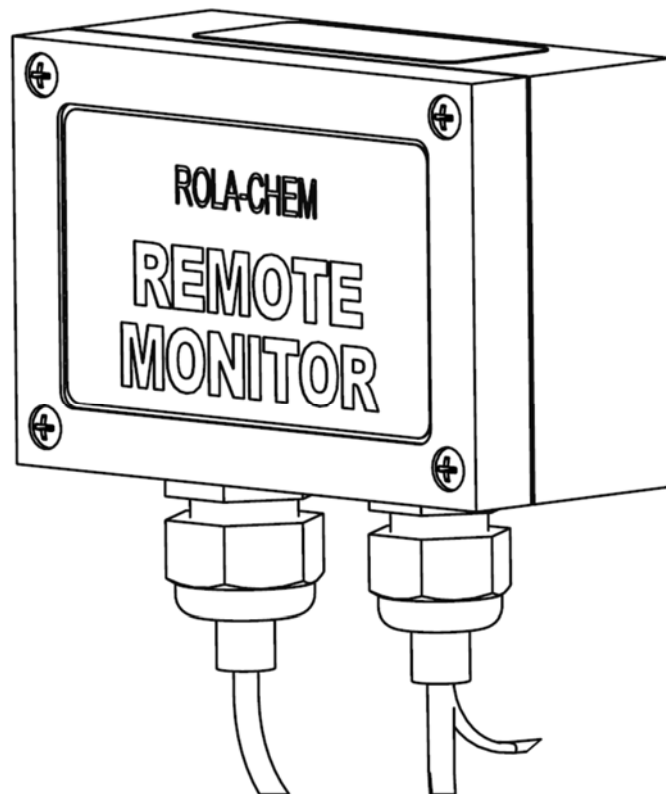


**MODEL RC554M**

**Remote Monitor**



**IMPORTANT SAFETY INSTRUCTIONS  
READ AND FOLLOW ALL INSTRUCTIONS  
SAVE THESE INSTRUCTIONS**



## 1. SAFETY INSTRUCTIONS

**When installing and using this electrical equipment, basic safety precautions should always be followed, including:**

**1.1 WARNING!** To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.

**1.2 WARNING!** Risk of electric shock.

Connect only to a grounding type receptacle protected by a ground-fault circuit interrupter (GFCI). Contact qualified electrician if you cannot verify that the receptacle is protected by a GFCI and that your installation meets local electrical codes, including grounding of water system components.

**1.3 WARNING!** Risk of electric shock.

Do not bury electric cords. Locate cord to minimize abuse from lawn mowers, hedge trimmers, and other equipment. Replace damaged cords immediately. Do not use extension cords.

**1.4 WARNING!** Risk of electric shock/pinching/chemical exposure.

Remove power sources or lockout circuit prior to performing maintenance.

**1.5 WARNING!** Controller uses microprocessor.

Wireless communication equipment or other electrical devices operated in close proximity may cause inadvertent actuation of chemical feed pumps.

Note: User assumes responsibility for confirming that pool/spa is properly maintained. Monitor will not provide notification of pool/spa conditions if internet communication fails.

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## 2. Quick Start Guide

Use this section for reference. Please read all safety instructions and appropriate manual sections for installation and operation instructions.

Remote Monitor is compatible only with Model RC554XP Controllers manufactured after October 2015 and Model RC554XXP Controllers manufactured after May 2016.

- a) To install hardware see section **4. Installation** on page 8 for details.
- b) To set up monitoring website see <http://www.rola-chem.com/manuals/new2016/554413-RC554M-Website-Registration-Setup-Instructions.pdf>
- c) To see the webpage for a controller, access the Remote Monitor website at <https://monitor.rola-chem.com/> and click on the Controller's Name on the Dashboard.
- d) Additional users can be authorized to view an existing Remote Monitor. See section **3.4 Additional Users** on page 7 for details.

