

POLUS[®]
Advanced **Ultra**

Whitening Accelerator Model: PLS-868UL



Unprecedented
Innovation and Flexibility
in Whitening Technology

USER MANUAL
Instruction for Use

Table of Contents

Attaching the Lamp Head	3
Attaching the LED Curing Light/Spot Whitening Device	3
Raising & Lowering the Lamp Arm	4-5
Caution	6
Adjusting the Lamp Head Height	6
Positioning the Lamp Head	6
LightBridge™ Technology	7
Ultrasonic Technology	7
Touch User Interface (TUI) Control Panel	8-9
Remote Control	10
Replacing the Remote Control Battery	
Light Output Settings	11
Whitening Treatment	12
Pre-Treatment	12
Dual-Arch (Power) Whitening Treatment	12
Single-Tooth (Spot) Whitening Treatment	13
Post-Treatment	14
Important Points to Note	14
Whitening Gel Storage & Maintenance	14
Using the LED Curing Light/Spot Whitening Device	14
Spot Whitening Device	15
LED Curing Light	15
Cleaning & Maintenance of the LED Curing Light/Spot Whitening Device	15
LED Curing Light/Spot Whitening Device Technical Data	16
Air Ionizer Purifier	16
Troubleshooting	17
Cleaning & Maintenance	18
Replacing the Halogen Bulb	18
Cleaning the Device	18
Technical Data	18
Transportation & Storage Data	18
Contact Information	19

Thank you for your purchase and for choosing BEYOND[®]. BEYOND[®] International Inc., global leaders in aesthetic dental products, is proud to provide you the award winning BEYOND[®] Polus[®] Advanced Ultra Whitening Accelerator, which will allow you to deliver the Ultimate Whitening Experience.

Purpose

The BEYOND[®] Polus[®] Advanced Ultra Whitening Accelerator is an enhanced version of the award winning BEYOND[®] Polus[®] Whitening System, designed for professional whitening in a dental facility to whiten stained teeth. With the Polus[®] Advanced Ultra, a combination of a powerful Halogen, LED light, and Ultrasonic whitening technologies are used to deliver a tailored light between 400 – 650 nanometers in wavelength needed to activate BEYOND[®] whitening gels and provide up to 6-8 shades improvements.

Notice

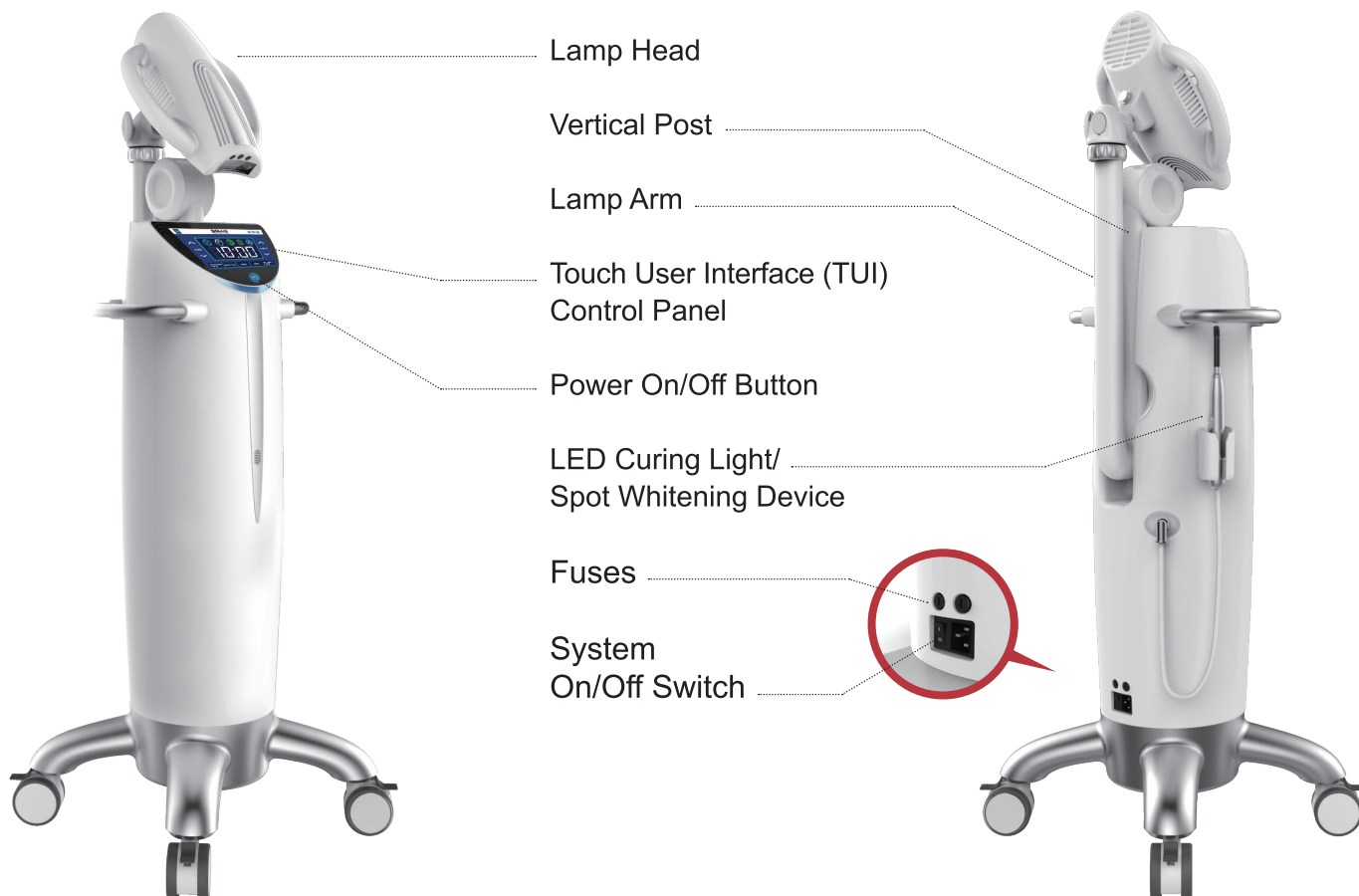
The BEYOND[®] Polus[®] Advanced Ultra must only be used by trained whitening professionals in a professional environment. Do not use without a thorough understanding of this manual.

