

# CD-2

## Instructions GB US



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### 1. General

The **CD-2** is a light-polymerisation unit for light-curing resins, equipped with 2 different wave lengths (365 nm and 405 nm). The curing chamber can be flushed with nitrogen to protect printed objects from oxygen and to avoid the creation of a dispersion layer during light curing.

### 2. Safety instructions

**Attention!** Please read these notes carefully before connecting and operating the device. The operational safety and functioning of the device can only be ensured if these safety instructions are observed.

1. The **CD-2** uses ultra high-energy UV LED sources that can seriously damage health, especially eyes and skin; therefore avoid direct or indirect exposure to these emissions even for short periods of time.
2. Although the **CD-2** is equipped with an automatic UV LEDs shut-off system in case of accidental opening of the lid, the lid should not be opened while the drying program is executed. If you need to open the lid, pause the program or stop it before opening the device.
3. The safety systems of the **CD-2** are intended as emergency aids: make sure not to tamper with the integrity of the UV oven nor with any part of it, in particular the lid closure control system. In case of malfunctioning of the system or incorrectly turning on the LEDs when the lid is open, immediately remove the power cable from the mains and contact the assistance service.
4. The **CD-2** is powered at 230 V main voltage. Do not tamper with any part of the device to avoid the risk of electric shock. In case of malfunction of the device contact qualified assistance.
5. The **CD-2** is equipped with a touch-screen interface and does not use mechanical commands or mechanical buttons. For this reason, even when the oven does not radiate, it remains powered by the network. Remove the power supply to the oven whenever it is not used for long periods, and especially if it remains unattended.
6. **CD-2** uses LEDs for drying process of the resins.
7. **CD-2** uses the heat generated by LEDs and nitrogen gas for the resin drying process. Do not leave the device unattended.
8. The curing of resins can generate heat, especially if they are collected in large quantities. Never leave the **CD-2** unattended.
9. During the drying process, the resins in the **CD-2** could generate fumes of volatile substances harmful to health. Therefore place and use the device in a well-ventilated area.
10. The fan placed on the bottom of the **CD-2** has the task of controlling the temperature of the device through numerous air intakes located at different points of the oven itself. Do not obstruct the pipes, their openings to the outside and the fan itself, in order not to damage the oven itself.
11. The **CD-2** is a device for professional use. Keep it in safe place accessible only to qualified personnel and to the rules described here. Keep it away from children.
12. Keep the **CD-2** away from heat sources, from flammable materials and liquids that may cause a safety risk. Do not wet the device and clean it only with a dry cloth.
13. Connect nitrogen to the **CD-2** with a maximum pressure of 1.5 bar. The working pressure on the pressure reducer of the **CD-2** is set to 1.8 bar ex works.
14. Open the nitrogen pressure supply after switching on the **CD-2** and loading the initial screen. Close the pressure of the nitrogen bottle after use.

### 3. General commissioning

Included in delivery are a power cable and a shelf for placing printed objects in the curing chamber. Not included, but necessary, is nitrogen: it is recommended to use a gas bottle with nitrogen with an attached pressure reducer (0 - 10 bar). The gas output should be adjusted to appr. 1.5 bar. For the connection to the **CD-2** a 6 mm tube is required. Please take care to use a proper connector to your pressure reducer. The other end of the tube can be directly connected to the joint on the back of the **CD-2**.

CD-2  
Curing device

#### Technische Daten:

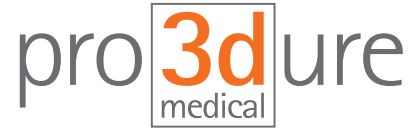
- **Dimensions:**  
405 x 210 x 430 mm
- **Dual wavelength:**  
365-405 nm
- **Light source:**  
UV-LED
- **Power:**  
100-240 VAC  
50/60 Hz
- **Weight:**  
10 kg
- **Chamber:**  
167 x 115 x 105 mm
- **Software:**  
Linux OS
- **Network compatibility:**  
Wifi
- **Sensor:**  
Gas pressure,  
UV sensor
- **Working pressure:**  
1.8 bar
- **Touchpanel:**  
7"

#### Ordering information:

item no.:  
U2020010

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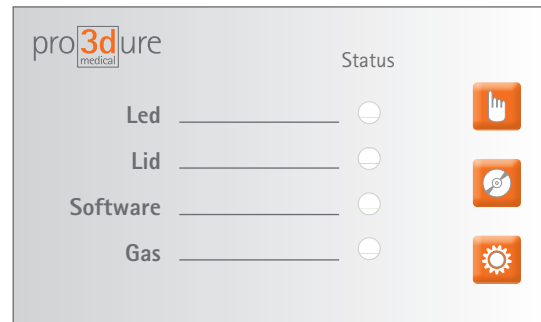


### 4. Operation

#### Touch screen: main window

The main window displays the status of the device's components: **Green** represents full functionality and **red** symbols an error. Please contact us, if a red status persists for a longer period of time. Please note that the lid status will change while opening and closing the lid.

