

log-EZ for Windows

User's Manual

Thank you for purchasing our product.
Carefully read this instruction manual before
using this unit.

Notices about this Manual and Disclaimers

In order to properly use this product, please carefully read this Manual before using.

T&D Corporation accepts no responsibility for any malfunction of and/or trouble with this product or with your computer that is caused by the improper handling of this product and will deem such trouble or malfunction as falling outside the conditions for free repair outlined in the attached warranty.

- All rights of this User's Manual belong to T&D Corporation. It is prohibited to use, duplicate and/or arrange a part or whole of this document without the permission of T&D Corporation.
- Microsoft® and Windows® are registered trademarks of Microsoft Corporation USA and are binding in the USA, Japan and all other countries.
- All registered trademarks, company names, product names and logos mentioned herein or for products being used are the properties of T&D Corporation or of their respective owners.
- Specifications, design and other contents outlined in this document are subject to change without notice.
- On-screen messages in this document may vary slightly from the actual messages.
- Please notify the distributor from which you purchased the product or T&D Corporation of any mistakes, errors or unclear explanations in this document.
- T&D Corporation accepts no responsibility for any damage or loss of income caused by the use of our product.
- This product has been designed for private or industrial use only. It is not for use in situations where strict precautions are necessary such as in connection with medical equipment, where directly or indirectly.
- We are not responsible for any malfunction or trouble caused by the use of our product or by any problem caused by the use of measurement results of our product. Please be fully aware of this before using our product.

Software User's Agreement

Disclaimers

- Although T&D Corporation has made operational tests on our software "log-EZ for Windows", we cannot guarantee that all operations will work properly under all conditions.
- T&D Corporation shall not accept any responsibility for any damage whether direct or indirect that results from the usage of "log-EZ for Windows".
- Specifications of "log-EZ for Windows" may be subject to change and service may be terminated without advance notice to the user. In such a case T&D Corporation shall not be responsible for any damages whether direct or indirect from the inability to use "log-EZ for Windows".
- T&D Corporation has no obligation to correct any defects found in "log-EZ for Windows".

Copyright Info

1. All copyrights for "log-EZ for Windows", including all of the programs and all related documents, are the sole property of T&D Corporation.
2. "log-EZ for Windows" is for use free of charge. Redistribution is permitted as long as it is to others for non-profit. In this case, all items as written in the above disclaimers automatically transfer and hold true and valid for the party to which the update was redistributed. Note, that if you wish to commercially redistribute the program please see item 3 below.
3. The reprinting or redistribution for commercial purposes whether in part or in whole, in magazines or as a part of any product is strictly forbidden without the expressed consent of T&D Corporation. Any inquires concerning commercial redistribution should be directed to the Sales Department of T&D Corporation.
4. Please do not attempt to make any changes or modifications to "log-EZ for Windows".

About Expressions used in this Manual

- The following explains some important terms used in this Manual.
- The "Wireless Dongle" is referred to as a "Base Unit", "Repeater", or the "Dongle".
- The "log-EZ" Unit (RTR-322) is referred to as a "Remote Unit" or "Repeater".
- The "log-EZ for Windows" is referred to as the/this "Software".
- The action whereby a PC collects recorded data from a Remote Unit (the "log-EZ") is referred to as "download(ing)" or "downloading of data".
- The overall wireless communication system made up of "log-EZ" units and wireless dongles is referred to as a/the "set".

Notices about Wireless Communication Devices

Situations where metals and/or concrete walls are present will adversely affect wireless communication.

- Please take note that in many instances, walls, floors, stairs, fences and desks will contain metals. In order to carry out communication between indoor and outdoor units, please locate indoor units near a window so that radio waves can be easily transmitted.
- Please install units at least 20 cm away from walls or boards containing metals.
- If units are placed in a metal container, the possible wireless communication range will be shortened. In most cases radio waves are transmitted via doors and door openings so place units as near to doors as possible.
- Concrete acts as a block to radio waves, and wireless communication errors may occur more frequently in situations where such walls are present.

As far as possible, keep the units away from noise-emitting sources.

- Equipment such as some industrial instruments, electronic devices or fluorescent lamps generates noise. Please place units more than one meter away from such devices.
- Please place units more than one meter away from computers and other devices which emit noise.
- Keep all wires as far away from wireless communication devices as possible. Be careful about placing units near any wiring or cables such as power supply cables, telephone wires or LAN cables.

Because objects which contain lots of water, such as plants or soil, absorb radio waves, we highly recommend that such objects not be placed between or near our wireless communication units.

- When measuring temperature in a greenhouse it has been reported that as plants grew, communication errors also increased.
- Do not place units directly on the ground.

After having made an installation, check the wireless signal strength.

- The software application includes a feature to check for wireless signal strength.
- Note that moving units 20 cm in any direction may result in communication results being significantly changed.
- If no change occurs after moving the units to several nearby locations, we strongly suggest using a Repeater to enhance communication.

Contents

User's Manual	1
Notices about this Manual and Disclaimers	2
Software User's Agreement.....	3
Notices about Wireless Communication Devices	4

Introduction

Overview and Features of "log-EZ"	7
Outline of Software "log-EZ for Windows"	8

Getting Ready

Have you already completed registering a Remote Unit?	10
Display Format Settings	11
Unit of Temperature	11
Calendar Display Format	11

Using "log-EZ"

Display Current Readings	13
Opening the Current Readings Display	13
Explanation of the Current Readings Display	14
Changing the Current Readings Display Settings	15
Closing the Current Readings Display	15
Displaying Current Readings in the Top Window	15
Download Settings	16
Download Recorded Data Now	16
Disable Auto-Download	17
Time Settings for Auto-Download	17
View Communication Log	18

View Graph	19
Opening the Temperature and Humidity Graph	19
Explanation of Temperature and Humidity Graph.....	22
Register	23
Registration Window	23
Adding a Remote Unit	25
Wireless Communication Test	26
Changing Remote Unit Names	27
Adding or Deleting Repeaters 28	
Adding a Repeater	28
Changing Repeater Names	32
Removing a Repeater	33
Deleting a Remote Unit	34
Deleting a Repeater	34

