USER‘S MANUAL

Version 2026-11

UNREAL SERIES

Full Color Laser Projector



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Article 4 bis :

« Les usages spécifiques autorisés pour les appareils à laser sortant d'une classe supérieure à 2 sont les usages professionnels suivants : (…)

9° Spectacle et affichage :

Toutes les applications de trajectoire, de visualisation, de projection ou de reproduction d'images en deux ou trois dimensions. »

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Contents

1 Contents of Package 5
2 Safety Hints 6
2.1 General Hints 6
2.2 Hints for Laser Safety 8
3 Product Information 10
4 Connectors. 11
4.1 Overview. 11
4.2 Connectors 12
4.2.1 Mains Connection. 12
4.2.2 LAN 12
4.2.3 Remote Connection 13
5 Installation and Commissioning 15
5.1 Installation 15
5.1.1 Standing Operation. 15
5.1.2 Hanging Operation 15
5.1.3 Hints for using the integrated masking plates 16
5.2.1 Power On 16
5.2.2 Laser On. 16
6 Control. 18
6.1 Operation via LA.toolbox Software. 18
6.2 Quick Start Guide to LA.toolbox 19
6.3 FB4 Control. 26
7 Pin Assignments. 26
7.2 Interlock Plug (included) 26
8 Maintenance Hints. 27
9 Malfunction 28
10 Operation with UPS 28
EU Declaration of Conformity. 33
Final statement. 34

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1 Contents of Package

Please make sure that all components were delivered correctly. Please also compare the separately supplied packing list. If something is missing, please contact your sales contact.

Name	No.	Picture
Laser projector	**1**	
powerCON TRUE1 / power cable	**1**	
Interlock plug XLR 3pin	**1**	
Set of keys	**1**	
USB stick incl. manual, software & tutorial videos	**1**	

The unit has been carefully packed for shipment. If you discover any damage to the unit or packing material due to improper shipping, please notify the shipping company and return the unit to the supplier, preferably in its original packaging.

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2 Safety Hints

2.1 General Hints

1. The laser projector is intended only for proper use for projecting laser beams onto a projection surface (walls, screens) or into space indoors or outdoors.

2. The device may not be used when there is visible damage to the housing, the connectors in the rear, especially the electric power supply, or the connecting cables.

3. The installation should be performed by specially trained personnel. The projector should not be connected to the mains during installation. Please note the local safety regulations!

4. For operation of the laser unit at truss or on ceiling, the projector must be additionally secured by a safety cable. This cable must be appropriately designed according to the weight of the laser projector. The relevant accident prevention regulations of the professional associations must be observed.

5. If the provided mains cable does not correspond with your existing mains supply please use an appropriate adapter for mains connection. Do not use any electronically controlled sockets, e.g. no dimmer or radio sockets, for mains connection of the laser projector.

6. The laser unit has to be used according to this manual. LaserAnimation Sollinger GmbH does not assume liability for damages caused by non-observation of this manual.

7. Before starting any maintenance or cleaning remove the unit from the power supply!

8. In case of malfunctions please contact your dealer and after consultation send the device back for inspection and repair in its original packing. Do not open the device!

   Attention: Warranty is rendered void if the device is misused, damaged, modified in any way, or for unauthorized repairs or parts.

9. The laser device is intended for use in a dry and sufficiently ventilated location.
   When used outdoors the device has to be protected against humidity, overheating and excessively low temperatures. Note the respective maximum and minimum ambient temperatures for operation specified in the technical details.
   IP65 water ingress protection level can only be met when the protection cover of FB4 interface at the back of the unit is firmly closed. Not correctly tightened screws may allow water ingress, which will not be covered by warranty.

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10. When operating the device in humid or special outdoor conditions that can lead to condensation:

    a. Allow the device to acclimatize sufficiently at the place of use.

    b. Do not operate the device if the dew point is > 20°C, as condensation can occur on the cooler components.

    c. Do not switch the device off between operating times, simply activate interlock / E-stop to disable laser emission or set the laser projector state to Standby (refer to LA.toolbox main tabs). This prevents the unit from cooling down, as all temperature control loops remain active.

11. The laser unit may not be operated in environments polluted with sand, dust or acrid fumes or gases. Fog machines must not be operated in the immediate vicinity of the laser projector. Do not point the fog nozzle directly at the laser projector.

12. Do not expose the laser unit to direct sunlight or other intensive light sources e.g. spotlight.

13. To ensure that the laser projector is not damaged during transportation, it must be properly packed and transported in an unassembled state. We recommend the use of a robust flight case or transport box. Ensure that the projector is firmly and securely fixed in the case to prevent movement during transportation.

14. Transport of the laser is permitted only in its factory-delivered state, without additional attachments, adapters or modifications. To avoid damages to rear panel connectors and key switch, always transport laser projector with removed interlock connector as well as removed key. This ensures that the projector is not damaged and remains in optimum condition.

15. Warning concerning back reflection:

    - Semiconductor laser sources (diodes) are by their nature particularly sensitive to back reflections. Direct or diffused laser radiation from external laser sources can lead to the irreversible extinction / damage of individual or all laser diodes in a projector.
    - Under no circumstances should a laser projector project a laser beam directly into an opposing projector at the same time. It is up to the user to determine either the orientation / position of the devices or to adapt the programming in such a way that two opposite projectors do not shoot into each other.

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2.2 Hints for Laser Safety

Caution – use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This laser product is designated as Class 4 during all procedures of operation, maintenance and service.
The local safety regulations for the application of Class 4 laser products must be observed!

1. Eye Protection

- **Never look directly into the laser beam!**
  A laser beam is coherent, monochromatic light with very high energy. A laser beam retains its intensity even over very long distances. If a laser beam hits the human eye it can lead to irreparable damages to the cornea, the conjunctiva, the eye lens and the retina. Avoid any reflections back into the laser to prevent damages to the laser system. Do not place any objects into the laser beam because even diffusely reflected radiation can cause eye damages. Therefore remove any rings, watches or the like before you carry out work on the device and use only non-reflective tools.
- We strictly recommend wearing laser protective glasses for laser devices according to laser class 4.

2. Fire Protection

- The high energy density of the laser beam causes painful burns when it hits human skin. The beam may also burn holes into textiles.
  Therefore never reach into the laser beam and do not let other parts of the body get in the way of the laser beam.
- If the laser beam hits easily flammable materials such as paper, these will ignite and a fire can develop very quickly. Therefore make sure that no flammable material is in the way of the beam before activating the laser.

