



# Introductory Manual

## Web Wing WL

### RTR-5W

\*This Introductory Manual explains in a simple manner the basic operations and set up for RTR-5W. For a more detailed explanation, see the User's Manual on the provided CD-ROM.

\*This data logger is designed for network communication. It does not include any RS-232 or USB communication interface. To make use of this product you must connect it to a network.

### Package Contents

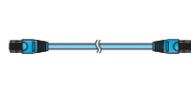
The following items should be in the package with each main unit.



Software  
CD-ROMx1



AC adapter  
AD-0605x1



LAN cable  
LN-20Wx1



Introductory Manual  
(Warranty)x1

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## Safety Precautions and Instructions \*Please carefully observe the following safety measures when using our product.

To prevent any loss or damage to our customers, other people and / or property, and to ensure the proper use of our products we ask that before using our product you carefully read, understand and follow the safety rules and precautions for our products as outlined below.

### Explanation of Warning Symbols

	<b>WARNING</b>	These entries are actions that absolutely under no circumstance should be taken. The taking of such an action may cause serious personal physical damage or death.
	<b>CAUTION</b>	These entries are actions that if taken may lead to physical injury or damage to persons or things.

### Explanation of Picture Symbols

	Denotes an important warning or caution. In the symbol will appear another symbol giving details. (EX: ⚠ stands for CAUTION AGAINST ELECTRIC SHOCK)
	Denotes a forbidden action. Inside the symbol will appear another symbol giving details. (EX: ⚡ stands for DO NOT TAKE APART)
	Denotes an action that you, must take.

### ⚠ DANGER

- Do not take apart, repair or modify the main unit. It may cause fire, electrocution or damage. Ask the shop where you purchased the product or T&D Corporation to carry out any repairs.
- Do not connect or unplug the AC adapter with wet hands. It may cause electrocution.
- If water or a foreign body enters into this unit, immediately remove the batteries and stop using it. Continued use may cause fire or electrocution.

- If any smoke or strange smells are emitted from the unit, immediately cease using it. Continued use may cause fire, electrocution or damage.
- Do not drop the unit, or expose the unit to a strong impact. If that happens to the unit, immediately remove the batteries and stop using it. Continued use may cause fire or electrocution.
- Make sure to periodically remove dust and dirt from the AC adaptor plug. Dust can cause moisture to accumulate and can lead to poor insulation which may result in fire.

- While installing and using this product, make sure to always follow your computer manufacturer's warnings and cautions.
- Do not use this unit in wet or humid places, such as a bathroom. Continued use may cause fire, electrocution or damage.

### ⚠ CAUTION

- This unit is not water-resistant. If the unit gets dirty, wipe it with a clean cloth and a mild detergent.
- We are not responsible for any malfunction or trouble caused by the use of our product or by any problem caused by the malfunction of our unit. Please be fully aware of this before using our product.
- This product has been designed for private or industrial use only. It is not for use in situations where strict safety precautions are necessary such as in connection with medical equipment, whether directly or indirectly.
- Do not expose the unit to harmful gases or chemicals. It may cause corrosion and/or other danger to the unit and to the people handling the unit.
- Condensation may occur if the unit is moved from one environment to another where the difference in temperature is great. Use the unit in an environment where the ambient temperature is from 0 to 60 and the humidity is from 20 to 80%RH (no condensation).

- To avoid poor connections, be sure to push the AC adapter and the LAN cable securely into the jack. When pulling out a cable from the logger, make sure to hold the connector plug to pull it out.
- Do not place heavy or hot things on top of cables. It may cause electrocution or damage.
- To prevent damage to the unit from static electricity, remove static electricity from your body by touching metal around you (door knob, window frame) before touching the unit. Static electricity may cause not only damage to the unit, but may cause breaks in or a loss of data.

- Do not use or store the Web Wing WL in any of the following places. Doing so may cause electrocution, fire and/or other adverse effects to the device and/or your computer.
  - Areas exposed to direct sunlight**  
This will cause the inside of the device to become overheated and may cause fire, deformation, and/or other damage including malfunction.
  - Areas prone to strong magnetic fields**  
This may cause damage including malfunction.
  - Areas exposed to water leakage**  
This may cause electrocution or other damage including malfunction.
  - Areas exposed to excessive vibration**  
This may cause injury, malfunction, damage or loss of proper electrical contact.
  - Areas near fire or exposed to excessive heat**  
This may cause damage including malfunction and deformation.
  - Areas prone to smoke, dust and dirt**  
This may cause damage including malfunction and deformation.

