



LIGHT INSTRUMENTS
RISE ABOVE TECHNOLOGY

LITETOUCH™

QUICK WORKING GUIDE



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ONE-TIME SETUP

1 Insert power cable



3 Connect foot switch

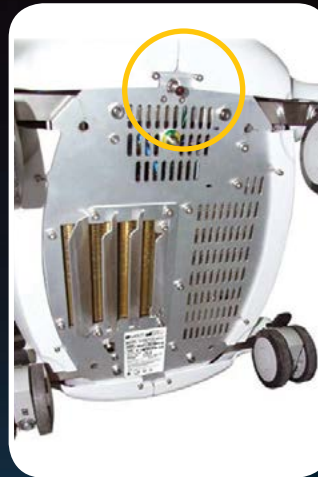


Note: A polarizer on the socket prevents incorrect connection of the cable. Turn the cable connector's locking ring ¼ turn clockwise to secure the connection.

2 Connect air pressure



4 Connect/verify interlock is plugged in



5 Disconnect the transportation connector



6 Connect applicator



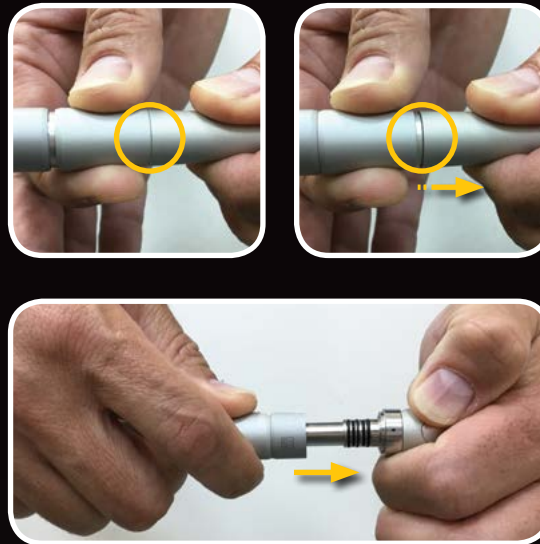
Note: Because of the diversity of pneumatic fittings in the industry, it is necessary for the customer to supply a fitting in order to connect the bare end of the tube to the clinic's compressed air supply outlet.

PRE START

- 1 Verify spray bottle is full with distilled water only



- 2 Connect handpiece



Note: verify that the mirror is clean (see mirror cleaning section)

- 3 Connect tip



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TURN ON THE MACHINE

- 1 Verify the emergency button is not pushed in. (Released by rotating clockwise)



- 2 Turn on the main on/off switch from the back



- 3 Click on the on/off switch



- 4 Once the password keypad screen appears insert the default password 1234 and click "ENTER"



