



INSTRUCTION
MANUAL

AIR TURBINES | AIR SCALERS



SICHER

UNITED KINGDOM



SUPERIOR TECHNOLOGY
EXTENDED DURABILITY
ERGONOMIC DESIGN

SICHER

UNITED KINGDOM

Sicher is a UK based global brand; owned by Sicher Holdings Ltd. UK, is incorporated as per the laws of England and Wales under the company registration number 10902574. Sicher caters to a wide range of products in healthcare industry including highly innovative dental equipments and consumables. We lay great emphasis in producing high quality, innovative, reliable and affordable healthcare products and accessories.

Innovation, product design and service are the key drivers of our existence. Over the years, through our key business partnerships with the industry, we have been able to develop products which addresses the relevant needs of the market . Sicher is constantly expanding our product range across all medical equipments, dental equipments, consumables, disposables and accessories. This manual provides you the basic instructions of usage of our air turbines.

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| AIR TURBINES |

SXR MAX SERIES | SX MAX SERIES | PX SERIES | X SERIES

CAUTION

Intended to use: This handpiece is designed only for clinical dental use by qualified personnel

- When operating the handpiece always consider the safety of the patient.
- Check for vibration, noise and overheating outside the patient's oral cavity before use. If any abnormalities are found, stop using the handpiece immediately and contact dealer.
- Should the handpiece function abnormally, cease operation immediately and return the handpiece to an authorized dealer for repair.
- Depressing the push-button while the handpiece is rotating will result in OVERHEATING of the handpiece head. Special caution must be exercised during use to keep cheek tissue AWAY from the push-button of the handpiece. Contact with cheek tissue may cause the push-button to depress and burn injury to the patient may occur.
- Do not applying excessive power in the direction which bur removes. When the bur drops into patient's oral cavity, they may drink by mistake and get injured.

CAUTION

- The LED handpiece may have a built-in dynamo. Consumption Air generates electricity and LED become luminous. Therefore, do not perform autoclave sterilization which it heat and cools rapidly.
- Do not allow any impact on to the Handpiece. Do not drop the Handpiece.
- Do not look into LED light directly.
- When abnormalities are in LED (dark, do not light on or flashing or so), contact dealer to repair.
- Do not attempt to disassemble the handpiece or tamper with the mechanism except Sicher recommend on this Operation Manual.
- Always keep bur shanks clean. Dirt or debris in a chuck could cause poor bur concentricity or low chuck retention force.
- Do not exceed the drive motor speed recommended the bur manufacturers. If the rotary speed which the manufacturer of bur nominates is lower than spec of handpiece, do not use it.

CAUTION ⚠

Risk due to electromagnetic fields

The functionality of implantable systems, such as cardiac pacemakers and implantable cardioverter defibrillator (ICD) can be affected by electric, magnetic and electromagnetic fields.

1. Find out if patient and user have implanted systems before using the product and consider the application.
2. Weigh the risks and benefits.
3. Keep the product away from implanted systems.
4. Make appropriate emergency provisions and take immediate action on any signs of ill-health.
5. Symptoms such as raised heartbeat, irregular pulse and dizziness can be signs of a problem with a cardiac pacemaker or ICD.

CAUTION ⚠

- Do not connect or disconnect the handpiece or bur until the motor has completely stopped.
- Sicher has not recommended the repair and disassembly of the cartridge without exception. Handpiece may perform abnormally (abnormal noise or abnormal vibration). Damage, failure or accidents are outside of our guarantee.
- Do not wipe with, or clean or immerse in, high acid water or sterilizing solutions.
- Use eye protectors, mask for safety when operating this handpiece.
- User is responsible for operation, maintenance and safety.
- If the handpiece has not been used for a long period, check for noise, vibration, and overheating before use.
- Treatment under the sufficient irrigation water(Spraying water).

CONNECTING/DISCONNECTING HANDPIECE

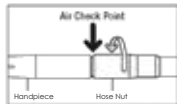


Fig. 1

Connecting

- 1) Insert the handpiece into the hose connector.
- 2) Tighten the Hose Nut. (Fig.1)

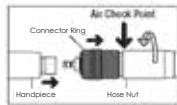


Fig. 2

Disconnect

- 1) Loosen the Hose Nut and pull out the Hose.
- 2) Slide back the Connector Ring as shown in Fig.2

Set the Air pressure at the "Air Check point" on Fig. 1 and Fig. 2 The setting values are on the specification table. Do not exceed the recommended air pressure by using Multi Gauge.