### ⚠ Wireless Regulations

#### Radio, EMC and Safety Regulations



This device complies with part 15 of the Federal Communications Commission (FCC) rules. Operation is subject to the following conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Note:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with RSS-210 of the Industry Canada (IC). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

# 1. Getting the RTR-5W Ready to Use

## 1. Connecting the AC Adapter

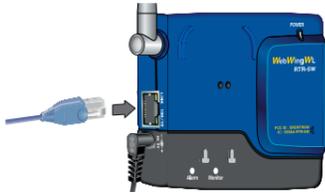
\* To ensure a proper connection make sure that the plug is completely inserted.



## 2. Connecting the LAN Cable

- When first making settings, please connect to a computer that is connected to a local network (same broadcast domain).

\* To ensure a proper connection make sure that the plug is completely inserted.



To connect an RTR-5W logger directly to your computer without using a hub, you must use a cross LAN cable. (Please purchase a cross LAN cable separately.)

For how to directly connect to a computer or for how to connect to use a Wireless LAN card, see [Connecting to a Network] in the User's Manual on the CD-ROM.

# 2. Installing the Software

## PC Operating Environment

- Microsoft Windows 7 32/64bit English
- Microsoft Windows Vista 32bit English
- Microsoft Windows XP 32bit(SP2 or above) English
- Microsoft Windows 2000 English
- Browser Internet Explorer 6.0 or above

- Is Windows® operating properly?

If Windows is not operating properly, *RTR-5W for Windows* may not be installed correctly or it may not operate properly.

- Please quit all other applications.

If other programs are open, please close and quit all of them, making sure to quit all Quick Start programs such as a virus checker. To install *RTR-5W for Windows*, it is necessary to have Administrator rights (Computer Administrator) for the computer in which you wish to install it.

### 1. Open Windows®.

### 2. Place the accompanying CD-ROM into your CD-ROM drive.

In a few seconds, the "Install Program" window will appear.

\* If that window does not automatically open, please open it by double clicking the CD-ROM icon in "My Computer" on your desktop. Also, if the file appears in the CD-ROM folder, click on the "start.exe" icon.



### 3. Select Install *RTR-5W for Windows* and click the [Execute] button to start the installation.

### 4. Follow the directions to install. For more details about the installation, see the User's Guide on the CD-ROM.

### 5. After installation has been completed, *RTR-5W for Windows* will be registered in the Window's [Start] Menu.

There are 5 applications within *RTR-5W for Windows*.

#### *RTR-5W for Windows*

In order to use this system it is necessary to carry out registration for wireless communication between an RTR-5W base station and RTR-51/52/53/RVR-52A data loggers, make recording settings, make warning monitoring settings and then gather recorded data.

#### Network Settings Utility

Make all network settings for RTR-5W.

#### Temp / Humidity Graph

View temperature and humidity data.

#### Multi-scale Graph

View voltage, temperature and humidity data.

#### Event Viewer

View data recorded with the RVR-52A Event Data Recorder.

# 3. Network Initialization Settings

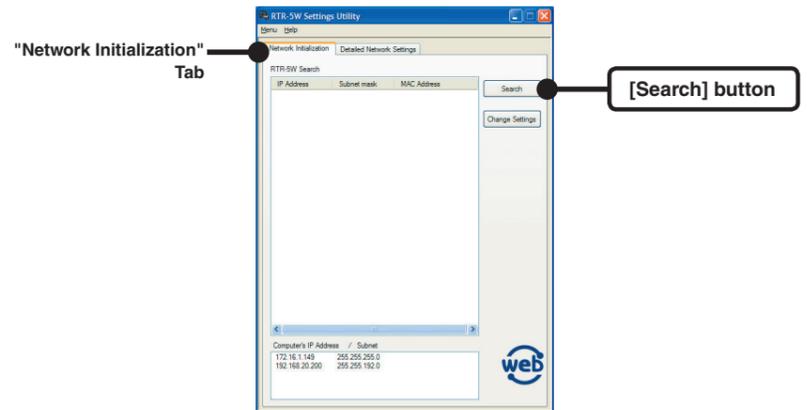
NOTE:

- Please note, that upon purchase, all RTR-5W units are set with the same IP address. To make IP address changes, connect one RTR-5W unit at a time and carry out the changes.

