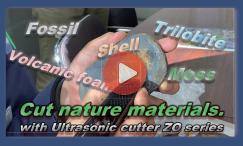
Echo Tech distributor location



Echo Tech social media accounts









YouTube

Χ

► /@Echotech oversea channel



Facebook

echotechco.ltd



Instagram

Echotech Co.,Ltd.



Echotech Co..Ltd.











20 Oyamazuka, Oiwa-cho, Toyohashi, Aichi 441-3131 Tel:+81-532-65-5158/Fax:+81-532-65-5159 worldinfo@us-dolphin.co.jp

() HONDA ELECTRONICS CO., LTD.

20 Oyamazuka, Oiwa-cho, Toyohashi, Aichi 441-3193 Registered company for ISO9001 and ISO14001

< Contact >



ULTRASONIC CUTTER

Echo Tech TM

ZO series



Ultrasonie Guiter 20 series

ULTRASONIC CUTTER BLADE'S HIGH SPEED AND FINE VIBRATION (40 KHZ/40.000 TIMES PER SECOND) DRASTICALLY IMPROVE CUTTING PER-FORMANCE. IT ABLE TO CUT, WELD, POLISH VARIOUS MATERIALS. SINCE 2016, WHICH IS A YEAR THAT WE RELEASED OVERSEAS MODEL, THE MARKET IS EXPANDING AROUND THE WORLD.



Ultrasonic Cutter **ZU**-Standard model -PUSH HAND PIECE SWITCH JUST ONCE AND BLADE WILL START VIBRATION. (NO NEED TO HOLD A HAND

PIECE SWITCH. LED LIGHT ON HAND PIECE WILL LIGHT UP WHEN THE UNIT IS OPERATING)

-POWER MODE COULD CONTROL WITH OUTPUT CONVERSION SWITCH.



Example of applicable materials

Plastic

- ■3D printing
- Carbon

- Cardboard

Resin

- Leather
- Cloth
- Plaster

etc.

Specifications

Oscillation frequency	40 kHz
Max. power consumption	MAX. 110 VA
AC adapter	INPUT: 100-240 VAC 50/60 Hz
	OUTPUT: 12 VDC *1
External dimensions	Main unit: 185×169×55
(Unit: mm)	Hand piece: φ28×150
	(include blade)
Power mode	S-High/High/Normal *2
Operating condition	Temperature: 10 to 35℃
	(without condensation)
Weight	Main unit: Approx. 1.2kg
	Hand piece: Approx. 350 g
	(include hand piece cable)
Hand piece cable	1.6 m (straight cable)

Accessories

Protection circuit Temperature sensor has installed inside the hand piece. Detection circuit will activate when the blade anchor screw has loosened or when the unit has overloaded. ZO-95 will be automatically turn OFF when it has used without attaching foot switch (ZH801).

- •BDC-200P: 40 pcs./case (include unusable blades with hole)
- ·Blade anchor ZH04: 1 pc.
- ·Blade anchor screw HB03: 3 pcs.
- ·Hexagon wrench RR02: 1 pc.
- •Torque screwdriver 60 cN·m ZH25T2: 1 pc.
- •Foot switch for ultrasonic cutter ZO-95 ZH801: 1 pc.
- ·Blade protector ZH805: 1 pc.

Specifications

Oscillation frequency Max. power consumption

AC adapter

External dimensions (Unit: mm)

Power mode Operating condition

Weight

Protection circuit

40 kHz MAX. 85 VA

overloaded

INPUT: 100-240 VAC 50/60 Hz OUTPUT: 12 VDC *1 Main unit: 173×89×76 Hand piece: $\phi 32 \times 144$ (include blade)

High/Normal Temperature: 5 to 35°C (without condensation)

Main unit: Approx. 300 g Hand piece: Approx. 70 g (include hand piece cable) Temperature sensor has installed inside the hand piece. Detection

circuit will activate when the blade anchor screw has

loosened or when the unit has

CE

Hand piece cable

Accessories

This product has CE certificate declared by our manufacturer, HONDA Electronics Co., Ltd.

1.6 m (straight cable)

BDC-200P: 40 pcs./case

· Blade anchor ZH04: 1 pc.

(include unusable blades with hole)

· Blade anchor screw HB03: 3 pcs.

· Hexagon wrench RR02: 1 pc.

· Blade protector ZH805: 1 pc.

