



JCR Mini Jewellery Cleaner User Manual

Designed and Manufactured in Australia
By JCR Solutions

www.jcr-solutions.com.au/mini

JCR Mini

Thank you for buying the JCR Mini. We are sure it will prove to be a valuable tool and give you many years of enjoyable and trouble-free service.

Introduction to the JCR Mini

The JCR Mini is a smart and versatile product designed for routine cleaning of jewellery, and specifically to clean jewellery set with delicate or chemically reactive stones.

It is made to be versatile and simple in use. Its principle use is the quick and safe removal of tarnish from the surface of gold and silver. It can also be used to clean stainless steel and other metals, and will remove tarnish, oxidation and oil or grease residues from any conductive surface using the electrochemical process of electrolysis.

In use the item is placed in a non-hazardous electrolyte, *Ion-Sol*, which has a pH of 9.1. This means that it is slightly alkaline and cannot damage chemically active gems like opal, ironstone, lapis lazuli, turquoise, coral, pearls etc.

The Ion-Stream Mini applies a carefully measured and regulated current to the surface of the item being cleaned. In practice millions of tiny hydrogen bubbles are formed on the conductive surface of the jewellery connected to the cleaning electrode. These bubbles dislodge and then mix oily molecules with the electrolyte, which contains an effective degreaser. Weak molecular bonds which hold the dirt in place are released by the action of the current.

The removal of tarnish from silver is almost immediate taking approximately 2 – 10 seconds. Tarnish from gold takes slightly longer at around 10 – 15 seconds. This form of cleaning also removes oily and greasy deposits off the surface of gems and diamonds, leaving them sparkling.

The Ion-Stream Mini contains an internal timer. This timer automatically starts when the unit is placed in the electrolyte. At the end of the cycle the unit returns to standby mode. The clean cycle can be interrupted at any time by removal from the electrolyte.

JCR Mini

Getting started

Step 1: Choose your Jewellery Cleaning Bath

If you purchased the standard model Mini, you will need to find a suitable plastic or glass container to use as your jewellery cleaning bath. Ideally use a 1 litre container with a sealable lid. A suitable container can be purchased inexpensively from any supermarket.



Step 2: Mixing the Cleaning Concentrate (Ion-Sol Electrolyte)

Ion-Sol is supplied as a concentrate. It should be diluted at a rate of 50mL per 1L of water. It is important to use deionised or distilled water. This is the same as is used in a steam ion, and is available from any supermarket. *Always avoid using tap water as this can cause problems.*

Put 50mL of Ion-Sol concentrate in your cleaning bath. This is easily measured by filling the measuring chamber on the bottle 5 times. To fill the chamber take the cap off above the chamber (leaving the other cap on), and squeeze the bottle. The fluid will fill the chamber. Dilute the concentrate by adding 1L of distilled or dionised water to the bath.

JCR Mini

Step 3: Cleaning your Jewellery

Remove the plastic hook protector, and place your jewellery on the silver hook. Items such as chains can be looped and bundled over the hook. Smaller items such as rings and earrings can be threaded onto the hook - multiple items can be cleaned at the same time if desired.

Remove the cap,
place your jewellery on the silver hook...



Dip the JCR Mini into the solution up to the line on the body. The blue light on the top will illuminate indicating that cleaning is in progress. When the blue light goes out remove from the solution, unhook your jewellery and rinse in tap water (or the rinse bath). Gently pat it dry, and that's it!

Dip into the solution up to the line.
The blue light will come on,
and the item will be clean in seconds....



