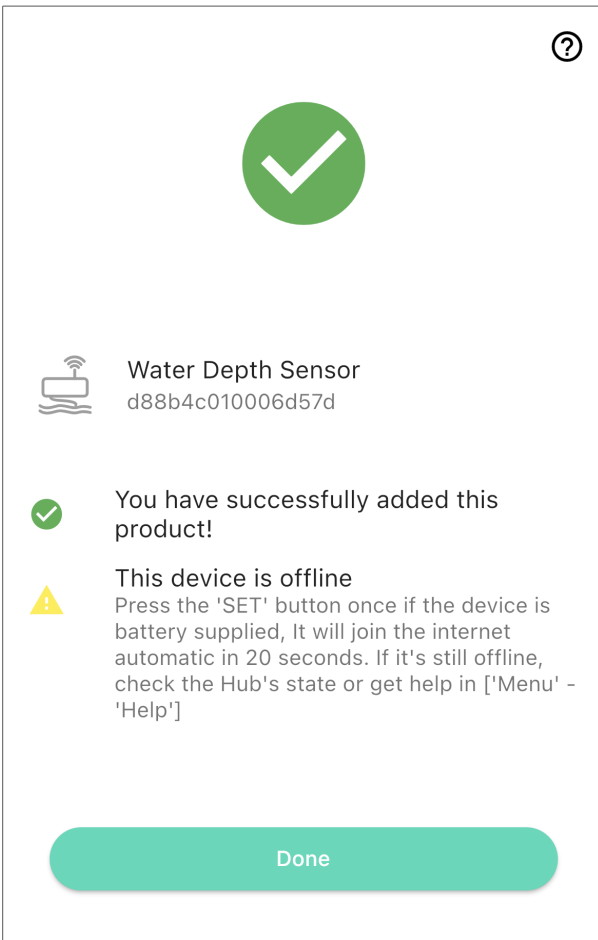
3. Hold the phone over the QR code so that the code appears in the viewfinder. If successful, the **Add Device** screen will be displayed.



Add Your Water Depth Sensor to the App, Continued

4. You can change the device name and assign it to a room later. Tap **Bind device**.

5. If successful, the screen will appear as shown. Tap **Done**.



I Installation

Sensor use considerations:

The Water Depth Sensor measures the depth of water in a tank or container using a pressure sensor in the probe. The weight of the water is sensed by the probe, and this data is converted to water depth in the app. The probe is ideally placed at the bottom of the tank or container. If not placed at the bottom, the sensor will indicate the depth of the water from the top of the water to the probe location.

Sensor location considerations:

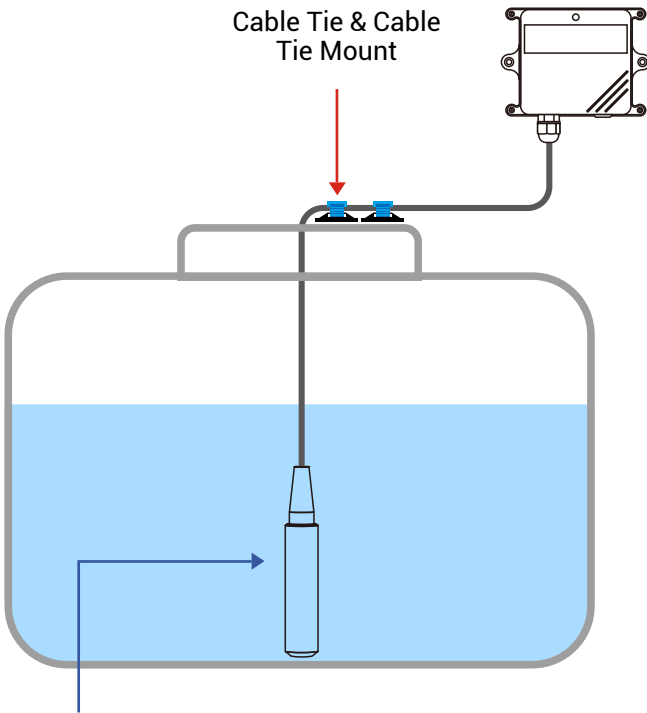
Before installing your Water Depth Sensor, consider the following important factors:

1. The sensor body is designed for outdoor use, but it must not be submerged; do not install the sensor where it can possibly be submerged later. Internal water damage to the sensor is not covered by the warranty.
2. The sensor has a SET button and LED indicator that should be accessible; install the sensor at an accessible location.