Deleting and Re-registering

Base Units	35
Analyzing Recorded Data	37
About the Recorded Data File Name ...	37
About the Saving Location for Recorded Data	37
Opening a Graph using "T&D Graph" Software	37
Saving Temperature and Humidity Data as CSV Format File	38
Print Preview	38

Troubleshooting

FAQ	40
Specifications	43
tandd.com.....	44
log-EZ for Windows.....	44
User's Manual.....	44

Introduction

- Overview and Features of "log-EZ"
- Outline of Software "log-EZ for Windows"

Overview and Features of "log-EZ"

The "log-EZ" is a handy Data Logger designed to measure and record temperature and humidity data, which can then be viewed via your computer.

It is possible to manage a multiple number of "log-EZ" units with one computer. Also, wireless communication makes data transmission easy and simple with no need for cables.

- Recorded data can be downloaded via wireless communication to a PC, on which the dedicated software has been installed and the data viewed in graph form.
- Even when the PC is off, the measuring and recording of temperature and humidity are carried out by the "log-EZ" unit.
- It is possible to save the recorded data to a PC, view the data in a graph, print out, save as text file, and so on.
- Data recorded by multiple "log-EZ" units can be viewed via one computer.
- By setting up a "log-EZ" unit as a Repeater, it is possible to extend the wireless communication range between other "log-EZ" units and a PC.

Outline of Software "log-EZ for Windows"

The "log-EZ for Windows" is dedicated software designed to carry out communication settings for the "log-EZ" and to display the data recorded by the "log-EZ" on a PC.

With simple operation of the software, the user can view the current temperature and humidity readings and the recorded data in graph form.

Getting Ready

- Have you already completed registering a Remote Unit?
- Display Format Settings

Have you already completed registering a Remote Unit?

➔ **If you have already registered a "log-EZ" as a Remote Unit, read the Using "log-EZ" section (P.12) and start using.**

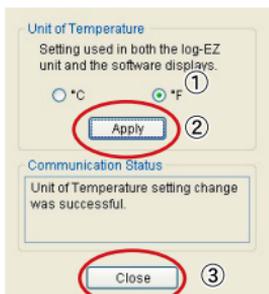
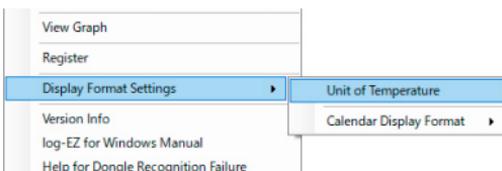
➔ **If you have not yet completed Remote Unit registration, follow the directions in the "Register as a Remote Unit" section of the Introductory Manual included in the package.**

Display Format Settings

Before using the "log-EZ", make settings for the display format of the temperature and calendar.

Unit of Temperature

The unit of temperature settings can be made in either Celsius or Fahrenheit. The default setting is Celsius (°C), but it can be changed to Fahrenheit (°F) by using the following procedure.



① In the Display Settings window for the unit of temperature, select °F.

② [Click the [Apply] button.

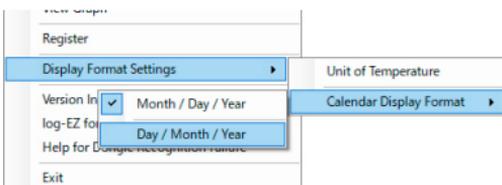
* Check the "Communication Status" to make sure the communication was successful.

③ Click the [Close] button.

* By changing the unit of temperature, the LCD display on the registered Remote Unit(s) and Repeater(s), the display of Current Readings being monitored, and the temperature scale in the graph display will also be changed to reflect the new setting.

Calendar Display Format

Make settings for the format of the calendar display. Select "Month/Day/Year" or "Day/Month/Year" and place a check next to the desired format. The default setting is "Month/Day/Year".



Using "log-EZ"

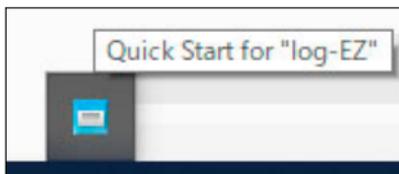
- Display Current Readings
- Download Settings
- View Graph
- Register
- Adding or Deleting Repeaters
- Deleting and Re-registering Base Units

Display Current Readings

It is possible not only to monitor the current readings of the Remote Unit(s) placed in remote locations, but also to view the most recently transferred readings in a continually changing graph. In addition, Today's "High" and "Low" readings can be viewed.

Opening the Current Readings Display

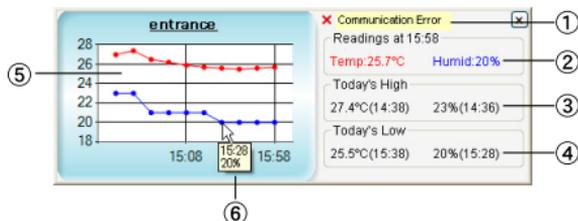
1. Click the [Quick Start for "log-EZ"] icon to view the Application Menu.



2. Click [Display Current Readings].
3. The "Current Readings Display" will appear with the current temperature and humidity readings.

*The Current Readings Display will show the readings of all registered Remote Units.

Explanation of the Current Readings Display



① Message Display

If there is trouble in the status of the Remote Unit or with communication, one of the following messages will be displayed: "No response from Remote Unit", "Base Unit Communication Error", "Please change the battery", "Remote Unit cannot be found", and "Communication Error". See "Communication Error Messages" (P.41).

② Current Temperature and Humidity

Temperature and humidity readings for the current time will be displayed.

③ Today's High Temperature and Humidity

The highest readings of the day (from 00:00 to current time) will be displayed.

④ Today's Low Temperature and Humidity

The lowest readings of the day (from 00:00 to current time) will be displayed.