CAUTION

- Ensure connect “Coupling and Hose” or “Handpiece and Coupling” firmly.
- Do not pull the Connector Ring while the handpiece is under air pressure. It may jump the handpiece out from the connector because of the air pressure.
- Do not exceed the recommended air pressure. If it exceeds the pressure, it may bur jump out from the handpiece.
- Ensure clean, dry air supply. Moisture and debris in air supply may cause the motor to malfunction.

CHECK BEFORE TREATMENT

Follow the steps below before use. If any abnormalities are found, stop using the handpiece immediately and contact the authorized Sicher dealer.

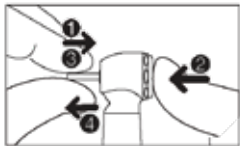
- 1) Insert the Bur (Do not exceed maximum rotation speed for any item).
- 2) Check that there is no abnormal rotation, vibration, noise and overheating.
- 3) If there are no immediate apparent abnormalities, continue to rotate the handpiece for about 1 minute.
Then check that there is no abnormal heating on the outer surface.
- 4) Operate it if there are not abnormalities above.

INSERTION /REMOVAL OF THE BUR

CAUTION

- Do not use non-standard burs. The ISO standard shank diameter is $\varnothing 1.59 - \varnothing 1.60$ mm.
- Do not exceed the bur speed recommended by the bur manufacturer. Moreover, do not use the bur which it has lower rotation speed.
- Do not use long surgical burs. Do not use burs longer than 26mm.
- Do not use short shank burs.
- Always keep the bur shank clean. Entry of hard debris into the chuck via the bur shank could cause rotation slip and also prevent the bur from being securely located in the chuck.
- Fully depress the Push Button and insert the bur into the chuck until it is secure.
- Test that the bur is secure by gently pulling and pushing the bur without depressing the Push Button.

INSERTION /REMOVAL OF THE BUR



To inserts the Bur

- 1) Insert the bur until it stops.(1)
- 2) Depress the Push Button.(2)
- 3) Insert the bur into the chuck until it is stops.(3)
- 4) Release the button.

To remove the Bur

- Depress the Push Button firmly and remove the bur.(4)

CAUTION

- Do not connect or disconnect the handpiece or bur until the motor has completely stopped.
- When used for crown removal and other procedures that would involve heavy vibration, the bur may become difficult to remove. Push the button firmly, and forcibly pull out the bur with a pair of pliers. Apply small amount of spray lubricant into the chuck. This can be prevented if the bur is repositioned a few times during the procedure.

MAINTENANCE



Fig. 4



Fig. 5

After the treatment of each patient, perform maintenance below.

Cleaning (Clean-Head System)

- 1) Scrub dirt and debris from the handpiece.(Fig.4)
- 2) Half fill a cup with clean water.
- 3) Rotate the handpiece and immerse half of the handpiece head. (Fig. 5)
- 4) Rotate and stop intermittently the handpiece about 2 to 3 seconds.
(About 3 times)
- 5) By the function of the clean head system, the clean head hole can be washed.
- 6) Stop the handpiece and wipe it dry. If the dirt could not remove from the hole, remove the cartridge and clean by brush.
- 7) Perform lubrication (4-3 Lubrication) and sterilization. (5-4 Lubrication, 5-5 Sterilization)

Note : Use only clean water to maintain the Clean Head System

MAINTENANCE

Cleaning (Glass Rod)

Wipe clean the Cellular Glass Optic Rod entry point and exit point with an alcohol-immersed cotton swab. Remove all debris and oil.(Fig.6)

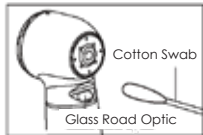



Fig. 6

Note : Do not use a pointed tool or sharp edged to clean the Cellular Glass Optic Rod. They may damage the mirror finish and reduce the light transmission efficiency. If Cellular Glass Optic Rod end has become damaged, return it to dealer for repair.

Cleaning

This handpiece can be washed via Thermo Disinfector 
Scrub dirt and debris from the handpiece, and wipe clean with alcohol-immersed cotton swab or cloth. Do not use a wire brush.

* Refer the manual of Thermo-Disinfector for performing it.

