

# **beyond<sup>®</sup>** II Ultra

Whitening Accelerator

Model: BE-818UL



Professional **in-office**  
Whitening Treatment!

**USER MANUAL**  
**Instruction for Use**



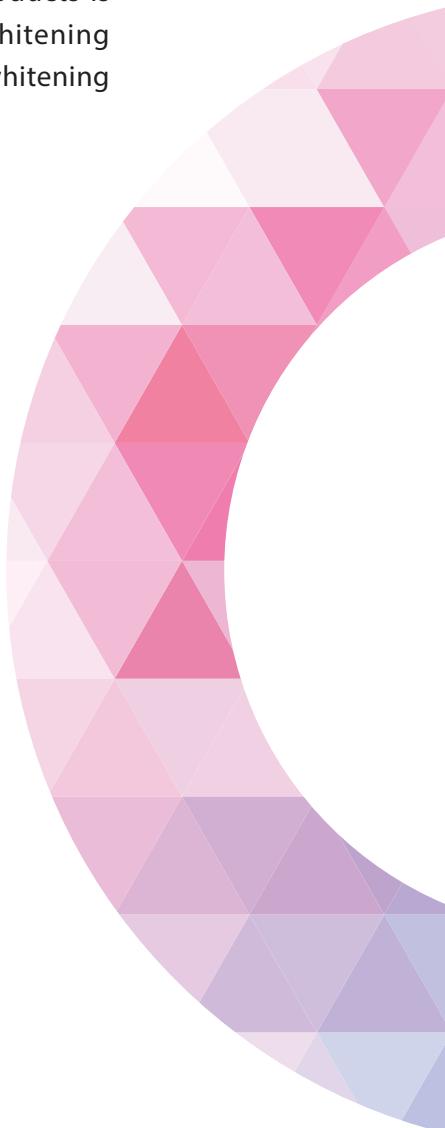
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Thank you for your purchase. BEYOND® International Inc., global leaders in aesthetic dental products is proud to present the BEYOND® II Ultra Whitening Accelerator: designed to deliver superior whitening results at an affordable price.

## Purpose

The BEYOND® II Ultra Whitening Accelerator is a reinvented version of our BEYOND® Power Whitening System designed for professional whitening in a dental facility to whiten stained teeth. With the BEYOND® II Ultra, a high-intensity LED light is used to deliver a tailored beam of light between 480–520 nanometers in wavelength needed to activate BEYOND® whitening gels and provide up to 6-8 shades of improvement. An ultrasound transducer within the light head further targets the whitening gel to augment the oxidation process. A cavitation phenomena is produced by the ultrasound component, where microbubbles are formed, then grow, and reach a point where they rupture. This rupture/collapse of microbubbles releases energy, creating shockwaves and high pressure. This effectively accelerates physical and chemical reactions in the whitening gel, aiding in the efficiency of the whitening process.



# beyond® II Ultra

## Whitening Accelerator



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### Included in the BEYOND® Package

- 1 x BEYOND® II Ultra Whitening Accelerator
- 1 x BEYOND® II Ultra LED light
- 2 x BEYOND® II Cheek Retractor 5pk  
or 1 x FlexiPro Cheek Retractor 5pk
- 1 x Power Cord
- 2 x Protective Eye Goggles
- 1 x Instruction Manual
- 2 x Wall Poster
- 100 x Four-fold Promotional Brochures

All BEYOND® brand dental products are manufactured to international quality standards and are thoroughly inspected upon completion. Once received, inspect both the shipping packaging and the whitening system for any damage and report, if any, to BEYOND®.

## Features

**Ultra** – The ultrasound function utilizes a cavitation process that permits the whitening gel to target the enamel more comprehensively and in a shorter time frame. This means less chair time for the patient, less potential for sensitivity and the same great results you've come to expect with BEYOND®.

**Simultaneous** – Allows for the effective treatment of two patients at the same time. (Second LED sold separately)

**Compact** – The BEYOND II Ultra has a small footprint and can be easily moved from operatory to operatory.

**Digital** – Simple and quick patient preparation and system operation with digital display control board.

**Ionizer** – A passive air ionizer gently removes odors from the room while unit is on.



## Technical Data

Model: BE-818UL

Input Voltage: 100~240VAC, 50/60Hz

Output Voltage: DC 24V

Input Power: 40VA

Illuminance:

High: 26000LX

Medium: 23000LX

Low: 20000LX

Wave Length: 485nm

Light Working Power: 40mW/cm<sup>2</sup>

Light Working Voltage: DC 24V

Fuse Type: F500L250Vx2

Gross Weight: 9KG

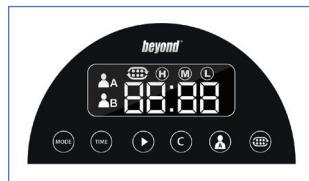
Package Dimension: 82.5 x 34 x 26cm

Estimated lifespan of LED: 50,000 hours

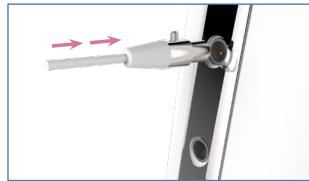
# Turning on Your BEYOND® II Ultra Whitening Accelerator



After checking the voltage input setting, plug the machine into a grounded power unit and switch the POWER ON/OFF switch located at the back of the machine near the power cable plug to ON.



The TUI panel will illuminate the default time on the control panel. Your Beyond II Ultra Whitening Accelerator is now ready to be used.



Up to two BEYOND® II Ultra LED lights may be connected to the BEYOND® II Ultra Whitening Accelerator. There are two male 3-pin circular connector sockets at the front of the BEYOND® II Ultra Whitening Accelerator. Push the female 3-pin circular connector attached to the BEYOND® II Ultra LED light into the male connector socket until it clicks.

To turn off the BEYOND® II Ultra Whitening Accelerator, all procedures should be reset. Then switch the POWER ON/OFF switch located at the back of the machine to OFF.

For energy conservation purposes, the BEYOND® II Ultra Accelerator will enter into a sleep mode after 15 minutes if not being used actively. During this time the ionizer light will become a continual light, and will remain so until sleep mode is cancelled. If ionizer was running prior to sleep mode it will continue to do so. To revert the BEYOND® II Ultra back to fully active mode, simply press any of the buttons at the top of the unit and the previous active settings will return.

# The Touch-Control Panel



**[ A ] High / Medium / Low:** Select light intensity by pressing the MODE button. The intensity levels may be changed before the desired procedure time has started or after the procedure is completed. The chosen intensity level will be lit next to the treatment cycle timer.

**[ B ] TIME:** Press to adjust the treatment cycle time. Factory default is set at 12 minutes. Longer procedure times may be needed for more severe cases. The system will default to the last time selected. Procedure time may not be adjusted during the procedure.

**[ C ] START/PAUSE:** Press the to turn on accelerator light and begin countdown of treatment cycle. Press the again to pause the treatment. Press to resume treatment.

**[ D ] CANCEL:** Press to stop the procedure and turn off accelerator light. This will reset time to 12 minutes.

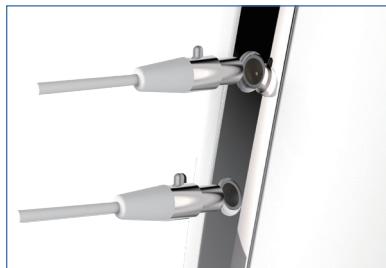
**[ E ] PA/PB:** Press to operate the functions on either Patient A or Patient B. The chosen PATIENT function that will be operable will be lit next to the treatment cycle timer.

**[ F ] ULTRASOUND:** Press to turn on or off the Ultrasound function.

**[ G ] TREATMENT CYCLE TIMER:** Shows the minutes remaining in a treatment cycle. Factory default is 12 minutes although this can be adjusted using the TIME button.

## Simultaneous / Dual Whitening Option

The BEYOND® II Ultra Whitening Accelerator gives you the option to whiten two patients simultaneously. Although the BEYOND® II Ultra Whitening Accelerator includes one BEYOND® II Ultra LED light, a second Ultra LED light may be purchased to offer the simultaneous option.



Plug in the two BEYOND® II Ultra LED lights to the 3-pin circular connector sockets.

Top socket is for Patient A Ultra LED light function. Bottom socket is for Patient B Ultra LED light function.



Press PA/PB  button to pick which Ultra LED light to function. Press TIME  button to set the time for the procedure. Press the MODE  button to choose the appropriate light intensity for the patient. Press START/PAUSE  button to turn on the BEYOND® II Ultra LED Light, starting the whitening

procedure. Press the PA/PB  button to switch to the other patient. Press TIME  button to set the time for the procedure. Press the MODE  button to choose the appropriate light intensity for the patient. Press START/PAUSE  button to turn on the BEYOND® II Ultra LED Light, starting the whitening procedure.

You may pause the procedure for each of the two patients during the procedure by pressing the PA/PB  button to choose the appropriate patient and then press the START/PAUSE  button.

