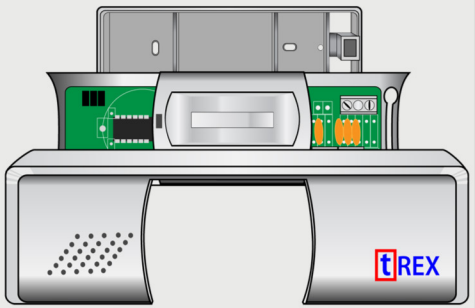
Instruction Guide – RTC 9000/TREX

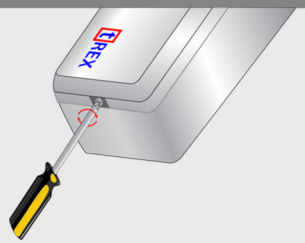
Version 01

TREX Sensor

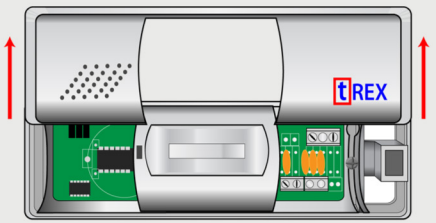


Disassembly and Mounting Guide

1. Disassembly (1st Part)

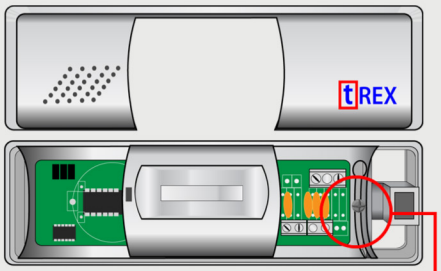


Using the Phillips Head Screw driver, loosen the screw on the side of the TREX Sensor.

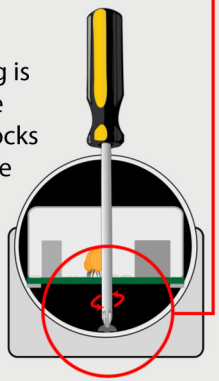


Once the screw is loose, lift the front casing to reveal the inner parts of the TREX Sensor.

2. Disassembly (2nd Part)

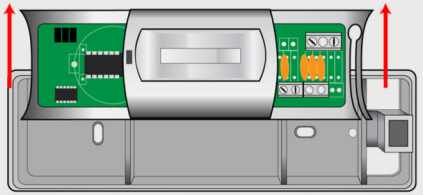


Now the front casing is removed, loosen the second screw that locks the mainboard of the TREX Sensor to the back casing.

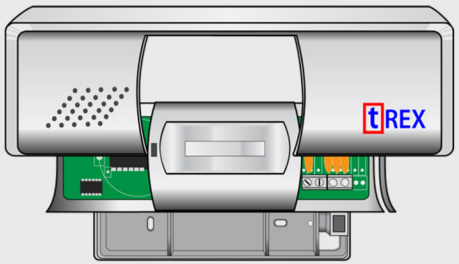


3. Disassembly (3rd Part)

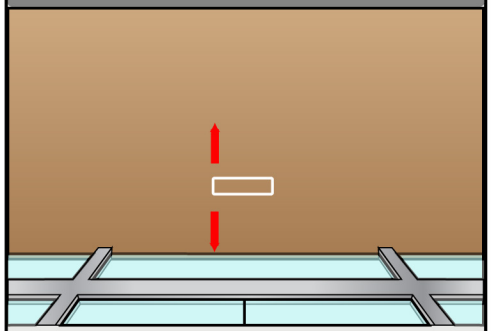
Lift the mainboard and separate from the back casing.



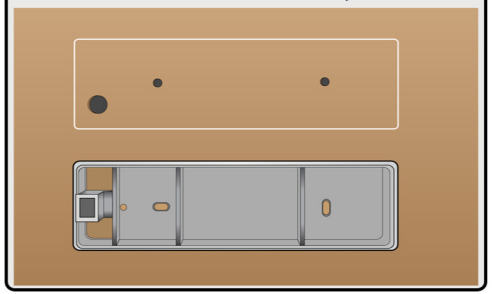
The TREX Sensor is now disassembled.



4. Mounting TREX Sensor

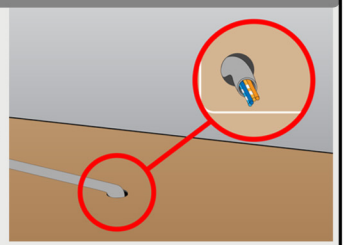


TREX should be mounted within 1 foot of the door. Drill all necessary holes.

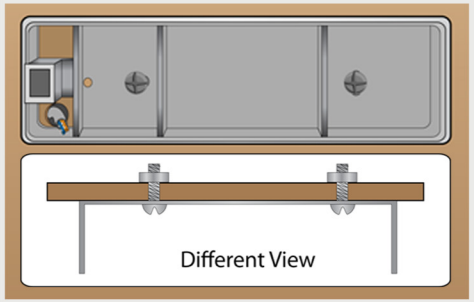


5. Wiring and Mounting

Insert cat5 through predrilled hole in the ceiling.



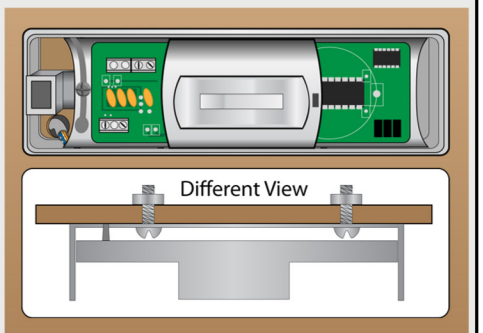
You can leave about 1 foot of exposed cable through the ceiling for the next step.



