

**CUTRA**

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# INSTRUCTION MANUAL

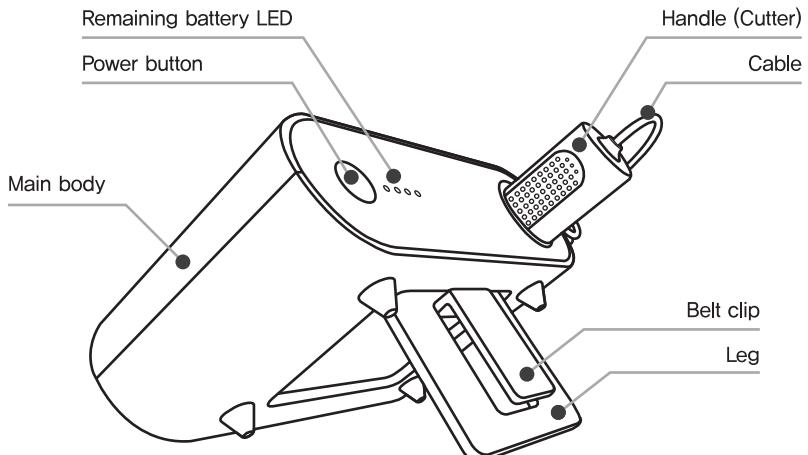


Wonder Cutter S

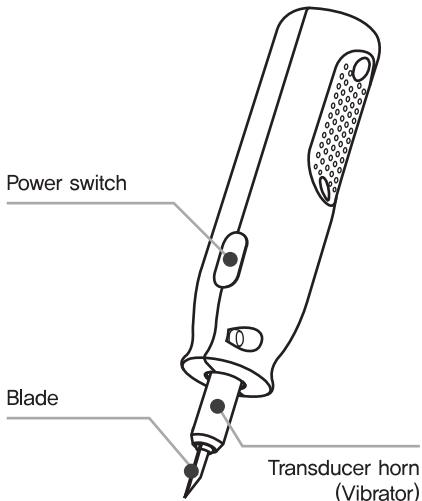


## Components

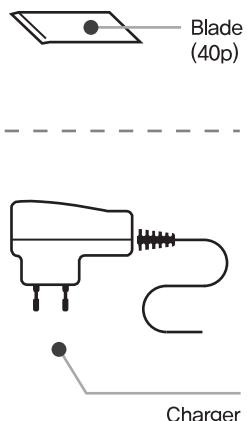
- Main body



- Handle (Cutter)



- Accessories

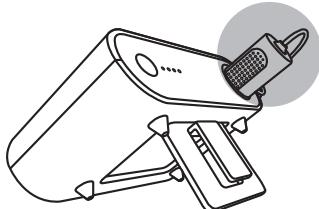


\* Check for the following components,



## How to use the product

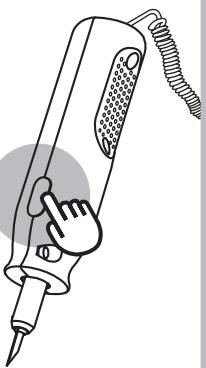
01



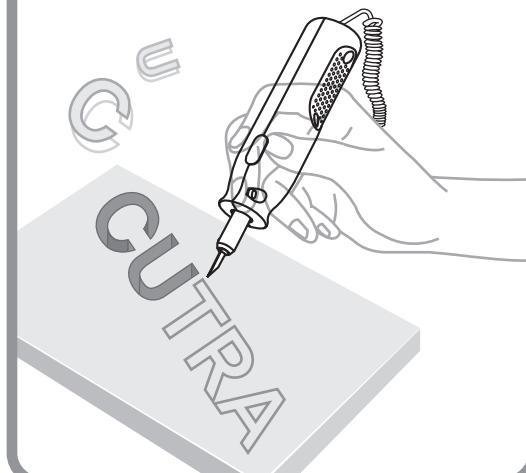
02



03



04



# 01

Pull the handle out from the inside of the main body.