# Light Output Settings

## LOW

The light output for this setting is 20000LX and is recommended for patients with sensitive teeth, severe fluorosis, enamel hypoplasia, or visibly compromised enamel (small cracks or chips). When using this setting, treatment times may need to be extended to account for weaker light output levels.



## MEDIUM

The light output for this setting is 23000LX. This setting is recommended for patients with healthy enamel, yellow stains caused by consumption of staining foods and drinks, and tobacco use. Patients with mild fluorosis can be treated using this light level, as well as mild tetracycline stains.

## HIGH

The light output for this setting is 26000LX and is recommended for patients with severe tetracycline stains, and gray, or related discolorations.

Note: A high percentage of patients with severe tetracycline stains may experience sensitivity. Patients with healthy, thick enamel and extrinsic, yellow discolorations can also use this setting if dramatic whitening results are desired.

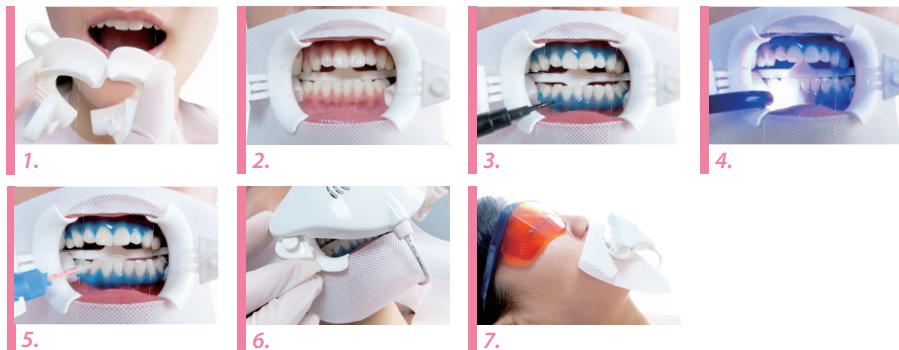
# Whitening Treatment

The treatment procedure outlined in this manual is the standard BEYOND® Whitening Treatment as recommended for patients with common extrinsic stains caused by staining foods, drinks, and tobacco products. Recommendations on treating severe extrinsic and intrinsic stains (including tetracycline and fluoride stains) can be found on our website at [www.beyonddent.com](http://www.beyonddent.com) or in the individual manuals packaged with BEYOND® whitening kits.

## PRE-TREATMENT

Perform a pre-treatment oral exam and consult with the patient on his or her desired whitening results to determine the best treatment plan for his or her individual situation. Ask the patient to sign the consent form and keep a copy for your records. Determine the pre-treatment color of the patient's teeth. (We recommend using BEYOND® 3D Teeth Whitening Shade Guide). Take a photo to document the shade before starting treatment (optional). Turn on the BEYOND® II Ultra Whitening Accelerator and program the desired treatment time and light intensity as discussed with the patient.

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1. Ask the patient to take a seat in the treatment chair and recline the seat back to a 40° angle.
2. Place the protective eye goggles on the patient.
3. Ask the patient to rinse his or her mouth.
4. Apply lip protection cream and insert the BEYOND® II Cheek Retractor with the tongue guard pointing down. (Fig. 1)
5. Stretch the face protection cloth around the outer rims of the cheek retractor and fold the top down under the arms of the cheek retractor.
6. Insert cotton rolls on either side of the buccal frenum. (Fig. 2)
7. Use compressed air to dry the surface of the teeth and gingiva. Holding the syringe at a 45° angle to the tooth surface along the gingival margin, apply a 2-3 mm layer of BEYOND® BlueSeal® Gingival Protection along the gingival margin. (Fig. 3)

8. Apply extra lip protection along the inside of the upper and lower lips.
9. Use a LED Curing Light to cure the BEYOND® BlueSeal® Gingival Protection. Hold the LED Curing Light 0.5-1 cm away from the gingiva. Move the device in a circular motion over the gingival area and light cure the gingival protection for 20-30 seconds (about 2-3 seconds per tooth). Use a dental probe tool to check that the gingival protection is fully cured. DO NOT over-cure the gingival protection. (Fig. 4)  
**(Take care to not over-cure, as gingival protection will not be able to maintain a seal over the gingiva. In such a case please remove it and repeat steps #7 and #9.)**
10. Remove the whitening gel syringe and tip from the vacuum-sealed foil wrapper. Attach the mixing tip to the dual barrel syringe of whitening gel.
11. Apply a 2-3 mm layer of BEYOND® Whitening Gel to the dry surface of the teeth. (Fig. 5)
12. Attach the BEYOND® II Ultra LED light to the BEYOND® II Cheek Retractor and connect the two using the brackets on the retractor. (Fig. 6)
13. Once the LED light is attached, press the START  button to begin the first 12-15 minute cycle. (Fig. 7)  
**(Note: Treatment time can be adjusted up to 20 minutes for application of the 6% Osmo Whitening Kit.)**
14. Remind the patient that it is safe to swallow his or her saliva during the treatment.
15. Provide the patient with music or entertainment during the treatment.
16. At the end of the first cycle, the light will turn off automatically. Use suction to remove the whitening gel. DO NOT rinse with water. Repeat the gel and light application steps two more times for a total of three treatment cycles.
17. After the final cycle, suction off the whitening gel, remove the gingival protection, cotton rolls, face protection cloth, cheek retractor, and protective eye goggles and ask the patient to rinse his or her mouth with warm water.

