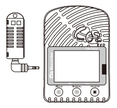
CO2 Recorder TR-76Ui
Getting Started Guide

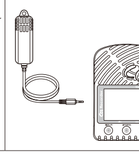
Package Contents

TR-76Ui



- CO2 Recorder TR-76Ui
- Temperature and Humidity Sensor (THA-3001)
- AC Adaptor (AD-0638 or AD-0638-C)
- USB Communication Cable (US-15C)
- Software CD-ROM
- AA Alkaline battery x 4
- Getting Started Guide (Warranty Included)
- Please Read First

TR-76Ui-H



- CO2 Recorder TR-76Ui
- High Precision Temperature/ Humidity Sensor (HHA-3151)
- AC Adaptor (AD-0638 or AD-0638-C)
- USB Communication Cable (US-15C)
- Software CD-ROM
- AA Alkaline battery x 4
- Getting Started Guide (Warranty Included)
- Please Read First

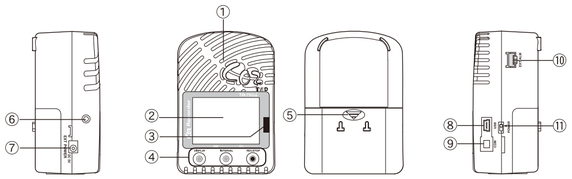
T&D Corporation

http://www.tandd.com

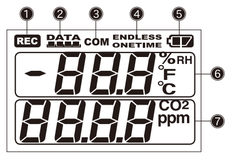
Notes about Operation

- This product has been designed for use in normal living conditions, and is not suited for controlled environments such as a CO2 incubator. When measuring outdoors, avoid exposure to sunlight, dust, rain, or wind. Also make sure to use in the operating environment indicated in the specifications.
- This product cannot measure CO or O2. Do not use the unit for purposes such as avoiding O2 deficiency, CO intoxication or any other health related purpose.
- For one to two weeks after installation of the TR-76Ui, CO2 concentration measurements may fluctuate suddenly. This is due to the normal operation of Auto Calibration and is not a malfunction of the unit.
- Do not use or store the unit in areas exposed to direct sunlight and abrupt changes in temperature.
- Do not allow the unit to become wet. Do not use or store the unit in places where condensation occurs.
- To help prevent deterioration of the unit, do not use or store the unit in areas exposed to cigarette smoke, gas, and dust in the air.
- Do not expose the unit to a strong impact. This will adversely affect measurement accuracy and may cause the case to break resulting in bodily injury.
- The measurement accuracy of the CO2 sensor can not be guaranteed for CO2 concentrations of 5,000ppm or more.
- The Warning Monitoring function provided in the TR-76Ui is for informational purposes only. By clicking “I Agree” button you confirm your understanding that it is not to be relied upon for human health or safety.

Part Names and LCD Display



① CO2 Sensor Area (Internal)
② LCD Display
③ Infrared Communication Port
④ Operation Buttons
〈**DISPLAY**〉Button
〈**INTERVAL**〉Button
〈**REC/STOP**〉Button
⑤ Battery Cover
⑥ Temperature and Humidity Sensor Jack
⑦ AC Adaptor Jack
⑧ USB Communication Cable Jack
⑨ Serial Communication Cable Jack (RS-232C)
⑩ External Alarm Terminal (EXT ALM)
⑪ 〈**POWER**〉Switch



❶	**[REC] Mark**	Shows recording status ON: Recording in progress BLINKING: Waiting for programmed start OFF: Recording stopped
❷	**Data Scale**	After every 2,000 readings the scale will be marked from left to right. Logging capacity is 8,000 readings.
❸	**[COM] Mark**	Shows communication status but not displayed normally. ON: The unit is connected to a PC with a USB cable. RAPID BLINKING: The unit is in communication with the computer via USB or infrared communication.
❹	**Recording Mode** **Endless:** **One Time:**	Recording mode settings can be made by using the supplied software. Upon reaching the logging capacity of 8,000 readings, the oldest data will be overwritten and recording will continue. Upon reaching the logging capacity of 8,000 readings, recording will automatically stop and in the LCD the current measurement and the word “FULL” will alternately appear.
❺	**Battery Mark**	Shows source of power and voltage level ON: Running on external power source BLINKING: Running on battery power OFF: No battery
❻	**Current Temperature and Humidity Readings Area**	Shows the current readings for temperature (°C or °F) and humidity (%RH). Pressing the〈**DISPLAY**〉button will change the measurement item to be displayed. By using the supplied software, the unit of temperature can be changed. is also used to display messages.
❼	**Current CO2 Readings Area**	Shows the current readings for CO2 concentration (ppm). is also used to display messages.

