TESLA CURE

RAPID REPAIR SOLUTIONS

Operations Manual

TESLACURE CORDLESS ZERO

CE

Section

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Field of application

For professional use only
Not for use by general public

The TESLACURE CORDLESS ZERO curing device is for use in professional vehicle accident repair workshops. It is suited to all types of small to medium sized (UV cured) paint repair work. UV safety guidelines must always be adhered to when using UV curing equipment. Please read safety and hazards section before using.

The ZERO curing device is primarily intended for curing of UV cured primers, UV cured body fillers and UV cured clearcoats.

For curing large areas of UV cured coatings, we recommend visiting https://teslacure.com/ website where you can view the latest range of large area curing equipment from Teslacure.

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Product description

The TESLACURE CORDLESS ZERO curing device is a highly efficient cordless, handheld, rechargeable, cold cure, paint curing device for use in professional vehicle accident repair workshops. It is suited to all types of small to medium sized (UV cured) paint repair work. Teslacure UV curing technology allows accident repair workshop owners to achieve the world's fastest vehicle repair times.

The ZERO uses cold cure technology. No heat is produced on the panel or the paint: This means that the paint technician will have no issues when curing plastic parts or any other heat sensitive materials.

The ZERO curing device is a high-tech piece of curing equipment and should be treated as such. Teslacure use the highest quality materials during manufacturing & assembly.

The TESLACURE CORDLESS ZERO curing device has an inbuilt digital timer with a large rear countdown digital display, it also has a safety auto/off function. It comes packaged with 2 x 3ah Makita batteries, a Makita battery charger, 1 filter cleaning brush, UV safety glasses and operations manual.

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Technical Data

SPECIFICATIONS

MANUFACTURER	TESLACURE
BODY TYPE	ALLUMINIUM OUTER WITH COMPOSITE INNER
BODY FINISH	ANODISED BLUE PEARL WITH BLACK MOULDINGS & LASER MARKINGS
GLASS LENS TYPE	UVA LIGHT TRANSMITANCE 4MM
COOLING	HEATSINK WITH INTERNAL FAN COOLING
SAFETY POWER OFF FUNCTION	AUTO SAFETY TURN OFF AFTER 1 MINUTE
BATTERY CHARGER TYPE	MAKITA 18V
BATTERY CHARGER VOLTAGE	INPUT 100-240 VOLT AC,50/60Hz / OUTPUT 18V VOLT DC
BATTERY OPTIONS – MAKITA CLICK ON/OFF RECHARGABLE	MAKITA I8v - BL1820B, BL1830B, BL1840B, BL1850B, BL1860B
BATTERY CHARGE CYCLES LIFE	700-1000 CYCLES
BATTERY CHARGE PERFORMANCE DISPLAYS	ON MAKITA BATTERY CHARGER (SEE CHARGER USER MANUAL)
BATTERY CHARGE TIME	1 TO 2 HOURS FROM FLAT DEPENDING ON Ah RATING
COUNTDOWN TIMER	DIGITAL DISPLAY ON REAR OF UNIT (MINUTE & SECONDS) WITH BEEP
LED LAMP WATTAGE	165 WATTS
LED WAVELENGTH	UVA SPECTRUM 395nm (Optional 365/395nm)
LED LENS TYPE	QUARTZ CRYSTAL
SAFETY GLASSES	UVA APPROVED - YELLOW TINT
LED LAMP WEIGHT	1.2Kg
BATTERY CHARGER WEIGHT	0.8Kg
BATTERY WEIGHT	0.35Kg TO 0.61Kg DEPENDING ON BATTERY Ah CHOICE
TOTAL SHIPPING WEIGHT FOR FULL KIT	3.7Kg
WARRANTY	2 YEARS ON UV LAMP ONLY (BATTERIES EXCLUDED)

