



Digital Infrared Thermometer Gun Manual & User's Guide

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PACKAGE CONTENTS

- 1× Festa Digital Infrared Thermometer Gun (FPC-ITG-01)
- 2× AAA Batteries
- 1× Quick Reference Card

REGULATORY & LEGAL NOTICES

California Proposition 65 Warning: □ This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information: www.P65Warnings.ca.gov

FCC Compliance (Part 15 Class B — SDoC): This device complies with Part 15 of the FCC Rules and has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 Subpart B — Unintentional Radiators. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Laser Compliance: CLASS 2 LASER PRODUCT. Complies with IEC 60825-1:2014. Conforms to 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007. Do not stare into the beam.

Legal Notice: This product is protected by intellectual property rights and may be subject to pending patent applications. Unauthorized reproduction or use may result in legal action.

QUICK START GUIDE

Step 1 — Install Batteries Open the battery compartment on the handle. Insert two (2) AAA batteries with correct polarity (+/-) and close the compartment.

Step 2 Point at Surface Hold the thermometer approximately 12cm (5 in) from the target surface. Point through the oven opening — do not measure through the glass door.

Step 3 Pull & Hold Trigger Hold the trigger for at least 2 seconds. The laser activates for aiming. The Upper Display shows a live reading. Scan across the stone to identify hot and cold zones.

Step 4 Release & Read Release the trigger — the Upper Display holds the last reading. Press MODE to review MAX / MIN / AVG. Pull the trigger again to take a new measurement.

Step 5 Launch Your Pizza Confirm stone is at your target temperature (see Section 7), then launch. Use the thermometer between back-to-back bakes to confirm the stone has recovered.

⚠ WARNING: DO NOT point the laser at people, animals, or aircraft. DO NOT stare into the beam. Keep out of reach of children.

LASER SAFETY

⚠ CLASS 2 LASER PRODUCT — Do not stare into the beam. Avoid prolonged direct eye exposure. Maximum output: <1mW. Wavelength: 630–680nm (visible red). Complies with IEC 60825-1:2014. Conforms to 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.

Do not stare into the beam or view with optical instruments.

Do not point the laser at reflective surfaces. Keep children away while operating. Store out of reach when idle.

SAFE USE & CARE

⚠ WARNING: This thermometer measures surface temperature only — not internal food temperature. Do not substitute for a calibrated probe thermometer for food safety doneness checks.

⚠ WARNING: This thermometer is NOT for medical use. Do not measure human or animal body temperatures.

CAUTION: Accuracy is $\pm 3^{\circ}\text{F}$ ($\pm 1.5^{\circ}\text{C}$) within 14–302°F only; outside this range, $\pm 1.5\%$ of reading.

CAUTION: Allow the thermometer to acclimate for 5–30 minutes after a change in ambient temperature of $>10^{\circ}\text{F}$.

CAUTION: Allow steam, smoke, or airborne debris to clear before measuring.

Do not use while fatigued or under the influence of drugs, alcohol, or medication.

Do not use in rain, damp, or wet locations.



Do not use near explosive atmospheres (flammable fumes, dust).

Do not disassemble or tamper with internal components — doing so voids the warranty and risks electric shock or fire.

Never immerse the device in liquid.

Clean exterior with a damp cloth and mild soap only. Do not use solvents (gasoline, turpentine, ammonia-based cleaners, etc.).

Keep away from strong electromagnetic fields (e.g., arc welders, induction heaters).

BATTERY REPLACEMENT & DISPOSAL

When the low battery icon appears, replace batteries immediately.

1. Open the battery compartment on the handle.
2. Remove used batteries and dispose of per local regulations — do not place in household waste.
3. Insert two new AAA (1.5V) batteries with correct polarity (+/-).
4. Close the compartment securely.

⚠ If battery liquid contacts skin, flush with water. If it contacts eyes, seek medical help immediately.
Use two (2) 1.5V AAA batteries only with correct polarity.

Do not incinerate or dismantle batteries. Keep out of reach of children.

Remove batteries during extended storage.