Button Operations

Upon the start of recording, all previously recorded data in the TR-76Ui will be deleted.

If "Button Lock" has been set to ON in the CO2 Recorder for Windows, the operational buttons will not be active.

〈REC/STOP〉Button: Starting and Stopping Recording

Starting Recording
Press the〈**REC/STOP**〉button for about two seconds until the [REC] mark appears on the display.
- It is possible to start recording even while waiting for a programmed recording to start.

Stopping Recording
Press the〈**REC/STOP**〉button for about two seconds until the [REC] mark disappears from the display.

〈DISPLAY〉Button: Changing the LCD Display Pattern

It is possible to change the current readings display for temperature and humidity (upper row). CO2 concentration (lower row) is always displayed.

1. With each pressing of the〈**DISPLAY**〉button the item on the display will change.

Temperature and Humidity: The display will alternate every one second.
Temperature only
Humidity only

2. When the desired display pattern appears, stop pressing the button.

〈INTERVAL〉Button: Checking Recording Interval

It is possible to check the recording interval during recording or while waiting for a programmed recording to start.

1. By pressing the〈**INTERVAL**〉button for about two seconds, the currently set recording interval will appear on the LCD display.

2. If no operation is carried out after the recording interval has been displayed, the current measurement readings will return to the LCD display.

10 minutes

10 seconds

〈INTERVAL〉Button: Changing the Recording Interval Setting

Recording interval settings cannot be changed while a recording session is in progress.

1. Stop recording.

2. Press the〈**INTERVAL**〉button for about two seconds to display the currently set recording interval on the LCD screen.

3. With each pressing of the〈**INTERVAL**〉button the recording interval time will change; stop pressing the button when the desired interval appears.

4. Restart the recording session.

Messages and Display on the LCD

Settings Messages

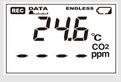
Button Lock
When "Button Lock" has been set to ON in CO2 Recorder for Windows, operational buttons are not active.

Memory Full
When recording mode has been set to “One Time” and the unit reaches its logging capacity of 8,000 readings, the measurement and the message [FULL] will alternately appear in the LCD.
Stop recording and download the recorded data before re-starting recording.

- When this happens, measurement will continue so battery power will be consumed.

When [----] appears in the following:

Temperature and Humidity Display Area
This appears when the temperature/humidity sensor is not connected to the TR-76Ui, the connection is loose, the wire is broken, or when power has just been turned ON. If after re-connecting the sensor, measurements can still not be displayed, it is very possible that the sensor or the logger is defective or has been damaged.



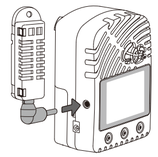
CO2 Concentration Display Area
This appears when power has just been turned ON. If measurements don't appear in the display after waiting for a considerable time, there is a possibility that the sensor is defective or has been damaged. Also, the CO2 sensor will not work if battery power is low.

- Measurement and recording will continue in this situation, so battery power will be consumed.

Setting up the TR-76Ui

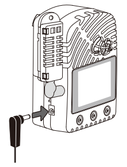
Make sure to install the provided software before connecting the TR-76Ui to your PC.

Connect the Temperature and Humidity Sensor



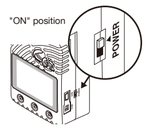
Turn On the Power

AC Adaptor
When measuring and recording over long periods of time, please use a supplied AC adaptor.



Four AA Alkaline Batteries
Keeping batteries in the unit allows a backup source of power for when and if electrical power is cut from the AC adaptor. If running on only batteries, the estimated battery life is about two days.

Turn On the〈POWER〉Switch
After setting up the power supply, turn on the〈**POWER**〉Switch.