3. Audience Protection

- The operation of laser systems with Class 4 lasers requires an emergency stop (E-Stop). Regardless of the way the laser is operated, an E-Stop must always be connected!
  Place the E-Stop so that you can reach it immediately in emergency situations. Run a test each time the laser is activated to ensure that it is turned off immediately by activating the E-Stop.
- Mark an area of about 3 to 4 m around the laser system as off limits to the audience.
- Only test the laser system as long as no audience is present.
- Never let the laser run unattended.
- Make sure that no unauthorized persons have access to your laser system.

The operation of laser equipment in the event sector with an audience requires an approval by a technical inspection authority in many countries!

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2.3 Warning Labels

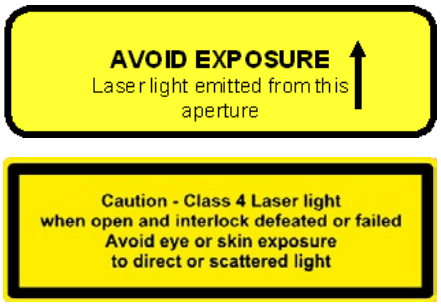
The operation of laser equipment in the event sector with an audience requires an approval by a technical inspection authority in many countries!

The following warning labels are placed on the laser device:

Next to emission laser window:



On the top cover:



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3 Product Information

The UNREAL laser projectors are equipped with high value color laser sources and fast 38 kpps at 8° X/Y scanners, allowing crisp projections in brilliant colors.
Special optical components for beam forming, beam combination and focusing and their professional placement and setup guarantee a sharp precise beam with a homogeneous beam profile and low divergence, even over longer distances.

Outstanding Features

- Outstanding design with a physically 3-way adjustable beam blocker
- Comfortable control using "LA.toolbox" software installed on PC or Mac via LAN (Ethernet)
- Internal selectable CTO - factory set values

Laser Sources

Every UNREAL unit is based on LaserAnimation Sollinger Gen.4 RSL modules.

UNREAL Laser Projectors

The UNREAL series is a high-performance RGB diode laser projector series engineered for professional applications that demand exceptional power and reliability. Designed as an IP65-rated housing with only 34.5 x 28.1 x 22.3 cm, the UNREAL 60 and UNREAL 120 deliver guaranteed optical output of 60 W resp. 115 W by combining red (637 nm), green (525 nm) and blue (455 nm) RSL Gen. 4 analog modulated laser modules — making them fully suited for demanding outdoor use across a wide range of environmental conditions.

Control flexibility is provided via a FB4 interface, stand-alone player, Art-Net.

The LAN Disable Button and color selection can be configured using the LA.toolbox.

Safety is taken seriously across the entire LaserAnimation UNREAL series: each unit features a scanfail safety circuit, a physically 3-way adjustable beam blocker, key switch, interlock, emission LEDs and can be controlled by an optional LAS LAN Disable Button accessible via LA.toolbox.

With their combination of outstanding optical output, robust thermal design and professional-grade feature set, the UNREAL 60 and UNREAL 120 are the ideal solution for large-scale events, permanent installations and any application where uncompromising laser performance is required.

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4 Connectors

4.1 Overview

All included signal cables are shielded. In case you use other cables (e.g. for remote control, Interlock, external key switch) it is essential to use shielded cables only.



UNREAL front panel

1. Laser aperture
2. Beam blocker mechanism
3. Emission LED



UNREAL back panel

1. FB4 interface
2. Key switch for controlling the laser emission
3. Status and emission LEDs
4. LAN to connect the device to Ethernet network for LA.toolbox access and FB4 control
5. Remote: 3pin XLR for connection of
   - emergency stop (E stop) (separately available)
   - included Interlock plug (to close the interlock loop for testing purposes)
6. Power connector powerCON TRUE1
   Universal input: 90 VAC – 264 VAC, 47 – 63 Hz
7. Push button for CTO selection

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4.2 Connectors

4.2.1 Mains Connection

The projector can be operated with supply voltages of 90 VAC – 264 VAC / 47 – 63 Hz.
If the provided mains cable does not correspond with your existing mains supply please use an appropriate adapter for mains connection.

The projector must be operated with supply voltage with grounded protective conductor (PE)!

The highly-efficient power supply allows discharging external and internal disturbances via the protective conductor (PE). Internal filters are ineffective without protective conductor (PE).
Operation without grounded protective conductor (PE) can cause damage to the components of the power supply. For this we cannot provide any warranty!

CAUTION – Important notice regarding PowerCon TRU1 power linking of projectors: When power-linking units together, please ensure that the maximum allowed ratings are not exceeded!

The maximum AC current according to the datasheet is set to: AC Current (Typ.): 10.1 A/115 V AC; 5.3 A/230 V AC.

Considering the maximum allowed rating for PowerCON TRU1 connectors (16 A/20 A US rating), the maximum quantity of linked units should not exceed two units at 115 V AC operation or three units at 230 V AC operation.

Furthermore, UNREAL projectors are equipped with a PFC switching supply, which can create a high inrush current of: Inrush current (typ.): cold start 20 A/115 V AC, 40 A/230 V AC. Please ensure that your circuit breaker can withstand such high inrush currents. If the fuse trips, please reduce the number of connected devices.

4.2.2 LAN

The UNREAL laser projector can be integrated into an Ethernet network using any of the three available LAN ports and can be controlled using the LA.toolbox software installed on a PC or Mac.

For the Ethernet connection, either direct or using a switch, use standard CAT 5 patch cables with RJ-45 connectors.

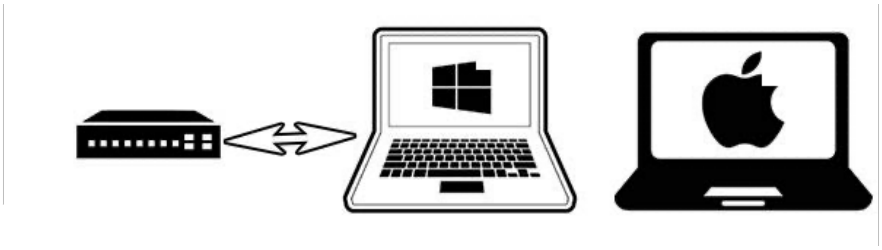


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Use a standard CAT 5 patch network cable to connect the laser projector with an Ethernet network.







Details on the setup of the LAN port (IP address, DHCP etc.) can be found in the LA.toolbox manual under the chapter "Network".

4.2.3 Remote Connection

Different connections are possible:

1. Emergency Stop Switch (Interlock loop) with or without key switch



- The operation of laser systems with lasers class 4 requires an emergency stop (E-Stop). Regardless of the way the laser is operated, an E-Stop must always be connected.