MAINTENANCE

Lubrication

- 1) Mount the Arrow Head Spray Nozzle into the Spray Port.(Fig.7)
- 2) Remove the Bur from the handpiece.
- 3) Insert the Arrow Head Spray Nozzle in the drive Air Tube of the handpiece and spray for approximately 2-3 seconds

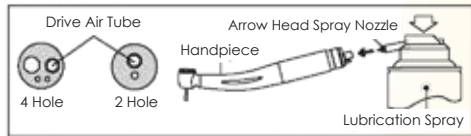


Fig. 7

Note :

- Be sure to hold the handpiece firmly to prevent the handpiece from slipping out of hand by the spray pressure when lubricating.
- Supply lubricant until it comes out of the handpiece head.(at least 2 seconds)
- Hold the spray can upright.

MAINTENANCE

Sterilization

This handpiece and motor can be autoclavable up to Max.135°C



Autoclave sterilization is recommended. Sterilization is required first time you use and after each patient as noted below.

Autoclave Procedure:

- 1) Clean and lubricate the handpiece.
- 2) Insert into an autoclave pouch. Seal the pouch.
- 3) Autoclavable up to max. 135°C. (ex. Autoclave for 3 min. at 134°C).
- 4) Keep the handpiece in the autoclave pouch to keep it clean until you use it.

MAINTENANCE

CAUTION

- To prevent infectiveness, Autoclave the handpiece every patient.
- Do not autoclave the handpiece, even when it is bagged, together with other instruments, from which chemicals are not sufficiently cleaned. This is to avoid discoloration and/or damage to the plating of the handpiece.
- In case the sterilizer chamber temperature could exceed 135°C during the dry cycle, skip the dry cycle.
- Do not heat or cool the handpiece quickly. Rapid change in temperature could break the glass rod or dynamo or LED parts.
- Do not wash, soak, or wipe off the handpiece with/in the oxidation potential solution (strong acid, super acid solution) sterilized solution, strong alkaline solution or functional water.
- The handpiece is kept in suitable atmospheric pressure, temperature, humidity, ventilation, and sunlight. Moreover, air does not include a dust, salt and sulfur.
- Do not touch the handpiece just after the autoclave. It may very hot.
- Sicher do not recommend you to sterilize on plasma sterilization or EOG sterilization.

CHANGING TURBINE CARTRIDGE

- 1) Mount a dummy bur in the chuck.
- 2) Turn the Wrench counter clockwise and remove the Head Cap by Head Cap Wrench.
- 3) Push up the dummy bur to remove Cartridge.
- 4) Clean the head interior. (Wipe extra oil after lubrication)
- 5) Align the Alignment Pin and insert Cartridge. (Fig. 8)
- 6) Turn the Wrench clockwise and mount the Head Cap. (Fig. 9)

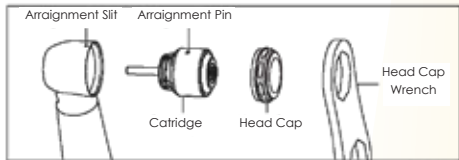


Fig. 9

CHANGING TURBINE CARTRIDGE

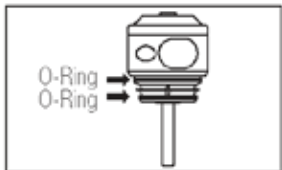


Fig. 10

CAUTION

- Tighten the head cap after changing the cartridge. If attachment is loose, there are the causes of an injury in oral cavity or possibility of accidental ingestion.
- Use only Sicher purity cartridge. Competitive cartridge is not covered under warranty.
- The screw of head cap is very small. Do not bind tight using a Wrench from the start. After tightening by the hand, use the Wrench.
- Check that the O-Rings are placed correct position and then install the cartridge.(Fig.10)

SPRAY PORT CLEANING

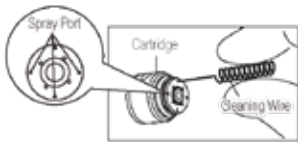


Fig. 11

When spray ports are clogged, or spray does not exit evenly from three ports, clean the ports as follows:

- 1) Remove the bur from the chuck. (Refer to "4. Insertion/Removal the Bur" and "6. Replacing the Cartridge")
- 2) Take out the cleaning wire from the back end of the brush holder. Insert the wire straight into the spray ports with caution. Do not forcibly insert the wire into the port. Damaged or disoriented port could cause the spray to diverge or be directed away from the bur, and the cooling efficiency deteriorates.
- 3) After use, clean the cleaning wire. Push into the brush holder with the pointed end of the wire inward.

