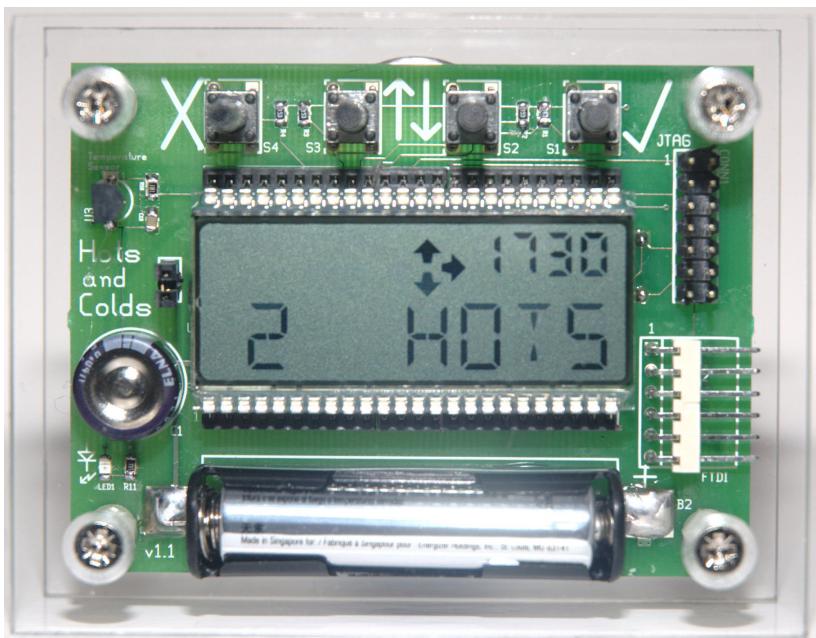


# HOTS AND COLDS

## Thermometer

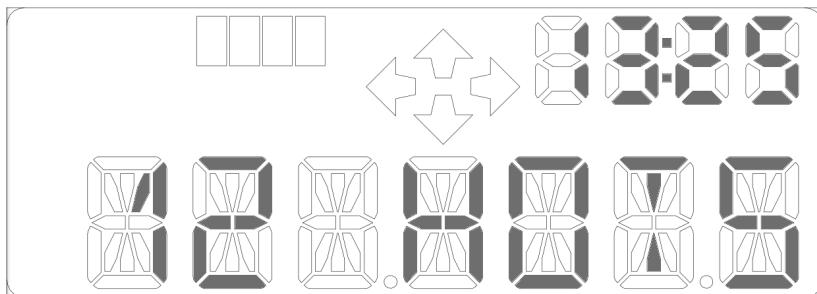


Congratulations on your purchase of a new **HOTS AND COLDS Thermometer**.

You can now display temperature in your home with the user friendly **hots and colds** scale. This scale is centred on a comfortable temperature for normal people, which is used as a reference for temperatures both hotter and colder than that.

Temperatures are displayed as:

- NORMAL for a normal temperature<sup>1</sup>
- A number of hots for temperatures above NORMAL (eg 12 HOTS)
- A number of colds for temperatures below NORMAL (eg 3 COLDS)



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<sup>1</sup>Normal is equivalent to 20°C

# **Contents**

<b>Setting up</b>	<b>4</b>
<b>Precautions</b>	<b>4</b>
<b>The display</b>	<b>5</b>
<b>The buttons</b>	<b>5</b>
<b>Configuring</b>	<b>6</b>
Setting time . . . . .	6
Calibrating temperature . . . . .	7
Adjusting time . . . . .	8
<b>Displaying the maximum or minimum temperature</b>	<b>9</b>
<b>Changing the battery</b>	<b>10</b>
<b>Specifications</b>	<b>11</b>
<b>Warranty</b>	<b>11</b>
<b>Calibration Information</b>	<b>12</b>

## Setting up

Remove your **HOTS AND COLDS Thermometer** from its packaging and either stand it on its base in a convenient location or use the magnet on its rear to attach it to a suitable surface (eg your fridge.)

Your **HOTS AND COLDS Thermometer** has been temperature calibrated and its clock has been set at the factory.

