



RMG AUTOMATION

+91 9940594413

Wireless Multi-Tank Water Level Indicator with Alarm

Model : WMTWLI



User Manual



<http://rmgautomation.com>



rmgworld@hotmail.com

1. INTRODUCTION

Using technology in day to day life make life easier and efficient. Wireless Multi Tank Water Level Indicator provides an automated way for water management. WMTWLI continuously monitors water/liquid levels in a tank and indicates it. It has two different alarms for tank full and tank empty.

It uses RF module and covers distance up to 700-1000 meters in line of sight. There are three variants available. Single tank, double tank, and triple tank. It can indicate up to 3 tanks status using a single indicator. Each transmitter is required for all three tanks.

2. DESCRIPTION

2.1 INDICATOR

- **POWER ON/OFF switch** – used to switch ON/OFF the indicator.
- **MUTE button** – Helps to mute the buzzer alarms. Also used to pair the indicator with transmitter.
- **Level indicator LEDs** – These LEDs shows the water levels of the particular tank. There are 4 level indications 25%,50%,75% and 100%. (each tank has its own level indicators)
- **BUZZER** – gives low beep alarm for 60 seconds when water in tank is low and fast beep alarm for 60 seconds if tank is full.

2.2 TRANSMITTER

- **POWER ON/OFF Switch** – used to switch ON/OFF the transmitter.
- **POWER ON LED** – shows the ON/OFF status of the device.
- **YELLOW Pairing soft key** – Helps to pair the unit with indicator.

3. TOOLS REQUIRED

- Drill gun
- Simple hammer
- Wooden gattas
- Screws for mounting units on wall
- Line tester
- Wire stripper
- 1.5Sq.mm Wire for power & control wiring
- Insulation tape
- Cable

4. INSTALLATION PROCEDURE

Caution: Switch off the main power while doing the Power Connection.

Step 1: Wall mount the Indicator unit nearby motor pump switch/starter location. The location chosen should be near the window or in open space to ensure good signal strength.

Step 2: Give Input AC 230V (phase and neutral) to red and black wire of the indicator unit. (Refer figure. 1).

Step 3: Wall mount the transmitter unit near tank location.

Step 4: Connect AC 230V (phase and neutral) to red and black wire of the transmitter unit. (Refer figure. 2).

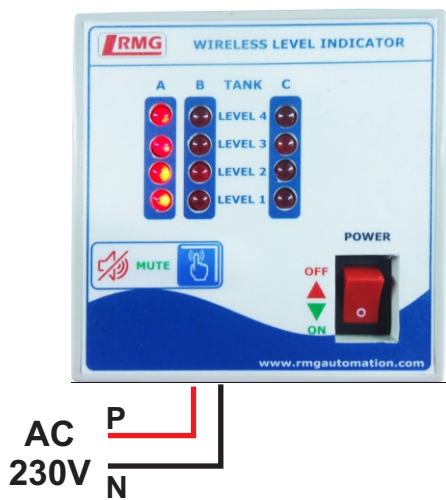


Figure 1: Indicator

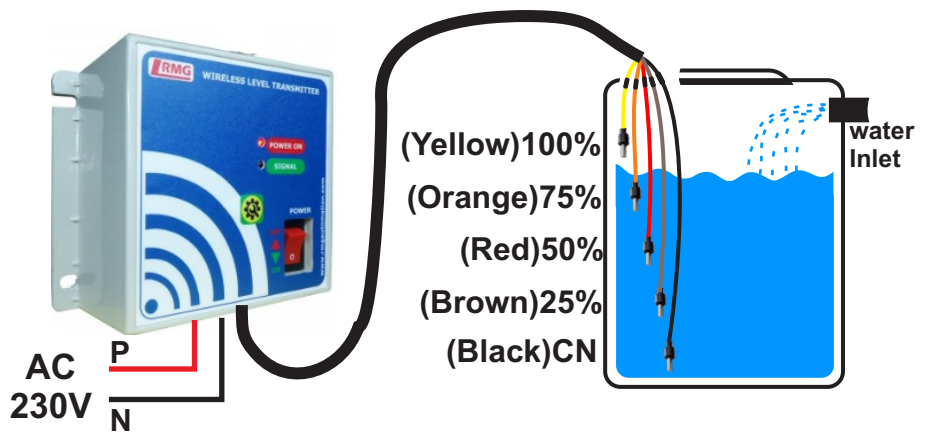


Figure 2: Transmitter

Step 5: Sensor connection with transmitter

Contact type sensor connection: Take the sensors and cut them according to the levels of the tank and join them with the sensors lines of transmitter as per color coding. (Refer figure 2).

Magnetic float sensor connection: These sensors has 2 wires. Use any one wire in each sensor as common. Other wire left in each can be used for levels.

Step 6: Immerse the sensors in the water tank and place at 25%, 50%, 75% and 100% levels. (Refer figure 2)

Note: Follow Step 3, 4 and 5 for other tanks. (If you have multi-tank models)

Step 7: Power on the transmitter and Indicator. Power ON LED on transmitter and Indicator glows. Signal LEDs on both transmitter and controller starts to blink once in 16 seconds. This means perfect communication.

This completes the installation.

5. OPERATING PROCEDURE

- Switch ON POWER button of the Indicator unit.
- Switch ON power button of the Transmitter unit, then power on LED glows.
- Signal LED in transmitter unit blinks in every 16 seconds confirming that signals are available.
- In indicator unit, depending upon the water levels in each tank, the level indication LEDs are ON. Furthermore, the levels of the each tank will be monitored every 16 seconds and the change in water level will be updated to the indicator.
- If the water level goes low, all LEDs will be OFF and you will hear a low beep alarm for 60 seconds. If water goes to high level all LEDs will be ON and you can hear a fast beep alarm for 60 seconds.

Pairing Procedure:

The units are generally paired and dispatched. In case of any trouble at the time of installation, users can pair the units once again.

- In Indicator Unit, Press the MUTE button and do not take the finger out. While doing this, switch ON the power ON/OFF switch using the other hand. All the LEDs will blink on the tank level. It means the device is ready for pairing.
- In Transmitter unit, Long press the pairing switch (yellow switch) of the Transmitter. Without taking out the finger from the pairing switch, switch ON the power ON/OFF switch. The indicator unit is now paired with Transmitter.

NOTE: Do not cover the transmitter and controller with metal enclosure. It may disturb / loss the RF communication.

6. TROUBLE SHOOTING METHODS

S.No.	Error	Solutions
1.	RF Signal LED glows continuously	a. Check whether any obstrucles are there in between transmitter and receiver units like large trees, buildings etc.(Repeaters can be addred if necessary).
2.	Tank level indicator LEDs are off	If one or all the level indicator LEDs are not glowing, a. Check common sensor connection is correctly made. If any loose contact correct it. b. Check all the sensor connections are having any loose contact.