### 3. Description and Specifications

#### 3.1 General Description

The Remote Monitor retrieves data from an ORP/pH controller. At a selectable interval the Remote Monitor polls the Controller for current readings. The current date, time, and ORP/pH levels are reported to a web-based interface. Access to the website requires a subscription.

#### 3.2 Controller Compatibility

Remote Monitor is compatible only with Model RC554XP Controllers manufactured after October 2015 and Model RC554XXP Controllers manufactured after May 2016.

#### 3.3 Available Readings and Features

To see the webpage for a controller, access the Remote Monitor website at <https://monitor.rola-chem.com/> and click on the Controller's Name on the Dashboard.

1. **Readings** tab shows recent data.
  - Readings available on the web-based status page include pH level, pH alert status, ORP level(s), ORP alert status, flow status, controller set points, alerts history and settings history.
2. **Alerts** tab shows alert events.
3. **Settings History** tab shows history of changed settings.
4. **Reports** tab exports PDF or Excel reports for:
  - a. **Level Summary** – summary of average/high/low values over the selected time period.
  - b. **Alert Summary** – summary of alerts over the selected time period.
  - c. **Hourly Levels** - average/high/low values for each hour of the day over the selected time period.
  - d. **Settings** – shows history of changed settings.

Data can also be exported to Excel or PDF file from Readings, Alerts and Settings History tabs.

5. **Notifications** tab configures email or SMS (text) messaging notifications. Notifications can be sent by SMS (text) and/or email if:
  - There is **No Communication** with the website with 12 hours.
  - A **No Flow Alert** event occurs.
  - An ORP, ORP2 or pH reading exceeds the **High/Low Alert** limits.
  - An ORP, ORP2 or pH **Consecutive Feed Limit (CFL)** time or cycle count is exceeded.

Standard data fees and SMS (text) messaging rates may apply based on your plan with your mobile phone carrier.

The web-based interface shows fields for readings that may not be active on all controllers.

### 3.4 Additional Users

Additional users can be authorized to view an existing Remote Monitor.

Authorized users will need to have an account using an email address. See “Website Registration and Setup Instructions” at ROLA-CHEM.com. They will not need a subscription to create an account or to view existing controllers that they have been authorized to view.

To add authorized user(s) and give them access to your controller, go to **Settings – Locations** and select a location – select **Change Settings** for the desired controller – click **Add User** under **Authorized Users** section. Complete the **Add User** pop-up using the email address that was used to create the authorized users account. The controller that you authorized will show up automatically when they log into that account.

Checking **Set Notifications** allows the authorized user to set or change notifications.

### 3.5 Power Supply

The Remote Monitor is powered by an external switching power supply.

### 3.6 Enclosure

Dimensions 4.8” wide by 3.23” tall by 2.20” deep. Access to interior of enclosure provided by 4 quick release retained screws. The opaque cover is hinge-mounted at the base and flips open. See figures in 4.5 Enclosure Cover Access on page 9.

## 4. Installation

### 4.1 Ethernet Connection

For the Remote Monitor to function, a hardwired Ethernet connection with unrestricted internet access must be provided. The Remote Monitor cannot be configured with a hardcoded/static IP address, and it must obtain an IP address from a DHCP server on the customer's network (i.e. from a router or other device which provides DHCP services). There cannot be usernames or passwords required to pass through a firewall/router to get to the web. A simple test for this is to connect a laptop computer to the Ethernet jack and verify (with Wi-Fi turned off) that the laptop can access the web.

Note: ROLA-CHEM does not assume responsibility for providing or troubleshooting internet access hardware.

### 4.2 Location

The Remote Monitor should be installed within 24" of the controller. The provided RJ cable assembly is 24" long. A longer cable could lead to electrical interference that would prevent proper function. Do not exceed this length. Mount the Remote Monitor next to controller.