Irradiance Data

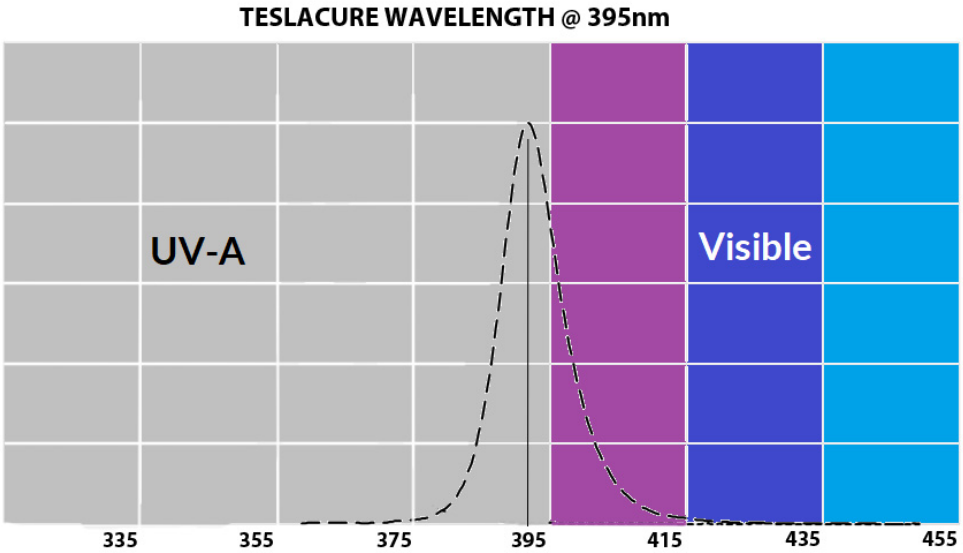
Distance @ 100mm

Area ∅ @ 170mm

Average @ 273mW/cm²

Peak @ 375mW/cm²

The ZERO UV LED lamp uses premium high output quartz crystal LED UV chips with a peak wavelength of 395nm in the safe UV-A light spectrum.



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Site Requirements

The area in which the TESLACURE CORDLESS ZERO curing device is used should be ventilated to such an extent that the solvent concentration never rises above 50% of the lower explosion limit.

Do not point the ZERO at any person and do not look into the light source. Always wear protective gloves and UV approved safety glasses when using the ZERO.

Avoid exposing the TESLACURE CORDLESS ZERO curing device to paint mist fog overspray or sanding dust, solvents, rain or water.

Do not leave solvent soaked rags on or near the equipment.

Do not allow the ZERO to be left in a spraybooth during bake cycle.

Avoid using the ZERO in temperatures above 35c.

Do not charge batteries in an explosive environment or a highly flammable area.

Do not put the lamp face down on the ground when the UV light is on as this may damage the LED.

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Safety & Hazards

Electrical equipment
The equipment when charging operates with dangerous electrical voltage.

If operations on electrical equipment have to be carried out:
• Remove the battery & enlist the help of a professional Teslacure technician or electrician. **Contact service@teslacure.com for service or warranty.**

Fire and explosion
The area in which the TESLACURE CORDLESS ZERO curing device is used should be ventilated to such an extent that the solvent concentration never rises above 50% of the lower explosion limit.

Do not put the lamp face down on the ground when the UV light is on as this may damage the LED.

Avoid exposing the TESLACURE CORDLESS ZERO curing device to paint mist fog overspray, sanding dust, solvents or rain & water.

Do not leave solvent soaked rags on or near the equipment.

Do not allow the ZERO UV lamp to be left in a spraybooth during bake cycle.

Avoid using the ZERO lamp in temperatures above 35c.

Never use non genuine batteries to power this lamp as you may cause damage to the lamp's electronics. USE GENUINE MAKITA BATTERIES.

Caution!
Eye protection & UV Exposure
Do not point the ZERO lamp at any person and do not look into the light source. Always wear protective gloves and UV approved safety glasses when using the ZERO lamp.

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Operating instructions

After fully charging your battery please follow the instructions below and make sure you are wearing UV safety glasses and protective gloves:

STEP 1: Press the blue POWER ON/OFF button one time.

Pressing the blue (POWER ON/OFF button) once will turn on the rear display screen, the display screen timer will show 00 seconds.

While the 00 seconds are showing you must now press the green button as shown below. *Note: If no other buttons are pressed the digital timer will auto turn off after 1 minute.*

STEP 2: Press the green LIGHT ON/OFF button one time to start curing.

Pressing the green (LIGHT ON/OFF button) one time will set the UV lamp rear display screen to 60 seconds and immediately turn on the UV light and start the countdown timer.

You can now start curing with the standard pre-set time of 60 seconds. When the curing set time of 60 seconds has completed, the lamp curing light will turn off automatically, but the display screen will stay on for 1 minute then turn off if not used.

