

**Communication Port** 

TR-50U User's Manual

CE

# **T&D** CORPORATION

#### Notices about this User's Manual

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 User's Manual without the permission of T&D Corporation.
- Microsoft<sup>®</sup> and Windows<sup>®</sup> are registered trademarks of Microsoft Corporation USA and are binding in the USA and all other countries.

  Windows Vista ™ is a registered trademark of Microsoft Corporation USA.
- Company names and product names are trademarks or registered trademarks of each company.
- Specifications, design and other contents outlined in this manual are subject to change without notice.
- On screen messages in this manual may vary slightly from the actual messages.
- Please notify the shop where you purchased this product or T&D Corporation of any mistakes, errors or unclear explanations in this manual.
   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 safety precautions are necessary such as in connection with medical equipment, whether 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 unit. Please be fully aware of this before using our product.
- Some of our products, which come under the category of strategic goods in foreign trade law, need the permission of the Japanese government to be exported outside of Japan.
- Please read the warranty and provisions for free repair carefully.

### **FCC Compliance Statement for American Users**

This device complies with Part 15 of the FCC Rules.

Operation is subject to following two 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 in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or telepuision

reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### WARNING

This equipment has been verified to comply with the limits for a Class A personal digital device, pursuant to Subpart B of Part 15 of FCC Rules. Only peripherals (computer input/output devices, terminals, printers, etc.) certified or verified to comply with the Class A or B limits may be attached to this equipment. Operation with non-certified or non-verified personal computer and/or peripherals is likely to result in interference to radio and TV reception. The connection of a non-shielded equipment interface cable to this equipment will invalidate the FCC Certification of this device and may cause interference levels which exceed the limits established by the FCC for this equipment.

You are cautioned that changes or modi.cations not expressly approved by party responsible for compliance could void your authority to operate the equipment.

### Safety Precautions and Instructions

### ■ To ensure safety obey all of the following warnings

The following items should be strictly obeyed for the safe usage of this unit, and for protecting yourself and other people from bodily harm and/or damage to property. Before using make sure to carefully read, understand and follow the safety rules and precautions for our products as outlined below.

### **■** Explanation of Symbols

**Explanation of Warning Symbols** 

$\triangle$	WARNING

DANGER: 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.

These entries are actions that if taken may lead to physical injury or damage to persons or things.

#### **Explanation of Picture Symbols**

CAUTION



Denotes an important warning or caution. Inside or near the symbol may appear another symbol giving details.

(EX: Be careful of electrocution)



Denotes a forbidden action. Inside or near the symbol may appear another symbol giving details.

( EX: Do not use in wet areas.)



Denotes an action that you must take. Inside or near the symbol may appear another symbol giving details.

(EX: E Unplug power plug from outlet)

#### **⚠ WARNING**



When installing and using this product, make sure to follow all warnings and directions from your computer manufacturer.



Do not take apart, repair or modify the main unit. This may cause fire or electrocution.



If water or a foreign body enters into this unit, immediately unplug the AC adaptor and stop using.

Continued use may cause fire or electrocution.



Do not use this unit in wet or humid places, such as a bathroom.



It may cause a fire or other trouble including malfunction.



If any smoke or strange smells are emitted from the unit, immediately pull out the AC adaptor and cease using it.

Continued use may cause fire or electrocution.



Store main units and LAN cables out of the reach of children. Touching them may result in injury and it is dangerous if they are dropped.



Do not connect standard communication cable to a telephone line. This can cause fire or other trouble in personal computers.



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. Continued use may cause fire or electrocution.

#### **⚠ CAUTION**



Use these units under conditions with an ambient temperature of -10 to 60°C and humidity of 90%RH or less.



We are not responsible for any damage, malfunction or trouble, whether direct or indirect, caused by the use of our product. 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.



This unit is not waterproof.

If the unit gets dirty, wipe it with a clean cloth dipped in alcohol.



The units can be operated with "T&D Recorder for Windows (TR-5, 7xU)" version 1.50E or later.

The latest version of "T&D Recorder for Windows (TR-5,7xU)" can be downloaded free of charge from our Web Site ( http://www.tandd.com/).



Do not use or store the unit in places such as listed below: 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 that are not flat or level
This may cause the unit to fall and result in injury and/or damage.

- 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.

### Before Using…

# Important Notes about the Installation Procedure (for using this product with USB communication)

Thank you for choosing T&D Products

In order to use a USB connection to communicate between this product and a PC, it is necessary to install the application and the USB driver.

Before connecting this product to a PC with a USB cable, it is necessary to first install the application and the USB driver.

If you use the USB cable to connect the product to a PC before installation, the USB driver may not properly install.

If you have connected the product to a PC without first installing the driver, please make sure to press [Cancel] in the [Installation Wizard] window when it pops up the PC screen and then disconnect the USB cable from the product.

For more details about the proper installation procedure, see the Software User's Manual that accompanies [T&D Recorder for Windows].

#### ■ Windows Vista



#### ■ For other Windows Operating Systems

\*The screen shot below is from Windows XP. For other Windows OS, there is also a [Cancel] button in the lower right of the screen. (Your screen may differ slightly if you are using a Windows OS other than XP.)



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### What is Communication Port TR-50U?

### Outline

Communication Port TR-50U has been designed to enable the downloading of recorded data from our compact waterproof TR-5 / TR-5S Series Data Loggers.