JCR Mini

Tips for Best Results

For best results we recommend reading through the following suggestions

- **Tap water will cause problems.** We recommend that only distilled or deionised water is used to dilute the electrolyte concentrate. If tap water is used the cleaning process will not be as efficient as it could be. In the worst case, the surface of the metal may be stained or made less bright by contaminants in the water.
- **Fresh electrolyte always works best.** We recommend that the solution is changed frequently as contaminants from dirty jewellery will accumulate inhibiting efficient cleaning.
- **Never re-use the same electrolytes for cleaning different metal types such as brass and copper, as staining may result.** Gold, Silver and gems can safely be used in the same electrolyte - always use fresh electrolyte!
- **The electrolyte should be used at room temperature.** Some stones such as opal are very vulnerable to sharp changes in temperature and may crack due to thermal shock.
- **To clean very dirty or tarnished items, or items that don't seem to respond to the process:** Sometimes there is a chemical residue on the surface of the item left over from other cleaning methods making the tarnish insoluble. Simply mix Ion-Sol with bicarb to form a paste. Brush the jewellery with this paste using a soft bristled toothbrush. This will gently remove the residue. Clean the item as normal with the Mini.
- **Jewellery with triplets or doublets should only be cleaned if absolutely necessary.** There is a very high risk that the cemented layers will become detached. We have done extensive tests on pearls, solid opals, emeralds, ironstone, coral and other chemically active gems and have found it to be safe.
- Ensure the item being cleaned is in sound electrical contact with the silver hook at all times.
- The customer should assure themselves of the suitability of this cleaner for their jewellery as no responsibility for damage will be accepted by JCR Solutions. Should the customer wish to see the cleaner used on a particular stone of concern please contact JCR Solutions or one of our many distributors for a risk free demonstration.
- The item being cleaned should be in contact with the silver electrode at all times during cleaning. If the item being cleaned inadvertently falls off the Mini, do not try to "fish it out" with the hook. Immediately take the Mini out of the electrolyte and manually remove the item of jewellery.
- Never completely submerge the Mini in water or electrolyte, always dry after use.

JCR Mini

Replacing the battery

The JCR Mini has 2 LEDs on the top cap, a blue and an amber. The blue LED indicates that the cleaning is in progress. If the amber LED illuminates it is time to replace the battery (it is normal for the amber light to briefly flash when the Mini is dipped into the Ion-Sol). A battery typically lasts for at least 1000 cleans.

The Mini uses a standard 9V battery that can be purchased from any supermarket. Replacing the battery is a very simple process. Pull off the top cap, tap out the battery, and replace it. There is a rubber seal so it may need a firm twist and pull to remove. Make sure you line up the lights with the windows on the cap! You can rotate the cap when the unit is in the solution to get the alignment perfect.



JCR Mini

Safe Handling of Ion-Sol

Although Ion-Sol is a non-hazardous chemical, through use it will gradually become increasingly contaminated with various metal salts, grime and general dirt from the jewellery being cleaned. Please ensure the container of used Ion-Sol is appropriately stored and labelled. Wash hands after use. Clean up any spills immediately. Observe all precautions reserved for using chemicals.

Please read through the MSDS, downloadable from www.jcr-solutions.com.au/ionsol.

Keep out of reach of children.

Replenishment Ion-Sol

Replenishment ION-SOL electrolyte can be purchased from your original distributor or directly from JCR Solutions online: www.jcr-solutions.com.au/store.

Customer Support

For further advice or support please email sales@jcr-solutions.com.au or phone us on (07) 5535 1939.

We also have a lots of useful tutorials and videos on our website (www.jcr-solutions.com.au), and on our Facebook page.

JCR Solutions
Unit 2, 53 Township Drive
Burleigh Heads
QLD 4220

JCR Mini

Other products



JCR Ion-Stream Commercial (JCR 150R) - professional in-store jewellery cleaning system

This cleaner has been on the market since 2007, and has quickly become an industry standard in-store cleaning system for jewellery stores Australia wide.

In principle it works the same as the JCR Mini, but it is slightly more powerful (faster), can be used to clean larger items, and can be operated with great advantage when used in conjunction with an ultrasonic cleaner.

To find out more, please visit our website: www.jcr-solutions.com.au/150R