X-TRONIC USA



X-Tronic[™] Model #6040-PRO Instructions

PLEASE READ THIS MANUAL BEFORE USING YOUR NEW X-TRONIC Model #6040-PRO SOLDERING STATION

This manual is provided to make a safe and effective use of the X-Tronic 6040-PRO soldering station and to maintain this instrument in proper working condition. Be sure to keep this booklet in a handy place near the unit for future reference.

Model	#6040-PRO								
Power Consumption	≤ 700 Watts								
Voltage	AC 110V ± 10% 60Hz								
Dimensions	4 x 6 x 5 in								
Weight	6.2 lbs								
Working Environment	32°F ~ 104°F / 0°C ~ 40°C								
Storage Environment	-4°F ~ 176°F / -20°C ~ 80°C								
Storage Humidity	35% - 45%								
Hot Air Rework									
Airflow Type	Brushless Fan								
Airflow	≤ 120 L/min								
Temperature Range	212°F ~ 896°F / 100°C ~ 480°C								
Temperature Stability	± 2°C								
Display Type	Digital								
Cable Length (Material)	≥ 39.4 in / 100 cm (Silicone)								
Noise	≤ 45dB								
Soldering Iron									
Soldering Iron Power	60W								
Temperature Range	392°F ~ 896°F / 200°C ~ 480°C								
Temperature Stability	± 1°C								
Output Voltage	24 V AC								
Tip Impedance	< 2Ω								
Display Type	Digital								
Cable Length (Material)	≥ 39.4 in / 100 cm (Silicone)								

SPECIFICATIONS

PANEL DIAGRAM



- 1. °C / °F Indicator for Hot Air Gun
- 2. Hot Air Gun Temperature Display
- 3. Hot Air Gun Modes
- 4. Temperature Stabalization Light for Hot Air Gun
- 5. Hot Air Gun Quick Conversion Button
- 6. Temperature Adjustment Buttons for Hot Air Gun
- 7. Air Flow Control Knob
- 8. Hot Air Gun Power Switch

- 9. Hot Air Gun Power Receptical
- 10. Soldering Iron Temperature Display
- 11. °C / °F Indicator for Soldering Iron
- 12. Temperature Stabilization Light for Soldering Iron
- 13. Calibration mode indicator for both Soldering Iron and Hot Air Gun
- 14. Sleep Time Setting for Soldering Iron
- 15. Temperature Adjustment Buttons for Soldering Iron
- 16. Soldering Iron Power Switch
- 17. Soldering Iron Power Receptical

INITIAL SET-UP

- 1. Plug the 3-Prong AC cord into a 110/120V grounded outlet to prevent electric shock or injury.
- 2. Turn the power on by pushing the power switch on the back of the unit. Both LED displays will show "---" and will be blinking.

HOT AIR GUN

- 1. **IMPORTANT:** Insert the hot air gun into holder on the side of the unit. If the hot air gun is not mounted in the holder, it cannot be programmed.
- 2. Plug the Hot Air Gun into the front power receptacle on the left side of the unit and tighten the ring nut.
- 3. Turn on the Hot Air Power Switch on the lower left hand side of the unit the LED display will show the last used hot air temperature for about 2 seconds and then change to "- -". This means the hot air gun is ready to be programmed.
- 4. Push the blue "Up" or "Down" arrows on the left side of the unit to set the hot air gun temperature. The temperature will blink to indicate it is being set. When the temperature has been selected the LED Display will show "- - -" indicating the hot air gun is now in the Standby State and set at the programmed temperature.
- 5. When the hot air gun is removed from the holder it will start blowing air and ramp up to the programmed temperature in about 8 seconds.
- 6. When the hot air gun is not in use- set it back in the holster, it will keep blowing air until the temperature gets back down to 100°C and then the airflow will stop.
- 7. When the hot air gun is removed again from the holder it will start blowing air and ramp up to the programmed temperature in about 8 seconds. This is a safety feature built into the unit.
- 8. To turn the hot air gun completely off turn off the power switch on the left side of the unit.

