X-TRONIC USA

Soldering Technology Professionals Can Trust

7040-PRO-X

Instructions

PLEASE READ THESE INSTRUCTIONS BEFORE USING THE X-TRONIC MODEL #7040-PRO-X HOT AIR REWORK STATION

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SPECIFICATIONS

Model	XTR-7040-PRO-X
Power Consumption	775 Watts
Power Cord	USA Type B - 3-pin Grounded Plug
Voltage	AC 110V 60Hz
Current	≤ 8 Amps
Dimensions	8.5 L x 9.0” W x 9.0” H
Weight	7.5 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	
Hot Air Gun Total Output	700W
Airflow Type	Brushless DC Fan
Airflow Volume	30 L/Min
Airflow Velocity	2.1 M/S
Programmable Air Flow	20-100
Temperature Range	212°F ~ 932°F / 100°C ~ 500°C
Temperature Stability	± 1.0°C
Cord Length	≥ 38.0 in
Cord Material	Silicone
Sound Intensity	≤ 73dB
SOLDERING IRON	
Soldering Iron Total Output	75W
Temperature Range	392°F ~ 932°F / 200°C ~ 500°C
Temperature Stability	± 1°C
Output Voltage	24 V AC
Tip Impedance	< 2Ω
Cord Length	≥ 52 in
Cord Material	Silicone

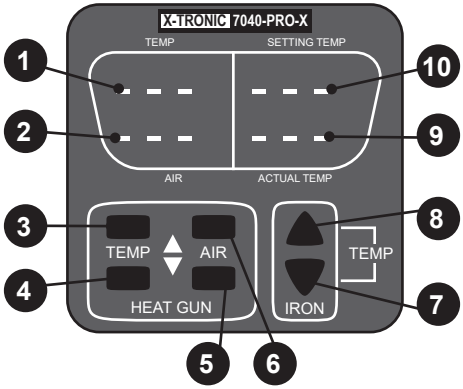
PACKAGE CONTENTS

- 775 Watt Main Power Unit
- 75 Watt Soldering Iron with Ergonomic Grip
- Deluxe Soldering Iron Stand Attached to Main Unit
- Soldering Cord Extension Holder
- Brass Sponge Tip Cleaner - Inside Soldering Iron Holder
- Wet Sponge Tip Cleaner
- 700 Watt Brushless Fan Hot Air Gun
- Hot Air Gun Holder (on side of main unit)
- 4 - Sizes/Styles of Hot Air Gun Nozzles
    - 2 Straight Air - 6mm, 9mm
    - 2 Spiral/Cyclone Air - 9mm & 11mm

SAFETY PRECAUTIONS

1. Always use a grounded outlet for the unit.
2. Always turn the power off and unplug the unit when not in use.
3. Never use the soldering iron near any flammable substance, material, or gas.
4. Never touch the metallic components of the soldering iron while the unit is on. They are extremely hot and will cause serious burns instantly.
5. Always turn the power off, unplug the unit, and let it fully cool down before attempting to replace any parts (tips, heating element, etc.)
6. Use only genuine replacement parts for this unit.
7. Do not use the unit for any application other than soldering.
8. Do not tap the soldering iron against the work bench to remove residual solder.
9. Do not modify the unit in any way.
10. When replacing consumable parts, only use approved manufacturer parts.
11. Do not get the unit wet or use when your hands are wet.
12. The soldering process will produce smoke - ensure the area is well ventilated.

PANEL DIAGRAM



1. Hot Air Gun Temperature Display
2. Air Flow Speed Display
3. Hot Air Gun Temperature Increase Button
4. Hot Air Gun Temperature Decrease Button
5. Hot Air Gun Air Flow Decrease Button
6. Hot Air Gun Air Flow Increase Button
7. Soldering Iron Temperature Decrease Button
8. Soldering Iron Temperature Increase Button
9. Soldering Iron Actual Temperature Display
10. Soldering Iron Set Temperature Display
11. Power Switch - Top of Unit (not pictured)

INITIAL SET-UP

1. Plug the Hot Air Gun into the cord receptacle on the back side of the unit and tighten the ring nut (same side as the hot air gun holder).