I Installation, Continued

Install the Water Depth Sensor's probe

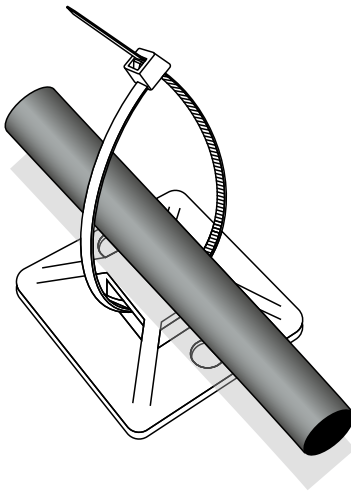
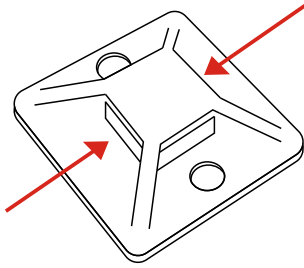
1. Uncoil and suspend the probe into the water container. The probe should sit on the bottom of the container, in a vertical orientation as shown in the diagram.



Probe should be placed at the bottom of the tank/well/container, in a vertical orientation, as shown.

I Installation, Continued

2. When the correct position is attained, secure the probe cable to the container sidewall, lid, or other fixed and stable surface, so that the probe position does not change. You can use cable ties and mounts to secure the probe cable, but to avoid damaging the cable, do not overtighten the ties or otherwise pinch or crimp the cable.



I Installation, Continued

Install the Water Depth Sensor (main assembly)

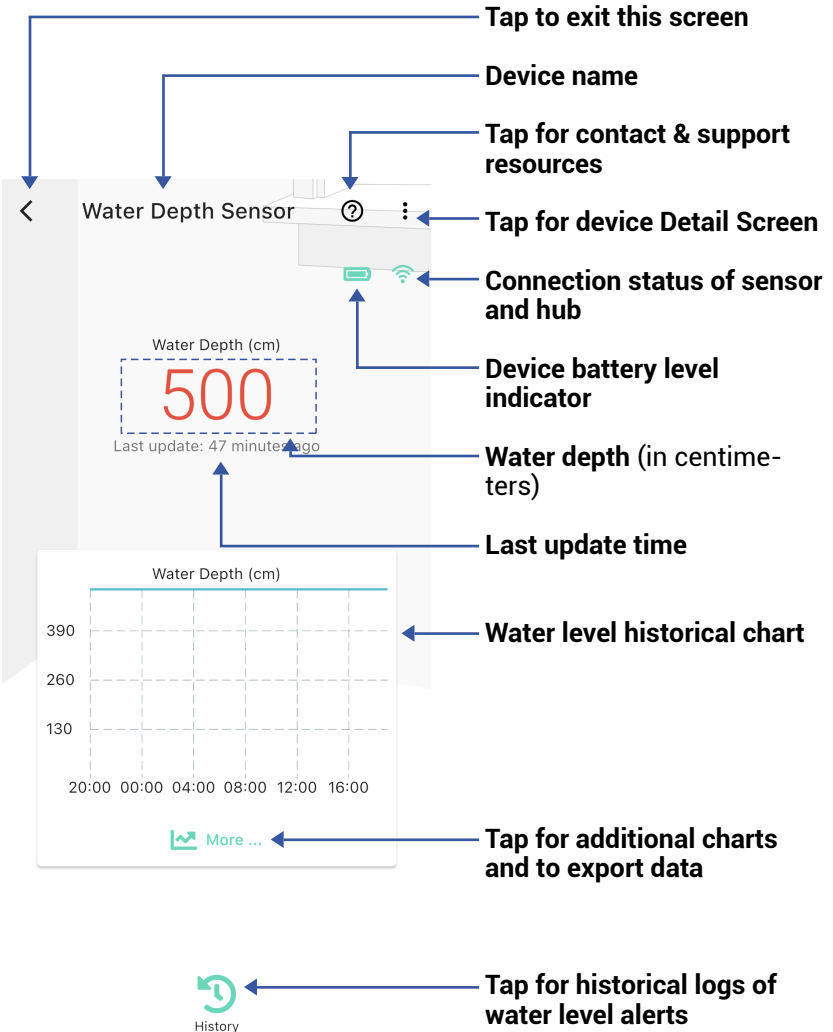
Determine how you will mount the sensor to the wall or surface, and have hardware and anchors appropriate for the wall surface on hand.

The sensor is intended to be wall-mounted, using screws. It can be placed in another enclosure. If using alternative methods, such as mounting tape, ensure the sensor is securely installed, so as to not fall off the wall later (physical damage is not covered by the warranty).