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- Place the E-Stop so that you can reach it immediately in emergency situations.
- Run a test each time the laser is activated to ensure that it is turned off immediately by activating the E-Stop.
- After activating the E-Stop (opening the interlock loop) your device is blocked from any laser emission.
  To return to normal mode you have to deactivate (close the Interlock loop) and then to turn the Key switch to OFF an ON again (so called „key latch").

Note:
On the remote connector the interlock loop is connected to pins 1 and 2.

2. Interlock Plug

If no E-Stop shall be used it is necessary that the included Interlock plug is inserted for closing the Interlock loop:



An open Interlock loop means no laser output!

4.2.4 Art-Net

The internal FB4 can be controlled by Art-Net. For more information, please refer to the Pangolin user manual.

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5 Installation and Commissioning

5.1 Installation

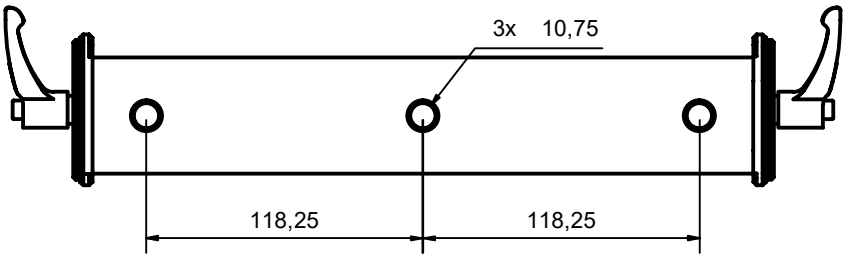
5.1.1 Standing Operation

Place the UNREAL laser projector in an upright position on a stable platform and make sure that the position is sufficiently ventilated.
Do not block the front or back panels to ensure proper ventilation (see pictures):



5.1.2 Hanging Operation

The UNREAL laser projector is equipped with an extra stable yoke for hanging operation (truss or tripod). For mounting you will need minimum one C-clamp (not included).



Make sure that the position is sufficiently ventilated.

Make sure that the projector is adequately secured by an additional steel cable during hanging operation. The manufacturer does not assume responsibility for damage to persons or to property due to faulty attachment!

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5.1.3 Hints for using the integrated masking plates

For safety reasons, an integrated three-way beam-blocking hardware is built into the front of the projector. This convenient masking plate set can be used to blank the laser output in order to protect the audience in a certain area.
To adjust the masking plates, untighten the screw and move the masking plate to the desired position and tighten the screw again.
The masking plate set offers 3-ways masking (bottom/left/right).
Do not move masking plates during laser operation as light scattering could occur!



5.2 Commissioning

5.2.1 Power On

The device is not equipped with a power switch. The power supply should only be performed by connecting respectively disconnecting the unit to or from the mains.

1. Connect the included power cord to the mains input of your device: Pull the slider, insert the connector and turn it clockwise until the connector is locked.

2. Connect the device to a power outlet. If mains power is available the fans will start and the „Status" LED will light up.

3. To turn off the projector turn the connector counterclockwise and disconnect it from the mains input „Power". The powerCON TRUE1 connector can be connected or disconnected under load!

5.2.2 Laser On

Never look into the emission window while turning the laser on! Make sure that no persons or highly combustible materials are located in the path of the laser beam.

1. Open the laser output window by sliding the 3-ways masking plates to the sides.

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2. Make sure that the Interlock loop is closed.

3. Insert the key and switch the laser on by turning the key to the right.
Vertical key position means „Laser off", horizontal key position means „Laser on".

The device will now be initialized. The laser is now able to emit laser light as signaled by the emission LED on the rear panel as well as the emission LED on the front panel. The laser beam emission is activated 7 seconds after turning the key switch to „Laser on"



The laser beam emission is activated 7 s after turning the key switch to „Laser on"

4. The laser can be switched-off without delay by turning the key switch counter-clockwise to the horizontal position.

5.2.3 Blink sequences of the Status LED

The status LED on the rear indicates the momentary operating status of the device.
Green blinking sequences signalizes normal operation, red ones an error state:

Blinking Sequence	Meaning
Alternate red/green blinking	The laser is in „Adjusting" mode, temperatures have not reached their target values yet.
Green constantly on	The laser is in „Run" mode. Control signal is present for laser emission, laser emission can start..
Green blinking 1 times	The device is in „Shutdown" mode.
Green blinking 2 times	Interlock loop is open.
Green blinking 3 times	Key switch is not closed.
Green fast blinking emission LED is off	Laser is in the „Standby" mode, interlock and key switch are closed.
Red Blinking	Warning! The temperature sensor for the heat sink is failing. However, the laser can still be operated.

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6 Control

The projector can be easily controlled and monitored using the LA.toolbox software, which can be installed on a PC running Windows or an Apple Mac computer.
The LA.toolbox as part of the LA.tools Software Suite can be downloaded on https://laseranimation.com/en/downloads/

6.1 Operation via LA.toolbox Software

LA.toolbox installation file as well as useful tutorial videos are saved on the included USB stick for easy use. This intuitive software allows for monitoring for important functions of the laser unit and adjustment of operating parameters.

The LA.toolbox communicates via LAN with the laser projector. This software is a part of the LA.tools Software Suite. The minimum requirements and more details on LA.tools / LA.toolbox can be found on https://laseranimation.com/en/product/la-tools/

The PC and Mac versions as well as the detailed LA.toolbox manual are stored on the included USB memory stick or can be downloaded form the LaserAnimation's website (see links above).

Please install the LA.tools Software Suite including LA.toolbox on your PC or Mac to activate main functionalities of the laser projector by LA.toolbox.

For additional information, please consult the LA.toolbox user manual (included on USB stick)

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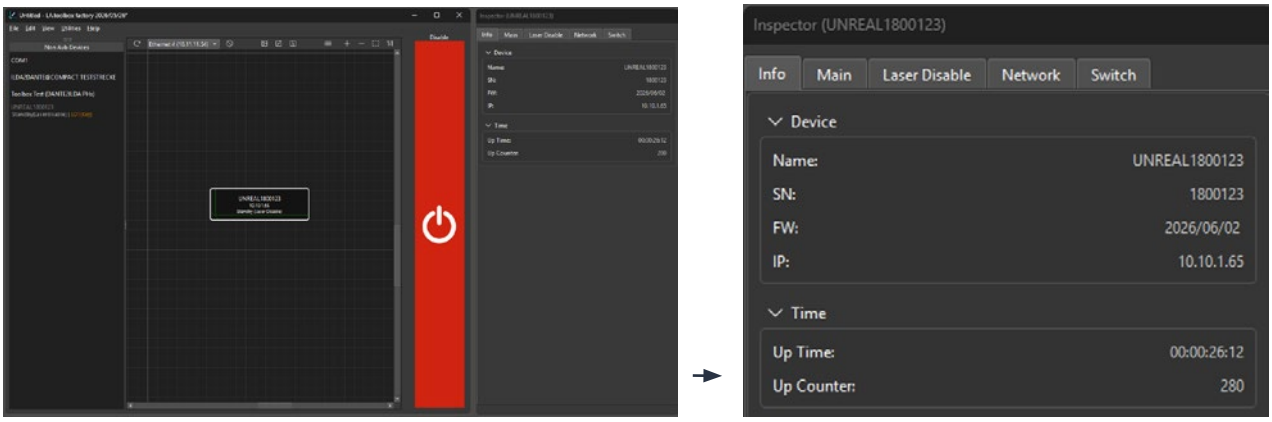
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6.2 Quick Start Guide to LA.toolbox