### 4.3 Connecting Remote Monitor

- A. Each Remote Monitor has a unique MAC address that is required for website setup. This address can be seen on the top of the Remote Monitor case and inside the enclosure. See figures in **4.5 Enclosure Cover Access** on page 9. There is also a copy of the MAC address label included with the product literature in a bag labelled "Keep This Bag For Reference". Locate the MAC address and keep it for use in section **5.1 Website Registration and Setup**.
- B. Mount Remote Monitor per section **4.2 Location** on page 8 above.

See figures in **4.4 RJ Cable Connection Locations** on page 9 for next steps.

- C. Disconnect Controller from power source. Remove lower enclosure cover on the Controller. If the Flow Switch wiring is installed, disconnect it from the Controller's terminal block and remove from watertight gland/strain relief. Remove the watertight gland/strain relief.
- D. Use needle nose pliers to remove knockout or the existing watertight gland/strain relief in the Controller enclosure if necessary to assemble watertight gland/strain relief included with the RJ cable assembly.
- E. Install the water tight gland/strain relief included with the RJ cable assembly.
- F. Plug the RJ Connector into the Controller's RJ jack.
- G. If a Flow Switch is to be installed, remove jumper wire from Flow Switch terminal block, route the Flow Switch cable through watertight gland/strain relief with the RJ cable and connect it to Controller terminal block.



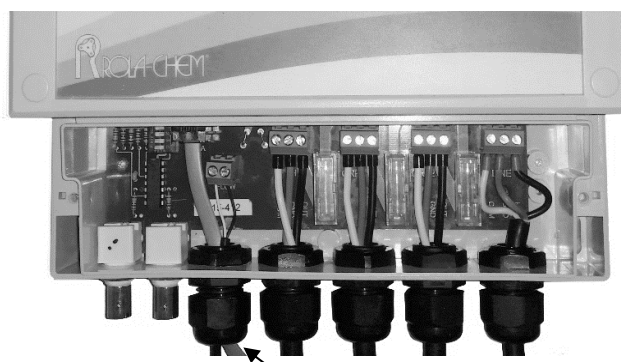
- H. Seal RJ cable and Flow Switch wire in water tight gland/strain relief using Tygon hose (1.25" long).
- I. Replace the Controller's lower cover.
- J. Connect Ethernet cable from Remote Monitor to local network. See **4.1 Ethernet Connection** note above for details.
- K. Plug Remote Monitor power supply into 110V receptacle.
- L. Restore power to Controller.
- M. Check internal LED status lights. See **4.6 Data Communication** on page 10 for details.
- N. Replace the Remote Monitor Cover if removed above.

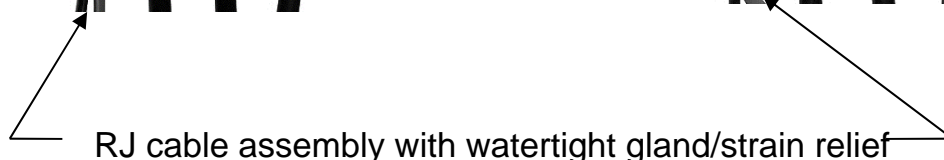
#### 4.4 RJ Cable Connection Locations

RC554XP



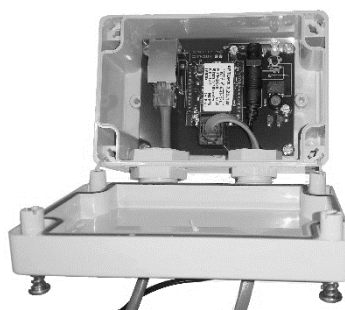
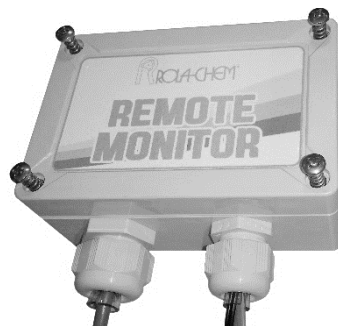
RC554XXP




 RJ cable assembly with watertight gland/strain relief

#### 4.5 Enclosure Cover Access

Rotate each of four ¼ -turn quick release screws with a screw driver on the enclosure cover. The screws are retained to the cover and will not fall out if turned ¼ turn. Pull the cover forward then flip it open.



