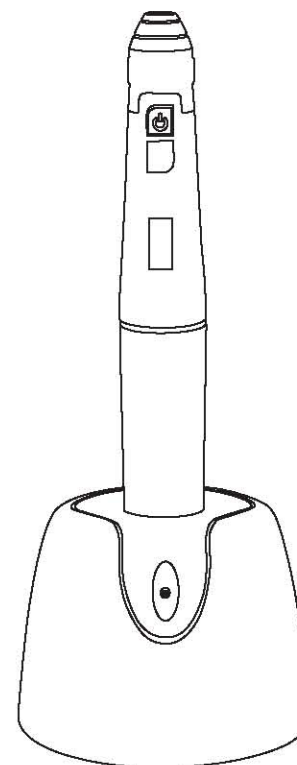


Obturation System

USERS GUIDE

α pack



Safety Caution

⚠ CAUTION: Please read the following information completely before use this product.

1. Never use any battery except the original battery; otherwise it will result in severe damage.
2. Please use our accessories, such as: Pen tips, adaptor, and batteries.
3. The temperature of tip is very high during the surgery, in order to prevent from being burned, please avoid it directly contact to the oral soft tissue.
4. Please keep the product clean.
5. Don't use the device to the patient who has heart pacemaker with him.

Standard Configuration

Obturation pen	1
Charging base	1
Adaptor	1
Batteries	2
Wrench	1
Pen tips(4 pcs)	1

Pen tip size/taper

F: #45/02 FM: #50/04 M: #55/06 ML: #55/08

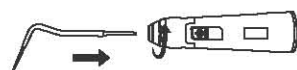
Intended Use

1. The obturation pen support the vertical compaction of gutta percha for the root canal (mainly is the apical parts) filling.
2. It is intended exclusively for use by trained dentist and use only in clinic or laboratory.

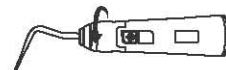
Construction and Installation

This product is consisted of pen tip, obturation Pen, battery, charging base and adaptor.

Installation of pen tip and battery



Loose

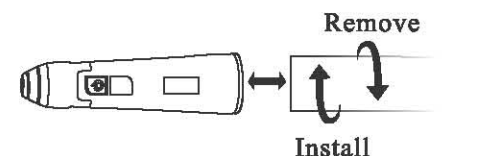


Tight

1

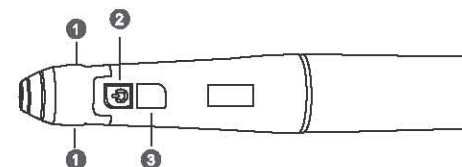
Warning:

Keep the unit shut down before the pen tips installed.



Usage

Function



① Heating button ② Power button ③ Function button

1. Hold the Power button ② for more than 1s to turn on the device, and hold it again to turn off the device.
2. Short press Power button ② to select the size of hot needle: MF, F, M, ML
3. Press the Function button ③ to set the temperature: 160°C, 180°C, 200°C, 230°C
4. Press any Heating button ① to start to heat, loosen to stop heating. Hot needle will reach the setting temperature after it is heated for about 5s.

⚠ Notice

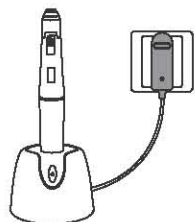
If a large amount of gutta-percha is used, raise the temperature setting to 230°C.

Usage notices

1. To avoid the overheating, the device will stop and into the protection mode automatically after heating over 30s. To continue the heating, release the button during the protection mode and press the button again.
2. For saving the power, the unit will be turned off after 2 min without any operation.

2

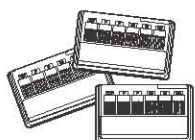
Charge



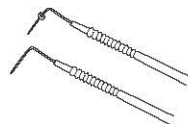
- 1.If the device is under low voltage, the screen will display LO indication and will start to flash at the same time, then the it will automatically turn off after 5s, please charge or change battery.
- 2.Connect the 5V adapter to the charging base, green indicates the light is on, then put the device on the charger base, yellow light will be on and start to charge. The green indicator light up again, which means that battery is full.

Clinical Use

① Preparation-gutta percha point

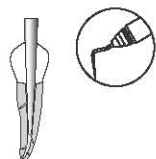


② Preparation-hand plugger



Prepare 2~3 plugger to compact gutta percha, mark root canal length by rubber stopper.