REPLACING THE O-RINGS (QD COUPLING)

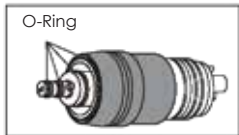


Fig. 12

Worn or damaged O-ring may cause air or water to leak. When water is found in the exhaust air or water leak from the coupled point, replace four O-rings as shown in Fig.10

NON-RETRACTION VALVE (QD COUPLING)

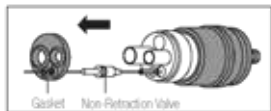


Fig. 13

To prevent oral fluids drawn into the water line, QD coupling has Non-Retracted valve. If water is beginning to leaking from handpiece, replace non-retraction valve.

- 1) Remove the back-end gasket.
- 2) Replace Non-Retracted Valve.

WARRANTY

Sicher warrants our product against poor manufacturing, faulty workmanship and defects in materials. Sicher reserves the right to analyze and determine the cause of any problem. Warranty is void if the handpiece is not used appropriately. Replacement parts are available for seven years beyond discontinuation of the model.

For any service/warranty information please write to **service@sicherholding.com**

SPECIFICATIONS (NON-LED MODELS)

Model No	Chuck Type	Pressure	Burs	RPM	Grip Power	Spray	Noise
SXR M1	Push Button	0.22-0.25Mpa	φ1.595-1.600mm	360,000~380,000	25~45N	Single Spray	58~63dB
SXR M2	Push Button	0.22-0.30Mpa	φ1.595-1.600mm	350,000~400,000	25~45N	Three Spray	<60dB
SXR M3	Push Button	0.22-0.30Mpa	φ1.595-1.600mm	320,000~350,000	25~45N	Single Spray	<55dB
SXR Max	Push Button	0.22-0.30Mpa	φ1.595-1.600mm	350,000~360,000	25~45N	Four Spray	<50dB
SX Max M1	Push Button	0.22-0.25Mpa	φ1.595-1.600mm	360,000~380,000	25~45N	Single Spray	53~63dB
SX Max M2	Push Button	0.22-0.30Mpa	φ1.595-1.600mm	320,000~340,000	25~45N	Four Spray	52~55dB
SX Max M3	Push Button	0.22-0.25Mpa	φ1.595-1.600mm	320,000~340,000	25~45N	Four Spray	52~55dB
Max S100	Push Button	0.22-0.25Mpa	φ1.595-1.600mm	350,000~420,000	25~45N	Single Spray	<60dB
Max T100	Push Button	0.22-0.25Mpa	φ1.595-1.600mm	300,000~350,000	25~45N	Single Spray	<60dB
Max S200	Push Button	0.22-0.25Mpa	φ1.595-1.600mm	320,000~380,000	25~45N	Single Spray	<60dB

SPECIFICATIONS (LED MODELS)

Model No	Chuck Type	Pressure	Burs	RPM	Grip Power	Spray	Noise	LED
SX Plus M1	Push Button	0.25-0.30Mpa	φ1.595-1.600mm	300,000~350,000	25~45N	Single Spray	<65dB	1 LED Self Generation
SX Max Plus 2	Push Button	0.25-0.30Mpa	φ1.595-1.600mm	340,000~380,000	25~45N	Single Spray	55~63dB	1 LED Self Generation
SXR Max Plus	Push Button	0.22-0.30Mpa	φ1.595-1.600mm	300,000~350,000	25~45N	Three Spray	<50dB	1 LED Self Generation
X5 LED	Push Button	0.22-0.30Mpa	φ1.595-1.600mm	350,000~380,000	25~45N	Five Spray	<55dB	5 LED Self Generation
X4 LED	Push Button	0.22-0.30Mpa	φ1.595-1.600mm	320,000~350,000	25~45N	Four Spray	<55dB	1 LED Self Generation
X5 SLED	Push Button	0.22-0.30Mpa	φ1.595-1.600mm	350,000~380,000	25~45N	Five Spray	<60dB	SMD LED Self Generation
Max Plus S100	Push Button	0.22-0.30Mpa	φ1.595-1.600mm	300,000~350,000	25~45N	Single Spray	<60dB	SMD LED Self Generation
Max Plus T100	Push Button	0.22-0.30Mpa	φ1.595-1.600mm	300,000~350,000	25~45N	Single Spray	<60dB	SMD LED Self Generation

SPECIFICATIONS (PEDO MODELS)