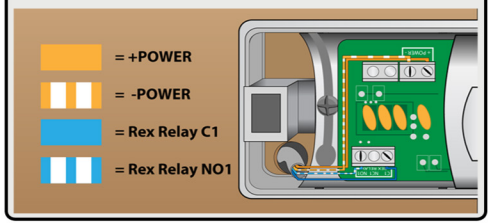
Mount the back casing on the ceiling with the use of screws.

6. Reassembly and Wiring

Reassemble the mainboard on the mounted back casing.

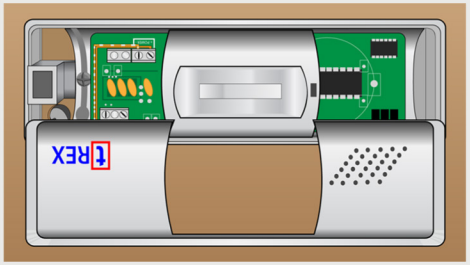


Strip orange and blue wires to bare 1/4 in copper and terminate according to diagram.

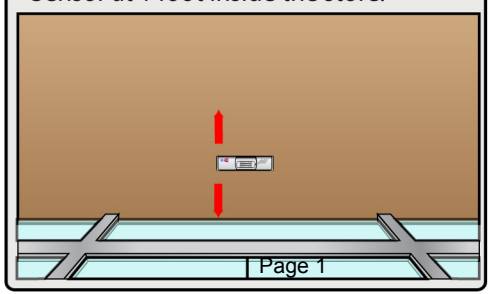


7. Finishing

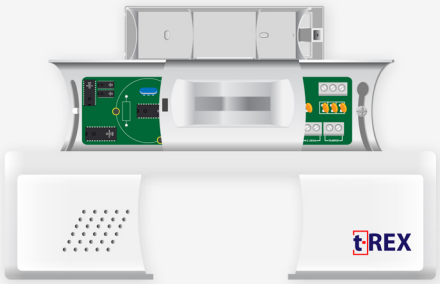
Once the wiring is finished, reassemble the front casing of the TREX Sensor.



This illustration shows a mounted TREX Sensor at 1 foot inside the store.



T-REX Sensor

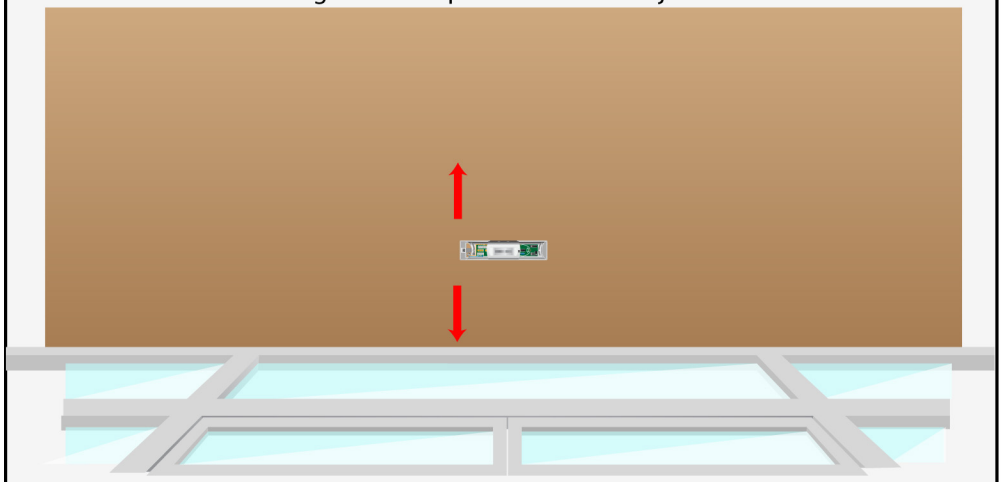


Echelon
Retail Echelon Installations Group Inc.

T-REX Adjustment Guide

1. Adjusting the TREX

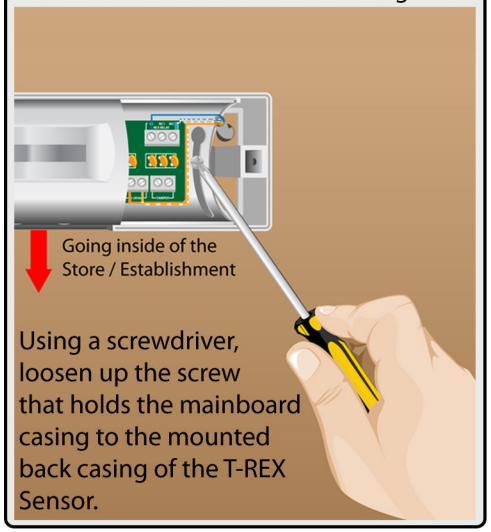
To continue with the installation of the TREX, we must be it is adjusted properly. The T-REX Sensor Adjustment is a trial and error, you will need to step on and off the ladder several times through these steps to ensure the adjustment is correct.



To start off the TREX should be mounted as close to the door as possible without picking up moving parts of the door. We will need to remove the faceplate of the TREX to adjust the Y-Axis of the TREX. (Please see the disassembly steps on how to remove the faceplate.