## Precautions

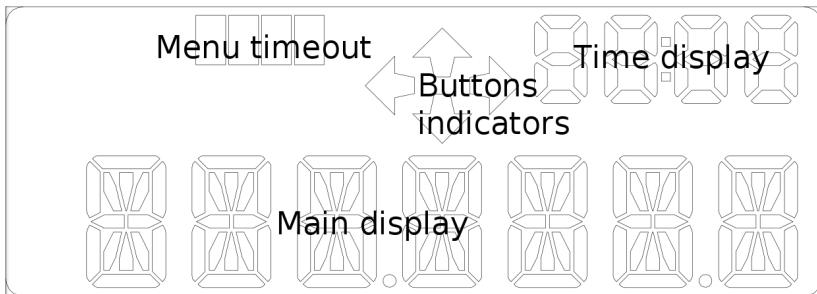
Your **HOTS AND COLDS Thermometer** is safe for normal use, but there are some precautions you should take.

- Exposure to extreme temperatures outside the operating range (see Specifications) may result in incorrect operation or failure. At very low temperatures (such as in your freezer) the display will appear to change very slowly.
- Do not get the device wet. If you put it in your freezer, place it in a plastic bag first, and only remove it from the plastic bag when the bag and device are back at room temperature.
- Do not leave in direct sunlight. This will result in incorrect temperature readings. For outside temperature readings, place the device in a Stevenson screen.<sup>2</sup>
- Not for use where failure could result in injury or death.
- Not for medical use.

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<sup>2</sup>Stevenson screen not supplied.

## The display



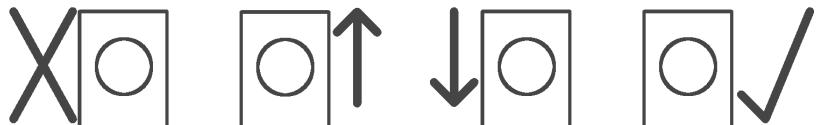
The display of your **HOTS AND COLDS Thermometer** shows the current time at the top right, and the current temperature on the main display at the bottom. The main display is also used for the menu system, and to display recorded maximum and minimum temperatures.

While in the menu system, a timeout showing four bars shows at the top left of the display. When the timeout bars disappear after 12 seconds without button presses, the display will exit the menu system.

Four arrow indicators tell you which buttons are active at any time. means the up button ( $\uparrow$ ), means the down button ( $\downarrow$ ), means the cancel button ( $\times$ ), and means the enter button ( $\checkmark$ ).

## The buttons

Your **HOTS AND COLDS Thermometer** has four buttons.



1.  is for the cancel function.
2.  is for the up function, and to display maximum temperature.
3.  is for the down function, and to display minimum temperature.
4.  is for the enter function, and for starting the menu.

## Configuring

### Setting time

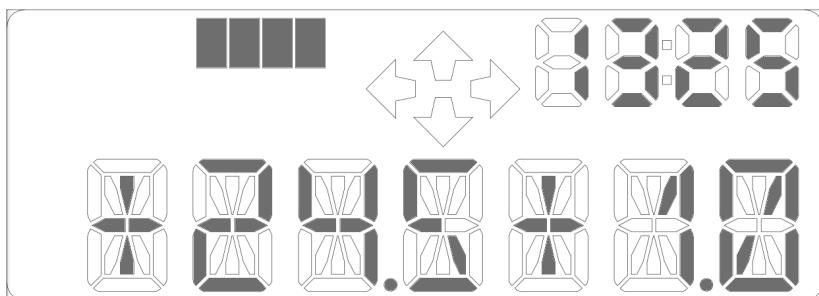
- Press .
- The display shows SETTIME.
- Press  again.
- The display shows Yr 2014 (or the current year), and the year will flash.
- Press  or  to change the year. You cannot set the year to before 2014.
- Press  to go to month, then to day, then to hour, then to minute. Each time element can be changed with  and .
- After you press  when setting the minutes, the time is set and saved.
- You can cancel setting the time with .

- If you don't press a button for 12 seconds, the display will exit the menu system without setting the time.
- If power is lost, the default starting date and time is 2014-03-07 at 17:30.

