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-ROM x1
- AC adapter AD-0065 x1
- LAN cable LN-20W x1
- Introductory Manual (1) x1

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 Waning Symbols**

- **WARNING:** 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.
- **CAUTION:** These entries are actions that if taken may lead to physical injury or damage to persons or things.
- **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 plug in 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 remove the batteries and stop using it. Continued use may cause fire or electrocution.
  - If smoke or strange smells are emitted from the unit, immediately remove the batteries and stop using it. Continued use may cause fire or electrocution.
  - Do not use or store the Web Wing WL in any of the following places. This may cause damage including malfunction and deformation.
    - Areas exposed to direct sunlight
    - This may cause 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.

**Explanation of Picture Symbols**

- **CAUTION AGAINST ELECTRIC SHOCK:**
  - Do not use this unit in wet or humid places, such as a bathroom. Continued use may cause fire, electrocution or damage.

**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 designed to comply with the limits of 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
- Microsoft Internet Explorer 6.0 or above
- Microsoft Windows 2008 English

* 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.

* 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 Windows’ [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.

   * 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)] and display a window where you can enter a name for the new Location.

   ![Image](Image 588x859 to 749x960)

   * 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.

   ![Image](Image 169x172 to 316x333)

   4. Click on the desired Location Icon. In the "Registration / Administration" Menu, select "Location (RTR-5W) Properties" to display the properties window.

   ![Image](Image 593x443 to 754x544)

   * 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.

   ![Image](Image 582x642 to 699x732)

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

   ![Image](Image 580x998 to 721x1049)

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

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.

   ![Image](Image 540x241 to 675x336)

   * In the Group name, you cannot use a space, or any of the following characters [\;\;":"\;"<>\;"|\;"&\;"\;"\;"\;"\;"
   2. After entering the Group Name, by clicking the [OK] button, the Group will be created in the Administration Tree.

   ![Image](Image 166x428 to 348x542)

   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.

   ![Image](Image 137x592 to 291x645)

   * 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.

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.

   ![Image](Image 209x254 to 334x347)

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

   ![Image](Image 197x254 to 334x347)

   * In the Remote Name, you cannot use a space, or any of the following characters [\;\;":"\;"<>\;"|\;"&\;"\;"
   3. Enter a name for the Remote Unit and click the [Register] button to finish the registration.

   ![Image](Image 197x254 to 334x347)

   * In the Group name, you cannot use a space, or any of the following characters [\;\;":"\;"<>\;"|\;"&\;"\;"
   4. Click the [OK] button to finish the Group settings.

   ![Image](Image 574x90 to 717x172)

   * By right clicking on the Group icon, a popup menu will appear where you can select "Group Properties" and assign a Communication Frequency Channel for the selected Group.

   ![Image](Image 582x642 to 699x732)

   * 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".

   ![Image](Image 582x642 to 699x732)

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

   ![Image](Image 582x642 to 699x732)
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.