



FloatMASTER

Customer Setup Guide

Quick Start • Dashboard Access • System Operation

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FloaTek Technologies • Calgary, Alberta, Canada

1. Understanding Your FloatMASTER System

Your FloatMASTER system consists of two units that work together to monitor water levels and alert you to potential problems. This guide will help you set up and use your system.

System Components

Transmitter Unit (At Your Tank)

The Transmitter is installed near your septic tank, cistern, or water storage. It monitors the float switches and sends data wirelessly to the Receiver.

- Monitors up to 2 independent float switches
- Sends data via long-range LoRa radio (up to 500m)
- **Local LED and buzzer alarms right at the tank**
- OLED display shows status and Device ID
- Rechargeable battery with USB-C or solar charging

Receiver Unit (In Your Home)

The Receiver is placed indoors and connects to your WiFi network. It receives data from the Transmitter and sends it to the cloud for dashboard access and email alerts.

- Receives data from Transmitter via LoRa radio
- Connects to your home WiFi for cloud access
- **Local LED and buzzer alarms indoors**
- Auxiliary relay output for external devices
- Rechargeable battery backup

Your Primary Alarm System

IMPORTANT: Your primary alarm system consists of the local LEDs and buzzers on **BOTH** the Transmitter and Receiver units. These provide immediate alerts:

- **At the tank:** Transmitter buzzer and LEDs alert anyone near the tank
- **In your home:** Receiver buzzer and LEDs alert you indoors
- **These work even without internet!**

The dashboard and email alerts are secondary notification methods that require internet connectivity.

2. Placement Tips

Unlike WiFi, LoRa radio generally does not require line-of-sight and can typically penetrate walls and standard construction materials. However, thick concrete, multiple walls, or metal structures may reduce signal strength.

Transmitter Location

- Install near your tank, protected from direct weather if possible
- Mount at a readable height above expected snow level
- Good locations: pump house, under an eave, weatherproof enclosure, on a post
- **Avoid:** Metal enclosures or metal sheds (significantly reduces signal)

Receiver Location

- Place indoors where you have good WiFi signal
- Good locations: mechanical room, utility room, basement, garage
- Place where you can hear the buzzer alarm
- **Avoid:** Metal enclosures (walls and standard construction are fine)

Range: Up to 500 meters between Transmitter and Receiver under typical conditions.

3. What You'll Need for Setup

Before starting setup, gather the following:

- Your Device ID** (6-character code shown on device label or OLED screen)
- A smartphone or computer** with WiFi capability
- Your home WiFi network name and password**
- An email address** for receiving alerts

⚠ IMPORTANT: FloatMASTER **ONLY supports 2.4 GHz WiFi networks**. 5 GHz networks will NOT work. If your network name ends in "_5G" or "5GHz", look for the 2.4 GHz version instead.

4. Step-by-Step Setup

Step 1: Unbox and Power On

1. Remove both units from packaging
2. Connect power to the Receiver unit (USB-C adapter included)
3. Wait 10 seconds for the device to boot up
4. Look at the OLED screen - you'll see your Device ID displayed
5. **Write down your Device ID** (e.g., "E1E200") - you'll need this!

 **TIP:** The Device ID is also printed on the label on your device.

Step 2: Connect to Your WiFi

On first boot, your FloatMASTER automatically enters WiFi setup mode.

Connect to FloatMASTER's Setup Network

6. On your phone or computer, open WiFi settings
7. Look for a network named: **FloatMASTER-XXXXXX**
8. Connect to it (no password required)
9. You may see "No Internet" - this is normal, stay connected

Enter Your WiFi Credentials

10. A setup page may open automatically
11. If not, open your web browser and go to: **192.168.4.1**
12. Enter your WiFi network name exactly as it appears
13. Enter your WiFi password (**case-sensitive!**)
14. Click **Save** or **Connect**
15. Device will restart - **Green LED = Successfully Connected!**

 **TIP:** If your phone keeps switching back to your home WiFi, temporarily "Forget" your home network, complete setup, then reconnect.

Need to re-enter setup mode later? Press and hold the button for 5-10 seconds until the blue LED blinks and OLED shows "WiFi Setup Mode".

Step 3: Register Your Device

Once connected to WiFi, register your device to receive email alerts and access your personal dashboard.