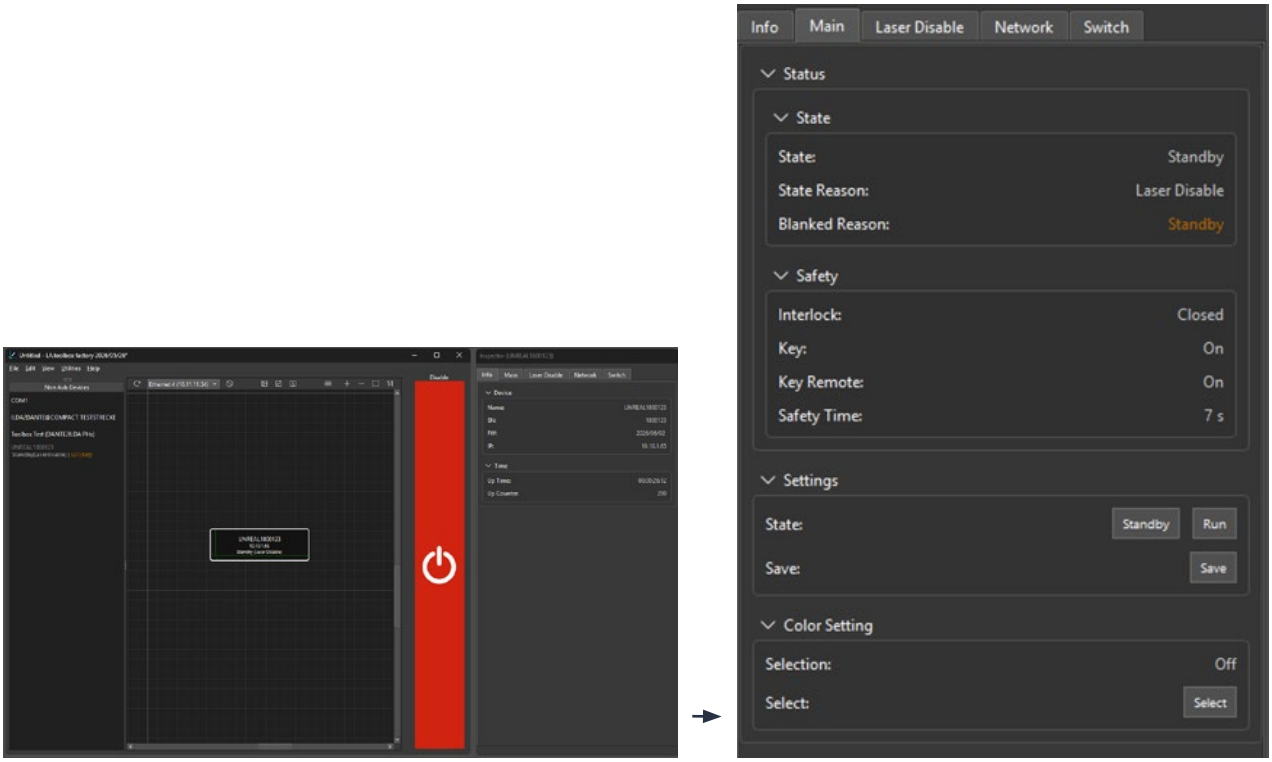
The following steps describe how to control and set up the UNREAL laser projector in combination with LA.toolbox.

Info Tab



The ‚Info' tab in LA.toolbox displays all device information, including the device name, serial number, firmware version and IP address, as well as the ‚Up Time' (which counts the time the laser has been running) and ‚Up Counter'.

Main Tab



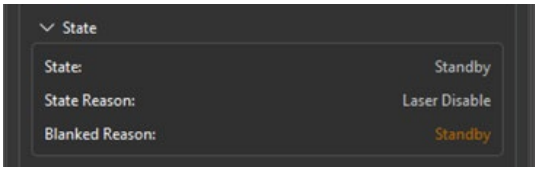
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The ‚Main' tab from LA.toolbox provides a detailed overview of the device's state and overall condition. This includes information such as safety status and the current operating state.

State

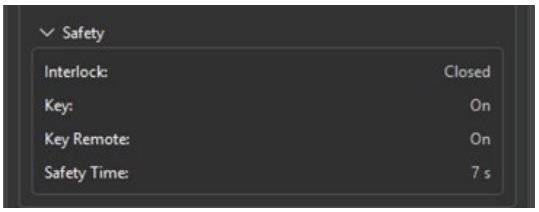


- State: Shows the current device state, either ‚Standby' (no laser emission possible) or ‚Run' (laser emission possible).

- State Reason: Explains why the device is in its current operating state.
In above example, the device went into standby mode following E-stop activation (laser disable).

- Blanked Reason: Explains why laser emission is currently blanked or not.
In this case, modulation is blanked because the device is in the Standby state. Other reasons for blanking can be ‚Window' (meaning the left masking plate is mostly closed) or ‚Housing' (meaning the top cover is open).

Safety



- Interlock: Displays the status of the interlock dongle or analog E-stop connected to the 3-pin XLR interlock port on the back of the device.

If it is open, the interlock dongle is missing or the analog E-stop is depressed, and NO LASER EMISSION IS POSSIBLE.
If it is closed, the interlock dongle is connected and closed, and LASER EMISSION IS POSSIBLE.

- Key: Shows the state of the key switch on the back of the device.
If the key switch is in the OFF position, NO LASER EMISSION IS POSSIBLE!
If the key switch is in the ON position, LASER EMISSION IS POSSIBLE!

- Key Remote: Shows the state of the key on the remote E-stop/laser disable button.
If the key switch is in the OFF position, NO LASER EMISSION IS POSSIBLE!
If the key switch is in the ON position, LASER EMISSION IS POSSIBLE!