⑤ Latest Readings Graph

Changes in temperature and humidity readings of the day can be viewed here.

The number of readings for display which has been set at start-up (default is 20) will be displayed in graph.

If the number of recorded data readings does not reach the set number, all data recorded until then will appear.

⑥ Data Point Readings Display

By placing the cursor on the data point on graph, the time and the measurement readings for that point will be shown.

Changing the Current Readings Display Settings

In this software, the default setting for "Interval for Gathering Current Readings" is 10 min. and "Number of Readings for Display" is 20.

These default settings can be changed as follows:

- 1.** Right click on the "Current Readings Display", and click on the [Current Readings Display Settings]. (You can also go to [Display Current Readings] in the Application Menu and click on the [Current Readings Display Settings] to open the same window.)
- 2.** Here you can make settings for both "Interval for Gathering Current Readings" and "Number of Readings for Display".
 - Interval for Gathering Current Readings: 1 to 60 min.
 - Number of Readings for Display: 1 to 150
- 3.** You can also change the graph background of the "Current Readings Display" from [Graph Color Settings] and [Graph Background Pattern].

Closing the Current Readings Display

In the Application Menu, click on the [Do Not Display Current Readings] to close the "Current Readings Display".

Displaying Current Readings in the Top Window

If and when the "Current Readings Display" is not visible behind other windows, go to [Do not Display Current Readings] in the Application Menu and click on the [Display Monitoring Window on Top]. This will bring the "Current Readings Display" to the front of the screen.

Download Settings

In the [Download Settings] menu, it is possible to make settings for downloading recorded data from the "log-EZ" to a PC; whether immediately or automatically at a set time once a day. The communication log can also be viewed here. The factory default settings are as follows.

Auto-Download: Enabled

Time to download: 12:00p.m.

Download Recorded Data Now

- 1.** Click the [Quick Start for "log-EZ"] icon to view the Application Menu. Go to [Download Settings] and click on [Download Recorded Data Now].
- 2.** Specify how many days of data are to be downloaded and click on the [OK] button to download the data for the specified number of days before the current time. The number of days for downloading data can be selected from 1 to 10.

Disable Auto-Download

In order to disable Auto-Download, click on the [Quick Start for "log-EZ"] icon > [Download Settings] > [Disable Auto-Download].

Time Settings for Auto-Download

In this software, the default settings for downloading temperature and humidity data are as follows: "Auto-Download (enabled)", "Time to download (12:00)", and "Day(s) of data (one day)". Follow the procedure below to change the time settings for Auto-Download.

1. Click on the [Quick Start for "log-EZ"] icon > [Download Settings] > [Time Settings for Auto-Download].
2. In the "Download Settings" window, make settings for the "Time to Download" and click on the [OK] button. "Time to Download" can be selected from 0:00 to 23:59.

*When the downloading is completed, the Remote Unit Name and result (Success / Failure) will be displayed on the [Quick Start for "log-EZ"] icon as "Message from log-EZ".

IMPORTANT:

The Auto-Download function allows the user to automatically download data, which has been recorded from 24 hours before the present time, from Remote Units to a PC at a set time of day. If multiple Remote Units have been registered, the time of the downloaded data will differ in seconds.

When the auto-downloading of data fails due to communication errors caused by such reasons as below, at the next scheduled downloading session the software will download all of the data, including any remaining data from the previously unsuccessful download. (for up to 10 days).

- The PC was off or in energy saving mode ("Standby" or "Sleep" mode) at the set download time.
- The Base Unit (Dongle) was not connected to a USB port on your PC.
- Wireless communication between the Base Unit and Remote Units was poor.

The display name and status of the energy saving mode vary depending upon your OS. If the auto-downloading of data could not be carried out in energy saving mode, it will be retried when the PC recovers from it.

View Communication Log

Here you can check the communication result to see if the downloading of data on a specific date was a success or failure.

You can also check the communication history and error details in cases where the downloading of data could not be carried out at a set time because the PC was off or communication error occurred.

By taking the appropriate approach in response to a communication error message, those types of errors may be solved. (See P.41).

Click the [Quick Start for "log-EZ"] icon, and from the Application Menu click the [Download Settings] > [View Communication Log] to open the Communication Log window.

Regardless of communication results (success / failure), the communication log for up to 500 download sessions will be displayed.

1. Communication Details: This represents the contents of communication between the Remote Unit and Base Unit.
2. Communication Results: This represents results of the communication.
3. Error Details: If communication errors occur often, check the details here to improve the conditions for wireless communication.

View Graph

Temperature and Humidity data recorded by the Remote Unit(s) can be viewed in graph via your computer.

Opening the Temperature and Humidity Graph

Opening Graph

1. Click the [Quick Start for "log-EZ"] icon to view the Application Menu.
2. Click on [View Graph].
3. The "Open Data File" window will appear with the data files created upon download of temperature and humidity data from Remote Unit(s).

IMPORTANT:

When a graph is opened for the first time after installation of this software, the following message window may appear.

No downloaded data file exists.



OK

Click the [OK] button if this window appears.

This occurs because the set "Time to Download" has not been passed yet and there is no downloaded recorded data to view in the graph.

If you wish to immediately view a graph, download data file by following the directions in the "Download Recorded Data Now" (P.16) or wait one day and try again.

4. Select a Remote Unit Name, click on the selected data file and click the [Open] button to view the graph.

*To view data from another Remote Unit in a graph, select another Unit and repeat the same procedure.

Opening Multiple Graphs Based on the Same Remote Unit

Here you can open multiple Temperature and Humidity graphs simultaneously. It is also possible to combine separate graphs together into one graph.

