

## Healthible cxt-dhj-fba-zx1

# Healthible Permanent Jewelry Welder

Model: cxt-dhj-fba-zx1

## 1. INTRODUCTION

---

This manual provides detailed instructions for the safe and effective use of your Healthible 100a Permanent Jewelry Welder. This pulse arc welding machine is designed for precision welding of small metal workpieces, primarily for permanent jewelry applications, but also suitable for other delicate metal repairs such as denture repair, wire welding, and glasses repair.

Please read this manual thoroughly before operating the device to ensure proper setup, operation, and maintenance, and to prevent injury or damage to the unit.

## 2. SAFETY INSTRUCTIONS

---

**WARNING: Always prioritize safety when operating welding equipment. Failure to follow these instructions may result in serious injury or damage to the equipment.**

- **Eye Protection:** Always wear the provided safety goggles or appropriate welding eye protection to shield your eyes from intense light and sparks during operation.
- **Ventilation:** Ensure adequate ventilation in your workspace to disperse any fumes produced during welding.
- **Workpiece Compatibility:** This welder is designed for workpieces with a caliber range of 0.8-3mm. Do not attempt to weld items outside this range.
- **Material Limitations:** This machine is not suitable for welding iron bars, drilling holes, or welding complex workpieces that do not allow for precise contact.
- **Workpiece Stability:** The workpiece must be held infinitely close to the welding needle and remain fixed during welding to ensure proper welding effect.
- **Power Supply:** Connect the welder to a stable 110V power supply.
- **Argon Gas:** For optimal welding results, an argon bottle and regulator are recommended. Ensure proper

connection and gas flow if using argon.

- **Electrical Safety:** Do not operate the welder with wet hands or in damp conditions. Ensure all connections are secure before powering on.

### 3. PACKAGE CONTENTS

Carefully unpack your Healthible Permanent Jewelry Welder and verify that all components listed below are present. If any items are missing or damaged, please contact customer support.



Figure 3.1: Overview of all included accessories and the main unit.

- Main Welder Unit
- Welding Handle with Stand (Workbench)
- 10 Tungsten Welding Needles (Soldering Pins)
- 4 Brass Collets (Copper Chucks)
- Hexagonal Wrench
- Curved Mouth Pointed Tweezers (175mm)
- Red Handle Cutting Pliers
- Red Handle Pointed Nose Pliers

- Safety Goggles
- Argon Gas Tube
- Loop Clamp
- Needle Grinder
- Power Cord
- Pneumatic Pressure Gauge (Argon Regulator)
- English Instruction Manual

## 4. SETUP

Follow these steps to set up your welding machine for first use:

1. **Placement:** Place the main welder unit on a stable, flat, and dry surface with adequate ventilation.
2. **Connect Welding Handle:** Insert the connector of the welding handle into the "Welding handle interface" port on the front of the main unit.
3. **Connect Negative Circuit:** Connect the negative circuit cable (usually a black cable with a clamp) to the "Negative circuit interface" port.
4. **Install Argon Regulator (Optional but Recommended):**



Figure 4.1: Air Pressure Gauge (Argon Regulator) Installation.

- If using an argon bottle for improved welding results, connect the pneumatic pressure gauge (argon regulator) to your argon bottle.
  - Connect the argon gas tube from the regulator to the 6mm argon gas interface on the back of the welder unit.
  - Ensure all connections are tight to prevent gas leaks.
5. **Prepare Welding Needles:** Before first use, or when a needle becomes dull, use the provided needle grinder to sharpen one end of a tungsten welding needle into a pointed tip.
  6. **Insert Welding Needle:** Select an appropriate brass collet for your chosen welding needle. Insert the sharpened welding needle into the collet, then secure the collet into the welding handle.

- Power Connection:** Plug the power cord into the power connector on the back of the welder unit, then plug the other end into a standard 110V AC outlet.

