ELECTRONIC DESIGN SERVICE

5/5/2025

SPM-010 / SPM-010BC User Guide

User Guide v2.0

ELECTRONIC DESIGN SERVICE

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SPM-010 / SPM-010BC Sump Pump Monitor and Control System

User Guide

About This Guide

This user guide provides detailed instructions for setting up and using the **SPM-010** and **SPM-010BC** sump pump monitoring and control devices. These devices are designed to help homeowners monitor critical sump pump parameters and prevent flooding due to equipment failure.

Overview

The **SPM-010** and **SPM-010BC** are smart sump pump monitoring and control units that use **Bluetooth** and **cellular technology (SPM-010BC)** to deliver real-time updates and alerts. Both devices monitor key environmental factors, such as water level, power supply status, and air temperature, and notify users of potential flooding risks.

SPM-010

The SPM-010 is a budget-friendly monitoring and control device that communicates with smartphones or tablets via **Bluetooth**.

- **Monitoring Function:** Requires a stationary smartphone or tablet at home for continuous monitoring.
- **Control Function:** Optional. Requires the **SSR-CU** power control module (sold separately).
- **Power Backup:** Includes a built-in rechargeable battery for continued operation during power outages.
- **Notifications:** Sends alarm messages through a paired smartphone or tablet.

Key Features:

- Monitors power loss, sump water level (with adjustable alarm thresholds), and air temperature

- Displays device status and battery charge
- Sends SMS alarms via a connected home device

SPM-010BC

The SPM-010BC provides **independent** monitoring and control via **cellular (LTE)** connectivity.

- **Monitoring and Control:** Works continuously, without requiring a home smartphone or tablet.
- **Control Function:** Optional. Requires the **SSR-CU** module.
- **Power Backup:** Rechargeable battery allows the device to function during power loss.
- **Notifications:** Sends SMS messages directly to your phone, including alarm alerts and on-demand status reports.

Key Features:

- LTE connectivity ensures full independence from home Wi-Fi or local devices
- Monitors power loss, water level, and temperature
- Displays real-time system status via SMS or Bluetooth
- Accepts remote SMS commands for status checks

Figure 1 shows an example of the monitoring screen on an iPhone.

Figure 1 iPhone Screen examples

Device Advantages

SPM-010

- Operates without relying on Wi-Fi or internet
- Real-time data on water level, power, and temperature
- Optional pump control using the **SSR-CU** module
- Continues monitoring during power outages

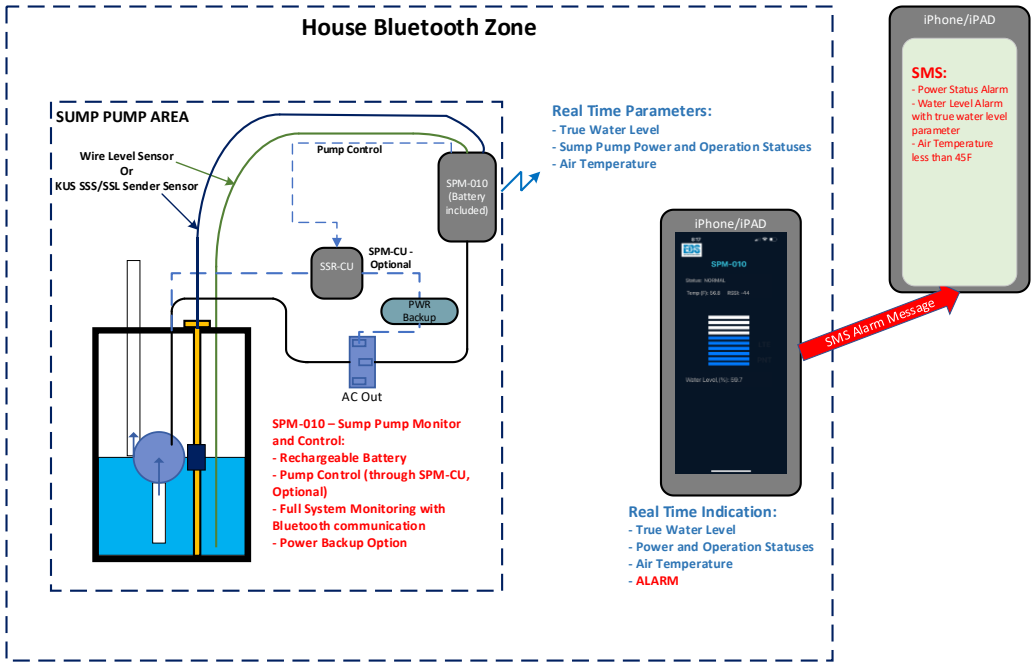
Note: Requires a stationary smartphone or tablet at home for full functionality

See implementation example on Figure 2.

SPM-010BC

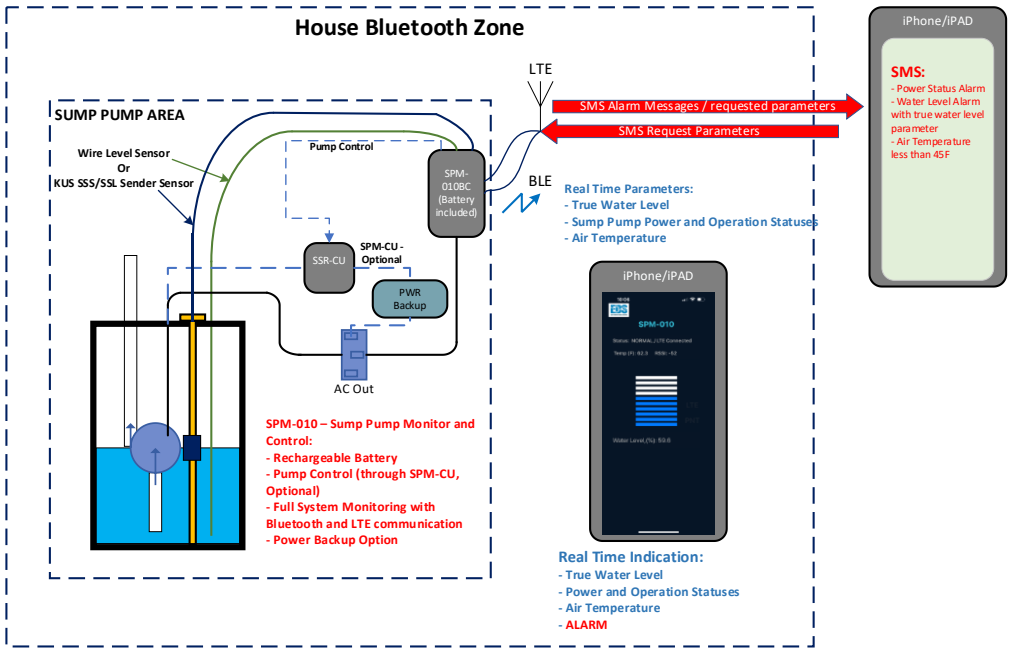
- Fully independent operation (no smartphone, tablet, or internet required)
- Sends and receives SMS alerts for status updates and alarms
- Optional pump control using the **SSR-CU** module
- Remains operational during power loss

See implementation example on Figure 3.