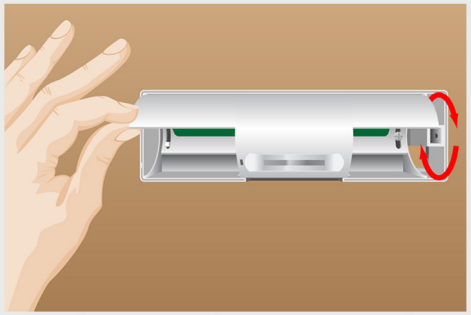
2. Adjustment Prep

Please ensure at this point the TREX has power. The T-REX Sensor has a passive inferred beam that only detects motion. The LED on the sensor stays red until the beam is broken and it switches to green.



Using a screwdriver, loosen up the screw that holds the mainboard casing to the mounted back casing of the T-REX Sensor.

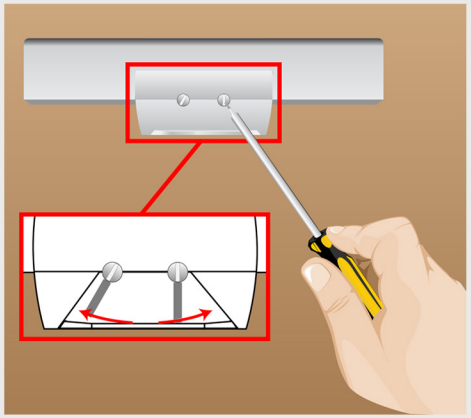
3. Adjusting Y - Axis



In adjusting the Y - Axis of the T-REX Sensor, rotate the mainboard casing clockwise or counter-clockwise depending on the desired position so that it can aim closer to the door frame itself.

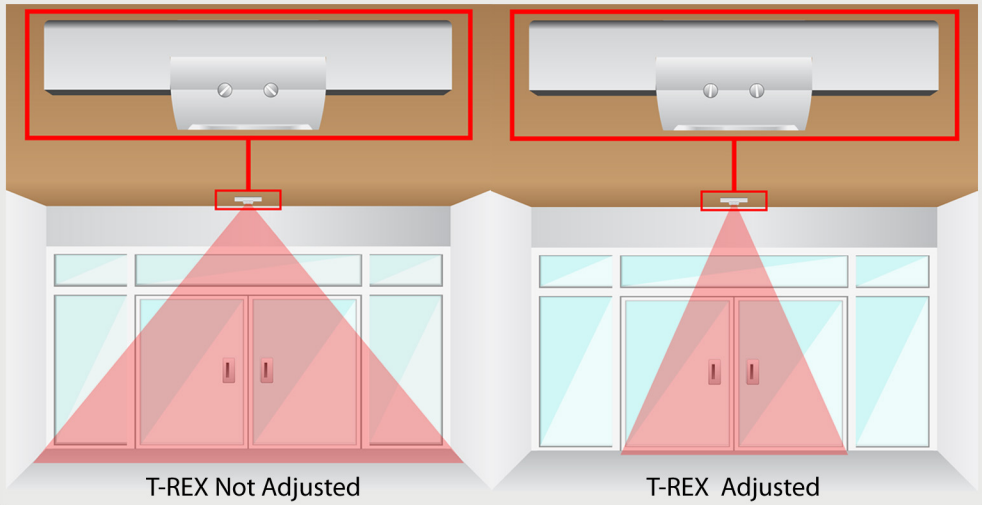
4. Adjusting X - Axis

When the Y - Axis of the T-REX Sensor is already properly aligned to the door frame, adjust the flat head screws located on the bottom part of the T-REX Sensor using a flat head screwdriver. These flat head screws are connected to the flaps inside the mainboard casing that can be widened or narrowed.

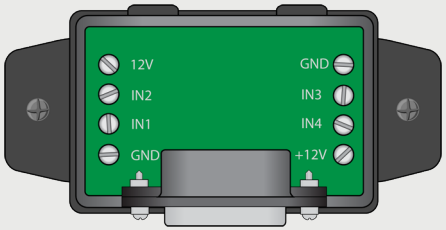


5. Basic Concept T-REX Adjustment

When adjusting these flaps correctly, field of view should not exceed width of the opening. For optimal positioning the TREX lens should be pointing straight down and the sensor should not be triggered to left and right hand side of the door.
Please note that the angles of flat head screws may vary depending on the distance of the door frames and the height of the TREX.

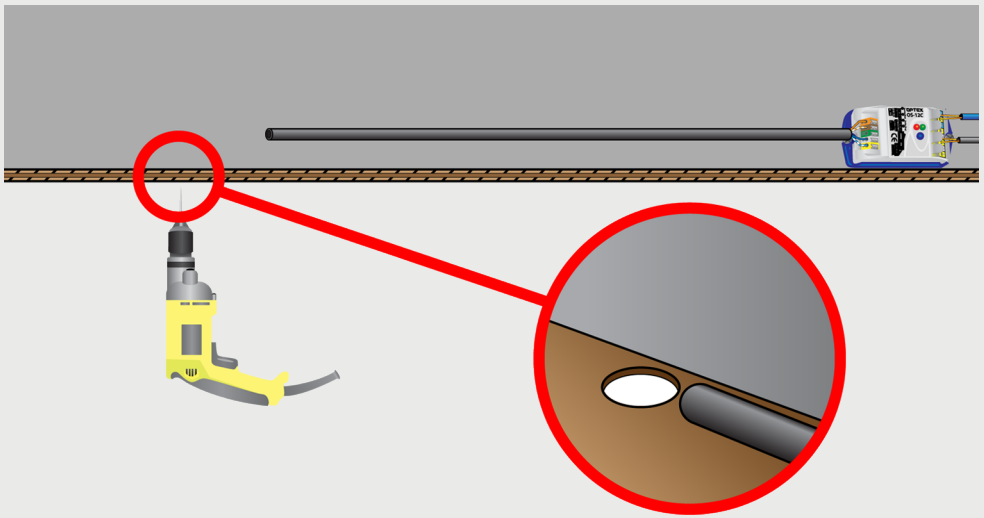


PRODCO Junction Box (JBOX)