2. Place the hot air gun into the holder on the left side of the unit.

3. Plug the Soldering Iron into the cord receptacle on the back side of the unit and tighten the ring nut (same side as the soldering iron holder).

4. Place the soldering iron in the soldering iron holder.

5. Plug the power cord into the back of the unit.

6. Plug the 3-Prong AC cord into a 110/120V grounded outlet to prevent electric shock or injury.

7. Turn on the main unit power switch on the top of the unit. When the unit is first turned on “C - C” or “F - F” will briefly show on the top left display to indicate if the unit readouts are in Celsius or Fahrenheit respectively. Then both Hot Air Gun LED displays will show “---”. The soldering iron displays will briefly show what temperature the soldering iron is set for and then turn to “---”. This indicates that they are in sleep/standby mode.

SOLDERING IRON

1. The bottom display will show the current temperature of the soldering iron when it is turned on and will immediately start to heat up to the last set temperature.

2. To adjust the temperature of the soldering iron, press the ▲ or ▼ to increase or decrease the temperature. The top display will show the temperature being set, once the temperature has been chosen the bottom display will show the actual temperature of the soldering iron as it heats up.

HOT AIR GUN

1. The top display will show "---" when the hot air gun is in its holder and in sleep/standby mode.
2. Press the Hot Air Temperature Adjustment Buttons (▲ or ▼) on the right side of the unit to set the hot air gun temperature. The top display on the left side will show the temperature being set.
3. Press the Air Flow Control Buttons (▲ or ▼) in the middle of the unit to adjust the airflow for the hot air gun. This can be set from 20 - 100. The bottom left display will show the programmed setting.

⚠ *CAUTION* ⚠

When using a temperature higher than 300°C/572°F on the hot air gun the air flow should be set at 45 or higher. This will prevent damage to the hot air gun and increase the life of the heating element.

4. When the hot air gun is removed from the holder it will start blowing air and ramp up to the programmed temperature and air speed quickly. The actual temperature and air speed will be shown on the left side of the display.
5. When the hot air gun is not in use, always place it back in the holder. When the hot air gun is placed in the holder, it will start going into the Auto Cool Down and Sleep/Standby mode immediately. The hot air gun will continue blowing air until the temperature gets back down to 100°C and then the airflow will stop and the hot air gun will go into sleep/standby mode.

Note: *When the hot air gun is initially returned to the holder, the air flow may increase noticeably while the hot air gun is cooling down and going into sleep/standby mode. This is a safety feature built into the unit.*

6. When the hot air gun is removed again from the holder it will start blowing air and ramp up to the programmed temperature and air speed again quickly.

Note: *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 the air has stopped blowing automatically.*

When the unit is not in operation, turn the unit off with the power switch on top of the unit and unplug it from the outlet.

FEATURES

TEMPERATURE CONVERSION

1. Ensure the soldering iron and the hot air gun are in their respective holders and that the unit is off.
2. Press and hold the hot air gun temperature increase button while turning on the unit with the power switch on the top of the unit.
3. The top display will say C - C or F - F to indicate that the unit is now in Celsius or Fahrenheit respectively.

MUTE / UNMUTE FUNCTION

The unit beeps when buttons are pushed and when it goes into sleep mode.

1. Ensure the soldering iron and the hot air gun are in their respective holders and that the unit is off.
2. Press and hold the hot air gun temperature decrease button while turning on the unit with the main switch on the back.
3. The left display will say “SPH on” or “SPH off” to indicate that the sounds for the unit are unmuted or muted accordingly.

ON/OFF OF INDIVIDUAL COMPONENTS

Some jobs may not require the use of both the hot air gun and the soldering iron, so each of these can be turned on and off individually once the main unit itself is powered on. This promotes safety and can lengthen the life of the components since they won’t be running unnecessarily.