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 it (if any) to BEYOND[®]. Please save all packaging materials.

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.

BEYOND® Polus® Advanced Ultra Whitening Accelerator System Instruction Manual



Additional Accessories:



Technical Parameters

Model: PLS-868UL
 Input Voltage: 100~240VAC
 Frequency: 50Hz/60Hz
 Output Voltage: 12V
 Input power: 150VA
 Power fuse size: T2.5AL250V x 2
 Working system: Continuous
 Gross Weight: 30KG
 Package Dimension: 47 x 47 x 109.5cm

Electrical Safety Requirements

1. Class I device
2. No applied part
3. Do not use the device near flammable anesthetic gas when mixed with air or nitrogen oxide.
4. Do not use the device near strong magnetic field.

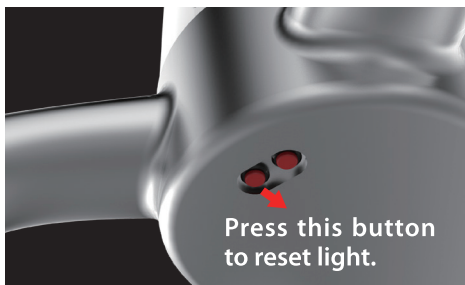
Normal Working Condition

Environmental temperature range: 5~40°C
 Relative humidity range: ≤80%
 Atmospheric pressure range: 86~106kpa

Transport and Storage Conditions

Environmental temperature range: -20~+55°C
 Relative humidity range: ≤93%
 Atmospheric pressure range: 50 kPa-106kPa

BEYOND® Polus® Advanced Ultra Whitening Accelerator and accessories are recyclable electronic products. Please send the decommissioned whitening accelerator and accessories to recycle station.



Attaching the Lamp Head

Attach the threaded joint at the base of the lamp head to the end of the lamp arm and screw the large metal nut onto the lamp head's threaded joint until secure.

Attach the male 7-pin circular connector plug located on the cable at the end of the lamp arm to the female 7-pin circular connector socket at the back of the lamp head. Screw the threaded joint into place until the cable is secured.

Note: Head should be positioned below the lamp arm (as pictured) for easier handling during the whitening procedure.

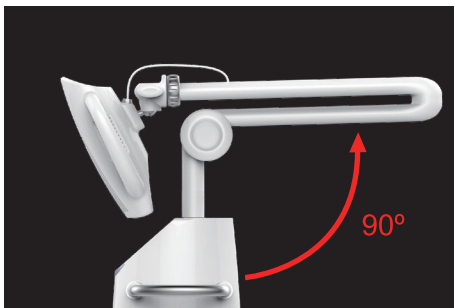
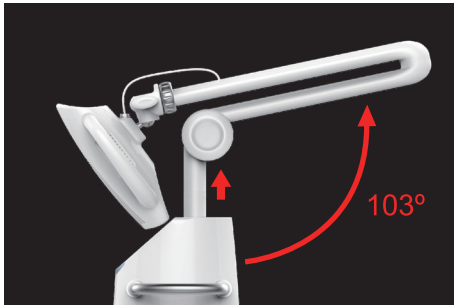
In some cases, after installing the Polus Advanced Ultra lamp head the light will switch on and stay on. In this eventuality, please press the highlighted button that can be seen below on the accelerator base to deactivate this function. The Polus Advanced Ultra Accelerator will then reset and function normally.



Attaching the LED Curing Light/Spot Whitening Device

Attach the male 3-pin circular connector plug to the female 3-pin circular connector socket on the back of the machine. Screw the threaded joint into place until cable is secured.

Always store the LED Curing Light/Spot Whitening Device in the special holder on the back of the machine. Avoid dropping or hitting the fiber light-transmission tube at the top of the device. Accidental impact may cause the part to break.



Raising & Adjusting the Lamp Arm

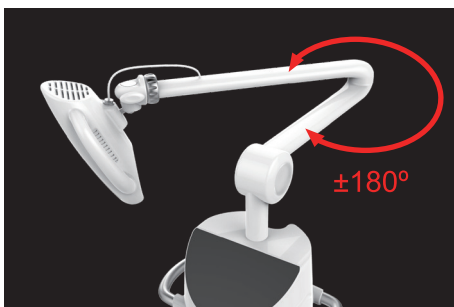
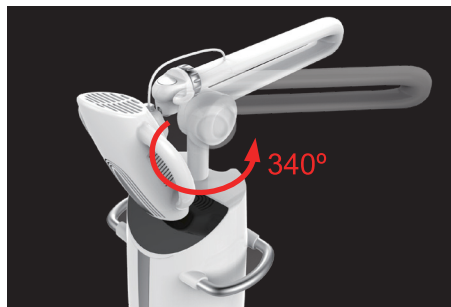
To extend the lamp arm from the resting position, pull the lamp arm up a few degrees from the back of the machine by grasping firmly at the end of the joint and pulling upwards.