16. On any device, open a web browser
17. Go to: **<https://app.floatek.ca/register>**
18. Enter your information:
 - Device ID (from Step 1)
 - Your name
 - Your email address (for alerts)
 - Location description (e.g., "Cabin at Pine Lake")
19. Create a 4-digit security PIN
20. Click **Register Device**
21. Success! You'll see your personal dashboard link

 **IMPORTANT: Bookmark your dashboard link!** You'll need it to access your system.

Step 4: Access Your Dashboard

On Computer/Laptop

22. Open any web browser (Chrome, Safari, Firefox, Edge)
23. Go to your dashboard link, or:
24. Visit: **https://app.floatek.ca/dashboard?device=XXXXXX**
25. Replace XXXXXX with your Device ID

On Mobile Phone (Add to Home Screen)

For quick access, add the dashboard to your phone's home screen:

iPhone: Open dashboard in Safari → Tap Share icon (square with arrow) → "Add to Home Screen"

Android: Open dashboard in Chrome → Tap menu (:) → "Add to Home Screen"

Step 5: Configure Float Modes

Each float can be set to HIGH or LOW mode depending on your application:

Mode	Alarms When	Typical Use
HIGH	Water level rises (float goes UP)	Septic tanks, sump pits, overflow warning
LOW	Water level drops (float goes DOWN)	Cisterns, supply tanks, low water warning

How to Change Float Modes

26. Go to your dashboard
27. Find the "Float 1 Mode" or "Float 2 Mode" dropdown
28. Select HIGH or LOW
29. Enter your security PIN when prompted
30. Wait for the green checkmark - mode changed!

5. Understanding LED Indicators

The LED lights on your units tell you what's happening at a glance:

LED Color	State	What It Means
GREEN	Solid	All good! WiFi connected, system normal
GREEN	Blinking	Connecting to WiFi...
RED	Solid	ALARM! Float has been triggered
RED	Blinking	Low battery warning
BLUE	Blinking	WiFi setup mode active
YELLOW	Solid	Alarm buzzer is muted

6. Your Dashboard

Your dashboard shows real-time information about your FloatMASTER system:

What You'll See

- **Float 1 & Float 2 Status:** Current state with visual indicators
- **Battery Levels:** Both Transmitter and Receiver battery percentage
- **Power Status:** Shows if running on external power, solar, or battery
- **Active Alarms:** Any current alarm conditions
- **Last Update:** When the device last reported
- **Connection Status:** Online/offline indicator

7. Email Alerts

Once registered, you'll automatically receive email alerts for important events:

-  **High Level Alarm:** Float detects high water (in HIGH mode)
-  **Low Level Alarm:** Float detects low water (in LOW mode)
-  **Low Battery:** Device battery drops below safe levels
-  **Power Changes:** Device switches between battery and external power

 **TIP:** Check your spam/junk folder if you're not receiving alerts. Add support@floatek.ca to your contacts.

8. Solar Power Option

For remote installations without access to AC power, your Transmitter can be powered by a solar panel. This provides extended off-grid operation without the need for frequent battery recharging.

How It Works

The Transmitter's built-in battery acts as a buffer:

- **Sunny conditions:** Solar panel charges the battery and powers the device
- **Cloudy days/Night:** Battery provides power until the sun returns
- **Dashboard monitoring:** Battery level and charging status are visible on your dashboard

Solar Panel Requirements

- **Power Rating:** 10W recommended
- **Output:** 5V DC with USB connector
- **Type:** Weatherproof/outdoor rated panel

Installation Tips

- **Panel orientation:** Face south (in Northern Hemisphere) at a 30-45° angle
- **Avoid shading:** Ensure no trees or structures shade the panel during peak sun hours
- **Secure mounting:** Mount panel securely to withstand wind and snow load
- **Cable protection:** Route USB cable where it won't be damaged by weather, foot traffic, or animals

 **TIP:** A 10W panel provides sufficient power for year-round operation in most climates, including Canadian winters with shorter daylight hours.

9. Auxiliary Relay Output

Your FloatMASTER Receiver includes a built-in auxiliary relay output. This allows you to connect external devices that activate when an alarm occurs.

What Can You Connect?

- **External sirens or strobe lights:** For louder or more visible alerts
- **Auto-dialers:** Devices that call preset phone numbers
- **Smart home systems:** Connect to Home Assistant, SmartThings, etc.
- **Indicator lights:** Add a warning light in another location

Dashboard Control

Control the auxiliary relay from your dashboard:

- **Enable/Disable:** Turn the relay function on or off
- **Trigger Mode:** Choose when relay activates (Either Float, Both Floats, Float 1 Only, or Float 2 Only)

Relay Rating: 10A @ 250VAC. Have a qualified electrician connect high-voltage devices.

