Thermo Recorder TR-51S/ TR-52S 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 warranty is to be free from defects in material and workmanship for a period of (1) one year following the date of purchase. Should the product fail to operate properly in accordance with the warranty during the period that the warranty is not for repair of other replacement of the Unit. T&D will not accept responsibility for any loss or damage caused by the breakdown of the product during the warranty period. 
2. This warranty is strictly limited to a repair or replacement thereof as a defective product. T&D reserves to make other warranty to the extent that the warranty is not for repair of the product. T&D will not accept responsibility for any damage caused by the breakdown of the product during the warranty period. 
3. Customers seeking to avail a defective product or replacement during the warranty period should contact the dealer where it was actually purchased. After receiving the claim, the dealer will handle related issues, including the determination of whether the product is really defective. 
4. Customers seeking to avail a defective product or replacement during the warranty period should contact the dealer where it was actually purchased. After receiving the claim, the dealer will handle related issues, including the determination of whether the product is really defective. 
5. The limited warranty is not transferable. T&D will not accept responsibility for any loss or damage caused by the breakdown of the product during the warranty period. 
6. Customers seeking to avail a defective product or replacement during the warranty period should contact the dealer where it was actually purchased. After receiving the claim, the dealer will handle related issues, including the determination of whether the product is really defective. 
7. The limited warranty is not transferable. T&D will not accept responsibility for any loss or damage caused by the breakdown of the product during the warranty period. 
8. Customers seeking to avail a defective product or replacement during the warranty period should contact the dealer where it was actually purchased. After receiving the claim, the dealer will handle related issues, including the determination of whether the product is really defective. 
9. This limited warranty does not prevent the customer's legal rights. The customer may also have other rights, which vary from state to state. 

FCC Compliance Statement for American Users 

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. 

NOTE

This equipment has been tested and found to comply with the limits for a Class A Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference 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: 

- 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 tested and found to comply with the limits for a Class A Digital Device, pursuant to Part 15 of the 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. 

Also, this equipment is not intended for use in a residential environment. 

Safety Precautions and Instructions 

Please carefully observe the following safety measures when using our product. 

Do not remove or repair or modify the main unit. 

- Do not expose the sensor to electricity. 
- Do not expose the repair to electricity. 
- Do not expose the protection to electricity. 

Do not use any battery other than those that are recommended. 

- Do not use the battery in an environment where the battery is likely to be exposed to high temperature or high humidity. 

Do not put your fingers or foreign matter into the sensor connection. 

- Do not put your fingers or foreign matter into the sensor connection. 

This is printed using recycled paper. 


Thank you for purchasing this product. Carefully read and fully understand these instructions before using this unit.

Specifications for TR-506 (Temperature Sensors for TR-52S)

<table>
<thead>
<tr>
<th>Measurement Unit</th>
<th>TR-51S</th>
<th>TR-52S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Type</td>
<td>Temp</td>
<td>Temp</td>
</tr>
<tr>
<td>Input Code</td>
<td>E001</td>
<td>E001</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>-67° F to 67° F</td>
<td>-67° F to 67° F</td>
</tr>
<tr>
<td>Measurement Range</td>
<td>-67° F to 67° F</td>
<td>-67° F to 67° F</td>
</tr>
<tr>
<td>Measurement Accuracy</td>
<td>± 0.3°F / ± 0.2°C</td>
<td>± 0.3°F / ± 0.2°C</td>
</tr>
<tr>
<td>Measurement Display Resolution</td>
<td>± 0.1°F / ± 0.05°C</td>
<td>± 0.1°F / ± 0.05°C</td>
</tr>
</tbody>
</table>

Accessories Included

1. LCD Display Items
2. External Sensor Type
3. External Dimensions
4. Recording Mode
5. Recording Capacity
6. Measurement Accuracy
7. Measurement Range
8. Measurement Display Resolution
9. Battery Life
10. Package Contents
11. Internal Sensor Type
12. External Sensor Type
13. Internal Sensor Resistant
14. External Sensor Resistant
15. Dimensions
16. Weight
17. Power Supply
18. Warranty
19. Contact Information
20. Terms and Conditions
21. Disclaimer
22. Privacy Policy
23. Accessibility
24. Copyright

Connect the sensor adapter to the sensor jack on the logger. Make sure that the plug is completely inserted until you hear a “click” sound. 