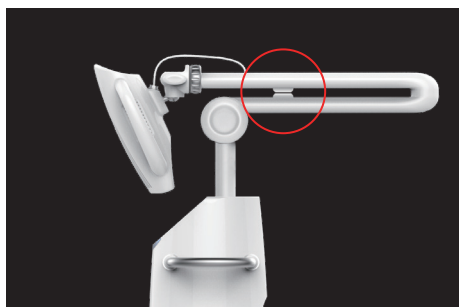
As you do this, a sensor at the top of the vertical post will raise the post automatically to avoid hitting the lamp head on the TUI panel. Wait until the vertical post has stopped rising before proceeding to the next step.

Grasping the base of the lamp arm at the back of the machine, extend the lamp arm to a 90° angle, locking the arm in place by gently overextending the arm to about a 103° angle and then lowering back down to 90 and locking into place (see images on left).

Once the lamp arm is locked in place, you can rotate the arm 340° into your desired position, separating the upper and lower halves of the lamp arm to extend the reach and mobility of the arm.

A hinge joint is located on the upper half of the lamp arm and can be bent downwards up to 90° to assist in positioning the lamp head.

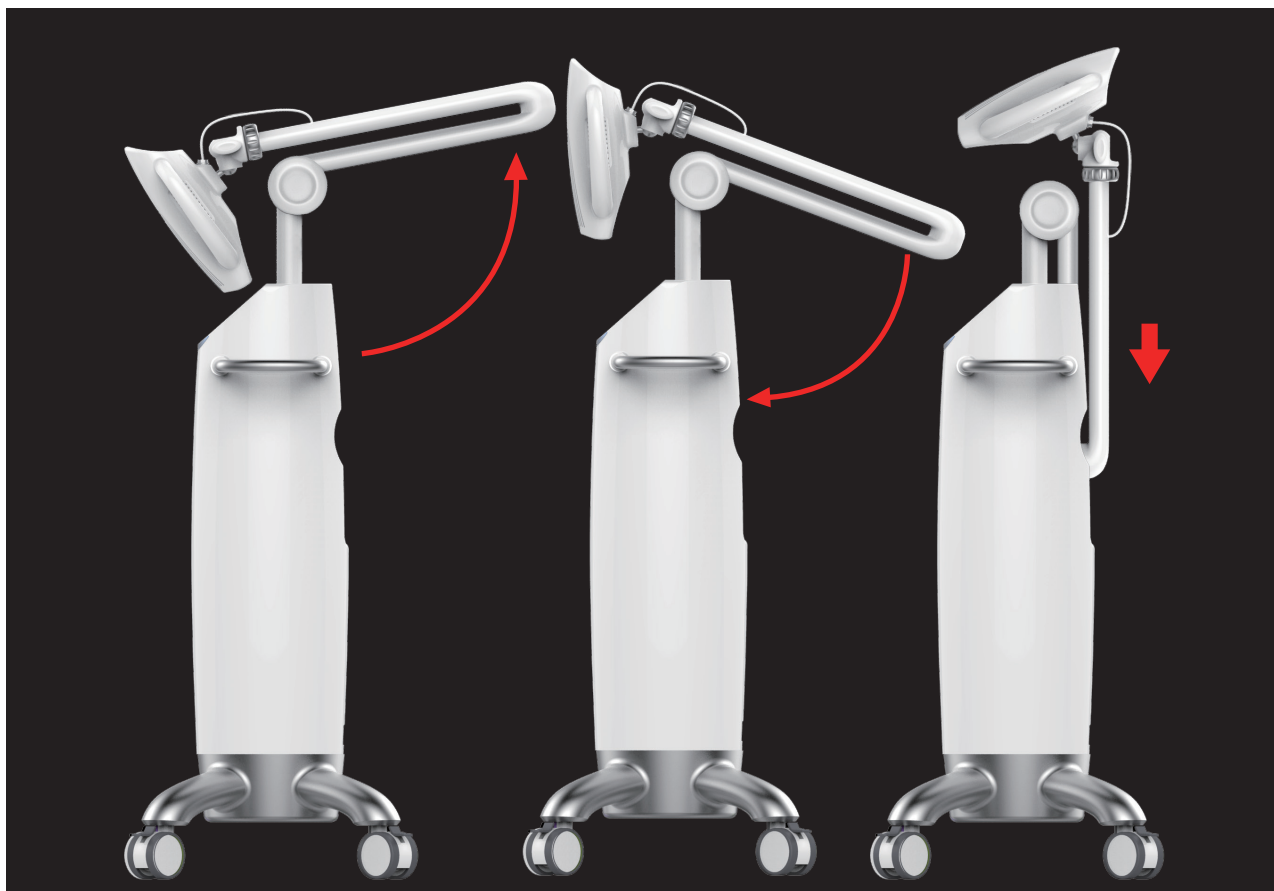


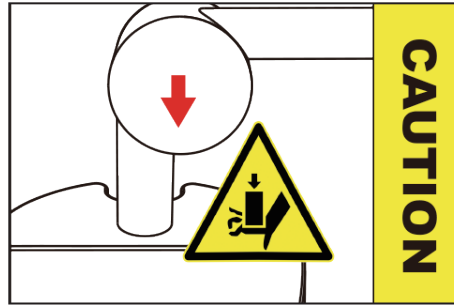
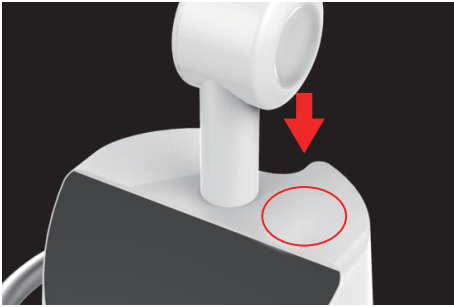


The upper and lower halves of the lamp arm can be aligned and secured using the position guide. Before lowering the radial arm back into the storage position, ensure that the two halves are aligned by clicking the male and female plugs on the position guide into place.