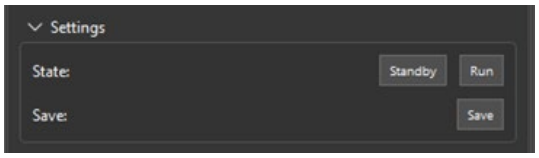
- Safety Time: Shows the safety delay before laser emission can resume.

Settings

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- State: Allows the user to toggle the unit between standby and run mode.

Standby: Temperature control of the modules is active, and laser emission is not possible.
Run: Enables laser emission after a 7-second safety timer delay.
Save: Allows the user to save the „default" run state.

Note: If you select Standby and save it, the unit will always boot in „Standby" mode. This means that you will need to access the device via LA.Toolbox each time to manually switch to „Run" mode.

Color Setting / CTO



The UNREAL features an advance internal CTO (color temperature orange) functionality, offering 4 factory-set modes.

You can switch between the different modes either by pushing the white button located left of the FB4 interface (you need to open the waterproof IP65 cover from FB4 to access this button) or by selecting directly the corresponding setting via LA.toolbox.

Within LA.toolbox, select your device and navigate on the "MAIN" tab of the device. At the bottom you have "Color Setting".

- Selection: Displays the currently selected color correction (CTO).

- Select: Allows the user to switch from one setting to the next one, in below listed succession:

- Full / Off: no color correction / full power
- Log: logarithmic curve
- Warm White: logarithmic curve + CTO 3200K
- Cold White: logarithmic curve + CTO 6500K

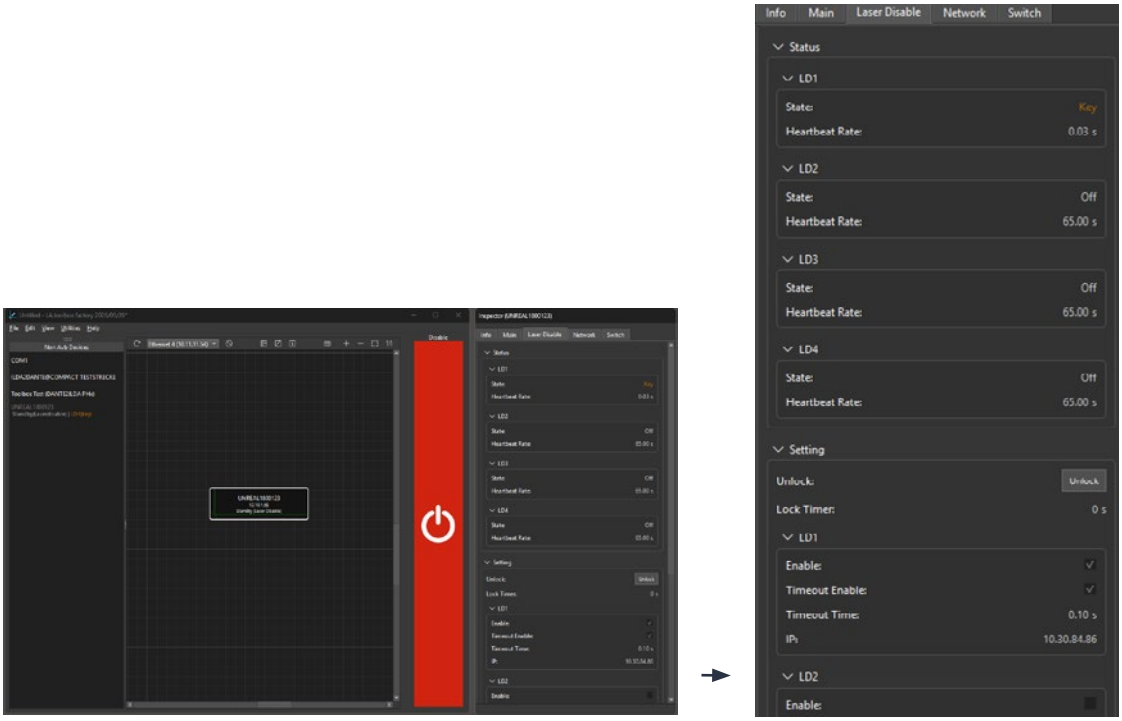
Warm white and cold white settings are factory-set values, in order to match various UNREAL together, so they all behave the same. These values can not be modified.

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Laser Disable Tab



The „Laser Disable" tab in LA.toolbox displays all the relevant information and control options for the LaserAnimation laser disable buttons (a digital e-stop solution).

- Status: Lists the status information of up to four different LaserAnimation Laser Disable buttons, which can be assigned to each UNREAL projector.

Each button is listed as „LD" followed by a number from 1 to 4.

- State: Shows the current state of the Laser Disable button.

- **Key:** Indicates that the key is in the OFF position.
- **Button:** Indicates that the E-stop button has been pressed.
- **Off:** Indicates that no E-stop has been assigned via the „Settings" section at the bottom of the window.

- Heartbeat Rate: Displays the timing of the received/incoming heartbeat signal from the Laser Disable button. By default, one package should be received every 0.03 seconds.
If the timing is longer, network delay/overload could be the cause.

- Setting: This section is used to configure the LD1 to LD4 settings. To prevent unwanted changes, first unlock the settings by pressing the „Unlock" button. The lock timer (counting down from 10) shows the remaining time before the settings are blocked again. The lock timer starts whenever you are not making any changes to the settings.

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Each laser disable can be configured in the following way:

- Enable: Tick the box to activate the laser disable control of the projector.

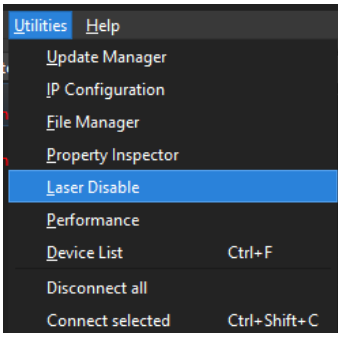
- Timeout Enable: Always activate so the unit can detect broken LAN connections and/or an E-stop disconnection.

- Timeout time: By default, if no new heartbeat signal is received within 0.1 seconds, the laser projector will automatically shut down laser emission.

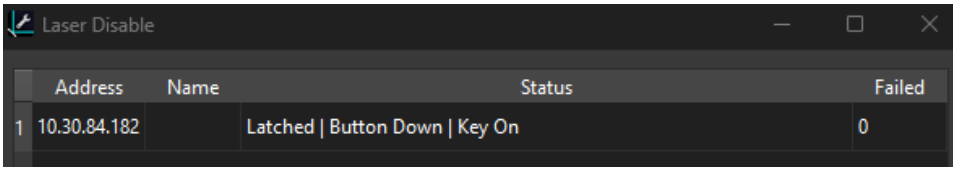
IP: Enter the IP address of your Laser Disable button here.

