

User Manual

DecoRad® UV FloorCure 2030



DecoRad® Systems bv
Fokkerstraat 25
3905 KV Veenendaal
The Netherlands

T: +31(0)318-550425
E: info@decorad.com
www.decorad.com

Preface

The DecoRad® UV FloorCure 2030 is the ultimate tool for instantly curing UV water based (floor)coatings.

UV has been used successfully for many years already for instantly curing inks, car paints, glues and coatings. The DecoRad® UV FloorCure 2030 is the result of the many years' experience of DecoRad® Systems with on-site use of UV in combination with coatings, varnishes and oils.

DecoRad® Systems has succeeded in providing the latest equipment and best technology.

Characteristics of the DecoRad® UV FloorCure 2030:

- Output 2000 Watt
- 30 cm cure path
- CE marking
- ISO 9001
- Single phase electronics
- Compact and user-friendly
- 1 medium-pressure mercury lamp, ozone free.

This user manual provides the user with information about the safe usage and maintenance of the DecoRad® UV FloorCure 2030.



Carefully read through this user manual before using the UV FloorCure 2030.

The DecoRad® UV FloorCure 2030 can only be operated by sufficiently qualified personnel.

Keep this user manual with the DecoRad® UV FloorCure 2030.

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Carefully read through this user manual before using the DecoRad® UV FloorCure 2030.

The DecoRad® UV FloorCure 2030 can only be operated by sufficiently qualified personnel.

1.1 Manufacturer

The DecoRad® UV FloorCure 2030 is manufactured by:

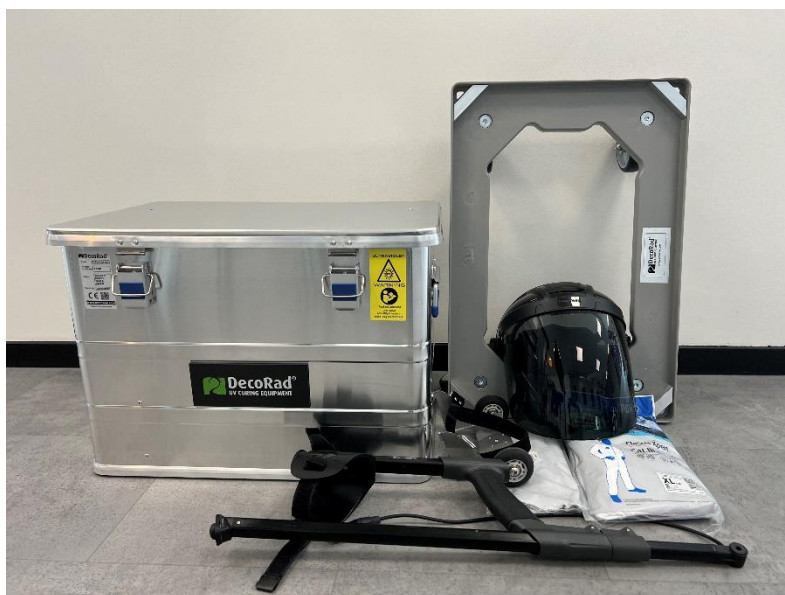
DecoRad® Systems bv
Fokkerstraat 25
3905 KV Veenendaal
The Netherlands

Phone: +31(0)318-550425
E-mail: info@decorad.com
www.decorad.com

For any questions regarding sales orders, deliveries, parts or shipments, please contact DecoRad® Systems bv.

1.2 CE-marking

The DecoRad® UV FloorCure 2030 comes with a CE marking. This means that the UV FloorCure 2030 meets the fundamental safety demands of the European Community.



1.3 Guarantee

The manufacturer of the DecoRad® UV FloorCure 2030 provides a 12-month warranty (carry-in) for parts and repair costs*. This warranty is only valid if the DecoRad® UV FloorCure 2030 is used according to the specifications and the user- and maintenance-instructions are observed. Factory repairs are under Carry-in conditions.

