



The world's leading expert in bone cutting efficiency.

# UltraSurgery

Your professional surgery assistant

- Equipped with
- 2 Handpieces
  - 14 Tips



# *UltraSurgery* Classical Model

- 12 years of R&D, Exported to 66 countries, including Germany, Italy, Switzerland etc. 31 patents, 8 invention patents,
- The only dental piezo surgery researched and manufactured in China.



## Application

- **Bone Surgery**  
Applied to orthopedic surgery such as: Osteotomy, Osteoplasty, Bone Collection etc.
- **Sinus lift**  
Applied to separation of the sinus membrane.
- **Extraction**  
Applied to the exelcymosis of embedded tooth and impacted tooth etc.
- **Implant preparatinon**  
Used for cutting socket ridge, alveolar nerve partial lateralization, implantation preparation etc.
- **Periodontic**  
Scaling and inflammatory tissue removal, fractured root apex extraction
- **Endodontic**  
Root surface micro-smoothing



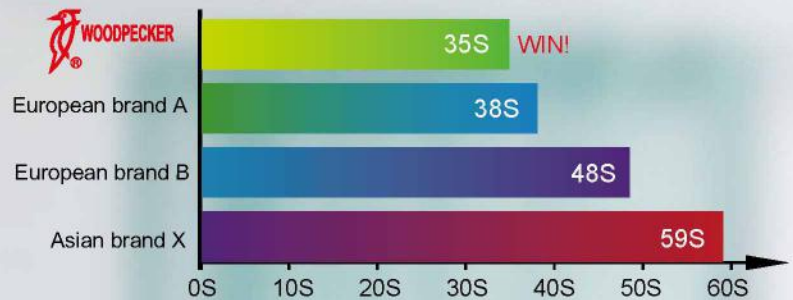
## Main Feature

- **Micrometric cutting**  
Maximum surgical precision and intra-operative sensibility.
- **Selective cutting**  
Maximum safety for the soft tissues.
- **Water cooling cold cutting**  
Keep the cutting point at low temperature, avoiding ambustion.
- **Clear vision for surgery**  
No blood at cutting point; cooling water is sprayed, ensuring clear sight for surgery.

# Excellent Handpiece

- The world's leading expert in bone cutting efficiency

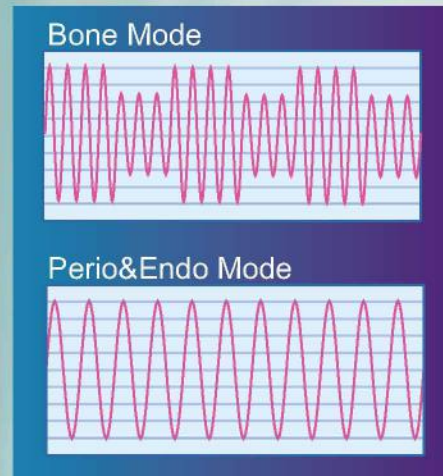
Work on a vertebral column bone of cow, depth 7.5mm



- High-power with firm output, handpiece without overheat

**Bone Mode**—Voltage signal with high and low amplitude alternation adjusted period supplies high-power energy for the handpiece, ensuring high cutting efficiency even when cutting the hardest texture.

**Perio&Endo Mode**—Sine voltage signal with constant amplitude, supplies the handpiece with stable power, ensuring precise treatment.



Working 10 min under full power, test the temperature of handpieces

The temperature below is the maximum temperature



50°C 26°C Color temperature value

Measurement tool: FLIR -E60 infrared camera



# UltraSurgery

## Complete configuration of UltraSurgery

- Mainframe · Foot switch · Pump tubing (5 pcs)
- Autoclave box · TU-1 Torque wrench
- **2 Handpieces**
- **2 Tip holders with 14 tips (US1, US2, US3, US1L, US1R, US4, US5, UL1, UL2, UL3, UL4, UL5, UC1, UI2)**



## Specifications

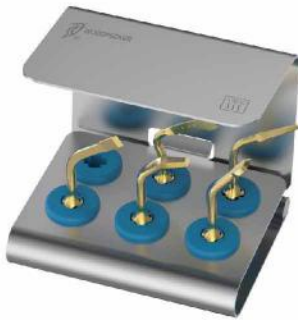
Power Supply	: AC 110V or 220V 50/60Hz
Working frequency	: 24KHz~29.5KHz
Flow	: 25~100ml/m
Dimensions	: 330mm×254mm×167mm
Weight	: 3.8Kg