Mounting and Installation Guide

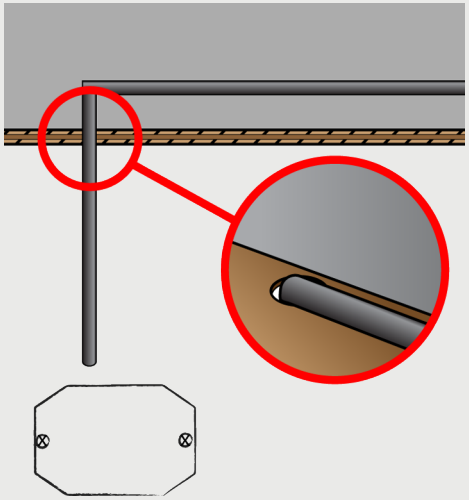
1. Determine Jbox Location



Confirm location of where JBox will be located with Tech Support, (usually near the network switch). Pass cable accordingly, along with other data cables or through conduit.

* Note that cable and room distances may vary and be longer than in the illustration

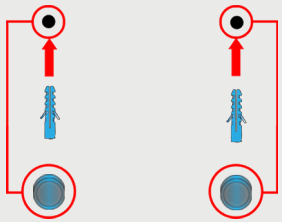
2. Drilling Mounting Holes



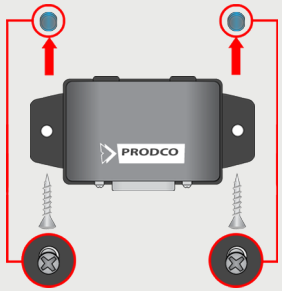
Determine where the jbox is to be mounted.

3. Mounting the JBOX

Insert the wall anchors.

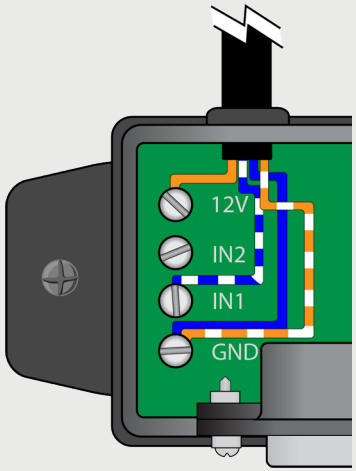


Insert the screws in the JBox's mounting holes, and mount the JBOX on the wall.

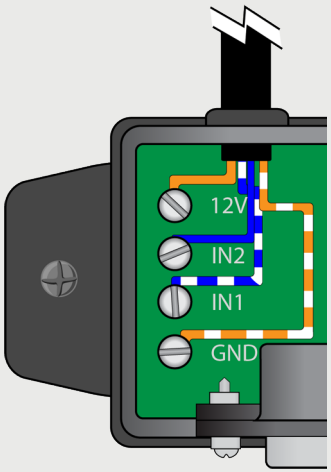


4. PRODCO JBOX Wiring Guide

Please call your Tech Support Representative for the setting number

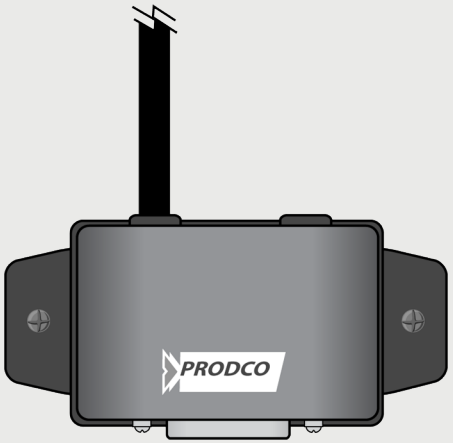


Setting #1 & #3 Wiring
12V = Solid Orange
IN2 = ----
IN1 = White/Blue
GND= Solid Blue + White/Orange (Twisted)



Setting #2 Wiring
12V = Solid Orange
IN2 = Solid Blue
IN1 = White/Blue
GND= White/Orange

5. Finishing

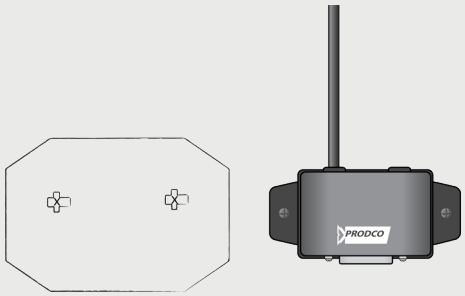


This illustration portrays a mounted and wired Jbox with cover.

PRODCO
RTC 9000

Mounting and Installation Guide

1. Drilling Positions

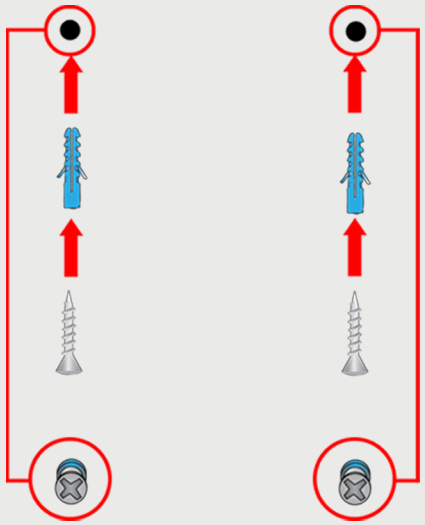


In the room where the JBox is located, mount and install the RTC9000 close to the Jbox.