The DecoRad® UV FloorCure 2030 warranty* lapses in case of:

- Inexpert use
- Insufficient or inexpert maintenance
- Alterations without prior written permission of the manufacturer

The normal replacement-parts (bulbs) do not fall under the factory warranty.

* At the discretion of DecoRad® Systems bv

1.4 Copyright

Copyright © DecoRad® Systems bv.

All rights reserved. Nothing from this publication can be multiplied, stored in an automated file and/or made public in any form, either electronically, mechanically, by photocopies, recordings, or any other way without prior written consent of the manufacturer.

1.5 Liability

The manufacturer of the DecoRad® UV FloorCure 2030 is not liable for unsafe situations, accidents or damage as a consequence of:

- Ignoring warnings or instructions as stated on the DecoRad® UV FloorCure 2030 or as described in this user manual (including not correctly applying personal protection measures).
- The use of the DecoRad® UV FloorCure 2030 for any other application or in any other circumstances than indicated in this user manual.
- Making any kind of alterations to the DecoRad® UV FloorCure 2030. This also pertains to applying other replacement parts.
- Intensity of the usage is decisive for the degree of maintenance.

The manufacturer is not liable for consequential loss in case of malfunctions of the DecoRad® UV FloorCure 2030, such as damage to products, business interruption, production loss, etc.

2. Safety

This chapter describes the safety measures pertaining to the DecoRad® UV FloorCure 2030. Carefully read this chapter before putting the DecoRad® UV FloorCure 2030 into operation or performing maintenance work.

2.1 Safety symbols in this user manual

The following symbols are used in this user manual:



A comment draws the user's attention to possible problems.

Danger of damage to the DecoRad® UV FloorCure 2030 if the instructions are not carefully executed.

2.2 Symbols on the DecoRad® UV FloorCure 2030

The following symbols can be found on the DecoRad® UV FloorCure 2030:

	Always wear the UV protective DecoRad® face shield
	Always wear the UV protective DecoRad® suit
	Always wear the UV protective DecoRad® gloves
	Caution ! Hot Surface !
	Caution ! UV light ! Never look directly into the UV light without wearing eye- and face protection.
	The user/maintenance mechanic should be acquainted with the entire contents of this user manual, before using the DecoRad® UV FloorCure 2030

2.3 Usage

The DecoRad® UV FloorCure 2030 can only be operated by qualified personnel.



The safety instructions described in this manual should be observed. If you deviate from these instructions, this can lead to serious personal or material damage.

2.4 Maintenance

The DecoRad® UV FloorCure 2030 can only be serviced by qualified personnel.



The maintenance mechanic should be acquainted with the entire contents of this user manual.

Intensity of the usage is decisive for the degree of maintenance.

Examples of this are:

- The support-wheels (which should be undamaged and clean)
- The lamp & reflector (dirt, dust and age causes a decrease in UV energy output, clean with IPA alcohol and paper tissue)

2.5 Safety regulations

The DecoRad® UV FloorCure 2030 meets the fundamental safety and health demands of the relevant guidelines of the European Community.



Stay alert for dangerous situations!

2.6 UV radiation

Ultraviolet radiation (or UV) is a proven process to disinfect water, air and solid surfaces which have been contaminated with micro-organisms. In addition to this, UV radiation is well-known for its application as a catalyst in drying processes. The effects of UV as a disinfectant have been extensively documented in scientific research.