To toggle a component on/off, press and hold the temperature ▲ and ▼ buttons for one of the components for 3 seconds, when the component is off the screen will say “OFF” to indicate that component is not powered on. When the component is “ON” the screen will show the temperature and settings.

HOT AIR GUN COOL DOWN SLEEP/STANDBY FUNCTION

When the hot air gun is placed in the side holder, it will automatically go into Cool Down mode. When the hot air gun is initially returned to the holder, the air flow may increase noticeably while the hot air gun is cooling down and going into sleep mode. This is a safety feature built into the unit.

Do NOT turn the hot air gun off while it is in the cool down phase - once cool down is complete, the air will cease and then it is OK to turn off the component or whole unit.

SOLDERING IRON SLEEP FUNCTION

When the soldering iron is placed in the holder, the iron will go into sleep mode after a few minutes (depending on the number of minutes this feature is set at). The display will show "---" to signify this and the temperature of the soldering iron will ramp down to 392°F / 200°C. When the soldering iron is removed from the holder to use again, the temperature of the soldering iron will quickly ramp back up to the temperature it was previously being used.

Note: *The unit will NOT go into sleep mode unless the soldering iron is in the holder.*

SETTING THE SOLDERING IRON SLEEP TIMER

1. Ensure the soldering iron and the hot air gun are in their respective holders and that the unit is off.
2. Press and hold both of the soldering iron ▲ and ▼ buttons while turning on the unit with the switch on the top.
3. The top display will show the number of minutes that sleep timer is currently set at.
4. To adjust the sleep minutes press the soldering iron ▲ or ▼. This can be set from 0 to 30 minutes.
5. When the number of minutes is set wait approximately 2 seconds and the setting will be saved.

Note: Setting the sleep timer at "00" will turn the sleep function off and the unit will NOT go to sleep regardless of how long the unit sits idle in the soldering station holder. It is not recommended to turn the sleep timer off for normal use. The use of the sleep timer will help extend the life of the heating element and tip if the unit is left on for long periods of time.

CALIBRATION FUNCTION

When is it time to Calibrate your Soldering/Hot Air Station?

All X-Tronic Stations come with a high quality ceramic heating element in the soldering iron that is calibrated to within ±3.6°F/2.0°C of the temperature that is shown on the LED Display and a high quality heating element in the hot air gun that is calibrated to within ±1.8°F/1.0°C of the temperature that is shown on the LED Display. While calibrating to the exact temperature is the ultimate goal, this heating element and tip/nozzle design are as close as can be achieved with this technology.

The age of the heating element, the hours of use, and the temperature at which the soldering iron/hot air gun are regularly used will affect the life of the heating element and can cause fatigue. When a heating element begins to fatigue, the heat that is transferred to the soldering tip/blowing air from the heating element will begin to drop. If the typical temperature used to solder/desolder is not working as well as when it was new, then it might be time to calibrate the unit.

Note: Heating elements are consumable parts for soldering stations. There will come a time when the heating element stops working due to age and/or too much deterioration. At this point, it will need to be replaced and cannot be calibrated. Heating elements for this unit can be found on our website (XTronicUSA.com).

Calibration Instructions - Soldering Iron

Once the desired temperature has been set and the temperature of the unit stabilizes, measure the heat at the soldering tip using **a high quality and well calibrated soldering tip tester.** If the temperature shown on the unit's display does not reflect the temperature shown on the tester, the unit may need to be calibrated.

To calibrate the soldering iron:

1. Ensure the unit is off. Press and hold the Soldering Iron Temp ▲ and ▼ buttons while switching the unit on.
2. When the unit first comes on, the unit will enter sleep mode - continue holding the ▲ and ▼ buttons and the unit will enter into calibration mode.
3. Calibration can be set between 100-500 in 10° increments. Press the ▲ and ▼ buttons while it is in calibration mode to adjust the offset needed. Adding 10° to the calibration number (i.e. changing from 270 to 280) will **lower** the temperature of the soldering iron by approximately 10°.

