

Product Quick Reference Card

Device Maintenance

Battery Replacement

Materials:

3/32" HEX Driver (Allen Key)

Replacement Battery (U9VL-I)

- Open the QuadThermoVault enclosure.
- Remove the cover from the device by unscrewing the four screws.
- Remove the battery from its compartment and unsnap it from the connector.
- Snap the new battery into the terminals and verify it is secure.
- Replace the cover taking care not to pinch the wires. Screw the enclosure back together securely.

Note: Be sure not to over tighten the screws or strip the threads.

Battery Warning

WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 60°C (140°F).

Recalibration

The QuadThermoVault standard calibration is one point at 25°C for the internal temperature sensor and 0mV for the thermocouple channels.

Pricing:

Recalibration traceable to NIST \$60.00

Recalibration \$40.00

Additional:

As Found Data \$15.00

Additional Points \$15.00 per point

Channel (1st) \$30.00 at 25°C

\$45.00 at custom point

Additional Channels \$3.00 at 25°C

\$4.50 at custom point

To send the devices back, visit www.madgetech.com, select Services then RMA Process.



Part Number	QuadThermoVault
Internal Channel Temperature Sensor	Semiconductor
Internal Channel Temperature Range	-20 to +60°C
Internal Channel Temperature Resolution	0.1°C
Internal Channel Calibrated Accuracy	±0.5°C
Remote Channel Temperature Sensor	Thermocouple Types J, K, T, E, R, S, B, N
Remote Channel Temperature Range, Resolution & Accuracy	*See Table on Inner Flap for Details
Cold Jct. Compensation	Automatic
Channels	1 internal & 4 remote
Memory	26,214/channel
Sample Rate	5 seconds up to 12 hours
Required Interface Package	IFC110 or IFC200
Baud Rate	2,400
Typical Battery Life	1 year
Operating Environment	**See Table Below, 0 to 95%RH (Non-Condensing)
Material	304 stainless steel w/ PTFE insulation
Dimensions	6.5" x 7.9" x 3.2" (165mm x 200mm x 82mm)
Approvals	CE

* Remote Channel Range, Resolution & Accuracy

Thermocouple	Range (°C)	Resolution	Accuracy
J	-210 to +760	0.1°C	±0.5°C
K	-260 to +1370	0.1°C	±0.5°C
T	-260 to +400	0.1°C	±0.5°C
E	-260 to +980	0.1°C	±0.5°C
R	-50 to +1760	0.5°C	±2.0°C
S	-50 to +1760	0.5°C	±2.0°C
B	+60 to +1820	0.5°C	±2.0°C
N	-260 to +1300	0.1°C	±0.5°C

Specifications subject to change.

See MadgeTech's terms and conditions at www.madgetech.com

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Product Information Card

QuadThermoVault



QuadThermoVault

4-Channel Oven Temperature Recorder



To view the full MadgeTech product line, visit our website at www.madgetech.com.

Product Notes

Operating Environment

The QuadThermoVault is an oven temperature recorder that consists of a QuadTemp with screw terminals inside a thermal enclosure.

The thermal enclosure prevents the data logger from heating up for a certain period of time. The chart below outlines the maximum temperature and time duration to which the device can be exposed.

**Operating Environment: Maximum Exposure Time

Ambient Temperature	Quad Channel
100°C (212°F)	110 min
150°C (302°F)	62 min
200°C (392°F)	45 min
250°C (482°F)	35 min
260°C (500°F)	33 min
300°C (572°F)	30 min
350°C (662°F)	25 min

Thermocouples and the Software

To change the thermocouple type in the MadgeTech software:

- Select **Thermocouple Type** from the **Device Menu**.
- Click on the **Change** button in the Thermocouple Type window.
- Select the correct thermocouple type from the drop down list.
- Click on the **Save** button to store the thermocouple type in the device.
- Click **OK**.

Please note that the same thermocouple type must be used on all of the channels.

Device Operation

Starting the data logger

- Click **Device Menu** then **Start Device**.
- Choose the desired start method.
- Choose the start parameters by selecting a **Reading Rate** suitable for your application.
- Enter in any other desired parameters and click **Start**.
- A box will appear stating the data logger has been started. Click **OK**.



- Disconnect the data logger from the interface cable and place it in the environment to measure.

Note: The device will stop recording data when the end of memory is reached or the device is stopped. At this point the device cannot be restarted until it has been re-armed by the computer.

Downloading data from a data logger

- Connect the data logger to the interface cable.
- Click the **Device Menu** then **Read Device Data**. This will offload all recorded data onto the PC.

Installation Guide

Installing the Interface cable

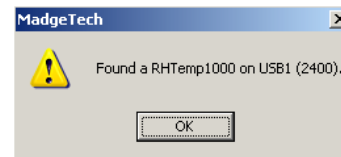
- IFC200, IFC202 or IFC300
Refer to the "Quick Start Guide" included in the package.
- IFC110, IFC102 or IFC103
Plug the serial cable into the port and verify it is secure.
- USB-1 or USB-101
Install the USB drivers from the CD provided in the kit, then plug the USB cable into the computer and the serial cable into the serial port.

Installing the software

Insert the Software CD in the CD-ROM Drive. If the autorun does not appear, locate the drive on the computer and double click on **Autorun.exe**. Follow the instructions provided in the Wizard.

Connecting the data logger

- Once the software is installed and running, plug the interface cable into the data logger.
- Click the **Communication Menu**, then **Auto Configure Port**.
- After a moment, a box similar to the following will appear;



- Click **OK**. The **Device Status** box will appear. Click **OK**.
- At this point, communications have been configured for your logger. These settings can be found under the **Communication Menu**.

Note: For additional installation instructions refer to your "Data Logger & Software Operating Manual".

Technical Support

Visit www.madgetech.com, or call (603) 456-2011. Technical support is also available by e-mailing support@madgetech.com

Additional product information is available by e-mailing info@madgetech.com.