2 Handpieces

# UltraSurgery Tip Series

A Wide Choice for Application

Basic kit



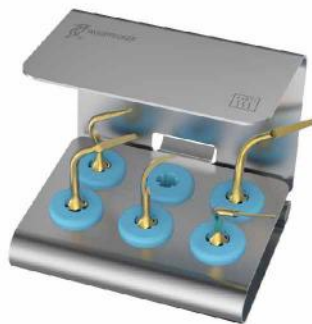
Sinus lift kit



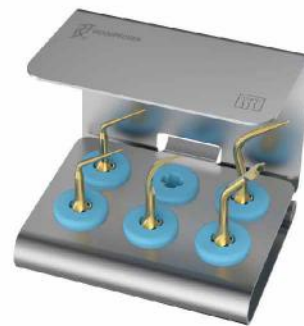
Osteotomy kit



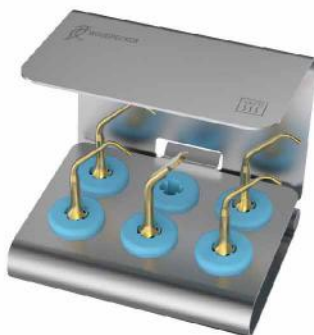
Extraction kit



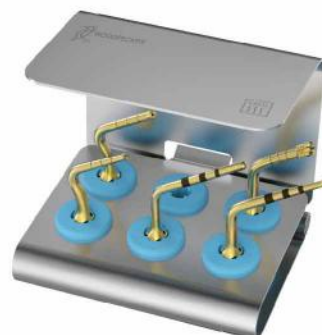
Periodontal kit



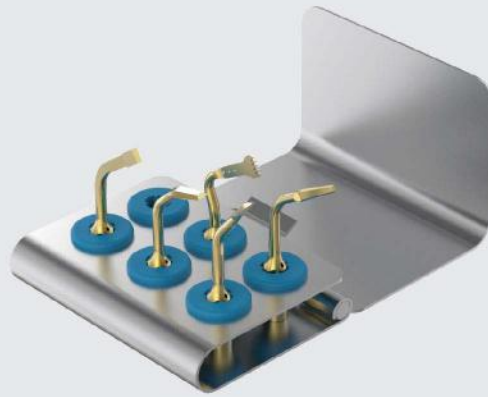
Retro surgical kit



Implant prep kit

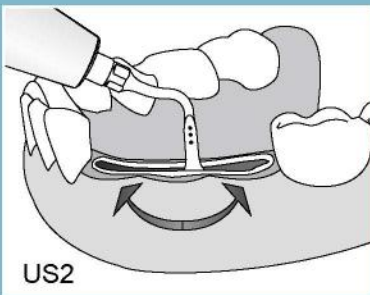


# Basic kit

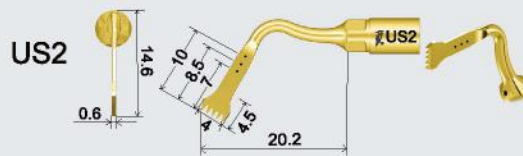


- Ridge expansion
- Corticotomy techniques
- Bone block grafting
- Bone chip grafting / bone modeling
- Extractions
- Sinus lift lateral approach
- Endodontics
- Periodontal surgery

## Basic kit



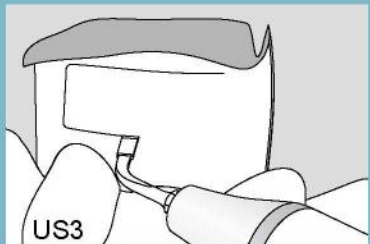
US2



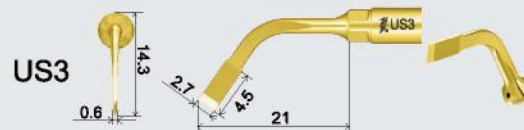
US2

Mode: Bone  
Power: Quality 1, Quality 2, Quality 3  
(Cortical/Spongious)

High effectiveness osteotomy technique in maxilla and mandible (ridge expansion, corticotomy technique, bone block grafting)



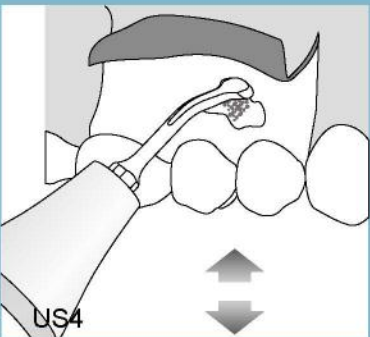
US3



US3

Mode: Bone  
Power: Quality 1, Quality 2, Quality 3  
(Cortical/Spongious)

Micrometric osteotomy (about 0.6 mm): osteotome of great precision in anatomically thin structures (for example, ridge expansion, interdental corticotomies).