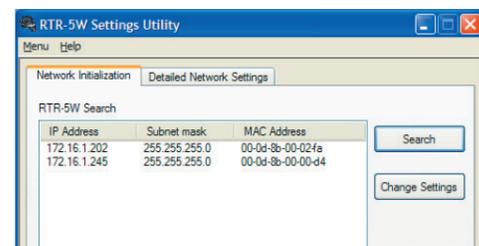
Do not connect more than one unit with the same address to the network at the same time. - This explanation is about how to connect to a local network and is not about how to connect to the Internet. If you wish to use by connecting to the Internet, see "Connecting to the Internet" in the User's Manual on the provided CD-ROM.

## 1. In *Network Settings Utility*, click on the "Network Initialization" Tab and then click on the [Search] button.

\*After clicking, the search results will be shown in about 5 seconds.



\* The factory default settings for RTR-5W are as follows:  
IP Address: "192.168.1.200", Subnet Mask: "255.255.0.0".



### [If no units are detected]

- Check the connection between the computer and the RTR-5W.

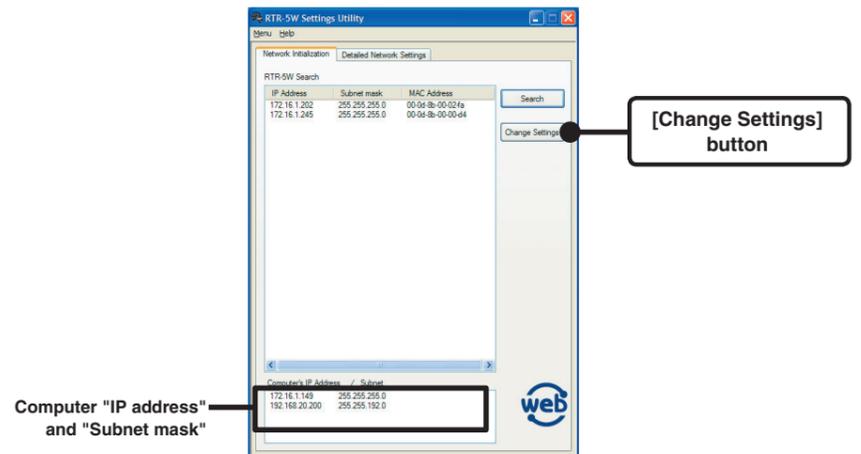
- Check the hub power switch and the network cable type.

- In some network environments, it may be necessary to make changes to the IP address and subnet mask at the computer side in order to carry out a search. To find out more details about checking and changing a computer's network settings, see "Network Initialization Settings" in the User's Manual on the provided CD-ROM.

## 2. Making Changes to the IP Address and Subnet Mask.

### 1. From the displayed list, select the RTR-5W to which you wish to make settings by either double clicking on that address or select and click on the [Change Settings] button.

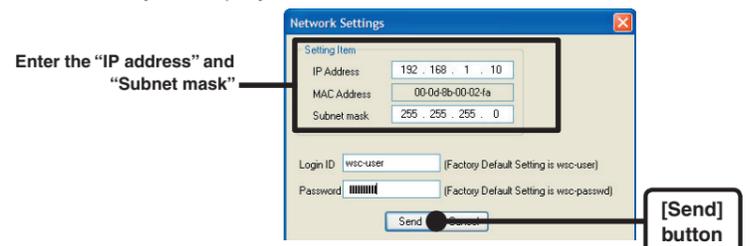
\*The [Network Settings] window will then appear.



### 2. Enter an IP Address and Subnet Mask that is appropriate for your network.

For example, if your computer IP address is "192.168.1.1", and the subnet mask is "255.255.255.0", then set the RTR-5W IP address as "192.168.1.10".

\*If you are unsure, ask your company network administrator.



### 3. After entering the above, next, enter the login ID and password.

\* The RTR-5W factory default login ID is "wsc-user" and the password is "wsc-passwd". Make any necessary changes to the login ID and password at "Detailed Network Settings".

