



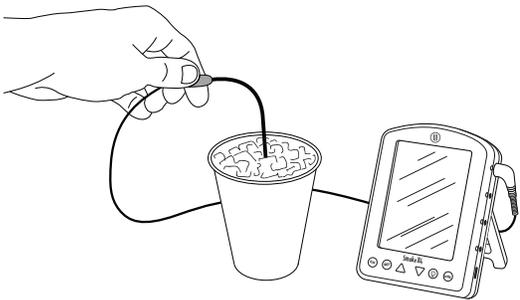
# ThermoWorks

## Smoke X2/X4 TRIM Function Guide

New from the factory, Smoke X2/X4 will read within  $\pm 1.8^{\circ}\text{F}$  even after changing probes, so you should never really need to use the CAL feature. However, you can fine-tune the calibration for accuracy better than  $\pm 1^{\circ}\text{F}$  with a specific probe.

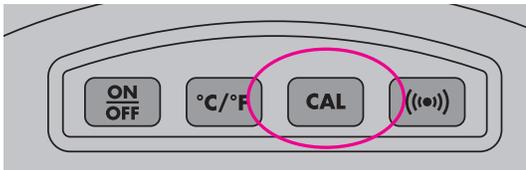
The CAL function allows adjustment of the reading at a single temperature. The readings will then be “offset” by the adjusted amount across the whole range of the thermometer. For best accuracy across a wider range, we recommend making the adjustment in an ice bath ( $32.0^{\circ}\text{F}$ ).

In order to make an accurate adjustment, you need a very stable and accurate reference temperature. The only precise way to do this outside of a calibration lab is to use a properly prepared ice bath. Go to [www.thermoworks.com/thermometer/check-thermometers](http://www.thermoworks.com/thermometer/check-thermometers) for instructions on getting this just right.



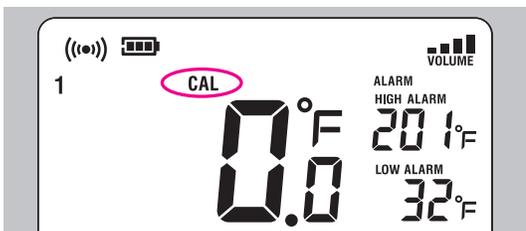
### Step 1

Turn Smoke X2/X4 on and immerse probe 1 into the ice bath and gently stir. When the temperature is stable and no longer changing, note the final reading. It should be close to  $32^{\circ}\text{F}$ . However, it may be low or high by several tenths of a degree or even one or two whole degrees. If, for example, the reading is  $31.4^{\circ}\text{F}$ , then you are reading low by  $0.6^{\circ}\text{F}$ . Repeat the test with Probe 2. Note the reading.



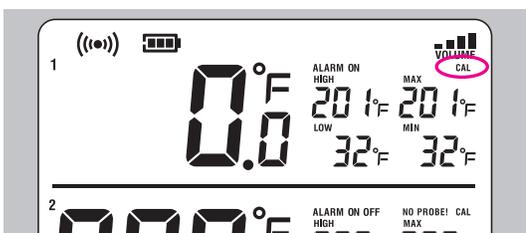
### Step 2

Press the CH button until the probe you would like to adjust is flashing, then press the CAL button.

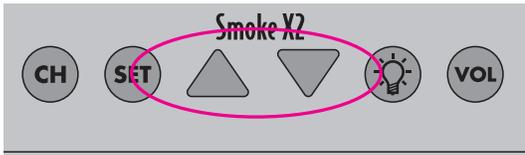


(Smoke X2)

Smoke X2/X4 display will change to “CAL” and will display  $0.0^{\circ}\text{F}$ .

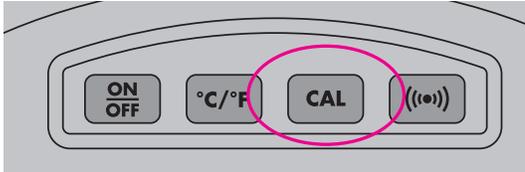


(Smoke X4)



### Step 3

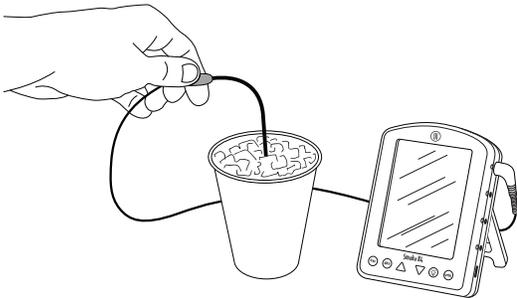
Press the Up or Down Arrows to increase or decrease this number for the amount you need to add or subtract from the reading noted in Step 1 so that your next ice bath test is correct. In our example, you would want to add 0.6°F to Smoke X2/X4 readings so you will hit the Up Arrow until the reading shows 0.6°F. Push the CAL button again to save the offset for Probe 1.



### Step 4

Repeat steps 2 and 3 for remaining probes if desired.

**Please note:** Each probe can have a different offset value.



### Step 5

Repeat the ice bath test in Step 1. You should be dead-on or within  $\pm 0.1^\circ\text{F}$ .

### Cautions:

The CAL feature will adjust the temperature up or down as much as 4°F. If your readings are off by more than that, there is a malfunction or your probe may be bad. If the sensor in the probe is damaged by excess heat, it may read off by significantly more. This cannot be fixed with the CAL function and you will need a new probe.

Do not try to check your thermometer accuracy in food, against your judgement of meat doneness, or the reading of a dial thermometer or a cheaper digital thermometer. The only precise way to test a thermometer's accuracy is by using very expensive calibration lab equipment with a thermometer that is traceable to National Standards -OR- to use the ice bath test discussed above. If your Smoke X2/X4 reads accurately at 32°F, then you can be confident that it will read within tolerance at any temperature.

For questions, contact ThermoWorks' Technical Support @ 801-756-7705 or [techsupport@thermoworks.com](mailto:techsupport@thermoworks.com).