## POST-TREATMENT

Show the patient his or her new teeth color and give him or her a Post-Whitening Care Instruction Card. Remind the patient that for the next 24 hours, he or she should avoid colored food and drinks.

Use of tobacco products should also be limited. Inform the patient that, depending on his or her diet, oral hygiene, and use of tobacco products, periodic touch-up treatments may be necessary to maintain his or her whitening results.

The BEYOND® II Ultra Whitening Treatment is a straightforward and simple procedure. If you have additional questions regarding the treatment after reading this system manual, please do not hesitate to email BEYOND® at [info@beyonddent.com](mailto:info@beyonddent.com).



## Air Ionizer Purifier



The BEYOND® II Ultra Whitening Accelerator comes equipped with an air ionizer that silently cleans and sanitizes air in areas less than  $6000/\text{cm}^3$ .

The ionizer is designed to remove airborne pollutants, allergens, pollen, mold, smoke, unpleasant odors, dust and other airborne pollutants.

Press  to turn on or off the ionizer function.

## Whitening Gel Storage and Maintenance

BEYOND® Whitening Gel syringes must be stored at temperatures near  $5^\circ\text{C}$ . Do not use the gel if the following are present: foil package around whitening gel syringes is no longer vacuum-sealed, there is gel leakage evident, the gel is no longer viscous and is in a liquid state, or the syringe plunger is being pushed out of the syringe body. If your whitening gel has started to break down, please contact your local dealer or BEYOND® directly for replacements.

Please avoid your eyes to direct exposure to the LED light.  
In order to ensure the normal use of products and the safety from electromagnetic interference, please avoid putting BEYOND® II Ultra Whitening Accelerator in a strong electromagnetic interference environment or near an interference source. Such sources may be MRI or X-ray machines.

## Cleaning The Device

The BEYOND® II Ultra Whitening Accelerator should be cleaned and disinfected after each whitening session. Spray disinfectant spray onto a clean cloth and wipe clean the BEYOND® II Ultra LED Light.

A slight temperature change of the BEYOND® II Ultra LED Light is normal if using the high-power light source.

## Safety Measures

Teeth whitening is not suitable for pregnant or lactating women or children under 18 years of age. BEYOND® is contraindicated for patients with known allergy or chemical sensitivity to peroxides or glycols.

Only allow trained personnel to operate the system and provide the whitening procedure.

Patients with cardiac pacemakers must not use the device with the ultrasound function activated. If the patient has a pacemaker, disable the ultrasound feature before treatment.

## Troubleshooting

If BEYOND® II Ultra Whitening Accelerator does not turn on:

1. Check that the power cord is firmly inserted into the power outlet and the machine base.
2. Check that the SYSTEM ON/OFF switch at the base of the machine is turned on.

# Distributor's Contact Information



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Symbol	Meaning	Symbol	Meaning	Symbol	Meaning
A white square containing a blue icon of a person looking at a document, with the letter 'i' inside the document.	Consult Instructions for Use	The CE Mark, which consists of the letters 'CE' in a bold, sans-serif font inside a dark grey rounded square.	CE Mark	A dark grey square containing a white icon of a trash bin with a crossed-out symbol, with the letter 'i' inside the bin.	Separate Collection for Electrical and Electronic Equipment
A white triangle containing a black exclamation mark.	Caution	The letters 'SN' in a bold, sans-serif font inside a dark grey rounded square.	Serial Number	A dark grey square containing a white icon of a zigzag line, with the letter 'i' inside the line.	Date of Manufacture
A dark grey square containing the letters 'EC' and 'REP' in a white box.	Authorized EC Representative in the European Community	A dark grey square containing a stylized mountain or crown-like shape in white.	Manufacturer		



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