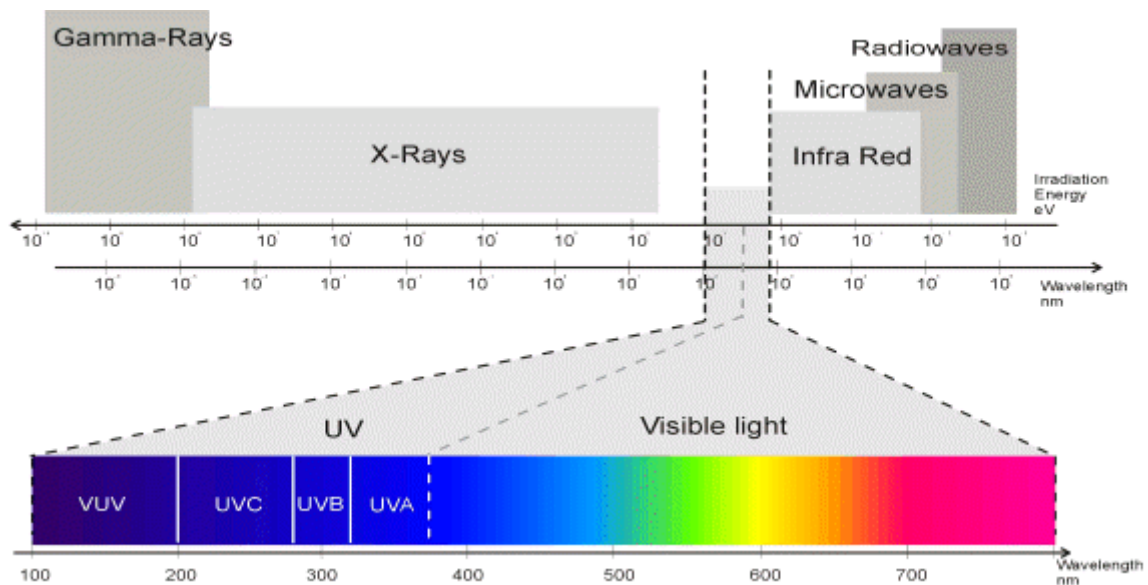
UV radiation is a mixture of radiation of various wavelengths. In a rainbow, the visible part of the UV radiation is ordered according to the length of the waves. Progressing from purple to red, the waves become increasingly longer. The ultraviolet or UV has a wavelength shorter than that of purple. This part of the UV radiation is not visible as well.

Most of the UV radiation we get comes through sunlight. Not all UV radiation reaches the earth: a part is blocked by the ozone layer.

2.7 Risks of UV radiation

Both UVA and UVB can damage cells and genetic material, thus leading to skin cancer. UVB poses the greater risk here. Even though scientists used to think that UVA was not harmful, newer research has proven that UVA contributes 10 to 20 percent to the cancer risk.

In order to protect itself against damage to genetic material, the skin tries to thicken itself (after UVB exposure). Pigment cells create the substance melanin, which gives the skin a brown colour. This means that when the skin tans, it has already been damaged. Because the ozone layer is becoming increasingly thinner due to environmental pollution, less UV radiation is absorbed, thus leading to an increase of skin cancer occurrences.



In addition, the skin can burn under influence of UVA and UVB radiation. Burning is accompanied by redness and in serious cases tremors, blisters, nausea and fever. In the long term the skin will lose its elasticity, suffer from accelerated aging and will remain sensitive for itching, pimples, etc.



Ultraviolet light can damage skin and eyes.

Wear the UV facial shield, protective clothes and gloves.

As a user, never look directly into a switched-on lamp.

Certain types of medication and cosmetics can increase sensitivity.

2.8 User



Carefully read through this user manual before operating the DecoRad® UV FloorCure 2030.



Before switching on the DecoRad® UV FloorCure 2030, ensure that the personal protection tools as described in the user manual are used. The UV facial shield and skin covering clothes (including gloves) are obligatory.



Dirt on the lamp and/or reflectors (e.g., from coatings or fingers) can shorten the life span of the lamp or reduce the UV effect. If needed, clean the cooled down lamp with isopropyl alcohol and paper towel.



Please make sure that bystanders without appropriate UV protection are at a safe distance of at least 10 meters.



The lamp emits large amounts of heat; keep out of reach of explosive or highly flammable mixtures.