About Optional Sensors 

Please see our Web Site for details about optional sensors available for the TR-52S.
Outline

- We offer two types to fit your needs: the TR-515 with internal sensor offers improved water resistance and the TR-525 with external sensor brings quicker response to changes in temperature. Both are ideal for measuring and recording temperature in normal outdoor conditions as well as in a stricter frosty environments or frozen storage. The compact design makes it no problem to place almost anywhere.

- For downloading data to a computer for saving and processing use either of our Communication Ports (TR-50U or TR-50C) or our Handy Data Collectors (TR-57U or RTR-57U).

- By using our newly released Communication Port TR-50U, it is possible to take advantage of the highest communication speeds for downloading data.

- The latest version of our software can be downloaded free of charge from our Web Site. Please visit us at http://www.tandd.com for more information. The units can be operated with "T&D Recorder for Windows (TR-5,7,6X)", version 1.5SE or later (included with our Communication Ports and Handy Data Collectors).

- We have removed all switches from the main unit to assure nothing gets accidentally turning on, thus assuring you of no mistakes, no tampering and no loss of data.

- Up to 16,000 measurement readings can be recorded, at a recording interval of 15 minutes that would equal about 666 days about or about 2 years of non-stop consecutive recording.

- When inserting a battery, make sure no water or foreign objects get inside the case.

- Please do not tighten the screw too tightly.

- Dust or defects on the packing can adversely affect the waterproof characteristics.

Communication with your Computer

In order to make recording settings in the Logger and download data from the Logger to your computer it is necessary to carry out communication via optical communication using one of T&D’s Communication Ports or Data Collectors (sold separately).

For details about how to make recording settings, download data and other operations; please see the User's Manual that comes with the Communication Port or Data Collector.

Installing the Battery

When a battery is installed, temperature measurement will start at the default settings.

1. Remove screws and open the case.
2. Insert the attached battery into the tube and mount the tube in the direction shown in the figure.
3. Confirm that the rubber packing does not have dust or defects. Close the case and screw on the cover.

Note

- If a new battery has been installed and recording does not immediately start, the display is jumbled, or nothing appears on the display even after inserting the battery, Please remove the battery and try installing again.

- When inserting a battery, make sure no water or foreign objects get inside the case.

- Some lithium batteries (CRD) sold in stores may also be used, but if you are using in an environment below 20°C, above 60°C, or in a situation such as transportation where continuous vibration is likely to occur, we suggest the purchase and use the optional lithium battery LS14250.

- Make sure that + and - are in the correct direction. If they are not correct, it may cause damage. After inserting the battery, it may occur that nothing appears in the display for about 10 seconds; this is not a malfunction.

Recording Condition Settings which can be made via Optical Communication

The following settings can be made via computer communication.

- Initial Setting Values / Recording Interval: 15 minutes / Recording Mode: Endless loop

When using optical communication with Communication Port TR-50C or one of our Data Collectors, please take note of the following:

- When using our Software “ handy Data Collector” please make sure that TR-50C will be recognized as TR-51A and TR-50C will be recognized as TR-52C, please operate as such.

- When using optical communication with communication data for downloading data and warning monitoring functions built into the TR-55 series can not be used.

Battery Replacement Icon

If the replacement icon appears, try to replace the battery with a new one as soon as possible.

1. When it is time for the battery to be replaced, the [ ] icon will appear.
2. After removing the battery, wait for about three seconds until the [ ] icon appears. Once this appears please change the battery as quickly as possible.

Reading the LCD

Basic LCD Display

- When being used in cold environments the display may become difficult to read. This is not a malfunction.
- When being used in hot environments the display may become black. This is not a malfunction.

Battery Replacement Icon

- If the battery is replaced before [ ] icon appears, even after replacing the [ ] icon may remain.
- After a battery is installed, if [ ] remains on display for more than one minute, please check to make sure that the battery has been properly installed. If after checking the [ ] icon continues to appear, please contact your nearest authorized T&D dealer. If communication is possible, the icon will disappear within an hour.