US4



US4

Mode: Bone  
Power: Quality 1, Quality 2, Quality 3  
(Cortical/Spongious)

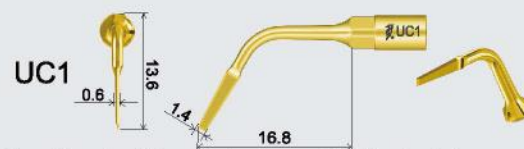
Universal osteoplasty: periodontal ostectomy, bone chips harvesting, inflammatory tissue removal (cyst, etc).



US5

Mode: Bone  
Power: Quality 1, Quality 2, Quality 3  
(Cortical/Spongious)

High efficiency bone osteoplasty: bone remodelling and harvesting of bone chips.



UC1

Mode: Bone  
Power: Quality 1, Quality 2, Quality 3  
(Cortical/Spongious)

Used to cut off the ankylosis, root fraction techniques.

# Sinus lift kit



- Sinus lift technique lateral approach
- Osteotomy close to nerves

## Sinus lift kit



Mode: Root  
Power: Perio

Non-cutting elevator of the sinus membrane: separation of the sinus membrane in internal zones.



Mode: Root  
Power: Perio

Schneiderian membrane separation from bony walls: separation of the sinus membrane, 2 mm around the frame of bony window.



Mode: Bone  
Power: Quality 1, Quality 2, Quality 3 (Cortical/Spongious)

Diamond-coated(100µm), instrument for micrometric osteotomy or osteoplasty: non-traumatic, to finalize the osteotomy or osteoplasty on thin bone and/or near delicate anatomic structures.



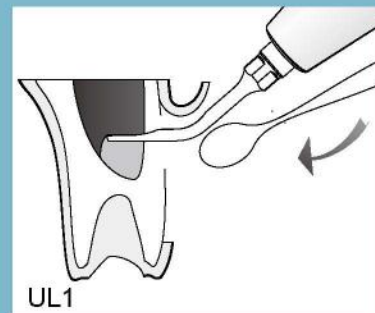
Mode: Bone  
Power: Quality 1, Quality 2, Quality 3 (Cortical/Spongious)

Diamond-coated(100µm), micrometric osteotomy (about 1 mm): to finalize the osteotomy in proximity of soft tissue (for example, sinus membrane, vessel, alveolar nerve).

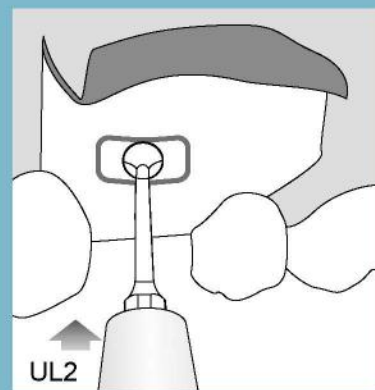


Mode: Root  
Power: Perio

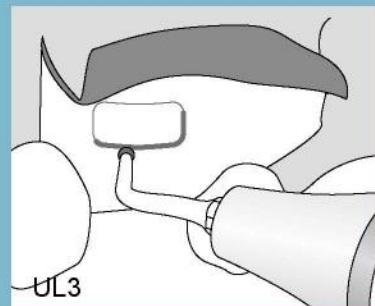
Separation of the sinus membrane in internal zones, on-cutting elevator of the sinus membrane.