In order to prevent damage to the DecoRad® UV FloorCure 2030 and the user, the user is strictly prohibited to work with tools on the DecoRad® UV FloorCure 2030 in any other way than indicated in this user manual for the purpose of maintenance.

3. Machine description

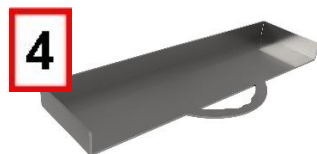
This chapter describes the parts and operational use of the DecoRad® UV FloorCure 2030.

3.1 Function

The DecoRad® UV FloorCure 2030 is the ultimate tool for instantly curing water-based UV (floor) coatings. Please consult our website, www.decorad.com for a recent overview of suitable products!

3.2 Overview of the DecoRad® UV FloorCure 2030

1. Box
2. Control / power unit
3. UV lamp-unit
4. Start / stop station
5. UV facial shield / gloves / Tyvek suit
6. Extension pole
7. Double support wheels
8. Trolley



3.3 Control elements



The following buttons can be found on the control panel:

1. On / off switch = power
2. On / off switch = UV lamp
3. Operation button = Dim or High* (HI) Power (on the lamp-unit)

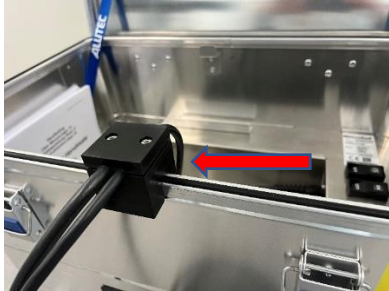
* UV High power can be ignited with the button on the UV FloorCure 2030 and / or on the extension pole.

3.4 Standard equipment

1. Box
2. Control / power unit
3. UV lamp-unit
4. Start / stop station
5. UV facial shield / gloves / Tyvek suit
6. Extension pole
7. Double support wheels
8. Trolley

Optional:
- spare UV bulb

4. Putting into operation



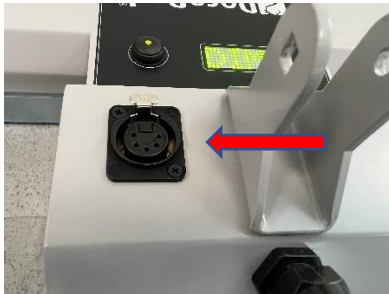
The UV FloorCure 2030 has a power cable of 225 centimetres.

Connect the power cable to a suitable power source.

Mains: 220 – 250 Vac / 50 – 60 Hz / 10/20A
When using the small handle push the button on the lamp unit to start curing in FULL power. (Display shows **HI**)



Place the black cable holder in position.



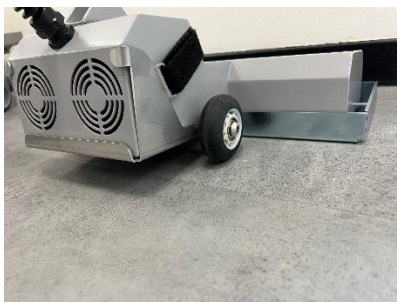
Adjust the extension pole to the desired height.

Connect the extension pole to the lamp unit.



Connect the data cable of the extension pole to the lamp unit.

This is a male/female connection.



Attach the double support wheels



Place the lamp unit on the Start / stop station



4.1 HOW TO START

1 Press the **ON** button.
The green indicator will burn. On the display of the lamp unit the text **DONE** will be shown.

2 Press the button with the “lamp symbol”
The green indicator will burn. On the display of the lamp unit the text **WAIT** will be shown. The UV lamp ignites.

When **DIM** is shown in the display, the UV FloorCure 2030 is ready to use.

Use the button on the lamp unit or the extension handle to start UV curing (**HI**).

ATTENTION

UV curing in Hi-power only with a distance to the object of 2 – 3 cm.

ATTENTION: When **DIST** is shown in the display and an acoustic signal can be heard, distance to the object is too large.
UV curing is no longer possible.

