



Marshall Smart Reg

Propane Tank Gas Level Monitor (Smart Tower) User Guide

Summary

The Marshall Smart Reg introduces an innovative electronic device known as the Marshall Smart Tower. This device is designed to collect, process, and utilize wireless Bluetooth technology to transmit propane tank gas level data directly to any smartphone within range. By using the corresponding smartphone app, users can easily connect and monitor their propane tank's gas level information.

With the Marshall Smart Reg, users can remotely view their propane tank's gas level, eliminating the need to manually remove the tank cover or visually inspect the mechanical gas meter, if present. The device also alerts users with a warning message when the propane level is low, and displays nearby propane gas stations using Google Maps integration.

The device operates on two CR2032 batteries, which are capable of lasting between one to two years depending on the frequency of updates. Additionally, the device features a weather-proof housing for added durability.

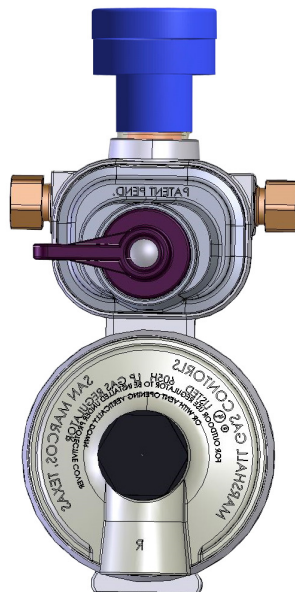


Fig. 1 – Marshall iReg with Smart Tower

Features

- Instant viewing of propane gas tank level through the smartphone app
- Simple Bluetooth connection to the smartphone
- Configurable data update frequencies for testing, monitoring, and sleep modes
- Color bar display for gas levels: full, medium, and low
- Low-gas warning message display
- One-click access to locate nearby propane gas service stations
- ABS material construction and weather-proof design
- Easy slide-on installation, with no screws required
- Operates on 2 x CR2032 Li-ion batteries, ensuring very low power consumption

Installation

Each Marshall Smart Reg is thoroughly tested at the factory and comes ready for use. Two CR2032 lithium batteries are pre-installed before shipping. To activate the device, open the cover and remove the clear plastic power isolation piece. This action powers the device.

When replacing the batteries, carefully lift the spring pressure battery contact to insert or remove the batteries as shown in Figure 2.



Fig. 2 – Install/Remove battery

Using the App

To begin, download the Marshall Smart app from the Apple App Store or Google Play Store by scanning the QR Code on top of the Smart Tower or scanning this one by taking a screen shot and then pressing and holding the QR code.



Once installed, launch the app and allow Bluetooth access when prompted.

To connect the Marshall Smart Reg, ensure the device is within Bluetooth range. Tap the Bluetooth icon in the top left corner to access the iReg search page. When “iReg” appears, select it to pair your smartphone with the Marshall Smart Reg. The initial pairing process may take a few seconds, but once completed, your smartphone will

automatically reconnect to the device whenever it is within Bluetooth range.

The app uses a color bar system to indicate the propane tank level:

- Green: Full (above 75%)
- Yellow: Medium (between 30% and 75%)
- Red: Low (below 30%)

When the gas level is low, a flashing warning message—“Change the cylinder”—will be displayed.

To conserve battery power, users can select from different data update frequencies. These include Test & Link Mode, Monitor, and Sleep. Access the update frequency selection table by clicking the system configuration button in the top right corner. It is important to note that higher update frequencies reduce battery life. The “Test & Link” option should only be used for linking and testing, as it significantly increases battery consumption.

Except when using the “Test & Link” mode, the connection to the Smart Tower will automatically terminate after two minutes to help conserve battery life, as shown in Figure 3.

- An update to the tank level data occurs when the smartphone is within Bluetooth range and one of the following actions is taken:
- A new update frequency is selected
- The app is relaunched
- The app is running, the smartphone moves out of Bluetooth range, and then returns

For users seeking a propane service station to refill their tank, the app includes a link labeled “Click here to find a service station.” This feature provides a map of nearby service stations.