FEATURES & SPECIFICATIONS



Key Features: HD Backlight · °F/°C Toggle · MAX/MIN/AVG Mode · Emissivity Adjustment · Low Battery Indicator · Auto Shut-Off (30s) · 12:1 Distance-to-Spot Ratio · 500ms Response Time

Specification	Value
Battery	2× AAA batteries, 1.5V each
Measurement Range	-58°F – 1202°F (-50°C – 650°C)
Accuracy	±3°F (±1.5°C) from 14–302°F (-10–150°C); otherwise ±1.5% of reading
Resolution	±1% / ±1°C
Wavelength	5µm – 14µm (IR sensing); 630–680nm (laser pointer)
Laser Class	Class 2, <1mW
Distance-to-Spot Ratio	12:1
Response Time	500ms
Emissivity	0.10 – 1.00 (Default: 0.95)
Operating Temperature	32°F – 104°F (0°C – 40°C)
Storage Temperature	-4°F – 140°F (-20°C – 60°C)
Backlight	Auto-off after 15 seconds
Auto-Off	30 seconds of inactivity
Low Battery Indicator	Activates below 2.3V
Part Number	FPC-ITG-01


DISPLAY & BUTTON FUNCTIONS

Key Features: HD Backlight · °F/°C Toggle · MAX/MIN/AVG Mode · Emissivity Adjustment · Low Battery Indicator · Auto Shut-Off (30s) · 12:1 Distance-to-Spot Ratio · 500ms Response Time




Specification	Value
Upper Display	Shows the latest temperature reading
Lower Display	Shows MAX / MIN / AVG temperature. In emissivity mode, shows current emissivity value
Trigger	Press and hold to take a continuous reading. Release to lock and display the last reading
 Button	Press once to toggle laser on/off. Hold 3 seconds to switch between °C and °F. In emissivity mode: lowers value
MODE Button	Cycles through MAX / MIN / AVG display. Hold 3 seconds to enter emissivity adjustment mode
 Button	Press to toggle backlight on/off. In emissivity mode: increases emissivity value
EMI Indicator	Appears when emissivity adjustment mode is active
Low Battery Indicator	Appears when battery voltage drops below 2.3V. Replace batteries immediately

OPERATION

 Cannot measure through glass. Allow steam, smoke, or debris to clear before measuring. Acclimate device for 5–30 minutes after significant ambient temperature changes.

1. Install batteries and press the trigger to activate.
2. Point at the target surface and hold the trigger for at least 2 seconds. The laser activates for aiming.
3. Scan continuously to see live readings on the Upper Display (MAX/MIN/AVG on Lower Display).
4. Release the trigger to lock the last reading.
5. Press MODE to cycle through MAX / MIN / AVG.
6. Pull trigger again for a new measurement.

Trigger Lock: Hold the  button for 3 seconds to toggle continuous scanning without holding the trigger.

PIZZA-SPECIFIC USE CASES & BAKING GUIDE

Step 1 Preheat the Oven Preheat for at least 15 minutes with both burners on high before taking a stone reading. Start stone rotation before igniting the bottom burner to ensure even heating.

Step 2 Verify Stone Temperature The mechanical gauge is calibrated for the green zone (750–850°F). For precise readings, use this thermometer — especially outside the green zone.

Green Zone (750–850°F): Gauge is reasonably accurate. Confirm with thermometer for precision.

Red Zone (>850°F): Gauge may overestimate. Verify with thermometer before launching.

Blue Zone (<750°F): Gauge may underestimate. Continue preheating and re-verify.

Hold the thermometer approximately 12cm (5 in) from the stone. Do not measure through the oven door glass.

Step 3 Launch at Target Temperature

Pizza Style	Target Temp (F)	Target Temp (C)	Cook Time	Baking Notes
Neapolitan	850-950 °F	450-510 °C	60-90 sec	Both burners high. Full 15-min preheat minimum. Watch top char; reduce top burner if browning too fast.
New York Style	750-850 °F	340-400 °C	3-5 min	Gauge green zone. Both burners on; reduce top burner slightly mid-bake to allow bottom to catch up.
Thin Crust (Tavern)	550-650 °F	285-345 °C	5-7 min	Reduce both burners to medium after launch. Monitor edges — thin crust can scorch quickly.
Sicilian / Detroit	500-600 °F	260-315 °C	10-15 min	Burners medium-low. Check stone temp mid-bake; reduce bottom burner if browning too fast.
Chicago Deep Dish	425-475 °F	220-245 °C	25-35 min	Lowest heat setting. Bottom burner low, top burner low-medium. Monitor stone does not exceed 500°F.

DISTANCE-TO-SPOT RATIO

This device uses a 12:1 D:S ratio — the measured spot diameter equals approximately 1/12 of the distance to the surface. For best accuracy, hold the thermometer approximately 12cm (5 in) from the target, and ensure the target area is at least twice the spot diameter.