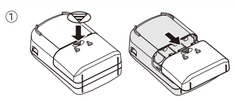
Warm-up Time for CO2 Sensor
After switching on the unit, it will take about one minute to display the normal CO2 concentration.

Install the Batteries

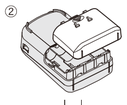
If battery power is lost, all recorded data stored in the unit will be erased. Do not leave the unit without batteries.

1. Remove the battery cover from the back of the unit.

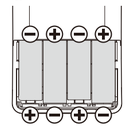
① While pressing down on the triangular mark, slide the cover to the bottom of the unit.



② Lift off the cover.



2. Insert the batteries.
- Make sure to use new batteries of the same kind.
- Make sure not to mistake + / -.
- Do not insert or change batteries with wet hands.
- Be sure to completely close the cover.



Interpreting the Battery Mark

Checking the Power Supply Condition
Whether the battery mark is "blinking" or "on" indicates the source of power.

BLINKING (Running on battery):
The battery mark will blink on the LCD display when measuring and recording by battery power.

ON (Running on external power):
The battery mark will be on when measuring and recording by AC adaptor power.

Mark blinks when running on battery power.

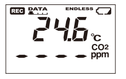
Checking the Battery Level
The battery level will be shown in three stages as below.

① **Battery Power - OK**
② **Battery Power - Getting Low**
Please change the batteries as soon as possible.

① ②

③ **Battery Power - Too Low**
Battery power is too low to carry out measurement and recording of CO2 concentration.

③



- When running on batteries only, it will take about 24 hours to go from Stage ① to ② and another 24 hours from Stage ② to ③.

④ Sleep Mode (stopping measurement and recording)
After Stage ③, if the battery is not changed but it remains in use, the unit will enter sleep mode and stop measurement and recording in order to protect recorded data until this point.
- To continue recording, it is necessary to change the batteries before the unit enters sleep mode.
- If the unit is already in sleep mode, download the recorded data into the PC before re-starting recording.

④

⑤ Erasing recorded data
If the battery is further left unchanged, the display will automatically shut off and all previously recorded data will be lost.
- Recording settings will remain. (See STEP 4 in the back side of this page for details.)

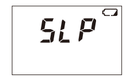
⑤

Removing the Batteries during Recording

1. If the batteries are removed when running on battery power only, the unit will start a sixty-second countdown.

2. To continue recording, before the countdown comes to an end, insert new batteries or connect the AC adaptor to supply power.

3. If power is not supplied within 60 seconds, the unit will enter sleep mode.



Turning Off the〈POWER〉Switch

During recording or when the "Button Lock" is set to ON in the CO2 Recorder for Windows, the power cannot be turned off even by pressing the〈**POWER**〉Switch.

1. Stop recording.

2. Turn off the〈**POWER**〉Switch.

Standby Power
If the TR-76Ui is connected to an AC adaptor, standby power will be supplied even after turning off the〈**POWER**〉switch, allowing the CO2 sensor to continue operation.

Notes on Special Functions

Getting Ready for Using Infrared Communication

In order to download recorded data from the TR-76Ui via infrared communication, it is necessary to purchase the dedicated Data Collector TR-57DCi (sold separately).
- Go to [Help and Support] - [Operation Guide] to see how to download data via data collector.

Getting Ready for Using the Warning Monitoring Function

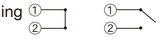
It is possible to connect an external device such as siren or lamp to the TR-76Ui. Please make sure to check specification details of the external alarm terminal before purchasing or getting an external device ready for connection.

Upper and Lower Limit Settings
To use the warning monitoring function, go to the [Start Recording] tab in the CO2 Recorder for Windows and make settings for Upper and Lower Limits and Judgement Time. When the measurement exceeds one of the set upper and lower limits, the TR-76Ui will turn ON the external alarm terminal. Upon a warning, the measurement value on the display will also flash.

About the External Alarm Terminal (EXT ALM)

Enabling Warnings	①	**Warning Output (Enable / Disable)**	Internal Pull-up: 3V 100kΩ Maximum Input Voltage: 30V
	②	**GND**	
Warning Output (OUT)	③	**Output Terminals (Warning Output)**	Open Drain Output Voltage when OFF: DC less than 30V Current when ON: less than 0.1A Resistance when ON: 15Ω
	④	**GND**	

The connection between ① and ② decides whether Warning Output is enabled or disabled.



