

Ultrasonic Unit



Application device for disinfecting vehicle air conditioners.



Properties:

- Application time – 18 minutes
- Can be plugged into a 12 V car socket
- Suitable for all vehicle types

Advantages:

- Simple application
- Contains a 230 V AC adapter to be used in vehicles without a 12 V DC socket
- Low energy consumption

Use:

RETECH Ultrasonic Unit is a mobile application device designed to apply the **RETECH Ultrasonic Cleaning Solution** biocide, ensuring excellent vehicle air conditioner disinfection. Using ultrasonic technology, the device turns the **RETECH Ultrasonic Cleaning Solution** fluid into ultra fine particles via vibrations and blows them into the vehicle's suction air ducts using a built-in fan. This efficiently spreads the **RETECH Ultrasonic Cleaning Solution** biocide into all interior ducts and heat exchangers where harmful microorganisms (viruses, bacteria, moulds, fungi, yeast) thrive.

Device and control panel description:



1. 12 V DC power connector with an 8 A fuse
2. Filler neck
3. Side air vents
4. Spirit level to control the device position
5. Exhaust opening with a dust cover

6. Application cycle START button
7. LED 1 – device is ready to be used
8. LED 2 – application cycle is running
9. LED 3 – application cycle ended
10. LED 4 – fluid level too high
11. LED 5 – fluid level too low



Order codes:

Name	Storage code	Package	Volume / Size	Order number
Ultrasonic Unit	RUSCU	Cardboard packaging	1 pc	1 35064

Instructions for use:

1. Remove cabin air filters – cabin filters must be removed before the application cycle has started to make sure they do not prevent the biocide from spreading to all interior ducts and heat exchangers. These filters are usually placed in the car interior (Fig. 1). Follow the specific vehicle's instructions for use.



2. Applicator installation and preparation – place the device on the passenger side floor near the interior divider so the exhaust faces the interior suction vents (Figure 2). Make sure the device is level – the air bubble in the spirit level must be within the marked circle. Start the vehicle's engine and leave it running throughout the application. Empty the **RETECH Ultrasonic Cleaning Solution** biocide bottom-up into the filler neck of the ultrasonic applicator **RETECH Ultrasonic Unit**.



3. Air conditioning setting – settings can vary for different vehicles and models.

- Turn the air conditioning on by pressing the “A/C” button
- Activate internal air circulation or maximum air conditioning mode (MAX. A/C)
- Set temperature to 22 °C
- Open all vents on the dashboard
- Set the fan speed to medium

4. Starting the application cycle:

- Plug the applicator's power connector into the car lighter 12 V DC socket. All the device's diagnostic LED diodes will light up for 1 second. If the device works correctly and the biocide level is within the limit, only LED 1 – “device is ready to be used” will stay lit. Otherwise please proceed to the “Troubleshooting” section.
- Close all the windows and press the START button on the control panel. LED 1 will turn off and light up again
- Exit the vehicle and close all doors. The biocide application will take approximately 18 minutes.
- LED 2 – “application cycle is running” will turn off and LED 3 – “application cycle ended” will light up automatically.
- Enter the vehicle, turn off the engine and open the doors for at least 5 minutes to ventilate the interior.

5. Ending the application

- Remove the 12 V DC connector from the lighter socket
- Pour out any remaining biocide into a drain through the exhaust opening by tilting the device forward – **NEVER TILT THE DEVICE BACKWARD!**
- Reattach the dust cover and store the device.







Warning:






- The **RETECH Ultrasonic Unit** device cannot be turned on if the biocide level is outside the specified min./max. limit. Double check LED 4 – “fluid level too high” or LED 5 – “fluid level too low”, see Troubleshooting below.
- The device can **NEVER** be filled via the exhaust opening or with a different fluid. This will result in damage to the device and immediate loss of warranty. Use exclusively **RETECH Ultrasonic Cleaning Solution** fluid applied via the filler neck.
- Make sure to properly ventilate when used indoors.

Troubleshooting:

Defect detection and removal is fairly simple. Any fixable errors are indicated via LED 1 – LED 5

NOTE: once the device is plugged in, all LED diodes light up for a brief moment – this is to indicate that the diodes are working.

	Error indication:	Action:
	The device is not properly plugged in, missing power	Double check that the connector is pushed in properly; check the lighter and connector fuses (they can be burnt)
 (Flashing LEDs)	The voltage is not sufficient (11.5 V)	Check the lighter and connector fuses (they can be burnt), clean the plugs or connect the device directly to the battery using an extending cable (no. 590155 – not included, can be bought separately as an accessory)
	Low fluid level or empty container	Readjust the fluid level – empty the container and refill with a full new bottle
	Wrong device position	Check the position of the device via the spirit level bubble
	High fluid level in the container	Readjust the fluid level – empty the container and refill with a full new bottle
	Wrong device position	Check the position of the device via the bubble in the spirit level
	The cycle was completed in less than 8 minutes (normally 14 minutes at 22 °C); no fluid level	Pour a full new bottle into the device and repeat the cycle

 (Flashing LED)	The cycle was completed in more than 18 minutes (normally 14 minutes at 22 °C); enough fluid was applied	Empty the rest of the fluid from the container, the device is ready for further use
 (Flashing LEDs)	The vehicle interior or fluid temperature is below 10 °C	Perform the cleaning at higher temperatures (ideally T= 22 °C)
 (Flashing LEDs)	The vehicle interior temperature is above 50 °C	Perform the cleaning at lower temperatures (ideally T= 22 °C)
	Internal device diagnostics error	Unplug and plug the device, contact the supplier if issue persists
	Component defect	Unplug and plug the device, contact the supplier if issue persists

Declaration:

The information and recommendations in this publication are to the best of our knowledge reliable. However nothing herein is to be construed as a warranty or representation. Users should make their own tests to determine the applicability of such information or the suitability of any products for their own particular purposes. Statements concerning the use of the products described herein are not to be construed as recommending the infringement of any patent and no liability for infringement arising out of any such use is to be assumed.

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