Model No	Chuck Type	Pressure	Burs	RPM	Grip Power	Spray	Noise	LED
PX Max	Push Button	0.25-0.30Mpa	φ1.595-1.600mm	380,000~420,000	15~30N	Single Spray	<55dB	NO LED
PX LED	Push Button	0.25-0.30Mpa	φ1.595-1.600mm	380,000~420,000	15~30N	Single Spray	<55dB	2 LED Self Generation
PX Max 1	Push Button	0.22-0.25 Mpa	φ1.595-1.600mm	350,000-380,000	15~30N	Single Spray	<65dB	NO LED



| AIR SCALERS |

AX SERIES

FEATURES

- Ergonomically designed for comfort.
- Smaller body to enhance wider reach with precision.
- Reduced pain compared to an ultra-sonic scalar, hence effective even for highly pain sensitive patients.
- Reduced heat generation while using and low cooling water usage, hence provides a clearer vision to the dentist.
- Track of Scalar inserts with a shape of 0, enhances its effectiveness, quickly eliminates the tartar, plaque and Tea Teeth.
- Not only lesser scratch and hurt on the teeth surface; but also minimizes the harm on to gums and teeth enamel.
- Plug and use Air drive – connects directly to the 2/4 hole tube of the dental unit.
- Easy to adjust the air pressure as per your requirement.
- Metal handle - effectively avoids the cross infection, autoclavable at both high temperature 135o C and high pressure 0.22 MPa.
- No electromagnetic radiation.
- Lower noise and skip down.
- Unique work tips changer makes it easier to adapt with EMS or with other compatible brand work tips.

USING PURPOSE

This product is for dentist usage on the surface of the patient's plaque; tartar also is used to remove the color of dental treatment.

About the scaler tip (the insert of air scaler)

1. Tips modes: With 3 pcs scaling tips provided with this equipment, choose suitable tips choose for right treatment.
2. Tips installation and unloading
 - a. Must use the disinfected tips, should wear gloves when loading and unloading.
 - b. Put the tips into the snap within the head of air scalar.
 - c. The thread of tip should be screwed as clockwise onto the scaler, and then tighten it by the wrench, be careful not to over tighten. Please note that during installation, the hand should hold the scaler body rather than the device during the installation process.
 - d. Please remove the tip by turning to anti-clockwise.

CAUTION

1. Scaler's insert which have edges, could not be used for position such as subgingival meet the soft tissue.
2. May feel insecure when using a different manufacturer scaler tips, causing irregular vibrations which may also lead to broken scaler head
3. Ensure the tips are secured before treatment to avoid accidents during the treatment.
4. Please wear gloves when Loading and unloading the tips
5. Do not over tighten the tips of the scaler.
6. Due to abrasion and continuous usage, the scaler tips may develop some noise while working. If the sound is too noisy, do not keep it working for long time
7. Limited for the use for specialty dentist
8. DO NOT make any disassembly and modification.
9. Contact your service advisor for any repair/fault
10. Avoid using the Air Scaler immediately if it shows any technical snag).
11. Do regular inspection and maintenance.
12. Strictly to the listed precautions for proper use

CAUTION

In order to avoid the patient's pain, injury, and scratches the surface of the tooth, please keep lower pressure when using. And use the most appropriate teeth cleaning tip.

1. Please wear masks, gloves, and protective eyewear during the treatment to avoid the infection
2. Do not work long hours in same treatment site.
3. The depth of the periodontal pocket must be assessed prior to the treatment.
4. Use cold water to achieve the desired cleaning effect and to avoid scratches on the root surface.
5. Avoid long time usage of the tip. Also stop using the tip when it is too noisy, so as to protect the patient's hearing.
6. While using, use with the recommended working pressure is 0.24MPa and should not exceed 0.35MPa. When the pressure exceeds the tooth surface is scratched, the patient will feel pain, resulting in broken scaler tip. Dentifrice will cause the tip life becomes short.
7. In the process of cleaning teeth using cold water must be sufficient so that the tip and teeth are cooled. Inadequate supply of water will cause scratches on the tooth surface

INSTALLATION

Using 2/4 hole hand piece connector:

1. The Scaler connection portion to be connected with the hand piece tube
2. The scaler connection portion connects with hand piece tube well after the insertion and fix the screw nut.
3. Confirm Scaler pipe connecting portion completely with hand piece tube.
4. To remove the Scaler from the connection tube on the hand piece, twist it anti-clockwise.