If a warning condition occurs while Warning Output is enabled, a connection between ③ and ④ will be established and a warning will be output.

About the Compatible Connector
The JST Connector PAP-04V-S is compatible with the external alarm terminal. For questions concerning sales of the connector, please directly contact JST Mfg. Co., Ltd. (http://www.jst-mfg.com/)

Using the Software

⚠ Do not connect a TR-76Ui to your computer until the software has been installed.

STEP 1 Install the Software

⚠ For installation of the supplied software, it is necessary to have Administrator (Computer Administrator) rights.

1. Start Windows and place the CD-ROM into your CD or DVD drive.
2. In a few seconds, the [Install Program] window will appear.

3. Select “Install CO2 Recorder for Windows” and click the [Execute] button to start the installation.
4. Follow the directions to install.

- If the [Auto Play] window appears, click on [Run start.exe].
- If the [Install Program] window does not automatically open, please open it by double clicking on the [start.exe] icon in your CD or DVD drive.

5. If a window appears such as the one below during installation, click the [Install] or [Continue Anyway] button.

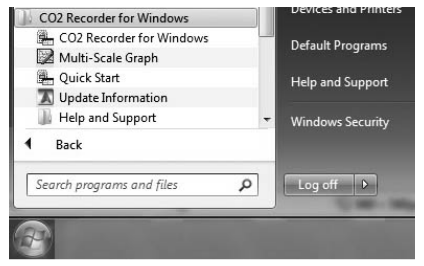
For Windows 7 / Windows Vista

[Install] button

For Windows XP

[Continue Anyway] button

6. After installation has been completed, "CO2 Recorder for Windows" will be registered in the Window's [Start] Menu.



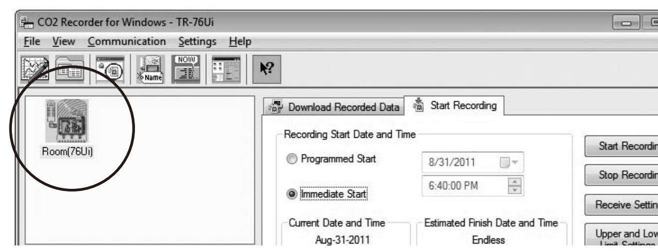
STEP 2 Connect the TR-76Ui to a PC

1. Connect the TR-76Ui with the supplied USB cable to your computer.
2. If you are using Windows XP, the "Found New Hardware Wizard" window will automatically open. Please follow the directions to install the USB driver.
3. If you are using Windows Vista or Windows 7, it is not necessary to install the USB driver into the computer. Go to STEP 4. .

① Check “No, not this time." and click the [Next] button.

② Check “Install the software automatically (Recommended)” and click the [Next] button.

4. When the completion message appears, please click the [Finish] button.
5. Open CO2 Recorder for Windows and confirm that the TR-76Ui icon appears in the main window.

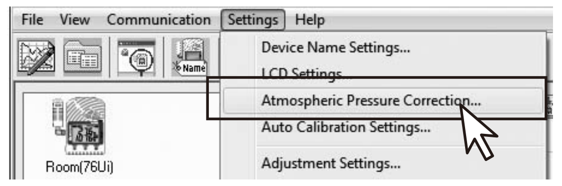


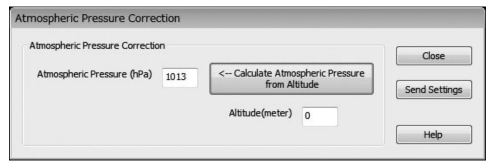
- If the icon does not appear, please check whether the USB driver has been properly installed. (Refer to [Help and Support] - [Help for Unit Recognition Failure])

STEP 3 Make Atmospheric Pressure Correction Settings

Measurement results of CO2 concentration are affected by atmospheric pressure. When high measurement accuracy is required, we recommend that Atmospheric Pressure Correction be carried out before a recording session is started.

1. Connect a TR-76Ui to your PC and open CO2 Recorder for Windows.
2. From the [Settings] Menu, select [Atmospheric Pressure Correction] to open the settings window.