## 5. OPERATING INSTRUCTIONS

The Healthible Permanent Jewelry Welder operates on the principle of spot welding. Precision and proper settings are key to successful welds.

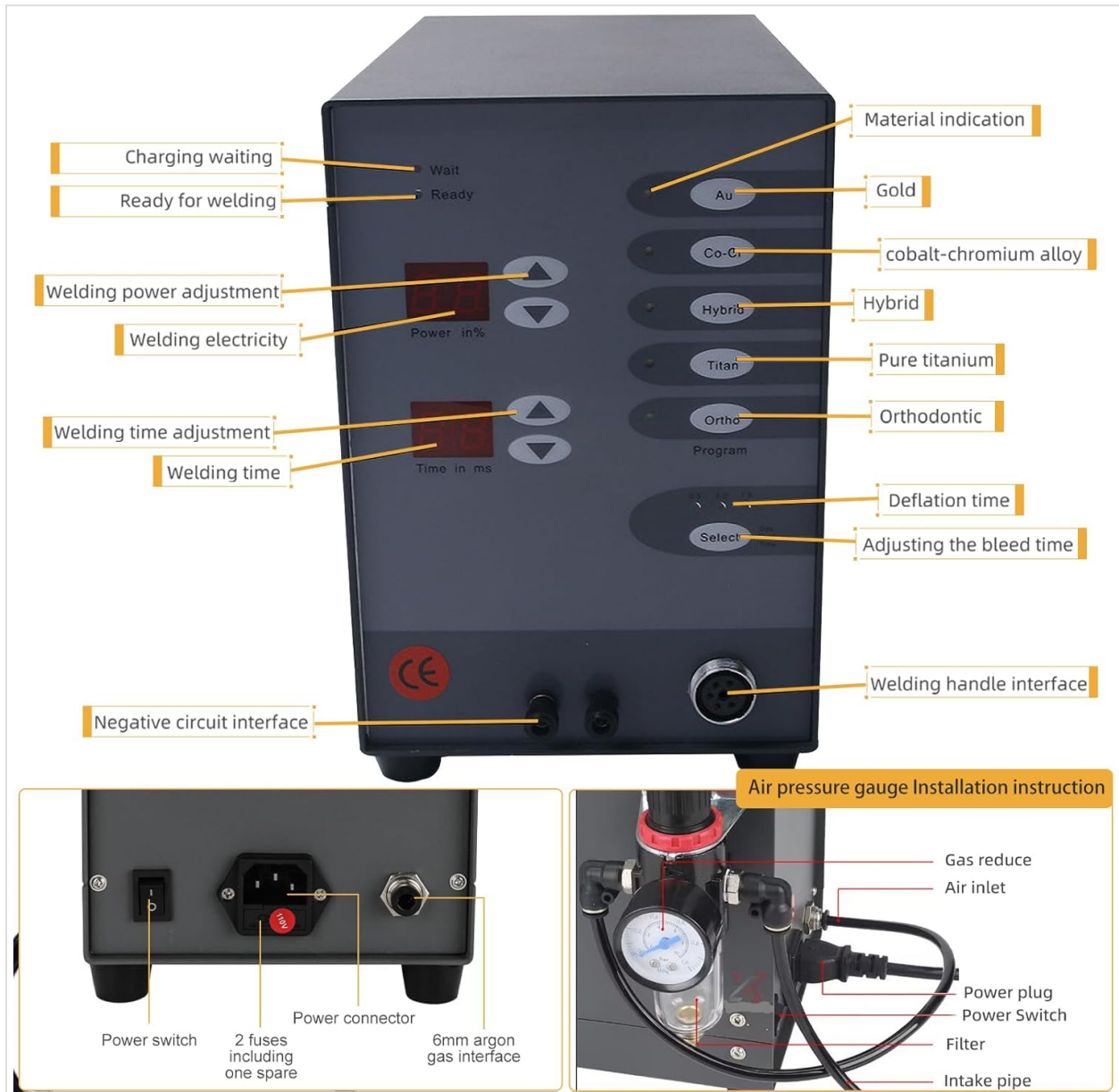


Figure 5.1: Welder Control Panel Overview.