SPM-010 Sump Pump Monitoring and Control with home stand Smartphone/Tablet

Figure 2 SPM-010 Monitoring and Control Implementation



SPM-010BC Sump Pump Monitoring and Control

Figure 3 SPM-010BC Independent Monitoring and Control Implementation

Techn m ical Specifications

Feature	Details
Operating Temperature	32°F to 110°F (0°C to 45°C)
Operating Humidity	0–95%, non-condensing
Temperature Accuracy	±1.8°F (±1°C)
WS-010 Wire Sensor Length	72.8” (1.85 m)
WS-010 Sensor Range	0–37.4” (0.95 m)
WS-010 Accuracy	±2%
Calibration Range (WS-010)	Adjustable between 11.8” and 37.4” (0.3–0.95 m)
WS-010 Sensor Input	Two dry contact terminals
Resistive Sensor Type	240–33 Ohms (240 = empty, 33 = full)
Sensor Transfer Characteristics	KUS SSS-24 sensor (dual-linear branches, breakpoint at 21.3% length)
Resistive Sensor Resolution	0.827” (0.021 m)
Input Power	5V DC, 500 mA
Battery	3.7V Lithium-ion, 750 mAh (KLARUS LIR 14500 protected)
Bluetooth	BLE 4.2, 2.4 GHz integrated antenna
FCC Compliance	FCC CFR47, Part 15 and ARIB STD-T-66
Pump Control Interface	Two-pin LED control (max 3 mA) via **SSR-CU module**
SPM-010 App Compatibility	iOS 14.5 and above
SPM-010BC Cellular Network	AT&T (or other providers) LTE-M
SPM-010BC Antenna	External MIMO, dual-port LTE band antenna
SPM-010BC Cell Modem Compliance	FCC: MCQ-XB3M1 IC (Canada): 1846A-XB3M1

What's in the Box

Configuration 1: SPM-010 Kit

- SPM-010 unit (see Figure 6)
- **WS-010** wire water level sensor *or* **KUS SSS/SSL** resistive sensor

  Note: KUS sensor is required for pump control

- AA-size dummy battery (to be installed in empty battery slot)
- 120V AC to 5V DC power adapter (see Figure 6)
- **SSR-CU power module** (optional, required for pump control — see Figure 7)

Configuration 2: SPM-010BC Kit

- SPM-010BC unit (see Figure 5)
- **WS-010** or **KUS SSS/SSL** resistive sensor (see Figure 4 – KUS sensor)

  Note: KUS sensor is required for pump control

- AA-size dummy battery
- 120V AC to 5V DC power adapter
- **SSR-CU power module** (optional – see Figure 7)
- External LTE band antenna (see Figure 8)

Figure 4 KUS SSS/SSL Resistive Sensor

Figure 5 SPM-010BC

Figure 6 SPM-010 with WS-010 and Power Adapter

Figure 7 SSR-CU Pump Control Power Unit

Figure 8 LTE Band Antenna

Installation and Adjustment

Before beginning installation, ensure the power is disconnected from all sump pump circuit breakers. If you're not familiar with electrical work, contact a licensed electrician or plumber.

Connections and Connector Panel

The provides guideline for SPM-010 and SPM-010BC connections.

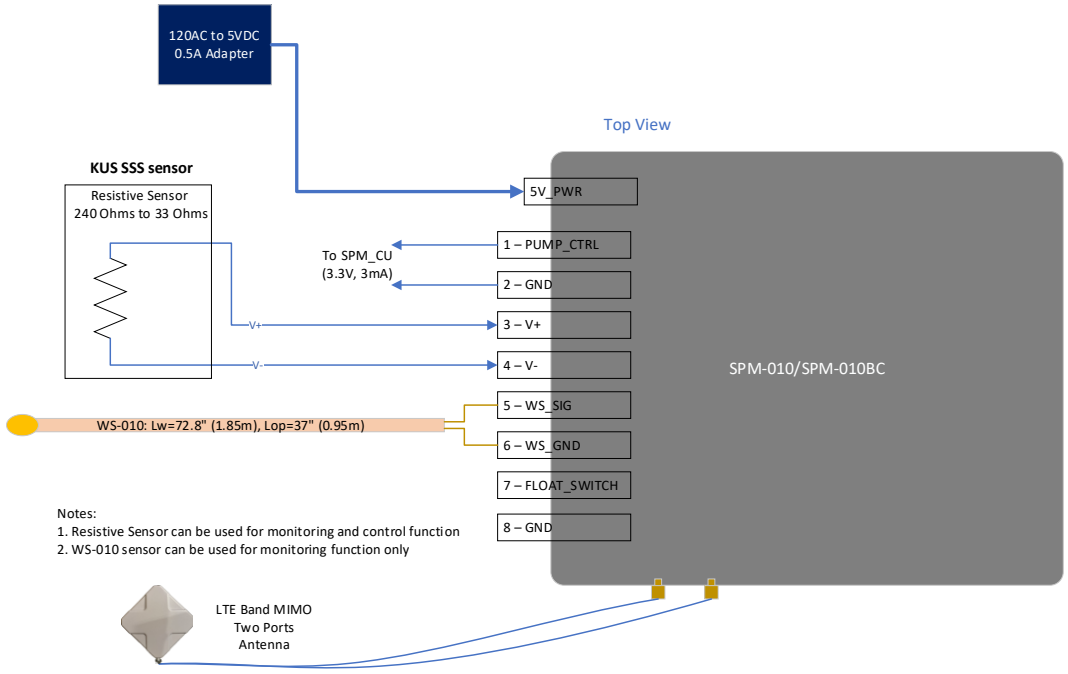


Figure 9 SPM-010 and SPM-010BC Connection Diagram

Sensor Installation Overview

There are two main sensor types supported:

- **WS-010 Wire Sensor** – Mounts vertically inside the sump or along the discharge pipe
- **KUS SSS/SSL Resistive Sensor** – Float-type resistive sensor mounted through the sump cover

WS-010 Sensor Installation (Without SIP – Sensor Installation Pipe)

The WS-010 can be mounted directly onto the sump pump's **PVC discharge pipe**.

Steps:

1. **Position the Sensor**
   - Place the sealed sensor tip as close to the bottom of the sump pit as possible.
   - Use cable zip ties to secure the wire loosely along the pipe (don't overtighten).
2. **Avoid Interference**
   - Do not allow the sensor wire to touch sump power cables or metal piping.
   - Avoid locations that may interfere with the sump pump float.
3. **Seal the Entry Point**
   - If entering through a sump cover, seal the opening with waterproof silicone.

⚠️ **Important:** Do not cut or extend the sensor wire — this will affect accuracy.

📷 **See Figure 10:** WS-010 Sensor (without SIP) and SPM-010 installation

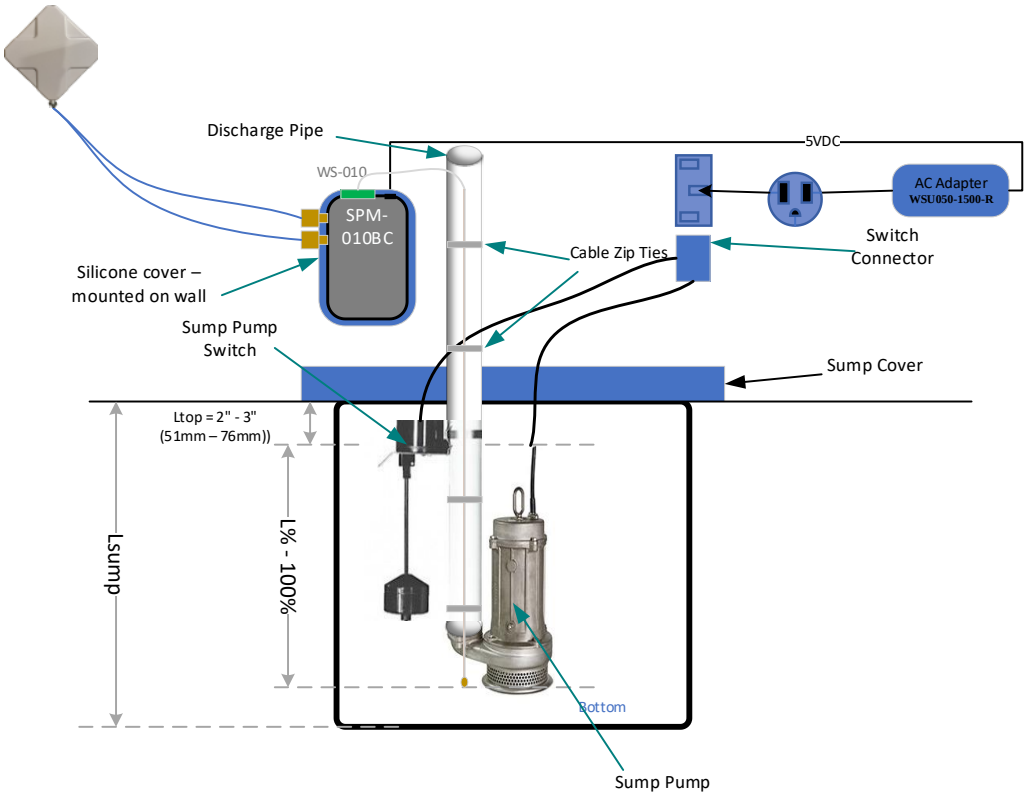


Figure 10 WS-010 Sensor (without SP) and SPM-010/SPM-010BC Installation

WS-010 Sensor Installation (With SIP – Sensor Installation Pipe)

This method uses a ¼” plastic pipe (PEX or PVC) to house the sensor wire vertically.

