

# X-100 MicroOven

**Low temperature oven for preheating  
cell phones and tablets prior to  
replacement of the broken glass**



P/N X-DOC220  
Nov/2016  
Rev. A

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**Table of Contents**

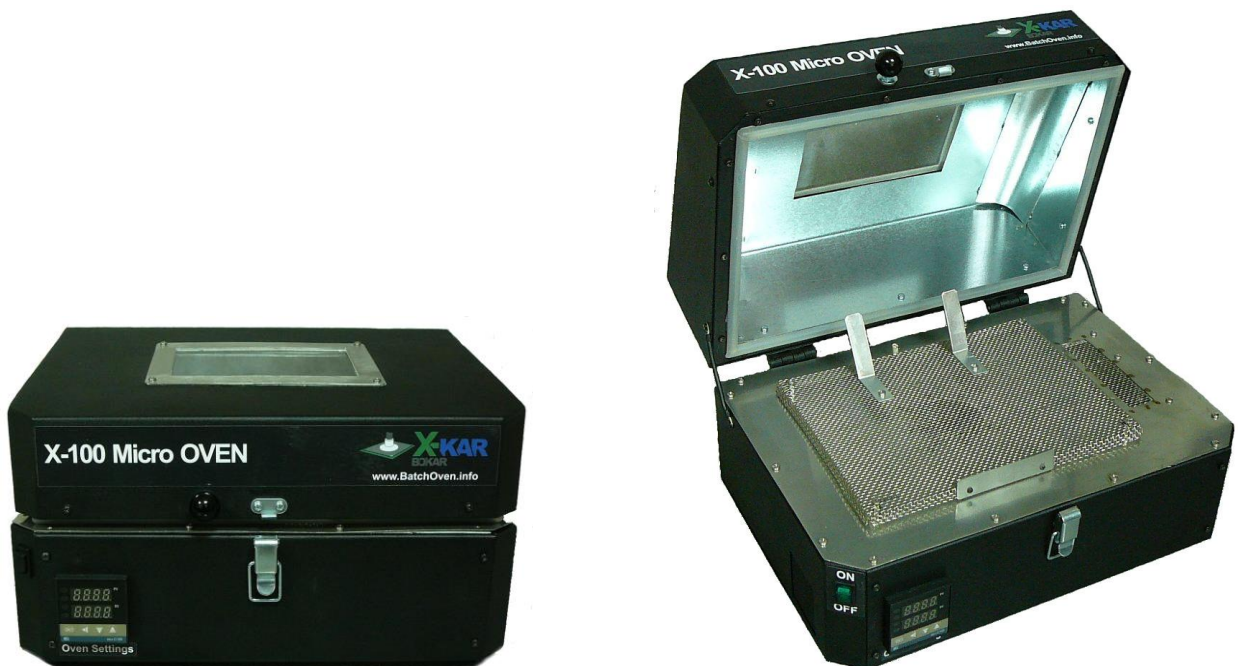
Page

I. Introduction	<b>Error! Bookmark not defined.</b>
II. Safety	<b>Error! Bookmark not defined.</b>
III. Package content	<b>Error! Bookmark not defined.</b>
IV. Unpacking	<b>Error! Bookmark not defined.</b>
V. Basic Information	<b>Error! Bookmark not defined.</b>
VI. Installation	<b>Error! Bookmark not defined.</b>
VII. Description and applications	<b>Error! Bookmark not defined.</b>
VIII. Technical specifications	<b>Error! Bookmark not defined.</b>

**I. INTRODUCTION**

The X-100 MicroOven was designed to preheat smart phones and tablets prior to the replacement of the broken glass. It is a pure convection system which guarantees the best uniform preheat od an entire phone or a tablet. It is set-up for maximum temperature 90 deg. C which is the recommended limit for a preheat for some smartphones.

The space in the heating chamber is sufficient for one tablet or up to 3 smartphones. The preheat time of the object in the oven will depend on the mass of the object. For most smartphones will the preheat time will not exceed 3-5 min.



PIC 1. View of the System

## II. SAFETY

This section of the manual is to inform the user how to use and service the X-100 MicroOven safely. "NOTES", "SAFETY PRECAUTIONS", "WARNINGS" i "DANGER" will appear in the manual when necessary. Please see an example below:

<b>NOTE</b>
XX

### NOTE

NOTE is use to underline advise of the manufacturer. It may concern directly or indirectly the safety of the operator or to avoid the malfunction or damage of the oven. NOTE has a general caracter and is used to inform and not to advise precaution, warn or indicate danger.

### SAFETY PRECAUTION

Safety Precaution is used to describe the dangerous situation which may cause minor or more painful wounds. Precaution may be also used to warn against situations/actions which may cause partial malfunction or serious destruction of the unit.

### WARNING

Warning is used to remind about specific rules when using the equipment. Failure to obey a safety warning could result in serious injury or death to the operator or to others. Always follow the safety precautions to reduce the risk of electric shock, fire or personal injury.

### DANGER

Danger provides additional information on use of the equipment. Failure to follow and use this information may result in destruction of the equipment and death of the personnel.