1. Click the [Quick Start for "log-EZ"] icon to view the Application Menu.
2. Click on [View Graph].
3. The "Open Data File" window will appear.
4. Select a Remote Unit Name, click on the selected data file and click the [Open] button to view the first graph.
5. Select the next Remote Unit Name and click the [Open] button.
6. The "Graph Display Confirmation" window will appear. Select [Yes] if you wish to display the selected data file in the same graph on display, and select [No] if you wish to display it in the different graph window.
7. When you select to add the selected data file into the currently displayed graph, it will be combined with the most recently opened graph as Figure 1. When you select separating the graph, the selected data file will be displayed in the separate graph window as Figure 2.

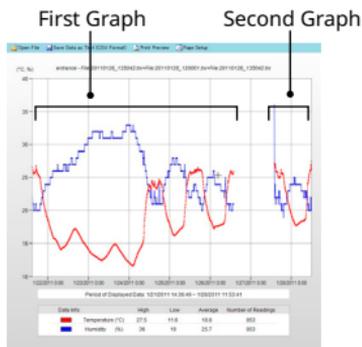


Figure 1

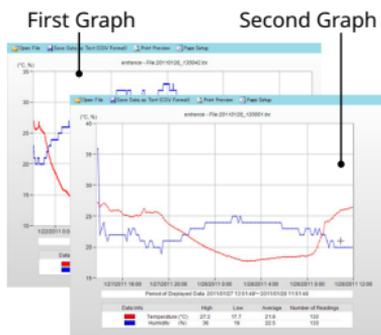


Figure 2

8. Repeat the procedures from steps 5 to 7 in order to open (or combine) more graphs.

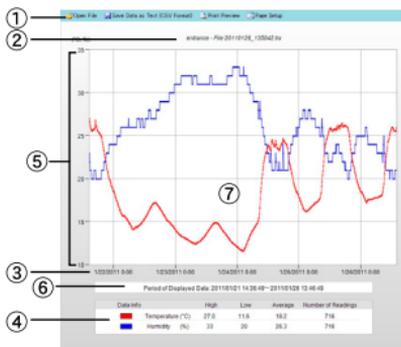
Deleting Data Files

Here you can delete unnecessary temperature and humidity data files.

In order to select and delete specific data files, select the Remote Unit Name, select the data file to be deleted and click the [Delete] button.

In order to delete all data files saved for each Remote Unit, select the Remote Unit Name and click the [Delete] button. Temperature and humidity data files for the selected Remote Unit will all be deleted.

Explanation of Temperature and Humidity Graph



① Menu Bar

[Open File]

The "Open Data File" window will appear.

[Save Data as Text (CSV Format)]

The data file will be saved after having been converted from ".trx" format to "CSV" format.

[Print Preview]

The currently displayed graph can be viewed in the Print Preview window.

[Page Setup]

Page size and orientation settings for printing a graph can be made here.

② Remote Unit Name, Temperature / Humidity Data File Name

This shows the Remote Unit Name and Data File Name for the displayed Graph.

③ Date / Time Axis

This shows dates and times scaled across the entire Graph to help in viewing and locating data.

④ Data Area

This area shows temperature and humidity data information in the following order from the left: the highest reading, lowest reading, average reading, and number of readings.

⑤ Temperature / Humidity Axis

This shows numerical values for both temperature and humidity scaled for the entire set of data.

⑥ Period of Displayed Data

This shows the time period for the full set of displayed data.

⑦ Graph Area

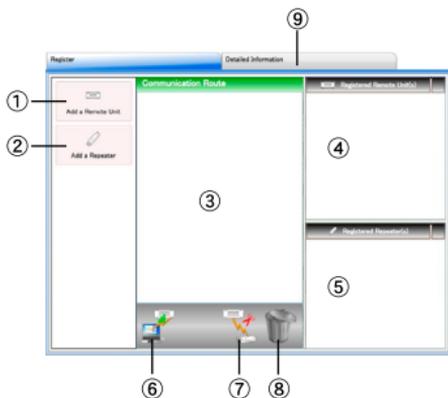
The temperature and humidity graph is shown here. The horizontal axis shows date and time and the vertical axis shows temperature(°C / °F) and humidity(%).

Register

This section explains the registration window and the icons to be used for Remote Unit / Repeater Registration.

1. Click the [Quick Start for "log-EZ"] icon to view the Application Menu.
2. Click on [Register].

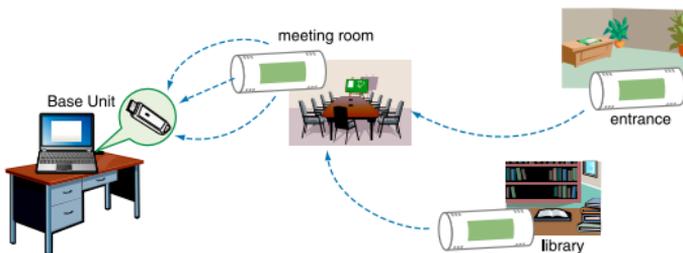
Registration Window



- | | |
|------------------------------|--------------------------------------|
| ① [Add a Remote Unit] button | ⑥ "Wireless Communication Test" Icon |
| ② [Add a Repeater] button | ⑦ "Repeater Removal" Icon |
| ③ Communication Route | ⑧ "Trash" icon |
| ④ Registered Remote Unit(s) | ⑨ [Detailed Information] tab |
| ⑤ Registered Repeater(s) | |

Communication Route Figure

This represents the current communication relations between each Remote Unit / Repeater and the Base Unit.



Communication route for the following set is shown below, representing three Remote Units being registered, one of which "meeting room" is functioning as a Repeater for "entrance" and "library".



Adding a Remote Unit

A total of 16 Remote Units and Repeaters can be registered into one Base Unit.

- 1.** Click the [Quick Start for "log-EZ"] icon to view the Application Menu.
- 2.** Click [Register] to open the registration window.
- 3.** Insert a battery into the "log-EZ" unit you wish to register so that the unit will enter [Registration Mode].

IMPORTANT:

To learn about [Registration Mode], see the Introductory Manual.

- 4.** Click [Add a Remote Unit] in the registration window.
- 5.** Enter the desired Remote Unit Name to register, and click on the [Assign Name] button.

