



Communication Port

# TR-50U2 User's Manual

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## 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 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.
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- All registered trademarks, company names, product names and logos mentioned herein or for products being used are the property of T&D Corporation or of their respective owners.
- Specifications, design and other contents outlined in this manual are subject to change without notice.
- Please follow the safety precautions outlined in the Manual carefully. We cannot guarantee nor are we responsible for safety if this product is used in any manner other than was intended.
- On-screen messages in this document 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 and/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 product.  
Please be fully aware of this before using our product.
- This manual cannot be reissued, so please keep it in a safe place.
- Please read the warranty and provisions for free repair carefully.

## Compliance Information

### Radio, EMC and Safety Regulations

This device complies with Part 15 of the Federal Communications Commission (FCC) rules. Operation is subject to the 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.

### FCC Statement

This equipment has been tested and found to comply with the limits for a Class B 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 television 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.

To comply with the limits for the Class B digital device, pursuant to Part 15 of the FCC Rules, this device must be installed in computer equipment certified to comply with the Class B limits.

All cables used to connect the computer and peripherals must be shielded and grounded. Operation with non-certified computers or non-shielded cables may result in interference to radio or television reception.

### Caution:

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

# Safety Precautions and Instructions

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**To ensure safety obey all of the following warnings.**

The following items should be strictly obeyed for the safe usage of this product, and for protecting yourself and other people from bodily harm and/or damage to property.







Before using this product, please read the following carefully and fully understand the contents.

## Explanation of Symbols

### <Warning Symbols>

 <b>DANGER</b>	These entries are actions that absolutely under no circumstance should be taken. These entries are actions that, if taken, 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.

### <Picture Symbols>

	Denotes an important warning or caution. Inside or near the symbol will appear another symbol giving details. (EX:  Caution against electric shock)
	Denotes a forbidden action. Inside or near the symbol will appear another symbol giving details. (EX:  Do not disassemble)
	Denotes an action that must be taken. Inside or near the symbol will appear another symbol giving details. (EX:  Unplug power plug from outlet)

 **DANGER**



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

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Do not take apart, repair or modify the unit.  
Doing so may cause fire or electrocution.

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If water or a foreign object enters the case, immediately cease using it.  
Continued use may cause fire or electrocution.

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Do not use this unit in wet or humid places.  
Doing so may cause fire, electrocution, and/or malfunction.

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If any smoke or strange smells are emitted from the unit, immediately stop using.  
Continued use may cause fire or electrocution.

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Do not connect any communication cables connected to the unit to telephone line outlets.  
It may cause fire or malfunction.

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Do not drop or expose the unit to a strong impact. If that happens to the unit, immediately remove batteries and stop using.  
Continued use may cause fire or electrocution.

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**⚠ CAUTION**



Please do not insert fingers or foreign objects into cable connection jacks.

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This unit is not water resistant.  
If the unit gets dirty, wipe it with a clean cloth and a mild detergent.

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Do not drop or expose the unit to a strong impact.  
This may cause damage including malfunction.

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Do not use or store the unit in the following places. Doing so may cause electrocution, fire, and other adverse effects to the unit and/or your computer.

- Areas exposed to direct sunlight  
This will cause the inside of the unit to become overheated and may cause fire, deformation, and/or other damage including malfunction.
  - Near devices that produce strong magnetic fields  
This may cause damage including malfunction.
  - Areas exposed to static electricity  
This may cause 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 exposed to fire or overheating  
This may cause damage including malfunction and deformation.
  - Areas exposed to high humidity or water leakage  
This may cause electrocution or other damage including malfunction.
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## **Before Using this Product**

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### **Please be careful about the procedures for Installation.**

In order to use a USB connection to communicate between this product and a PC, the software and the USB device driver need to be installed.

### **Before connecting this product to your computer, make sure to first install the software and the USB device driver.**

For more details about the proper installation procedure, see the Software User's Manual that accompanies "T&D Recorder for Windows (TR-5, 7xU)".



# What is Communication Port TR-50U2 ?

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## Outline

Communication Port TR-50U2 has been designed for use with TR-5i / TR-5S / TR-5 Series data loggers to enable the making of recording settings and the downloading of recorded data to a PC.

