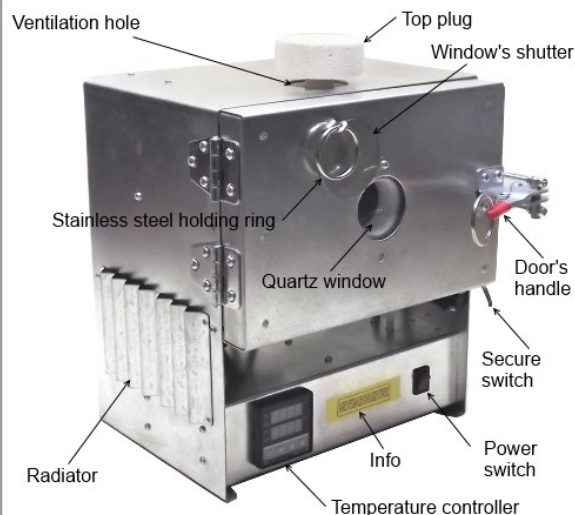


## R14-UP UNIVERSAL PROGRAMMABLE ELECTRICAL MUFFLE KILN USER MANUAL

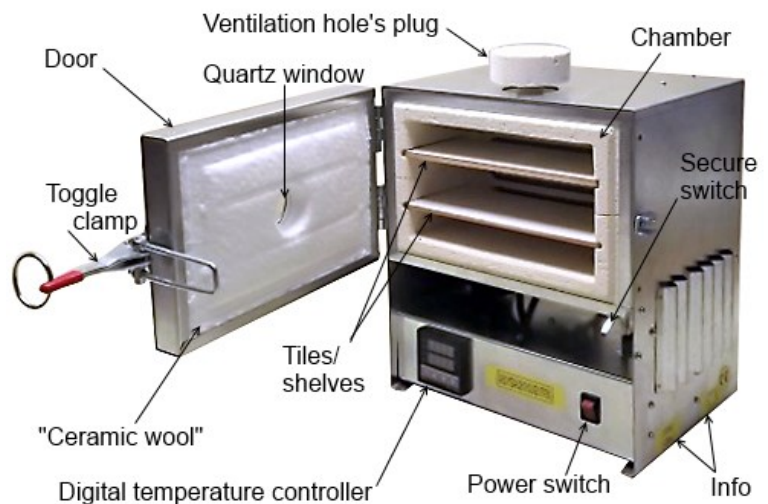
### PRODUCT INTRODUCTION:

This programmable, electrical muffle kiln is especially designed to heating up to 1000 C / 1832 F for work with most popular materials and processes such as: fusing and annealing glass, metals, enamelling, metal clays firing, waxes, stones etc. The R14-UP kiln has a programmable temperature controller that will allow you to control heating, soaking and cooling time as well as any temperature between a room temperature and 1000°C (1832°F) once settled. This model of kiln is supplied with two tile-shelves, one ventilation hole with a plug on the top and one 1.1/2" (40 mm in diameter) quartz window with a shutter on the door helps to monitor heating objects in process. This kiln reaches the maximum possible temperature of 1000°C (1832°F) approximately in 50 minutes depending of the quantity and size of heating objects inside the chamber. This kiln has also a toggle clamp on the door as a door's handle and, at same time, as a latch that allows you to open/close the door by one hand. Stainless steel rings on the toggle clamp and window's shutter will help you safety catch the clamp and shutter by gloves on top temperatures. This kiln also has a secure switch under the door that for your safety will disconnect a heating element inside the chamber when the door will opened or not closed properly.