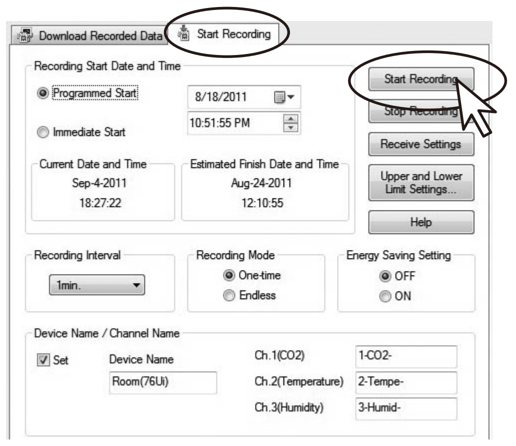
Enter Atmospheric Pressure at Measurement Location:
Directly enter the pressure (hpa) in the [Atmospheric Pressure] field.
Calculate Atmospheric Pressure from Altitude:
This setting can also be made by having the software calculate the estimated pressure at the altitude (meters) entered by the user.

3. Click the [Send Settings] button to transmit the settings to the TR-76Ui.

STEP 4 Make Settings and Start Recording

⚠ Upon the start of recording, all previously recorded data in the TR-76Ui will be deleted.

1. Connect a TR-76Ui to your PC and open CO2 Recorder for Windows.
2. Make recording settings in the [Start Recording] tab window.
3. Click the [Start Recording] button to transmit the settings to the TR-76Ui.



4. Disconnect the TR-76Ui from the PC and place in the desired measurement location.

Recording Settings

Recording Start Date and Time

Programmed Start: Recording will begin on the set date and time. As the current date and time of your computer are used, make sure that your computer clock settings are correct.

Immediate Start: Recording will start when the [Start Recording] button is clicked.

Recording Mode

One Time: Upon reaching the logging capacity of 8,000 readings, recording will automatically stop.

Endless: Upon reaching the logging capacity of 8,000 readings, the oldest data will be overwritten and recording will continue.

Recording Interval

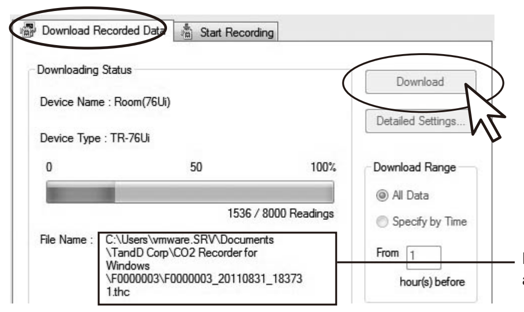
Select from one of the following 15 choices. Time shown in parentheses indicates the amount of time recording is possible at the given interval before reaching logging capacity.

1 second	(2 hr 13 min 20 sec)	**1 minute**	(5 days 13 hr 20 min 00 sec)
2 seconds	(4 hr 26 min 40 sec)	**2 minutes**	(11 days 2 hr 40 min 00 sec)
5 seconds	(11 hr 06 min 40 sec)	**5 minutes**	(27 days 18 hr 40 min 00 sec)
10 seconds	(22 hr 13 min 20 sec)	**10 minutes**	(55 days 13 hr 20 min 00 sec
15 seconds	(1 day 9 hr 20 min 00 sec)	**15 minutes**	(83 days 8 hr 00 min 00 sec)
20 seconds	(1 day 20 hr 26 min 40 sec)	**20 minutes**	(111 days 2 hr 40 min 00 sec)
30 seconds	(2 days 18 hr 40 min 00 sec)	**30 minutes**	(166 days 16 hr 00 min 00 sec)
		60 minutes	(333 days 8 hr 00 min 00 sec)

STEP 5 Download Recorded Data to a PC

⚠ Even after downloading recorded data, the data will remain in the TR-76Ui.

1. Connect a TR-76Ui to your PC and open CO2 Recorder for Windows.
2. In the [Download Recorded Data] tab window, click the [Download] button.



Here you can check the storage location and file name for the recorded data.