### GENERAL SAFETY PRECAUTIONS

General Safety Precautions are the points which the personnel must understand and respect when operating and servicing this product. They may but will not necessarily be quoted again in the other parts of this manual.

1. All metal elements inside the oven (mesh, upper and lower chamber body are hot when the oven is operating and for some time after it is switched-off and opened. Please do not touch with bare hands the hot metal parts and do not place your hand over the hot air stream. If you do, you endanger your body. Hot air and hot metal parts may cause burns.
2. Use the oven in a well ventilated areas
3. Exercise precaution when using heat and chemicals. If you do please check carefully MSDS for these chemicals before exposing them to the heat from your oven.
4. There is a potential danger of the electric shock when using products powered by electricity. All repairs and periodic service shall be done by qualified personnel. Before opening the covers to reach inside of the unit disconnect the power cord from the electrical outlet.

### Note:

When servicing the oven use only original parts from Bokar International.

## III. THE CONTENT OF THE PACKAGE

1. X-100 MicroOVEN
2. The power Cord
3. Manual
4. Warranty Card

Bokar International 650 Scranton-Pocono Hwy., Covington Twp., 18444 PA USA  
1-570-842-2812 e-mail: [bokar@bokar.com](mailto:bokar@bokar.com) [www.bokar.com](http://www.bokar.com)

## IV. UNPACKING

Please check the content of your package after delivery to your facilities. In case of missing parts or damage in transport please notify immediately the distributor from whom you have ordered the unit. When filing a claim please include: Product name, Model, Supply Voltage, and the name of the distributor. All claims must be filed within 7 days from the receipt of the product.

Warning
When unpacking and connecting the unit to the power source for the first time please check your supply voltage and read the manual. The supply voltage must be compatible with the rated voltage on the received unit. Connecting to a differend voltage may cause temporary or permanent damage to the system

## V. BASIC INFORMATION



Pic 2. View of the MicroOven

1. **ON OFF RUN Switch** – Top position: ON/SET, Central Position OFF, Bottom position RUN/SET
2. **TEMPERATURE CONTROLLER** – Top Display=Actual temperature, Bottom Display= Set Temperature
3. **TOP COVER LOCK.**
4. **HANDLE** to lift and lower the Top Cover
5. **Viewing Window.**

## VI. SET-UP

### Power Requirements

X-100 MicroOVen uses 900W. Power outlet must be grounded.

### Set-up on the bench

1. Unpack the MicroOven. Save the original packaging in a safe place. Use of the original package will prevent the damage to the MicroOven when stored or transported to another location.
2. System powinien być umieszczony na twardej i stabilnej powierzchni.
3. Check if the ON/OFF/RUN switch is in the central position.
4. Connect the power cord
5. Set the ON/OFF/RUN switch to the top position
6. Set desire temperature on the temperature controller
7. Place a phone or a tablet inside the oven and close top cover. Secure the latch.
8. Place the ON/OFF/RUN switch in the bottom position to start the heating process.  
Note: For the best results keep the oven running at all times and insert the load into the oven when it already reached the set temperature.

## VII. DESCRIPTION AND APPLICATIONS

The X-100 MicroOven is a convection oven for preheat objects to temperatures up to 100 deg. C. The MicroOVen was designed for a primary use when replacing broken screen glass of the cellular phones. The unit has enough space inside to preheat up to three smartphones or one tablet which is not larger than 10" diagonal. Pure convection guarantees the best preheat and temperature uniformity of the preheated object. MicroOven can also be used to preheat variety of objects like:

- Solder paste syringes removed from the cold storage prior to their use with the dispensers
- Curing the potting resins when protecting areas on PCB's or other electronics

### Starting the Oven



Pic. 3 View of the Controller

## Convection, Low Temperature MicroOven

### 1. ON/OFF/RUN Switch:

- Central position: OFF
- Top position – Power ON to allow the operator to set desire temperature.
- Bottom position– RUN

### 2. Temperature Controller

**PV** – Top Display shows actual temperature .

**SV** – Bottom Display shows set temperature




SET – pressing set allows for set temperature change





Left arrow – moves the active position for a digit change.



Up and down arrows – allow to set required digit (0 to 9)

To set required temperature press „SET” . Lower display **SV** will start blinking.

Using  select the place of the digit which you want to change.

Then, using  set required digit value.

To confirm your setting press again .

Bottom display will stop blinking and the controller is set to heat to the set temperature.

To change set temperature you need to repeat the described above setting sequence.

## VIII. Technical Specifications

Voltage	115 V AC 60Hz or 230V AC 60 Hz
Power	890W
Fuse	4A
Temperature range	Room temperature to 90°C
Temperature control	PID, Temperature sensing by thermocouple type "K"
Heating chamber size	D=11,81" x Sz=7,87" x W=2,76"-3,94 (D=300mm x Sz=200mm x W=70-100mm)
Heater	One heater 880W ,
Tablet maximum size	10" diagonal
Viewing window size	5.43"x3.03" (138x77 mm)
Outside dimensions	D=13,78" x Sz=10,63" x W=8,86" (D=350mm x Sz=270mm x W=225mm)
Weight	14,36 lbs. (6,5 kg)
Packaged weight	19,9 lbs. (9 kg)



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