③ Preparation-pen tip



Select proper pen tip for root canal.

④ Dry root canal



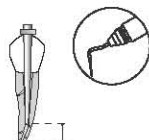
Dry the root canal using paper point.

⑤ Select the gutta percha point



Select a proper gutta percha point that matches the root canal to check it makes a tug back.

⑥ Mark the length of pen tip



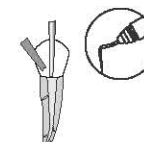
Select a proper pen tip and proper plugger, the length of tip should be 4-6mm shorter than working length, then mark a length by rubber stopper.

⑦ Insert gutta percha point



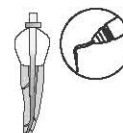
Coat 3mm from the tip with sealer, insert it to root canal with pumping action.

⑧ Removal of excess



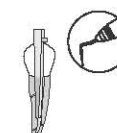
Cut the excess gutta percha by pen tip.

⑨ Heating & insertion



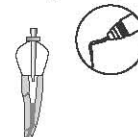
Heat and insert pen tip with gutta percha to 4-6mm short of the working length.

⑩ Compaction



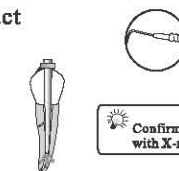
Stop the heating and maintain the pressure about 10 seconds.

⑪ Removal of pen tip



Removal after heating the pen tip for 1-2s to avoid gutta percha come out with pen tip.

⑫ Compact



Confirm obturation with X-ray.

Compact the warmed gutta percha with plugger.

Troubleshooting

1. If pen tip can't work properly, please check if the installation is reliable, otherwise, please change a new pen tip.
- 2.If the LED indicators on charging base are off during the charging, please check it if the charging base is well connected to the power source.

Cleaning and Sterilization

- Surfaces can be cleaned with soft towel and a mild detergent or rubbing alcohol.
- It is recommended that the pen tip be changed after patient and when damage is detected or suspected. Discard used needles in biohazard container.
- The needle and the thermal protector must be sterilized before first use and between patients, autoclave at 121°C for 15 minutes or 135°C for 4 minutes.

Storage and Transportation

- Storage temperature: -10°C ~+55°C
- Humidity: 10%RH~85%RH
- Atmospheric pressure: 86kPa~106kPa

Warranty

The warranty of this equipment is 1 years, batteries and adaptor are 6 months, other accessories are not included in the warranty.

Technical Specifications

Adaptor:	input:100-240Vac50/60Hz
	output: DC 5V/2A
Battery:	DC 3. 7V/2600mAh
Operating Temperature:	0°~45°C
Humidity:	10%RH~75%RH
Atmospheric pressure:	50%RH~106%RH

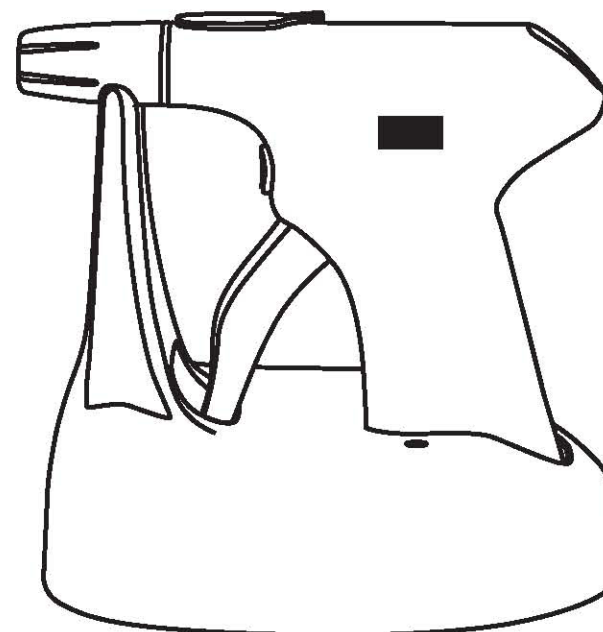
Symbol Definition

	Class II equipment(Adaptor)
	Direct current
	This way up
	Fragile, handle with care
	Keep away from rain
	Type B equipment
	Caution! Please read the instruction
	Used indoor only
	WEEE
	Please refer to the instructions

Obturation System

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β pack



Safety Caution

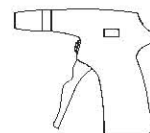
⚠ CAUTION:

Please read all instructions provided for this device before using it.

