



TR300

**Temperature and
Relative Humidity
Data Logger**

Users Manual

- **Mode d'emploi**
- **Bedienungshandbuch**
- **Manual d'Uso**
- **Manual de uso**
- **Användarhandbok**



TR300

Temperature and Relative Humidity Data Logger

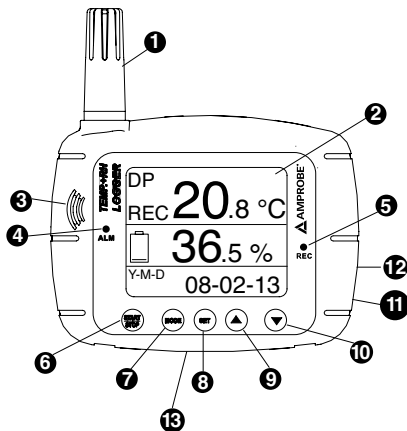
Users Manual

English

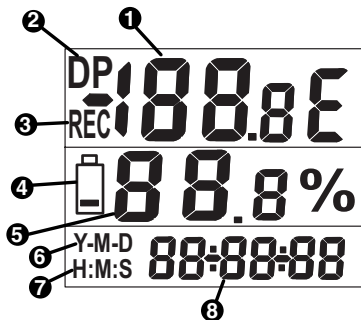
TR300_Rev001

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- ❶ Sensor
- ❷ 2.5"X 2.0" LCD display
- ❸ Speaker
- ❹ Alarm LED
- ❺ Record LED
- ❻ Start/Stop to turn on and off the unit
- ❼ Mode
- ❽ Set
- ❾ Up scroll
- ❿ Down scroll
- ⓫ 9V DC adaptor (>= 500mA. Depth:9mm Inner: 1.35mm. Outer: 3.5mm) Not Included
- ⓬ USB adaptor (USB cable is optional accessory)
- ⓭ Tripod mounting screw (tripod not included)



- ❶ Primary display: Displays the measured temperature in °C or °F.
- ❷ DP: Dew point indicator
- ❸ REC: recording indicator
- ❹ Low battery indicator
- ❺ Secondary display: Displays the air humidity
- ❻ Date indicator
- ❼ Time indicator
- ❽ Date and time display: Alternates between date and time display

Temperature and Relative Humidity Data Logger

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INTRODUCTION

The TR300 Temperature and humidity logger is well suitable to monitor indoor air quality. It is designed with a wall-mounted hook in the back for easy installation. It has a very large LCD display, an audible and visible alarm, and a quick response sensor to help monitor easily the air temperature and humidity. It also has 16K memory capacity storage to record and save continuous readings.

Please read this manual thoroughly before operation. You will find it very easy to operate and a valuable instrument to measure & record the air temperature & humidity.

UNPACKING AND INSPECTION

The standard package of this product contains:

- 1 X TR300 meter
- 1 X Instruction Manual
- 1 X Download Suite CD
- 1 X USB Cable
- 4 X AA battery

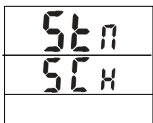
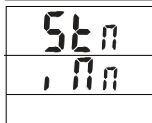
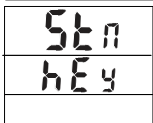
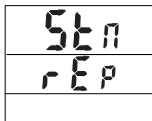
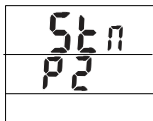
OPERATION

Turn ON and OFF the unit

- Press START/STOP pushbutton for less than 1 sec
- The display will show current temperature, humidity, the date and time in alternate fashion.

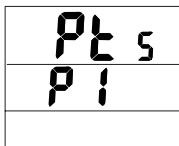
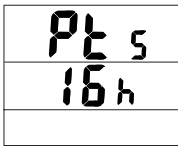
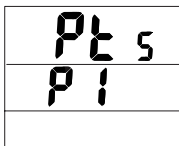
Setting Mode (See Fig 4 for Symbols meaning)

1. Press SET pushbutton to enter the setting mode or use the software program .
2. Use Up and Down pushbuttons to select from:
 - Sample point: 'PtS' & 'P1' show on the display
 - Start mode: 'Stn' and 'P2' show on the screen
 - Start Time: 'Stt' & 'P3' show on the display
 - Sample rate: 'Sr' & 'P4' show on the screen
 - Alarm set: 'AL' & 'P5' show on the screen
 - Real time: 'rtC' & 'P6' shown on the display



Sample point:

- From 'Pts' & 'P1', press SET key
- Press up and Down pushbuttons to select the sample point from 1h(1000).....16h(16000). The sample point will be divided in half: $\frac{1}{2}$ for temperature and $\frac{1}{2}$ for humidity. Example: 16000 points= 8000 Temp + 8000 RH
- Press SET to save and return to P1
- Press MODE to escape without saving the value



