# KINGSOM KS-205 (150W) KINGSOM KS-205DH (150W)

High-Power Intelligent Lead Free Soldering Station

High Frequency Heating Rapid Recovery of Temperature

**Operation and Maintenance Manual** 

Thank you for purchasing a Intelligent Lead Free Soldering Station. It is designed for lead free soldering. Please read this manual before operating the unit. Store this manual in a safe, easily accessible place for future reference.

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#### **Precautions**

In this instruction manual, "Warning", "Caution" and "Note" are defined as follows.

# **WARNING**

WARNING: Misuse may potentially cause death of, or serious injury to the user.

CAUTION: Misuse may potentially cause injury to the user or physical damage to the objects involved.

For your own safety, be sure to comply with these precautions.

NOTE: A NOTE indicates a procedure or point that is important to the process being described.

# **ACAUTION**

When the power is on, the tip temperature is very high. Since mishandling may lead to burns or fire, be sure to comply with the following precautions.

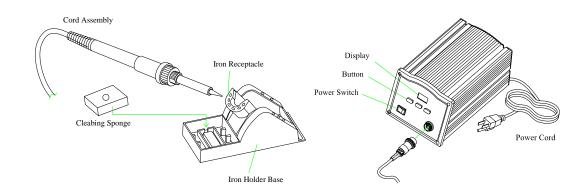
- Please avoid an abuse of the equipment, use the appliance only in the described way.
- Don't touch the metallic parts near the Tip.
- Don't use the product near flammable items.
- Advise other people in the work area that the unit can reach a very high temperature and should be considered potentially dangerous.
- Turn the power off while taking breaks and when finished using the unit.
- Before replacing parts or storing the unit, turn the power off and allow the unit to cool to room temperature.

To prevent damage to the unit and ensure a safe working environment, be sure to comply with the following precautions.

- Appliance shall only be used with rated voltage and frequency. (Refer to the trademark back of equipment.)
- Don't use or stop the use if the appliance is damaged, especially the supply cord.
- This machine is equipped with a 3-wires grounding plug and must be plugged into a 3-terminal grounded socket. Do not modify plug or use an ungrounded power socket. If an extension cord is necessary, use only a 3-wire extension cord that provides grounding.
- Do not use the unit for applications other than soldering.
- Do not rap the soldering iron against the work bench to shake off residual solder, or otherwise subject the iron to severe shocks.
- Do not modify the unit.
- Use only genuine replacement parts.

- Do not wet the unit or use and disconnect the unit when your hands are wet and without to force the supply cord.
- The soldering process will produce smoke, so make sure the area is well ventilated.
- While using the unit, don't do anything which may cause bodily harm or physical damage.
- Children don't recognize the risks of electrical appliances. Therefore use or keep the appliance only under supervision of adults and out of the reach from children.

#### **Names of Parts**



### Setting up & Operating the soldering station

CAUTION: The sponge is compressed. It will swell when moistened with water.

Before using the unit, dampen the sponge with the water and squeeze it dry. Failure to do so may result in damage to the Soldering tip.

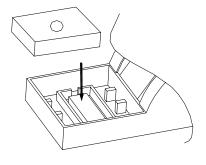
#### **Iron Holder**

1.Small Cleaning Sponge

Dampen the small cleaning sponge with water and then squeeze it dry.

Place it in one of the openings of the iron holder base.

2. Add water to the approximate level as shown. The small sponge will absorb water to keep the large sponge above it wet at all times.



- \*The large sponge may be used alone (without small sponge & water).
- 3. Dampen the large cleaning sponge and place it on the iron holder base.

#### **Connections**

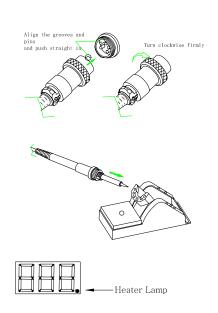
VCAUTION: Be sure to turn off the power switch before connecting or disconnecting the soldering iron. Failure to do so may result in damage to the soldering station.

- 1. Connect the cord assembly to the receptacle.
- 2. Place the soldering iron in the iron holder.
- 3. Plug the power cord into a power supply. Be sure to ground the unit.
- 4. Turn the power switch on.

The temperature is preset at  $300^{\circ}$ C or  $350^{\circ}$ C at the factory.

The heater lamp flickers when the temperature has stabilized.

 Press the \* button to display the preset temperature. It will be displayed for two seconds.



#### **Setting the temperature**

<u>Set Temperature Normally</u>

V CAUTION: Make sure the temperature of the station can be adjusted (password is OK or the password is initial). While setting the temperature normally, the heating element is off.

If the "\*" button is pressed for less than one second, the present temperature setting will be shown for two seconds and then the display will return to showing the tip temperature.

#### Example:400°C to 350°C

1.