# 02

Press the main power button for 1 to 2 seconds to turn the LED setting into stand-by mode. Please note, a second press of the power button will turn power off. In Stand-by Mode the green LED on the handle is not on.

# 03

While in the Stand-by Mode, the Wondercutter operates by pressing and holding the button on the cutter handle. While the button is held, the blade will rapidly move with ultra-sonic vibrations of 40,000 per second. Releasing the handle button will stop the vibrations. The green LED on the handle indicates that the cutter is vibrating

# 04

When used for more than 10 minutes, the Wondercutter will stop operating and return to Stand-by Mode to allow cooling. The green LED on the handle is off while cooling. The cooling condition is call the Stationary State.

While in the Stationary State, the Wondercutter can be turned on again by holding the button on the handle. However, to ensure proper performance, allow the Wondercutter to cool for several minutes before returning to operation.

If the Wondercutter reaches extreme temperatures it will return to Stand-by Mode to allow cooling.

## Status explanation

### Stand-by Mode

The LED turns green when the main body is turned on.

The remaining battery can be checked on the LED of face panel.

\* The green LED on the handle is off.

\* The Wondercutter will turn off automatically after a beep when not used for more than 10 minutes in the Stand-by Mode.

### Up and Running

Vibrations on (pressing the handle button)

\* The green LED on the handle is on.

### High temperature stationary state

The product enters high temperature status after being used for 10 minutes. To prevent the product from overheating, it automatically stops operating after using for 10 minutes and turns into the Stand-by Mode  
\* Use the product again after cooldown (more than 10 minutes) for safe use.

### Stand-by after buzzer sound

The continuous production of 40,000 vibrations per second generates high temperature vibration, and eventually will reach high temperatures and the Wondercutter will return to Stand-by Mode to cool.

\* After allowing the Wondercutter to cool, return to operating by holding the button on the handle. Not allowing the Wondercutter to cool properly will eventually cause a circuit overload which will lower the performance and power.

\* A Loose setscrew of the blade or overload on the blade produces will the Wondercutter to Stand-by Mode. To tighten the setscrew, turn off the power, tighten, and restart.

## Checklist before Use and Precautions

### \* Checklist before Use

- Check if the device is fully charged.
- The level of charge will impact the power and performance of the Wondercutter. Fully charged power will provide maximum performance.
- The Wondercutter will provide maximum performance when the charger is plugging into an outlet.
- If the device is not fully charged, the cutting power will be reduced.
- A loose setscrew will cause the Wondercutter to overheat and it may eventually cause damage. Properly tighten the setscrew for safety.
- Properly attach the Wondercutter when carrying around the waist for mobile use.
- Follow the instructions to correctly install the blade to the handle.
- Fully charge the Wondercutter before initial use or after long periods of nonuse.

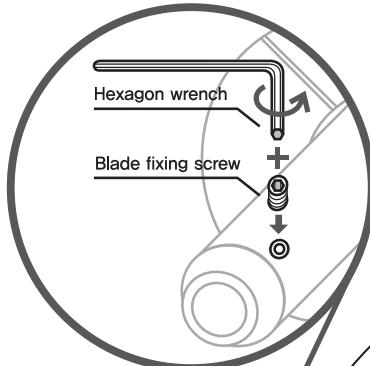
### \* Precautions

- Ultrasonic wave cutter cuts better than the normal cutter, so use caution.
- Wear necessary equipment including safety glasses.
- Wear safety gloves when operating the Wondercutter.
- Wear proper clothing when using the Wondercutter.
- Be aware of potential fumes as a result of the cut and wear protective ventilation gear when necessary.
- Keep the workplace clean and well lit.
- Turn off the main power button when not using the Wondercutter and return the handle to the main body. When putting the handle back into the main body, be sure to center the working button at 12 o'clock on the receptacle. The interior of the receptacle for the handle has an indentation for the handle button.
- Do not turn the Wondercutter on when the handle is inside the main body receptacle.
- Properly secure the material to be cut.
- Do not cut metal or glass with the Wondercutter.