Press Up and Down

Press SET to save

Start Mode:

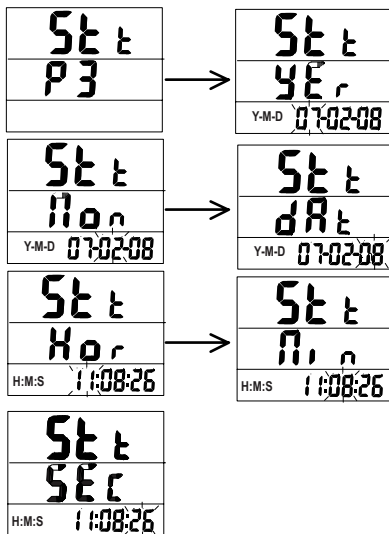
Press Up and Down keys to select from:

- Repeat: 'rEp' is displayed on the bottom of the screen. In this mode the meter will automatically record again once the memories are uploaded to a PC.
 - From 'Stn' & 'P2', press SET key
 - Press Up or Down key to select 'rEp'
 - Press SET to save and return to P2
 - Press MODE to escape

- Key Start: 'hEy' is displayed on the bottom of the screen. In this mode, the meter will start recording when you press Start/Stop for more than 2 seconds.
 - From 'Stn' & 'P2', press SET key
 - Press Up or Down key to select 'hEy'
 - Press SET to save and return to P2
 - Press MODE to escape
- Immediately: 'lNn' is displayed on the bottom of the screen. In this mode, the meter will start recording immediately after you save the setting.
 - From 'Stn' & 'P2', press SET key
 - Press Up or Down key to select 'lNn'
 - Press SET to save and return to P2
 - Press MODE to escape and start recording.
 - To stop the recording, press and hold Start/Stop for more than 2 seconds.
- Schedule: 'Sch' is displayed on the bottom of the screen. In this mode, the meter will start recording from the preset date and time.
 - From 'Stn' & 'P2', press SET key
 - Press Up or Down key to select 'Sch'
 - Press SET to save and return to P2
 - Press MODE to escape

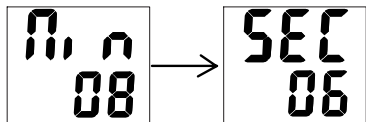
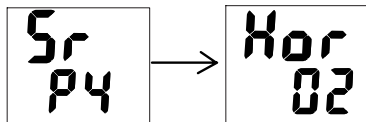
Start Time:

- Press SET to enter the setting mode
- Press Up or Down key to select 'Stt' & 'P3'
- Press SET to enter edit mode for year 'YEr'
- Press Up or Down key to adjust the year
- Press SET to enter edit mode for month 'Mon'
- Press Up or Down key to adjust the month
- Press SET to enter edit mode for day 'dAt'
- Press Up or Down key to adjust the day
- Press SET again to enter the edit mode for hour 'Hor'
- Press Up or Down key to adjust the hour
- Press SET again to enter the edit mode of minute 'NI n'
- Press Up or Down key to adjust the minute
- Press SET again to enter the edit mode for Second 'Sec'
- Press Up or Down key to adjust the second
- Press SET to save the date and time
- Press MODE to quit



Sample Rate

- Press SET key to enter sample rate mode
- Press Up or Down key to select 'Sr & P4'
- Press SET to enter edit mode for HOUR 'Hor'
- Press Up or Down key to adjust the hour
- Press SET to enter edit mode for MINUTE 'NI n'
- Press Up or Down key to adjust the minute
- Press SET to enter edit mode for SECOND 'SEc'
- Press Up or Down key to adjust the second
- Press SET to save and return to P4
- Press mode to quit and return to main menu



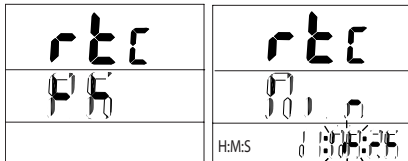
Alarm Set

- Press SET key to enter the alarm setting
- Press Up or Down key to select 'AL & P5'
- Press set key to edit HIGH temperature 'tH'
- Press Up or Down key to adjust the high temperature
- Press set key to edit LOW temperature 'tLo'
- Press Up or Down key to adjust the low temperature
- Press set key to edit HIGH humidity 'HH'
- Press Up or Down key to adjust the high humidity
- Press set key to edit LOW humidity 'HL'
- Press Up or Down key to adjust the low humidity
- Press SET to save and return to P5
- Press MODE to quit and return to main menu



Real Time

- Press SET to enter real time setting
- Press Up or Down key to select 'rTC & P6"
- Press SET to edit YEAR 'yEr'
- Press Up or Down key to adjust the year
- Press SET to edit MONTH 'Non'
- Press Up or Down key to adjust the month
- Press SET to edit DAY 'dAt'
- Press Up or Down key to adjust the day
- Press SET to edit HOUR 'Hor'
- Press Up or Down key to adjust the hour
- Press SET to edit MINUTE 'Mi n'
- Press Up or Down key to adjust the minute
- Press SET to edit SECOND 'Sec'
- Press Up or Down key to adjust the second
- Press SET to save and return to P6
- Press MODE to quit and return to main menu



Switch from °F to °C

- Press and release MODE key to change from °F to °C

Dew point measurement: DP

- Press and hold MODE key for dew point reading
- Press and release MODE key to change DP from °F to °C
- Press and hold MODE key to return to temperature reading.

