TABLETOP FURNACE COMPANY Building Better Kilns & Furnaces

RapidFire Programmable

Installation and Operating Manual December 2012

Thank you for choosing Tabletop Furnace Company as your designated kiln manufacturer. We take great pride in designing hand-made kilns and furnaces in the USA with our exclusive RAPIDHEAT TECHNOLOGY, which brings together quality components, detailed craftsmanship, and innovative design to produce some of the lightest and most powerful kilns on the marketplace today. For more information about our company or products, please visit us at www.tabletopfurnace.com or call **1.866.206.8410.**

For additional product support, please visit our Support Center at the following link, http://www.tabletopfurnace.com/supporthelp.html

PACKAGE CONTENTS:

- RAPIDFIRE PROGRAMMABLE KILN
- 1 ALUMINA-FIBER SHELF
- 1 SET OF KILN LEGS

For operation of your new kiln, please refer to the following instructions:

RAPIDFIRE PRO FEATURES & KILN USAGE INSTRUCTIONS

QUICK START FIRST FIRING GUIDE

STEP 1: Place furnace on a heat resistant surface, and for the first firing in a well-ventilated area, only during the very first firing will the furnace and kiln furniture produce a good amount of smoke while they burn off any moisture and sediment that come naturally in the ceramic insulation. (This burn off process usually lasts around 10-15 minutes. Once the burn off is complete you'll be left with a clean white internal chamber and kiln furniture once again.)

STEP 2: Plug in both power cords. One is for the furnace power and the other is to power the cooling fan. The cooling fan MUST BE RUNNING AT ALL TIMES WHILE THE FURNACE IS FIRING. It's also a good idea to run the cooling fan until the furnace is completely cooled off.

STEP 3: Flip the ON/OFF switch to the ON position

STEP 4: Following the provided <u>Supplemental Instructions</u> create a program similar to example 1 on pages 2 & 3, for the initial burn off, see example below. *Temperature of your unit is set to Fahrenheit*

STEP 1: C01=50° F (or ambient temp), t01=15 (rate of rise)

STEP 2: C02=1200°F t02=15 (maintain for 15 minutes)

STEP 3: C03=1200°F t03=15 (rate of rise to next step)

STEP 4: C04=1700°F t04=25 (maintain for 25 minutes)

STEP 5: C05=1700°F t05=-121 (stop the program and let the oven cool naturally -121 is the Program stop code)

Once it reaches 1700° F, using gloves, crack the door about an inch and allow the furnace to hold temperature while giving an ample amount of time to burn off any moisture and smoke, usually before the end of the last 25 minute hold. Be extremely careful to avoid contact with, and not to inhale any of the fumes emitting from the furnace at any time,

they can be dangerous!

What Happens during the program: The first temperature is the ambient temp, which will increase to 1200°F with a 15 minute rate of rise. It is set to hold at 1200°F for another 15 minutes, then the next step should increase the temperature to 1700°F with a 15 minute rate of rise, 25 minute hold and finally back down to 0°F.

The maximum recommended firing temperature for the kilns is 2200° F (1204° C). However, we recommend not exceeding 2100° F (1150° C) to prolong the life of your kiln.

STEP 5: After allowing enough time for the unit to cool, it is prepped and ready for normal every day usage.

KILN SAFETY GUIDELINES:

When operating a Tabletop kiln, please properly observe the following safety requirements:

- 1. The stainless steel jacket and some of the other fixtures surrounding the kiln will get hot enough to burn your skin when the kiln is heated. Therefore it is important to be extremely careful when working close to the kiln. Even after the kiln's power has been turned off, it will remain very hot for a considerable amount of time. It should not be touched or opened until it has fully cooled.
- 2. Use extreme caution when opening the kiln door while the kiln is heated. We recommend you use heavy-duty and heat-resistant gloves to protect your skin from the heated components and hot air that can escape from the chamber of the kiln when opening the lid (or door on frontloading kilns).
- 3. Keep children and pets away from the kiln when it is heated.
- **4.** The elements inside the kiln chamber may cause an electrical shock if touched. Never insert metal instruments into the element coil while it is firing or let steel firing trays touch element coils.
- 5. The unit has been equipped with a tip over switch to help prevent accidents.
- 6. Always be sure to unplug the kiln before working on the electrical components of the kiln.
- 7. Remove all potentially combustible or flammable materials from the kiln area and make certain that the kiln is at least six (6) feet from curtains, draperies, carpet or any combustible or flammable household items. The kiln should be used in a garage, a carport, a room meant for utility or for pursuing a hobby and the surface on which the kiln must rest on should be made of some element, which is non-combustible, such as, metal, ceramic or brick.
- **8.** Do not put anything on top of the kiln.
- 9. Use IR and UV protective glasses when looking into the kiln.
- 10. Your intended use of the kiln may cause release gases which can irritate the body and lungs; some of these may be toxic or lethal if proper safety measures are not observed. You should make sure the operating space for the kiln is properly ventilated, including but not limited to use a licensed heating and air-conditioning (HAC) contractor to ensure that adequate ventilation is achieved.
- 11. The toxic fumes given off by a ceramic kiln during firing include carbon monoxide released during reduction firing which can be lethal, sulfur dioxide released by firing metal-soluble salts which irritates the lungs and carbon dioxide which can elevate blood pressure dangerously. Therefore, observe these kiln-safety tips:

- Do not operate the kiln in a wet place
- Do not allow children or animals near a hot kiln.
- Electric kilns should not be plugged or unplugged unless the electric circuit is off and they should always be unplugged before making repairs.
- Be sure to turn all switches off before loading or unloading a kiln.
- 12. Complete product safety and State/Federal regulatory information for Gemcolite Alumina Fiber Insulation is available at the following link, http://www.rsifibre.com/pdfs/Gemcolite-MSDS-9-24-10.pdf
- **13.** You should never locate the kiln in an enclosed space or in a room where the temperature might tend to fall below 32°F or rise above 105°F. This causes damage to the components within the kiln.

PRODUCT WARRANTY:

All Tabletop kilns and furnaces include a 1-year limited warranty on electrical parts including; digital temperature controller, power switch, and relays. Ceramic firing chambers, element coils, and thermocouples are covered for 3 months, excluding normal wear and tear. Melting crucibles, crucible tongs, and ceramic fiber shelving is not included in the warranty scope. No Cash Refunds will be issued.

LEGAL DISCLAIMER:

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