Steps:

1. **Drill a Hole in the Sump Cover**
   - Size the hole to match the **outer diameter** of the SIP.
   - Ensure it's placed far from the pump and float switch, ideally at the deepest point.
2. **Measure and Cut the Pipe**
   - Determine total depth from cover to sump bottom: `L_sump`
   - Cut SIP length to: `L_sump + H_cover + 2"`
     (Where H_cover = sump cover thickness)
3. **Install the SIP and Sensor**
   - Insert SIP into the cover hole and seal with waterproof silicone.
   - Slide the WS-010 sensor into the SIP until it gently contacts the sump bottom.

📷 **See Figure 11**: WS-010 with SIP and SPM-010 installation diagram

⚠️ **Reminder:** Do not modify the length of the sensor wire.

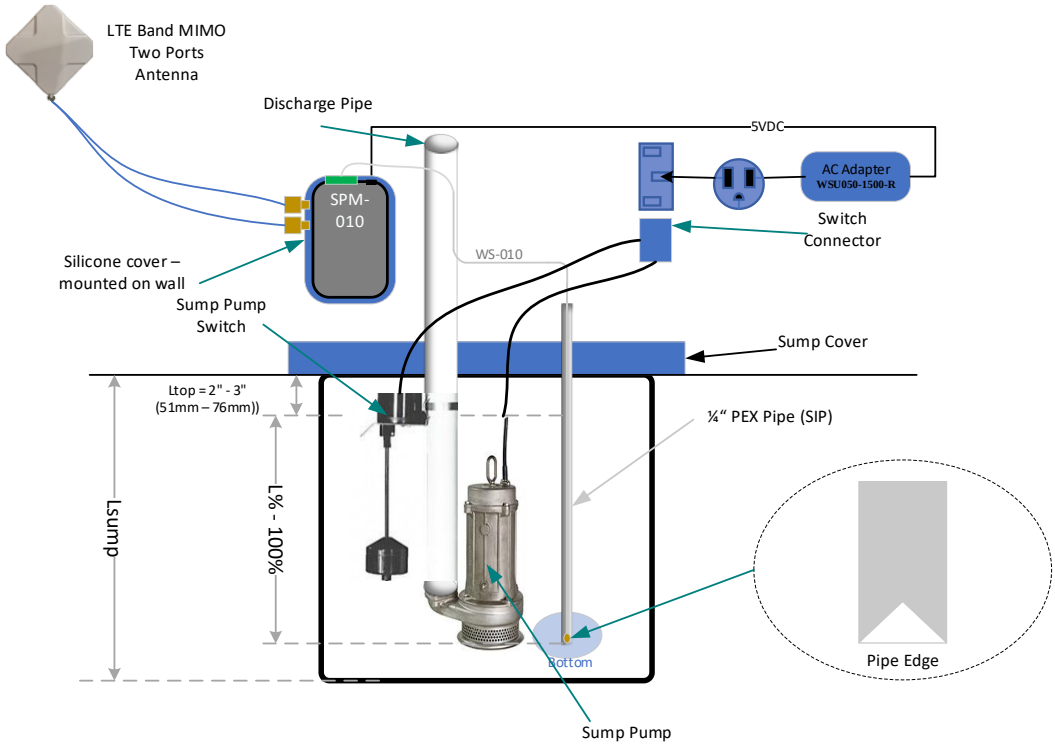


Figure 11 WS-010 Sensor with SIP and SPM-010 Installation

KUS SSS/SSL Resistive Sensor Installation

This sensor is a float-based resistive type and installs directly through the sump cover.

Steps:

1. **Measure and Order Sensor Length**
   - Determine sump depth (L_sump).
   - Order a sensor with a length **equal to or just under L_sump**.
2. **Drill Mounting Hole**
   - Drill a hole matching the **float's outer diameter** at a deep, unobstructed location.
3. **Install and Seal**
   - Place the sensor in the hole and **seal with waterproof silicone**.
   - Avoid screws; silicone sealant is sufficient.

📷 **See Figure 12**: KUS SSS sensor and SPM-010 installation diagram
📷 **See Figure 13**: SPM-010BC installation with KUS SSS sensor

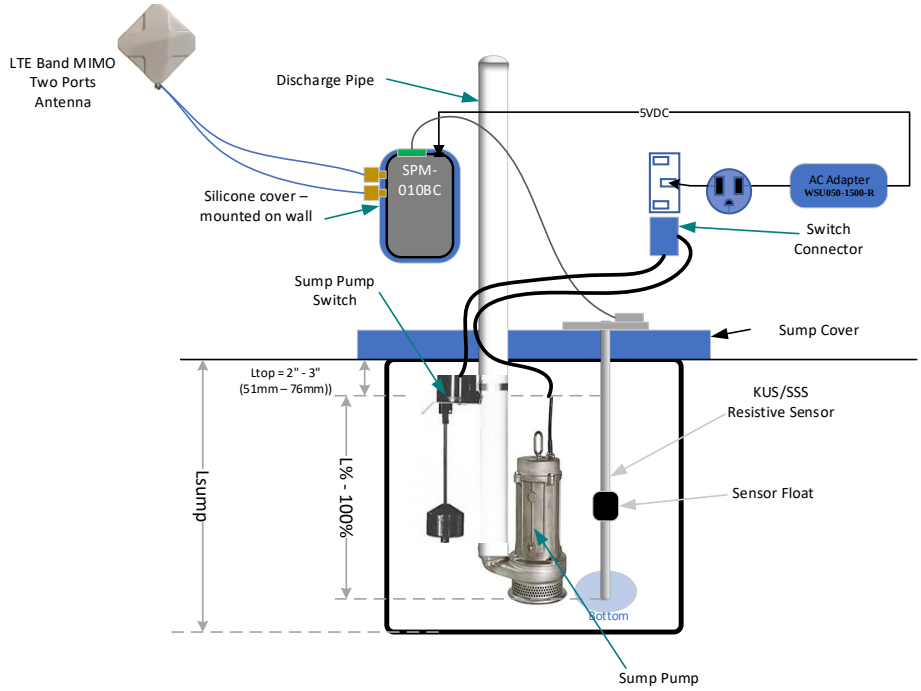


Figure 12 Resistive sensor and SPM-010 Installation

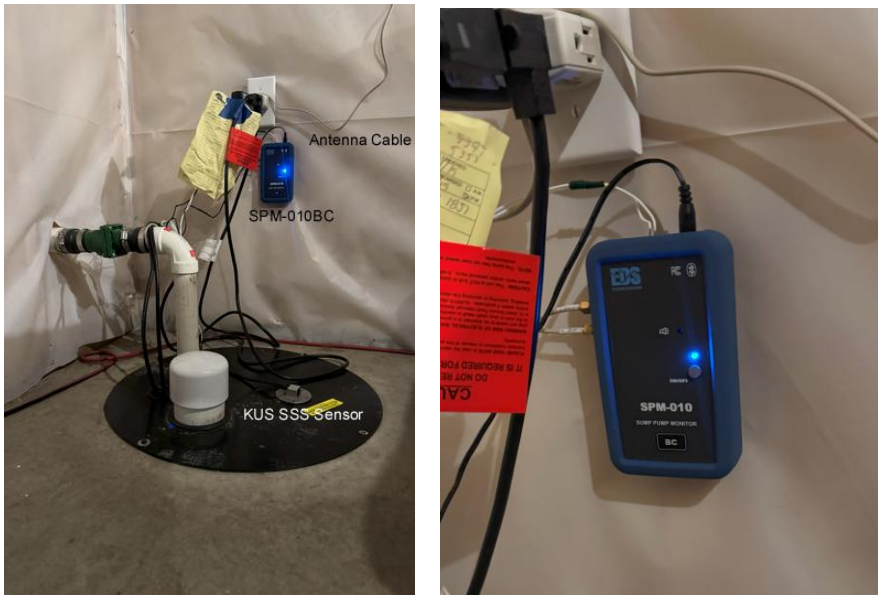


Figure 13 SPM-010BC installation example for Monitoring function with KUS SSS sensor

Emergency Pump Setup (with SSR-CU Module)

If using an emergency sump pump setup:

- Install the **SSR-CU control module** between the sensor and the pump.
- The resistive sensor (e.g., KUS SSS) is required for this configuration.