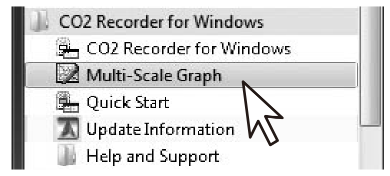
3. When a completion message appears after downloading, click the [OK] button to view the graph for that data.

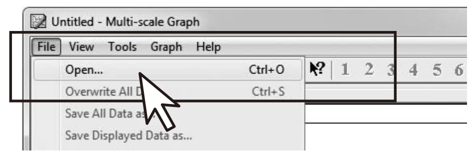
Storage Location of Recorded Data and File Name (Default Settings)
My Document\CO2 Recorder for Windows\Internal ID(folder)\Internal ID*+ Downloading Date and Time.thc
* Internal ID is a unique number assigned to each product, which can be found on the sticker on the reverse side of the product.

STEP 6 View and Print Graphs

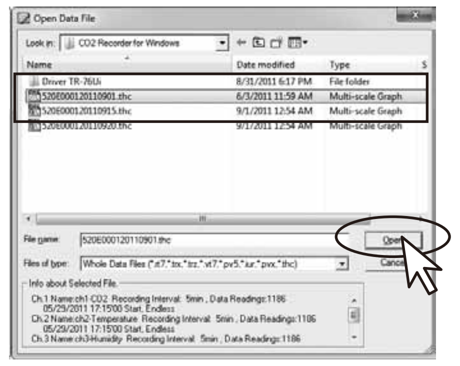
Viewing Saved Data in Graph Form

1. Open the Multi-scale Graph. From the [File] Menu, select [Open].



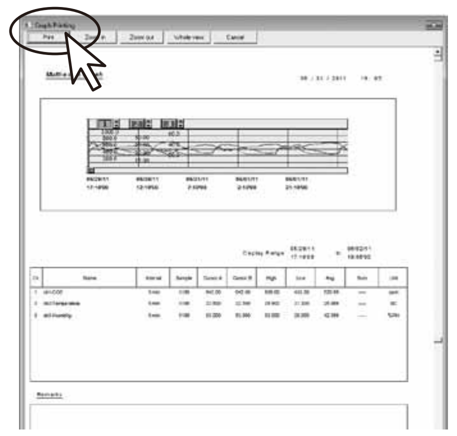


2. Select the data file you wish to open, and click [Open] to view in graph.



Printing the Graph

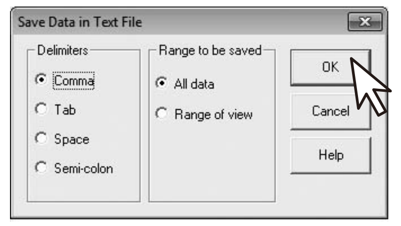
1. While the graph is open, click [Graph Print Preview] in the [File] Menu to view a preview image of the printed page.
2. If you wish to change the aspect ratio of the graph, change the size of the graph window.
3. Click the [Print] button to start printing.



Saving Recorded Data as Text for use with Spreadsheet Software

It is possible to convert recorded data to a text file (CSV format) which can be read by common spreadsheet software.

1. While the graph is open, click [Save Data in Text File] in the [File] Menu.
2. After having made the desired settings, click the [OK] button.

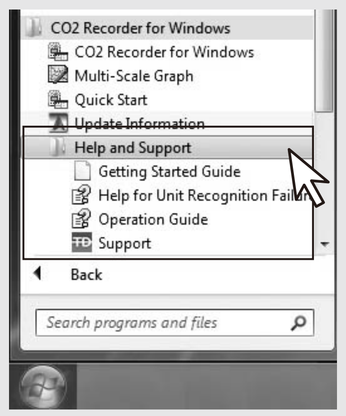


3. Make storage folder and file name settings, and click the [Save] button to output the file.

For more detailed information - Help and Support

Help and Support provides detailed information about software settings.

Getting Started Guide (pdf):
This document is available in PDF file format.
Help for Unit Recognition Failure:
This contains detailed information about installing and checking the USB driver as outlined in [STEP2] above.
Operation Guide:
This contains detailed information about basic settings as well as details about advanced settings for many useful functions.
Support:
This opens the T&D support page.



- Adobe Reader is required to view PDF files. If you do not already have it installed on your computer, download and install Adobe Reader which is available free of charge from the download page on Adobe's official website.

