

## Product Quick Reference Card

### Device Maintenance

#### Battery Replacement

Materials:

3/32" HEX Driver (Allen Key)

Replacement Battery (U9VL-I)

- 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 TCTemp2000 standard calibration is one point at 25°C for the internal channel and 0mV for the thermocouple channel.

#### Pricing:

Recalibration traceable to NIST \$60.00

Recalibration \$40.00

#### Additional:

As Found Data \$15.00 per parameter/channel

Verification Point \$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](http://www.madgetech.com), select Services then RMA Process.



Part Number	TCTemp2000
Temperature Sensor	Semiconductor
Temperature Range	-20 to +60°C
Temperature Resolution	0.1°C
Remote Channel Temperature Sensor Range, Resolution & Accuracy	*See Table for Details
Cold Jct. Compensation	Automatic
Memory	131,071/channel
Sample Rate	2 second up to 24 hours
Channels	1 Internal & 1 Remote
Required Interface Package	IFC200
Baud Rate	115,200
Typical Battery Life	1 year with display off, 30 days with continuous LCD and no backlight
Operating Environment	-20 to +60°C 0 to 95%RH
Material	Black Anodized Aluminum
Dimensions	4.8" x 3.3" x 1.25" (122mm x 84mm x 32mm)
Approval	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](http://www.madgetech.com)

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# Product Information Card

TCTemp2000



TCTemp2000

Thermocouple Temperature Recorder with LCD Display



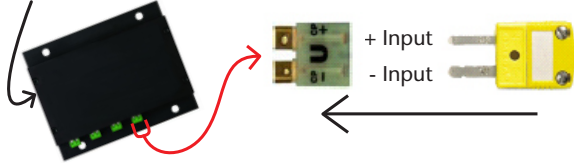
To view the full MadgeTech product line, visit our website at [www.madgetech.com](http://www.madgetech.com).

## Wiring the Data Logger

### Wiring Diagrams

The diagrams below show how to connect the thermocouple.

Connector for interface cable



**Warning:** Note the polarity instructions. Do not attach wires to the wrong terminals.

## Product Notes

### Backlight

The backlight uses a significant amount of battery life. Refer to the manual to configure the auto shut-off when not in use.

### 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**.

## 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**.

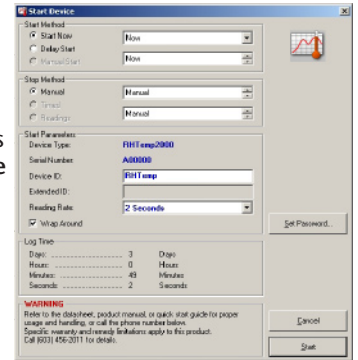
**Note:** For additional installation instructions refer to your "Data Logger & Software Operating Manual".

## Device Operation

### Starting the data logger

- Click **Device Menu** then **Start Device**.

- Choose the desired start method.
- Choose the desired stop method.
- Choose the start parameters by selecting a **Reading Rate** suitable for the 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.

## Technical Support

Visit [www.madgetech.com](http://www.madgetech.com), or call (603) 456-2011. Technical support is also available by e-mailing [support@madgetech.com](mailto:support@madgetech.com)

Additional product information is available by e-mailing [info@madgetech.com](mailto:info@madgetech.com).