CAUTION: The lower the calibration number, the hotter the soldering iron will heat up. If the heating element is working well, do not over calibrate the unit - this will cause the unit to overheat, burn out the heating element, and can be dangerous.

4. Once the calibration offset has been set, the unit will save the setting after approximately 3 seconds and return to normal functioning mode.

IMPORTANT - PLEASE READ

Infrared (IR) Thermometers should NOT be used to measure the temperature of the ***soldering iron tip*** *as they often provide inaccurate readings. All IR Thermometers are different and the capability depends on the Distance to Spot (D:S) ratio of the model being used. Many IR thermometers have a D:S ratio of 8:1 or 12:1 which means that the thermometer needs to be a distance of 8" or 12" in order to read a 1" spot size. The tip of a soldering iron is approximately 2 to 3 mm (.07-.11"), requiring the thermometer to be 0.8" or 1.2" away from the tip. However, the IR thermometer also has a minimum distance it needs to be away from the object. Most IR thermometers will not be capable of measuring such a small spot size and will provide disappointing calibration results.*

Calibration Instructions - Hot Air Gun

Before measuring the temperature or calibrating the hot air gun, ensure all nozzles have been removed from the hot air gun. Once the desired temperature has been set and the temperature of the unit stabilizes, measure the heat of the hot air using **a high quality and well calibrated hot air tester or an infrared thermometer.** If using the infrared thermometer, aim it approximately three inches away from the end of the hot air gun. If the temperature shown on the unit's display does not reflect the temperature shown on the tester, the unit can be calibrated.

To calibrate the hot air gun:

1. Ensure the unit is off. Press and hold the Hot Air Temp ▲ and ▼ buttons while switching the unit on, the unit will enter into calibration mode.
2. Calibration can be set between 100-500 in 10° increments. Press the ▲ and ▼ buttons while it is in calibration mode to adjust the offset needed. Adding 10° to the calibration number (i.e. changing from 270 to 280) will **lower** the temperature of the hot air gun by approximately 10°.

CAUTION: The lower the calibration number, the hotter the hot air gun will heat up. If the heating element is working well, do not over calibrate the unit - this will cause the unit to overheat, burn out the heating element, and can be dangerous.

3. Once the calibration offset has been set, the unit will save the setting after approximately 3 seconds and return to normal functioning mode.

MAINTENANCE

SOLDERING TIP PREPARATION & CARE

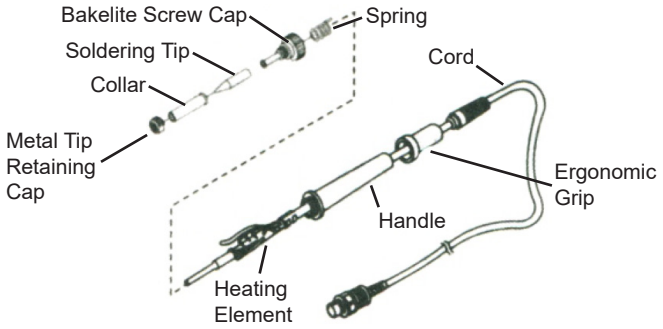
1. Keep the soldering tip properly tinned. Always use solder with sufficient rosin flux or the tip will degrade. A well tinned tip will be bright all over when hot, with no dull or discolored spots.
2. To tin the iron, do the following:
3. Plug in the iron and allow it to reach solder melt temperature.
4. Flood the tip with solder and let it stand for one minute.
5. 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.
6. 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.
7. 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.