If the registration is successful, the following message appears:
"Communication was successful".

6-1.

To add more Remote Units, click the [Register Another Unit] button and repeat the same process.

6-2.

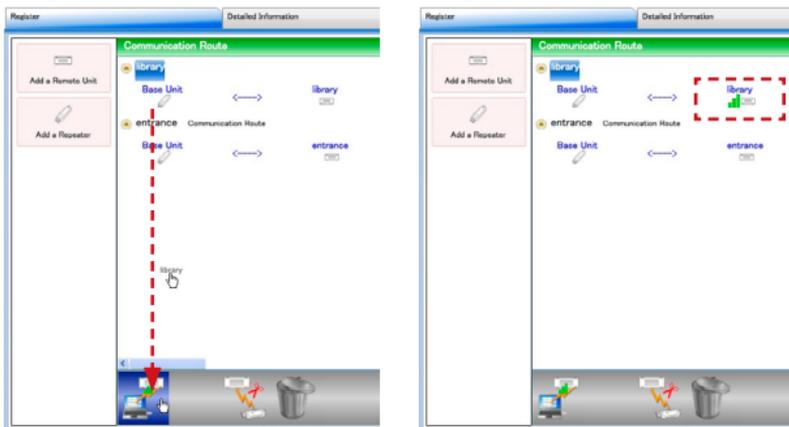
To exit the registration window, click the [Close] button.

Upon successful registration, the new Remote Unit appears in the "Registered Remote Unit(s)" List and "Communication Route" Area.

Wireless Communication Test

Here you can check the signal strength for the registered Remote Units and Repeaters. This shows how to check the signal strength for a registered Remote Unit.

From the "Communication Route Figure", drag and drop the desired Remote Unit Name to the "Wireless Communication Test" icon; a signal strength mark appears to show the communication status.



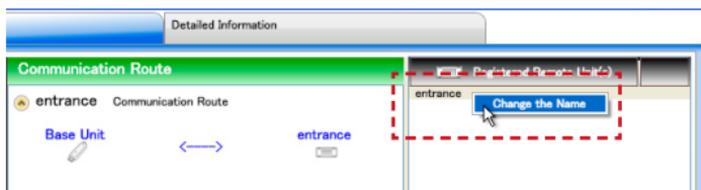
IMPORTANT:

In case the number of bars showing signal strength is less than two, read the "Notices about Wireless Communication Devices" (P.4) and make adjustments to the Remote Unit location or positioning. The signal strength mark shows the result of the most recent wireless communication test. It is recommended to carry out a wireless communication test every time you change the location of a Remote Unit.

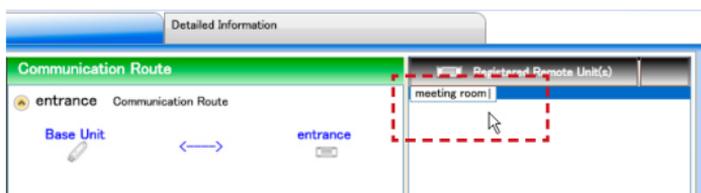
Changing Remote Unit Names

Follow the procedure below to change a registered Remote Unit Name.

1. Place the cursor on the desired Remote Unit Name in the "Registered Remote Unit(s)" List and right click to view the popup menu. In the popup menu, click on [Change the Name].



2. Enter a new name here.



3. Press the "Enter" key to confirm the new name. Upon confirmation the Remote Unit name in the "Communication Route" Area will change as well.



Adding or Deleting Repeaters

Adding a Repeater

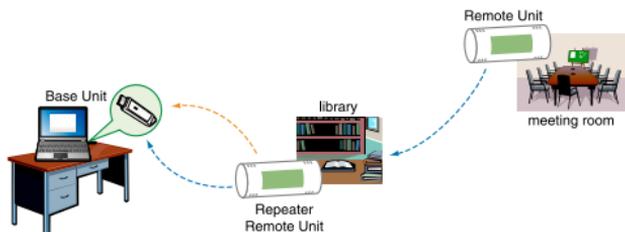
If radio signals are poor due to building structure or from being out of communication range, placing a Repeater between a Remote Unit and a Base Unit may help improve the communication status. There are two ways to add Repeaters: use a "log-EZ" unit as a Repeater or use a Dongle as a Repeater.

Using a "log-EZ" as a Repeater

Here shows how to register the "log-EZ" unit currently used as a Remote Unit as a Repeater.

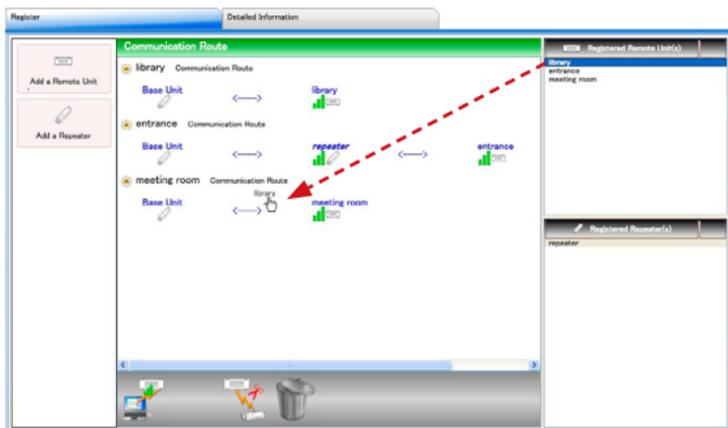
IMPORTANT:

- Even if the currently used "log-EZ" unit has been registered as a Repeater, its functions as a Remote Unit continue, such as Current Readings Display and Graph Display. If you wish to register a "log-EZ" unit that has not yet been registered as a Remote Unit, first carry out the Remote Unit registration and then register as a Repeater.
- When a "log-EZ" unit is being used as a Repeater, depending on the frequency of communication battery life may be shortened.