Pic:1



Pic: 2:



### TECHNICAL SPECIFICATIONS:

MODEL:	R14-UP	ADJUSTED TEMPERATURE RANGE	0 C - 1000 C (32 F - 1832 F)
INPUT:	115/220/240V ON REQUEST	ACCURACY:	+/- 1 %
POWER:	750 WATT	INSULATION MATERIALS:	MUFFLE & CERAMIC FIBER
MAXIMUM TEMPERATURE:	1000 C / 1832 F	CRUCIBLE DIMENSIONS (MM):	175(W)x100x100(H)
		(INCH):	7"(W)x4"x4"(H)
ESTIMATED HEATING TIME TO 1000 C:	50 MINUTES	KILN DIMENSIONS WITH DOOR'S HANDLE (MM/INCH):	250(W)x250x275(H) 10"(W)x10"x11"(H)
MATERIAL OF CHAMBER:	MUFFLE (no asbestos)	QUARTZ WINDOW:	Yes
VENTILATION HOLE:	Yes + ceramic plate as a plug	TILE SHELF:	2
CONTINUOUSLY WORKING-TIME:	12 HOURS	WEIGHT:	4.8KG

## **PREPARING FOR WORK and FIRST STEPS:**

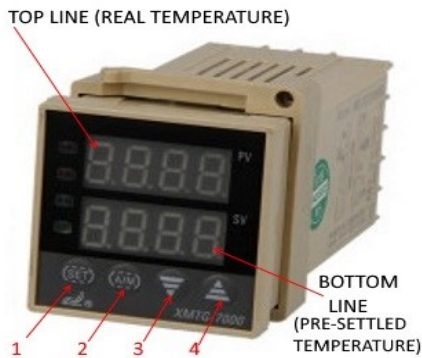
- Remove the kiln from its original box/s.
- ♦ Put this kiln on a heat-resistant work-top such as sheet of metal or a ceramic tile.
- ♦ Originally brand new programmable kiln's controller is already pre-settled at 100° C (10 minutes) on factory for chamber drying purpose. If the required temperature is different you can pre-set it your self at any time in future. The information is provided on next page in step-by-step instruction: [how to pre-set a required temperature](#).
- ♦ When *used for the first time cover the ventilation hole by ceramic cover*, close quartz *window* by moving the *window's shutter* by its ring and allow the kiln execute its factory pre-settled program to evaporate water, oil and other materials from the chamber and the inside of the kiln (light smoke can be seen in few minutes). Otherwise there is a risk of causing small cracks to the chamber. Let the kiln cooling down in full before re-program and start your work. If this kiln will used less than once per month please repeat this process each time before use.

**Now you can connect your kiln to a power source and start your work.** For this:

- Before connect it to a power source please check that the kiln's power switch on front panel is turned 'OFF'.
- Open kiln's door by pooling a red-handle toggle clamp on right side of kiln (See Pic 2) by stainless steel ring.
- If you need it - insert inside the chamber (in special slots) one or two shelves.
- If you need it - take out the top ventilation hole's cover to allow smoke easily go out from inside of the chamber during a firing process.
- Place inside chamber firing object/s. To avoid an electrical shock please make sure that these object/s or accessories inside the chamber accidentally do not contacted heating element on back wall of the chamber when door will be closed.
- Close the door back by its toggle clamp. When you closing the door please ensure that the secure switch on right side of kiln under the door will be properly pressed down by the door to "Click" and is NOT smashed between the door and body of kiln. Please do NOT unbend this switch by any purpose - it can cause an electrical shock when you will accidentally contact the heating element in future by, for example, hand or a metal tweezers. This is a secure switch that installed on your kiln by reason.
- Now close the quartz window moving the shutter by its stainless steel ring anti-clockwise: it will help you to avoid heat leaking through the window to reach a required temperature inside the chamber quicker and cheaper. Open this window only when checking firing objects.
- Now press on Power switch (Pic 1) - to pre-set required temperature/time setting and start your work.