📷 **See Figure 14**: SPM-010/SPM-010BC with Emergency Pump and SSR-CU

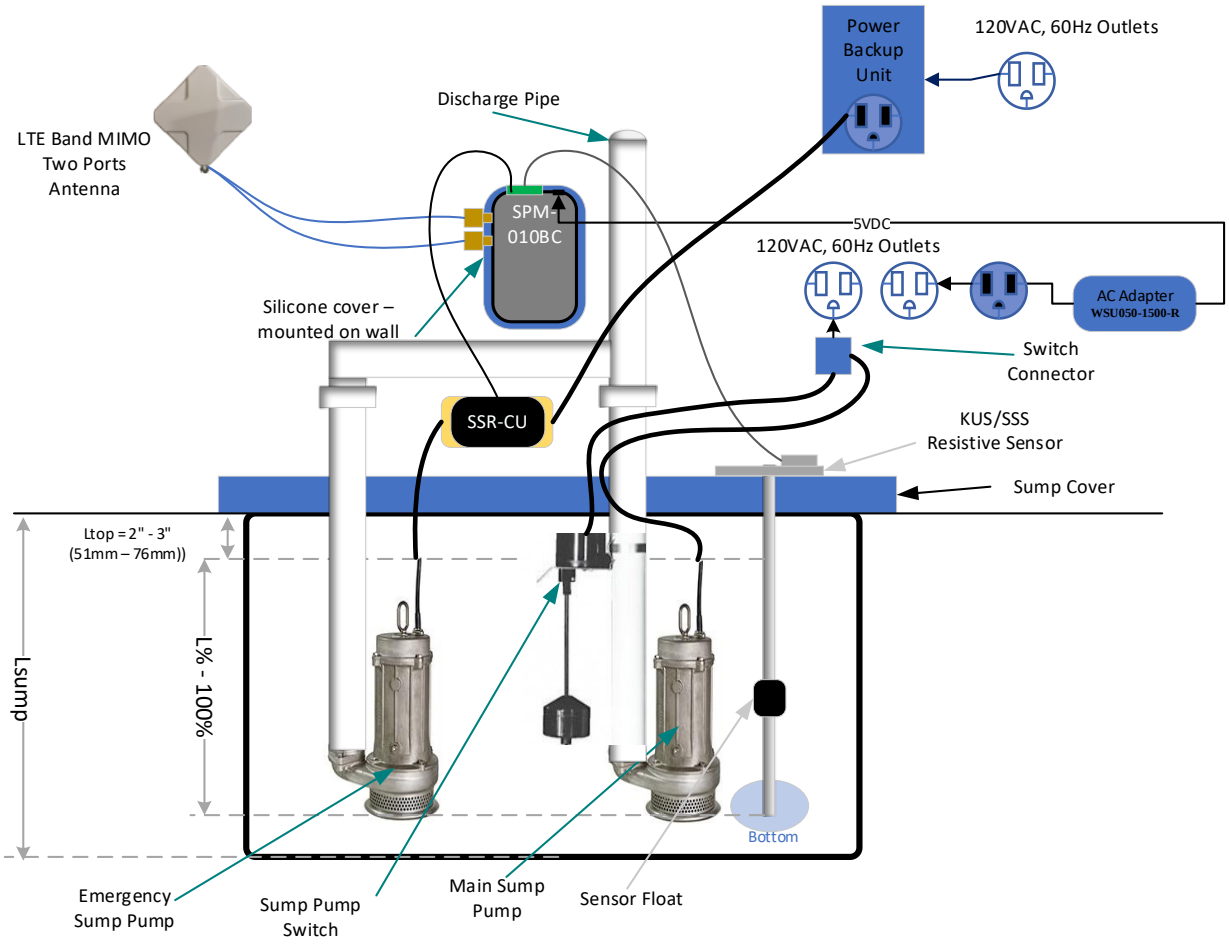


Figure 14 SPM-010/SPM-010BC with Emergency Pump Installation

Installing the SPM-010 or SPM-010BC Device

Refer to the figures mentioned earlier (Figures 9–14) based on your sensor type.

- Mount the device in a **dry, elevated** area near the sump.
- Ensure clear access to connectors and visibility of LED indicators.
- For **SPM-010BC**, also follow the **Antenna Adjustment** section to ensure strong LTE signal reception (see Figure 37).

Next up: I'll continue with the **Operation** section, including the power-on sequence, dummy battery installation, and front panel functionality.

Let me know if you'd like me to also incorporate icons or styled callouts for tips, notes, or warnings (for example: 💡 Tips, ⚠️ Warnings).

🧭 Operation

Powering On and Basic Use

🪫 Dummy Cell Installation (SPM-010 Only)

Before first use, you must install the included **dummy battery** in the SPM-010 device.

Steps:

1. Remove the silicone protective cover.
   📷 *See* Figure 15*: Removing Silicon Cover*
2. Open the battery compartment on the back.
3. Insert the AA-sized dummy battery into the empty slot.
   📷 *See* Figure 16*: Dummy Battery Installation*
4. Close the cover and reapply the silicone protector.

Figure 15 Silicon Cover Removing

Figure 16 Dummy Cell Installation

Device Controls and Indicators

Both models have a simple, intuitive front panel:

- **Power Button** – Turns the unit on/off.
- **LED Indicator** – Blinks approximately every 1.5 seconds during normal operation.

See Figure 17*: Front Panels of SPM-010 and SPM-010BC*

Note: Local sound alarm is available only on older hardware versions (SPM-010 v4).

Figure 17 SPM-010 and SPM-010BC Front Panels

Using the iOS Application

🔧 Installation

Download and install the **SPM-010 App** from the AppStore on your iPhone or iPad.

Setup for SPM-010 Users

If using a smartphone/tablet for monitoring and alerts:

1. Create a new **Contact** on your iOS device:
   - **First Name**: `SPM-010`
   - **Phone Number**: Your actual phone number (e.g., +1XXXXXXXXXX)
2. Launch the app. An **activation message** will be sent from the app to the assigned number.

See Figure 18: Activation Messages
See Figure 19: Confirmation Message on Startup

If SMS alerts are not required, this step is optional.

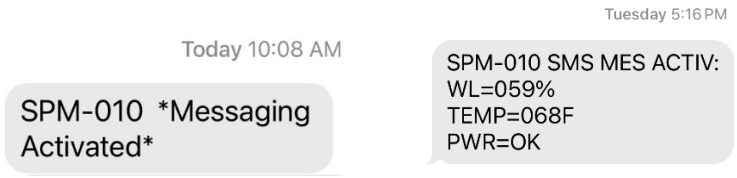


Figure 18 SPM-010 Activation Message and SPM-010BC (in case of LTE is connected) Activation direct SMS message

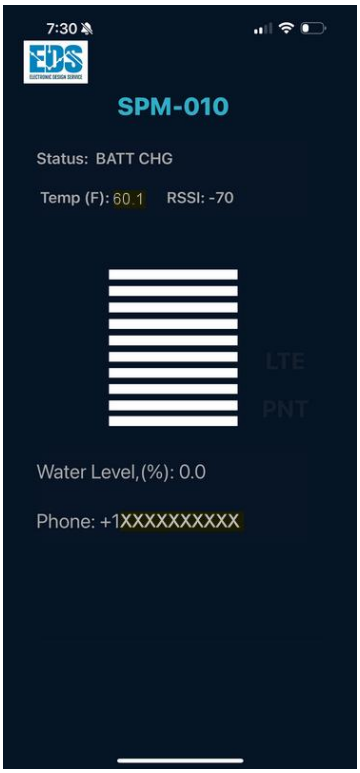


Figure 19 Message Phone number at start (SPM-010 example)

Setup for SPM-010BC Users

The SPM-010BC can send and receive SMS messages **independently**.