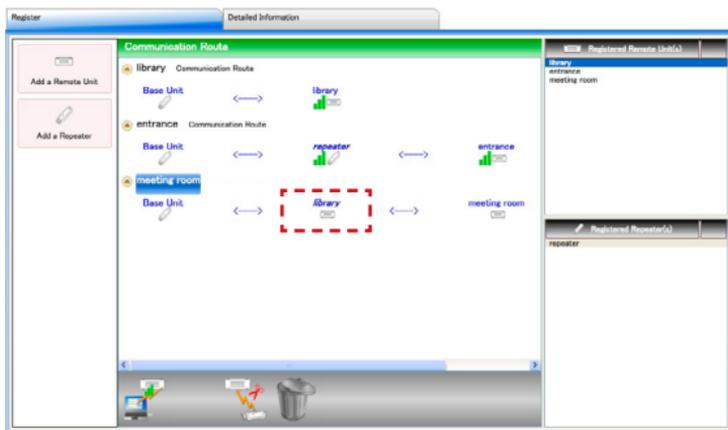


1. Click the [Quick Start for "log-EZ"] icon to view the Application Menu.
2. Click [Register] to open the registration window.

- From the "Registered Remote Unit(s)" List, drag and drop the Remote Unit Name to the desired location as shown below.



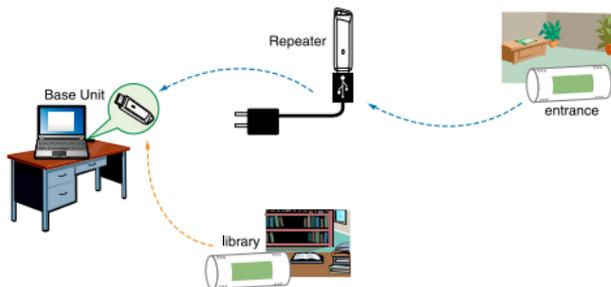
The Repeater appears in the "Communication Route" Area.



*A total of 16 Remote Units and Repeaters can be registered into one Base Unit.

Using a Dongle as a Repeater

Here shows how to register a Dongle as a Repeater between a Remote Unit and a Base Unit.



- 1.** Click the [Quick Start for "log-EZ"] icon to view the Application Menu.
- 2.** Click [Register] to open the registration window.
* Make sure to disconnect the Base Unit from the PC before registration.
- 3.** Connect the target Dongle to a USB port on the PC.
- 4.** Click the [Add a Repeater] button in the registration window, enter the desired Repeater Name to register, and click the [Assign Name] button.

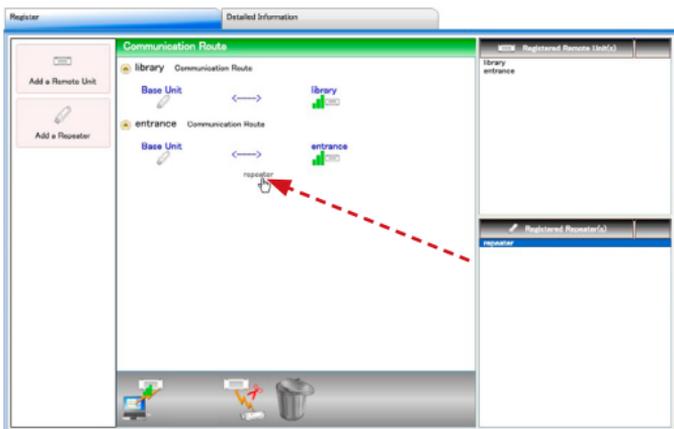
When the registration succeeds, the "Communication was successful" message appears.

4-1. To add more Repeaters, click the [Register Another Unit] button and repeat the same process.

4-2. To exit the registration window, click the [Close] button.

* Upon successful registration, the new Repeater appears in the "Registered Repeater(s)" List.

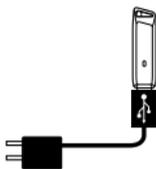
5. From the "Registered Repeater(s)" List, drag and drop the Repeater Name to the desired location as shown below.



The Repeater appears in the "Communication Route" Area.

* A total of 16 Remote Units and Repeaters can be registered into one Base Unit.

6. Upon completion of registration, remove the Repeater from the PC and set into its position.



IMPORTANT:

When using as a Repeater, it is necessary to have the optional AC adaptor as a power source for the USB device.

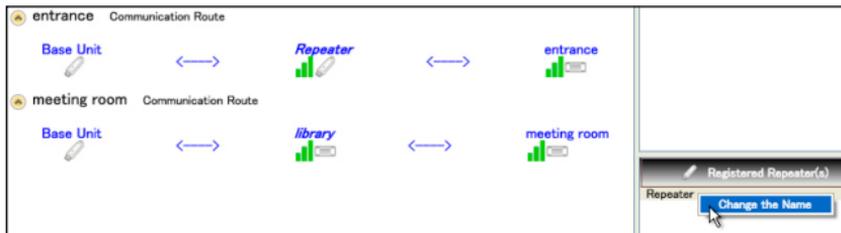
For information about compatible AC adaptors, visit our T&D website (tandd.com).

7. Reconnect the Base Unit to the PC.

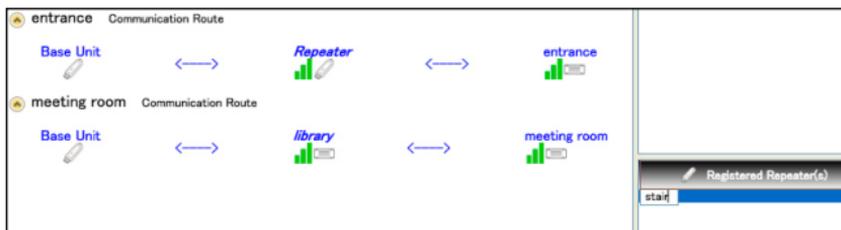
Changing Repeater Names

Follow the procedure below to change a registered Repeater Name.