## **TEMPERATURE CONTROL (how to pre-set the required temperature/time):**

The programmable temperature controller (XMTG-7000) is already settled up by the manufacturer for a chamber drying purpose if customer did not asked other setting. If you want to re-program this controller please refer to the controller's user manual or contact us for help on Skype. In any way you can find some useful tips on the controller below:



1. *"SET" - setting/confirmation button. To be used for setting all controller's parameters.*
2. *"Arrow Left" or "A/M"- segment's selector (to choose any one from four segments).*
3. *"Arrow Down" - value decrement (Used to set up a required temperature).*
4. *"Arrow Up" - value increment (Used to set up a required temperature).*

Example of program: From room temperature ramp up to 450 C for 99 minutes, soak this temperature 4 minutes and ramp down to room temperature for 145 minutes:

Open the door of your kiln for initiate the safety-switch mechanism for disconnecting a power supply from heating element/s and avoiding the kiln's heating during all re-programming process or just press button No:4 for 3 seconds until get on bottom line "Stop" sign. Now you can start re-programming your controller.

For starting programming short-press on "SET": you'll see on TOP line C1 (First segment from 32 segments total) and insert on BOTTOM line a room temperature (usually = 20 C) - 0020. Now press "SET" for remembering first segment' temp. parameter and go to next step «Г1» to pre-set required TIME for NEXT temperature parameter (0450 C). For this just insert on BOTTOM line using buttons 2-3-4, "0099" (minutes) and press SET again to remember this parameter as well and for getting on screen "C2". (second temperature parameter). As usually, using buttons 2-3-4 insert on bottom line "0450" and press "SET" again to go to next parameter "Г2" for pre-setting soaking time = 0004 (minutes). Press "SET" again to see "C3" for confirming on bottom line the required soaking temperature = 0450. Now press "SET" again for pre-setting («Г3») required time for ramping down temperature in your kiln to room temperature 20 C = 0145 (minutes) and press SET again for pre-setting the required room temperature: 0020. That's it. Now finish reprogramming by pressing on SET button again for inserting on bottom line "0000". Your program will be automatically finished as soon as last parameter will be reached.

- A. When you finish re-programming the controller: short-click on the "SET" button or just leave this controller for about 30 seconds for remembering new setting and starting your work.
- B. Close the kiln's door for disconnecting the safety-switch mechanism and allow your kiln to start heating up or press 3 second on button No:3 until get a sign "Run" if you pressed button 4 before.
- C. Important: you'll have about 20-30 seconds to change EVERY segment. Please do not worry if you lose this time and controller re-starts to show you a real temperature inside the chamber. Just re-start the re-programming process by short-pressing on "SET" button for 3 seconds again. If you are a beginner and have difficulty to re-program your controller please feel free to contact the manufacturer or agent/shop for free help with this matter during all warranty period.
- D. You can find detailed information about the controller settings and all his functions in the controller's user manual, but we do not recommend you to change the manufacture's setting yourself as it can cause loss of factory setting that may will require full re-setting and/or re-calibration of the controller in future that is not under warranty.

**DELIVERY SPECIFICATION:**

- R14-UP-1000C (Universal) programmable electrical muffle kiln;
- Two tile-shelves;
- One top ventilation hole's ceramic cover (round, rectangular or in square form);
- Downloadable User manual with other useful information;
- One year manufacturer warranty.

**SAFETY AND USEFUL TIPS FOR BEGINNERS:**

- ♦ Always work with heat-resistant gloves because this kiln is very compact and gets hot whilst working on high temperatures.
- ♦ Always place this kiln on a heat resistant work-top. A masonry or concrete floor is recommended, but other protective material like metal or ceramic tiles can be used as well.
- ♦ Do not open the window by shutter too often. Each time you open it temperature inside the chamber drops and it will require more time to re-heat.
- ♦ If not in use please disconnect it from a power supply.
- ♦ Keep away from all inflammable materials and from any heating devices.
- ♦ Keep out of reach of children.
- ♦ Please make sure that all firing object/s or/and accessories inside the chamber are not accidentally contact heating element/s on back wall. It may cause damages on the heating element/s that is not under warranty.

**KEEP OUT OF REACH OF CHILDREN AND NEVER LEAVE IT UNATTENDED IN WORK**

**DANGER: This is an electrical, high temperature equipment: always follow all health and safety rules and regulations for this equipment in your country.**

**MADE IN UK**