

# Operations & maintenance manual for: TESLACURE HYBRID

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#### 1

# Field of application

For professional use only
Not for use by the general public
Read & follow all safety instructions before use (see section 8)

The TESLACURE HYBRID is a highly efficient rapid repair curing system, it can be used as a handheld curing device or as a trolley mounted mobile curing device. It is intended for use in professional vehicle repair workshops. It is suited to all types of UV repairs: Small medium and large.

The TESLACURE HYBRID is primarily intended for curing of UV body fillers, UV putties, UV primers and UV clearcoats.

All curing must be done in a well-ventilated area as approved by your workplace safety officer.

#### 2.

# **Efficiency Benefits**

#### **TESLA CURE:**

Recognized around the world as the innovator and leader in LED UVA curing technology, we offer the largest range of UV curing equipment for the automotive industry combined with the most efficient equipment in terms of high speed and low energy consumption. This allows our customers to make high profits from vehicle repairs.

## 3.

# **TESLA CURE Global Approvals**

TESLA CURE Products are recommended tested and approved by many professional corporations such as: AkzoNobel, BASF, PPG, BMW and Mercedes Benz.











# **Product description**

The TeslaCure Hybrid offers the user the best of both curing options, it can be used as a high power handheld curing device for (hard to reach areas) or as a mobile curing device on a portable trolley, when used in mobile mode then the user simply presses the start button and walks away while auto curing is carried out.

The TESLACURE HYBRID offers super high speed curing for UV body fillers, UV putties, UV primers and UV Clearcoats, cure times range from 20 seconds to 90 seconds depending on product used and size of cure area. The lamp produces safe high power UVA LED light.

The TESLACURE HYBRID is lightweight and can be easily moved around the workshop using only one hand, it will fit in-between cars bays even in an extremely busy shop. The UV lamp can be easily removed from the mobile trolley for handheld use and used anywhere up to 9 meters away for easy curing around a vehicle or work area.

Features include a digital control panel with auto cure & auto off programs, the curing lamp can be fully controlled from the Hybrid digital display control panel or the handheld lamp itself.

The control panel can be used to set a curing time of anywhere between 1 and 9 minutes. **Note:** Normally only 1 minute is needed to cure UV cured products.

The TESLACURE HYBRID can be used with input AC single phase power from any country in Europe, USA, Japan and around the world as it will automatically adjust to input voltages.

# **Technical Data & Shipping Weights**

Rated input voltage: 100-240V approved in USA & Europe

Rated frequency: 50 - 60 Hz

Rated current: 6.70 Amp

Rated power of LED: 300 watts

Phase: Single Phase

Output Voltage to lamp: 36Vdc

Wavelength: 395nm UVA LED

Lamp device dimensions in mm: Length: 300mm, Width: 110mm, Depth: 70mm

Control panel dimensions in mm: Length: 500mm, Width: 145mm, Depth: 90mm

**Control panel materials:** Anodised brushed blue aluminium

**Lamp device materials:** Anodised brushed blue aluminium front, brushed black anodised aluminium sides.

Noise pressure level: < 24 dB (A)

Carton shipping weight including lamp, trolley & control panel: 21.0kg

Carton dimensions: Length: 710mm, Width: 310mm, Depth: 360mm

# **Unpacking the box**

The equipment is packed with the lamp and mobile trolley, the lamp is fully assembled and ready for use, the mobile trolley must be assembled, please see separate assembly manual to assemble the trolley.

Please read the safety & hazards (section 8) before using.









#### Note:

The lamp LED UV light can be operated from the control panel by pressing the green start button (1) or from the UV lamp body by pressing the round chrome button (2) seen in images above.

The inbuilt electronics will always remember the last set cure time, default set cure time is 1 minute, this can be changed from the control panel if required.

# **Site Requirements**

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

Within a radius of 5 m (16 ft) around the handheld curing device, it is forbidden to use or to store solvent containing materials.

Avoid exposing the TESLACURE HYBRID to paint mist fog overspray or sanding dust and solvents.

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

Never leave the lamp face down on the ground or other surface when the LED light is on.

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# **Safety & Hazards**

#### **Electrical equipment**

The equipment operates with dangerous electrical voltage.

#### If operations on electrical equipment have to be carried out:

- Remove the power cable from the wall socket.
- Enlist the help of a professional electrician or contact service@teslacure.com

  Only professional electricians may work with the electrical equipment.

#### Fire and explosion

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

Within a radius of 5 m (16 ft) around the handheld lamp, it is forbidden to use or store solvent-containing materials including solvent soaked rags.

Avoid exposing the TESLACURE HYBRID to paint fog or overspray, sanding dust and solvents.

Do not direct the lamp towards combustible material.

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

Do not allow the equipment to be left in a spray booth during bake cycle.

Avoid using the equipment in temperatures above 35c.

#### Caution!

#### **Eye Protection & UV Skin Exposure**

Always use UV approved safety glasses when using the lamp. Do not point the UV lamp at any person and do not look directly into the UV light source.

Always wear protective gloves when using the equipment.