Before lowering the lamp arm, ensure that the upper and lower halves are locked into place using the position guides. To lower the lamp arm, gently overextend the lamp arm to a 103° angle (push it up as far as it will go) to release the locking feature and then lower back down into the original storage position. If the lamp arm is aligned correctly in the slot on the back of the machine, the vertical post will automatically lower to the recommended resting height when the machine is turned off.

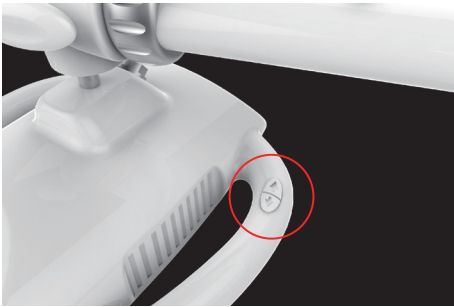
Note: Make sure that the accelerator head is placed to its original position (above lamp arm), for proper storage.





CAUTION

When lowering the vertical post, **DO NOT** place hands or any items by the vertical post.

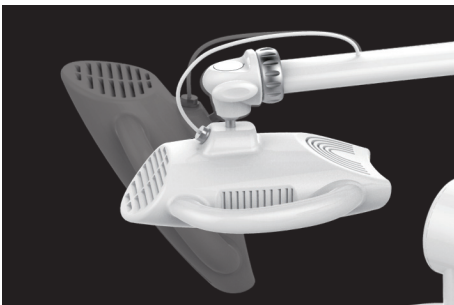


Adjusting the Lamp Head Height

Head should be positioned below the lamp arm for easier handling during the whitening procedure.

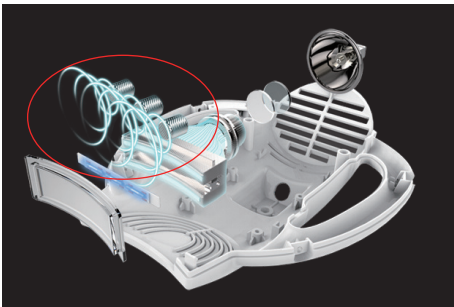
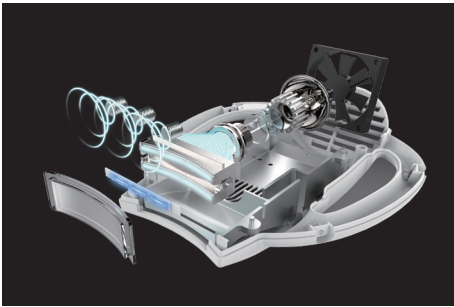
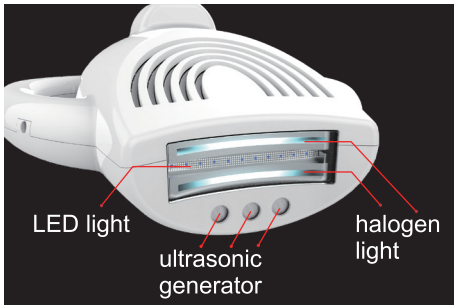
The BEYOND® Polus® Advanced Ultra system provides two methods for adjusting the height of the lamp head. On the TUI control panel, pressing the up and down HEIGHT arrows will raise and lower the vertical post. The up and down arrows next to the handles on the lamp head will also raise and lower the vertical post.

When storing the BEYOND® Polus® Advanced Ultra system, it is recommended that the vertical post be lowered completely. If the lamp arm is aligned correctly for storage, the vertical post will automatically lower to the recommended resting height when the machine is turned off.



Positioning the Lamp Head

The lamp head is attached to the lamp arm by a ball joint for optimal rotation and positioning. Convenient handles are located on either side of the lamp head to assist with positioning.



LightBridge™ Technology

The BEYOND® Polus® Advanced Ultra Whitening Accelerator combines halogen light, LED light, and ultrasonic technologies to provide users with a premium whitening experience. An advanced light filtration system containing 200,000 optical fibers serves as a bridge between the two light sources, removing all harmful heat and ultraviolet (UV) light from the powerful halogen light source and ultrasonic waves, before merging the light with emissions from the twelve blue LED lights at the front of the lamp head. The end results is a combination of two powerful light sources and ultrasonic technology with wavelengths that span the entire blue light whitening spectrum, providing patients with an effective and precise whitening treatment.