(Should be located near network switch. Please confirm with Tech Support.)

Drill the part marked with an X for mounting process.

2. Screws and Wall Anchors



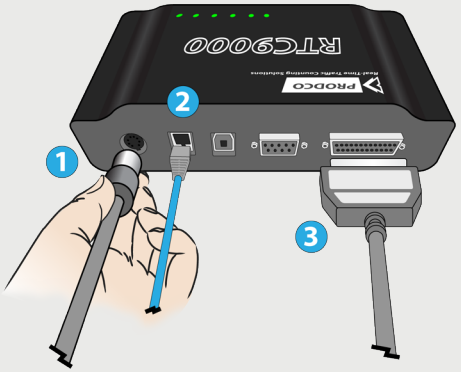
Once the holes are drilled for RTC9000, insert the wall anchors and screw in the first and second holes.

3. Mounting RTC9000

Mount the RTC 9000 on the wall with the use of the screws and wall anchors.

4. Cabling

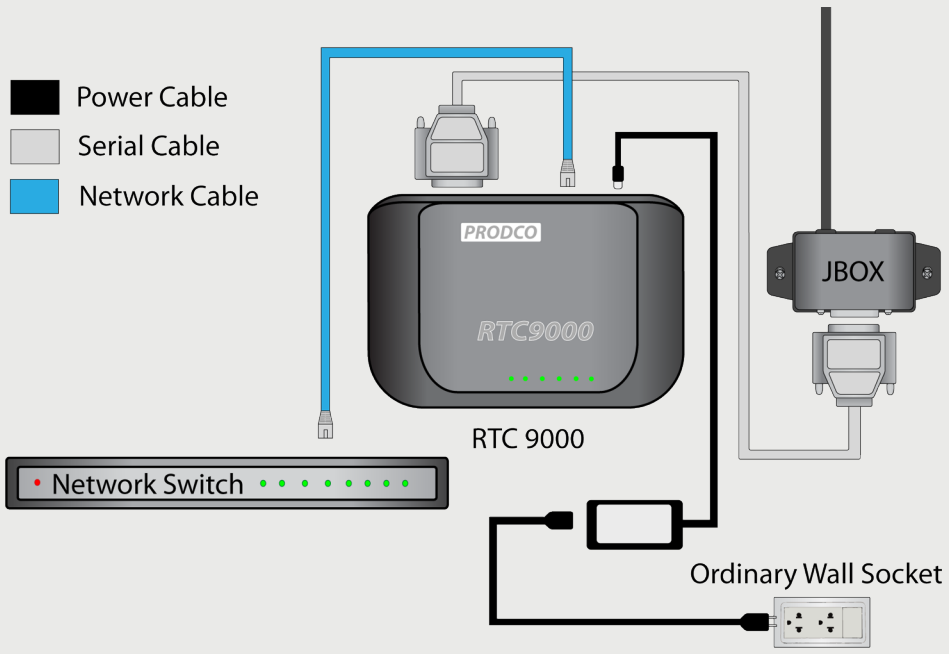
Plug all required cables in the corresponding ports.



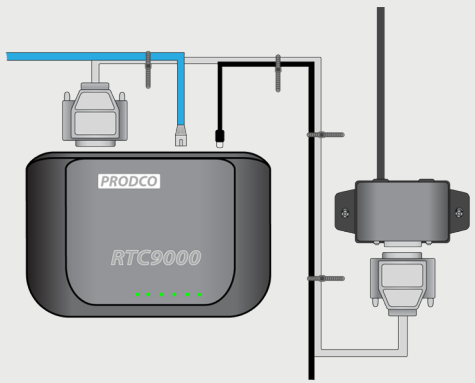
1. Plug the Power Cable into the power port.
2. Plug the Network Cable into the RJ45 port.
3. Plug the 25pin Serial cable into the Jbox port.

Console port is only used for programming

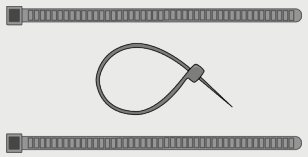
5. PRODCO RTC9000 Wiring Diagram



6. Finishing



Using zip ties, neatly tie all cables.



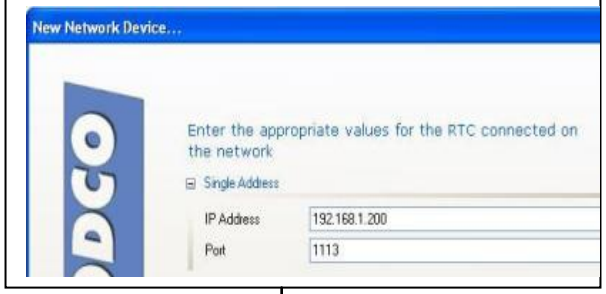
RTC Manager Programming Guide
Gaining Access To the 9000.

Using a Serial Connection

--To gain access through serial (console port),
--Plug a USB to serial or a straight through serial cable into the Console port of the 9000
--The other end will go into your USB port/ 9Pin serial port.
--Once the cable is plugged in you should see the console light on the RTC turn green.
--Once this is accomplished pull up RTCManager on your computer.
At the top left click New → New Serial Device → Select the correct port → Click next.