### 4. After checking for entry errors, click the [Send] button. After transmission has been completed, a message will appear.

Click the [OK] button to complete the settings.

\*After settings are completed, the RTR-5W will automatically restart. During the restarting process, a search cannot be performed, even if you click the [Search] button. It should take about 30 seconds.

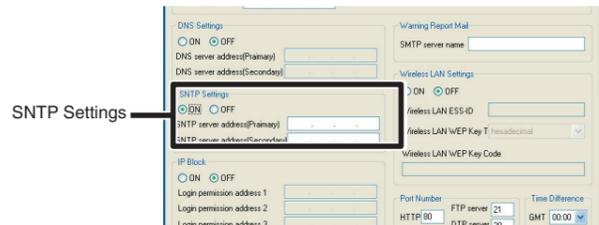
## 4. RTR-5W Clock Settings

If the clock settings for the RTR-5W are not set correctly, the clock in the Web Viewer and the time of Warnings will also be incorrect. Please make sure to set correctly before beginning to use.

Clock settings can be made directly using RTR-5W for Windows software, but if RTR-5W is rebooted, the clock settings will be initialized. However, by making settings to enable the SNTP server, it is possible to have the clock automatically reset to the current time upon rebooting.

### Ex) Making SNTP Settings

1. Open the **Network Settings Utility**, click on the "Detailed Network Settings" tab, and gather the current settings.
2. Click the [Change Settings] button and the "Detailed Network Settings" window will appear, where you can make changes to the settings.
3. Under [SNTP Settings], click "ON" to change the setting.



4. After making the settings, enter the info for the recipient of the settings and click the [Send Settings] button.
5. A message will appear asking you if it is OK to restart the system. Click the [Yes] button to restart.
6. After the restarting has been completed, the settings will have been successfully made.

## 5. Remote Registration

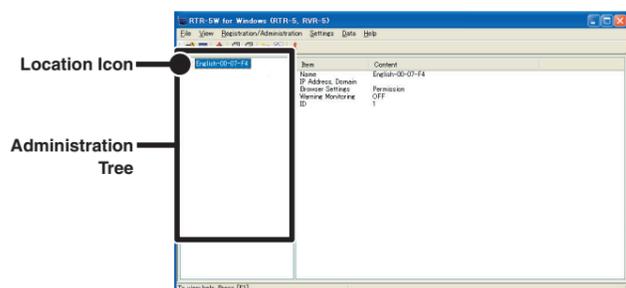
### 1. Create a Location

1. Open **RTR-5W for Windows**.
2. In the "Registration / Administration" Menu, click on [Create Location (RTR-5W)] to display a window where you can enter a name for the new Location.



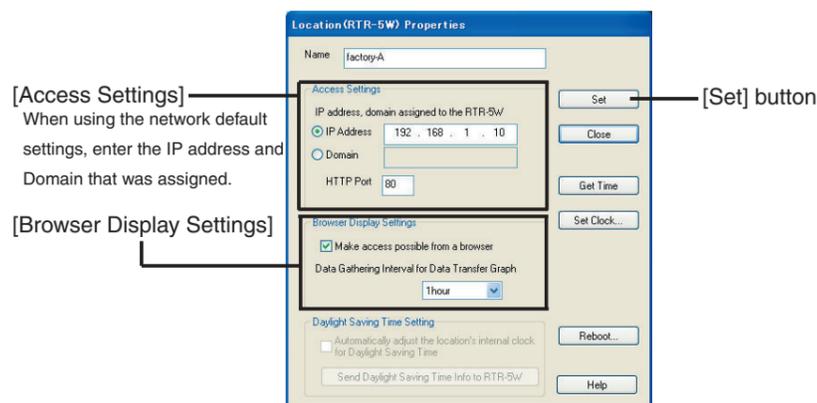
\* In the Location name, you cannot use a space, or any of the following characters [ \ / ; : \* ? " < > | & ].

3. After entering the Location Name, by clicking the [OK] button, the Location will be created in the Administration Tree.



4. Click on the desired Location Icon. In the "Registration / Administration" Menu, select "Location (RTR-5W) Properties" and enter the same IP address that you previously entered when making settings in the Network Settings Utility. When using the network default settings, enter the IP address and Domain that was assigned.