UL1



UL2



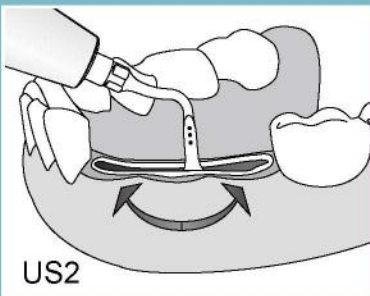
UL3

# Osteotomy kit



- Ridge expansion
- Corticotomy technique
- Bone block grafting

## Osteotomy kit



**US1**

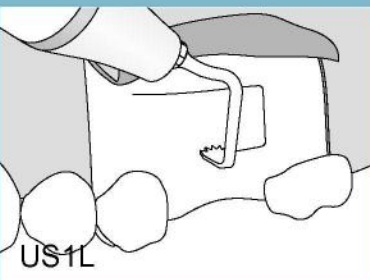
Mode: Bone  
Power: Quality 1, Quality 2, Quality 3  
(Cortical/Spongious)

High effectiveness osteotomy of large bone sections during maxillofacial surgery, it can also be used for exodontia exodontics.

**US2**

Mode: Bone  
Power: Quality 1, Quality 2, Quality 3  
(Cortical/Spongious)

High effectiveness osteotomy technique in maxilla and mandible (ridge expansion, corticotomy technique, bone block grafting)



**US1L**

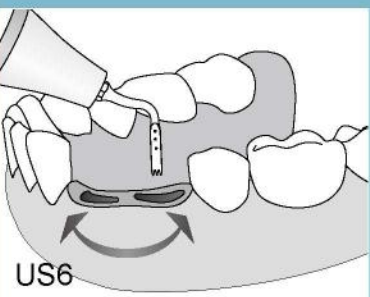
Mode: Bone  
Power: Quality 1, Quality 2, Quality 3  
(Cortical/Spongious)

Left angle 90°, micro-saw 0.5 mm horizontal osteotomy: all the osteotomy technique in maxilla and mandible (for example, bone block grafting).

**US1R**

Mode: Bone  
Power: Quality 1, Quality 2, Quality 3  
(Cortical/Spongious)

Right angle 90°, micro-saw 0.5 mm horizontal osteotomy: all the osteotomy technique in maxilla and mandible (for example, bone block grafting).



**US6**

Mode: Bone  
Mode: Special

Micro-saw 0.6 mm (3 teeth), Osteotomy: osteotome of great precision in anatomically thin structures (for example, ridge expansion, corticotomy technique).



# Extraction kit



- Extractions
- Periodontal surgery

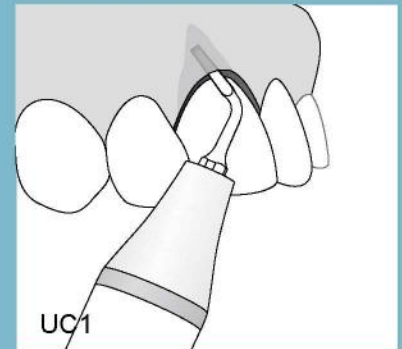
## Extraction kit



UC1

Mode: Bone  
Power: Quality 1, Quality 2, Quality 3  
(Cortical/Spongious)

Used to cut off the ankylosis, root fraction techniques.



UC2

Mode: Bone  
Power: Quality 1, Quality 2, Quality 3  
(Cortical/Spongious)

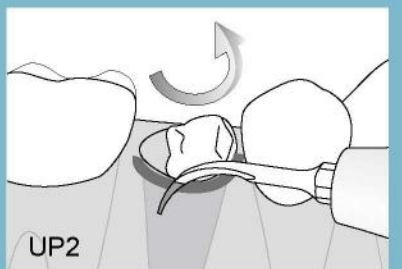
Analogue to UC1 in the posterior regions.



UC3

Mode: Bone  
Power: Quality 1, Quality 2, Quality 3  
(Cortical/Spongious)

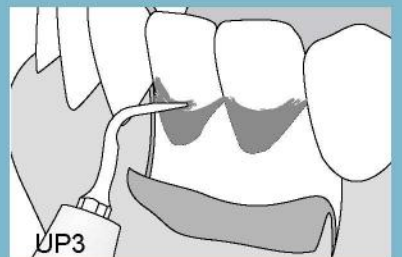
Analogue to UC1 in the posterior regions.



UP2

Mode: Root  
Power: Perio

Powerful scaling: scaling and inflammatory tissue removal fractured root apex extraction.