INSTRUMENT CONNECTION

1. Plug the RS232 cable to the meter to turn it ON.
2. Connect the meter with the PC using the RS232 provided
3. Start the Download Suite software program

RS232 PC interface capabilities

The RS232 cable and the Download Suite software are required to transfer data to a PC. The RS232 port is located on the right side of the instrument. There is an optional USB converter kit (RS-USB) available for PCs with no available RS232 port.

Download Suite Software installation

Insert the Download Suite CD into the CD-ROM drive.

To install the software, follow the on-screen instructions.

Operation

1. Open the program, double-click the Download Suite icon.
2. Click on work "with instrument" and then "next"
3. Select TR300 and click on "next"
4. Select Program device and click on NEXT . Click on NEXT again to open the programming screen (see Figs 1&2)
5. Setup the parameters and click OK to start recording
6. To download file from the device, repeat steps 1 and 2. Select Download and click NEXT. (See Fig.1)
7. Click NEXT again to start downloading the file. Select the location where you want to store the file and click NEXT, YES or NO, and FINISH
8. Click on "Visualizations" to select digital meter, generic historical graph, or generic historical table.(See Fig.3)
9. Select the parameters you want to visualize and click OK.

NB. Refer to help menu for more details on how to use the Download Suite.

TROUBLESHOOTING

Power on but no display or meter doesn't work .

- Check whether the DC power is connected or not.
- Make sure you press "START/STOP" key for more than 0.1 Sec.
- Check the batteries and see if they make good contact and the polarity is correct.
- Replace the batteries and try again.

Error Codes.

- E02: The value is underflow.
- E03: The value is overflow.
- E04: Wrong value is caused by E02 or E03.
- E11: RH calibration error. Need to re-calibrate.
- E32: IC read/write error. Return the meter for repair.
- E33:Circuit error in measurement portion. Return the meter for repair.

SPECIFICATIONS

Mode	Range
RH %	0.0 ~ 100.0%
Resolution	0.1%
Accuracy	+/-3% @ 10~90%; +/-5% @ others
Temperature	-20°C to 70°C (-4°F to 158°F)
Resolution	0.1°C (0.1°F)
Accuracy	±0.6°C (±1°F) @ 0–50°C (32–122°F); ±1.2°C (±2°F) @ others
Memory	Up to 16K (Temp: 8K + RH: 8K)
Real Time	Yes
USB Port	Yes

Supporting Figure Diagrams

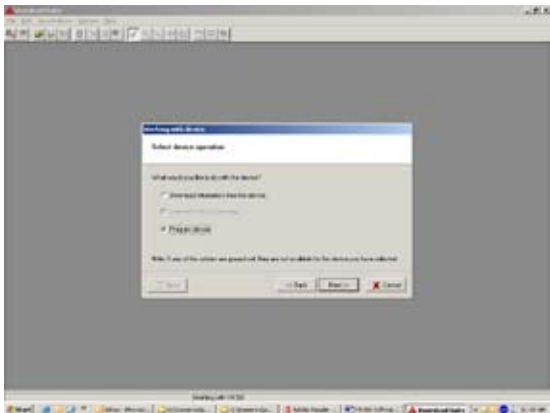


Figure 1

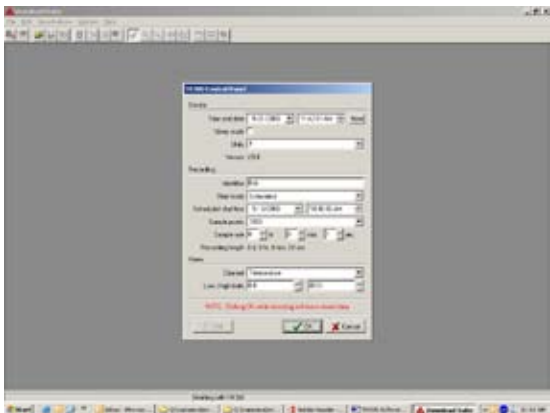


Figure 2



Figure 3

DISPLAY ALPHABET LIST			
Display	Meaning	Display	Meaning
A	A	C	C
d	d	E	E
h	H	,	i
k	k	L	L
n	m	n	n
o	o	P	P
r	r	S	S
t	t	y	y

Figure 4