To find the IP address of your Laser Disable button:

Click Utilities, then Laser Disable.



A new window will open listing all detected Laser Disable buttons available on the network. If no Laser Disable buttons are listed, check the power supply. A PoE switch is needed for a Laser Disable button. Also, check the network connections.

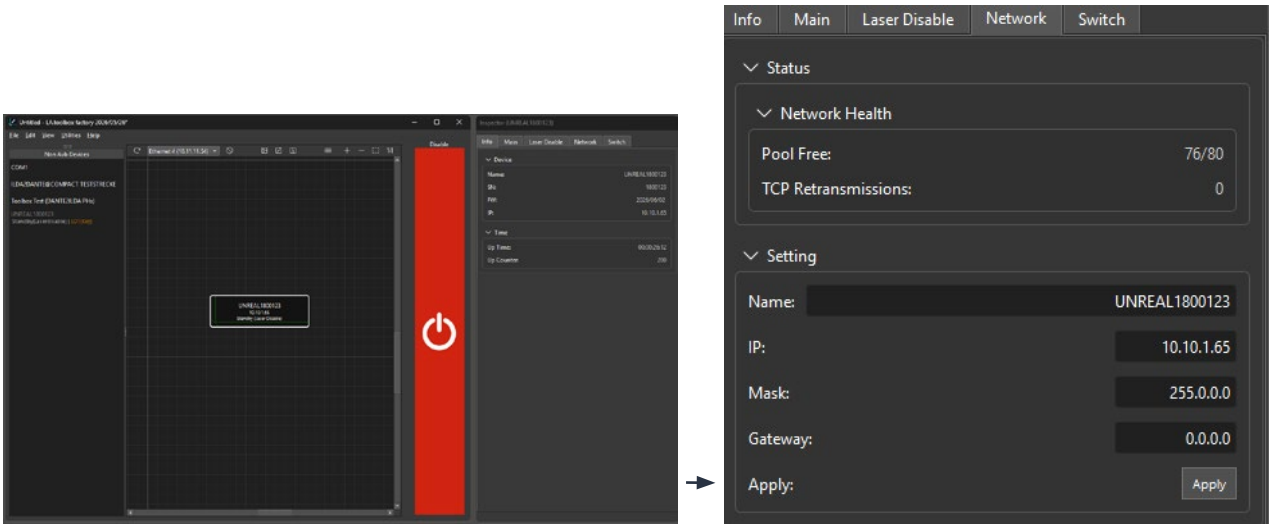


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Network Tab



The „Network" tab in LA.toolbox lists network health and allows you to make network-related changes to the projector.

Status - Network Health



If the TCP Retransmissions counter increases, there might be network issues somewhere. Please check your network!

Setting

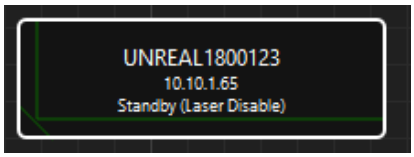


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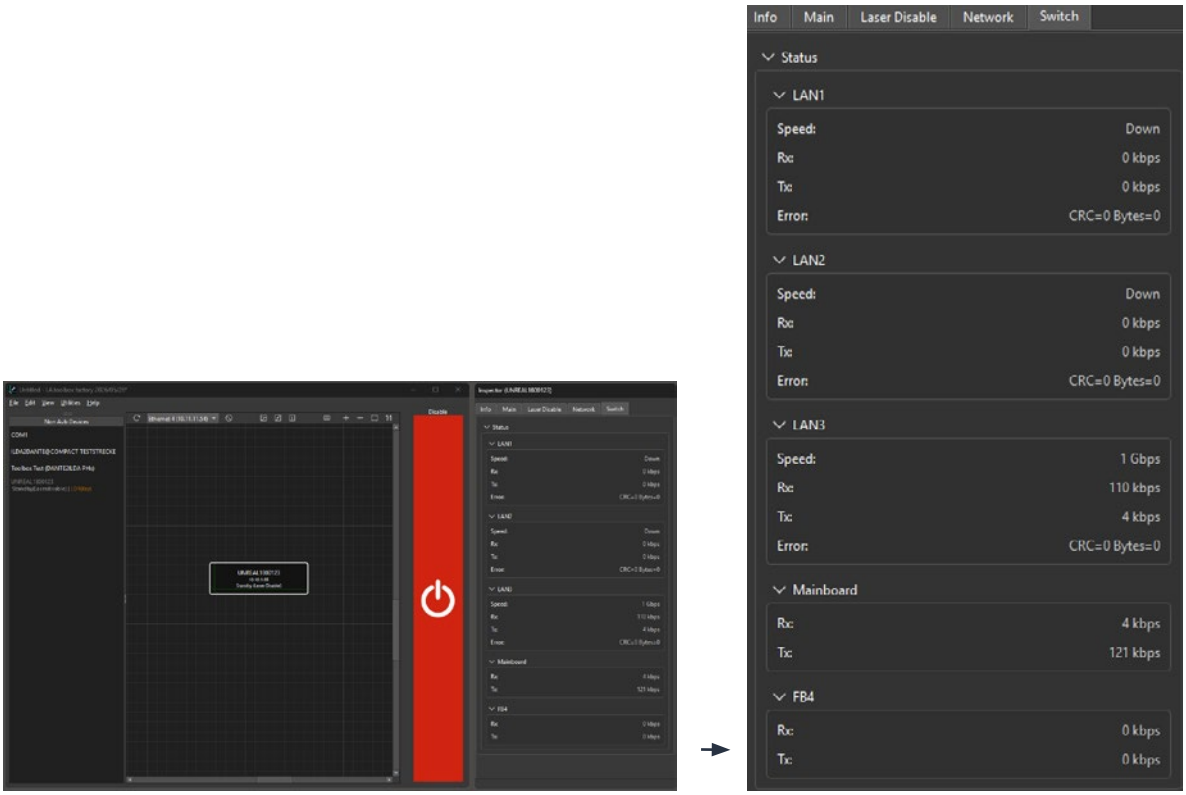
- Name: Allows the user to change the device name and how it will show up on the LA.toolbox main screen:



- IP/Mask/Gateway: Allows the user to change the device's IP address settings.

- Apply: IMPORTANT: For IP address changes to become effective, you must press Apply.

Switch Tab



The „Switch" tab in LA.toolbox lists traffic data for all internal LAN switch ports. LAN 1, LAN 2, and LAN 3 are the external LAN ports.

This tab is particularly helpful when running a star-topology network with one UNREAL as the main network switch and when linking LAN connections to additional units.