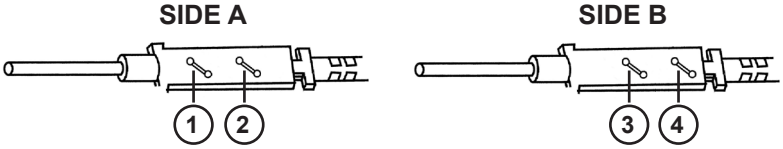
REPLACING SOLDERING IRON TIP

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 THE SOLDERING IRON HEATING ELEMENT

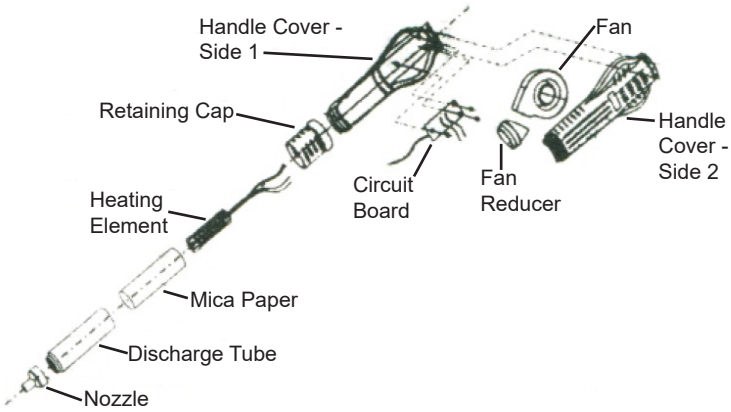


1. Turn off the unit and unplug it from the outlet. Allow the soldering iron to cool down to room temperature.
   Never attempt to handle the tip while the iron is hot.
2. Unscrew the Black Bakelite Screw Cap and slide off the full tip assembly.
3. Push the Cord through the bottom of the soldering iron while simultaneously pulling gently on the heating element to expose the heating element.
4. 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).
5. On one side of the circuit board solder a thin wire to ① and a thick wire to ② (see diagram below).
6. Flip the circuit board over and solder a thin wire to ③ and a thick wire to ④(see diagram below).
7. 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.
8. Replace Bakelite Retaining Cap and screw back on and hand tighten - ***Do NOT over-tighten.***
9. 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 onto either side of the circuit board, as there is no polarity for the element.

REPLACING THE HOT AIR GUN HEATING ELEMENT



1. Turn off the unit and unplug it from the outlet. Allow the hot air gun to cool down to room temperature.
   Never attempt to handle the gun while the it is hot.
2. Slide the ergonomic grip up and unscrew the retaining cap, pull the ergonomic grip down off the handle.
3. Unscrew both of the screws at the base of the handle and separate the two handle sides.
4. Pull the heating element out of the Mica Paper and Discharge Tube, being careful not to disconnect grounding wire.
5. Unscrew the two screws holding the circuit board in place.
6. Desolder the four wires to the heating element - Please take note of the location of the 4 wires thickness/color for installation of new heating element.
7. Solder the new heating element into place.
8. Reassemble the hot air gun.

TROUBLESHOOTING

ISSUE	POSSIBLE SOLUTIONS
Unit does not have power	• Ensure the power cord is securely plugged into the outlet and the back of the unit. • Ensure the unit is powered on with the power switch on top of the unit. • Ensure that the outlet is functional. • Contact X-Tronic International for assistance - Contact information on back of manual
Soldering Iron “Rattles”	• This is expected behavior. The “rattle” is a small ball that allows the unit to determine when the soldering iron is not in use and it should go into Sleep Mode.
S-E Error	• Ensure the soldering iron and/or the hot air gun is securely plugged into the front of the unit. • The heating element may need to be replaced • Contact X-Tronic International for assistance - Contact information on back of manual
Tip is not heating up as expected	• The soldering tip could be oxidized, it is important to always tin your tip and keep it clean. See Tip Maintenance section of manual. • The heating element may need to be replaced • Unit may need to be calibrated - see Calibration section of manual • Contact X-Tronic International for assistance - Contact information on back of manual

Note: Although tip temperature is not the key element in soldering, you should always start at the lowest temperature possible. A good rule of thumb is to set the soldering iron tip temperature at 260°C (500°F) and increase the temperature as needed to obtain the desired result.

X-Tronic International Inc.

3-YEAR LIMITED WARRANTY

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS, AS THEY VARY FROM STATE TO STATE.