\* By right clicking on the Location icon, a popup menu will appear where you can select "Location(RTR-5W) Properties" to display the properties window.



\*If necessary, make settings in the "Browser Display Settings" section of the Properties Window.

#### - Making access possible from a browser

It is possible to make permit / forbid access from a browser.

#### - Data Gathering Intervals for Data Transfer Graph <Selections: deactivate, 15, 20, 30 minutes, 1, 2, 3, 6, 12, 24 hours>

This setting is for the intervals for gathering data when monitoring the current readings via the browser and viewing in simple graph form.

5. After making entries, click the [Set] button to send the settings to the RTR-5W that was entered into the "Access Settings" Bar and settings for the Location will be completed.

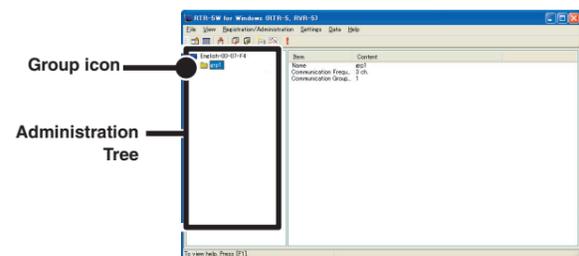
## 2. Creating Groups

1. In the "Registration / Administration" Menu, click on "Create Group" to display a window where you can enter a name for the new Group.

\* In the Group name, you cannot use a space, or any of the following characters [ \ / ; : \* ? " < > | & ]. (Up to 8 characters can be entered.)



2. After entering the Group Name, by clicking the [OK] button, the Group will be created in the Administration Tree.

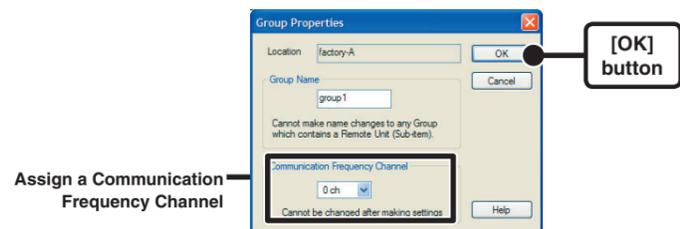


3. Click on the desired Group Icon. In the "Registration / Administration" Menu, select "Group Properties" and assign a Communication Frequency Channel for the selected Group.

\* By right clicking on the Group icon, a popup menu will appear where you can select "Group Properties" to display the properties window.

- Once a Communication Frequency Channel setting has been made, it cannot be changed.

- If a different Group is located nearby and there is a possibility that communication could occur at the same time, please make sure to set the Communication Frequency Channels for each Group to a different setting. If two Groups use the same Communication Frequency Channel at the same time, there is a great possibility that a communication failure will occur.

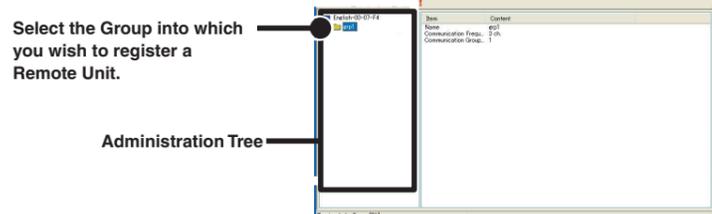


4. Click the [OK] button to finish the Group settings.

### 3. Registering a Remote Unit

1. Place a Data Logger face down on the RTR-5W.

2. Select the Group in which you wish to register Remote Units from the Administrator Tree. In the "Registration/Administration" Menu, select "Remote Unit (RTR-5, RVR-5) Registration" to display the Remote Unit Registration window.

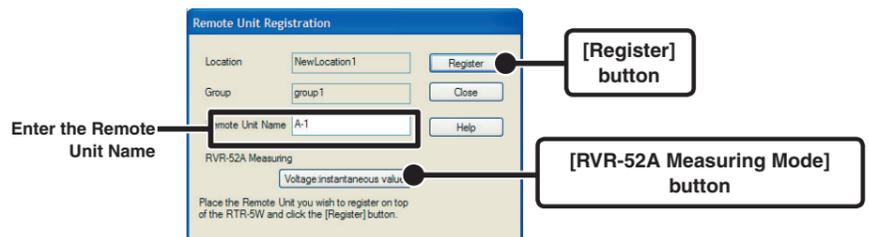


\* By right clicking on a Group icon, a popup menu will appear where you can select "Remote Unit Registration" to display the registration window.