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6.3 FB4 Control

By default, UNREAL laser projectors are set as Input source FB4 on LA.toolbox.
If you want to operate FB4 via LAN, simply connect a suitable LAN cable to one of the two Ethernet ports on the back of the device and execute either QuickShow or BEYOND as control software.
If you want to control FB4 via Art-Net, set the FB4 to Art-Net mode (either through LAN FB4 settings or via display & rotary encoder) .

All settings relative to FB4 shall be made directly on the FB4 display or remotely through Pangolin software.

7 Pin Assignments

7.1 Remote Connector

3pin XLR-Jack female



Pin No.	Signal	Meaning
1	GND	Ground
2	INTERLOCK	INTERLOCK ON
3	Remote Key	KEY ON (external key switch)

7.2 Interlock Plug (included)



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Note:
Please only use the new 3-pin XLR Interlock connectors for the laser projectors. The black/silver 7-pin interlock connectors supplied with previous LaserAnimation products is not compatible with newer projector versions.



8 Maintenance Hints

Turn the laser off and disconnect the device from the mains before doing any maintenance!

Do not touch the laser emission window and always close it with the masking plates after operation.



The laser emission window can be polluted during the operation (fog machines, open air operation etc.). A polluted window can reduce the laser output power and influence the beam quality. We recommend the laser output window to be cleaned from time to time. Please use methanol (against finger prints) and/or acetone and lens paper for cleaning.
Be carefully during cleaning and do not touch the cleaning surface of the lens paper with your fingers.
Methanol and Acetone are hazardous materials: Please observe the related precautions!
The housing of the device may be cleaned with a soft fluff-less cloth and a mild detergent.
Please check the air inlets and outlets on both sides of the housing from time to time. Remove any dust between the ribs using a brush, a vacuum cleaner or oil-free compressed air.

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9 Malfunction

Check the mains connection!

In case of malfunction please check the mains connection and mains cable first. If necessary change the mains cable.

In case of other malfunctions please send the device to your dealer for inspection and repair in its original packing.

10 Operation with UPS

The mains supply at events may be „contaminated" (e.g. voltage peaks) due to a large number of connected devices (e.g. dimmers etc.).
In adverse conditions this could cause problems in the operation of the laser projector.



To ensure safe operation of the laser anytime it is highly recommended to run the laser with the aid of a UPS (Uninterrupted Power Supply).
It is recommended to protect your valuable laser equipment by a cheap, readily available device!

The UPS can be obtained from any supplier for electric appliances or computers. It is set up between the mains supply and the mains connector of the laser projector and ensures a clean AC voltage.
The best choice is a „double-conversion" or „online" UPS – double conversion means Voltage Frequency Independent (VFI). It protects your high-value equipment against power failures, voltage drops or spikes and frequency fluctuations.
We recommend the online UPS type

APC Smart-UPS SRT 2200 VA, 230 V SRT2200XLI" by APC Schneider Electric Inc.

It is essential to check if protective earth (PE) is available at the connection side of the UPS, because the best UPS doesn't help without protective earth (PE).

Please set the following parameters as specified:

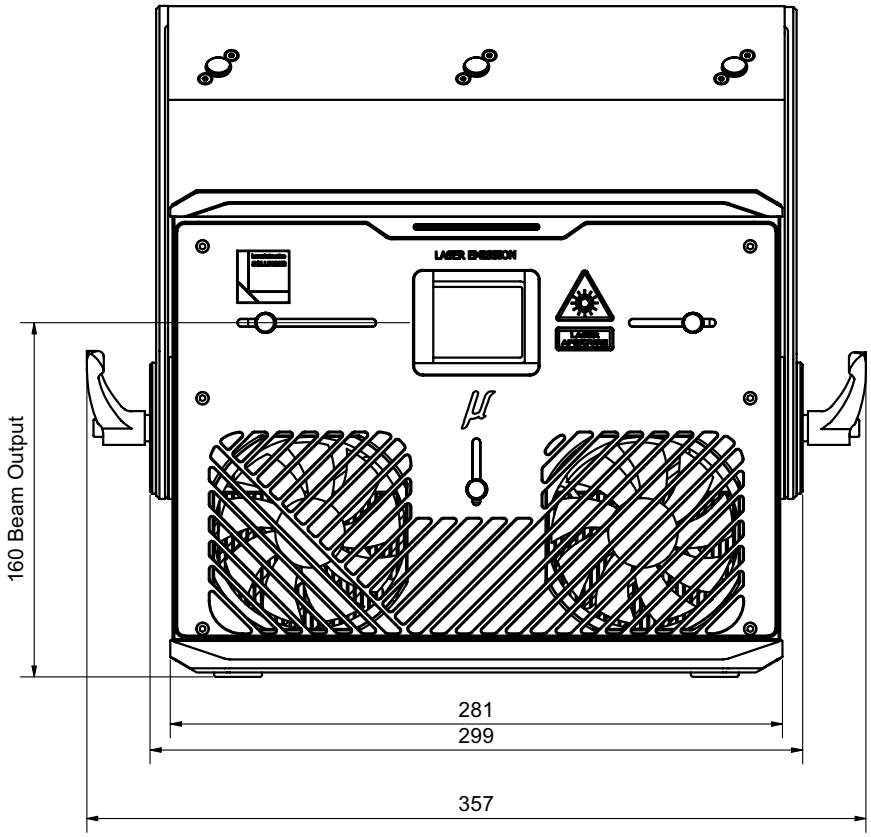
- Bypass: Disabled
- Frequency: Fixed 50Hz
- Voltage: Fixed 230VAC

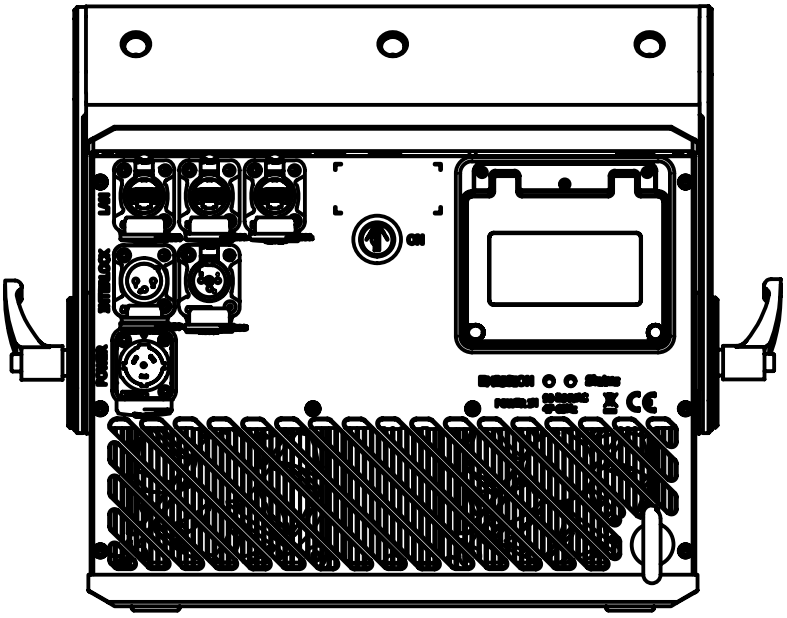
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12 Technical Drawings - UNREAL

