

TROUBLESHOOTING

The Status LED is not lit and the device is shown as disconnected on the app

This means that the device is not connected to the Cloud

- Check your **Internet connection**. If you cannot access the Internet with a different device on the same Wi-Fi network check with your ISP
- Check that the server is accessible at **<https://hamsystems.eu>** with your browser. If it is not, check again in 5 minutes or refresh the app / webpage
- Try restarting the device with the **Reset Button** and / or with removing and re-attaching the power. Wait for a few minutes
- Check if the device **is connected to your Wi-Fi router / Access Point**. If the device does not appear to be connected, then repeat the setup procedure and make sure that the Wi-Fi name and password are correct. The device may also need to be whitelisted depending on your network configuration. Note that the device and the app use the ports 9001 and 9002

No readings are shown or they are too inaccurate

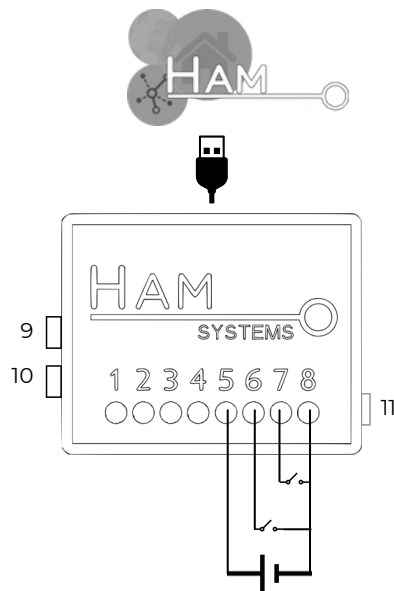
This is probably due to incorrect wiring

- Check your wiring of the sensor cables and that you have tightened the screws sufficiently
- Check that the sensor you are using is not cut at any point
- Check that the device is connected and the green light is on steadily

More information about the installation of our devices, their capabilities and the use of our platform can be found at **<https://hamsystems.tawk.help/>**

This product is in compliance with the **Radio Equipment Directive (RED) 2014/53/EU** and the **Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU** and carries the **CE Mark**. The complete EU declaration of conformity can be found at https://hamsystems.eu/res/doc/soniccese_nse_ce.pdf

Manufacturer: Home Automation and More P.C.
76, 28th October, 54642, Thessaloniki, Greece



- **Internet connection via Wi-Fi**
- **Real-time monitoring of the water level in a tank**
- Power supplied via **micro-USB, terminals or power bank**
- **Easy setup**
- Up to **2 general inputs**, e.g. for magnetic contacts or floater



SonicSense

1. Sensor GND (**Black**)
2. Sensor Rx (**Green**)
3. Sensor Tx (**Blue**)
4. Sensor 3.3V (**Red**)
5. **5-12VDC** (instead of micro-USB)
6. **Gen. Input 2**
7. **Gen. Input 1**
8. **GND**
9. **Restart Button**
10. **Setup Button**
11. **Status LED**



SETUP

In order to connect the device to your Wi-Fi network, you need to use the HAM Systems app. All the other features are also available on the Web on <https://hamsystems.eu>

1. **Connect the device according to the wiring diagram** on the first page
2. **Check your connections** and **power up the device** either via micro-USB or from terminals
3. **Open the HAM Systems app**. If you don't have an account create one
4. **Click on (+) button** on the devices list view on the smartphone app
5. **Follow the instructions** on the app
6. After completing the instructions, check that the green LED is fully on
7. If the Status LED is fully on and the device does not appear on the app, then you may also need **claim the device** to your account. Click on (+) and select the Claim Device option
8. You should now be able to **view the real-time readings of the device on the app**

In case you are having difficulties, you can **try restarting the device** and repeating the steps.

If you want to change the Wi-Fi network of your device, you can do so by doing the steps 3-5. You **don't have to re-claim** your device in this case.

SAFETY WARNINGS

- Incorrect wiring of the device may lead to permanent damage to the device and / or sensors. Make sure your connections are correct before powering the device.
- **Do not disassemble the device. Doing so, voids the warranty.**
- In case of loss of network, you will **NOT** be able to monitor the real-time values of the device.
- You should not rely on the device in such a way that puts human or animal lives at risk.
- You are responsible for checking the accuracy of the readings periodically.

USAGE

To use the device, visit our web app at <https://hamsystems.eu> or search **HAM Systems** at the App Store / Play Store

Some features of the app:

- View real time total water consumption and rate
- View historical readings in detail
- Create interactions between HAM Systems devices by using IF this THEN that style rules
- Notifications via app, email, SMS or cloud phone call
- Organization of devices into groups and floorplans
- Encrypted communications via TLS
- Generate PDF / CSV reports
- Device sharing with other users

The **Setup button** is used during the setup process to pair the device to your Wi-Fi network
The **Restart button** restarts the device, similar to power cycling

TECHNICAL SPECIFICATIONS

| | |
|--|---------------------------------------|
| Sensor Type | Ultrasonic |
| Detection Range | 30cm - 750cm |
| Accuracy Step | 5% 1cm |
| Environmental conditions for the HAM device | -10°C to 50°C |
| General inputs | Up to 2 |
| Power supply | 5-12 VDC, 0.5 A |
| Dimensions | 55mm x 44mm x 21.5mm |
| Enclosure Material | ABS V0 |
| Communications protocol | Wi-Fi IEEE 802.11 b/g/n 2.4Ghz |