## Calibrating temperature

Your **HOTS AND COLDS Thermometer** was calibrated at the factory, so you should not need to do your own calibration. But if you wish to change the calibration:

- Press ✓ to enter the menu.
- The display shows SETTIME.
- Press ↓.
- The display shows CALTEMP.
- Press ✓.
- The display will now show the temperature in the archaic “degrees Celsius” scale, and an offset. You can compare the temperature with an old style thermometer, and adjust in 0.5°C steps.



- When you are happy with the calibration, press ✓.
- The calibration is saved permanently.
- You can cancel the temperature calibration changes by pressing X.
- If you don't press a button for 12 seconds, the display will exit the menu system without saving the new temperature calibration.

## Adjusting time

Your **HOTS AND COLDS Thermometer** was adjusted to keep correct time at the factory, and should not drift more than a minute per year. But if you wish to change its time adjustment:

- Press ✓ to enter the menu.
- The display says SETTIME.
- Press ↓ twice.
- The display says ADJTIME.
- Press ✓.
- The display will show the current adjustment in seconds per day. To make the clock run slower, decrease the number (or make it more negative.) To make the clock run faster, increase the number (or make it less negative.)
- You can change the adjustment from -20 seconds per day to +20 seconds per day, in steps of 0.25 seconds per day.

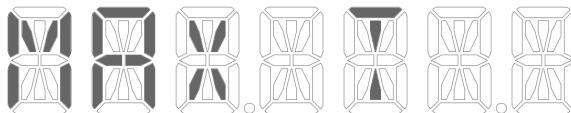
- When you are happy with the adjustment, press ✓.
- The time adjustment is saved permanently.
- You can cancel the time adjustment changes by pressing X.
- If you don't press a button for 12 seconds, the display will exit the menu system without saving the new time adjustment.

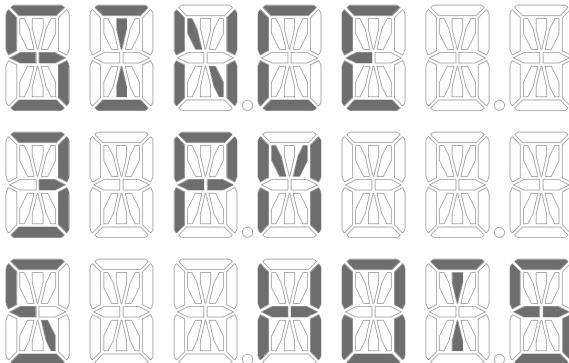
## Displaying the maximum or minimum temperature

When your **HOTS AND COLDS Thermometer** is displaying the current temperature, you can press ↑ to display the maximum temperature since the last 3pm time. It will also display the maximum temperature in the 24 hours to the last 3pm time, then return to displaying the current temperature.

Press ↓ while the display is showing the current temperature, or while displaying the maximum, to display the minimum temperature since the last 9am time, followed by the minimum temperature in the 24 hours up to the last 9am time.

The times and temperatures are shown sequentially, as they don't fit on the display together. For example:





## Changing the battery

Your **HOTS AND COLDS Thermometer** requires two 1.5V AAA size batteries. When the display goes dim, the batteries should be changed.

To change the batteries, use a pozidrive screwdriver to remove the front and rear covers. There is one battery under the front cover and one under the rear cover. If the old batteries were not too flat, your **HOTS AND COLDS Thermometer** will continue to run for a few minutes while you insert new batteries.

High capacity lithium batteries should last for at least three years in normal use.

## Specifications

Minimum temperature	50 COLDS
Maximum temperature	50 HOTS
Temperature calibration range	$\pm 4.5$ HOTS/COLDS ( $\pm 4.5^{\circ}\text{C}$ — Eww)
Time accuracy (with adjustment)	$\pm 0.125$ seconds per day (about 45 seconds per year)
Time adjustment range	$\pm 20$ seconds per day
Battery life	At least 3 years, with lithium AAA batteries

## Warranty

Your **HOTS AND COLDS Thermometer** has a lifetime warranty. When it stops working, it is at the end of its life.

In order to fix identified issues with the device, we may at times offer software upgrades.

## Calibration Information

Serial number	
Temperature calibration	
Time adjustment	
Calibrated by	