Move the lamp unit in a position approx. 3 centimetres from the surface. The beeping signal will stop. The text **DIM** will be shown on the display. From here you can start curing in **HI**.

After 1 minute **DIST** the text **U51** appears on the display. Turn off the lamp button. Display moves to **COOL** and after 8 minutes to **DONE**.

After leaving the UV FloorCure 2030 5 minutes in **DIM** on the start/stop station, **U94** appears on the display. Turn off the lamp button. Display moves to **COOL** and after 8 minutes to **DONE**.

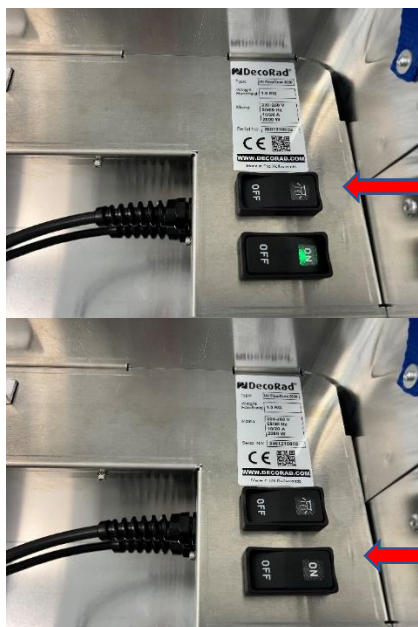


4.2 SPEED DISPLAY

The UV FloorCure 2030 is pushed along the substrate in a steady pace. The display shows the speed in meters/minute.

! The right speed for UV curing is between 4 and 10 meters/minute.

Speeds in excess of 10 meters per minute result in a X warning followed by an acoustic signal. Reduce speed gently to speeds between 5 and 10 meters/minute.



4.3 HOW TO STOP

! Place the lamp unit on the Start / stop station

From **DIM** switch off the UV lamp when ready. Press the **OFF** button with the “lamp symbol”.

The text **COOL** will be shown.

Leave the UV FloorCure 2030 attached to the power source until **DONE** is shown.

Press the **OFF** button

Please unplug the UV FloorCure 2030 entirely from any power source.

5. Error messages

EXPLANATION OF THE DISPLAY MESSAGES

Error	Description	Solution
E13	Lamp start fail	Turn both switches OFF. Start from <u>4 PUTTING INTO OPERATION</u> . In case of recurrence E13, please consult DecoRad® Systems
E14 (TEMP)	Over-temperature	The UV lamp is too hot, leave the UV lamp to cool down for min.5 minutes. Turn both switches OFF. Start from <u>4 PUTTING INTO OPERATION</u> . In case of recurrence, please consult DecoRad® Systems
E15 (FAN)	Fan fail	Leave the UV lamp to cool down for min.5 minutes. Turn both switches OFF. Start from <u>4 PUTTING INTO OPERATION</u> . In case of recurrence, please consult DecoRad® Systems
E17	Temperature sensor	Leave the UV lamp to cool down for min.5 minutes. Turn both switches OFF. Start from <u>4 PUTTING INTO OPERATION</u> . In case of recurrence, please consult DecoRad® Systems
U51 (DIST)	Distance	The lamp-unit is turned too far from the object for more than 30 seconds. Please position the UV FloorCure 2030 between 2 – 4 cm distance from the floor, cure at approx. 3 cm
U94 (TIME)	Time management	Automatically to OFF after 5 minutes no use

6. Replacing lamp

Replacing UV lamp:

Caution: never touch a heated UV lamp!!



