


**Lares MX Coupler  
Operator Manual**

REF 10286, 10287, 10289, 10574 

Manufacturer:

 Lares Research  
295 Lockheed Ave  
Chico, CA 95973



MDSS GmbH  
Schiffgraben 41  
30175 Hannover,  
Germany  
info@mdss.com

Lares Research hopes that you will benefit greatly from working with your new quality product, the Lares MX coupler. Please observe the following notes to assure continued trouble-free and safe product operation:

**Technical Data**

 **Not Sterile  
Lares MX Coupler**

ISO-Type 2 5 Hole Fiber Optic (optional)  
ISO-Type 1 2 Hole connection (optional)  
Weight 20-30 grams  
Adjustable spray control ring (optional)  
Safe maximum drive air and water pressure is 40 psi (275 KPa).

 **Cautions**

**Lares MX Coupler**

- Only intended for dental treatment in the area of dental medicine.
- Intended to connect to Air Driven dental handpiece instruments.
- An accessory to an active medical device according to the applicable regulatory requirements.

Regulations require that the Lares MX Coupler only be used by a competent person for the described application and following:


- Valid regulations on work safety.
- Valid accident prevention measures.
- These operating instructions.

The user must:

- Use only devices in good working order (no damage).
- Ensure that it is used for the correct purpose.
- Protect patients and third parties from all dangers.
- Not use parts from other sources and/or not make any type of modification. Both may result in damage or injury.

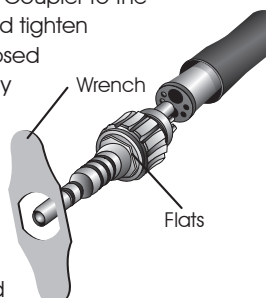
**Putting Into Operation  
(Installation)**


**Connection to hose**

 **Caution:** A supply of dry, clean, compressed and uncontaminated air must be provided.

Screw the Lares MX Coupler to the dental unit hose and tighten firmly with the enclosed wrench. Lightly spray the exposed o-rings with **Lares One-Step Handpiece Conditioner**.

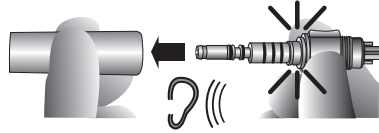
The coupler remains connected to the hose during normal use & maintenance. To remove from the hose use the wrench.



 **Caution:** Do not hold on to the spray adjustment ring when securing the coupler to the hose since this may result in malfunction.

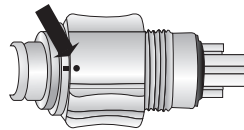
**Changing the swivel handpiece**


All Lares MX swivel handpieces and Kavo MULTiflex<sup>®</sup> connection handpieces may be connected to the MX Coupler. Insert the MX Coupler into the backend of the handpiece and push until it clicks audibly into place. Pull to remove.



**Adjusting the spray  
(optional feature)**

By turning the spray ring on the Lares MX Coupler in clockwise direction, the water content of the spray can be reduced by means of different adjustments. Maximum water flow is achieved when the marks on the ring and coupler are aligned.




 **Caution:** To increase the water content of the spray turn the ring in the counter-clockwise direction.

**Troubleshooting**

**Leaks? - Replace the o-rings**


If the coupler leaks, replace the o-rings. Press the defective o-ring(s) to one side between two fingers until a loop is formed and then slide the rings to the front and remove them. Insert new o-ring(s) in the recesses and apply Lares One-Step conditioner.

 **Caution:** Do not use Vaseline or any other type of grease on O-rings. It may result in handpiece or coupler damage.


**7.0 Care Instructions**

**7.1 Cleaning Exterior**

The Lares MX Coupler can be cleaned on the outside with an isopropyl alcohol solution.

 **Caution:** Do not place the Lares MX Coupler in an ultrasonic cleaner since this may result in malfunction.




 **WARNING**

**Hazard from non-sterile products.**  
There is a risk of infection from contaminated handpieces and accessories.

- ▶ Take suitable personal protective measures (i.e. exam gloves, eye protection, 5 µm particulate filter mask).

- ▶ Remove all residual cement, composite or blood without delay.
- ▶ Clean and maintain the coupler as soon as possible after treatment.
- ▶ Remove the coupler from the dental unit hose.
- ▶ The coupler must be dry when transported for cleaning and sterilizing.
- ▶ Do not submerge or place it in any solution.

**7.2 Cleaning**

 **CAUTION**

**Malfunctions from cleaning in the ultrasonic unit.**  
Ultrasonic cleaning may cause severe damage to the product.

- ▶ Only clean manually.

**7.2.1 Manual Cleaning - external**

- Accessories required:
- Warm tap water 40 °C ± 5 °C (104 °F ± 10 °F)
  - Brush, e.g. medium-hard toothbrush or comparable nylon-bristled dental instrument cleaning brush.

**Manual Cleaning Process**

Coupler disassembly not required.

- ▶ Rinse product under warm flowing tap water to remove gross oil.
- ▶ Brush off while rinsing under flowing warm tap water for 30 to 45 seconds to remove all soil. Brush in a direction parallel to the o-ring grooves and completely around the coupler.
- ▶ Use filtered pressurized air to completely dry coupler. If soil is still visible when dry, repeat all the cleaning steps.
- ▶ Apply Lares One-Step Handpiece Conditioner to the exterior of the coupler into a towel or sink.
- ▶ Remove excess conditioner from the exterior of coupler with a towel.

**7.2.2 Automated External Cleaning**

Not applicable.


**7.2.3 Manual Cleaning of the Inside**

Not applicable.

**7.2.4 Automated Internal Cleaning**

Not applicable.