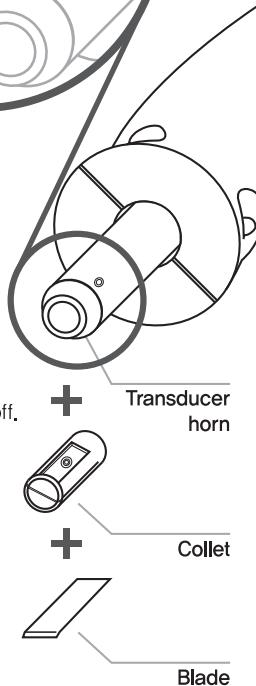
### Attention

- Be careful when using the blade.
- The 40,000 vibrations per second rises the temperature due to friction and can make the Wondercutter very hot, including the blade, collet, and setscrew. Avoid touching when hot.
- Reset the Wondercutter if performance is diminished.



### \* Replacement of blade and replacement of collet

1. Turn off the Wondercutter before changing the blade and tightening the setscrew. Use a .6N torque wrench to tighten the setscrew. Only use a high quality wrench. The setscrew can be used for approximately 20 times.
2. Be sure to reset the Wondercutter after changing the blade.
3. To reset the Wondercutter, press the button on the handle and the power button on the main body simultaneously for 1 to 2 seconds. The cutter assembly is automatically detected and the sensor beeps with LED light on for a second and the Wondercutter turns off. After a second beep, the Wondercutter will turn on again. The 4 LED lights on after the first beep indicates the Wondercutter was properly reset. If the 4 LED lights are not on, retighten the setscrew and reset.
4. Once the setscrew is fixed, turn the power of the main body on and press the handle button on to check that the Wondercutter is operational.



### \* If the Wondercutter is still not operational, clean the inside of transducer horn by following the steps below. Also, cleaning or replacing the collet or the blade can return the Wondercutter to full use.

1. Turn the main power off.
2. Remove the collect and the blade. Then clean the inside of transducer horn with q tips.
3. If the collet or the blade is contaminated or shows wear or damage, remove the contaminants or replace them with a new collet or a new blade.
4. Retighten the setscrew using a hexagon wrench.

### \* Blade and Collet

1. In order to transmit the ultrasonic waves, fix the Wondercutter with the proper blade and collet.
  - \* Ensure that the blade and fixtures are correctly attached,
2. A stain on the blade or on its fixture can cause heat, noise, and damage of the product.
  - \* Ensure that the Wondercutter does not have a stain on the blade or other fixtures and replace when necessary.

#### ○ Changing the Blades

Insert the end of the new blade into the inside of the collet.  
Line up the holes of the blade setscrew and the collet.

#### ○ Changing the Collet

Line up the holes of the blade setscrew and the new collet,



##### Cautions

- Take care to line the blade in the proper direction,  
Only use Wondercutter blades,
- Non Wondercutter blades could cause the Wondercutter to function improperly or could cause damage,
- The buzzer will beep and the Wondercutter will not operate if the blade is loose,

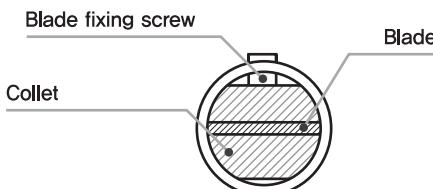
#### ○ Other Notes

Check the blade and collet to make sure they are set correctly and tight,



##### Cautions

- Tighten the setscrew of blade,
- When the setscrew is not correctly adjusted, the blade can pop out and this may cause accidents and cause of breakdown,
- Change the hex wrench if signs of wear,
- Ask for the manufacturer's help when the setscrew does not fall out,
- When the blade has been changed while the vibrator produces heat, the setscrew may become loose when the temperature goes down, Make sure that the setscrew is correctly tightened before using the product,



## Safety Cautions

### Warning

If the instructions are not correctly followed, death or serious injury can occur.

