# USER'S MANUAL

Version 2025-06

LaserAnimation
**SOLLINGER**

# PHAENON XS
Full Color Laser Projector



LASER
APERTURE

LASER EMISSION

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This device is a show laser device for commercial use. This device is not a laser pointer and it must not be used for pointing purposes.

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L'utilisation est réservée à un usage professionnel selon décret n°2007-665 du 2 mai 2007 relatif à la sécurité des appareils à laser sortant!

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. »

Attention : Cet appareil est un projecteur laser destiné à un usage commercial. Cet appareil n'est pas un pointeur laser, il ne convient pas pour le pointage et ne doit pas être utilisé à cette fin.

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## Contents

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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<br>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.

## 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.** Use LA.toolbox to check the internal temperature of the unit and the dew point.

   **c.** Do not operate the device if the dew point is > 20℃, as condensation can occur on the cooler components.

   **d.** 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!

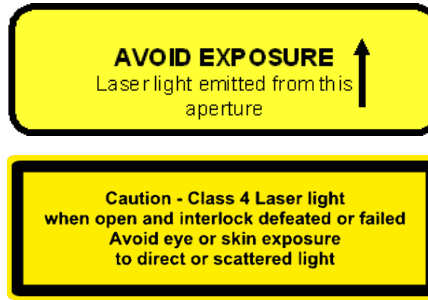MADE
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## 2.3 Warning Labels

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

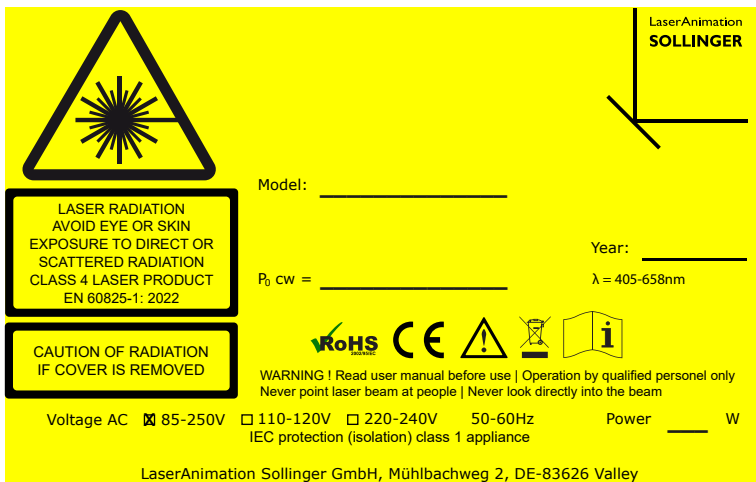The following warning labels are placed on the laser device:

Next to emission laser window:

On the top cover:



On the bottom:



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# 3 Product Information

The PHAENON XS projectors are equipped with high value color laser sources and fast 45kpps@8° X/Y scanners (CT-6210 upgrade also available), 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

- Electronic Masking sets new standards in the field of laser safety because it allows to define certain areas which can be perfectly protected against laser radiation
- Outstanding Design with stable stainless steel yoke as well as output window protector
- Comfortable Control using "LA.toolbox" software installed on PC or Mac via LAN (Ethernet)

Laser Sources

Every PHAENON XS unit is based on LaserAnimation Sollinger Gen.3 RSL modules.

PHAENON XS

Two RSL modules of third generation manufactured by LaserAnimation are used to generate sharp and brilliant colors.

The integrated laser sources stand out due to their high beam quality in rich colors, low divergence as well as their enormous durability. The parameters for operating temperature and current set by the manufacturer of the laser sources are observed strictly in order to maximize their life expectancy.

Optics

The high value optics for beam combination and focusing are professionally arranged and perfectly adjusted during production. All laser colors are combined into a beam with high power density.

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# 4 Connectors

## 4.1 Overview

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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.