- 1.** Holding the sensor in position, mark the location of the sensor's four mounting holes to the wall surface.
- 2.** If using anchors, install them, per the manufacturer's instructions.
- 3.** Insert and tighten one screw in each of the sensor's mounting holes, ensuring the sensor is secured to the wall or mounting surface.

J App Settings

In the app, tap on your Water Depth Sensor icon. Your main screen should be similar to the one shown below.



From the device main screen shown on the previous page, tap the 3 vertical dots in the upper right corner, to go to the device details screen, as shown below.

Details

- ?** Tap for contact & support resources
- Type** Water Depth Sensor
- Device type**
- Name** Water Depth Sensor > **Device name/label** Tap to edit
- Room** Not Set > **Device Room** Tap to edit
- Alert** > **Tap to edit alerts** (see next page)
- Recording Interval** 1 hour > **Recording interval** Tap to edit
- Favorite** Will show in favorite screen **Favorite status** Tap to edit
- History** Get device logs > **Alert history** Tap to view
- State** Normal **Device state**
- Other** **Device state**
- Model** YS7905-UC **Model number**
- Device EUI** d88b4c010006d57d **Device Equipment Unique Identifier**
- SN** 074BC9611D > **Device serial number** Tap to view QR code
- Signal Intensity** Strong (-38 dBm) **Signal intensity**
- Battery** **Battery level**
- Firmware** 0506 **Firmware version** See page 22
- Delete** **Tap to delete this device**



App Settings, Continued

From the device main screen shown on the previous page, tap the 3 vertical dots in the upper right corner, to go to the device details screen, as shown below.

< ✓ ← Tap to save your settings

Alert

Alarm Strategy Default >

You will be notified according to selected alarm strategy when device alerts
[View your alarm strategies](#)

Water Depth (0 ~ 500 cm)

Alert Reminder (Disabled)

Alert Interval (Disabled)

Alarm Strategy assigned to this device.
Tap to edit

Tap to see your alarm strategies

Tap to edit your high and low water level alerts via roller wheels

Tap to edit your high and low water level alerts on the slider bar

Tap to enable/disable Alert Reminders

Tap to edit Alert Reminders (from 0 to 60 minutes)

Tap to enable/disable Alert Interval

Tap to edit Alert Interval (from 0 to 60 minutes)



About Alerts: an alert is the state or status of a device when it detects an abnormal condition, such as high water level. Alert also refers to the notifications that you or other recipients can receive to notify you of the device's abnormal condition, for example to receive an alert about low water for a storage tank. Finally, "alert" is a verb, such as "the water depth sensor alerted at seven this morning". General alert/notification settings are found in the Alarm Strategy section of the app - this is where you determine if you would prefer to receive, for example, an email or a SMS message when one of your sensors alerts. But a device can have its own specific alert settings, such as for the Water Depth Sensor:

Alert Reminder: the Alert Reminder duration defines the duration between the first alert and the first reminder of the alert. If you want to be reminded of an alert 10 minutes after the first alert, set this duration to 10 minutes. Leave or set this duration to 0 or move the disable/enable switch to the disabled position if you do not wish to be reminded.

Alert Interval: the Alert Interval duration defines the duration of additional Alert Reminders. This duration would apply to the second reminder, and any subsequent alert reminders. If you would like to be reminded at one hour intervals after the first reminder, set this duration to 60 minutes. If you do not want additional reminders after the first reminder, set the duration to 0 or slide the enable/disable switch to disabled.

L Testing

We recommend testing your new sensor before leaving it in operation, to confirm it is working correctly, and the device settings are correct:

1. Test the sensor for accuracy. After placing the sensor and securing the cable, press the sensor's SET button to refresh the depth reading. Then, check the water depth as indicated in the app. Next the depth reported should be compared to a measurement method or tool that you consider accurate. This method could be as simple as using a weighted string or fishing line, marked with distance intervals. Compare the depth indicated by the sensor to the depth indicated by your alternative measuring method. Confirm the two figures are the same or within a tolerable distance of accuracy. If they are not, double-check your measurements and verify the sensor probe is placed at the bottom of the tank or container. Make the necessary adjustments or corrections, then repeat this testing step.

2. After testing for accuracy, test the sensor for response to one or both of your high or low water alerts. You will need to set low water level alert for this test. In the app, set a low water alert slightly lower than the current water level. For a low-water level test, pull on the probe cable and lift the sensor probe up higher in the water, so that it responds to the new, "lower", water level. (Since the probe reports the pressure of the water on it, and this data is converted to water depth, if it is raised higher the pressure will be reduced, indicating a drop in water level.)