## 4.6 Data Communication

The Remote Monitor starts collecting data every 60 seconds as soon as it is connected to the internet and powered. This data includes any settings changes or alerts that occur after connection is made. No data is stored when there is no internet connection. Data is refreshed every 60 seconds until Remote Monitor Module is associated with an account on the website. Once connected, the refresh frequency is automatically changed to refresh every 1800 seconds (30 minutes). Refresh frequency can be changed from the Dashboard as follows: click **Settings – Controllers** and select the controller to be changed. Change the **Update Frequency** and click **Save**. The frequency will not change until the current update cycle is complete.

The Remote Monitor includes two internal LED lights and one Reset button. These lights are used to verify network connectivity and the presence of a server connection.

The green LED indicates an active connection between the Remote Monitor and the local network. If the green LED does not light, check the Ethernet cable connections and confirm that the network equipment is functioning correctly. A simple test for this is to connect a laptop computer to the Ethernet port which is to be used for the Remote Monitor and verify (with Wi-Fi turned off) that the laptop can access the internet.

The amber LED indicates activity between the Remote Monitor and the network. The amber LED flashes frequently (every few seconds) when data is being communicated to the Monitoring website. If the amber LED flashes only intermittently (more than 10 seconds between flashes) then the connection to the internet is not working properly.

The Reset button is used to force the Remote Monitor to reconnect to the server if the connection is lost. Disconnecting power from the controller will also accomplish this.

Note: ROLA-CHEM does not assume responsibility for providing or troubleshooting internet access hardware.

## 5. Operation

### 5.1 Website Registration and Setup

To set up monitoring website see <http://www.rola-chem.com/manuals/new2016/554413-RC554M-Website-Registration-Setup-Instructions.pdf>

### 5.2 Monitor Website Access

To see the webpage for a controller that has been set up, access the Remote Monitor website at <https://monitor.rola-chem.com/> and click on the Controller's Name on the Dashboard.

## 6. Troubleshooting

**See 4.6 Data Communication for LED function.**

## 7. Warranty and Service

### Limited Warranty:

ROLA-CHEM warrants the original purchaser that this unit is free from manufacturing defects in material and workmanship from the date of the original purchase for one (1) year.

If this unit fails within the one (1) year period, it will be repaired or replaced (ROLA-CHEM's option) at no charge when returned to ROLA-CHEM with proof of purchase receipt. This warranty does not apply to any product damage caused by improper use, accident, misuse, improper line voltage, fire, flood, lightning, earthquake, other acts of nature, or if product was altered or opened by anyone other than qualified ROLA-CHEM personnel.

ROLA-CHEM, under no circumstances, shall be liable for any consequential damages directly or indirectly caused by this unit. Please observe all rules and regulations required by state and local regulations, building codes, health codes, OSHA, etc.

Note: ROLA-CHEM does not assume responsibility for providing or troubleshooting internet access hardware.

**Service Procedure:** For operation assistance in the United States please call: (800) 549-4473, Monday through Friday 8:00 am-5:00 pm Central Time or email: [info@rola-chem.com](mailto:info@rola-chem.com). Have model number and serial number available.

ROLA-CHEM has specialized knowledge and equipment to test and diagnose your product. Contact our service personnel as noted above for assistance. If you are directed to ship the product to ROLA-CHEM and given an RGA#, please note RGA# on the package and ship freight pre-paid to:

ROLA-CHEM CORPORATION  
5858 Centerville Road  
St. Paul, MN 55127-6804

[www.rola-chem.com](http://www.rola-chem.com)