3. Enter a name for the Remote Unit and click the [Register] button to finish the registration.

\* In the Remote Name, you cannot use a space, or any of the following characters [ \ / ; : \* ? " < > | & ]. (Up to 8 characters can be entered.)

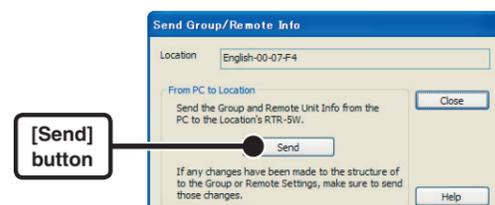
-If you are using an RVR-52A logger, click the [RVR-52A Measuring Mode] button and select the desired measuring mode.



If you wish to register other Remote Units, repeat the process as in steps 1~3.

### 4. Sending Registration Info to an RTR-5W

1. Select a Location from the Administration Tree, and in the "Settings" Menu, select "Send Group / Remote Info".

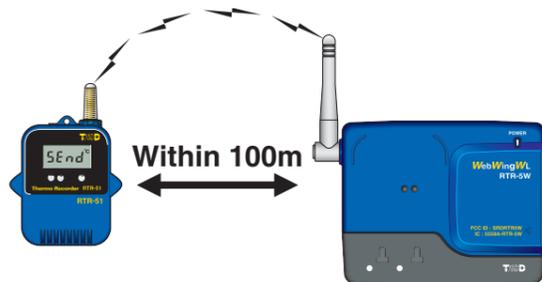


2. Click the [Send] button to send the registration info to the RTR-5W and complete the settings.

\* After making any changes to the settings, make sure to repeat step 4 above.

## 6. Placing a Remote in the Field

The wireless communication range, if unobstructed and direct, is about 100 meters [330 feet. ].Place the Remote Unit(s) within 100 meters of the RTR-5W Station in a spot where stable wireless communication can occur.

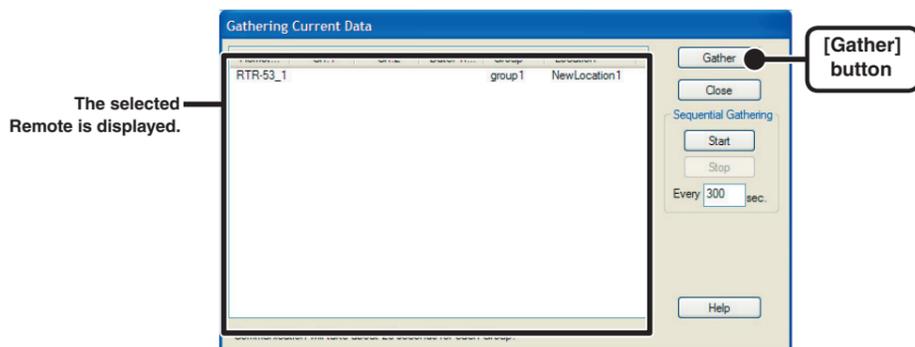


## 7. Wireless Communication Test

Gather the current data readings from each Remote Unit and check to make sure that wireless communication is possible between the Remote Units and the RTR-5W Station.

1. Place a Remote Unit in the actual place from which you wish to measure and record data.
2. Select the placed Remote Unit from the Administration Tree, and in the "Data" Menu, select "Gather Current Data".

\* By right clicking on the Remote Unit icon, a popup menu will appear where you can select "Gather Current Data" to display the "Gathering Current Data" window.



3. Click the [Gather] button to start communication with the Remote Unit and the current data readings will be displayed.