MAINTENANCE

Always use high-speed hand piece oil. Highly recommended to use oil as follows :

- a. Before the first use
- b. Before Autoclaving
- c. Twice a day
- d. If the Scaler was not used for more than a week
- e. After replacing the transducer

Oiling:

- a. Use high speed hand piece oil; put 4 drops to intake-tube of air scaler.
- b. After lubrication, connect to hand piece tube and run for 1 minute, until adequately lubricated and wipe excess oil.
- c. While using the spray oiling, keep the bottle up for adequate lubrication. The scaler life may be shorter if oiling is done inadequately.

Suggestion: proper use of hand piece oil can prolong the life of air scaler.

STERILIZATION

High temperature and high pressure disinfection for air scaler, work tip, wrench.

Disinfection

1. The scaler should be disinfected before using for every patient. The temperature for disinfection is 121 degrees Celsius (250 degrees Fahrenheit) 20 minutes (EN standard 554:1994), or 132 degrees (270 degrees Fahrenheit) 15 minutes (JIS specification T 5910:2005). The highest temperature for air scaler disinfection is 135 degrees (275 degrees Fahrenheit). Or you can set up the temperature by yourself according to your local regulation. Do not use the drying process in order to avoid damage to the air scaler.
2. Please take out the air scaler, scaler tip, wrench from the disinfection furnace after finishing disinfection, and keep it dry.

CAUTION

1. Skip dry cycle, if the chamber temperature is suspected to rise beyond 135°C (275 F) during the dry cycle.
2. Always, where possible, place the scaler in the middle or upper tray, as most sterilizers have heating elements in the bottom of the chamber and that the local temperature may exceed 135°C (275 F).
3. Do not sterilize the scaler mixed with other instruments if chemicals are not sufficiently removed from them. Chemicals could cause the plating to chip off and discolorate or penetrate into the fiber bundles and to the internal components. Keep any chemicals off the sterilizer.
4. Do not clean or wipe the scaler with highly oxidized or acid water or sterilizing solution.

WARRANTY

This product is protected under warranty for six months from the date of purchase, if there quality problems caused by artificial factors, the company repair or replace the equipment to ensure the normal use.

The product warranty does not cover, if;

- * The user has not followed the instruction manual for the installation, operation and maintenance;
- * An unusual chemical, electric power, electrolytic damage or by fall;
- * Overuse or out of dental area damage caused due to supply/connection of unsuitable water and gas;
- * Improper operation or not authorized maintenance
- * Outside the normal use

SYMPTOMS/SOLUTIONS

Symptoms	Possible Cause	Solutions
Do not spray water	<ul style="list-style-type: none">▶ Do not open the switch of the water supply from dental unit.▶ The water supply setting is wrong from dental unit.▶ Water do not enter into the hand piece tube▶ Water tube of air scaler is stopped up	<ul style="list-style-type: none">▶ Open the water supply switch.▶ Set up the water supply or checking the water supply of dental unit▶ Repair the air scaler
Low power	<ul style="list-style-type: none">▶ No supply air.▶ The bearing of shock is damaged.▶ Just finished oiling.▶ Some dust or others fall into the shocking bearing.	<ul style="list-style-type: none">▶ Adjust the pressure at 0.3MPa.▶ If no air enter to the transducer, it need repair.▶ Change the new transducer. Grease cleaning.▶ Air scaler should be idled for one minute after injected.

SYMPTOMS/SOLUTIONS

Symptoms	Possible Cause	Solutions
High noise	<ul style="list-style-type: none">▶ The scaler head is loosen.▶ The scaler hear wore.▶ The transducer wore.▶ Just inject oil.	<ul style="list-style-type: none">▶ Use wrench to fix.▶ Change the new working tip.▶ Change the new transducer.▶ Idle for one minute after injected
Water & Air leakage at the connection joints	<ul style="list-style-type: none">▶ The joint is not tighten properly.▶ The sealing of joint coupling is damaged.	<ul style="list-style-type: none">▶ Tighten the hand piece screw joint again.▶ Change the seating.