- After LTE connection is established, the **activation SMS** is sent automatically.
- You may still pair your smartphone via Bluetooth for local monitoring.
- Create a new contact (see above).
- Use the **PNT Button** on the app (available at startup for 15 seconds) to transfer your phone number to the device.
- Use the **LTE Button** during installation to enter antenna signal strength adjustment mode.

See Figure 20: iOS App – SPM-010BC Version

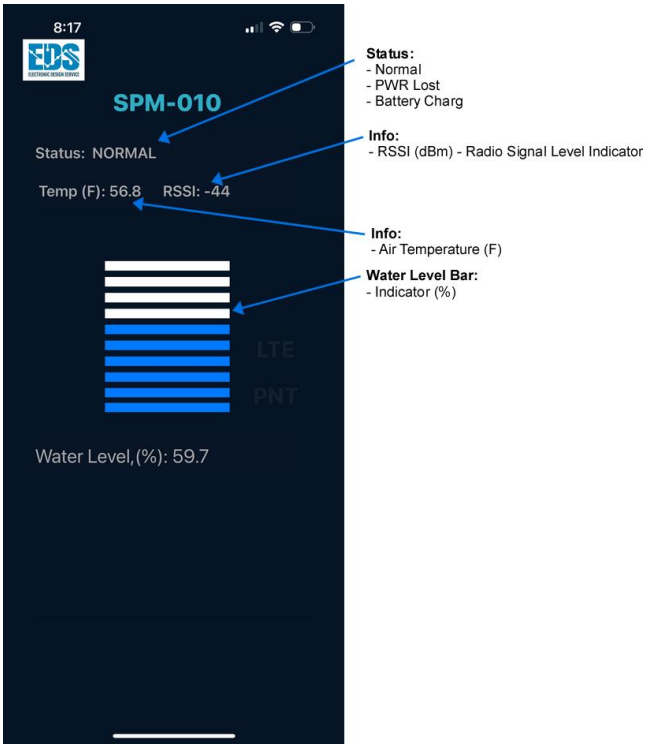


Figure 20 iOS Application Screenshot for SPM-010BC device version.

Messaging, Alerts, and Operating Conditions

The SPM-010 and SPM-010BC devices notify you of key status changes through visual indicators, in-app messages, and SMS alerts (when configured). Here's how each scenario is handled:

✅ Normal Operation

SPM-010

- Power is connected and stable
- Battery is charging or fully charged
- Water level is below the alarm threshold
- No sound or visual alarms
- Status indicator shows **“Normal”**

SPM-010BC

- Power is connected
- LTE connection is active
- Battery is charging or charged
- Water level is normal
- App shows **“Normal / LTE Connected”**
- No alerts or alarms triggered

📷 *See Figure 19 & Figure 20 for app screen examples*

⚡ Power Loss Condition

When a power outage occurs:

- **Status changes to “PWR LOST”**
- Battery backup keeps the device running
- Water level monitoring continues

SPM-010

- Sends a power loss alert via SMS (if connected to a home device with the Remote Messaging Service)

📷 *See Figure 21: Power Loss and Recovery Messages*

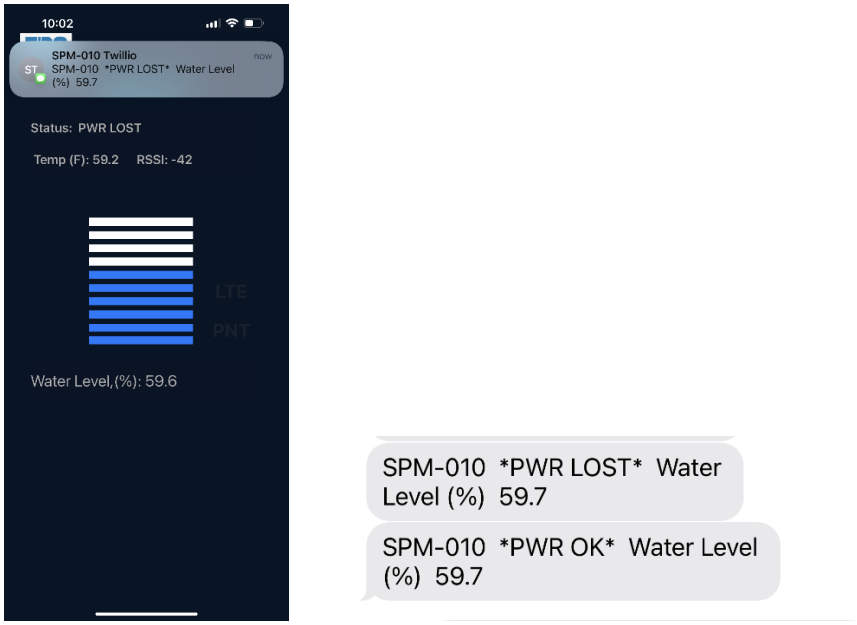


Figure 21 Power Loss Screenshot, Power Loss Alarm message and Power Return Message

SPM-010BC

- Sends SMS directly using LTE
- When power is restored, a **"PWR OK"** message is automatically sent

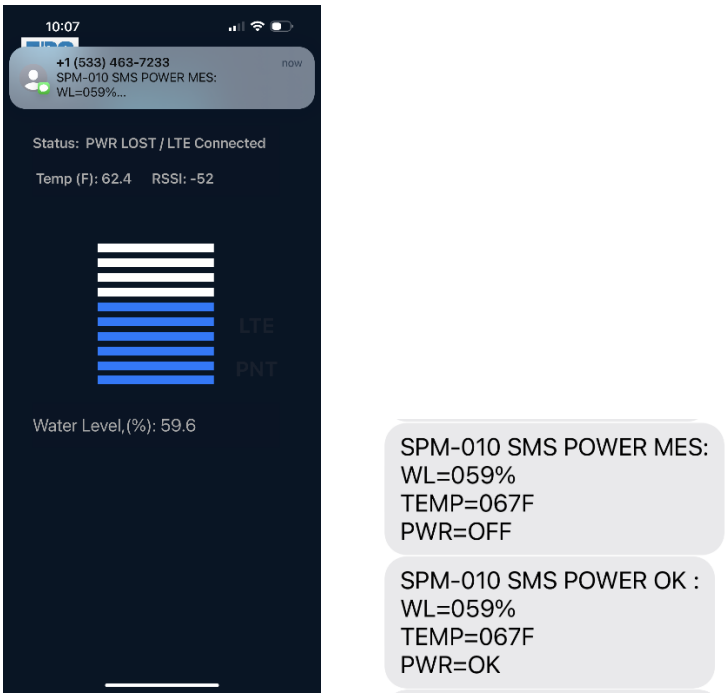


Figure 22 Power Loss Screenshot, Power Loss Alarm SMS message and Power Return SMS Message

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💧 Water Level Alarm

If the sump water level rises above the set threshold:

- The water level bar on the app turns red (above 70% - adjustable)
- A sound alarm is triggered on the paired iOS device (SPM-010)
- SMS alert is sent (SPM-010BC or RMS-enabled SPM-010)

When water drops below 5%, a "**Water OK**" message is sent to confirm normal status.