The 3 buttons on the right side of the main window allow manual operation of the device (**hand button**), activation of pre-saved programs (**disc button**), and access to the settings (**gear button**).



#### Manual operation (**hand button**)

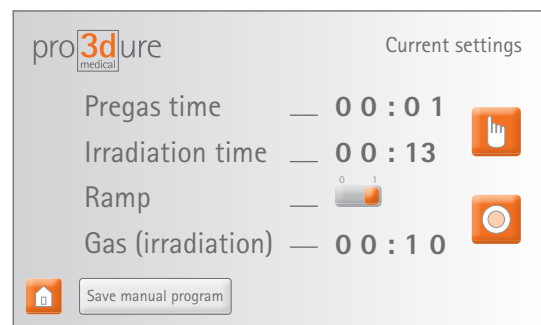
This window contains an overview of current settings for the manual operation:

**Pregas time** indicates the time necessary to displace oxygen from the polymerization chamber by flushing it with nitrogen before the LEDs switch on.

**Irradiation time** specifies the duration of light curing and how long the LEDs will be switched on.

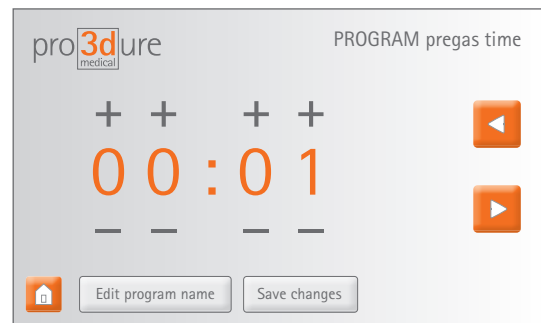
**Ramp** is a special way to cure objects by controlling the initial light intensity.

**Gas (irradiation)** indicates the time of gas flushing the polymerization chamber with the LEDs switched on.



The **hand button** activates the parameter settings for manual operation. The **circle button** starts the light curing with the settings from the overview. By touching **"Save manual program"**, these settings can be named and saved as an individual program which will later be accessible via the disc button. The **home button** will return you to the main menu. To setup your program touch the **hand button**.

The menus for **"Pregas time"**, **"Irradiation time"** and **"Gas (irradiation)"** look similar. You can change the time by pressing **+/-** for both minutes (the numbers to the left of the colon) and seconds (the numbers to the right of the colon).

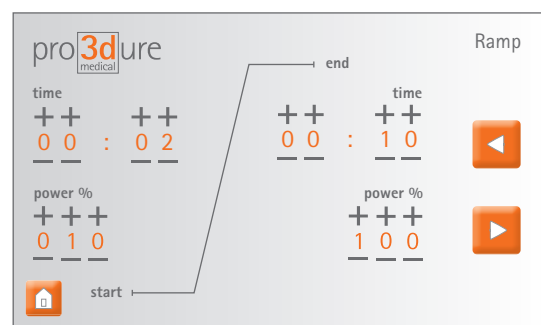


The ramp function offers a curing program with a power variation curve. Please enter the time with the desired initial UV power as well as the time, in which the UV power should be increased to the desired final UV power. The device will linearly increase UV power during the second period of time until the final UV power is reached.

**Attention:** The sum of all partial times of the ramp must be less or equal to the set irradiation time.

Please touch the **home button** to return to the overview for manual operation.

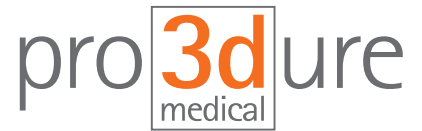
By touching the save button, your individual program settings can be named and saved to the memory of the device and later be accessed via the **disc button**.



# idea to product.

# CD-2

Instructions  

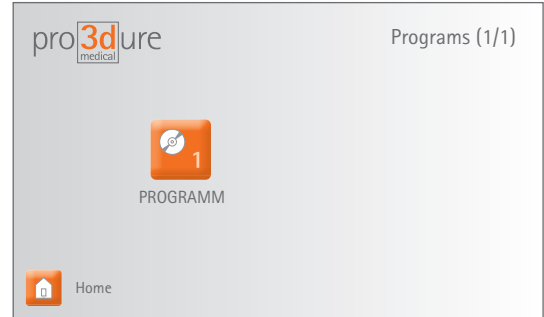


## Pre-saved programs (disc button)

The CD-2 allows you to save frequently used settings as individual programs. The settings for pro3dure's 3D printing resins are already pre-saved as well. Please touch the **disc button** in the main menu and choose the desired program. By touching the **circle button**, the CD-2 will start curing the object.

## Settings (gear button)

Please touch the **gear button** in the main menu to access the settings menu. Please use this only in instruction with a pro3dure service technician. The settings offer you to update your firmware.



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