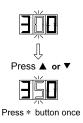


- 1. Press the \* button and hold it down for at least one second. The left-most digit (the 100's digit) in the display will flash. This indicates that the station is in temperature setting mode and that the 100's digit can be adjusted.
- 2. Select the desired value for 100's digit. Using the ▲ or ▼button will change displayed





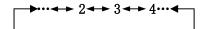
3.



4.



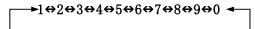
value as follows.



Press the \* button when the desired value is displayed. This will cause the middle digit (the 10's digit) in the display to begin flashing.

3. Select the desired value for the 10's digit.

Using the ▲ or ▼ button will change displayed value as shown below.



Press the \* button. The right (the 1's digit) will then begin flashing to indicate that the 1's digit can be set.

4. Select the desired value for the 1's digit. Using the ▲ or ▼ button will change the displayed value as shown above for the 10's digit selection.

Press the \* button. Here, pressing the \* button.....

- A. enters the temperature setting into the internal memory.
- B. displays the temperature setting, and
- C. starts heater control

**Note:** If you turn off the power switch during the temperature setting, setting value will not be stored in the memory. If a temperature value outside of this range is selected, the display will return to flashing the 100's digit. If this happens, input a correct temperature value.

#### Set temperature on-line

In the work, if it is necessary to set temperature quickly and the heat elements can't be cut off, the way may be selected.

Temperature rising:

Don't press \* button, and press ▲ button directly. If so, the setting temperature will raise one degree centigrade and the display window will display the set temperature. When loose the ▲ button, the display window will delay the set temperature about 2 seconds. If within 2 seconds of

time, press the  $\triangle$  button again, the setting temperature will raise one degree centigrade again. If press the  $\triangle$  button and not loose at least 1 second, the setting temperature will rise rapidly. Till the needed temperature reaches, then loose the  $\triangle$  button. Temperature dropping:

Don't press \* button, and press  $\blacktriangledown$  button directly. If so, the setting temperature will drop one degree centigrade and the display window will display the set temperature. When loose the  $\blacktriangledown$  button, the display window will delay the set temperature about 2 seconds. If 2 seconds later, press the  $\blacktriangledown$  button again, the setting temperature will drop one degree centigrade again. If press the  $\blacktriangledown$  button and not loose at least 1 second, the setting temperature will drop rapidly. Till the needed temperature reaches, then loose the  $\blacktriangledown$  button.

#### **Parameters**

The station has the following parameters. Parameters settings can be adjusted.

#### Setting the password

The initial password in station's memory is 000. The setting temperature is admitted in this state. If need to restrict the setting temperature, the password must be changed.

#### **Enter into Setting The Password**

- 2. Continue holding down the ▲ and ▼ buttons until the display shows .
- 3. When the display shows the station is in parameter-input mode.
- 4. Press the \* button, the display shows

  , and the left-most digit (100's digit)
  in the display will flash. This indicates the
  station is in password setting mode and the
  100's digit can be adjusted. Using the ▲ or

  ✓ button will change displayed value. Set
  the password value in the same way described
  in "Set Temperature Normally". After
  selecting the password of three digit, press \*
  button.
- 5. If the display window shows the present setting temperature, two seconds later, the station is in normal work state. This indicates

#### **Input Previously Password**

The Password of input is error

#### The Password of input is correct

#### **Input New Password**

#### Repeat the New Password

the password of input is error, and the temperature setting can't be done.

- 6. If the display window shows indicates the password of input is correct. After displaying about 4 seconds, the station comes into normal work state, and the setting temperature will be admitted.
- 7. When display window is showing . It indicates the station comes into inputting new password state. Pressing ▲ or ▼ button will change displayed value. See "Set Temperature Normally".
- 8. When three digits are selected, press \* button, the display window shows again. Now must input the new password. Repeat the same steps.
- 9. If the password is the same as last time, the changed password is OK. The new password is stored into the internal memory.
- 10. If the password is not the same as last time, and the display window shows , the station will need to rewrite new password. (see the last 8—9 steps). The changing of password is finished until the lately two passwords are identical.

Note: The word of password is 0 to 9, ten words. If not, the changed password is unsuccessful.

#### **Working Mode Setting**

If the display window shows  $\square$ , press and hold the  $\triangle$  and  $\triangledown$  buttons simultaneously, then the display shows  $\boxed{X}$ . This indicates the unit comes into working mode setting state, and

pressing ▲ or ▼ button will change displayed value as shown below:

After selecting the working mode, press\* button down. The working mode is stored into the internal memory.

Please refer to the "Working Mode Table" for the meaning of the digit displayed.

Note: X represents the original working mode digit.

**★Warning:** The heater and soldering tips will be

seriously oxidized or damaged when working with a high temperature. So please choose the working mode carefully and try to operate with a lower temperature if possible.