**7.3 Disinfection**

 **CAUTION**

**Malfunctioning from using a disinfectant bath or disinfectant containing chlorine.**  
Handpiece damage may result.

- ▶ Never disinfect in a thermo-disinfector.

**7.3.1 Manual Disinfection - External**

The Lares MX Coupler can be disinfected on the outside with chemical disinfectants (spray disinfectant or wipe clean disinfectants). The coupler should not be immersed in any disinfecting solutions.

**7.3.2 Manual Disinfection - Internal**

Not applicable.

**7.3.3 Machine Disinfection - External & Internal**

Not applicable.

**7.4 Drying**

Manual Drying

- ▶ Blow off the outside and inside with compressed air until water drops are no longer visible.

**7.4.1 Automatic Drying**

Not applicable

**7.5 Care Products and Systems - Servicing**

 **CAUTION**

**Premature wear and malfunctions from improper servicing and care.**  
Reduced product life.

- ▶ Perform proper care regularly!

**Note**

Lares Research only guarantees that its products will function properly when the care products used are those listed as accessories, as they were tested for proper use on our products.

**7.5.1 Care Products & Systems - Servicing: Care with Lares One-Step Handpiece Conditioner**

Lares Research recommends applying handpiece conditioner after each time it is used, i.e. after each cleaning and before each sterilization.

**7.5.2 Inspection & Function Testing**

Lares MX Couplers: Visually inspect for damage and wear. Service or discard damaged couplers.

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### 7.5.3 Packaging Prior to Autoclaving

**Note**




The autoclave bag must be large enough for the coupler so that the bag is not stretched.

The quality and use of the autoclave bag must satisfy applicable standards, be cleared to market and be suitable for the autoclave procedure!

- ▶ Seal each coupler individually in an autoclave bag!

### 7.5.4 Autoclaving

Process couplers in a steam sterilizer (autoclave).

 <b>CAUTION</b>
<p><b>Premature wear and malfunctions from improper servicing and care.</b> Reduced product life.</p> <ul style="list-style-type: none"> <li>▶ Before each autoclave cycle, service the coupler with Lares One-Step Handpiece Conditioner.</li> </ul>
 <b>CAUTION</b>
<p><b>Contact corrosion due to moisture.</b> Leaving coupler in autoclave after cycle has finished may damage the coupler.</p> <ul style="list-style-type: none"> <li>▶ Immediately remove the product from the steam sterilizer after the sterilization cycle to reduce condensation!</li> </ul>
 <b>CAUTION</b>
<p><b>Do not use Flash Sterilization Techniques.</b> These techniques are not validated for efficacy and damage to the coupler may result.</p>

The Lares MX Coupler has a maximum temperature resistance up to 135 °C (275 °F). Autoclave with gravitation process for at least 15 minutes at 132 °C ± 1 °C (270 °F ± 1.8 °F). Drying time: 30 minutes minimum.


When autoclaving multiple couplers in one autoclave cycle ensure that the autoclave's maximum load is not exceeded. Follow the autoclave manufacturer's Instructions for Use.










### 7.5.5 Handling & Storage After Autoclaving

- ▶ Keep couplers in the autoclave bag until next use.
- ▶ Cleaned and autoclaved couplers should be stored protected from dust with minimum exposure to germs in a dry, dark and cool space.

**Note**

The reprocessing instructions provided have been validated by Lares Research as being CAPABLE of preparing an MX Coupler for re-use. It remains the responsibility of the practitioner to ensure that the processing was actually performed using equipment, materials and personnel in the practitioner's facility to achieve the desired result. This requires validation and routine monitoring of the process as specified by the autoclave manufacturer. Use only FDA cleared to market equipment and materials for autoclaving and routine monitoring of the autoclaving process.

 <b>WARNING</b>
<p><b>Hazard from cross infection.</b> There is a risk of cross infection from patient to patient to dental staff from contaminated couplers.</p> <ul style="list-style-type: none"> <li>▶ Do not deviate from the specified coupler reprocessing steps (i.e. cleaning, autoclaving and storage).</li> </ul>

Symbol Description			
 REF	Catalog Part Number	 CE	Conformity Marking
 SN	Product Serial Number		Manufacturer
 EC REP	European Community Representative		YYYY-MM Manufacture Date
	Consult Accompanying Documents		Parts Applied to Patient
			132 °C 11 Steam Autoclave

## Accessories Replacement Parts

Description	Part ID
Wrench	10363
Gasket, 2 Hole	10094
Gasket, 5 Hole	10009
O-ring Kit	10074
Bulb Sleeve	10111

## Cautions for Use and Safety

When the Lares MX coupler will not be used for an extended period of time, it should be removed from the hose, cleaned, maintained and stored in a dry place. Any waste, which is generated must be recycled or disposed of in a manner which is safe both for people and for the environment. This must be done in strict compliance with all applicable national regulations. Questions on proper disposal of the Lares product can be answered by Technical Services. In case of any malfunction or problem stop use immediately. Contact you Lares Research technical service or account representative.

**Safety note:** If a serious safety event should occur during the use of this device it should be reported to Lares Research. It should also be reported to the regulatory authorities of the marketing region in which the user/patient is established.

**Toll Free 1-888-333-8440**

## Additional Conditions of Warranty:

1. Warranty registration is automatic as of shipping date (Outside the US warranty registration may be required).
2. The swivel coupler must be operated and maintained in accordance with procedures outlined in these instructions.
3. The swivel coupler must not be subjected to abuse or neglect.
4. The swivel coupler must not be repaired or disassembled by anyone other than Lares Research or your authorized Lares distributor. Lares Research will repair or replace, at its discretion, without charge any defective parts covered by this warranty provided the swivel coupler is returned to the factory, transportation prepaid. (Outside the US return to your authorized Lares distributor.) Lares Research makes no other warranties expressed or implied.