UP3

Mode: Root  
Power: Perio

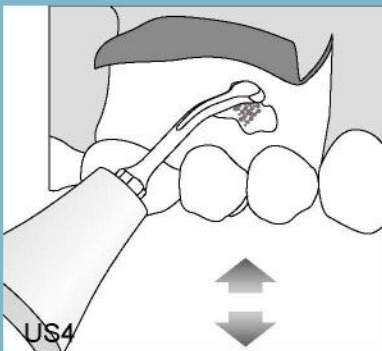
Gentle scaling: root scaling

# Periodontal kit



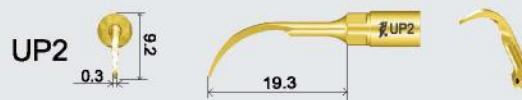
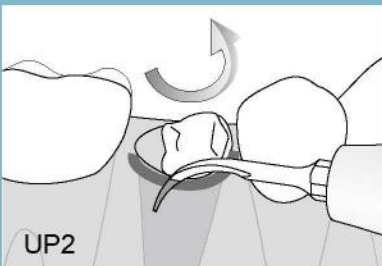
- Periodontal surgery
- Bone chip grafting / bone modeling
- Sinus lift lateral approach
- Endodontics
- Ridge expansion
- Extractions

## Periodontal kit



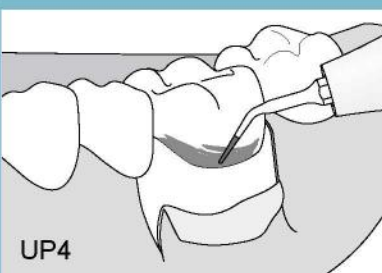
Mode: Bone  
Power: Quality 1, Quality 2, Quality 3  
(Cortical/Spongious)

Universal osteoplasty: periodontal osteotomy, crown lengthening, bone chips harvesting, inflammatory tissue removal (cyst, etc.)



Mode: Root  
Power: Perio

Powerful scaling: scaling and inflammatory tissue removal fractured root apex extraction.



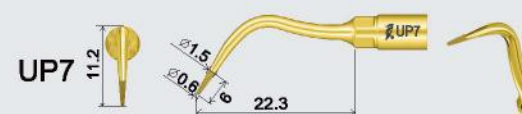
Mode: Root  
Power: Perio

1. Scaling and micro-debridement: root debridement and root planing during resective and regenerative periodontal surgery.
2. Bone perforation: initial pilot osteotomy.



Mode: Root  
Power: Perio

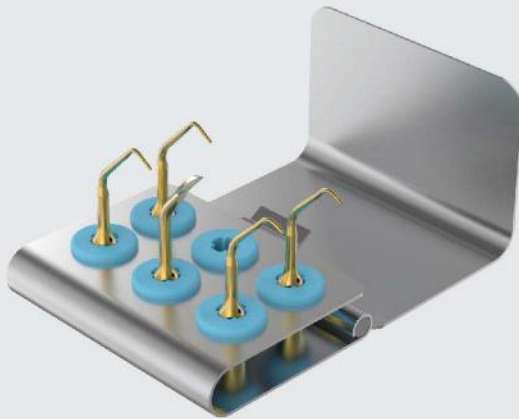
Root surface micro-smoothing: root planing



Mode: Root  
Power: Perio

Diamond-coated (40µm), instrument for root canal orientation and removal of the calcifications located at 1/3 part of root canal, it can also be used for micro-osteoplasty and root planing.

# Retro surgical kit



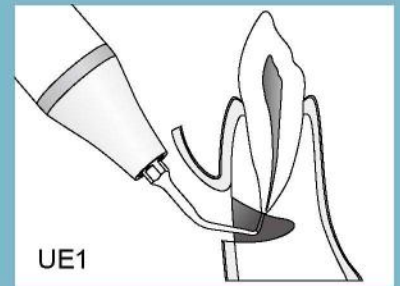
• Endodontics

## Retro surgical kit



Mode: Root  
Power: Endo

Diamond-coated(40µm),instrument for apical root debridement:diamond-coated instrument for efficient root planning.The length of the diamond-coated on tip is 3.3mm.

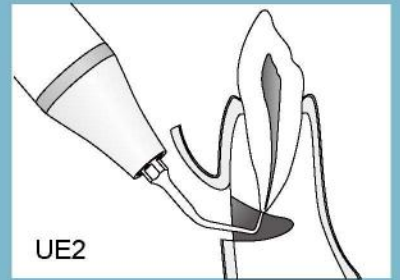


UE1



Mode: Root  
Power: Endo

Used for gentle cleaning .The length of tip slender smooth part is 4.5mm.