- Power On:** Flip the power switch on the back of the unit to the "ON" position. The display will illuminate. The "Wait" indicator will be lit initially, then switch to "Ready" when the machine is prepared for welding.
- Select Material Program:** Use the buttons (Au, Co-Cr, Hybrid, Titan, Ortho) to select the appropriate preset program for the material you are welding. This welder can be used for platinum, gold, K gold, silver copper, stainless steel plate, cobalt-chromium alloy, and pure titanium.
- Adjust Power and Time:**
  - Use the up/down arrows next to "Power in %" to adjust the welding power.
  - Use the up/down arrows next to "Time in ms" to adjust the welding duration.
  - Experiment with settings on scrap material first to find the optimal parameters for your specific workpiece.

4. **Position Workpiece:** Place the workpiece on the workbench or hold it securely with the provided tweezers. Ensure the area to be welded is clean and free of debris.
5. **Perform Weld:** Bring the workpiece infinitely close to the tip of the welding needle. Ensure the workpiece is fixed and does not move during the welding process. Press the foot pedal (if applicable, or trigger on handle) to initiate the weld. A brief flash and a small spark will occur.
6. **Inspect Weld:** After welding, inspect the joint. If the weld is not satisfactory, adjust the power and time settings and re-attempt on a new spot or scrap.

## MULTI-FUNCTION

Welding caliber: 0.8-3mm



## Scope of exclusion



Welding metal bars



Drilling



Workpieces that are complex and do not have a diameter in the range of 0.5-1.3 mm.

Figure 5.2: Applications and Exclusions of the Welder.

## 6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your welder.

- **Welding Needle Care:** The tungsten welding needles will wear down or become stained with debris over time. Use the provided needle grinder to re-sharpen the tip. Replace needles when they become too short or damaged.
- **Collet Replacement:** The brass collets may also wear. Replace them as needed to ensure a secure grip

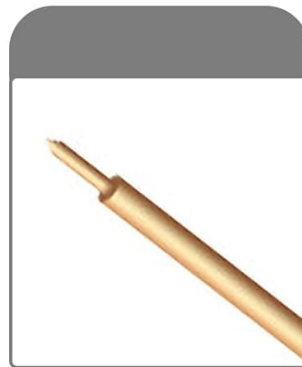
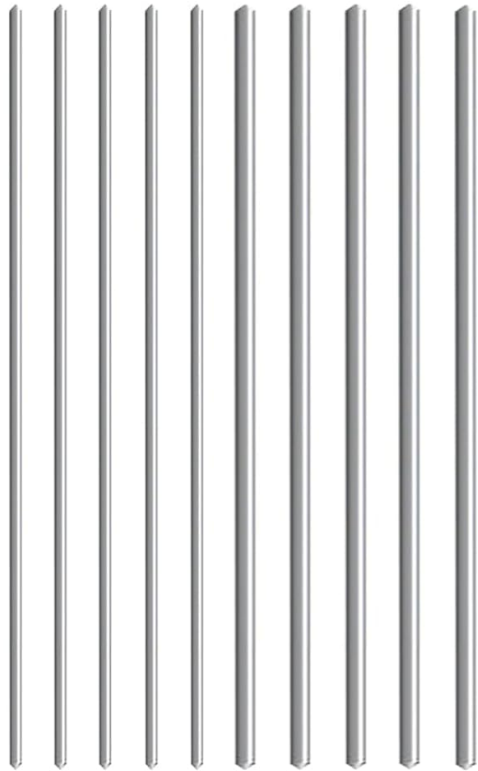
on the welding needles. Different sizes of soldering pins require different sizes of copper collets.