Specifications

Product	TR-76Ui / TR-76Ui-H	TR-76Ui		TR-76Ui-H	
Sensor	Internal CO2 Sensor	External Temperature/ Humidity Sensor (THA-3001)		External Temperature/Humidity Sensor (HHA-3151)	
	NDIR	Thermistor	Polymer Resistance	Platinum Resistance	Electrostatic Capacitance
Measurement Channels	CO2 Concentration 1ch	Temperature 1ch	Humidity 1ch	Temperature 1ch	Humidity 1ch
Units of Measurement	ppm	°C, °F	%RH	°C, °F	%RH
Measurement Range	0 to 5,000 ppm (display range is up to 9,999 ppm)	0 to 45 °C 32 to 113 °F	10 to 90 %RH	-30 to 80 °C -22 to 176 °F	0 to 99 %RH
Accuracy	± (50 ppm + 5 % of reading) (*1) (at 5,000 ppm or less)	±0.5 °C	±5 %RH (at 25 °C, 50 %RH)	±0.3 °C (at 10 to 40 °C) ±0.5 °C (at all other temperatures)	±2.5 %RH (at 25 °C, 10 to 85 %RH) ± 4.0 %RH (at 25°C, 0 to 10 % or 85 to 99 %RH) At temperatures other than 25 °C and ≥ 0 °C, add ±0.1 %RH per degree of difference from 25. Humidity Hysteresis: ±1.5 %RH or lower (*2)
Measurement Resolution	Minimum of 1 ppm	0.1 °C	1 %RH	0.1 °C	0.1 %RH
Response Time (90%)	Approx. 15 min.	Approx. 7 min.		Approx. 7 min.	Approx. 20 sec.
Logging Capacity	8,000 data sets (One data set consists of readings for all channels in that type of unit.)				
Recording Interval	Select from 15 choices: 1, 2, 5, 10, 15, 20, 30 sec. or 1, 2, 5, 10, 15, 20, 30, 60 min.				
Recording Mode	Endless (Overwrite oldest data when capacity is full) or One Time (Stop recording when capacity is full)				
Communication Interfaces	USB Communication, Serial Communication (RS-232C) (*3), Infrared Communication (IrPHY 1.2 low power) (*4)				
Communication Time	Downloading time for one unit at full capacity (8,000 data sets) Via USB Communication: approx. 45 sec. Via infrared communication: approx. 60 to 80 sec.				
External Alarm Terminal	Output Terminal: Open Drain Output (Voltage when OFF: DC less than 30 V Current when ON: less than 0.1 A / Resistance when ON: about 15 Ω)				
Power	AC Adaptor (AD-0638 or AD-0638-C), AA Alkaline Battery (LR6) x 4				
Battery Life	Approx. 2 days (batteries only without AC adaptor) (*5)				
Dimensions	H 96 mm x W 66 mm x D 46 mm (excluding protrusions and sensor)				
Weight	214 g (including batteries, excluding sensor)				
Operating Environment	Temperature: 0 to 45 °C, Humidity: 90 %RH or less (no condensation)				
Initial Settings	Recording Mode: Endless, Recording Interval: 10 min.				
CO2 Recorder for Windows					
Compatible OS (*6)	Microsoft Windows 7 32 / 64 bit English Microsoft Windows Vista 32 bit English Microsoft Windows XP 32 bit (SP2 or above) English				
Memory	A Stable Windows Operating Environment				
Disk Capacity	100 MB of free hard disk space recommended (plus additional space for data)				

