A complete line of UV-A LED curing lamps specially designed with high performance UV LED technologies for the automotive industry.

An environmentally-friendly process with low energy consumption.
SPECTRATEK InstaCure UVLED • Handheld model

Cordless & Battery Powered
Only emits UV-A
Safety Use
No Harmful UVB & UVC
No Risk of Burns

Uniform & Constant Irradiance
Managed by State-of-the-Art MCPCB
No Warm-Up Time Before Using
No Cooling Time Required During Curing Jobs
Irradiance Up to 250mW/cm²

SPECTRATEK UVLED • Mobile models

Almost Instant Full Cure with No Heat
Only emits UV-A
Environmentally Friendly
No Harmful UVB & UVC

Ready to Sand, Buff and Deliver in Less Than 3 Minutes
Efficient and Unique Passive Thermal Management
System Specially Designed for High Power UVLED
Irradiance Up to 16mW/cm²
AMH Canada Ltd presents a complete line of UV-A curing lamps designed and developed with the most advanced LED technology.

Working from its state-of-the-art research and testing facilities in Canada, a top team of designers, technicians and LED experts created - in cooperation with the coating industries - the SPECTRATEK UVLED lamps destined to revolutionize UV-A curing in the car body repair industry.

Faster, safer, and more efficient than any other conventional UV curing system for automotive repair and industrial finishes.

The primary advantage of curing finishes with ultraviolet lies with the speed in which the final product can be readied for delivery.

In addition to speeding up production, UV curing can also reduce flaws and errors. The amount of time that dust, insects, or any airborne object has to settle on the painted surface is greatly reduced. This will improve the finish quality.

The SPECTRATEK UVLED curing lamps are environmentally-friendly with a low energy consumption.

**What is UV?**

Ultraviolet (UV) light is an electromagnetic radiation with a wavelength from 100nm to 400nm, shorter than visible light but longer than X-rays. Though usually invisible, under some conditions children and young adults can see ultraviolet down to wavelengths of about 310nm.

UV radiation is present in sunlight, and produced by electric arcs and specialized light such as mercury-vapor lamps, tanning lamps, and black lights. Although lacking the energy to ionize atoms, long-wavelength ultraviolet radiation can cause chemical reactions, and cause many substances to glow or fluoresce. Consequently, biological effects of UV are greater than simple heating effects, and many practical applications of UV radiation derive from its interactions with organic molecules.

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**InstaCure UVLED**

Cordless & Handheld High Performance UV-A LED curing lamp

A UV LED curing lamp powered by a rechargeable battery.

Designed and built in Canada for worldwide use on all current ultraviolet light curable fillers, base coats (primers), top coats, and clear coats.

Available in 2 different models: Equipped with standard 395nm UV LED units or special UV LED units combining 365 & 395nm.

**Cordless & Autonomy**

- No electric plug needed.
- Easy and complete access to all parts and sections of the vehicle.

**Flexible**

- Perfect for quick & fast repair.
- Scanning process can be used for larger surfaces.

**Long Life Usage**

- More than 35,000 hours of hard work

**Curing distance 50-75mm (2-3')**

- Curing surface: 100mm x 100mm (4’’ x 4’’)
- Curing time: 8 - 60 seconds
- Average irradiance: 112.8mW/cm²
- Peak irradiance: 200mW/cm²

**Curing distance 200mm (8’’)**

- Curing surface: 250mm x 250mm (10’’ x 10’’)
- Curing time: 60 - 120 seconds
- Average irradiance: 21.7mW/cm²
- Peak irradiance: 40mW/cm²

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**Control system**

- Digital counter, battery level symbol and control mode displayed on screen.

**Battery powered**

- Complete recharge in less than 1-1/2 hours.

**State-of-the-art electronics**

- Electronics kept in a well-sealed section.
- Constant and uniform irradiance during the complete battery autonomy.

**Safety**

- No risk of burns.
- No cooling time required.

**Ergonomic handle & trigger**

- Light weight & safe handling.

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**Storage case:**

The SPECTRATEK InstaCure UVLED is provided with a storage case made of durable material. Battery charger, AC cable, and UV safety goggles also included.
Mobile High Performance UV-A LED curing lamps

Manufactured with an efficient and unique passive thermal management system specially designed for high power UV LEDs. No fan or liquid cooled system.

Complete access all around the vehicle (including top of the vehicle).

All the models are equipped with a distance sensor and a digital control board. The distance sensor allows the operator to adjust the lamp unit at the proper 300mm from the curing surface.

The digital control board allows the selection and display of the curing parameters through a multi language interface.

**High quality**

- Evenly cured surface up to 170μm for customer satisfaction.
- No degradation of UV over lifetime.
- Higher accuracy due to incorporation of lenses and distance control.
- Large, uniform curing area up to 600mm x 600mm.
- High intensity curing up to 16mW/cm².