Using a Network Connection

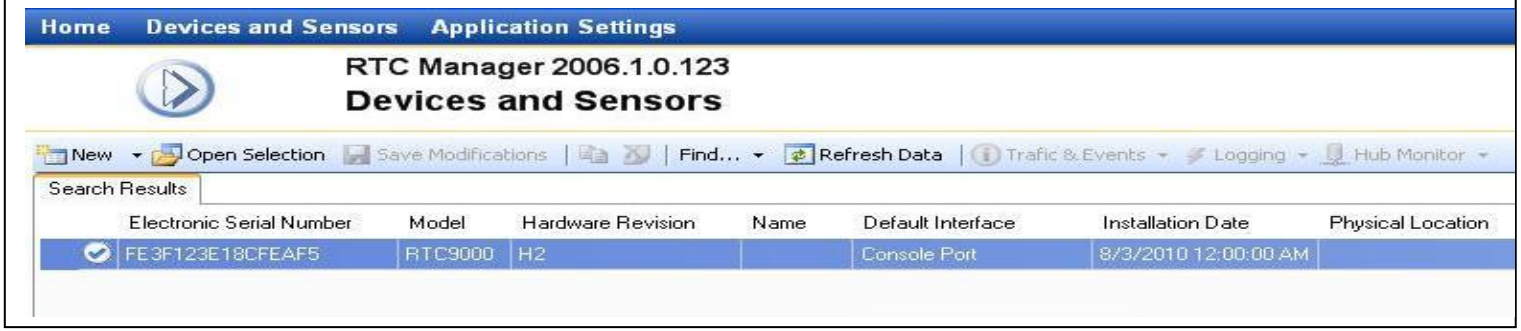
--To gain access via network cable, plug in a standard patch cable into the Ethernet port on the RTC to the Ethernet port on your laptop.
--You should get a green Ethernet light.
--You will need to know the IP address of the unit you are going to program.
--Check the paperwork that had came in the box, or call your REIG Tech specialist. Once you have the IP you will need to change the static IP of your computer, two numbers off the last set of digits.
For example: Unit IP = 192.168.1.200
Static IP = 192.168.1.198
Gateway leave at 255.0.0.0
--Once that is set, Apply the changes and close both the Internet Protocol window and the Local Area Connection Properties Window.
--Open RTC Manager.
--At the top left click New → New Network Device → Type in the IP address of the unit → Click next.

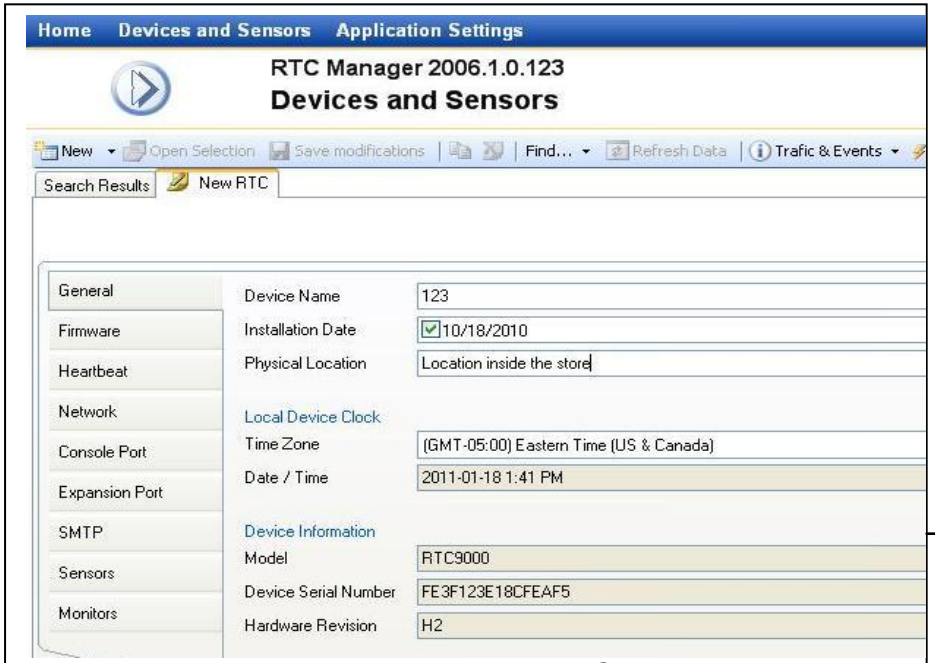


Trouble Shooting Techniques
If you are unable to get the serial number to the RTC to show up under electronic serial number please try the following steps.

- **Restart the RTC, and RTC manager.**
- **Make sure Vcredist, Netframework, and Reportviewer are all installed.**
- **Make sure the Console (If serial) or the Ethernet light is lit.**
- **Double check your serial port, to ensure that it is plugged into the right port.**
- **Make sure your static IP and the IP of the unit is what it is designated to be.**
- **Make sure RTC manager and the patch is up to date**
- **Try restarting the laptop.**
- **Click Refresh Data at the Top.**

The screen should disappear and a serial number will show up under electronic serial number with a check mark to the left. Write down the serial number as you will need this for your paperwork. Double click the serial number and proceed to the General Tab.