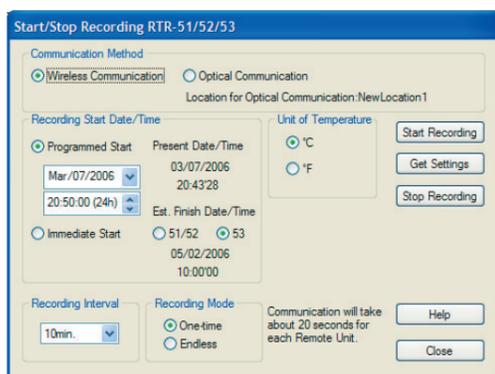
If the current readings are not displayed, move the Remote Unit to a different Location and try gathering the current data again.

## 8. Starting Recording

NOTE:

If the computer clock is set incorrectly, the programmed start time will also be incorrect. Make sure the clock settings are correct before starting a recording session.

1. Open RTR-5W for Windows.
2. From the Administration Tree, select the Remote Unit for which you wish to make recording settings, and in the "Settings" Menu, select "Start/Stop Recording".
3. Set the Recording Conditions.



4. Click the [Start Recording] button to send the recording condition settings via the RTR-5W Station to the Remote Unit and complete the set-up.

## 9. Downloading Recorded Data

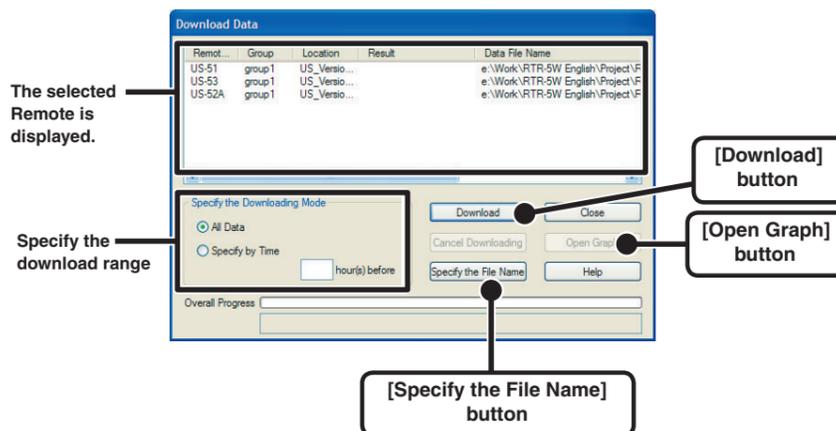
It is possible to download recorded data by two methods: [Wireless Communication] or [Optical Communication].

NOTE:

If the computer clock is set incorrectly, the time of the downloaded data will also be incorrect. Make sure the clock settings are correct before starting a downloading session.

### Ex) Download Data by Wireless Communication

1. Open RTR-5W for Windows.
2. From the Administration Tree, select the Remote Unit from which you wish to download data, and in the "Data" Menu, select "Download Data".



3. Select the Download Mode.
4. If you wish to save the file by specifying the location, click the [Specify File Name] button and make Saving Location Settings.
5. Click the [Download] button to start downloading.

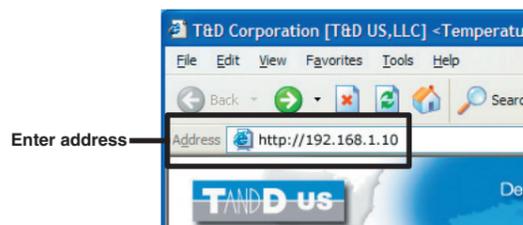
After downloading has been completed, select the name of the Remote Unit from the list and click "Open Graph" to view the data in graph form.

## 10. Viewing the Current Readings Monitor

(accessing via browser)

1. Open Internet Explorer.
2. In the address, enter the IP address that was entered in the *Network Settings Utility* in the form of a URL that begins with `http://...` and then press the [Enter] key. The RTR-5W Series Web Viewer will appear.

After this, anytime you wish to view an already initialized RTR-5W, enter the address as above, and press the [Enter] key to open the RTR-5W Web Viewer.



[If the Viewer does not appear]

Check the IP address and subnet mask, and repeat the steps in "3. Network Initialization Settings".

3. Once the RTR-5W Web Viewer is displayed, the current readings monitor for all Remote Units registered to that RTR-5W will automatically appear.

In the Current Readings Monitor, gathered data will appear from the Remote Unit(s) at the data gathering interval set in the "Location Properties" in RTR-5W for Windows. If you wish to view the most recent readings, click the [Gather Current Readings] button.