📷 *See Figure 23 & Figure 24: Water Level Alerts and Returns*

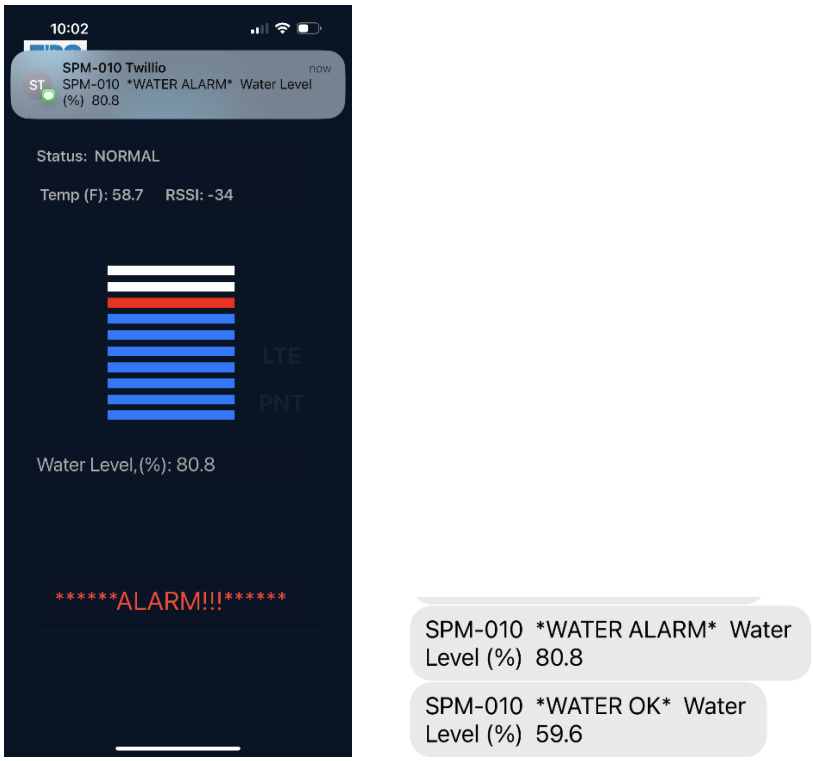

Figure 23 SPM-010 Water Level Alarm Screenshots, Water Level Alarm message and Water Level Return message

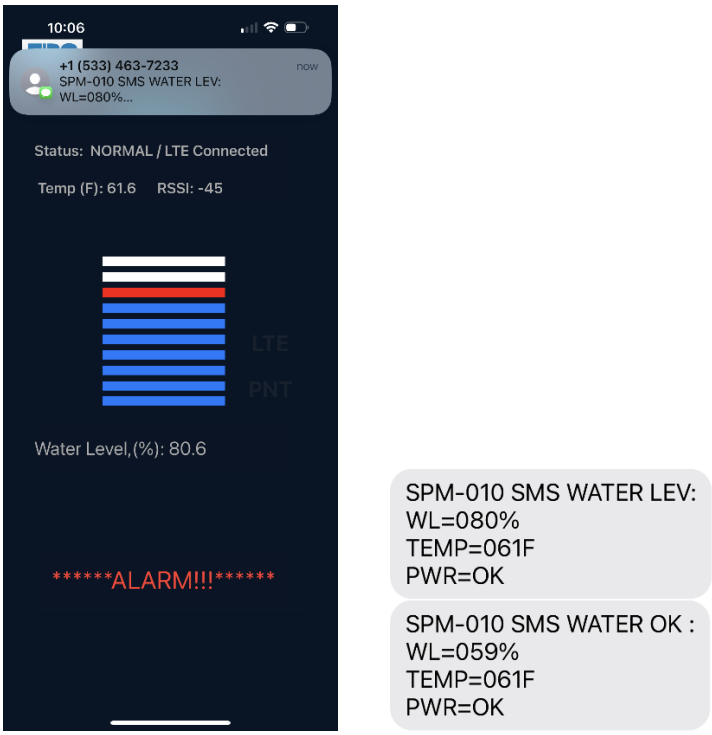

Figure 24 SPM-010BC Water Level Alarm Screenshots, Water Level Alarm message and Water Level Return message

🔋 Battery Charging Status

If the device is operating on backup power but receives external AC power again:

- The device shows **“Battery Charging”** on its status line
- Indicates the unit switched to charging mode after a power loss

📷 *See Figure 25 & Figure 26: Charging Indicator Screens*

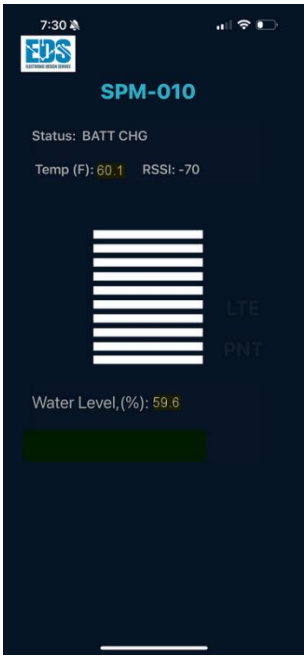

Figure 25 SPM-010 Normal operation with battery charging screenshot

Figure 26 SPM-010BC Normal operation with battery charging and Activation SMS screenshot

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❄️ Low Temperature Alert

If the ambient temperature drops below 45°F (7°C):

- An SMS message is sent with the "**Low Temperature**" alert and the actual reading
- Once temperature rises back above 45°F, a "**Temperature Norm**" message is sent

📷 *See Figure 27: Low Temperature Notifications*

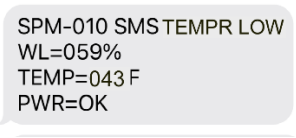

Figure 27 Low Temperature SMS Message (SPM-010BC example)

📤 Requesting System Status (SPM-010BC Only)

You can query the device by sending an SMS command:

- Text **GD** to the phone number associated with your SPM-010BC device
- The device replies with an SMS showing:
  - Water level
  - Power status
  - Air temperature
  - Device battery state

📷 *See Figure 28: SMS Response with Current Parameters*

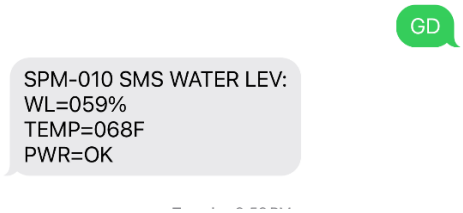

Figure 28 Request Current parameters and response SMS message with current parameters

🔋 Battery Safety and Handling

The SPM-010 and SPM-010BC both use a **3.7V Lithium-ion protected battery** to ensure uninterrupted operation during power outages.

Safety Features:

- **Overcharge protection**
- **Over-discharge protection**
- **Short-circuit protection**
- **Reverse polarity protection**
- Reinforced steel shell to protect against pressure or impact

Important Guidelines:

- **Do not use the device with a damaged battery**
- **Do not attempt to replace the battery with a non-approved model**
- Battery is rated for approximately **500 charge cycles**
- Store the device in a cool, dry place to extend battery life

⚠️ Always handle batteries with care. Improper use may result in damage or reduce battery effectiveness.

🛡️ Warranty Information

Limited 1-Year Warranty

This product is covered by a **1-year limited warranty** against defects in materials or craftsmanship under normal use.

What's Covered:

- Repairs or replacement due to manufacturing defects

What's Not Covered:

- Damage due to misuse, improper installation, or external events (fire, water, lightning)
- Use with unauthorized accessories or modifications
- Unauthorized repairs or service

Warranty Procedure:

To request service:

1. Contact the manufacturer or dealer.
2. Provide proof of purchase.
3. Ship the product (freight prepaid) to the authorized address.

Legal Notice:

- This warranty is governed by the laws of the State of Missouri, USA.
- Certain limitations may not apply depending on your local jurisdiction.
- **Warranty is limited to repair or replacement only.** Indirect, incidental, or consequential damages are not covered.

For full legal terms, please refer to the complete warranty document included with your product or visit: www.eldesignservice.com

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🧩 Troubleshooting Guide

🔹 SPM-010 Issues

Issue	Solution
Bluetooth won't stay connected	Ensure the iOS device is within range (RSSI > -90dBm). Reconnection may take up to 6 minutes.
Bluetooth won’t connect	Go to iOS Settings > Bluetooth, tap on `SumpPumpMonitorV010`, and select "Forget This Device." Then restart both the SPM-010 and your phone.
No activation SMS sent	Double-check the contact entry in your iOS device (see app setup instructions).
Incorrect water level readings	Restart the device if WS-010 was recently calibrated. For KUS sensors, ensure the correct sensor type is selected in settings.

🔹 SPM-010BC Issues

Issue	Solution
Bluetooth issues	Follow the same steps as above for SPM-010.
No SMS responses	Ensure the device has a valid LTE signal and SIM card. Recheck phone number transfer.
No alarms or alerts	Verify that the correct threshold settings are applied and sensors are installed properly.

📘 Appendix A: Bluetooth Scanner & Sensor Calibration

This section covers the use of a BLE (Bluetooth Low Energy) scanner app for configuring the SPM-010, including how to perform WS-010 sensor calibration and set resistive sensor parameters using the TI SimpleLink Starter app.

