Telog RG-32A

WITH TRIMBLE UNITY


OUT-OF-THE-BOX steps to commission and install the Telog RG-32A with Trimble Unity GIS-based Cloud and mobile software.

Trimble.

OVERVIEW

The Telog® Rain Gauge Recorder model RG-32A is a wireless, battery-powered, single-channel rain gauge recorder. The RG-32A continuously monitors the output of a Tipping Bucket Rain Gauge Sensor collecting rainfall data in user-configured increments, then transfers the data automatically to the application over a cellular network.

The Trimble Unity application provides the capability to view and analyze the data, configure and manage the RG-32A, as well as manage monitoring sites. Make sure you set up an account with Trimble Unity before installing RG-32A onsite.

The RG-32A is shipped in a dormant state. Please follow the instructions outlined in this Quick Start Guide to activate the device and ensure proper operation.
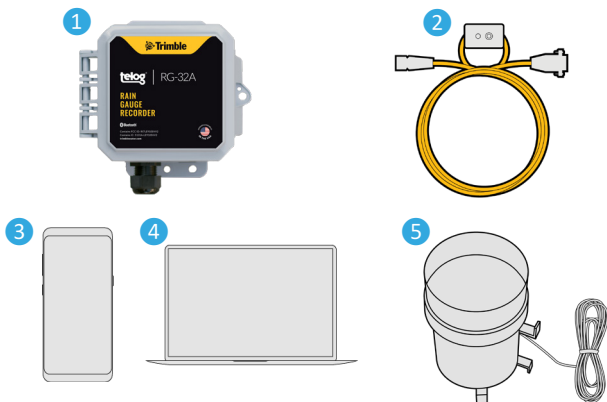
Item	Description
1	Telog RG-32A
2	Communication/Tamper Switch Cable
3	Trimble Unity on mobile device
4	Trimble Unity on PC/tablet
5	Tipping Bucket Rain Gauge Sensor (Size 6") (Size 8" not shown)

WHAT YOU NEED TO GET STARTED

- Telog RG-32A – Self-contained Rain Gauge Recorder with an integrated antenna and wireless modem.
- Communication/Tamper Switch Cable CU-CTS (yellow cable) – Used to force a communications call (also known as 'tampering a call'). *Ordered separately*.
- Tipping Bucket Rain Gauge Sensor – Measures rain and delivers data to the RG-32A. *Ordered separately*.
- Trimble Unity Mobile App – Used to install and view the data for RG-32A. The mobile application can be downloaded from the App Store on Android/iOS devices. Please ensure you have a Unity account set up and can log in to the mobile app before beginning the installation process.
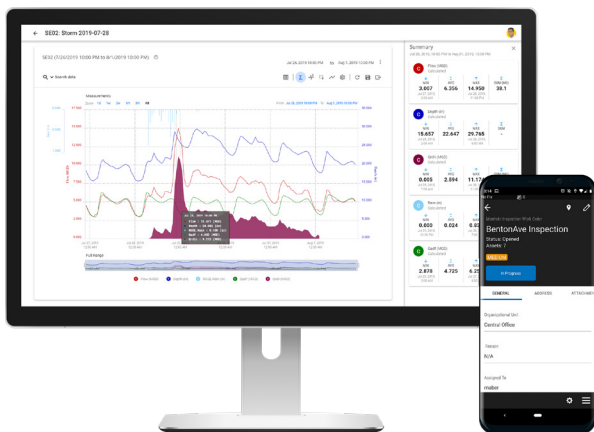
HOW TO INSTALL AND COMMISSION AN RG-32A

## Set Up a Work Order Using Trimble Unity

1. Go to: **https://app.trimbleunity.com/** on a Google Chrome browser.
2. Login to your **Trimble Unity** account.
3. On the **App Selector** screen, click on '**RTU Installer**'.
4. Click on the '**+**' sign on the bottom right of the screen to create a new Work Order (WO).
5. Fill in the **required information** and assign the WO to the crew that will do the installation.
6. Click on '**Create**' to save and issue the WO.

Set Up RG-32A in the Field

1. **Tamper a Call** to activate the device when you get to the field:
   a. Unscrew the **black waterproof cap** and connect the **Communication/Tamper Switch Cable** to the RG-32A using the rounded 5-pin connector end. Rotate to align the pin groove with the notch. Tighten the locking collar to ensure a secure connection.
   b. Press and hold the **Tamper Switch** on the cable for 5 seconds until the LED turns **solid red** (a call has been initiated). During the call, the LED will **flash off once per second**. When the call is finished, the LED will return to **blinking once every five seconds**.

2. Complete the **WO** issued previously by **creating a new monitoring site** in the field.
3. On a **mobile device**, run the **Trimble Unity** app and log in.
4. On the **App Selector** screen, click on '**RTU Installer**'.
5. Select the correct **WO** to begin the RG-32A installation.
6. Click on '**In Progress**' once the WO is displayed.
7. Click on '**Install RTU**' to bring up the installation form.
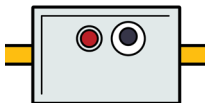
8. Click on '**Yes**' to confirm it is a new site.

9. Fill in the details for **Site Type (Rain Guage)**, **Site Name**, **Serial Number** and **Time Zone** for the RG-32A that is being installed. All other fields are optional.