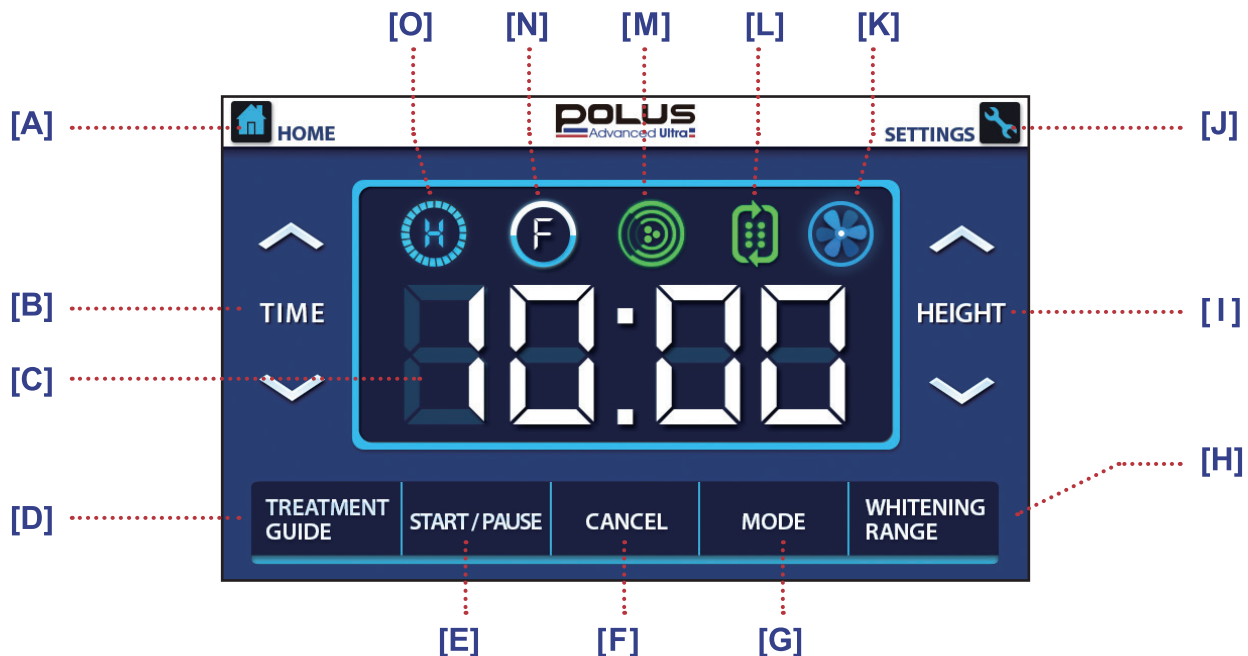
Ultrasonic Technology

In the BEYOND® Polus® Advanced Ultra, a cavitation process created through ultrasonic waves within the accelerator head is used to yet more effectively deliver the oxidation process needed for a whitening procedure. An ultrasonic cavitation phenomena is produced by the ultrasound component, where in cavitation, microbubbles are formed, then grow, and get to a limit where they rupture. This rupture/collapse of microbubbles, releases energy, creates shockwaves, high pressure, which in effect accelerates physical and chemical reactions in the whitening gel, creating a more efficient whitening process.

The ULTRASOUND function may be temporarily turned off by pressing the SETTINGS button on the display screen and then pressing OFF by the ULTRASOUND section on the SETTINGS screen.

Touch User Interface (TUI) Control Panel

System Operational Interface



[A] HOME: Press to go to Main Page.

[B] TIME: Press to adjust the treatment cycle time. Factory default is set at 10 minutes. When restarted, the system will default to the last time selected. To restore factory settings, simply adjust the time back to 10 minutes and press START. The next treatment cycle will default to 10 minutes.

[C] Treatment cycle timer: Shows the minutes remaining in a treatment cycle. Factory default is 10 minutes and can be reset using the SET TIME <> function.

[D] TREATMENT GUIDE: Press to choose from the following TREATMENT GUIDE

Options:

- a. Teeth Whitening Treatment Plans: Press to obtain Two different treatment plans (A, B) depending on the whitening case.
 - i. Treatment A: Press to obtain instructions to complete a whitening procedure for Regular Treatment Period for Normal Teeth Stain.
 - ii. Treatment B: Press to obtain instructions to complete a whitening procedure for Cases of Teeth with Abnormal Growth.
- b. How to Control Teeth Sensitivity: Press to obtain instructions to complete a whitening procedure for cases more susceptible to Sensitivity.
- c. How to Avoid Color Rebound: Press to obtain instructions on how to Avoid Color Rebound.
- d. Home Whitening Maintenance: Press to see options for Home Whitening Maintenance.

[E] START/PAUSE: Press to begin and pause treatment cycle. If paused, PAUSE will appear and flash below the time remaining until the treatment is resumed. Press START/PAUSE to resume the treatment.

[F] CANCEL: Press to stop the current treatment cycle and reset the timer to the default treatment cycle.

[G] MODE: Select light intensity (Low for Gentle, Medium for Normal, or High for Intense) by scrolling through these options using the MODE button.

[H] WHITENING RANGE: Press to select either Full or Single Whitening Options. Full Whitening provides dual arch whitening and the Single Whitening mode is for single tooth whitening.

[I] HEIGHT: Motorized lamp head height adjustment.

[J] SETTINGS: Press to choose from the following options:

a. VOICE INSTRUCTIONS: Press ON/OFF to activate or deactivate this function.

ON: Voice Instructions can now be accessed by using either the Control Panel or the Remote Control.

1. Allows to PLAY/STOP the "Patient Welcome" recording.

2. Allows to PLAY/STOP the "Introduction to Teeth Whitening" recording.

3. Allows to PLAY/STOP the "Post-Treatment Instructions" recording.

Please check Page 10 on "Voice Instructions are now operable by using the Remote Control".

b. ULTRASOUND: Allows to turn OFF/ON Ultrasound whitening option.

c. PURIFICATION: Allows to turn OFF/ON air purifier/ionizer.

d. TREATMENT TIME: Displays Total Usage Time of Accelerator. Allows for Total Usage Time to be reset.

e. HELP: Press to display BEYOND[®] contact information in case of need of assistance.


[K] Temperature/Cooling Fan Indicator:



Normal temperature – The fan icon will appear if the cooling fan is working properly.



If the system overheats (>90°C), the fan icon will flash at a lower speed and will emit a warning beep indicating that the system should be turned off until it has sufficiently cooled to less than 70°C. Press the POWER ON/OFF button to turn off the system. Do not unplug the machine. Do not turn the system back on until the fan turns off.

[L]  Air Ionizer Purifier Indicator

[M]  Ultrasonic Cavitation Phenomena Indicator

[N]  Dual-arch / Spot Whitening Indicator

[O]  Light Mode Indicator



Demo Mode: Press and hold Polus icon/logo for three seconds to enter the Demo Mode screen.