**Lower cost**

- Substantial cost saving over lifetime = better margins up to 70% lower energy use.
- Very long lifetime = no replacement cost.
- No warm-up & cooldown time.
- Passive cooling without parts and vents subject to wear.

**Safety**

- Pure UV-A, no filter required.
- Reduced heat production, no risk of burns.
- No hazardous chemicals in work environment.
- No disposal of used lamps containing Mercury.

**User friendly**

- Improved working conditions = employee satisfaction.
- Compact design, easy to store and set-up.
- Safe in use - Unit does not get hot.

**Long Life Usage**

- More than 35,000 hours of hard works

**UV curing process**

UV curing is the process by which ultraviolet light is used to initiate a photochemical reaction that generates a crosslinked network of polymers. UV curing is adaptable to printing, coating, decorating, stereolithography, and in the assembly of a variety of products and materials.

In comparison to other technologies, curing with UV energy may be considered a low temperature process, a high speed process, and is a solventless process, as cure occurs via direct polymerization rather than by evaporation.
### Handheld model Specifications

<table>
<thead>
<tr>
<th>Spec</th>
<th>SPECTRATEK InstaCure UVLED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rechargable battery type:</td>
<td>Li-ion 18.5 VOLT - 3,000mAh</td>
</tr>
<tr>
<td>Battery charge cycles life:</td>
<td>1,000 cycles</td>
</tr>
<tr>
<td>Battery autonomy:</td>
<td>2 hours</td>
</tr>
<tr>
<td>Battery charger:</td>
<td>110-240VAC, 50-60Hz, Short circuit/Overload protection</td>
</tr>
<tr>
<td>LED type:</td>
<td>High power LED</td>
</tr>
<tr>
<td>LED lamp wattage:</td>
<td>55 watts</td>
</tr>
<tr>
<td>Wavelength:</td>
<td>395nm (UV-A only)</td>
</tr>
<tr>
<td>Weight:</td>
<td>1.85 kg (4 lbs)</td>
</tr>
</tbody>
</table>

**Curing zone dimensions:**
- @ 50mm (2") curing distance: 100mm x 100mm (4" x 4")
- @ 200mm (8") curing distance: 250mm x 250mm (10" x 10")

**Emitting zone dimensions:**
- 80mm x 80mm (3-1/5" x 3-1/5")

**Curing time:**
- 8 ~ 60 seconds

**Average Irradiance:**
- 112.8 mW/cm²

**Peak Irradiance:**
- 250.0 mW/cm²

**Body lamp material:** Aluminium

**Cooling system:** Passive thermal management system enhanced with fan

**LED lifetime:** +35,000 hours

**Storage temperature (°C):** -40°C ~ +80°C

*The curing time may vary according to the paint product type, the curing process and/or other factors*

### Mobile models Specifications

<table>
<thead>
<tr>
<th>Spec</th>
<th>UVTEK 2000</th>
<th>UVTEK 3000</th>
<th>UVTEK 4000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage (V):</td>
<td>110VAC, 1PH</td>
<td>230VAC, 1PH</td>
<td>230VAC, 1PH</td>
</tr>
<tr>
<td>Frequency (Hz):</td>
<td>50-60Hz</td>
<td>50-60Hz</td>
<td>50-60Hz</td>
</tr>
<tr>
<td>Fuse (A):</td>
<td>3.5A</td>
<td>1.5A</td>
<td>3.5A</td>
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<tr>
<td>Input apparent power (VA):</td>
<td>385VA</td>
<td>350VA</td>
<td>350VA</td>
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<tr>
<td>Electrical power (W):</td>
<td>250W</td>
<td>500W</td>
<td>340W</td>
</tr>
<tr>
<td>Optical power (W):</td>
<td>80W</td>
<td>160W</td>
<td>340W</td>
</tr>
<tr>
<td>Total LED power (W):</td>
<td>170W</td>
<td>85W</td>
<td></td>
</tr>
</tbody>
</table>

**Curing zone dimensions (mm):**
- 24" x 24" (600mm x 600mm)

**Emitting zone dimensions (mm):**
- 16" x 16" (400mm x 400mm)

**Maximum curing distance (mm):** 12" (300mm)

**Curing time (sec.):** < 300 seconds

**Average irradiance (mW/cm²):** 13.0mW/cm²

**Peak irradiance (mW/cm²):** 16.0mW/cm²

**Cooling system:** Passive thermal management system

**LED lifetime (hr):** +35,000 hours

**Storage temperature (°C):** -40°C ~ +80°C

**Control system:** Digital control (LCD screen + tactile membrane keypad)