*1 Since this product has intended selling to CE standard region, the power supply cord has complied to CE standard. In case of using product at any foreign country or region, please prepare and use the power cord which complies to your country or your region's law and safety standard.

*2 Do not use S-High mode for long time or regularly. It might shorten a life of unit. * Specifications and appearance are subject to change without notice.

Replacement blades

Scan this QR code to get more product information.

https://echotech.co.ip/en/















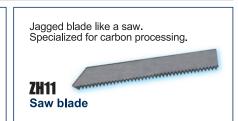
ZH20 3mm **Curving blade** (3 mm)

Flat blade alike to graver. There are 2 types of different width blade. ZHO5A 1mm Flat blade (1 mm) ZHO6A 2mm Flat blade (2 mm)



Flat plate (1 mm)

ZHO8 2mm Flat plate (2 mm)



The blade which has requested to make for welding film sheet. It welds sheets by friction heat of vibration.

Welding blade (2 mm) **ZH38**

from museum.

Useful for grooving work.

25 mm length blade.

Specialized for cork processing.

metal products with grinding stone!

ZH30



Special blade which has been ordered

ZH45

ZH41

ZH10

Square blade

Long blade (25 mm)

Grinding stone #400

Grinding stone #600

Color: Orange

Circular tip ϕ 0.4 blade

Round shaped blade alike to knife. Specialized for cardboard and cloth processing.



Thin blade could be bent easier, but it



ZH16 Thin long blade (5 pcs.)

Cone shaped blade.

Useful for marking work.



Requested blade to cut gourd. It's also useful for cutting silicone.



ZH01A Sharp edge blade 16° Useful for making triangular mold by cutting edge of the blade



ZH44 Double-edged triangular blade

Requested blade for cloth processing.

Only applicable to

ZO-91 and ZO-95.

Color: Blue

Color: Green

"Normal power mode"

ZH52 Flat round blade

ZH27

Grinding stone was made for polishing mold. Even if colored stone part wears, it could keep use black part. Let's clean

Electrodeposited plates could use for filing, not for cutting, ZH34, ZH35, ZH36 are special products that take 2 months for producing.

pyramid filing plate Filing plate #325

ZH34 1mm

ZH23 4mm



ZH36 3mm



Electrodeposited square

ZH47 Round shape filing blade



ZH49 Useful for grinding object's corner



Grinding stone #180

Grinding stone #800

Grinding stone #120



Color: Brown

ZH51

Color: Gray **ZH31 Grinding stone #1000** Color: White **ZH32 Grinding stone #1200** Color: Red **Grinding stone #80**

Maintenance Option

Get Maintenance set & Optional products to maintain and expand your unit's utility.

Blade anchor

for ZO series

Blade anchor ZH15 x 1

Torque screwdriver

ZH25T2



ZH15

Blade anchor

Weld resin sheet and film sheet by pressing and sliding bar on

ZH14SG Thin blade and goggle set

Thin blade ZH14 (5 pcs.) x 1

Blade anchor ZH15 x 1

Goggle ZH13 x 1

Blade anchor screw HB03 x 1



Bar anchor

ZH15S

Blade anchor ZH15 x 1

Blade anchor screw HB03 x 1

Hexagon wrench RR02 x 1





ZH16SG Thin long blade and goggle set

Thin long blade ZH16 (5 pcs.) x

Blade anchor screw HB03 x 1

for Thin blade 7.00 Blade anchor ZH04 x 1 Only for ZH14 and ZH16

Blade anchor screw HB03 x Hexagon wrench RR02 x 1

ZH04S

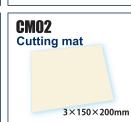
Blade anchor set

ZH14S ZH16S Thin blade set Thin long blade set Thin blade ZH14 (5 pcs.) x 1

Blade anchor screw HB03 x Blade anchor ZH15 x 1













ZH61 #800

ZH62 #1000 Color: White

ZH63 #1200

Replacement Blade Adaption List

%"○" is a mark that the blade could use with Normal or High mode, but not S-High mode. "N" is a mark that the blade could use with Normal, but not High mode and S-High mode. <mark>ZO-91</mark> ZO-95 ZO-91 ZO-95 HA04 Standard blade ZH27 Grinding stone #180 Ν HA07 | Cemented carbide blade ZH28 Grinding stone #300 Ν ZH48 Zirconia ceramic blade ZH29 Grinding stone #400 Ν ZH03 Curving blade (4 mm) Grindina ZH30 Grinding stone #600 Ν ZH18 Curving blade (1 mm) ZH31 Grinding stone #1000 N ZH19 Curving blade (2 mm) ZH32 Grinding stone #1200 ZH20 Curving blade (3 mm) ZH51 Grinding stone #80