L Testing, Continued

3. Simulating a high water level may require the addition of water to the tank or container. After setting a high-water alert level just above the current water level, add water to the tank or container, to the high-water alert level. Verify the sensor alerts accordingly.

M App & 3rd-Party Services

Please visit our website's Support page for the YoLink app guide and for product-specific app settings and instructions:

www.yosmart.com/support-and-service

N Factory Reset

Factory reset will erase device settings and restore it to factory default settings. Doing a factory reset will not remove the device from your account and it will not harm the device, or lose any data or require you to redo your automations, etc.

Instructions:

Hold the SET button down for 20-30 seconds, until the LED blinks red and green alternately. Then, release the button. (Holding the button down longer than 30 seconds will abort the factory reset operation)

Factory reset will be complete when the LED stops blinking.



Only deleting a device from the app will remove it from your account. Factory reset will not delete the device from the app.

Firmware Update

Your YoLink products are constantly being improved, with new features added. It is periodically necessary to make changes to your device's firmware. For optimal performance of your system, and to give you access to all available features for your devices, these firmware updates should be installed when they become available.

In the Detail screen of each device, at the bottom, you will see the Firmware section, as shown in the image below. A firmware update is available for your device if it says "#### ready now"

Tap in this area to start the update.

The device will update automatically, indicating progress by percentage-complete. You may use your device during the update, as the update is performed "in the background". The LED will slowly blink green during the update, and the update may continue for several minutes beyond the LED turning off.

P Troubleshooting

Problem:

The Water Depth Sensor is offline

Possible Solutions:

- 1) The Water Depth Sensor may be off. Repeat the Power up steps, if needed.
- 2) If this did not resolve the problem, replace the battery.

Problem:

The Water Depth Sensor is not reporting the correct depth

Possible Solutions:

- 1) The probe is not at the bottom of the tank or container
- 2) The liquid being monitored is not water. The sensor is optimized for freshwater. Saltwater, septic tank water, etcetera, requires adjusting the specific gravity valve for the liquid. As of the printing of this user guide, the specific gravity value can not be edited.

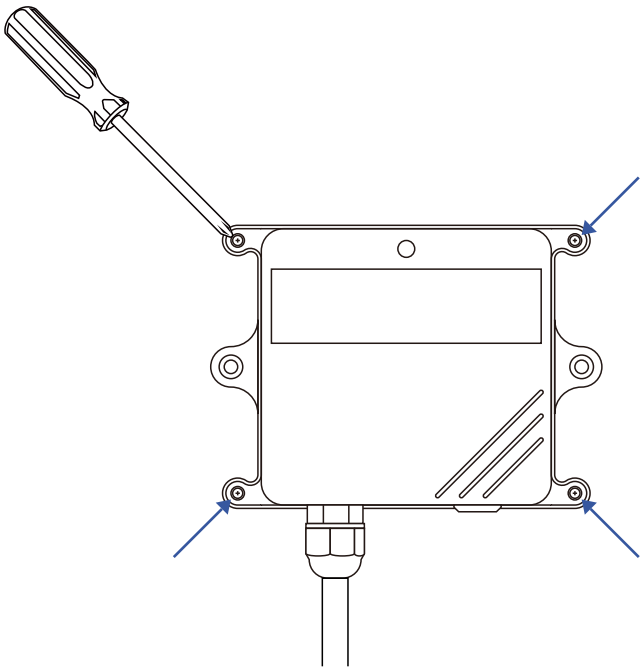
Other issues:

Please contact us via the info on the last page of this guide.

Q Battery Replacement

The preinstalled battery in your Water Depth Sensor should give you upwards of 10 years between battery changes. When it is time to replace the battery, please replace it using only a part number G.34615 battery, available on our website, and follow these instructions:

1. Using a small or medium Phillips screwdriver, remove the four screws on the front of the enclosure as shown. Carefully set them to the side.

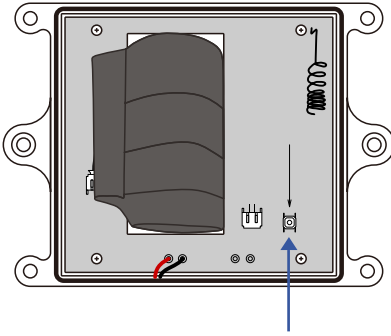


2. Open the sensor enclosure by pulling the two pieces apart. The two pieces are joined by wiring; use care to not damage the wiring.