The accelerator light will activate and the vertical arm will raise and lower throughout the demonstration. The accelerator light may be deactivated by pressing the OFF button on any of the Demo Mode screens. Press the HOME button to exit the Demo Mode and deactivate all the demonstration.

Demo Mode may be used by a dentist, to showcase the main features of the Polus[®] Advanced Ultra to their clientele, while it may also be used by resellers to demonstrate future owners of the Polus[®] Advanced Ultra, about its features.

Note: The Touch Interface (TUI) Control Panel relies on the conductive properties of the human body, therefore the use of gloves is not recommended unless touchscreen-compatible gloves are being used.



Remote Control

If you leave the treatment room during the procedure, give the system remote control to the patient while you are out of the room.

PAUSE/RESUME: Instruct the patient to press PAUSE/RESUME if he or she needs to pause the treatment cycle at any time. The patient may press the PAUSE/RESUME button to start the treatment cycle again. The treatment cycle timer will resume from the paused time.

TIME: Instruct the patient to press the TIME button if he or she would like to know the time remaining on the treatment cycle.

CALL: Instruct the patient to press the CALL button if he or she needs to summon you at any time during the treatment. A loud beeping noise will emit from the accelerator when this button is pressed. Press the CALL button again to turn off the beeping.

Voice Instructions are now operable by using the Remote Control

- Press and hold PAUSE/RESUME button to activate Voice Welcome for patient.
- Press and hold TIME button to activate Voice Introduction of the whitening procedure for the patient.
- Press and hold CALL button to activate Voice Post-Treatment instructions for the patient.

REPLACING THE REMOTE CONTROL BATTERY

Push the back cover open, taking care not to lose the loose remote control buttons. The battery is located at the back of the green circuit board. Gently pull the green circuit board away from the back cover and use a blunt-pointed object to push the battery out of place. The battery is a standard CR2032 coin battery. Push the new battery back into place with the [+] symbol facing outwards, away from the circuit board. Replace the green circuit board and remote control buttons and screw the two covers back together before resuming use.

Extra CR2032 coin batteries can be ordered directly from BEYOND® if needed, but should be readily available from any standard electronic appliance store in your area.

Light Output Settings

LOW / GENTLE

The light output for this setting is 210000LX 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 / NORMAL

The light output for this setting is 250000LX and is recommended for patients with healthy enamel, yellow stains caused by consumption of staining food and drinks, and tobacco use. Patients with mild fluorosis can be treated using this light level, as well as mild tetracycline cases.

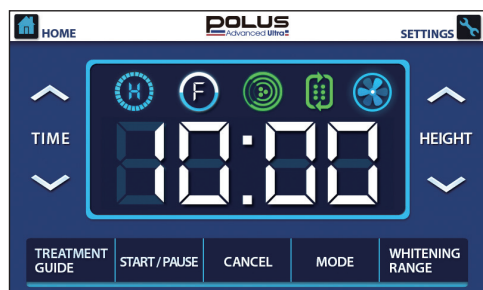
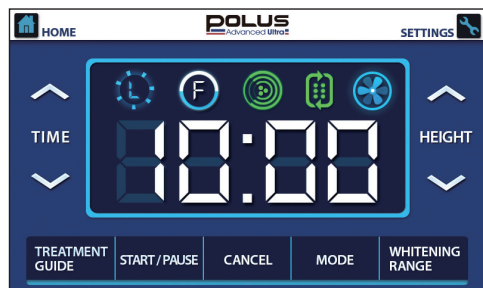
HIGH / INTENSE

The light output for this setting is 300000LX and is recommended for patients with severe tetracycline stains and gray, age-related discolorations.

Note: A high percentage of patients with severe tetracycline stains may experience sensitivity. Please see TREATMENT GUIDE option on the Polus Advanced Display Menu or visit www.beyonddent.com/treatments for more information on how to effectively whiten tetracycline stains while minimizing sensitivity.

Patients with healthy, thick enamel and extrinsic, yellow discolorations can also use this setting if dramatic whitening results are desired.

Note: Patients with thin or visibly compromised enamel (chips, cracks, or untreated caries) should not use this light setting.





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 the TREATMENT GUIDE option on the Polus® Advanced Ultra Display Menu or at www.beyonddent.com/treatments or in 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 the VITA Bleachedguide 3D-MASTER® shade guide.) Take a photo to document the shade before starting treatment (optional).

Turn on the BEYOND® Polus® Advanced Ultra system and program the desired treatment time as discussed with the patient.


DUAL-ARCH (POWER) WHITENING TREATMENT

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. Apply lip protection cream and insert the BEYOND® FlexiBlue® Cheek Retractor with the tongue guard pointing down. (Fig. 1)
4. 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.
5. Insert cotton rolls on either side of the frenum of the upper and lower lips. (Fig. 2)
6. 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)
7. Apply extra lip protection along the inside of the upper and lower lips.
8. Remove the LED Curing Light from the back of the machine and hold the LED Curing Light 0.5-1 cm away from the gingival. Press the  button on the LED Curing Light to begin curing. 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) See pg.14-15 for more information on how to use the LED Curing Light.
9. 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.

NOTE: GELS MUST REMAIN REFRIGERATED NEAR 5°C/40°F UPON RECEIPT. DO NOT USE PRODUCT, IF MIXTURE IS NOT THICK, APPEARS RUNNY, OR IS LIQUID. IF SO, CONTACT YOUR SUPPLIER FOR REPLACEMENT PRODUCT.