- **Cleaning:** Keep the main unit and accessories clean and free of dust and metal particles. Use a soft, dry cloth for cleaning. Do not use abrasive cleaners or solvents.
- **Storage:** When not in use, store the welder and its accessories in a clean, dry environment, away from direct sunlight and extreme temperatures.

## 10 tungsten needles

# TUNGSTEN NEEDLES

Before using, you need to sharpen the tungsten needles. Tungsten needles are stronger and more durable than copper needles.



Copper needle



Tungsten needle

## Four brass collets

For spare and replacement of welding gun parts



Different sizes of soldering pins need to be replaced by different sizes of copper collets.

Figure 6.1: Tungsten Needles and Brass Collets.

## 7. TROUBLESHOOTING

If you encounter issues with your welder, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
---------	----------------	----------

Problem	Possible Cause	Solution
Poor welding effect / Weak weld	<ul style="list-style-type: none"> <li>• Workpiece not fixed or too far from needle.</li> <li>• Incorrect power/time settings.</li> <li>• Dull or dirty welding needle.</li> <li>• Lack of argon gas (if desired for perfect results).</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure workpiece is stable and in close contact with the needle.</li> <li>• Adjust power and time settings; increase if weld is too weak.</li> <li>• Re-sharpen or replace the welding needle.</li> <li>• Ensure argon bottle is connected and gas is flowing (if using).</li> </ul>
Machine does not power on	<ul style="list-style-type: none"> <li>• Power cord not properly connected.</li> <li>• Power switch is off.</li> <li>• No power from outlet.</li> <li>• Blown fuse.</li> </ul>	<ul style="list-style-type: none"> <li>• Check power cord connections at both ends.</li> <li>• Ensure power switch is in the "ON" position.</li> <li>• Test outlet with another device.</li> <li>• Check and replace fuses on the back of the unit (two fuses included).</li> </ul>
Welding needle sparks excessively or melts quickly	<ul style="list-style-type: none"> <li>• Power setting too high.</li> <li>• Needle tip is too blunt or too sharp.</li> <li>• Improper contact with workpiece.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce the power setting.</li> <li>• Re-grind the needle to a proper, consistent point.</li> <li>• Ensure firm and direct contact with the workpiece.</li> </ul>

## 8. SPECIFICATIONS

Refer to the table below for the technical specifications of your Healthible Permanent Jewelry Welder.

# EASY TO OPERATE

Can be used for platinum, gold, K gold, silver copper, stainless steel plate, cobalt-chromium alloy and pure titanium.

It is necessary to keep the workpiece in a fixed position while welding is in progress, otherwise the welding effect will be affected.

## MAIN PERFORMANCE PARAMETERS

Input voltage/frequency	110V/60HZ	Welding voltage	40v
Input power	100W	Welding current	50A-600A
Fuse	250V/2.0A	Welding time	3ms-30ms
Protection grade	IP21	Maximum welding frequency	1HZ
Gas supply pressure	≥0.1Mpa	Maximum argon consumption	5L/min

Figure 8.1: Main Performance Parameters.

Parameter	Value
Manufacturer	Healthible
Model Number	cxt-dhj-fba-zx1
Input Voltage/Frequency	110V/60Hz
Input Power	100W
Fuse	250V/2.0A
Protection Grade	IP21
Gas Supply Pressure	≥0.1Mpa
Welding Voltage	40V
Welding Current	50A-600A

Parameter	Value
Welding Time	3ms-30ms
Maximum Welding Frequency	1Hz
Maximum Argon Consumption	5L/min
Item Weight	16.72 pounds
Package Dimensions	14 x 12 x 10 inches
Color	Blackish

## 9. WARRANTY AND SUPPORT

---

For information regarding the product warranty, please refer to the warranty card included in your package or contact the seller directly. Healthible is committed to providing quality products and customer satisfaction. If you require technical assistance, have questions about operation, or need to report a missing/damaged part, please contact the seller or manufacturer through the platform where you purchased the product. Please have your model number (cxt-dhj-fba-zx1) and purchase date ready when contacting support.