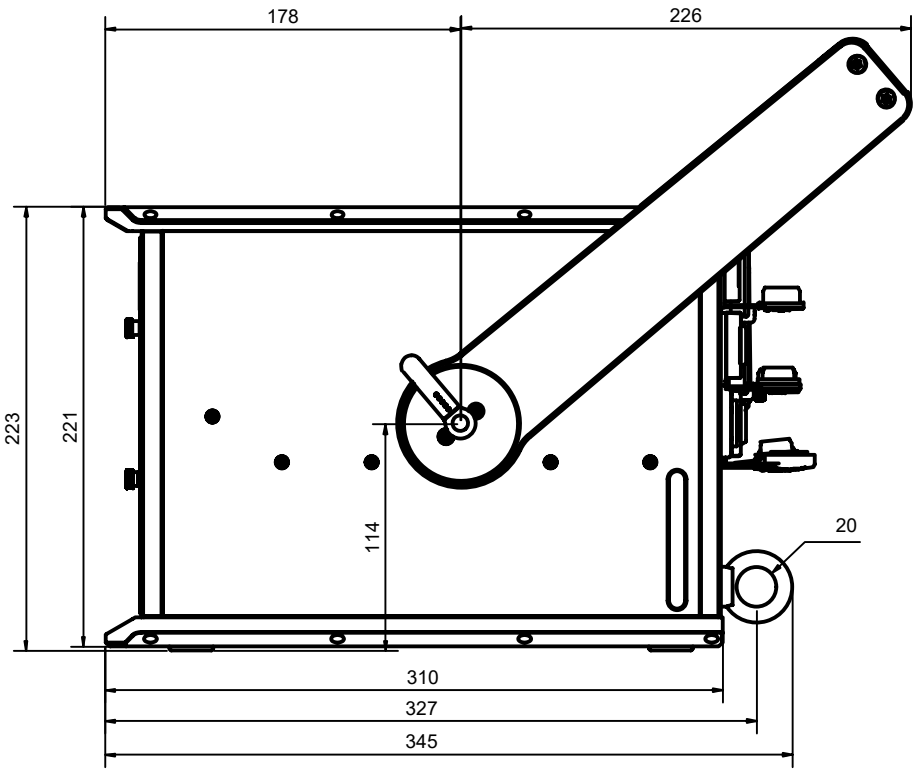




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UNREAL
Dimensions in mm
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13 Technical Specifications

Device dimensions (L x W x H)	345 x 281 x 223 mm (w/o bracket)		
Laser Source	LaserAnimation Sollinger RSL Gen. 4		
Type	CW analog modulated, laser class 4		
Typical wavelengths	637 nm	525 nm	455 nm
Beam divergence*	0.8 mrad		
Beam diameter*	10 mm		
Operation mode	FB4 interface, stand-alone player, Art-Net, CTO selection via LA.toolbox		
Power supply	90 VAC – 264 VAC, 47 - 63 Hz, universal		
Operationg temperature	-10°C to 40°C		
IP rating	IP65		
Connectors			
AC Mains Connector	powerCON TRUE1		
Remote	3pin XLR (external key switch, interlock)		
LAN	RJ-45 Ethercon		
Optional Built-in	AVB card		
			*FWHM average depending on model

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Device-dependent laser specifications			
UNREAL 60			
Guaranteed optical power (at laser modules)	60 W (at 35°C)		
Minimum power (at aperture)	55 W		
Power per color	17 W (637 nm)	20 W (525 nm)	27.5 W (455 nm)
Scanner system	38 kpps 8°		
Scan angle	max. 48°		
Power consumption	850 W		
Weight (net)	15.5 kg		
UNREAL 120			
Guaranteed optical power (at laser modules)	115 W (at 35°C)		
Minimum power (at aperture)	105 W		
Power per color	34 W (637 nm)	40 W (525 nm)	55 W (455 nm)
Scanner system	38 kpps 8°		
Scan angle	max. 48°		
Power consumption	1100 W		
Weight (net)	15.5 kg		

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EU Declaration of Conformity

Manufacturer:
LaserAnimation Sollinger GmbH

Product Names:

UNREAL 60
UNREAL 120

Products covered by this declaration: Laser display systems

We hereby declare that the above-described product is in conformity with the essential requirements and other relevant provisions of the following directives, and complies with the applicable standards:

2014/30/EU Electromagnetic Compatibility Directive (EMC):
• EN IEC 55015:2019 + A11:2020
• EN IEC 55015:2019 + A11:2020
• EN IEC 61547:2023

2014/35/EU Low Voltage Directive (LVD):
• EN IEC 60598-1:2024/A11:2024
• EN 61000-3-3

Circuit Feedback:
• EN IEC 61000-3-2:2019/A1:2021

Safety of laser products, Part 1: Equipment classification and requirements:
• EN 60825-1:2014/A11:2021/AC:2022

REACH (Registration, Evaluation, Authorization of Chemicals):
• Regulation (EC) No 1907/2006

RoHS Directive 2011/65/EU:
• EN IEC 63000:2018

General Product Safety Regulation (EU) 2023/988 (GPSR)

The included technical documents (files) demonstrate that the product has been produced according to the requirements of the abovementioned directives. The devices are verified in correspondence to the laser class regulation(s): EN 60825-1:2014/A11:2021/AC:2022. The technical documentation is kept at the above mentioned addresses open for inspection.

Berlin, 01.07.2026

Martin Werner

Certified
ISO 9001:2015

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Final statement

All our products and their packaging are individually checked and leave our facilities in a flawless and proper condition. If you notice any damage or defects when receiving the product, please contact your dealer immediately. Damages caused by improper handling are not subject to the manufacturer's or dealer's responsibility and no liability or warranty is assumed for it. The operator of the device must follow the local safety regulations and the warnings in the manual. If changes are made to this manual, we cannot inform you. Please contact your dealer for service and any other questions. Only use original spare parts.

Subject to change without notice. No warranty can be given for the correctness of the information.

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Place of Business: Berlin, Germany | Registry Court: Amtsgericht Charlottenburg, HRB 45888 | Managing Director: Martin Werner | VAT-ID: DE154202159

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Certified

ISO 9001:2015

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