### Cautions

If the instructions are not correctly followed, physical damage or property damage can occur.



Keep away from water.



Never decompose the product.



Be careful of high temperatures.

## Warnings

- Do not bend, pull, twist, or put heavy objects on the cable.
- Do not touch the product with wet hands.
- Do not expose the product into any type of liquid.
- Immediately stop using the product when in contact with water.
- Do not use the product if the cable or AC adapter is damaged.
- Do not use the product to cut inflammable objects such as oil paper.
- Do not under any circumstance touch the blade while in operation.
- Do not look directly at the blade when in operation. Do not point the blade toward another person.
- Do not use the product for anything with a running electrical current.
- Remove the cord from the outlet using the plug and not the cord.
- Keep the product away from children.
- Do not implement strong physical impact on the Wondercutter.
- Do not remodel or decompose the Wondercutter.
- Do not insert metals in the any openings in the Wondercutter.
- Do not incinerate the product.
- Do not use the product to cut metal or glass.
- Do not touch the blade after using; the high temperature can cause burns.

## Safety Cautions

### Warnings

- **Do not use the product in the following places.**
  - Places with high temperature or inflammable objects.
  - Places with dust and generating corrosive gas.
  - Places with high vibrations and impacts.
  - Wet and humid places.
- **Be careful not to drop the blade while moving the product**
- **Depending on what type of object is cut, it can cause substance or gas that affect the human body. Check before using.**

### Cautions

- Do not put spray on the main body, cutter, and charger.  
This may cause deterioration or breakdown of the plastic or paint.
- Immediately turn the power off for any detectable smell or smoke.
- Turn the power off when changing blades or working on maintenance.
- Do not use the device on anything else than what it is meant for.
- Fix the blade correctly before using.
- Use the supplied blade only. Other types of blades can cause severe problems as they may not operate correctly and be detached.
- Do not get rid of the worn-out blade as regular waste, and follow the local government rules in regard to disposal of old blades.
- Do not use the product near precise control, electric devices, and vibrating equipment. This can cause severe problems to the device.
- Always hold the cutter handle correctly.
- Do not exert excessive power to the end of the blade.  
It may cause the collet or the vibrator to break.
- Turn the power off and put the handle in the main body when not in use.

## Compensation for damage

- Cutra Co., Ltd. guarantees its products for a period of one year from the date of purchase. If any defect due to faulty materials and workmanship occur within this one-year guarantee period, Cutra Co., Ltd. will repair or replace the product at its expense.
- Cutra Co., Ltd. will only pay for repair or replacement if convincing proof is provided, for instance by means of a receipt, that the day on which service is claimed is within the guarantee period.
- The guarantee is not valid and a customer will be charged for both repair and the shipping cost if a defect is due to damage caused by incorrect use, poor maintenance or if alterations or repairs have been carried out by persons not authorized by Cutra Co., Ltd.
- Any attempt to disassemble the product will void the guarantee.
- For the device to be used correctly, the user should strictly adhere to all instructions included in the user manual and should abstain from any actions or uses that are described as undesired or which are warned against in the user manual.
- Do not use the device if the cable is damaged or has visible cracks. If the cable is damaged, you must have it replaced by Cutra Co., Ltd., or a service center authorized by Cutra Co., Ltd. in order to avoid a hazard.
- Please note that our guarantee does not cover any consumables or accessories such as blades, batteries, and a recharger.