IMPORTANT: Do not unplug the unit or shut off the Main Power Switch on the back of the unit until you have placed the hot air gun in the holder and it has cooled down and shut itself off automatically.

SOLDERING IRON

- Note: Before placing the soldering iron in the holder and turning it on, remove the lid of the rosin flux that sits below the soldering iron tip when it is in the holder.
- 1. Plug the Soldering Iron into the front power receptacle on the right side of the unit and tighten the ring nut. Place the soldering iron in the soldering iron holder provided.
- 2. Turn on the soldering iron power switch the LED display will light up and show the last temperature that the soldering iron was used at and begin to heat up to that temperature.
- 3. To adjust the temperature of the soldering iron, press the blue "Up" or "Down" arrows on the right side of the unit. The display will blink indicating that the temperature is being set. When the temperature has been set, the unit will stop blinking after about 3 seconds and the soldering iron will start to heat to the newly set temperature.
- 4. To turn the soldering iron completely off turn off the power switch.

ADJUSTING AIR FLOW

- 1. Take the hot air gun out of the holder it will start heating and blowing.
- 2. Adjust the air flow with the Air Flow Control Knob from 20 up to 99. *Important:* When using a temperature higher than 300°C on the hot air gun make sure the air flow is set at 45 or higher. This will prevent damage to the hot air gun and increase the life of the heating element.

FUNCTION OPERATIONS

HOT AIR GUN COOL MODE

When the hot air gun is in use, press the airflow control knob quickly to change the heated air to "COOL" mode. "COOL" will light up on the screen and the hot air gun will stop heating and the air will drop to room temperature. To re-activate the heat mode, simply press the airflow control knob again quickly and the hot air gun will resume heating.

HOT AIR GUN AUTO/MANUAL MODE

When the hot air gun is in its holder on the side of the unit, it will automatically go into a cool down mode. The hot air gun will continue to blow air while it cools down to room temperature and then stops blowing air. When the hot air gun is removed from the holder it will immediately start the air flow again and heat up to the set temperature. When this AUTO mode is on, AUTO will display on the screen.

If a project requires you to take it out of AUTO mode briefly, press the AUTO/MAN button above the airflow control knob and the screen will change to MANUAL. At this point the hot air gun will start to blow air and heat up, even if it is in the holder.

NOTE: This unit should ALWAYS be used in Automatic mode for safety purposes. It is very rare that manual mode is need.

Using Manual mode will also greatly reduce the life of the heating element in the hot air gun.

SOLDERING IRON SLEEP FUNCTION

When the soldering iron is placed in the holder, the iron will go into sleep mode after 2 / 10 / 30 minutes (depending on what it is set at). The display will show "SLP" to signify this and the temperature of the soldering iron will ramp down to $392^{\circ}F$ / $200^{\circ}C$. When the soldering iron is removed from the holder to use again, the temperature of the soldering iron will ramp back up to the temperature it was previously being used at within 5-10 seconds.

SETTING THE SOLDERING IRON SLEEP TIMER

- 1. Ensure the soldering iron is in the soldering iron holder.
- 2. Turn on the power switch.
- Press and hold the aluminum air flow adjustment knob for about 2 seconds. The time options will light up and the option currently selected will blink.
- 4. There are four options for how long the unit sits idle until the sleep timer kicks in:0, 2, 10 or 30 minutes. If you select 0, the unit will NOT go into sleep mode (this can reduce the life of your soldering iron and heating element).
- 5. Adjust the temperature knob to select the sleep time. When the display indicates the sleep time you would like, press the airflow adjustment knob two times to save the setting and exit the programming mode.

TEMPERATURE CONVERSION

- 1. Ensure the soldering iron and the hot air gun are in their respective holders.
- 2. Turn on the power switches.
- 3. Press and hold the aluminum air flow adjustment knob for about 2 seconds. The sleep time options will light up, the press the knob one more time.
- 4. The °C or °F both light up, the one that is currently chosen will blink.
- 5. Turn the airflow adjustment knob to select either °C or °F.
- 6. Press the airflow adjustment knob one time to save the setting and exit the programming mode.