ZH05A Flat blade 1 mm ZH06A Flat blade 2 mm ZH52 Flat round blade ZH07 | Flat plate 1 mm ZH08 | Flat plate 2 mm ZH44 Double-edged triangular pyramid Blade ZH45 Circular tip φ0.4 blade Ν Ν ZH11 Saw blade ZH11 ZH12 Square pyramid blade HA09 Long blade for USW series × 0 ZH10 Long blade 25 mm ZH38 Welding blade 2 mm ZH09 Round tip blade(R 15) ZH49 | Electrodeposited curving filing blade 1 mm ZH42 Round tip blade ZH47 Electrodeposited round tip filing blade ZH41 Square blade N N ZH14 Thin blade 0.15 mm N N ZH16 Thin long blade ZH23 Filing plate #325 4 mm ZH34 Filing plate #325 1 mm ZH35 Filing plate #325 2 mm ZH36 Filing plate #325 3 mm ZH39 Electrodeposited square pyramid filing plate Ν ZH01A Sharp edge blade 16°(Revision) **Grinding** ZH24 Grinding stone #800 Ν ZH26 Grinding stone #120

N N N ZH55 ~63 Grinding stone bar ZH54 Welding bar Blade anchor ZH04 Blade anchor for ZO series HB03 Blade anchor screw RR02 Hexagon wrench ZH25T2 Torque screwdriver 60 cN · m Abrasive paper x 3 Cleaning bar x 1 SB01 goods Abrasive paper x 10 SB02 Blade anchor ZH04 x 1 Blade anchor 7H04S Blade anchor screw HB03 x 1

Hexagon wrench RR02 x 1 Thin blade ZH14 (5 pcs.) x 1 7H14S Thin blade set Blade anchor screw HB03 x 1 Ν Ν Blade anchor ZH15 x 1 Thin blade ZH14 (5 pcs.) x 1 Thin blade and Blade anchor screw HB03 x 1 ZH14SG Blade anchor ZH15 x 1 N Goggle set Set of Goggle ZH13 x 1 blade anchor Blade anchor 7H15 x 1 Blade anchor and set ZH15S Blade anchor screw HB03 x 1 for thin blade set products Hexagon wrench RR02 x 1 Thin long blade ZH16 (5 pcs.) x 1 Thin long blade ZH16S Blade anchor screw HB03 x 1 Blade anchor ZH15 x 1 Thin long blade ZH16 (5 pcs.) x Thin long blade Blade anchor screw HB03 x 1 ZH16SG and Goggle set Blade anchor ZH15 x 1 Goagle ZH13 x 1

*1 The vibration might become weak when it has pressed strongly to metal.

Ultrasonic cutter Z0 work with 4 ways of

Depending on the working material, its thickness, or way of processing, there might be differences in unit performance.

Cut

ZO series cuts plastic like butter, and also its range of applicable material is wide. Blade's high-speed, fine vibration cuts even small burrs smoothly and cleanly.





series supports your processing.

Polish

X

"Grinding stone" and "Filing plate" edge is sanded for polishing metal. It polishes rust gently, reducing damaging on material.





set. If contamination inside horn

Maintenance set SB02

Abrasive paper in Maintenance set could clean inside the

has leaved, it might become

cause of unit trouble.

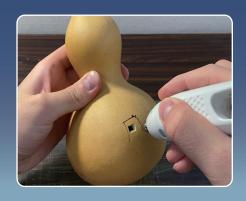
horn without damaging.

(10 pcs. set)

Design

By engraving, melting, making hole or mark on surface of working materials, it able to make object to your original design.





Weld

By pressing and sliding welding blade (or bar) on overlapped vinyl sheet, friction heat melts and weld sheet. Welding bar could also do spot welding on overlapped plastics.