### PHAENON XS front panel

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



### PHAENON XS back panel

1. FB4 interface

2. Key switch for controlling the laser emission

3. Status LED

4. LAN to connect the device to Ethernet network for controlling by LA.toolbox
   LAN 1 / LAN 2 : Mainboard - LA.toolbox access and FB4 control

5. DMX in: 5pin XLR male
   DMX thru: 5pin XLR female

6. Remote: 3pin XLR for connection of
   - emergency stop (E stop) (separately available)
   - included Interlock plug (to close the interlock loop for testing purposes)

7. Power connector powerCON TRUE1
   Universal input: 85 VAC – 264 VAC, 50 – 60 Hz

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## 4.2 Connectors

### 4.2.1 Mains Connection

The projector can be operated with supply voltages of 85 VAC – 264 VAC / 50 – 60 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!

### 4.2.2 LAN

The PHAENON XS can be integrated into an Ethernet network using the LAN interface 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.
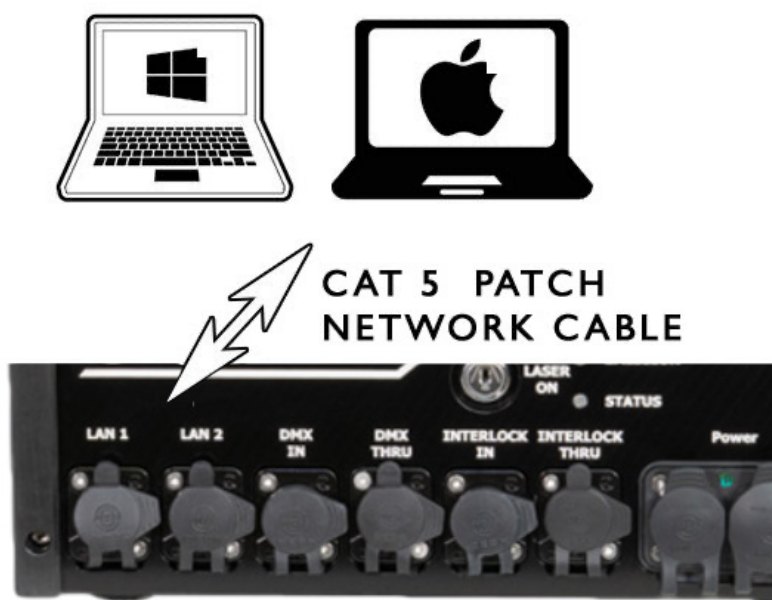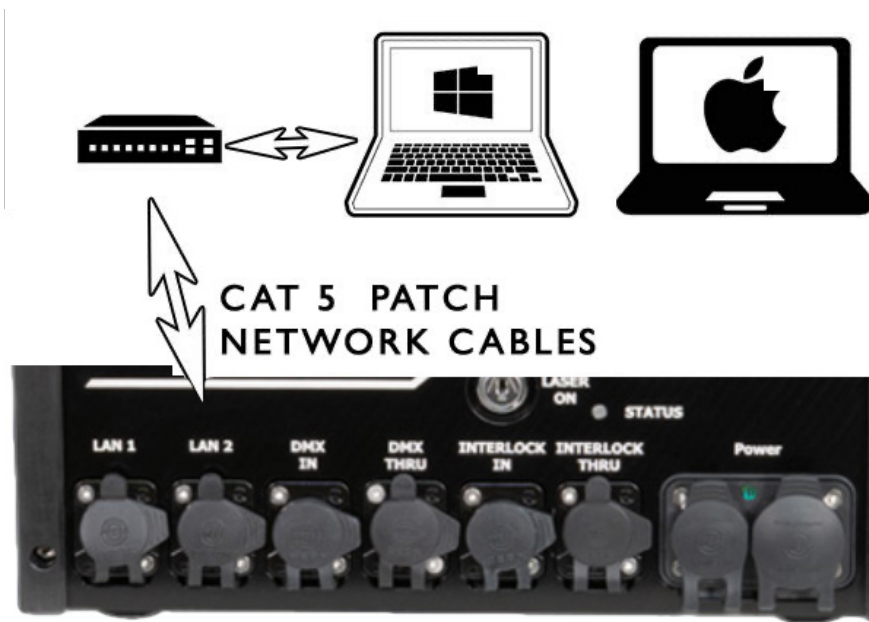
Details on the setup of the LAN port (IP address, DHCP etc.) can be found in the LA.toolbox Manual under the chapter "Network".

## 4.2.3 Internal ILDA and DMX signal sources: AVB module, FB4

The selection of the source for ILDA and DMX can be done independently of each other.