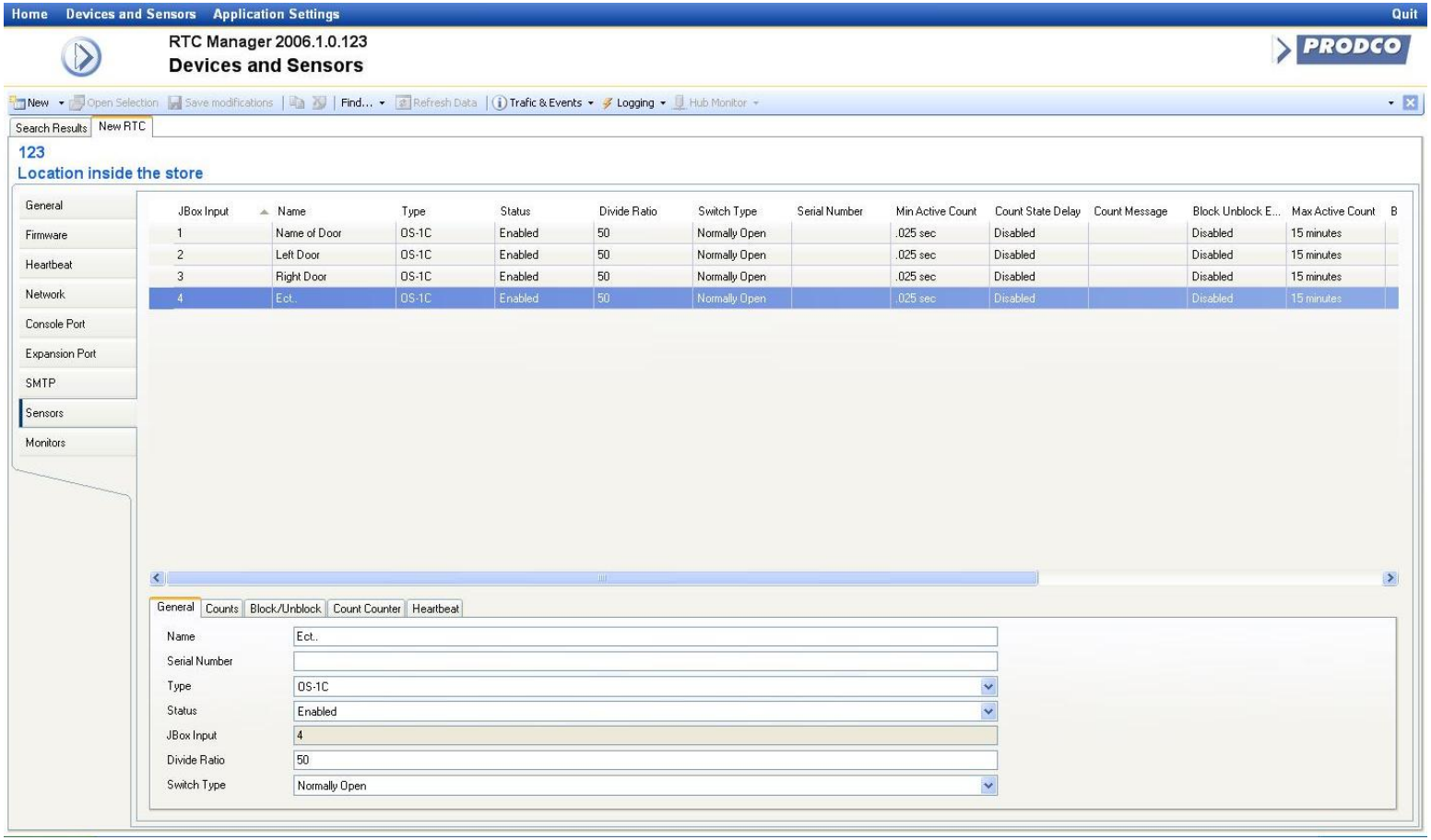




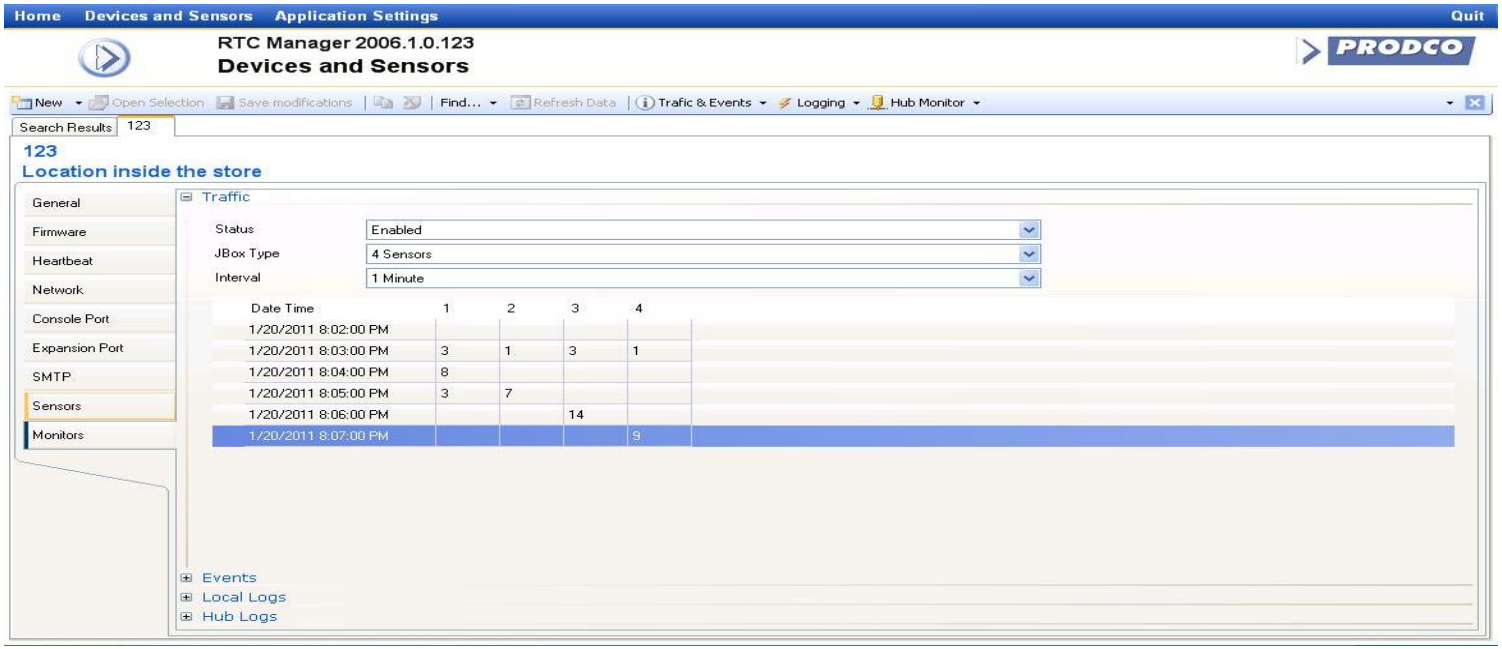
--Now you should be in the general tab. Set the device name as the store number.
--Set the install date.
--Set the Time Zone **(If you are running Vista or 7 skip this part)**
--Set physical location. This is where the RTC is installed in the store.