🔍 Using a Bluetooth Scanner Application

A BLE scanner app allows you to connect directly to the SPM-010 and SPM-010BC for configuration and diagnostics.

Recommendation is to use TI SimpleLink Starter App:

- **App Name:** *Bluetooth BLE Scanner*
- **Platform:** iOS (iPhone or iPad)
- 📷 *See Figure 29: Recommended Bluetooth Scanner iOS Application*

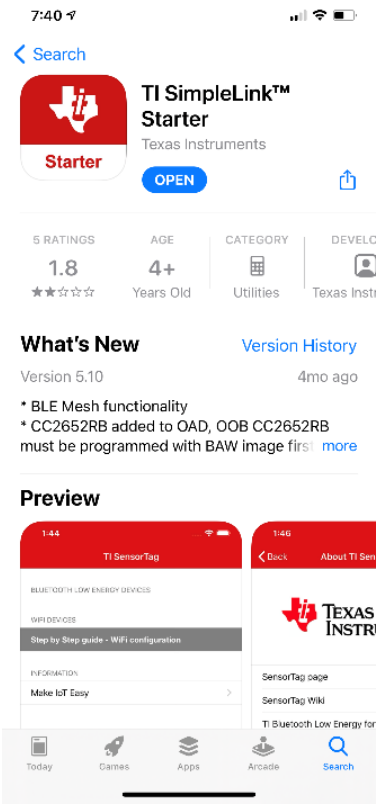


Figure 29 Recommended Bluetooth Scanner iOS Application.

Steps:

Note: If you have previously paired any SPM-010 device, go to Settings>Bluetooth and remove it from list (see Figure 30) by using Forget This Device option

1. **Download and install** the BLE Scanner app from the App Store.
2. **Open the app** and scan for nearby BLE devices.
3. Look for a device named **`SPM-010`** in the list.
4. Tap to connect, then navigate to the **Service Explorer**.
5. Choose the **"1 – TI Simple Key Service"** and then select **"0 – Key Press State"**.
6. Use the "Enter Value" field to write commands to the device.

- *See Figure 30: Device Scan Example*
- *See Figure 31: Service List*
- *See Figure 33: TI Services Available*
- *See Figure 33: Writing a Command*

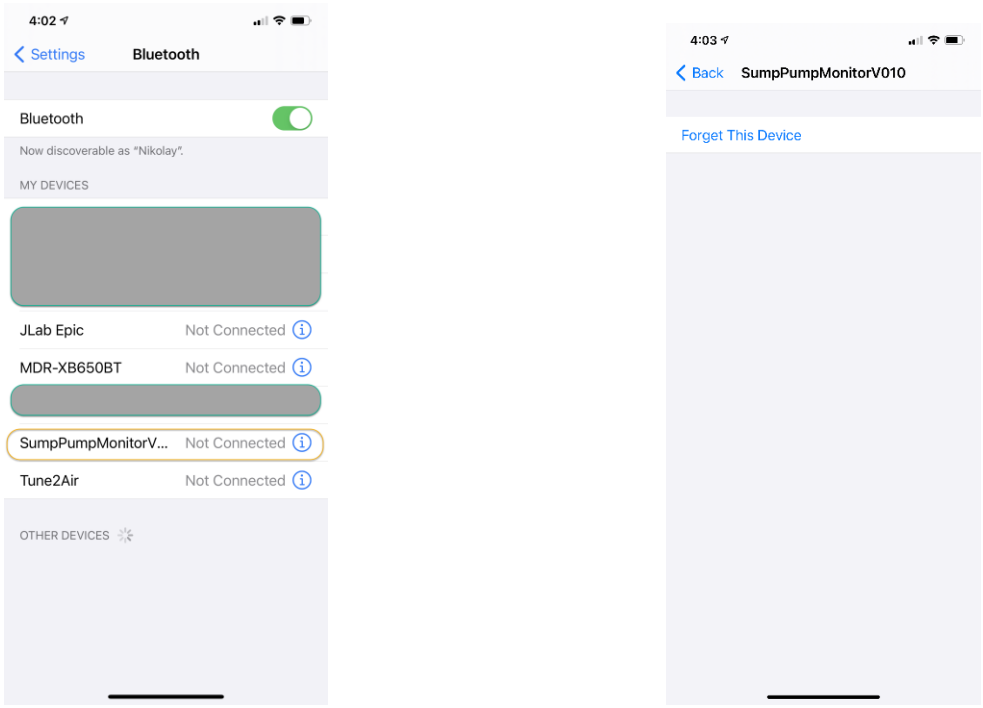


Figure 30 Screenshot Example

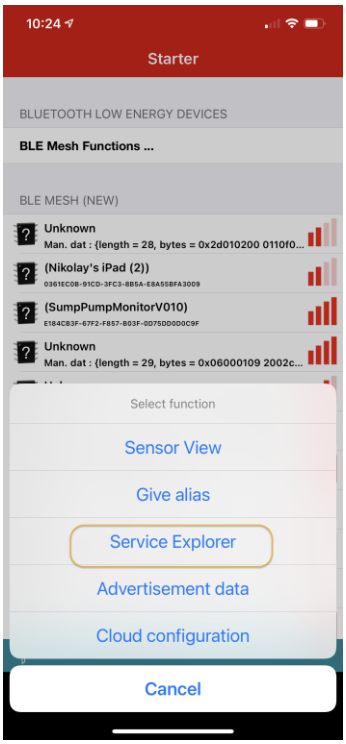
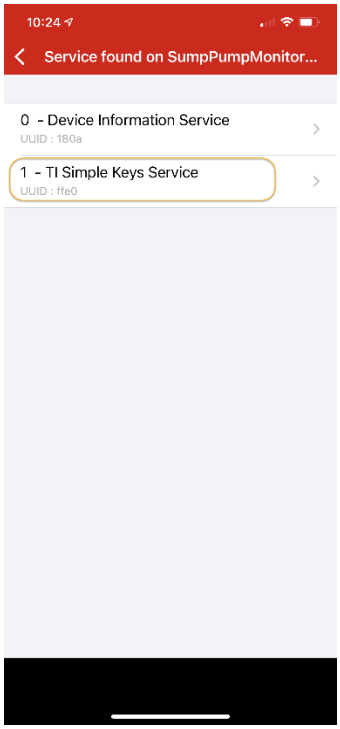