10. Testing Your System

After installation, verify your system is working properly. We recommend testing every 6 months.

Quick Function Test

31. Manually lift or tilt Float 1 to trigger the alarm
32. Within 5 seconds, verify:
 - Red LED illuminates on both Transmitter and Receiver
 - Buzzer sounds on both units
 - Dashboard shows alarm status
33. Release the float switch
34. Verify alarm clears within 5 seconds
35. Repeat for Float 2 if installed

11. Troubleshooting

Device Won't Connect to WiFi

- Ensure you're using a 2.4 GHz network (not 5 GHz)
- Verify WiFi password is correct (case-sensitive!)
- Hold button for 5-10 seconds to re-enter setup mode
- Make sure Receiver is within range of your WiFi router

Dashboard Shows "No Data"

- Check that both units have power (LEDs should be on)
- Verify WiFi connection (green LED on Receiver)
- Wait 30 seconds for first data transmission
- Ensure neither unit is inside a metal enclosure

Not Receiving Email Alerts

- Check your spam/junk folder
- Verify email address was entered correctly during registration
- Contact support to update your email address if needed

Buzzer Won't Stop

- Press the button briefly to mute the buzzer (yellow LED indicates muted)
- Check your tank - the alarm may be legitimate!
- Verify float switch is not stuck or obstructed

12. Maintenance

Regular maintenance ensures reliable operation:

Frequency	Task
Monthly	Check dashboard for battery levels and connection status
Every 3 Months	Inspect float switches for debris, verify free movement
Every 6 Months	Full alarm test - manually trigger each float
Every 2-3 Years	Replace batteries if runtime significantly reduced

13. Quick Reference

Important URLs

Purpose	URL
Register Your Device	https://app.floatek.ca/register
Your Dashboard	https://app.floatek.ca/dashboard?device=XXXXXX
WiFi Setup Page	192.168.4.1 (when connected to FloatMASTER AP)
Support Website	www.floatek.ca

Button Functions

- **Short press:** Wake OLED display / Mute buzzer
- **Hold 5-10 seconds:** Enter WiFi setup mode
- **Hold 10-15 seconds:** Factory reset

Setup Complete Checklist

- Device powered on and Device ID noted
- Device connected to WiFi (green LED)
- Device registered at app.floatek.ca/register
- Dashboard link bookmarked
- Float modes configured correctly (HIGH or LOW)
- Float switch test completed successfully
- Email alerts tested (optional)

14. Support

FloaTek Technical Support

Email: support@floatek.ca

Website: www.floatek.ca

Hours: Monday-Friday, 9am-5pm MST

When contacting support, please have ready:

- Your Device ID (6-character code)
- Description of the issue
- LED indicator colors and states
- When the problem started

15. Warranty & Disclaimers

1-Year Limited Warranty

FloatMASTER products are covered by a 1-year limited warranty protecting against manufacturing defects in materials and workmanship under normal use.

What's Covered

- Manufacturing defects in materials and workmanship
- Component failures under normal operation
- Firmware issues

What's NOT Covered

This warranty does NOT cover damage from:

- Misuse, neglect, or abuse
- Lightning strikes or power surges
- Frost damage or extreme temperature exposure
- Water ingress due to improper sealing
- Unauthorized modifications
- Improper installation

Liability Disclaimer

IMPORTANT: Please read carefully.

This system contains mechanical and electrical components that can fail. Component failure could result in property damage, flooding, or tank overflow.

FloaTek Technologies assumes no liability for damages arising from system failures. Regular maintenance and testing are required to minimize risk.

This system is designed as a secondary monitoring aid, not a primary safety device.

Software & Remote Monitoring Disclaimer

IMPORTANT NOTICE:

- FloaTek Technologies does not guarantee continuous availability of remote monitoring services
- Cloud services may experience downtime for maintenance
- **Remote monitoring services may be discontinued or changed at any time**
- **Services may transition to a paid subscription model in the future**

Your primary alarm system consists of the local LEDs and buzzers on BOTH the Transmitter and Receiver units. These function independently of internet connectivity and must be tested regularly.

Do not rely solely on remote notifications or dashboard access.

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