10. Apply a 2-3 mm layer of BEYOND[®] Advanced Formula Whitening Gel to the dry surface of the teeth. (Fig. 5)
11. Raise the lamp arm and position the lamp head as close as possible to the surface of the teeth, with the lamp head at a 90° angle to the teeth. (Fig. 6)
12. Once the lamp head is positioned, press the START button to begin the first 10-12minute cycle.
13. Remind the patient that it is safe to swallow his or her saliva during the treatment.
14. Give the patient the remote control. Instruct the patient that the remote control has a PAUSE/RESUME button to control the light if he or she needs to stop the treatment at any time. A CALL button is also included in case the dentist needs to leave the room 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 water.

SINGLE-TOOTH (SPOT) WHITENING TREATMENT

1. Follow Steps #1-9 of the Dual-Arch (Power) Whitening Treatment to prepare the patient for the treatment.
Note: Gingival protection only needs to be applied to the gingival margin along the tooth to be whitened and the teeth immediately adjacent. We also recommend that you apply damp gauze to the surrounding teeth that are not being whitened in order to keep the tooth enamel hydrated during the treatment.
2. Press WHITENING RANGE on the Polus Advanced display screen and choose Single Whitening option on the TUI panel.
3. Adjust the treatment time to the desired number of minutes. The recommended treatment time for most cases is 10-12 minutes.
4. Attach the lamp head holder for the Spot Whitening Device to the bottom of the lamp head and secure the device. Position the lamp head so that the Spot Whitening Device is at a 90° angle to the tooth and as close as possible to the tooth without touching the surface.
5. The Spot Whitening Device can also be held in place by the dentist for the duration of the treatment.
6. Once the Single/Spot Whitening Device is positioned, press the START/PAUSE button on the TUI panel or press and hold the “” button for 3 seconds on the device to begin the first cycle.
7. Follow Steps #13-17 of the Dual-Arch (Power) Whitening Treatment to complete the Single-Tooth (Spot) Whitening Treatment.



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.

IMPORTANT POINTS TO NOTE

- The BEYOND® Polus® Advanced Ultra whitening treatment is contraindicated for patients with known allergies or chemical sensitivities to peroxides, resins, or glycols, pregnant or lactating women, and children under the age of 16.
- Terminate the whitening procedure if any patient reports severe tooth sensitivity and remove all whitening gel before treating with fluoride.

WHITENING GEL STORAGE & MAINTENANCE

- BEYOND® Advanced Formula Whitening Gel syringes must be stored at temperatures near 5°C. These syringes are packed outside of the whitening kit for easy storage in the refrigerator.
- Do not use the gel if the following conditions 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.

The BEYOND® Polus® Advanced Ultra whitening treatment is a straightforward and simple procedure. If you have additional questions regarding the treatment after reading this manual, please do not hesitate email BEYOND® at info@beyonddent.com. We also offer a complimentary online training session. This is a valuable training resource for any dental professional who is interested in learning more about the BEYOND® treatment and the science behind teeth whitening.



Using the LED Curing Light/ Spot Whitening Device

Before using the Spot Whitening or LED Curing Light functions for the first time, ensure that the device is connected to the main machine body.


Note: The BEYOND® Polus® Advanced Ultra system must be turned on to utilize the Spot Whitening and LED Curing Light functions.




SPOT WHITENING



Press WHITENING RANGE on the Polus[®] Advanced Ultra display screen and choose Single Whitening option on the TUI panel.

Note: The Spot Whitening Device can be hand-held during the treatment, or secured to the lamp head using the lamp head holder for the Spot Whitening Device.

The Spot Whitening Device's treatment time will default to the last time setting on the control panel. The recommended treatment cycle is 12 minutes. See pg. 13 for more detailed instructions on how to adjust treatment times using the TUI control panel. Once the Spot Whitening Device is positioned, press the START/PAUSE button on the TUI panel or press and hold the “” button for 3 seconds on the device to begin the first cycle.

The Spot Whitening device will automatically turn off at the end of the whitening cycle. However, the treatment can also be paused by pressing the “” button again or by pressing START/PAUSE on the TUI panel or on the wireless remote control. Note: You must pause the treatment before adjusting the treatment time.

LED CURING LIGHT

- The  button operates the standard curing light function.
- Click the button once to produce 15 seconds of intense light output.
- Click the button twice in quick succession to produce 25 seconds of ramped up light output (5 seconds ramping-up and 20 seconds intense).
- The LED Curing Light will automatically turn off at the end of the timer cycle. Pressing the  button again while the LED Curing Light is illuminated will abort the curing cycle.

CLEANING & MAINTENANCE OF THE LED CURING LIGHT/SPOT WHITENING DEVICE

Cleaning the Device

- Disposable sleeves for curing light tips should be used to protect the LED Curing Light/Spot Whitening Device fiber light-transmission tube during use. Follow instructions of the sleeve manufacturer for infection control. The fiber light-transmission tube will fit standard 7-8 mm curing light sleeves. Replace after each use to prevent cross contamination and composite from bonding to the end of the tube.
- Device cannot be sterilized. Use of a disposable tip sleeve is required. Do not submerge. Not autoclavable.

Maintenance

- Take care when handling the fiber light-transmission tube to avoid dropping or hitting the tip against hard surfaces.
- If the rubber o-ring between the fiber light-transmission tube and the LED Curing Light/Spot Whitening Device body becomes loose, replace the rubber o-ring connecting the two parts with one of the spare o-rings included with the whitening system.

To order extra light shields or replacement parts, please contact your local BEYOND® products agent or contact BEYOND® at info@beyonddent.com.

LED CURING LIGHT/SPOT WHITENING DEVICE TECHNICAL DATA

Power consumption: $\leq 9\text{ W}$


LED Curing Light light intensity: 800 mW/cm^2

Spot Whitening Device light intensity: 750 mW/cm^2

Device operating voltage: DC10 – 20V

Device light wavelength: 400 – 650nm

Timing:  : Must be manually set using the TUI control panel. Recommended 10-12 minutes.