How to Maintenance *When you perform maintenance, the unit must be turned OFF. ■ How to replace a blade anchor ■ How to clean inside of transducer horn Loosen a blade anchor screw with hexagon wrench. Use longer side of hexagon wrench to loosen screw. Set abrasive paper to Wind abrasive paper to cleaning bar. cleaning bar (SB01). Clean or replace listed parts. Blade · Blade anchor · Blade anchor screw Inside the horn (Unreplaceable) Replace a blade Insert cleaning bar inside Insert swab inside the horn anchor. If you often the horn and rotate it. and clean contamination. replace a blade, the work becomes easier **Maintenance set SB01** if you get Torque Cleaning bar and abrasive paper

screwdriver set

Blade anchor is a

or it has broken.

consumable product.

Please replace when it becomes contaminated

(ZH25T2).

Progress of Echo Tech

1956



Ultrasonic equipment manufacturer

1999



Echo Tech Sales company of **Honda Electronics** 2001



USW-333 (Discontinued model)

Released Ultrasonic cutter for hobby



2020 **Released ZO-95**



2016 Released ZO-91



Released Mokebu



Attending to international exhibitions!

Japan Expo Paris (France)



Modellbaumesse (Austria)



Spielwarenmesse (Germany)



JIMTOF (Japan)



SMC (The Netherlands)



Wonder Festival (Thailand)





Point **O** Straight line

BEST ruler is elaborately designed to draw line and for measuring. Hook (A) on BEST ruler stops pen at the zero point and it able to draw a line with accurate length. Because BEST ruler is transparent, it able to draw line with both right and left-hand by reversing ruler.



Point 🕢 Caliper

Because the point (D) corner is right angle, it able to measure a length by hooking corner to material's edge. It could also measure rounded



Point 🛭 **Triangle ruler**

It able to draw a corner with 30, 45, 90 degrees (B) by following guides on ruler. First, write mark on either degree's point and draw a line without moving ruler. It able to draw a corner with designated angle by drawing line between zero point and mark.



By overlapping point (A)on drawn diagram, it able to measure diagram corner's angle. It also able to draw a corner with various degrees (©).



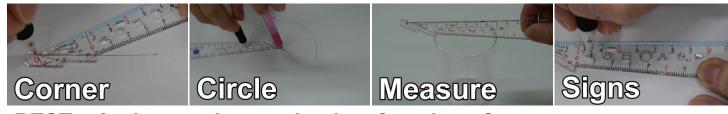
Point 6 Compass

Use two pens to draw a circle. Hook a pen to point (A) and set the other pen in either centimeter's hole. It could draw a circle by turning ruler and drawing, taking point (A) as a center position.



Promotion Promotion video





BEST ruler is a stationery that has function of protractor, compass, triangle and caliper. It is designed by Mr. Nakamura, a chairman of UHOLABO Co., Ltd. BEST ruler is now being started used at workplaces as a support tool of designing and studies.



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Markets of Ultrasonic Cutter ZO series

Hobby

Plastic model, figurine, diorama, RC, etc. For various hobby stuffs, ZO series is useful for fine processing. Not only for cutting parts from runner, it could also able to remodel parts to creator's original design by cutting body. ZO series raises your level of modeling.



Cutting car modeľs body.



Art

For creators who use various materials, ZO series is very supportive because of its wide range of application. To express original ideal design, or working on materials which is uneven surface. ZO series raises the working quality and shortens your working time.



Cutting medium lensity fiberboard.

Cutting eggshell.





Cutting plastic case made by ABS.



Zimmerit coa-

model's body.

ting on tank

Manufacturing

ZO series for hobby is low power compared with tools for industrial use, but it could cut lessening damage on materials because it doesn't give large impact. ZO series could also polish metal parts by replacing to grinding stone. To maintain metalic parts, it has popularly used at various workplaces.

Deburring

3D printer resin.



Cut tabletan

Burned tabletap.

After putting out fire, to specify the origin of fire, ZO series is used for cutting brittle burned materials in Japan. Because those materials might become important evidence at court, there is a demand of tool's performance that gives hardly impact to materials.

Fire station

3D printing

ZO series could easily cut support materials and burrs. Compared with other tools, ZO series reduces resistance from working material because of its sharpness. It could shorten user's repeating, fine works on hard materials. ZO series is one of the few tools that able to process on 3D printing.



Cutting 3D printer resin.



Fossil

ZO series could clean a surface of fossil. There are over 50 types of replacement blades including grinding stone, specialized for "polishing". Stone, moss, bone, etc. such natural materials, or which has uneven surface, ZO series flexibly corresponds and able to process easier.



Shaving Fossil.