After the data has been downloaded to your computer, our exclusive software can then easily process the data into graphs, tables, save to files and/or print it out.

The latest version of our software can be downloaded free of charge from our Web Site ( http://www.tandd.com/ ) .

### ■ Principal Features

- High speed communication via USB connection

When coupled with our TR-5S Series (TR-51S/52S) Loggers it is possible to take advantage of the fastest communication rate of 19200bps.

- Remote Unit Auto Detection function automatically opens software.

Simply by placing a compatible logger on the TR-50U, the necessary software program will open automatically.

- Power supply via USB bus power.

As power comes through the USB connection, there is no longer any need for external power jacks and connections.

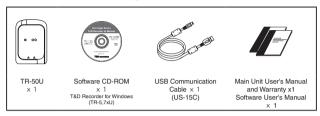
### ■ Compatible Data Loggers

TR-50U can be used with the following data loggers:

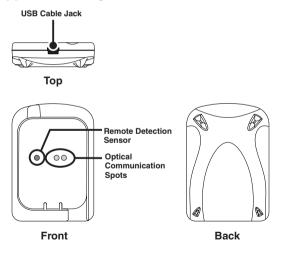
- TR-5S Series Loggers (TR-51S / TR-52S)
- MAX speed 19200bps / Download Time at Full Data: about 20 seconds
- TR-5 Series (TR-51A/TR-51/TR-52)
  MAX speed 2400bps / Download Time at Full Data: about 160 seconds

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# **■** Contents of Package



# ■ Appearance Diagram



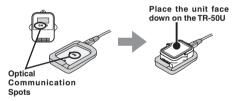
### Using Optical Communication with a Data Logger

Via optical communication between the TR-50U and a Data Logger, it is possible to download recorded data to your computer and make necessary recording settings to the Data Logger.

- Connect the provided USB communication cable's "A-plug" to a USB port on your computer.
- 2. Connect the "mini-B plug" to the TR-50U.



Place the Data Logger on top of the TR-50U as shown in the figure, making sure that the optical communication spots are aligned properly.



#### NOTE

- To ensure that the communication cable is properly connected make sure that the plugs are completely inserted.
- If the Data Logger is wet, make sure to dry it off before placing it on top of the TR-50U.
- Recording settings for the Data Logger and the downloading of data can now be carried out as desired.

#### After having installed the software....

- Simply by placing a compatible logger on a TR-50U that is connected to your computer, the Remote Unit will be detected and the necessary software program will open automatically. (Common for both TR-5S and TR-5 Series Units)

### **Specifications for TR-50U**

PC Interface	USB Communication: USB 1.1 (with PC)
Communication Speed	TR-5S Series Loggers:  MAX speed 19200bps / Download Time at Full Data: about 20 seconds TR-5 Series Loggers:  MAX speed 2400bps / Download Time at Full Data: about 160 seconds
Dimensions	H:80mm x W:56mm x D:16.5mm (excluding protrusions)
Weight	Approx. 30g
Operating Environment	Temperature : −10 to 60°C Humidity : less than 90%RH (No condensation) Do not use if the Data Logger is wet.

# For product information or questions contact us at

# **T&D** CORPORATION

Shimadachi 817-1, Matsumoto, Nagano 390-0852 Japan Monday to Friday 9:00 – 12:00 / 13:00 – 17:00 excluding company holidays (GMT +9:00 Tokyo Time)

#### Web Site

http://www.tandd.com/

#### Communication Port TR-50U User's Manual

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# Communication Port TR-50U Warranty

Customer's name:	
Address:	
Phone No.:	
Dealer's name:	
Address:	
Phone No.:	
Guarantee period	12 months from date of purchase
Date of purchase	

### **Statement of Limited Warranty**

- 1. This product is warranted to be free from defects in materials and workmanship for a period of one (1) year following the date of purchase. Should the product fail to operate per specification in normal use during this period T&D will repair the unit or provide a replacement free of charge. T&D will not accept returns for any reason other than defects during the warranty period, and will not accept any product that has been misused, dropped, abused or inappropriately used or mistreated at any time.
- 2. This warranty is strictly limited to repair or replacement-in-kind for defective product. T&D makes no other warranty, either express or implied, and will not accept liability beyond the remedies stated herein. Specifically, T&D will not accept liability for direct, indirect, special, consequential or incidental damages arising from the use of this product.
- 3. Customers wishing to submit a defective product for repair or replacement during the warranty period should first contact the dealer from whom it was originally purchased. After receiving a return authorization the defective product should then be packaged along with a description of the difficulties being experienced, proof of purchase and all included accessories and materials, and return it to the dealer. In the event of difficulty contacting the original dealer, customers should contact the nearest authorized T&D sales representative. A list of these can be found on the company's website, www.tandd.com, or it can be obtained by contacting TandD US directly.
- 4. This limited warranty statement gives the customer specific legal rights. The customer may also have other rights which vary from state to state in the United States, from province to province in Canada, and from country to country elsewhere in the world. To the extent this limited warranty statement is inconsistent with local law, this statement shall be deemed modified to be consistent with such local law.
- 5. For further information relating to product repair or replacement, or for other service questions after the termination of the warranty period, customers should contact their local authorized T&D sales representative.

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