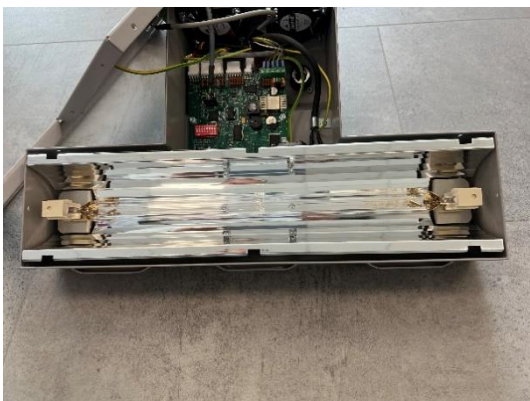
Step 1: Place the UV FloorCure 2030 on a flat surface with the lamp facing up.

Step 2: Disconnect from the power source.



Step 3: Remove the screws with an allen key and flip the bottom plate carefully to the side.
Do not remove any wiring.
Remove the old UV lamp by pulling the ceramic parts of the lamp.

Do not remove any wiring.
Remove the old UV lamp by pulling the ceramic parts of the lamp.



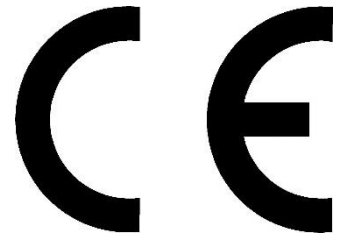
Step 4: Place new UV bulb by using a paper tissue. (Do not touch the glass with hands)

Carefully guide the wiring back with the bottom plate. Reassemble the screws carefully, do not over tighten.

7. Specifications

UV FloorCure 2030	
General	
Description	DecoRad® UV FloorCure 2030
Brand	DecoRad®
Colour	Silver / black
Distance to object	2 - 3 cm
Cure path	30 cm
Measurements and weights	
Weight hand unit (KGS)	Appx. 1,5
Measurements hand unit (cm)	40 x 26,5 x 16 (LxWxH)
Measurements power supply/switch unit/box (cm)	58 x 39 x 40 (LxWxH)
Weight box (KGS)	Appx. 15,5
Total weight (KGS)	Appx. 17
Power supply	
Power UV - ultraviolet (Watt)	2000
Power Voltage	220 - 250 Vac 50/60 HZ
	10 – 20 Amp circuit
Cable powering (cm)	225
Cable from switch to hand unit (cm)	800
Electronic ballast	2 kW
Lamps	
Type UV-lamp	UV-2000 W
Number of UV-lamp(s)	1
Burning hours UV-lamp(s)	Appx. 500
Start-up time UV-lamp(s)	Appx. 60 seconds
Cool down-time	Appx. 8 minutes
Ozone free	✓
Warranty (excluding UV lamp(s))	
Manufacturer's warranty	1 year
Warranty type	Carry-in
Inspections	
CE Approved	✓
Accessories	
Standard	Service and repair manual, safety package, box + trolley, extension pole, double support wheels.
Optional	Spare UV lamps

We, DecoRad® Systems bv
Fokkerstraat 25
3905 KV Veenendaal
The Netherlands



Declares fully under own responsibility that the equipment specified in this declaration complies with the conditions as defined in:

Machinery Directive :	:2006/42/EC
EMC Directive	:2004-108/EG
Low Voltage Directive	:2006/95/EC

and the standards:

EN 12921-1:2005+A1 (2010)	:Machines for surface preparation using liquids or vapours
EN ISO 12100 (2010)	:Safety of Machinery
EN 61000-3-2 (2006)	:Harmonic Current Emissions
EN 60204-1(2006)	:Electrical equipment of machines
EN 61000-3-3 (2008)	:Limitation of voltage changes, voltage fluctuations and flicker
EN 61000-6-2 (2005)	:Immunity for industrial environments
EN 61000-6-3 (2007)	:Emission standard for residential, commercial and light-industrial environments
EN 61000-6-4 (2007)	:Emission Standard for Industrial Environments
Product	:DecoRad® UV FloorCure 2030 UV drying/curing device

Veenendaal, Date	:01 May 2023
Name	:A.J. Maatkamp
Function	:General Manager Decorad Systems BV

A handwritten signature in blue ink, appearing to be 'A.J. Maatkamp', is written over a light blue rectangular background.