UE2



Mode: Root  
Power: Endo

Diamond-coated(40µm),instrument for apical root debridement:diamond-coated instrument for efficient root planning.The length of the diamond-coated on tip is 2.2mm.



UE4



Mode: Root  
Power: Endo

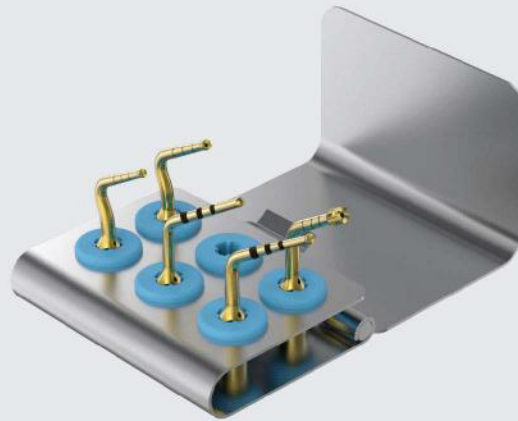
Used for gentle cleaning .The length of tip slender smooth part is 3.5mm.



Mode: Bone  
Power: Quality 1,Quality 2,Quality 3  
(Cortical/Spongious)

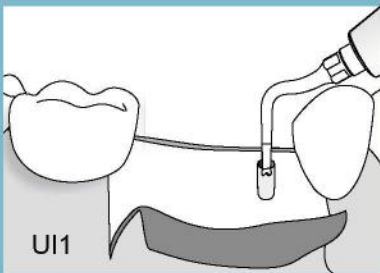
Universal osteoplasty: periodontal ostectomy, bone chips harvesting, inflammatory tissue removal (cyst, etc.).

# Implant prep kit

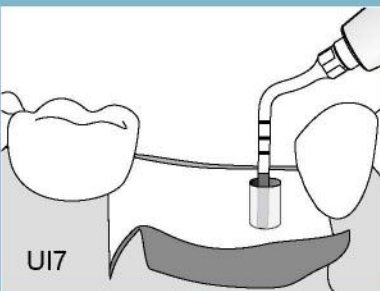


- Implant site preparation
- Sinus lift technique crestal approach

## Implant prep kit



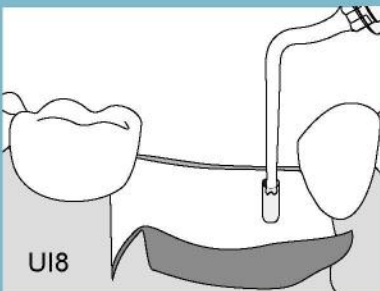
Φ1.6mm implantation site preparation insert. The working length of the tip is 9mm.



Φ2.0mm implantation site preparation insert. The hole center of the top for water spray maximum reduce the heat.



Diamond-coated(100μm), instrument for finalizing the implantation site preparation close to the alveolar nerve.



Φ1.6mm implantation site preparation insert. The working length of the tip is 15mm.



Φ2.8mm implantation site preparation insert. The hole center of the top for water spray maximum reduce the heat.

# Other tips



Recommended for periodontal gentle curetting scaling



Diamond-coated(40µm),instrument for micro-soteoplasty:interproximal osteoplasty and root planning

# Spare parts



Handpiece  
LED/non LED



Tip holder



TU-1 Torque wrench



Foot switch



Pump tubing



Pump connector



Handpiece holder



Water tank hanger



Power line



Autoclave box

# *UltraSurgery*

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Add: Information Industrial Park, Guilin National High-Tech Zone,  
Guilin, Guangxi, 541004 P. R. China  
Tel: Europe Sales Dept.:+86-773-5873196, +86-773-2125222  
North America, South America &  
Oceania Sales Dept.: +86-773-5873198, +86-773-2125123  
Asia & Africa Sales Dept.:+86-773-5855350, +86-773-2125896  
Fax: +86-773-5822450  
E-mail: [woodpecker@glwoodpecker.com](mailto:woodpecker@glwoodpecker.com), [sales@glwoodpecker.com](mailto:sales@glwoodpecker.com)  
Web: <http://www.glwoodpecker.com>

**EC REP** Weikang Ltd ([www.CE-Marking.eu](http://www.CE-Marking.eu))  
29 Harley St., LONDON, W1G 9QR, UK

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