## Product and battery standards

<b>Model Number</b>	WC40000F25W	<b>Type</b>	Lithium Ion battery
<b>Oscillation Frequency</b>	40 kHz	<b>Nominal Capacity</b>	2600 mAh
<b>Body Dimensions</b>	175 x 102 x 62 mm	<b>Rated Voltage</b>	11.1 V
<b>Handle Dimensions</b>	Ø 28 x 104 mm	<b>Battery Charging Time</b>	Approx. 2 hrs
<b>Body Weight</b>	Approx. 670 g	<b>Usage period</b>	300 cycles
<b>Handle Weight</b>	Approx. 85 g		
<b>Max. Power Consumption</b>	30W		
<b>Charger</b>	INPUT: AC100~240V, 50/60Hz, 1.5A MAX		
<b>Ambient Condition</b>	5 ~ 35 °C		
<b>Use Time</b>	Approx. 1hr 30min, cycled		

## Self-diagnosis

### Before requesting repair

When the product does not function, check the following before requesting any type of repair.

Symptoms	Checklist	Solutions
The power button won't turn on.	Is there any remaining battery?	Connect the charger to the back side of the main body.
	Is the power button off?	Turn the power button on.
	Was the handle switch pressed for a moment only?	Continuously press the handle switch.
The handle switch won't work.	Is the LED light on the handle off?	After 10 minutes of use the product automatically turns to stand-by state. Press the handle switch to use the product again after cooldown for safe use.  To prevent the product from overheating, it automatically stops operating and turns into the stand-by state. Turn the power off and tighten the setscrew before restarting.
	Is the blade fixed?	Fix the blade and setscrew tight.
	Is the blade bent or broken?	
	Is the blade setscrew contaminated or has its shape changed?	
	Is there any foreign substance on the blade or at the end of the vibrator?	Clean the inner parts of blade, collet, setscrew, and the end of the vibrator.
The handle makes noise and it does not cut well.	Is a supplied blade being used?	
	Was the product used for a long time?	After 10 minutes of use the product automatically turns to stand-by state. Press the handle switch to use the product again after cooldown for safe use. The device may get hot sooner and turns to stand-by state after using less than 10 minutes if you try cutting hard or thick materials.
	Is too much pressure being held on the blade?	The product is a light ultrasonic wave cutter. Do not exert too much power and hold it correctly.
	Is the blade and setscrew correctly fixed?	If the blade is not correctly fixed, the vibration temperature can affect negatively on the product's life cycle.
	Is the blade, collet, setscrew, or the end of the vibrator contaminated?	Clean the inner parts of blade, collet, setscrew, and the end of the vibrator.
The handle gets hot.	Is there too much pressure held on the switch button?	The blade is stuck. Relax before using it again.
	Does the LED light turn on following the buzzer sound?	It's a stationary state due to the high temperature. Wait until the handle temperature cools down.  To prevent the product from overheating, it automatically stops operating and turns into the stand-by state. Turn the power button off and check the setscrew before restarting.
The ultrasonic wave vibrations stopped.		

What materials do you want to cut? \_\_\_\_\_



PLASTIC



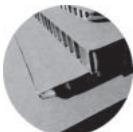
PVC FOAM BOARD



VACUUM FORMER SHEET



EVA FOAM



PAPERBOARD



RUBBER



LEATHER



PMMA



ABS

The thickness that can be cut is different depending on the materials.

Featured On \_\_\_\_\_



## Certifications / Patents



Patent Certification



A patent application for its technology



Trademark Registration Certification



Venture Business Confirmation

'Gold Prize'  
44th Salon  
International  
Des Inventions  
Geneve'Gold Prize'  
Silicon Valley  
International  
Invention  
Festival'Gold Prize'  
Seoul International  
Invention FairRoHS  
CertificationCE  
CertificationFCC  
CertificationDoE & CEC  
CertificationEEC & NRcan  
Certification

## Crowdfunding results



 **Makuake** &  **KICKSTARTER**  **INDIEGOGO**

- Total Funding Raised : \$ 250,553
- Total Backers : 873
- 46 Countries