SPECIFICATIONS - AX PLUS M1

Product Name	Air Scaler (AX Plus M1)	
Specifications	M4 (4H)	M2 (2H)
Connection	4-hole handpiece spiral tube	2-hole handpiece spiral tube
Frequency	From 6100 to 6600Hz	
Pressure	0.24 – 0.32 MPa (2.4 – 3.2 kgf/cm ²)	
Air flow	22 L/Min	23 L/Min
Durable Temperature	135°C	

SPECIFICATIONS - AX PRO

Product Name	Air Scaler (AX Pro)	
Specifications	M4 (4H)	M2 (2H)
Connection	4-hole handpiece spiral tube	2-hole handpiece spiral tube
Frequency	From 10,500 to 13,200Hz	
Pressure	0.28 Mpa (2.9 kgf/cm ²)	
Air flow	20 - 30 L/Min	20 - 30 L/Min
Durable Temperature	135°C	

The background is a solid teal color with a pattern of thin, white, wavy lines that create a sense of motion and depth. The lines are more densely packed in some areas and more sparse in others, creating a layered, ethereal effect.

| LED LIGHT CURE |

LX SERIES

CAUTION

Prior to installation and activation of the light, please read these instructions carefully and follow safety procedures as well as the specific safety comments and recommendations presented throughout the instructions for use. The manufacturer accepts no liability for any damage resulting from the improper use of this unit and/or for any purpose other than those covered by these instructions.

1. LED Light Cure produces high intensity light. Prolonged exposure to the skin, oral mucosa, or pulp can result in irritation or injury.
 - Do not place light in direct contact with unprotected gingival, oral mucous membrane or skin.
 - Do not place light directly on the same tooth segment for more than 6 seconds in Plasma Power Mode.
 - If long exposure cannot be avoided, direct a stream of air over the tooth surface from an air syringe or high-speed vacuum tip, adjust to Pulse Power Mode or adjust curing distance.
2. Do not look directly at light emitted from the device. Do not use LED Light Cure without suitable eye protection for the operator, assistant and patient. Use Light Shield, Protective Goggles, and/or Curing Caps. Exposure must be restricted to the area of the oral cavity for which the clinical treatment is intended.

CAUTION

3. Exposure must be restricted to the area of the oral cavity in which clinical treatment is intended.
4. Use only chargers and adapters supplied for Sicher LED curing lights. The use of third party chargers and/or AC/DC wall plug adapters may result in damage to the unit, may be hazardous to users/patients, and will void warranty.
5. Do not allow cleaning agents to directly enter the unit as this may cause premature failure. See Maintenance and Care.
6. Do not use on patients with a history of photo biological conditions including urticarial solaris or erythropoetic protoporphyria or who are on photosensitizing medications.
7. Suitable blue-light filtering safety goggles must be worn by patient and dentist during use.
8. Do not stare at operating curing light. May be harmful to the eyes.

OPERATION

The Sicher LED Curing Light is supplied with the lens cap attached. A button on the Sicher LED Curing Light turns the light on and off. Simply press the button once and release to activate or de-activate the light.

Duty Cycle

Intermittent use of 10 to 40 second curing times, with twice the cooling time, within maximum of 6 minutes.

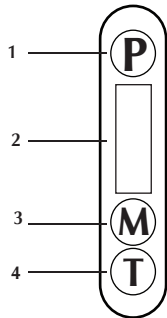
Cure Times

Due to the variation in VLC (visible light cured) materials, curing times will differ. Review manufacturer product instructions for recommended curing times. ALWAYS bench test new materials before use.

OPERATION

- Remove the contents from the package. Be careful not to drop or impact the curing light. Choose a flat, level surface to place the charging cradle on.
- Before using the Light Cures for the first time, the unit must be fully charged. Charge time will take approximately 5 hours the first time.
- Use only the power supply furnished with the Light Cure Complete Kit or a Light Cure Charging Station. Attempting to use another power supply source may cause injury or damage and will void the warranty.
- Plug the connector of the power supply into the back of the charging station or plug into the bottom end of the Light Cure handpiece. Plug the other end of the power supply into the appropriate electrical outlet. For the first use, allow to charge fully (approximately 5 hours).
- Select the appropriate mode necessary to do your procedure. See Modes selection on the following page.
- Select curing time. Curing time can be selected to run at 5, 10, 15 or 20 second intervals for all modes, See Modes section on the following page.
- The Light Cure features a “sleep” state. When not in the charging cradle or attached to the power supply, if the unit has not been used for more than five (5) minutes, the display will turn off to conserve power.




OPERATION(LX PLUS M1)



1. Start key
2. Digital display
3. Mode key
4. Time key

Mode Key (M) : Using this button, you may able to choose three different modes 1,2 and 3. The digital display screen (2) will display the corresponding number which is selected (default mode is 1)

The following modes are available with the respective numbers as mentioned below :

-  **01.Strong Mode**
-  **02.Crescendo Mode**
-  **03. Flashing Mode**

Time key (T) use this button to set the time by pressing it, you can select different periods such as 10,20,30,40 seconds cycles, you can select the desired time using the time key (default working time is 20 seconds).