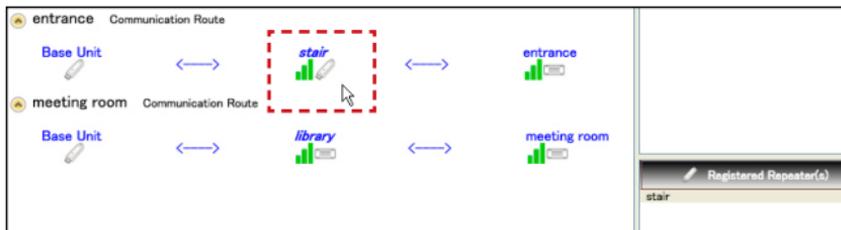
1. Place the cursor on the target Repeater Name in the "Registered Repeater(s)" List, and right click to view the popup menu. In the popup menu click on [Change the Name].



2. Enter a new name here.



3. Press the "Enter" key to confirm the new name. Upon confirmation the Remote Unit name in the "Communication Route" Area will change as well.



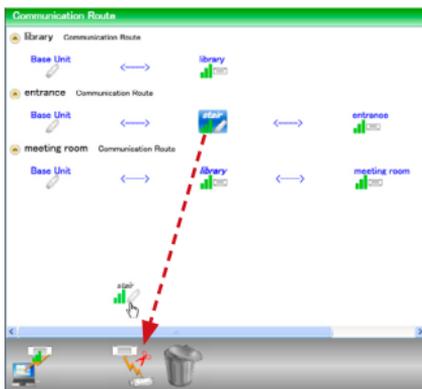
Removing a Repeater

Use this to remove the Repeater from the Relay Route in the current set.

From the "Communication Route" Area, drag and drop the registered Repeater to the "Repeater Removal" Icon as shown below.



When removing a "log-EZ" from a Relay Route

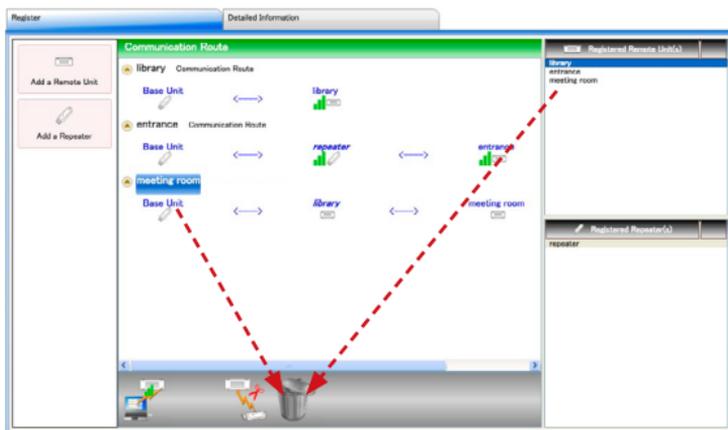


When removing a Dongle from a Relay Route

* When removing a Remote Unit from the Relay Route, the unit only stops its operation as a Repeater and continues to carry out operation as a Remote Unit.

Deleting a Remote Unit

Here you can delete registered Remote Units from the current set. From either the "Communication Route" Area or "Registered Remote Unit(s)" List, drag and drop the target Remote Unit Name to the "Trash" icon.



Deleting a Repeater

Deleting a Repeater can also be carried out by the same operation.

IMPORTANT:

Any Remote Unit and Repeater which has been deleted must be registered again to a Base Unit and then wireless communication can be carried out.

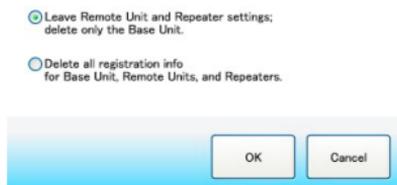
Also, after deletion, it will not be possible to download the temperature and humidity data stored in the Remote Unit.

Deleting and Re-registering Base Units

It is possible to delete the registered info for Base Unit in such cases as follows:

- When the Base Unit is broken
- When you wish to re-register a Base Unit to a computer after it was used as a Base Unit / Repeater with a different PC
- When you wish to delete all registration info and return the Base Unit to its original factory default settings.

1. Click the [Detailed Information] tab in the registration window.
2. Click the [Delete the Base Unit] button in the lower right of the screen.
3. Select how you wish to carry out deletion by clicking one of the choices in the window as shown below.



Leave Remote Unit and Repeater settings: delete only the Base Unit.

Remote Unit and Repeater info as well as the communication route settings will not be deleted; therefore you can register a new Base Unit using the same communication settings.

Delete all registration info for Base Unit, Remote Units, and Repeaters.

This returns the Wireless Dongle to its original factory default settings; deleting all registration info for Base Unit, Remote Units, and Repeaters as well as the communication route settings.

4. Connect the Base Unit to the USB port on the PC. Check the contents of your selections in step 3, and click the [OK] button.

* Note that deleted information cannot be recovered.

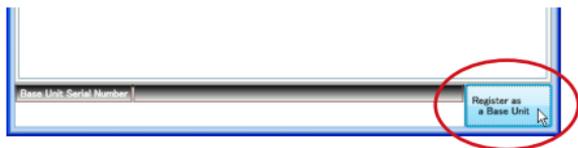
5. The software needs to be restarted; please exit Quick Start for "log-EZ" first and open "log-EZ for Windows" from the Start Screen or Start Menu.

If a Base Unit is connected to the PC when re-starting the software:

The registration process for the connected Base Unit will begin automatically.

If a Base Unit is not connected to the PC when re-starting the software:

The registration process will not begin automatically; carry out re-registration of the Base Unit from the window as shown below.



Analyzing Recorded Data

About the Recorded Data File Name

The default file name consists of the date and time of data collection.

File Name Example: 20100306_120356.trx
Year+Month+Date _ Hour+Minute+Second

About the Saving Location for Recorded Data

Recorded data will be saved in the default folder under the Documents (or My Documents) folder .