TEMPERATURE CALIBRATION

- 1. Turn on the power switch for either the hot air gun or the soldering iron, depending on which one you are calibrating.
- 2. Remove the hot air gun or soldering iron from their holders they need to be at the temperature you have set and not in sleep mode. *Note: The temperature for the hot air gun will vary based on the distance from the source.*
- 3. If the independently measured temperature varies from the temperature set on the unit, press and hold the "Up" and "Down" buttons for 2 seconds for the respective device you are calibrating until the display flashes. "CAL" will light up on the screen and the temperature being calibrated will flash.
- 4. Enter the measured temperature into the flashing display by rotating the airflow adjustment knob.
- 5. Once the flashing temperature shows the correct temperature, press the Air Adjustment Knob to save the calibrated temperature and exit the programming mode.

MAINTENANCE

Do NOT put excess pressure on the tip. It can damage the element.

REPLACING SOLDERING IRON TIP

- 1. Turn off the soldering station, unplug the power cord from the power source and allow the soldering iron to cool down to room temperature. **Never attempt to remove the tip while the iron is hot.**
- 2. Unscrew the larger metal tip retaining screw ring at the bottom of the soldering irons metal shaft. Slide off or remove the soldering tip retaining collar. Now, remove the tip by sliding it forward.
- 3. Slide a new tip over the exposed ceramic heating element, slide the metal retaining collar over the new soldering tip back onto the soldering iron.
- 4. Tighten the metal tip retaining screw ring to snug the tip into place. Do not over tighten the tip retaining screw
- 5. Plug the soldering iron AC cord into a grounded outlet to resume soldering.

REPLACING HOT AIR GUN NOZZLE

- 1. Turn the power off to the unit and unplug it from the power source.
- 2. Allow the hot air gun and attachment to reach room temperature before proceeding.
- 3. Do not use excessive force when installing/removing hot air attachments. Loosen the screw and nut from the attachment by holding the nut with a pair of pliers and turning the screw counterclockwise.
- 4. Slide the attachment off of the metallic shaft of the hot air gun.

Repeat in the reverse order for installation. *Do not overtighten the screen and nut on the hot air gun.*

SE ERROR MESSAGE

When the display shows "SE" this means that the heating element needs to be replaced. The heating element could be worn out or cracked.

Note: If you run the soldering iron in the $600^{\circ}F \sim 650^{\circ}F / 315^{\circ}C \sim 343^{\circ}C$ range, which is the normal temperature range for most all soldering applications, the heating element should last for 6 to 12 months depending on hours of use.

F-1/F-2 ERROR MESSAGE

When the display shows "F-1" or "F-2" this indicates that the fan has stopped working on the hot air gun and the power supply needs to be checked.

REPLACING THE HEATING ELEMENT

- 1. Turn off the unit and unplug it from the outlet.
- 2. Allow the soldering iron to cool down to room temperature. *Never attempt to remove the tip while the iron is hot.*
- 3. Unscrew the Black "Bakelite Polymer" Retaining Cap and slide off the full tip assembly.
- 4. Push the Power Cord through the bottom of the soldering iron while simultaneously pulling gently on the heating element to expose the heating element.
- 5. De-solder the 2 Thin (red or white) wires and the 2 Thick (blue) wires that have heat shielding on them from the circuit board and pull the heating element away from the board. Please take note of the location of the wire thickness/color for installation of new heating element (see diagram below).
- 6. On one side of the circuit board solder a thin wire to 1 and a thick wire to 2 (see diagram below).
- 7. Flip the circuit board over and solder a thin wire to 3 and a thick wire to 4 (see diagram below).
- 8. Pull the cord back gently and align the circuit board to the slots on the iron so the cord can be pulled back to its original position.
- 9. Replace Bakelite Polymer Retaining Cap and screw back on and hand tighten *Do NOT over-tighten.*
- 10. Install the soldering tip, slide the metal soldering tip retaining collar and hand tighten it. Plug the AC cord back into a grounded outlet.



NOTE: The wires on the heating element can be soldered back onto either side of the circuit board, as there is no polarity for the element.

