

Chapter 3

Operation

Keypad Functions

ON/OFF Key	Press to turn the Alnor TH710/AIRFLOW RH10 on and off. During the power up sequence the display will show the following: Model Number, Serial Number, Software Revision and Last Date Calibrated.
%RH Key	Pressing this key changes the display to read relative humidity.
WB Key	Pressing this key changes the display to read wet bulb.
°C Key	Pressing this key changes the display to read temperature.
Changing Units	To change units for temperature and wet bulb, press and hold the unlabelled soft key for 5 seconds to bring up a menu. Then use the ▲▼ and ENTER key to select the units as °C or °F.

Chapter 4

Maintenance

The Alnor TH710/AIRFLOW RH10 requires very little maintenance to keep it performing well.

Recalibration

To maintain a high degree of accuracy in your measurements, we recommend that you return your Alnor TH710/ AIRFLOW RH10 to TSI for annual recalibration. Please contact one of TSI's offices or your local distributor to make service arrangements and to receive a Return Material Authorization (RMA) number. To fill out an online RMA form, visit TSI's website at <http://service.tsi.com>.

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Cases

If the instrument case or storage case needs cleaning, wipe it off with a soft cloth and isopropyl alcohol or a mild detergent. ***Never*** immerse the Alnor TH710/AIRFLOW RH10. If the enclosure of the Alnor TH710/AIRFLOW RH10, it must be replaced immediately to prevent access to hazardous voltage.

Storage

Remove the batteries when storing the unit for more than one month to prevent damage due to battery leakage.

Chapter 5

Troubleshooting

Table 5-1 lists the symptoms, possible causes, and recommended solutions for common problems encountered with the Alnor TH710/AIRFLOW RH10. If your symptom is not listed, or if none of the solutions solves your problem, please contact TSI.

Table 5-1: Troubleshooting the Alnor TH710/AIRFLOW RH10

Symptom	Possible Causes	Corrective Action
No Display	Unit not turned on	Switch unit on.
	Low or dead batteries	Replace batteries or plug in AC adapter.
	Dirty battery contacts	Clean the battery contacts.
Temp. initially reads high or low	Temperature sensor is still adjusting to temperature	Allow sufficient time for the temperature to stabilize.
Humidity reading near zero or not believable	Probe exposed to intense light	Shade the probe while taking samples.
Instrument Error message appears	Fault in instrument	Factory service required on instrument.

WARNING!

Remove the probe from excessive temperature immediately: excessive heat can damage the sensor. Operating temperature limits can be found in [Appendix A, Specifications](#).

Appendix A

Specifications

Specifications are subject to change without notice.

Temperature

Range	32 to 140°F (0 to 60°C)
Accuracy ¹	±1.0°F (±0.6°C)
Resolution	0.1°F (0.1°C)
Response time	30 seconds (90% of final value, air velocity at 2 m/s)
Display units	°F or °C (user selectable)
Type	Thermistor

Humidity

Range	5 to 95% RH
Accuracy ²	±3% RH (includes ±1% hysteresis.)
Resolution	0.1% RH
Response time	20 seconds (for 63% of final value)
Sensor type	Thin-film capacitive

Instrument Temperature Range:

Operating (Electronics):	40 to 113°F (5 to 45°C)
Operating (Probe):	14 to 140°F (-10 to 60°C)
Storage:	-4 to 140°F (-20 to 60°C)

Instrument Operating Conditions:

Altitude up to 4000 meters
 Relative humidity up to 80% RH, non-condensing
 Pollution degree 1 in accordance with IEC 664
 Transient over voltage category II

External Meter Dimensions:

3.3 in. × 7.0 in. × 1.8 in. (8.4 cm × 17.8 cm × 4.4 cm)

Meter Weight:

Weight with Batteries: 0.6 lbs (0.27 kg)

Power Requirements:

Four AA-size batteries (included)

- ¹ Accuracy with instrument case at 77°F (25°C), add uncertainty of 0.05°F/°F (0.05°C/°C) for change in instrument temperature.
- ² Accuracy with probe at 77°F (25°C). Add uncertainty of 0.1% RH/°F (0.1% RH/°C) for change in probe temperature. Includes 1% hysteresis.



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