5 Select HT / ST / GT



6 Verify/Change the energy mJ / Hz



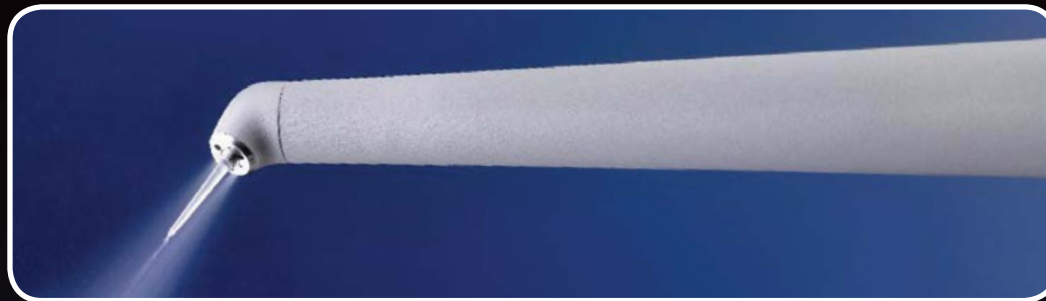
7 Adjust relevant spray level



8 Lift the applicator from the cradle and click the ready button



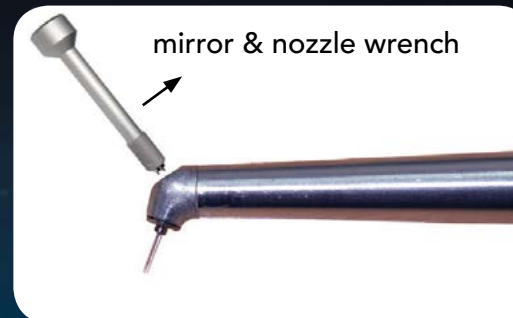
9 Start lasing



MIRROR CLEANING

- Remove the tip from the handpiece
- Disconnect handpiece from applicator
- Use the 'mirror & nozzle wrench' to open the mirror cap
- Clean the mirror with alcohol 70% or higher concentration.

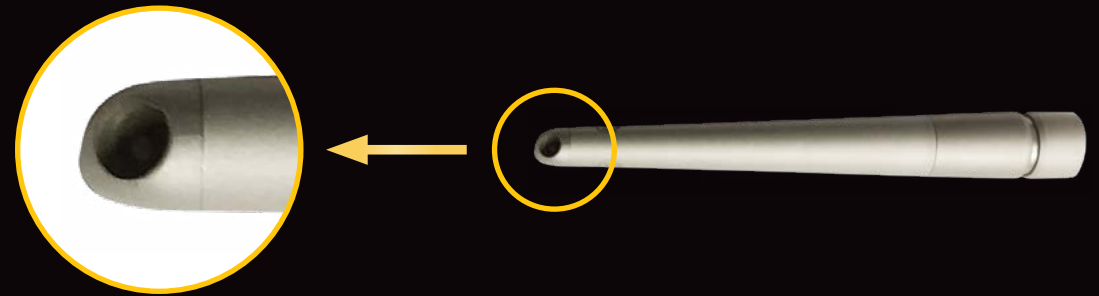
1



STERILIZATION

1

- Handpiece and mirror cap
- Caution: remember to remove the mirror before
- Tips (with or without tip holder)



MAXIMUM ALLOWABLE ENERGY PER TIP TYPE

(Tip may be damaged if energy exceeded):

Tips	Tips Code (pack of 5 tips)	Tip Diameter X Length (mm)	Max. Allowable Energy
	AS7565(x)	0.2 x 17 mm	250 mJ
	AS7075(x)	0.4 x 17 mm	300 mJ
	AS7072(X)	0.6 x 17 mm	400 mJ
	AS7074(x)	0.8 x 14 mm	500 mJ
	AS7069(x)	0.8 x 17 mm	500 mJ
	AS7073(x)	1.0 x 14 mm	600 mJ
	AS7068(x)	1.0 x 17 mm	600 mJ
	AS7066(X)	1.3 x 14 mm	700 mJ

Tips	Tips Code (pack of 5 tips)	Tip Diameter X Length (mm)	Max. Allowable Energy
	AS7065(X)	1.3 x 17 mm	700 mJ
	AS7071(X)	1.3 x 19 mm	700 mJ
	AS7450(x) Implants Tip	1.3 x 19 mm	500-700 mJ
	AS0165(X) Blade Tip	0.4 x 17 mm	200 mJ
	AS7197(x) Chisel Tips	1.3 x 17 mm	200 mJ
	AS7631(x) Side Firing Tip	1.3 X 19 mm	250 mJ
	AS7564(x) Magnum Tip *	1.3 X 6.3 mm	700 mJ