 : 15s intense light [one click]
5s ramp-up, 20s intense light [two clicks]

Device timing Error: $\pm 2\text{ s}$

LED Curing Light solidification depth: The depth is no less than 3mm for 10 second light cures of resin.

Device working conditions

Working temperature: $+5^{\circ}\text{C} \sim +40^{\circ}\text{C}$

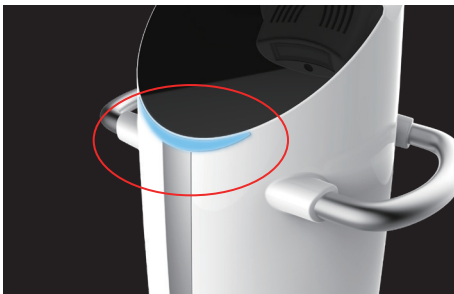
Working humidity: $\leq 80\% \text{ RH}$

Device storage conditions

Storage temperature: $-20^{\circ}\text{C} \sim +50^{\circ}\text{C}$

Storage humidity: $\leq 95\% \text{ RH}$

Size: $\phi 21\text{mm} \times 196\text{mm}$ (Includes device body and fiber light-transmission tube)



Air Ionizer Purifier

The BEYOND® Polus® Advanced Ultra comes equipped with an air ionizer that silently cleans and sanitizes air in areas larger than $6,000/\text{cm}^3$. The ionizer is designed to remove airborne pollutants, allergens, pollen, mold, smoke, unpleasant odors, dust and other airborne pollutants.

The ionizer function automatically turns on once the BEYOND® Polus® Advanced Ultra is on. This function may be temporarily be turned off by pressing the SETTINGS button on the display screen and then pressing OFF by the PURIFICATION section on the SETTINGS screen.

Troubleshooting

If the following troubleshooting suggestions do not resolve your problem, please contact your local BEYOND[®] products dealer or BEYOND[®] International Inc., at info@beyonddent.com, or call +1-866-695-6452.

BEYOND[®] Polus Advanced Ultra system 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.
3. After performing steps #1 and #2, press and hold the Power On/Off button below the TUI control panel for 3 seconds.
4. If the machine does not turn on after attempting all of the above steps, replace the two fuses at the base of the machine near the System On/Off switch with the two spare fuses included with your system.

Remote control does not work

1. Check that machine is turned on.
2. Replace the battery in the remote control.

Machine emits beeping alarm noise upon turning on the power

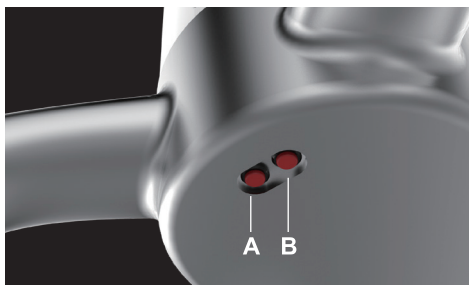
1. Ensure that the machine is not overheating: Look at the fan indicator on the TUI panel. If the fan indicator is flashing or the thermometer icon appears, the machine is overheating. See pg. 9 for instructions on what to do if the machine is overheating.
2. Check the 7-pin circular connector plug and socket are correctly connected at the back of the machine head.

Someone inadvertently drummed his fingers on the TUI (touch user interface) and the screen turned blue.

In extreme cases of information overload (touching the screen multiple times within a one-second time span, for instance), the Polus screen will require resetting. In such a situation the user will see the following message:

1. Due to information overload, this unit needs to be reset. Please touch the "+" at the left-top of this screen.
2. Please touch the "+" at the right-top of this screen.
3. Please touch the "+" at the right-bottom of this screen.

Following these directions will successfully reset the unit for immediate use. Please follow directions EXACTLY, or subsequent touches of the touch user interface (TUI) will malfunction.



Machine turns off during a whitening procedure

1. Check that the power cord is firmly inserted into the power outlet and the machine base.
2. In case of electrical outage: at the base of the machine you may press the red button **A** which will bypass all other functions and will allow only the machine light to turn on, in order to allow the completion of the procedure.
3. The red button **B** may be pressed to mechanically bypass the accelerator head and TUI panel controls for lowering the arm to its default position.



Cleaning & Maintenance

REPLACING THE HALOGEN BULB

Your accelerator comes with a spare halogen bulb. To replace the bulb, follow the instructions listed below:

1. Turn off the accelerator and remove the eight screws on the bottom of the lamp head.
2. Remove the four screws holding the top of the gray filtration unit cover.
3. Unhinge the wire cage holding the bulb in place and pull gently the bulb loose. Remove and replace with the spare halogen bulb.
4. Secure the bulb within the wire cage, replace the filtration unit cover, and screw the outside of the lamp head back into place.
5. We recommend replacing halogen bulb after 500 hours of use.

CLEANING THE DEVICE

After each treatment, clean the lamp head and the concave light output window with a disinfectant spray and wipe dry with a clean cloth.

Note: Following use, do not unplug the accelerator until the cooling fan turns off.

TECHNICAL DATA

100~240VAC, 150VA, 50/60Hz, Class I, type B Applied Part.

TRANSPORTATION & STORAGE DATA

Temperature: -20°C — +55°C

Relative Humidity: ≤ 93%

Atmospheric Pressure: 50 kPa — 106 kPa

Distributor's Contact Information



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Symbol	Meaning	Symbol	Meaning	Symbol	Meaning
	Consult Instructions for Use		CE Mark		Separate Collection for Electrical and Electronic Equipment
	Caution		Serial Number		Date of Manufacture
	Authorized EC Representative in the European Community		Manufacturer		



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