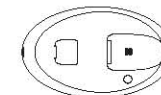
- This product is only available for use by dental professionals.
- The temperature of needle is very high during the surgery, in order to prevent from being burned, please avoid it directly contact to the oral soft tissue.
- To reduce the risk of explosion, do not use in the presence of flammable anesthetics or in areas where there's a risk of explosion.
- Protect the instrument from ambient electromagnetic interference, when there is a patient who is using the cardiac pacemaker, or there is an electronic operation, please don't put the machine around.
- Use of any other tips or accessories may cause damage, injuries or loss of performance and will void warranty.

Standard Configuration

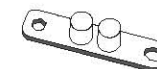
Obturation Gun	1
Adapter	1
Charging Base	1
Multi-tool	1
Handpiece prop	1
Needles	4
Thermal Protector	2
Prevent overflow ring	10
Plunger	1
Cleaning Brush	1



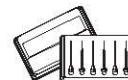
Obturation Gun



Charging base



Multi-tool



Needle



Thermal Protector



Prevent overflow rings



Plunger



Cleaning brush

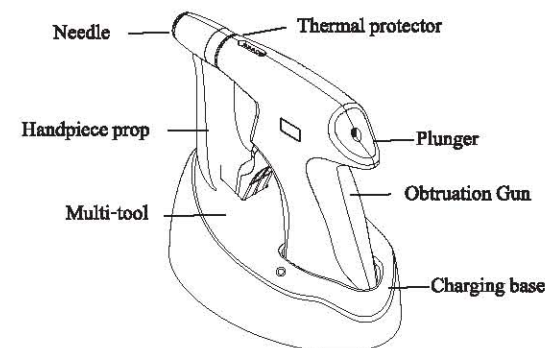


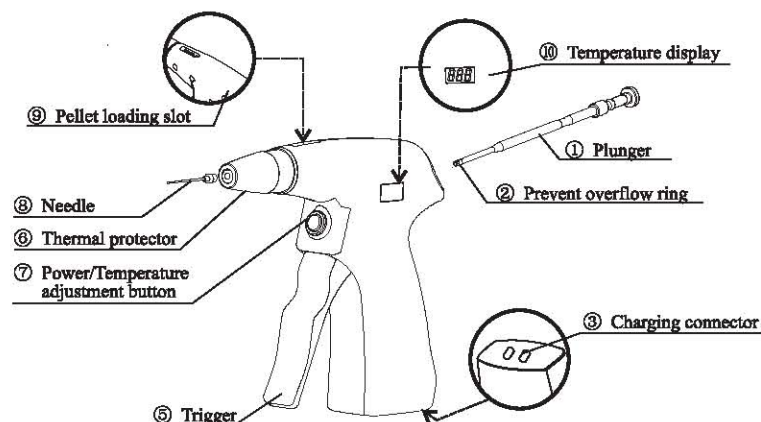
Adaptor

Intended Use

Obturation Gun is intended for injection of Gutta-Percha into a prepared root canal for obturation. This product is only available for use by dental professionals.

Product Description



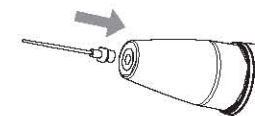


- ① Plunger: The stainless steel plunger can be reused many times, however eventually it will need to be replaced. Call authorized dealer to purchase replacements.
- ② Prevent overflow ring: Prevent the gutta-percha overflow.
- ③ Charging connector: Connect the Obturation Gun and Charging Base
- ④ Trigger: Pull repeatedly to extrude the gutta-percha pellet.
- ⑤ Thermal Protector: Simply grab and swivel to 360. The Thermal Protector protects the patient from harmful amount of heat.
- ⑥ Power/Temperature adjustment button: Press and hold to turn on and off. Press to switch different temperature settings :160°C/180°C/200°C/230°C.
- ⑦ Needle: The melted gutta percha is extruded at the end of the needle.
- ⑧ Pellet loading slot: Insert a gutta-percha pellet into the pellet loading slot.
- ⑨ Temperature display window.

