

Microphone disinfection in a 19" rack format



safe . simple . fast



Professional disinfection through controlled exposure to ultraviolet light (UV-C)

.simple

Li.LAC resembles a futuristic sandwich grill in a robust, road-ready 19" 3U rackmount format.

Simply place the microphones on the stainless-steel grille, close the irradiation chamber and press start.

The steel grille can accommodate up to three handheld mics or handheld transmitters. It is also possible to disinfect other items like headsets, lavalier microphones etc.

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A disinfection cycle takes only 5 to 10 minutes. Additional 2 minutes pre-heat time might apply for cold UV-C lamps.

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Proof of effectiveness and clinical validation

A disinfection level of 99.99%* for surface disinfection inside Li.LAC has been approved by the independent, accredited laboratory Opsytec Dr. Gröbel GmbH.

The departments **Biomedical Engineering** and **Medical Microbiology & Infection Prevention** of the **University Medical Center Groningen (UMCG)** have conducted comprehensive scientific studies to evaluate the effectiveness of Li.LAC. Viruses were sprayed onto microphones, similar to singing into the mic. The results show a reduction of 99.3% of the viral load on strongly contaminated microphones (including the metal grille and foam underneath) after 10 minutes irradiation inside Li.LAC.

* The exact disinfection level varies with the type of virus or bacteria and with the shape and the surface of the object to be disinfected.

** Industry standard vocal microphones were used for this study.

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Microphone and material compatibility

Any kind of intense cleaning procedure (soap & water, alcohol or UVC light) has a long-term effect on the materials used in or on microphones. Different kinds of plastics and the outer appearance (color/ gloss) especially, can be altered or degraded by "too much cleaning". We have run numerous tests with various microphones inside Li.LAC to evaluate the long-time impact of UV-C light. ...



... The results show that the aging effect implied by UV-C disinfection inside Li.LAC is negligible compared to the normal aging that happens to the microphones (by mechanical impacts, dirt, humidity etc.).

During the long-term irradiation tests in Li.LAC, we recorded changes in the appearance and frequency response of the microphones after 500, 1000 and 1500 disinfection cycles. 1500 cycles correspond to several years in the real life of a microphone.

Shown below are some of the test results (further results can be found at www.lilac.works/testresults/):



Technical specifications:

Operating conditions	room temperature (0°C bis 45°C)
Power supply	110V-240V~ or 220V-240V~, +/-10% 50-60Hz, 40W
UV-C lamps	2x 16W, 254nm wavelength
UV-C irradiance @ microphone head	>800µW/cm ²
UV-C irradiance @ microphone shaft	>350µW/cm ²
Dimensions (WxHxD)	482mm x 132mm x 385mm (428mm incl. handles), 19" 3U
Weight:	11.5kg



Li.LAC is designed and manufactured in Germany.