- Recording errors may occur in environments where one of the limits is being exceeded and recording is started, the monitoring function will enter "wait" mode. Once the current measurement falls within the set limits, the monitoring function will begin to operate.

- If the unit is left with the warning LED blinking, battery life will be halved.

- The [ ] icon will appear based upon the calculation of battery usage. It may appear sooner than noted above.

- If the unit is left with the warning LED blinking, battery life will be halved.

Warning (exceeds set limit)

- When using optical communication with Communication Port TR-50C or one of our Data Collectors, please take note of the following:

- When using our Software “ handy Data Collector” please make sure that TR-50C will be recognized as TR-51A and TR-50C will be recognized as TR-52C, please operate as such.

- When using our Software “ handy Data Collector” please make sure that TR-50C will be recognized as TR-51A and TR-50C will be recognized as TR-52C, please operate as such.

- High-speed, the high speed data communication for downloading data and warning monitoring functions built into the TR-55 series can not be used.

Reading the LCD

Basic LCD Display

- When using optical communication with Communication Port TR-50C or one of our Data Collectors, please take note of the following:

- When using our Software “ handy Data Collector” please make sure that TR-50C will be recognized as TR-51A and TR-50C will be recognized as TR-52C, please operate as such.

- The [ ] icon will appear based upon the calculation of battery usage. It may appear sooner than noted above.

- If the unit is left with the warning LED blinking, battery life will be halved.

Notes about Changing the Battery

Replace with a new battery following the directions as in "Installing the Battery". Recording will continue using the previously set recording settings or will restart using those settings.

- If [plus] and [minus] are mistakenly interchanged, the battery terminals + and - are shorted, the recorded data that is stored in the Logger will be lost.

- Before replacing the battery, please make sure to download any necessary data and proceed with changing the battery. For details, see the User’s Manual that came with the Logger.

- Do not remove the battery until it can be replaced with a new one.

- When using our Software “ handy Data Collector" please make sure that TR-50C will be recognized as TR-51A and TR-50C will be recognized as TR-52C, please operate as such.

- About 30 minutes

- About 4 hours

- About 5 hours

Other Icons

[Full Memory]

- When using the One-Time Recording Method, the REC icon appears when the number of recorded readings reaches 16,000 and the unit stops recording.

- For TR-52S only

- Displayed time when to change the battery.

- Measurement Reading and Message Display

- Unit of measurement: display unit of measurement

- Estimation of time until full display

- [Clear Warning]

- [Exceeds Upper Limit]

- When the measured temperature exceeds one of the already set upper and lower limits, the warning LED on the Logger will flash.

- [Exceeds Lower Limit]

- When the measured temperature exceeds the set lower limit, the Logger LED will alternately flash between [NL] and the current temperature.

- [Exceeds Upper Limit]

- When the measured temperature exceeds the set upper limit, the Logger LED will alternately flash between [L] and the current temperature.

[Exceeds Lower Limit]

- When the measured temperature exceeds the set lower limit, the Logger LED will alternately flash between [L] and the current temperature.

Starting the Warning Monitoring Function

- These settings are made in an environment where one of the limits is being exceeded and recording is started, the monitoring function will enter “wait” mode. Once the current measurement falls within the set limits, the monitoring function will begin to operate.

Removing a Warning

- Under the following conditions the warning display will be removed (if a recording starts anyway).

- [Clear Warning] is carried out from the software (only via TR-50U).

- Warning LED is turned off and successfully completed.

- The battery is recharged, or battery power has been turned off and then turned on again.

Notes about the Device used for Communication

- Please refer to "Abstract note for Device used for Communication" when using communication with Communication Port or Data Collector.

- Note: Some recording settings are made in the Logger and may not be reflected in the computer.

- When using the One-Time Recording Method, the REC icon appears when the number of recorded readings reaches 16,000 and the unit stops recording.

- For TR-52S only

- Displayed time when to change the battery.

- Measurement Reading and Message Display

- Unit of measurement: display unit of measurement

- Estimation of time until full display