THIS LIMITED WARRANTY CAN ALSO BE FOUND ON OUR WEBSITE AT WWW.XTRONICUSA.COM/SUPPORT/WARRANTY.

WE WARRANT THAT DURING THE WARRANTY PERIOD, THE PRODUCT WILL BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP.

WE LIMIT THE DURATION AND REMEDIES OF ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO THE DURATION OF THIS EXPRESS LIMITED WARRANTY.

SOME STATES HAVE DIFFERENT LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

OUR RESPONSIBILITY FOR DEFECTIVE GOODS IS LIMITED TO REPAIR, REPLACEMENT OR REFUND AS DESCRIBED BELOW IN THIS WARRANTY STATEMENT.

WHO MAY USE THIS WARRANTY?

X-Tronic International Inc. located at 2159 Magnum Circle, Lincoln, Nebraska 68522 (“we”) extend this limited warranty only to the consumer who originally purchased the product in the United States, the District of Columbia or Canada (“you”). It does not extend to (a) any subsequent owner or other transferee of the product, (b) any product shipped outside of the United States, the District of Columbia or Canada, or (c) anyone who may have purchased it from someone other than X-Tronic International Inc.. Proof of purchase is required for in-warranty service. We recommend you promptly register this product on our website (www.XTronicUSA.com) to facilitate verification of the date of the original purchase. Keep the product manual and your sales receipt together for future reference.

WHAT DOES THIS WARRANTY COVER?

This limited warranty covers defects in materials and workmanship of the product for the Warranty Period as defined below. In addition, during the Initial Warranty Period, this limited warranty also covers defects occurring in the initial shipment of the product to you.

WHAT DOES THIS WARRANTY NOT COVER?

This limited warranty during the Warranty Period does not cover any damage due to: (a) improper use; (b) failure to follow the product instructions or to perform any preventive maintenance; (c) modifications; (d) unauthorized repair; (e) normal wear and tear that comes with household use; or (f) external causes such as accidents, abuse, or other actions or events beyond our reasonable control. It also does not cover consumable parts.

WHAT IS THE PERIOD OF COVERAGE?

This limited warranty starts on the date of your purchase and lasts for 3 years ("The Warranty Period"), which shall be divided into two periods: (1) the first 30 days from the date of your purchase ("Initial Warranty Period"); and (2) the remainder of the 3 year period after the Initial Warranty Period has expired (the "Remainder Warranty Period"). The Warranty Period is not extended if we repair or replace the product. We may change the availability of this limited warranty at our discretion, but any changes will not be retroactive.

WHAT ARE YOUR REMEDIES UNDER THIS WARRANTY?

With respect to any defective product during the Initial Warranty Period, we will, in our sole discretion either (a) replace such product (or the defective part) free of charge, or (b) refund the purchase price of such product.

With respect to any defective product during the Remaining Warranty Period, we will repair such product free of charge and provide a full-service inspection of your product. You will be responsible for all shipping and handling fees to and from our facility.

HOW DO YOU OBTAIN WARRANTY SERVICE?

To obtain warranty service, you must call 844-861-4762 or email us at Info@XTronicUSA.com during the Warranty Period to open a service request. Proof of purchase will be required to open a service request.

LIMITATION OF LIABILITY

THE REMEDIES DESCRIBED ABOVE ARE YOUR SOLE AND EXCLUSIVE REMEDIES AND OUR ENTIRE LIABILITY FOR ANY BREACH OF THIS LIMITED WARRANTY. OUR LIABILITY SHALL UNDER NO CIRCUMSTANCES EXCEED THE ACTUAL AMOUNT PAID BY YOU FOR THE DEFECTIVE PRODUCT, NOR SHALL WE UNDER ANY CIRCUMSTANCES BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL OR PUNITIVE DAMAGES OR LOSSES, WHETHER DIRECT OR INDIRECT.

SOME STATES HAVE DIFFERENT LIMITATIONS OF LIABILITY AND EXCLUSIONS, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

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

X-TRONIC USA
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