Fig. 3 – App

Fig. 4 – Data update frequency selection

Fig. 5 – Auto-disconnect feature for battery saving

Find Smart Reg

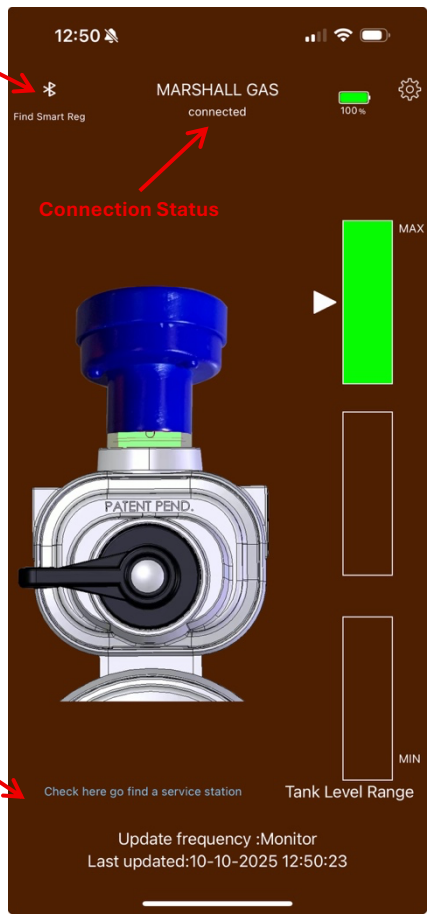


Fig 3

Data update frequency selection

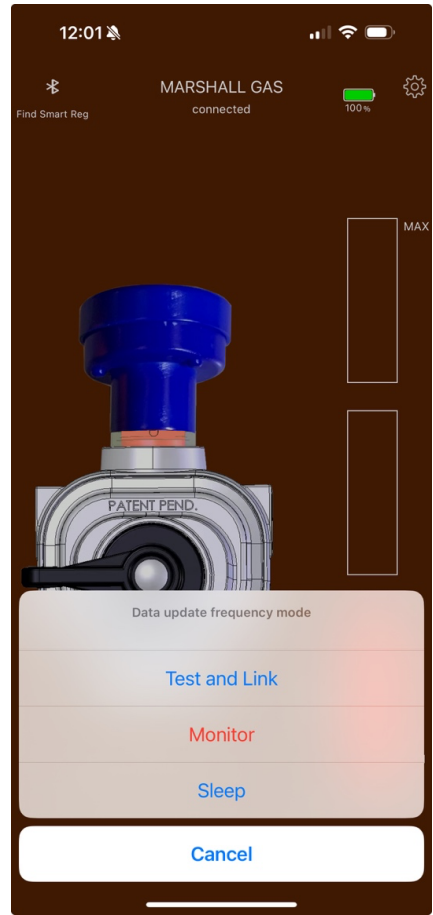
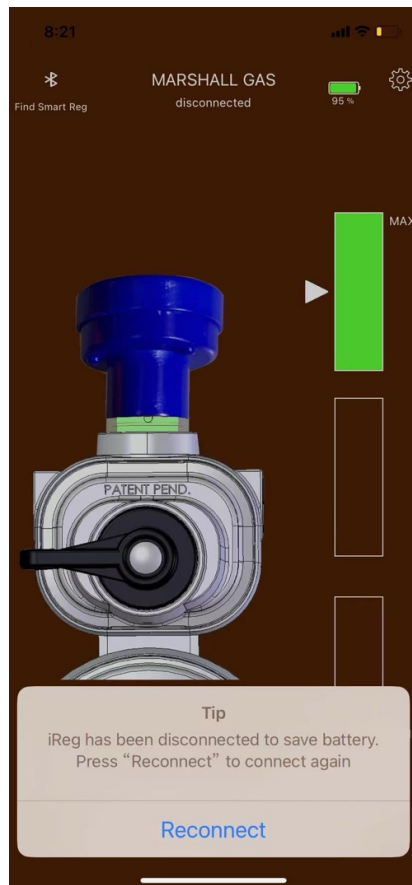


Fig 4

Find propane service Station nearby



Marshall Smart Reg Troubleshooting Guide

Marshall Smart App can't find Smart Regulator.

Make sure you have given the app permission to use Bluetooth

1. If you have already previously opened the app and not granted permission, Open Settings on your phone, navigate to Access Privacy & Security, find Bluetooth, Manage App Permissions, here you will see a list of apps that have requested Bluetooth access, toggle the switch next to Marshall SmartReg.
2. For an Android device, Open settings, tap on "Apps", look for the Marshall SmartReg app, tap on "Permissions", look for "Nearby devices" permission for Bluetooth, Tap on Marshall SmartReg and select "Allow".

Smart Reg battery is dead

Make sure your Smart App update frequency is not set on Test/Demo Mode

To conserve battery power, users can select from different data update frequencies. These include Test & Link Mode, Monitor, and Sleep. Access the update frequency selection table by clicking the system configuration button in the top right corner. It is important to note that higher update frequencies reduce battery life. The "Test & Link" option should only be used for linking and testing, as it significantly increases battery consumption.