EMISSIVITY SETTINGS

Emissivity measures a material's efficiency in emitting thermal radiation. The default setting of 0.95 is appropriate for most pizza surfaces. Reflective surfaces (raw aluminum, polished steel) have lower emissivity and may produce inaccurate readings.

Material	Emissivity
Pizza stone / Cordierite	0.95
Cast Iron	0.95
Ceramics / Tile	0.95
Painted Steel (Cart)	0.93
Hot Food Surface	0.93
Glass (Avoid)	0.85

Tip for reflective surfaces: Apply masking tape over the surface, allow 30 minutes to temperature-equalize, then measure the taped area.

To Adjust Emissivity:

1. Hold MODE for 3 seconds until EMI appears.
2. Use Δ / ∇ to decrease or \blacktriangle to increase the value (range: 0.10–1.00).

STORAGE & OPERATING ENVIRONMENT




Parameter	Range
Operating Temperature	32°F – 104°F (0°C – 40°C)
Storage Temperature	-4°F – 140°F (-20°C – 60°C)
Operating Humidity	10% – 90% RH non-condensing
Storage Humidity	10% – 75% RH non-condensing

- Store in a dry location away from heat, cold, and direct sunlight.
- Remove batteries before extended storage.
- Allow 30 minutes of acclimation after moving from a significantly different environment.

CARE & MAINTENANCE

- Wipe exterior with a damp cloth and mild soap only. Do not use solvents.
- Never immerse in liquid.
- Lens: Blow off loose particles with compressed air. Wipe with a water-moistened cotton swab, then dry with a second dry swab. Do not use solvents or abrasives on the lens.
- Allow device to cool to ambient temperature before storing after oven use.
- If corrosion is found on battery contacts, clean gently with a dry cloth or fine-grit sandpaper.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Display won't turn on	Dead or depleted batteries; incorrect polarity	Replace both AAA batteries; verify +/- orientation
Reading seems too low or too high	Incorrect emissivity setting; measuring reflective surface	Check emissivity setting (Section 9); apply masking tape to reflective surfaces
Inaccurate or fluctuating readings	Steam, smoke, or debris in air path; thermometer not acclimated	Allow air path to clear; allow 5-30 min acclimation
Laser won't activate	Laser toggled off	Press  button once to re-enable laser
Backlight not working	Auto-off triggered (15 sec); low battery	Press  button to toggle; replace batteries if persists
Reading won't hold / display blanks	Trigger released too quickly; auto-off triggered	Hold trigger for at least 2 seconds; press trigger again to reactivate
Readings vary on metal surfaces	Reflective surface with low emissivity	Apply masking tape; allow 30 min to equalize; adjust emissivity
Cannot measure through oven door	Glass blocks infrared signal	Measure through the oven opening, not the glass door
MAX/MIN/AVG not displaying	MODE not cycled	Press MODE button to cycle through display modes
Device auto-shuts off	30-second inactivity auto-off	Press trigger to reactivate; device is functioning normally
Wrong °C/°F unit showing	Unit not set correctly	Press and hold  button for 3 seconds to toggle

Still not working? Contact Festa Support at support@festapizzaco.com or (866) 792-7789.

WARRANTY & CUSTOMER SUPPORT

Use	Coverage
Residential	1 Year
Commercial (manufacturing defects only)	90 Days

Festa may repair or replace defective products at its discretion. No registration required — retain proof of purchase.

What Is Covered

Manufacturing defects in the display, laser, or measurement system
Button and trigger failures under normal use
Battery compartment defects affecting fit or electrical contact
Coating or finish failures not caused by misuse

What Is Not Covered

Normal wear and tear; cosmetic changes not affecting function
Damage from improper use, storage, or cleaning
Disassembly, tampering, or unauthorized modifications
Non-approved batteries or improper battery installation
Units purchased used, open-box, or from unauthorized resellers
Lost or stolen items; consequential or indirect damage

Limitations of Liability

TO THE EXTENT PERMITTED BY APPLICABLE LAW, FESTA PIZZA CO. DISCLAIMS ALL IMPLIED WARRANTIES AND SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OR INABILITY TO USE THIS PRODUCT. Some states do not allow limitations on implied warranties or the exclusion of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. To Make a Claim Email support@festapizzaco.com with your contact info, product name, proof of purchase, and a description of the issue. Festa will respond within 3-5 business days.

Customer Support

Email: support@festapizzaco.com
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