# ThermoPop® 2 (4.5-inch) Operating Instructions

- 360° auto-rotating display
- Includes calibration certificate
- Super-Fast® 2-3 seconds
- Splash-proof design
- Bigger backlit digits
- Wide range -58 to 572°F
- Guaranteed accuracy ±1°F to 208°F
- Switchable °C/°F



# **Instrument Operation**

Press the 'o' button to activate the thermometer. Temperatures will be displayed and the display will auto-rotate depending on orientation. The thermometer will turn off automatically after 10 minutes. This can be disabled. Press and hold the 'o' button for 5 seconds to turn instrument off. To activate the backlight, press the & button once while the instrument is turned on. Press again

Insert the stainless steel probe to the desired depth. The measured temperature will be shown on the LCD display within 2-3 seconds.

# Auto-Off

To disable:

Press the - button 6 times. Display will flash OFF twice To enable

Press the button 6 times. Display will flash ON twice. Auto-off setting is saved even if instrument is turned off.

#### To Select °F or °C

Press and hold the 🔅 button for 3 seconds upon start-up.

# **Battery Installation**

Replace the battery when low battery symbol 'Bat' flashes. Replace with a 3-volt, type CR2032, button-cell battery or eguivalent.

Use a screwdriver of suitable size to open the battery cover on the back

Install the battery observing the correct polarity, (+) positive side up, sliding the battery under the metal clip. Close the battery cover. Do not overtighten.

# Care and Cleaning

Clean the probe immediately after each measurement to avoid cross contamination. Do not expose the entire thermometer to temperatures over 190°F (88°C). Do not leave inside ovens.

# **Technical Support**

For warranty, service, and technical assistance, please contact ThermoWorks' Technical Support at (801) 756-7705 or email at techsupport@thermoworks.com.

For additional cooking tips and doneness temperatures, and to see the full line of ThermoWorks tools, visit our website at www.thermoworks.com.

#### Specifications

-58 to 572°F (-50 to 300°C) Range Accuracy

±1.0°F (±0.5°C) between 14 to 208°F (-10 to 98°C); ±4.0°F (±2.0°C) between 392 to 572°F (200 to 300°C);

otherwise ±3.0°F (±1.6°C)

0.1° from -19.9 to 99.9°, otherwise 1° Resolution Response 2-3 seconds

IP Rating IP67

**Operating Range** 32 to 122°F (0 to 50°C)

Probe

4.5 L x 0.1 inch dia. reduces to 0.06 inches dia. (114 L x 2.5 mm dia. reduces to 1.5 mm dia.) Auto-Off After 10 minutes, can be disabled

Auto Backlight 10 seconds

Battery CR2032 (3V) lithium coin cell x 1, 4,000 hours

Display 1.26 dia. inches (32 dia. mm);

**Product Size** 7 H x 1.8 W x 0.8 D inches (178 H x 45.4 W x 17.5 D mm) Certificate Includes NIST-traceable Calibration Certificate

# WARNING

- INGESTION HAZARD: DEATH or serious injury can occur if ingested.
- A swallowed button cell or coin battery can cause internal chemical burns in as little as 2 hours. KEEP new and used batteries OUT OF REACH OF CHILDREN.
- Seek immediate medical attention if a battery is suspected to be swallowed or inserted inside any part of the body.



# **Chef & USDA Recommended Temps\*\***

For additional temperature recommendations, go to blog.thermoworks.com

<b>Beef, Veal &amp; Lamb</b> Roasts, Steaks & Chops	Rare 120-130°F* 49-54°€	Med. Rare 130-135°F* 54-57°C	Medium 135-145°F* 57-63°€	Med. Well 145-155°F* 63-68°C	Well Done 155°F-up* 68°C-up
<b>Pork</b> Roasts, Steaks & Chops				USDA-Done 145°F* 63°€	Well Done 150°F-up* 66°C-up
<b>BBQ</b> Brisket, Ribs, & Pork Butt					Done 190-205°F 88-96°C

<sup>\*</sup> These temperatures are ideal peak temperatures. Meats should be removed from heat several degrees lower and allowed to rise during resting.

# **Minimum Done Temps for Food Safety**

Ground Meat: Beef, Veal, & Sausage*	<b>160°F</b> (71°C)	Chicken, Turkey & Duck (whole or pieces)*	<b>165°F</b> (74°C)
Ham (raw)	<b>160°F</b> (71°C)	Poultry Dark Meat**	<b>175°F</b> (79°C)
Ham (pre-cooked)	<b>140°F</b> (60°C)	Stuffing (in the bird)	<b>165°F</b> (74°C)
Egg dishes	<b>160°F</b> (71°C)	Tuna, Swordfish & Marlin**	<b>125°F</b> (52°C)
Casseroles & Leftovers	<b>165°F</b> (74°C)	Other Fish**	<b>140°F</b> (60°C)

# Water Temps (at sea level)

Poach	160-180°F	Simmer	<b>185°F</b> (85°C)
	(71-82°C)	Slow Boil	<b>205°F</b> (96°C)
Low Simmer	<b>180°F</b> (82°C)	Rolling Boil	<b>212°F</b> (100°C)

### **Other Food Temps**

Bread: Rich Dough	<b>190-200°F</b> (88-93°C)	Butter: Chilled	<b>35°F</b> (2°C)
Bread: Lean Dough	<b>200-210°F</b> (93-99°C)	Butter: Softened	<b>60-67°F</b> (16-19°C)
Water temp to add active dry yeast	<b>105-115°F</b> (41-46°C)	Butter: Melted & Cooled	<b>85-90°F</b> (29-32°C)

# Candy or Sugar Syrup Temps (at sea level)

Thread	<b>230-234°F</b> (110-112°C)	Syrup
Soft Ball	<b>234-240°F</b> (112-116°C)	Fondant, Fudge & Pralines
Firm Ball	<b>244-248°F</b> (118-120°C)	Caramels
Hard Ball	<b>250-266°F</b> (121-130°C)	Divinity & Nougat
Soft Crack	<b>270-290°F</b> (132-143°C)	Taffy
Hard Crack	<b>300-310°F</b> (149-154°C)	Brittles, Lollipops & Hardtack
Caramel	<b>320-350°F</b> (160-177°C)	Flan & Caramel Cages



<sup>\*\*</sup> Chef-recommended temperatures are consistent with many expert sources for taste and safety. USDA-recommended temperatures are 5 to 10°F (2 to 5°C) higher.