Installation and Use

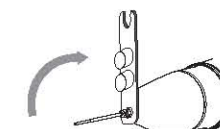
⚠ Caution: To reduce the risk of burn, make sure the gun has been off for a minimum of five (5) minutes and the nose is cool to the touch before changing the needle or protector.

1. Select desired needle, assemble it.

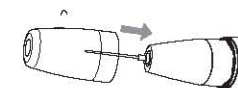


2. Use the needle bender/wrench to secure the needle while turning it in a clockwise direction.

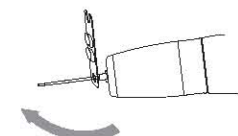
⚠ Caution:
Do not over-tighten!



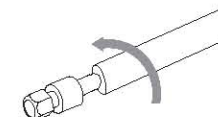
3. Install the thermal protector.



4. Use needle bender to bend needle as desired.



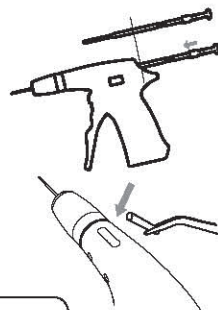
5. Install the prevent overflow ring.



⚠ Caution:
-Prevent overflow ring is Wearing part, worn or damaged would cause blocking or Backflow, Always check whether it is intact.
-Do not tighten the plunger screw too hard. it will shrink and permanently damage the ring.

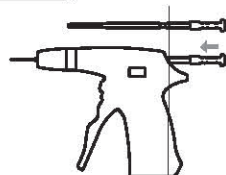
6. To insert the pellet into the Beta, pull the plunger back (but not out of the Gun) to clear the loading slot.

7. Tilt the front of Gun down so that the needle is pointing at an angle towards the floor. Place the pellet inside the loading slot.



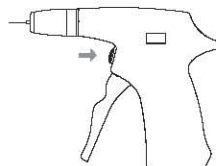
Caution:
Only insert one pellet at a time, gutta percha pellet melting point must below than 20°C

8. Use the plunger to push the pellet forward until it enters the heating chamber. Advance the plunger to push the pellet fully into the heating chamber up to a point approximately as shown fig.

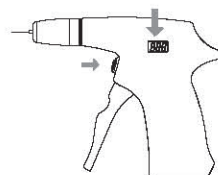


Caution:
Failure to fully insert the Plunger will result in the trigger-advance mechanism not operating properly.

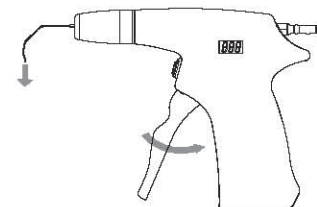
9. Turn on the Power Switch. The temperature will automatically default to the previous temperature setting used before the Beta was turned off.



10. To change the desired temperature, continue pressing the power/temperature adjustment button until the desired temperature is displayed. Each press will incrementally change the temperature display as follows: 160°C→180°C→200°C→230°C and then back to 160°C (recommended temperature setting is 180 or 200°C)



11. After selecting the desired temperature, the temperature display will begin to show the actual temperature, which will continue to change until it reaches the desired temperature. Pump the trigger to further advance the Plunger until a small amount of material extrudes from the needle tip.



Caution:

- With the Plunger inside the Gun, do not push or pull the Plunger forcefully. Once the pellet material has been warmed up to the desire temperature, the Plunger should advance by pumping the trigger several times. If not, try advancing the Plunger manually with light pressure and try again.
- To empty the Gun of all remaining material, remove the needle and express any residual material by pumping the trigger to push the plunger out the front of heated gun.
- Be careful not to touch the front nose and plunger until it has been given a chance to cool.
- When prevent overflow ring is worn or damaged, replace in time, the thermal protector must be sterilized before first use and between patients.

12. The device automatically turns off its heating element after 15 minutes of non-use.

13. When the temperature window displays "LO" and "bibi" alarms, indicates battery level is critical, please charge.

14. Reset function:

Press and release to reset the device. Use in case of device malfunction or error. The device will not operate when the switch is pressed. Release it to turn on the power.

15. Charging:

- Insert the Handpiece prop to the Charging Base;
- Connect the Charging Base to the provided power cord and plug cord into a standard electrical outlet.