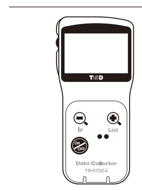
*1: Stated value is the measurement accuracy of the CO2 sensor when Auto Calibration is operating properly. A change in atmospheric pressure directly influences the reading of CO2, which can cause measurement errors; a decrease in pressure by 10 hPa results in a relative decrease in CO2 by 1.6%. CO2 Recorder for WindowsIn such a case, we recommend carrying out the “Atmospheric Pressure Correction” function found in CO2 Recorder for Windows.
*2: When used in environments where temperature and humidity are over the values of 50°C 75%, 60°C 50%, 70°C 35%, and 80°C 25%, sensor hysteresis may fluctuate by values greater than ±1.5%RH. Under certain circumstances, it may take some time to return to normal measurement capability.
*3: If necessary, serial communication can be established by using our communication protocol (contact your local distributor) to write a software program.
*4: If you wish to use infrared communication to download recorded data, it is necessary to purchase the Data Collector TR-57DCi (sold separately).
*5: Battery life varies depending upon the ambient temperature in which it is used, the recording interval, the frequency of communication, and the battery performance. All estimates are based on operations carried out with a new battery and are in no way a guarantee of actual battery life. Battery life may be shortened if the unit is used under inverter type fluorescent lighting.
*6: For installation, it is necessary to have Administrator (Computer Administrator) rights.
The specifications listed above are subject to change without notice.

Cautions about using the Temperature/Humidity Sensors

- If extremely severe temperature changes occur, the humidity measurements may appear abnormal. Once the sensor’s temperature becomes stable, the measurements will return to normal.
- Do not connect the sensor to any data logger other than those specified by T&D Corporation.
- Do not expose the sensor to a strong impact. This may adversely affect measurement accuracy and cause damage or malfunction.
- When the sensor is not to be used for a long period of time, please store it at normal temperature and humidity.
- Do not allow the sensor to become wet. If the sensor gets wet, immediately remove it from the unit.
- Do not use the sensor on the human body.
- Continued use may cause a decrease in the sensor’s accuracy and sensitivity even under normal operational conditions. If the sensor is being used in a bad environment (smoky or dusty places) it may be necessary to change the sensor sooner.
- The HHA-3151 is not water resistant. If the sensor gets wet, immediately remove the sensor from the unit and wipe it with a clean cloth as soon as possible. Then allow the sensor to dry in normal room temperature before using it again.
- When using the THA-3001 in an environment where the humidity is under 30%RH, the measurements may sometimes fluctuate. This is not abnormal.

Options

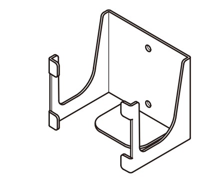
Data Collector: TR-57DCi

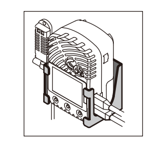


For Infrared Communication

Accessories
USB Communication Cable (US-15C)
Serial Communication Cable (TR-6C10)
AAA Alkaline Battery x 2
Software CD-ROM

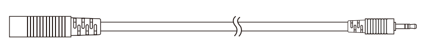
Wall Attachment: AT-76K





Material: Aluminum

Sensor Extension Cable: TR-1C30



For High Precision Temperature/Humidity Sensor HHA-3151
(Possible to use up to three extension cables per sensor)
Cable Length: 3m
Temperature Durability: -25 to 60 °C
Material: Vinyl Coated Electrical Wire

CO2 Recorder TR-76Ui Warranty

Guarantee Period	1 year from date of purchase
Date of Purchase	
Customer's name	
Address	
Phone No.	
Distributor's name	
Address	
Phone No.	
Object of Repair	Main Unit (excluding sensors and any other options.)
Method of Repair	Send in for Repair

Provisions for Free Repair

1. If the unit does not work properly despite the fact that the customer used it properly and in line with the manual, the unit shall be repaired free of charge through the distributor which sold the unit.
2. If the customer requests free repair because of trouble within the warranty period, bring or send the unit along with the warranty to the distributor.
3. If you have moved after purchasing, or there are difficulties contacting the distributor from which you purchased the unit, please contact T&D directly for service.
4. Free repair is not available in the following cases even though it is within the warranty period:
   1. Trouble or damage was caused by careless operation, natural disaster, fire, public pollution, or use of a power source other than specified.
   2. If repair, adjustment, disassembly or modification of the unit has been carried out by a person other than a T&D authorized engineer.
   3. Trouble or damage was caused by transportation, movement or dropping of the unit after purchase.
   4. Failure to submit the Warranty or failure to fill in all items required in the Warranty.
5. The Warranty cannot be reissued.
This Warranty only promises customers free repair within the period and conditions clarified in this Warranty. Therefore, the customer's legal rights will not be limited by this Warranty. For further information on repair and other service questions after the termination of the warranty period, contact your distributor.

T&D Corporation