C:\Users\User Name\Documents\TandD Corp\log-EZ for Windows\Remote Unit Name Folder

Opening a Graph using "T&D Graph" Software

Recorded data files can be opened by T&D Graph to view in graph form. With T&D Graph, even if the data you wish to view is divided into multiple files, it is possible to merge them into one graph by specifying the device name and/or time period. Other features include data filtering and posting comments and/or memos on graphs.

1. Download and install T&D Graph from the following site:
tandd.com/software/td-graph.html
2. Open T&D Graph and then access the data you wish to view.

* For details about operations please see the "Help" menu in the software.

Saving Temperature and Humidity Data as CSV Format File

By saving the data displayed in the graph as text file (CSV), you can create a file type that can be read by commercial spreadsheet software.

- 1.** Click the [Save Data as Text (CSV Format)] in the Graph window.
- 2.** Designate the file name and the location to which the file should be saved and click the [Save] button to create and save the data as a Text File document.

Print Preview

By clicking on the [Print Preview] Menu in the Temperature / Humidity Graph, the "Print Preview" window will appear. Click the "Print" icon to open the "Print Setup" window. After making necessary settings, click the [Print] button to start printing.

Troubleshooting

- FAQ

FAQ

- Q.** The date and time of recorded data are incorrect, what should I do?
- A.** When you download data, the date and time that are shown are taken from your computer's clock. If your computer's clock is not correct, it will affect the recorded data.
- Q.** Remote Unit Registration cannot be carried out, what should I do?
- A.** Make sure to follow the proper registration procedures. Go back to "Have you already completed registering a Remote Unit?" (P.10) and follow the directions to make the registration again.
- A.** Read "Notices about this Manual and Disclaimers" (P.4) and try to reposition Remote Units. Moving the wireless communication devices to a different location can sometimes improve the wireless condition. The USB device driver for the Base Unit may not have been recognized.
- A.** The USB device driver for the Base Unit may not have been recognized. Click the [Quick Start for "log-EZ"] icon, and from the Application Menu, open [Help for Unit Recognition Failure] to check the USB driver.
- A.** In case you have registered a Base Unit using the Base Unit / Repeater having been used in a different set, delete the Base Unit and the written info in it first (P.35) and make registration again.
- Q.** Wireless communication errors occur frequently, what should I do?
- A.** Check whether the Wireless Dongle has been properly connected to the PC.
- A.** Carry out a wireless communication test for the registered Remote Units and Repeaters. Check the registration window – signal strength mark (wireless communication test). See P.26 In case the number of signal strength bars is less than two, read the "Notices about this Manual and Disclaimers" (P.4) and make adjustment to such as the Remote Unit location.

- A.** If after checking and trying the above there is no improvement, see "View Communication Log" (P.18) and check the communication history between the Base Unit and Remote Unit. Check and try the "Dealing with Communication Error Messages" in the next page.

Dealing with Communication Error Messages

<p>Base Unit Communication Error</p>	<ul style="list-style-type: none"> - Check that the Dongle has been properly inserted into a USB port of the PC. - Try connecting the Dongle (Base Unit) to a different USB port. - Check whether the USB driver has been properly installed. (See [Help for Unit Recognition Failure] in the menu displayed by clicking the [Quick Start for "log-EZ"] icon.) - Try deleting the Base Unit and the written info in it (P.35) and make registration again.
<p>Remote Unit cannot be found / No Response from Remote Unit</p>	<ul style="list-style-type: none"> - Check whether the Dongle has been properly inserted into a USB port of the PC. - Try connecting the Dongle (Base Unit) to a different USB port. - Check that the Remote Unit's position has not been changed or that some interference to wireless communication has not occurred. - Try replacing the battery of the Remote Unit with a new one. - Try deleting the Base Unit and the written info in it (P.35) and make registration again.
<p>Communication Error / Other Communication Error</p>	<ul style="list-style-type: none"> - Try communication again. If communication errors occur quite often, it is very possible that the unit is defective or has been damaged.

*If after trying the above there is no improvement, using a Repeater may be the best solution. It is recommended to set up a Repeater by following the directions in "Adding or Deleting Repeaters" (P.28).

- Q.** Is it possible to use different computers to operate a "log-EZ"?
- A.** It is not possible to use two computers to make settings, operate, or communicate with a "log-EZ" unit. However, transmitting the registration info or recorded data to another computer is possible. (Note that the original computer can no longer be used to carry out operation of the "log-EZ".) Follow the directions below.

IMPORTANT:

This method is only valid when using the same Base Unit with both the original computer (from which the data is transmitted) and the new computer (to which the data is transmitted). Also make sure not to edit the following folder names or data in the folder. If edited, data can no longer be properly read.

- 1.** In the original computer, copy the "xmldata~system" folder under "My Documents\TandD Corp\RTR-300\RTR-322". Copy the "log-EZ for Windows" folder under "My Documents\TandD Corp".
- 2.** After installation of the software to a new computer, overwrite the "xmldata~system" folder under "My Documents\TandD Corp\RTR-300\RTR-322". Overwrite the "log-EZ for Windows" folder under "My Document\TandD Corp".

* Open this software on the new computer to upload all of the registration info and the recorded data up until that point.

Specifications

Maximum Number of Registrations	16 units (number of log-EZ and repeater dongles)
Compatible Devices	RTR-300, RTR-322

* Software on CD-ROM is not supplied with the product. Free software download and information on OS compatibility is available on the Software page of our website at tandd.com/software/.

For product information or questions contact us at:

T&D Corporation

Shimadachi 817-1, Matsumoto, Nagano, 390-0852 JAPAN
Fax: +81-263-40-3152 E-mail: support@tandd.com

Website

tandd.com

We have opened an English Website for your convenience. Here you can find information about our company, news, products, upcoming events, software and Introductory Manual downloads, as well as, other support. Please stop by and see what we have to offer.

log-EZ for Windows User's Manual

Published by T&D Corporation

© Copyright T&D Corporation. All rights reserved.