3. Pull the battery assembly free from the mounting tape by using a gentle prying motion with your fingers.

Q Battery Replacement, Continued

4. Disconnect the battery assembly cable and remove the old battery.
5. Connect the new battery assembly cable to the sensor, and seat the battery assembly in the cut-out section of the PC board.
6. Press the button, as shown, to reset the sensor's battery life meter.



Press this button after replacing the battery

7. Check the sensor in the app, to confirm it is online and the battery level icon indicates a full battery.
8. Reassemble the two parts of the enclosure. Reinsert the four housing screws, and tighten them firmly to close the enclosure. To ensure the waterproof characteristics of the enclosure, examine the enclosure and check for uneven gaps between the two parts, that might allow water in.

R

Warnings

- Please install, operate and maintain the Water Depth Sensor only as outlined in this manual. Improper installation or use may damage the unit and/or void the warranty.
- Do not install or use the device outside of the temperature and humidity range listed in the environmental specifications.
- If used outdoors, for the maximum life of the device, provide overhead cover or a protective enclosure. This can protect it from the damaging effects of intense direct sunlight and/or rain over a period of years.
- Do not immerse or allow the devices to be immersed or submerged in water.
- Avoid placing the devices in extremely dirty or dusty environments.
- If the device does get dirty, please clean it by wiping it down with a clean dry cloth. Do not use strong chemicals or detergents, which may damage or discolor the exterior and/or damage the electronics, voiding the warranty.
- Do not install the device where it may be subjected to vandalism, abuse, physical impacts or strong vibrations. Physical damage is not covered by the warranty.

R Warnings, Continued

- Power the controller only with new part number G.34615 lithium battery assembly. Do not use rechargeable battery, do not use other type battery (e.g. zinc blend).
- If storing the controller for extended periods, remove the battery.
- Replace the battery only with one new part number G.34615 lithium battery assembly. Do not use other types of batteries, such as zinc blend or rechargeable batteries.
- The G.34515 lithium battery assembly is available for purchase on our website

2 Year Limited Electrical Device Warranty

YoSmart warrants to the original user of this product that it will be free from defects in materials and manufacturing workmanship, under normal use, for 2 years from the date of purchase for the Water Depth Sensor.

The warranty does not cover abuse or misused products, nor does this warranty apply to products that have been improperly installed, were modified, or put to a use other than designed. This warranty does not cover products subjected to acts of God (such as floods, lightning strike or electrical surge, or earthquakes, etc.).

This warranty is limited to repair or replacement of the product only at YoSmart's sole discretion. YoSmart will NOT be liable for any costs associated with removing or reinstalling the product. YoSmart will NOT be liable for direct or indirect or consequential damages to persons or property resulting from the use of this product.

The warranty only covers the cost of replacement products or parts. It does not cover shipping and handling charges or fees.

To implement this warranty, please refer to the Contact Us section of this guide.

T FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna, connect the equipment into an outlet on a circuit different from that to which the receiver is connected, increase the separation between the equipment and receiver, consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference
- 2) This device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



FCC Statement, Continued

PRODUCT NAME:
WATER DEPTH SENSOR

PARTY:
YOSMART, INC.

TELEPHONE:
831-292-4831

MODEL NUMBER:
YS7905-UC

ADDRESS:
15375 BARRANCA PKWY SUITE J-107, IRVINE,
CA 92618 USA

EMAIL:
SERVICE@YOSMART.COM



IC Caution

-English:

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

To maintain compliance with RSS-102 RF Exposure guidelines, This equipment should be installed and operated with minimum 20cm distance between the radiator and your body: Use only the supplied antenna.

-French:

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Pour être conforme aux lignes directrices d'exposition RF RSS-102, cet équipement doit être installé et exploité à une distance minimale de 20cm entre le radiateur et votre corps: n'utilisez que l'antenne fournie.



Contact Us

We are here for you, if you ever need any assistance installing, setting up or using a YoLink app or product!

Need help? For fastest service, please email us 24/7 at service@yosmart.com

Or call us at **831-292-4831** (US phone support hours: **Monday - Friday, 9AM to 5PM Pacific**)

You can also find additional support and ways to contact us at:

www.yosmart.com/support-and-service

Or scan the QR code:



Support Home Page

Finally, if you have any feedback or suggestions for us, please email us at feedback@yosmart.com

Thank you for trusting YoLink!

Eric Vanzo
Customer Experience Manager

YOLINK

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