

Fahrenheit Scale on BHM Electronics Temperature Meter

Starting with version 1E of the software a Fahrenheit scale has been added to the meter. Version 1E is included with all meters with serial number 10072 or greater. Any older meter may be upgraded to version 1H (the last revision of the version 1 software) by replacing the microcontroller.

The meters are normally shipped with the display scale set to degrees Celsius. They may be changed to degrees Fahrenheit or back to degrees Celsius.

Changing Scale

Switch off the power on the front panel toggle switch and unplug the power lead from the meter.

To remove the cover, loosen the four screws. If the meter has chassis connectors instead of flying leads (serial number 12000 and later) you will also need to unscrew the rubber boot covering the power toggle switch.

Check the software version on the label on the microcontroller (socketed 18-pin IC).

If the version is older than 1E, you will need to upgrade the software.

If the software version is 2C or earlier then the scale is stored in non-volatile memory in the microcontroller. If the software is version 2D or later then the scale is set with a link.

Memory (software version 2C or earlier)

Plug the power lead back into the meter.

Place a link across the two pins of the red LED. The easiest way to do this is to short across the pins with the tip of a metal screwdriver.

Switch on the power.

The meter will toggle to the other scale. The scale is automatically saved within the microcontroller.

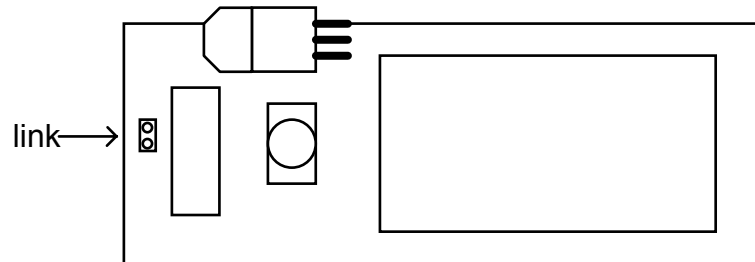
Remove the link.

Switch off the power and unplug the power lead from the meter before replacing the cover.

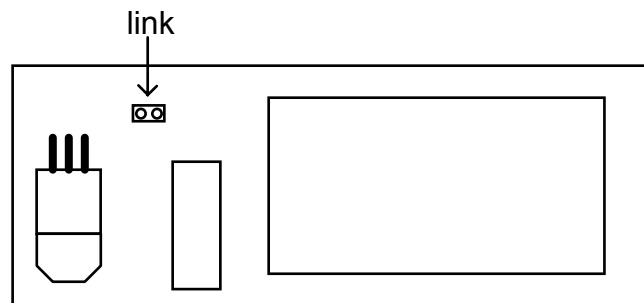
Link (software 2D or later)

The link location depends on the board version.

board revision 040901 (switch and LEDs mounted on board)



board revision 140201 (switch and LEDs mounted on front cover)



If a two-pin header is present at the link position then a 0.1 inch jumper can be placed on it to close the link.

If no header is present then the board must be removed and a wire link soldered across the pads.

If the software on the board has been upgraded to version 2C from an earlier version there may be no pads, in this case solder a wire from pin 12 to pin 5 of the microcontroller.

The meter will display the temperature in Fahrenheit scale as long as the link is in place. Remove it to return to Celsius scale.