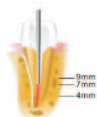


CAUTION:

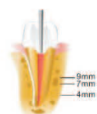
Fully charge battery immediately upon receipt of this device and prior to first use.

16. Place the device in the Charging Base so that the connector on the bottom of the Gun engages securely with the connector in the Charging Base. The Gun is properly connected when the LEDs illuminate. If no light on the Gun is visible, check all connections. The device is fully charged when the green charging indicator lights are displayed.

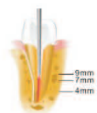
Clinical Use



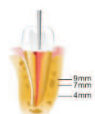
1. Using the gun's needle, make contact with the upper part of filled master cone in the canal, transfer heat for 3 to 5 seconds.



3. Continue flowing while withdrawing the needle from the canal.



2. Follow the melted Gutta-percha obturator to the root canal.



4. Now the entire root canal is fully obturated.

Troubleshooting

1. Gun does not power on when Power Switch is pressed.

- Check that the battery is charged. Recharge as needed.
- Check if that the reset switch is pressed, release it.

2. Plunger cannot be retracted.

- If the plunger cannot be retracted, it is most likely due to cooling and firming of material in the chamber with the Plunger left in.
- To remove Plunger, turn on the Gun and set temperature at 200°C. Wait for Gun to reach selected temperature and then retract the plunger.
- If the Plunger will still not retract, allow the Gun to cool and remove the needle. With the needle removed, pull the Gun's trigger several times to advance the Plunger tip out the front of the Gun. Clean excess material off the tip of the Plunger then the Plunger should be easy to retract.

3. Material does not flow from the needle.

- When Blocking occurs, do not force pulling the trigger, you can press the plunger slowly
- If still not solve, allow the Gun to cool and remove the needle. With the needle removed, pull the Gun's trigger several times to advance the Plunger tip out the front of the Gun.
- Check the Prevent overflow ring. If worn or damaged, replace it.

4. Display "Err"

- Slightly turn the gun head, device will return to normal.

Product Maintenance

1. Changing the Battery:

- When changing the battery, unscrew the screw to remove the battery cover from the handle;
- Pull the connector and pick out the battery;
- Replace the new battery, Connect the connector;
- Install the battery cover.

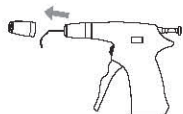


CAUTION:

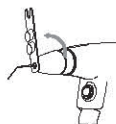
Please use the original batteries, to avoid damage to the device.

2.Internal cleaning of handpiece:

(1)Remove the thermal Protector.



(2)Remove the Needle and plunger.



(3)Set the temperature to 160°C.



(4)Use the provided brush by pushing in the back of the gun and through the exit at the tip (where the plunger first enters the gun) to clean it as necessary.



(5)Use alcohol soaked the brush.



(6)Wipe off the plunger using rubbing alcohol and gauze to remove any visible residual material.

CAUTION:
Do not put any cleaner or chemicals on the cleaning brush before inserting it into the chamber.

Cleaning and Sterilization

- Surfaces can be cleaned with soft towel and a mild detergent or rubbing alcohol.
- It is recommended that the needle be changed after each patient and when damage is detected or suspected. Discard used needles in biohazard container.
- The needle and the thermal protector must be sterilized before first use and between patients,autoclave at 121 °C for 15 minutes or 135 °C for 4 minutes.

Storage and Transportation

- Storage temperature: -10°C ~ +55°C
- Humidity: 10%RH ~ 85%RH
- Atmospheric pressure :86kPa ~ 106kPa

Warranty

The warranty of obturation gun and charging base is 12 months, adaptor and battery are 6 months, other accessories are not included in the warranty.

Technical Specifications

Adaptor:	input:100~240V / 50~60Hz
	output: DC 5V, 2A
Battery:	DC3.7V/2200mAh
Operating Temperature:	0 ~ 45°C
Humidity:	10%R ~ 85%RH
Atmospheric pressure:	50%RH ~ 106%RH

Symbol Definition

	Class II equipment(Adaptor)
	Direct current
	Type B equipment
	Caution! Please read the instruction
	Used indoor only
	This way up
	Fragile,handle with care
	Keep away from rain
	WEEE
	Please refer to the instructions