For Example: Network Rack, Cash-wrap, Stock Room, Managers Office.

-- Click the network tab
-- Make sure the IP, Subnet and Gateway are set to the stores preferences. Remember port is always set to 1113.
--Please call your Tech Specialist to be sure that the IP, Subnet and Gateway are correct.
--Document the IP address as you will need this for your paperwork.



--Click the sensors tab.
--Click JBox input 1 at the top to highlight the whole row.
--Down at the bottom, set the name of the sensor, Example: Main Entrance, (Left Door, Right Door, Front Door, if multiple entrances.)
--If a thermal, input the serial number of the thermal.
--Select the type of sensor installed on that door. (If it is a thermal please designate weather it is counting In, In and Out or Outbound only.) If you are unsure please contact Tech Support.
-- Set Divide ratio to 50 or 100. This all depends on the type of set up. Thermals counting in and outbound on the same port will be 50, along with OS12C and TREX sensors. Thermals counting outbound only will be 100. Please call Tech Support for further information.



--Click the monitors tab.
--Change the interval from Hourly to One Minute.
--Right Click an empty space and click save device settings.
--Click traffic and events at the top and click start
--Click logging and then click start
--Make sure events local logs and hub logs are all collapsed to the bottom left with a + sign to the left of them.
--After a minute goes by you should see a grid start to form under interval. Time will appear on the left going from top to bottom and ports will appear right under interval going from left to right.
--Run a few test counts
--Come back and check to see if counts came through for the minute (as shown above), if this is the case please document with a screen shot and close the RTC program and disconnect from the RTC
--If you are only running one sensor, you should only see counts coming through on port 1.

--Call Tech Support to set up a communication test once you have completed this step

Trouble Shooting

If you are not getting counts or proper counts

- Ensure that the JBox is hooked in and you have a green JBox Light
- If counts are coming through the JBox light will turn amber if someone trips the sensor. If this is the case you might be dealing with a software issue
- Check all connections at the sensor to ensure all the circuits are solid for it to report to the JBox.
- Be sure programming is correct on the sensor.
- Proceed to sensor trouble shooting if more issues occur.

TREX Troubleshooting Guide

No lights means no power

- TREX sensors are direct current only. By standard please ensure that the orange is plugged into power + and the orange/white is plugged into - on the circuit board.
- Ensure the power to the RTC is plugged in.
- Ensure that the Cat5 sensor cable is plugged into the RTC or the Jbox, and connected in the appropriate ports.
- For 402 units make sure the crimp is wired properly and that the pins are puncturing through the insulation and making contact with the copper wire.
- Make sure the RTC has the proper voltage running to it. The DC output read out on the power brick should be 12 – 13.5 volts 1 amp (1000mA).
- If a volt meter is not available try using different ports on the RTC. (RTC ports will go bad from time to time.)
- If the RTC is powered and wired correctly, check (with a voltage meter) to see if the Orange and Orange/White unplugged from the TREX is reading at least 12v. (The TREX requires 12-24volts to power on.)
- Ensure that the wires at the module are stripped down about a ¼ inch to make full contact with the conductors inside.
- Tone out the Cat5 line, make sure that it is indeed our designated line and that the line is not damaged. Ensure that it is reading all pairs.

TREX Lights on but not sending counts.

- The light should be red on the TREX, once the beam is broken (when an individual walks under the sensor) it should turn green.
- If the light does not turn green it means that it is not seeing any motion beneath it. Ensure that the adjustable tabs are open enough to see people walking underneath. (These tabs are used to monitor traffic only within the doorframe boundaries make sure they are not too wide or too narrow.)
- Ensure that the blue wire is attached to the C1 Port and the white/blue wire is attached to the NO1 Port on the TREX. (You will see the designated ports printed on the circuit board. This section is the REX Relay.)
- Ensure the screws are tightened down to clench the wires in the terminals. Tug on the wires to be sure they do not fall out.
- The data lines will send a little less than volt through if they are connected to the crimp/J-box properly.
- Check another port on the RTC or J-box.
- Recrimp the sensor line at the cable.
- Reseat the Blue and Blue/White pair on both ends.
- Check for any damages to the pair.
- Tone the cable to ensure that the pair is linking from front to back.
- Check for any splices that may be causing an issue.