10. Click on '**CAPTURE**' to use the current location as identified by the mobile device GPS to associate with the RG-32A. Site association can also be done using a pin on the 'MAP'.

11. Click on '**Install**' to create the new monitoring site and associate the RG-32A with the site location captured previously. A confirmation message should be displayed on the screen once the site has been created successfully.

12. **Tamper a Call** (as outlined in step 1) to verify whether the RG-32A can communicate successfully.

13. Once the call is completed, click on '**Verify**' in the Trimble Unity application to determine whether the call was successful. If the call was unsuccessful, please **Tamper a Call** again. If subsequent call attempts are unsuccessful, contact Trimble® Water Support.

14. Once the call has successfully completed, remove the **Tamper Switch cable**, replace the waterproof cap on the RG-32A, and hand-tighten.

15. Click on "✓" in the upper right corner of the Trimble Unity application to save the installation form for your records.
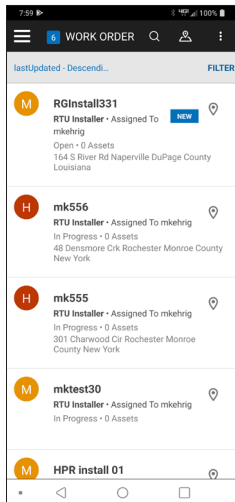
INSTALL THE RG-32A IN THE FIELD

1. Open the lid of the RG-32A housing to connect the Tipping Bucket Rain Gauge sensor.

   a. Unscrew the **cord grip** (A) from the sensor port.

   b. Remove the **waterproof plug** from the cord grip.

   c. Feed the **Tipping Bucket Rain Gauge Sensor cable** through the cord grip; allow only 1/4" or less of the cable sheath to protrude inside the housing.
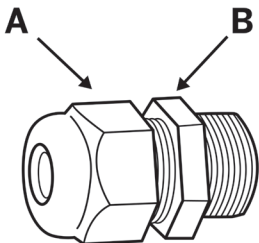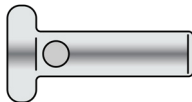
   d. Terminate the **sensor wires** per the **Connection Diagram** inside the lid (Connector J5 position 4 and 5) and the information provided with the Tipping Bucket Rain Gauge Sensor.
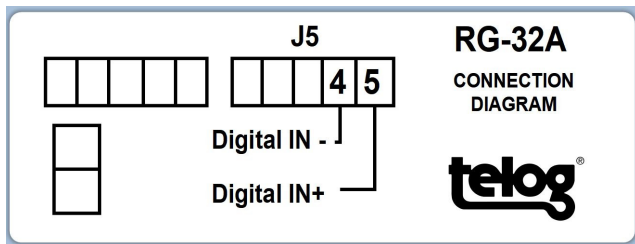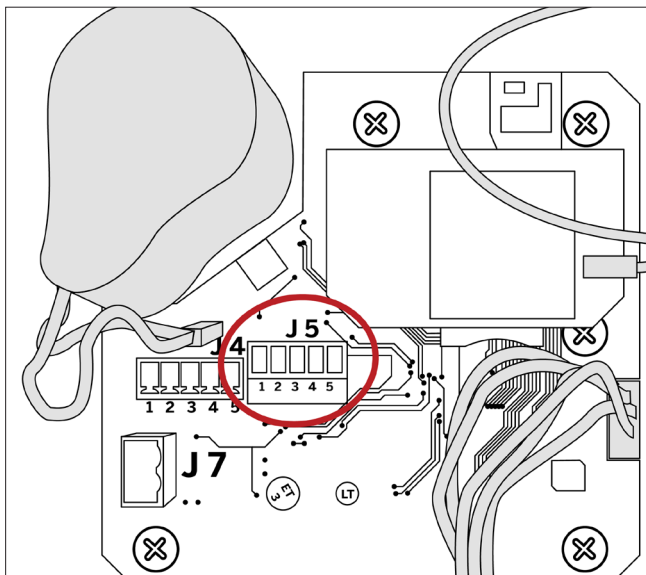
e. Secure the **wire leads** by tightening the terminals with a 1/8'' flat head screwdriver.

f. Secure the cable and provide a water-tight enclosure seal by tightening the **cord grip (A)** around the cable. Use a 24mm wrench on the outside of the housing on **cord grip (A)** and another wrench to hold the **nut (B)**. Use a max torque of 35 LBF-IN. Overtightening could damage the cord grip.

2. Prepare **RG-32A** for the onsite installation in the field:

   a. Ensure the **RG-32A** housing lid is securely closed and both latches have snapped shut.

   b. Ensure the **Tipping Bucket Rain Gauge Sensor** connection is tight.

c. Ensure that any **protective wrapping** has been removed from the inside of the Tipping Bucket Rain Gauge Sensor to allow the Tipping Bucket Sensor to move freely.

d. Verify that **data** is being logged by the RG-32A from the Rain Gauge Sensor.

e. Verify that **calls** are being completed.

3. Mount the **RG-32A** on a pole or mounting platform within reach of the Tipping Bucket Rain Gauge Sensor using your company's standard installation procedure.

Find more information about the Telog RG-32A at
www.trimblewater.com

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