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 the software can be downloaded free of charge from our T&D Website (<http://www.tandd.com/>). The units can be operated with "T&D Recorder for Windows (TR-5, 7xU)" version 2.00 or later.

## Principal Features

### High speed communication via USB connection

TR-50U2 carries out high speed communication with our data loggers at their fastest possible communication rate.

### Auto-Open Software

Simply by placing a compatible data logger on the PC-connected TR-50U2, the appropriate application window will automatically open. It is no longer necessary to click to open the software each time.

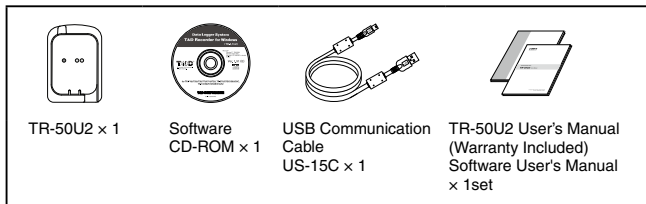
### Power supply via USB bus power

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

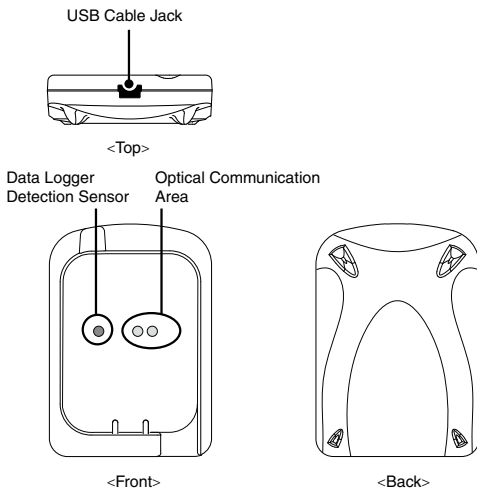
## Compatible Data Loggers

TR-51i / 52i / 55i, TR-51S / 52S, TR-51A / 51 / 52

## Package Contents



## Part Names



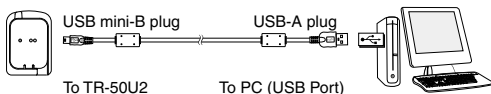
# Using Optical Communication with a Data Logger



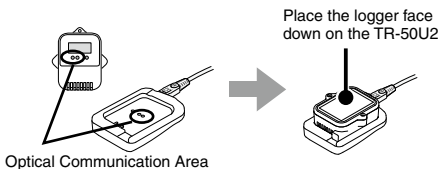
**Do not connect a TR-50U2 to your computer until the software has been installed.**

Via optical communication between the TR-50U2 and a data logger, it is possible to download recorded data to your computer and make necessary recording settings in the data logger.

1. 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-50U2.



3. Place the data logger on top of the TR-50U2 as shown in the figure, making sure that the optical communication areas are aligned properly.



## **CAUTION**

- Make sure that the cable is inserted fully, so as not to cause an improper connection.
- If the data logger is wet, make sure to dry it off before placing it on top of the TR-50U2.

4. 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 data logger on a TR-50U2 that is connected to your computer, the logger will be detected and the appropriate application window will automatically open.

# Specifications

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Device Name	TR-50U2
Communication Interfaces	Optical Communication: 19,200 bps (with Data Logger) USB Communication: USB 2.0 (with PC)
Communication Time (speed)	Downloading time for one unit at full capacity TR-5i and TR-5S Series Data Loggers: Approx. 25 sec. (at 19200 bps) TR-5 Series Loggers: Approx. 160 sec. (at 2400 bps)
Dimensions	H 80 mm x W 56 mm x D 16.5 mm (excluding protrusions)
Weight	Approx. 30 g
Operating Environment	Temperature: -10 to 60°C Humidity: under 90%RH (without condensation) Do not use if the Data Logger is wet.

**For product information or questions contact us at:**

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### **Website**

**<http://www.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 user's manual downloads, as well as, other support. Please stop by and see what we have to offer.

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### **Communication Port TR-50U2 User's Manual**

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