* Caution: focusing distance = 8mm

RECOMMENDED TREATMENT GUIDE FOR SELECTED CLINICAL APPLICATIONS

Application	Procedure	Hard Tissue [HT] Soft Tissue [ST]	Contact/ Non-Contact	Laser Energy [mJ]	Pulse Frequency [Hz]	Tip Diameter x Length [mm]	Water Spray Level
Gentle Treatments	Desensitizing of root necks *6	Gentle	Non-Contact	20	10	1.3 x 14/17/19 mm	0
	Biofilm removal and surface conditioning prior fissure sealing	Gentle	Non-Contact	20-40	20	1.3 x 14/17/19 mm	4-6
	Root surface biomodification prior to GBR	Gentle	Non-Contact	20-40	20	1.3 x 14/17/19 mm	7-8
	Remineralization (in presence of fluoride gel)	Gentle	Non-Contact	20-40	10	1.3 x 14/17/19 mm	0
	Disinfection of deep caries	Gentle	Non-Contact	20-40	20	1.3 x 14/17/19 mm 1.0 x 14/17 mm	7-8
	Enamel conditioning	Gentle	Non-Contact	20-40	20	1.3 x 14/17/19 mm	4-6
	Pulp capping	Gentle	Non-Contact	20	10	0.8 x 14/17 mm	0
	Laser endodontic irrigation	Gentle	Contact with irrigant	20-40	10	0.4/0.6 x 17 mm	0
	Photobanding of ulcers	Gentle	Non-Contact	20	10	1.0 x 14/17 mm	0
	Apthous	Gentle	Near Contact	20	10	1.3 x 14/17/19 mm	0
	Reconditioning of exposed root	Gentle	Non-Contact	20-40	20	1.3 x19 mm	6
	Periodontal pocket disinfection	Gentle	Non-Contact	40	20	0.6/0.8 x 17 mm	6
	Implant Decontamination	Gentle	Non-Contact	20-40	20	1.0/1.3 x 14/17 mm	6-8
Cavity Preparation	Enamel *1	HT	Non-Contact	300	20-25	0.8-1.3 x 14/17 mm Magnum	6-8
	Dentin	HT	Non-Contact	200-300	20-25	0.8-1.3 x 14/17 mm Magnum	6-8
	Caries Romavel	HT	Non-Contact	200	20-30	0.8-1.3 x 14/17 mm Magnum	6
	Pits & Fissures	HT	Non-Contact	50-100	20	0.8 x 14/17 mm 0.4/0.6 x 17 mm	6

RECOMMENDED TREATMENT GUIDE FOR SELECTED CLINICAL APPLICATIONS

Application	Procedure	Hard Tissue [HT] Soft Tissue [ST]	Contact/ Non-Contact	Laser Energy [mJ]	Pulse Frequency [Hz]	Tip Diameter x Length [mm]	Water Spray Level
Crown Lengthening	Release Incision	ST	Contact	100 – 200	10 - 20	0.2/0.4 x 17 mm	3-4
	Bone Remodeling	HT	Non-Contact	200 – 300	20 - 25	0.8/1.0 x 14/17 mm 1.3 x 14/17/19 mm	6-8
	Bone Smoothing	HT	Non-Contact	100 – 200	20	1.00 x 14/17 mm 1.3 x 14/17/19 mm	6-8
Periodontal Surgery	Release Incision of the Flap	ST	Contact	200	10 – 20	0.2/0.4 x 17 mm Chisel, Blade	3-4
	Granulation Tissue Ablation	ST	Contact/Non-Contact	100 - 200	20	1.0/1.3 x 14/17 mm	3-4
	Bone Remodeling	HT	Non-Contact	200 – 300	20 - 25	0.8/1.0 x 14/17 mm 1.3 x 14/17/19 mm	6-8
	Bone Smoothing	HT	Non-Contact	100 – 200	20	0.8-1.3 x 14/17 mm	6-8
	Gingivectomy	ST	Contact/Non-Contact	100 - 200	10-20	0.4/0.6 x 17 mm 0.8 x 14/17 mm, Chisel	0-4
	Frenectomy	ST	Contact/Non-Contact	100 - 200	10-20	0.4/0.6 x 17 mm 0.8 x 14/17 mm, Chisel	0-4
	Gums Pigmentation Removal *5	ST	Contact/Non-Contact	100	10 – 20	1.0/1.3 x 14/17 mm	0-4
	Periodontal Pocket Debridement *4	ST	Non-Contact	50 - 100	20	0.6/0.8 x 17 mm	6
	Excision (e.g. fibroma)	ST	Contact	100 - 200	10-20	0.6 x 17 mm 0.8 x 14/17 mm, Chisel	0-4
	Incision (e.g. abscess)	ST	Contact	100 – 200	20	0.6 x 17 mm 0.8 x 14/17 mm, Chisel	3-6
Calculus Removal *3	HT	Contact	100	20	Chisel	6	
Implants	Trans Mucosal	ST	Contact	100 - 200	20	0.4 x 17 mm 0.6 x 17 mm	6
	Uncover Submerged Implants	ST	Contact	100 – 200	20	0.4/0.6 x 17 mm 0.8/1.0 x 14/17 mm	6