Figure 31 List of devices and Services



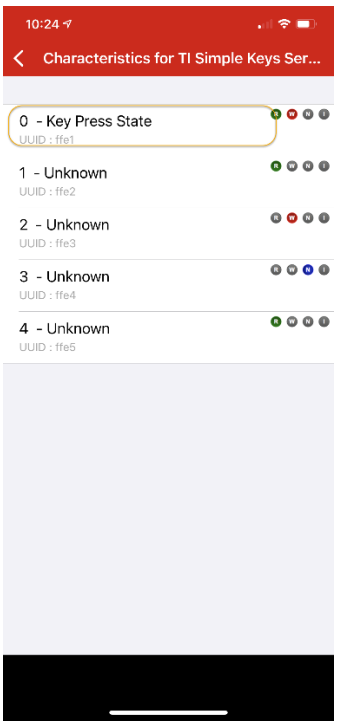


Figure 32 Services

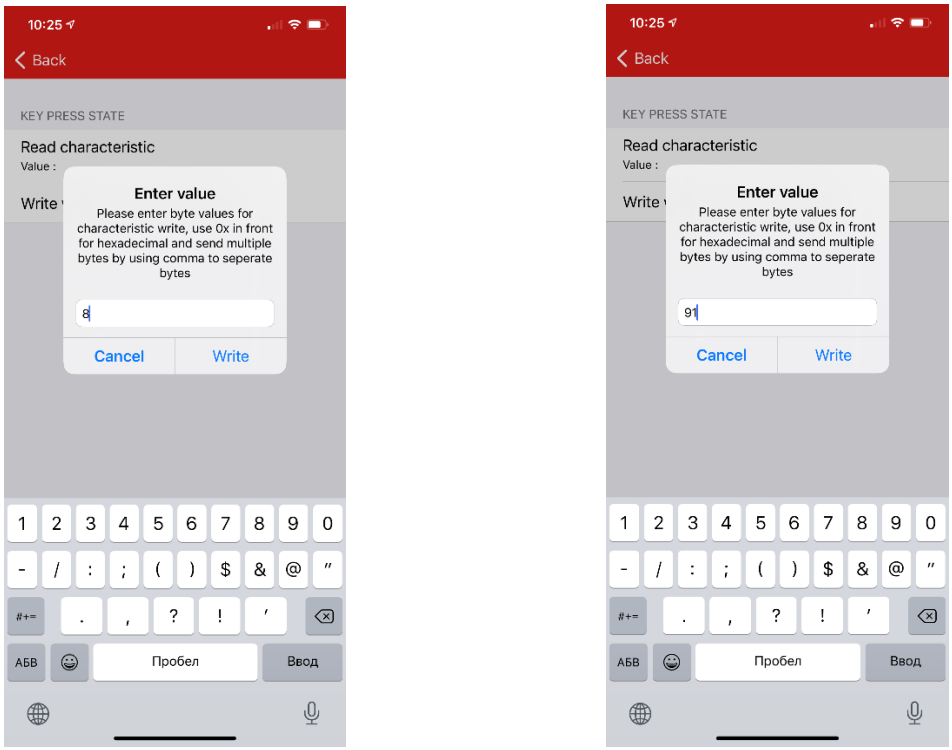


Figure 33 Command Write Example

⚙️ WS-010 Sensor Settings and Calibration

If you are using the WS-010 wire sensor, you may need to calibrate it if the default settings do not match your sump depth.

Default Calibration Settings:

- **0% Water Level:** 0 mm (sensor dry)
- **100% Water Level:** 30" (762 mm)

If your installation differs, recalibrate the sensor using the BLE Scanner and WS-010 Sensor Calibration Instruction. Document is provided by:

https://eldesignservice.com/home-monitors/home-monitors-2/

🔧 Resistive Sensor Configuration (KUS SSS Sensor)

Default Settings:

- **240 Ohms = 0% water level (empty)**
- **33 Ohms = 100% water level (full)**

This type of sensor does not require calibration.

📘 Appendix B: SPM-010BC Special Operation Modes

This section outlines advanced configuration features unique to the **SPM-010BC**, including how to transfer a messaging phone number to the device and how to optimize the LTE antenna placement for a reliable cellular signal.

📞 Phone Number Transfer to SPM-010BC

For the SPM-010BC to send and receive SMS alerts, it must store a valid **destination phone number**. There are two ways to assign this number to the device:

Method 1: Using the Smartphone App (Recommended)

Steps:

1. **Ensure your smartphone is connected** to the SPM-010BC via Bluetooth.
2. Add the target number to your iPhone/iPad Contacts:
   - **First Name:** `SPM-010`
   - **Phone Number:** `+1XXXXXXXXXX` (the number to receive SMS)
3. Open the **SPM-010 App**. Wait until the **status bar** displays:

   ```
   Normal / LTE Connected
   ```

4. The **PNT Button** (Phone Number Transfer) will appear **for 15 seconds**.
5. Tap the **PNT button** once and wait **20–30 seconds** for the number to be saved.
6. After success, the app will return to the main monitoring screen automatically.

📷 *See* Figure 34*: Transferring Number via App Interface*

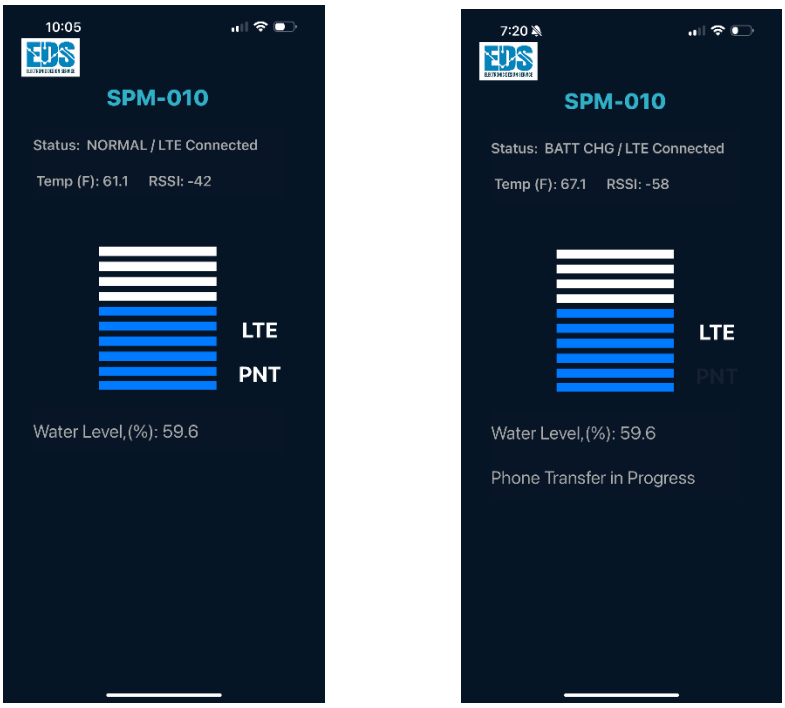


Figure 34 Phone Transferring Mode by using SPM-010 application

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Method 2: Using the TI SimpleLink Starter App

This method allows you to manually send configuration commands to the SPM-010BC.

Prerequisites:

- TI SimpleLink Starter app installed
- BLE connection to SPM-010BC established
- Familiarity with command input format

Steps:

1. Connect to the device via **TI SimpleLink Starter**.
2. Navigate to:
    - `TI Simple Key Service > Key Press State`
3. Send the command sequence required to store the phone number.

Refer to Table 1 for the full command list.

📡 LTE Antenna Location Adjustment

Proper LTE antenna placement is critical for the SPM-010BC to maintain reliable connectivity for remote SMS alerts.

Goal:

Achieve a **signal strength better than -100 dBm** during initial installation.

📶 Signal Optimization Mode ("LTE Mode")

How to Enter LTE Mode:

1. Open the **SPM-010 App** on your iOS device.
2. Wait for the status to show: `Normal / LTE Connected`
3. The **LTE Button** will appear (active for 10–15 seconds).
4. Tap **LTE Button** once to enter signal strength display mode.
5. The app will now show the **LTE RSSI value**.

Adjust the Antenna:

- Slowly reposition the antenna until you achieve a signal better than **-95 dBm**
- Wait for the RSSI to refresh (may take up to 30 seconds)
- Once optimal, tap **LTE Button** again to return to standard operation mode

📷 *See Figure 35: LTE Antenna Adjustment Mode Interface*

📌 For best results, keep the antenna away from concrete walls, metal enclosures, or any sources of electrical interference.

Figure 35 LTE Operation Mode

The series of commands need to be sent for phone transferring (see Table 1)

Table 1 Phone Transferring Commands

Command	95	Country Code = 1											
					Phone Number Digits:								
Area Code	**Example**		**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	
D1	4		96	97	98	99	100	101	102	103	104	105	**Area Code D1 Command**
D2	5		106	107	108	109	110	111	112	113	114	115	**Area Code D2 Command**
D3	4		116	117	118	119	120	121	122	123	124	125	**Area Code D3 Command**
Phone Number													
D1	1		126	127	128	129	130	131	132	133	134	135	**Phone Number D1 Command**
D2	2		185	186	187	188	189	190	191	192	193	194	**Phone Number D2 Command**
D3	4		195	196	197	198	199	200	201	202	203	204	**Phone Number D3 Command**
D4	5		205	206	207	208	209	210	211	212	213	214	**Phone Number D4 Command**
D5	4		215	216	217	218	219	220	221	222	223	224	**Phone Number D5 Command**
D6	3		225	226	227	228	229	230	231	232	233	234	**Phone Number D6 Command**
D7	2		235	236	237	238	239	240	241	242	243	244	**Phone Number D7 Command**
Command	1	Go to operation											
To transfer 1 454 124 5432 phone number example the following series command shall be used:													
94	95	100	111	120	127	187	199	210	219	228	237	1	

Support & Contacts

For the most up-to-date information about the Electronic Design Service product, go to the Electronic Design Service website at www.eldesignservice.com.

Technical Support :

Email: support@eldesignservice.com

www.eldesignservice.com