NOTE 1: If you wish to cure a larger area or continue curing for more than 1 minute then you can simply press the (LIGHT ON/OFF button) again to start another one-minute cure.

NOTE 2: If you have finished all your curing, you should press the blue (POWER ON/OFF button) to turn off the rear display screen therefore saving battery power when not in use.

Curing correctly:

Note: Never leave the UV light on face down on the ground as this may damage the LED.

Using the lamp is easy, use the exact same motion from top left to top right side of the panel moving down the panel with overlapping passes with the lamp at around 4-5 inches from the panel.

Exactly the same motion and distance as using a spray gun is perfect for curing, keep using this motion until the cure time has been reached. See below for cure time examples.

Note: You can press the battery level indicator button while the lamp is turned off to check your battery level.

Example curing times for UV primers.

30 Seconds **60 Seconds** **2 minutes**

Distance from lamp to paint surface should be 4 -5 inches.

Keep moving the ZERO over the UV primer area from left to right to left again using overlaps, exactly the same motion as using a spray gun. Keep using this motion, move up and down the primer area until your set cure time has completed.

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Common causes of under cure or adhesion issues when using UV primers.

- **The UV primer has not been mixed enough or the Aerosol spray can have not been shaken enough. UV primers do settle easily so mixing or shaking before use is extremely important.**

- **Too many coats of UV primer have been applied, you must stay within the manufacturer's recommendation with regard to number of coats to apply, this is normally 2 coats.**

- **You must stay with the manufacturers recommended flash off times especially in colder weather conditions.**

- **UV primers require that the surface to be primed need a P240 or P320 grit sand, if you try to prime over a sanded surface that has been sanded with finer grit abrasive then you will likely have a possible adhesion issue.**

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Control and maintenance

Weekly

Check that the UV lamp side filters and rear filters are clean, these must always be kept clear of dust & overspray. Use the supplied brush to loosen any dust from the side and rear filters, blow off using low pressure with your airline. Make sure you wear your safety glasses when blowing. **See image below:**

Monthly

Check that the battery charger power cable is not damaged or worn.

A damaged wire can result in danger to life! Do not use the charger if cables are worn or damaged.

Check the front of the UV lamp glass for damage, dirt & overspray.

If the front glass is dirty cure times will be affected. The glass can be cleaned even if overspray is on it, but you must clean the glass with overspray removal clay such as manufactured by 3M.

Only in extreme cases you may use solvent to remove overspray. In this case dampen a cloth with solvent, do not pour solvent on the glass.

If in any doubt do not use the equipment and call a Teslacure service agent.

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Instruction to owner

The owner of the TESLACURE CORDLESS ZERO curing device is obliged, taking into account the operations manual and the conditions which it contains, to produce clear and concise directions for use by the operators. Moreover, the directions for use should be kept in an appropriate place to which the operator has easy access.

The operator must follow the directions for use.

New staff should follow the directions for use.

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Product Warranty

The Teslacure ZERO UV lamp is covered by a two-year warranty, warranty does not cover batteries as these are prone to normal wear and tear and classed as a consumable item. However, Teslacure purposely chose to power our lamps using Makita brand batteries as these are proven to be the best and most reliable battery power packs available. These power packs are also available everywhere throughout the world. If non genuine batteries are used warranty is void.

If warranty service is required, then please contact our service centre at: service@teslacure.com The user must send us the product serial number which is laser engraved on every product. The user must also send the product to our service centre paying the shipping cost and then Teslacure will repair and return the product to the customers address at the cost to Teslacure.

The customer will have no cost other than the one-way shipping cost if the product is still under warranty.

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Declaration of conformity CE (EU Safety Declaration)

TESLACURE

The Teslacure ZERO UV curing lamp is in accordance with the following applicable directives:
EMC 2014/30/EU Electromagnetic Compatibility (recast)

This product has been assesed against the following standards:
EN 55014-1: 2006 & A1: 2009 & A2: 2011
EN 55014-2: 1997 & A1: 2001 & A2: 2008
EN 61000-3-2: 2014
EN 61000-3-3: 2013

We TESLACURE confirm that the Teslacure ZERO UV curing lamp has passed all above-mentioned standards and meets the CE safety directives.

CE