Start key (P) use this button to start/stop light curing device.

SPECIFICATIONS (LX PLUS M1)

BATTERY	Lithium-ion battery
BATTERY VOLTAGE	4.2V
BATTERY CAPACITY	1400 mAh
SUITABLE TEMP.	5°C~50°C
RELATIVE HUMIDITY	<80%
SOLIDIFY TIME/DEPTH	5s/3mm
LIGHT WAVELENGTH	420-480nm
LIGHT INTENSITY	1200-1500mw/cm ²

OPERATION(LX MAX)

LX Max Light Cure body is made by environmental white plastic shell contains 5W high power LED, high permeability rate of glass fiber-optic, strong flashing, gradually increasing 3 modes and large capacity lithium battery. It's features includes automatic standby/shutdown, low battery warning, suitable for all brands of resin materials, long standby time of 90 days. In one time charged, accordance with each working time of 20 seconds, it could be used continuously for more than 130 times.



Power switch



Strong mode indicator light



Flashing mode indicator light



Crescendo mode



Time adjustment 5-40 seconds



Mode select switch



Low battery alert

SPECIFICATIONS (LX MAX)

BATTERY	Lithium-ion battery
BATTERY VOLTAGE	4.2V
BATTERY CAPACITY	1400 mAh
SUITABLE TEMP.	5°C~50°C
RELATIVE HUMIDITY	<80%
SOLIDIFY TIME/DEPTH	5s/3mm
LIGHT WAVELENGTH	420-480nm
LIGHT INTENSITY	1200-2000mw/cm ²

OPERATION(LX MAX PLUS)

LX Max Plus dual colour LED curing light with light meter body is made by environmental white plastic shell. The base with the function of light measuring with white light diagnostics model . It contains 5W high power LED, high permeability rate of glass fiber-optic, strong and low flashing, gradually increasing 4 modes and large capacity lithium battery. It's features includes automatic standby/shutdown, low battery warning, suitable for all brands of resin materials, long standby time of 90 days. In one time charged, accordance with each working time of 20 seconds, it could be used continuously for more than 130 times.



Power switch



Strong mode indicator light



Low mode indicator light



Flashing mode indicator light



Crescendo mode



Time adjustment 5-40 seconds



Mode select switch



Low battery alert

SPECIFICATIONS (LX MAX PLUS)

BATTERY	Lithium-ion battery
BATTERY VOLTAGE	4.2V
BATTERY CAPACITY	1400 mAh
SUITABLE TEMP.	5°C~50°C
RELATIVE HUMIDITY	<80%
SOLIDIFY TIME/DEPTH	5s/3mm
LIGHT WAVELENGTH	420-480nm
LIGHT INTENSITY	1200-2000mw/cm ²

CLEANING

The Light Cures are a state-of-the-art electronic device. To prevent unnecessary damage to the unit and to the power supply, these care and cleaning guidelines must be followed. The Light Cures are sealed so it can be surface cleaned and disinfected using an appropriate disinfectant towelette or a cloth soaked in surface disinfectant. Below is a partial list of suggested surface disinfectants:

- Glutaraldehyde
- Chlorhexidine gluconate
- 70% Isopropyl alcohol
- Water-based phenolics
- Dual or synergized quaternary ammoniums

DO NOT use harsh abrasives. DO NOT autoclave or otherwise sterilize these components. The amber shield provided may be immersed in the solution but DO NOT autoclave or otherwise sterilize.

RECYCLING AND DISPOSAL

Recycling

Sicher considers that it has a special duty towards the environment. The turbine handpiece along with its packaging has been designed to be as environmentally friendly as possible.



Disposal of the turbine handpiece

Follow your country-specific laws, directives, standards and guidelines for the disposal of used electrical devices. Ensure that the parts are not contaminated on disposal.

Disposal of the packaging material

All packaging materials have been selected according to environmentally compatible and disposal aspects and can be recycled. Please send old packaging materials to the relevant collection and reprocessing system. This way, you will contribute to the recycling of raw materials and the avoidance of waste.

A close-up photograph of several dental instruments, including a high-speed handpiece and a dental mirror, arranged in a tray. The instruments are metallic and have a clean, professional appearance. The background is softly blurred, showing more of the dental setup.

DRIVEN BY PASSION
GUIDED BY TECHNOLOGY



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