Never leave the lamp face down on the ground or other surface when the LED light is on.

Internet: www.teslacure.com
Email: hugh@teslacure.com
Service: service@teslacure.com

**CAUTION** 

# **Operating instructions**

#### **Quick Guide**

- 1. Connect the TESLACURE HYBRID power cable plug into the appropriate wall socket.
- 2. If the digital display is not already on. Press the blue on button, the default (1 minute) set cure time will appear on the digital display. To change the last set cure time, see below. (How to set the cure time)
- 3. To start curing press the green start button on the control panel or press the chrome start button on the lamp body, the LED lamp and cooling fan will turn on and you can start curing. When the digital timer reaches zero you will hear 5 beeps and the LED lamp and cooling fan will automatically turn off. **Note:** You can leave the lamp in this standby state during the day.
- 4. When finished curing for the day and before leaving work, press the red off button.

Note: Cure time is normally anywhere from 20 seconds for a small area to maximum 2 minutes for a large area. Lamp distance to panel should be around 100mm in handheld mode or 300-400mm in mobile (on trolley) mode..

Do not try to overcure UV coatings as you will only be wasting unnecessary energy. The lamp is capable of curing more than 2 minutes but this function is rarely required.

#### How to set the cure time

- 1. Make sure the unit is plugged into the appropriate wall socket.
- 2. Press the blue on button, the last set time will appear on the digital display.
- 3. To change the last set cure time, press the orange set time button, each press will increase cure time by 1 minute.
- 4. To start curing again press the green start button.

  The lamp will always remember the last set cure time.

## **Control and maintenance**

#### Weekly

Check each week that the lamp electrical cables and connections are in good condition.

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

Check that the LED front glass cover is not dirty or has over spray on it. In the case of over spray on the glass, the glass can be cleaned with a clean cloth dampened with solvent but you must make sure the unit is un-plugged from the power source before cleaning the glass.

To clean the glass without using solvent, please use over spray clay such as 3M brand.

Always check that the cooling fan is working, if not working stop using the lamp and contact service@teslacure.com

Never leave the lamp face down on the ground or other surface when the LED light is on.

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

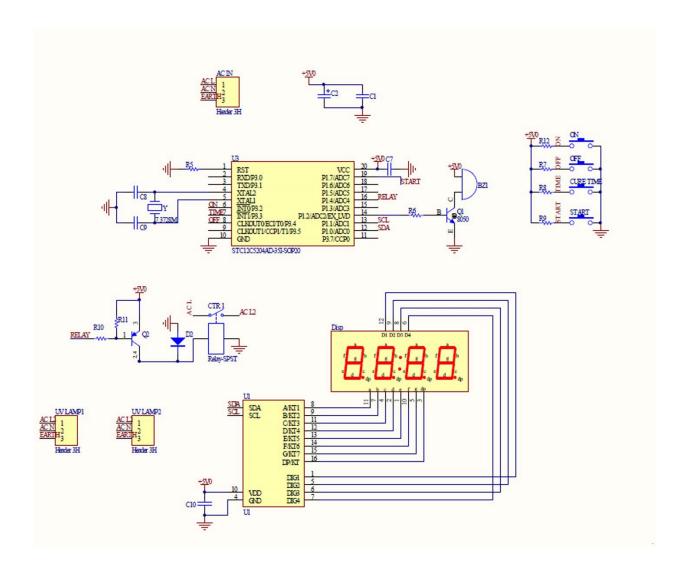
If operations on electrical equipment have to be carried out:

- Remove the power cable from the wall socket.
- Enlist the help of a professional electrician or a Teslacure technician.

Only a professional electrician or Teslacure technician may carry out repair work with this equipment.

Contact: service@teslacure.com for help

# 11. Electric schematic diagram



### Instruction to owner

The owner of the TESLACURE HYBRID 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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# **Declaration of conformity (EU Declaration)**

We TESLA CURE (Thailand) CO.,LTD.

Kham Thale So,

Nakhon Ratchasima,

THAILAND 30280

#### **Declare that the product:**

TESLACURE HYBRIDcuring device to which this declaration relates is in conformity with the following standards & directives.

**Declaration of Conformity Number: S/N 3.A6.023** 

Complies with the relevant provisions of:

• 2014/35//EU – Low Voltage Directive

#### Complies with the following relevant provisions and standards

- ② EN 60204-1: 2006 +A1:2009 Safety of Machinery Electrical Equipment of Machines and all relevant clauses
- 2 ISO 12100: 2010 Safety of Machinery General Principles for Design Risk Assessment and Risk Reduction.

(Continued Over)

For the intended purpose: Provide UV Lighting to aid in the curing process.

We declare the technical file for this machine was compiled meeting the provisions of the listed directive(s) above and undertake to forward these to market monitoring authorities by request. This declaration is invalidated by any modification outside the scope of those identified by the manufacturer.

Authorised Representative and Manufactures representative for the approval of the relevant technical documentation and issuer of EC Declaration of

**Conformity:** 

Signed: Date: 23-02-2021

**CE Marking Affixed: February 2021** 

Place of issue: Republic of Ireland