Application	Procedure	Hard Tissue [HT] Soft Tissue [ST]	Contact/ Non-Contact	Laser Energy [mJ]	Pulse Frequency [Hz]	Tip Diameter x Length [mm]	Water Spray Level
Periimplantitis Treatment	Release Incision of the Flap	ST	Contact	200	20	0.2/0.4 x 17 mm, Chisel	5 – 6
	Granulation Tissue Ablation	ST	Non-Contact	100 - 200	20	1.0/1.3 x 14/17 mm	6
	Bone Remodeling	HT	Non-Contact	200 - 300	20-25	0.8-1.0 x 14/17 mm 1.3 x 14/17/19 mm	8
	Implant Decontamination	Gentle	Non-Contact	20-40	20	1.0/1.3 x 14/17 mm	6-8
	Decortications for GBR Technique	HT	Non-Contact	200 - 300	20-25	1.0/1.3 x 14/17 mm	8
Open Sinus Lift	Release Incision of the Flap	ST	Contact	200	20	0.2/0.4 x 17 mm Blade	5-6
Apicoectomy (Endodontic Surgery)	Opening the Window *2	HT	Non-Contact	200	20	1.3 x17/19 mm	8
	Release Incision of the Flap	ST	Contact	200	20	0.2/0.4 x 17 mm Blade	5-6
	Bone Removal to Expand Entrance to Apex	HT	Non-Contact	300	20-25	0.8-1.3 x14/17 mm	8
	Granulation Tissue Ablation	ST	Non-Contact	200	20	1.0/1.3 x 14/17 mm	3-4
Other	Apex Cutting	HT	Non-Contact	200	20	0.8 x 14/17 mm	8
	Cavity Preparation for Retrograde Filling	HT	Non-Contact	200	20	0.6 x 17 mm	8
	Operculectomy	ST	Contact	200	20	Chisel	4-6
	Biopsy	ST	Contact	200	30	0.2/0.4 x 17 mm	6-8

Important Notes and Instructions:

- The preceding tables have been formulated for practitioners who have just begun using the LiteTouch dental laser system. Accordingly, the energy setups in the tables are set to the average energy settings that are effective for the intended application/procedure.
 - After becoming fully familiar with the capabilities of the laser system, adjust the parameters up or down based on patient and tissue variations, and on personal experience.
 - Always keep the tip in motion to prevent overheating of the tissue.
 - Tip Orientation in Hard-Tissue Operations: hold the tip at 70-90° angle (almost perpendicular) to the tissue.
 - Tip Orientation in Soft-Tissue / Release Incision of the Flap: keep the tip at 50-70° angle to the tissue in the direction of movement, with slight pressure.
 - Working Distance: non-contact mode is performed at a distance of 1-2 mm between the tip's end and the tissue.
- *1 Class V preparation may be performed with straight handpiece.
 - *2 Keep distance of 9 mm between the tip's end and the sinus bone - defocused mode.
 - *3 Keep the tip at 10-15° angle to the root surface. This is not recommended for regular calculus removal, only in the pockets or during periodontal surgery.
 - *4 Keep the tip at 10-15° angle to the root surface.
 - *5 Preferable using the Straight Handpiece in defocused mode.
 - *6 With fluoride gel (apply a thin layer of transparent fluoride gel on cleaned surface and repeat 2 - 3 times until the whole surface turns white).