SOLDERING TIPS PREPARATION & CARE

- 1. Keep the soldering tip properly tinned. Always use solder with sufficient rosin flux or the tip will de-wet. A well tinned tip will be bright all over when hot, with no dull or discolored spots.
- 2. To tin the iron, do the following:
 - a. Plug in the iron and allow it to reach solder melt temperature.
 - b. Flood the tip with solder and let it stand for one minute.
 - c. Apply more solder to the tip, allow it to idle for one or two more minutes, wipe it lightly on the sponge. Do not remove all of the solder, but use the sponge to remove excess solder and wipe solder onto non-tinned areas.
- 3. Do not file or attempt to reshape the tip. This will destroy the plating and shorten tip life. Do not use chloride and acid fluxes; they will also shorten tip and heater life.
- 4. For maximum tip life, always apply solder to the heated connections or joints. Repeated application of solder directly to the tip will shorten the tip life.

WARNING: Do NOT use anti-seize or any other lubricant on the tip retainer or heater of the soldering iron.

*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
*						7.	.1		R	Π		J	1					*
*										U				س				*
*		R		E	К	R	4			U	R	A		, l			5.	*
*			•													,		*
*			3		ΥE	A	ĥ	V	\mathbb{N}		K	K			ΙΥ			*
*			•	-														*
*	All Co	X-Ti ntiai	ronic Jous	Proc Unit	ducts ed St	con tates	ne wi a If v	ith 3-	Yea	r Gua ase t	arant his p	ee, v rodu	valid uct ar	only nd sł	in th nip it	e 48 to		*
*	a destination outside of the 48 Contiguous United States this warranty										*							
*	Consumable parts such as soldering tips, heating elements, nozzles, etc.								*									
*	are	e not	COVe	ered	by th	is w	arrar	nty.										*
*	Th Gu	e firs Iarar	st 30 ntee f	Day: from	s are the c	cov late	ered of th	by a e rec	Mo	ney E of th	Back e pro	or R	epla If v	ceme	ent produ	ıct		*
*	becomes damaged in shipment or is found to be defective in any way									*								
*	during this period, we will replace or issue a complete refund for your product upon return. We will pay all shipping involved during this first 30-											*						
*	day period.													*				
*	The remainder of the 3 Years (after the first 30 days) is covered by a											*						
*	defective during this period we will fix the issue and provide a full service										*							
*	Inspection to your product, shipping (to & from) will be paid by the buyer. Please email us at Info@XTronicUSA.com to set up a service request.											*						
*	Re	turn	s of	New	/Unu	used	Pro	duct	s									*
*	If you have Buyer's Remorse and decide that you do not want the product,									*								
*	it must be returned NEW & UNUSED in the original box and you will pay the return shipping. PLEASE NOTE: There will be a 10% Restocking Fee										*							
*	and original Shipping Costs (if applicable) will not be refunded. Used									*								
*	· · · · · · · · · · · · · · · · · · ·										*							
*	How To Register Your Warranty									*								
*	Go to www.XTronicUSA.com. Click on "Register Your Warranty" tab and fill out the form. This is a fully secure website. Your information will never										*							
*	be sold or misused in any way. This registration site is strictly for order									*								
*	verification that will be used to speed up the process should you ever need to use your Warranty for service.										*							
*	X-Tronic International, Inc.											*						
*	2159 Magnum Circle, Lincoln, NE 68522 844-861-4762									*								
*				Inf	o@X	Tron	icUS	A.coi	m•	www	.XTro	onicU	ISA.d	com				*
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

QUESTIONS, PROBLEMS OR COMPLIMENTS?

Thank You for purchasing this X-Tronic International Product! We are grateful for your business!

All of our X-Tronic International Products are inspected then sealed with our NEW Product Seal prior to shipment. Our goal is to ensure Quality, Completeness, and Satisfaction for your order.

For Any Questions, Problems, or Compliments please call or email us.



Toll Free: 844-861-4762 Info@XTronicUSA.com

Our Business Hours are: Monday - Thursday: 8am - 4pm CST Friday: 8am - Noon CST

If you would like to shop for other X-Tronic International Products Please visit our website www.XTronicUSA.com