## 4.2.4 Remote Connection

Different connections are possible:

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

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- 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.
- 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.

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:

INTERLOCK

3-pin Interlock plug

An open Interlock loop means no laser output!

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## 4.2.5 DMX

The DMX in- and outputs are only for control of embedded FB4 interface.

PHAENON XS with FB4

The internal FB4 can be controlled either via DMX or via ArtNet.

You can connect any professional DMX lighting console to „DMX in" for controlling the grating module. Please use 5pin standard cables marked EIA RS-485, shielded, twisted pair with 120 ohm surge impedance and low capacity (not included).

Please do not use microphone cables or cables with other characteristics than specified.

The applied DMX signal at „DMX in" is still available for transmission to other DMX devices at „DMX thru".

Hint:
Please note that „DMX in" is not terminated with 120 Ohm. This needs to be done externally (most easily using a terminating connector on „DMX thru").

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## 5 Installation and Commissioning

## 5.1 Installation

### 5.1.1 Standing Operation

Place the PHAENON XS in upright position on a stable platform and make sure that the position is sufficiently ventilated.
Do not place the laser unit sideways and do not block the side panels because the air ventilation takes place through the side panels, (see picture):



air outlet ← → air inlet (fans)

### 5.1.2 Hanging Operation

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



90    90

Ø12,5 THRU
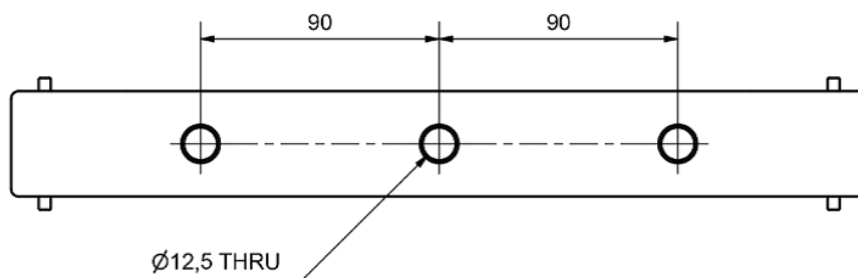
Make sure that the position is sufficiently ventilated.

⚠️

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

An integrated beam blocking hardware is integrated in the projector for safety reasons. This convenient masking plate sets 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 tigthen the screw again.
The masking plate set offers 4-ways masking (top/bottom/left/right) and can furthermore be rotated on its center axis using the top right holder.
Do not move masking plates during laser operation as light scattering could occur..

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## 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 4 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.

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## 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" or „Test10%" 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. |
| Green fast blinking emission LED is constantly on | Laser is in automatic „Standby" or „Shutdown" mode. This occurs if the laser is in the „Run" mode but no internal ILDA signal has been present for more than some seconds (adjustable). The laser switches back to „Run" immediately when the internal ILDA signal comes back again. A lot of heat dissipation can be saved in this mode. Your projector stays cooler especially in higher ambient temperatures. The power of the fans will be reduced -> less noise. |
| Red Blinking | Warning! The temperature sensor for the heat sink is failing. However, the laser can still be operated. |
| Red constantly on | Error! 1. If „Run" or „Test" modes are no longer possible a system error has occured. 2. If „Run" and „Test" modes are still possible, it means that one or more laser disable drivers have signalized an error. |

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# 6 Control

The projector can easily be operated using the LA.toolbox software for installation on a PC running Windows or an Apple Mac computer. Please note the minimum requirements for installing the LA.toolbox software.
The LA.toolbox as part of the LA.tools Software Suite can be downloaded on [https://laseranimation.com/en/downloads/](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/](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)

## 6.2 Quick Start guide

To activate laser emission of your PHAENON XS projector, make sure that interlock dongle / E-stop are connected and that your key switch is in ON position.
You might also need to connect your projector to our LA.toolbox monitoring & control software to set the operation state to "Run". If state has been set to "Standby", laser emission cannot resume, unless operator connects to the laser projector using LA.toolbox and set the state to "Run" (highlighted in yellow).

The "Main" tab from LA.toolbox offers great insight of device health and overall condition, for example such as Climate Status (highlighted in green) but also important data about Safety Status (highlighted in red). Maximum output power of device can also be set through the "Power Scale" slider and saved for startup if button is clicked.
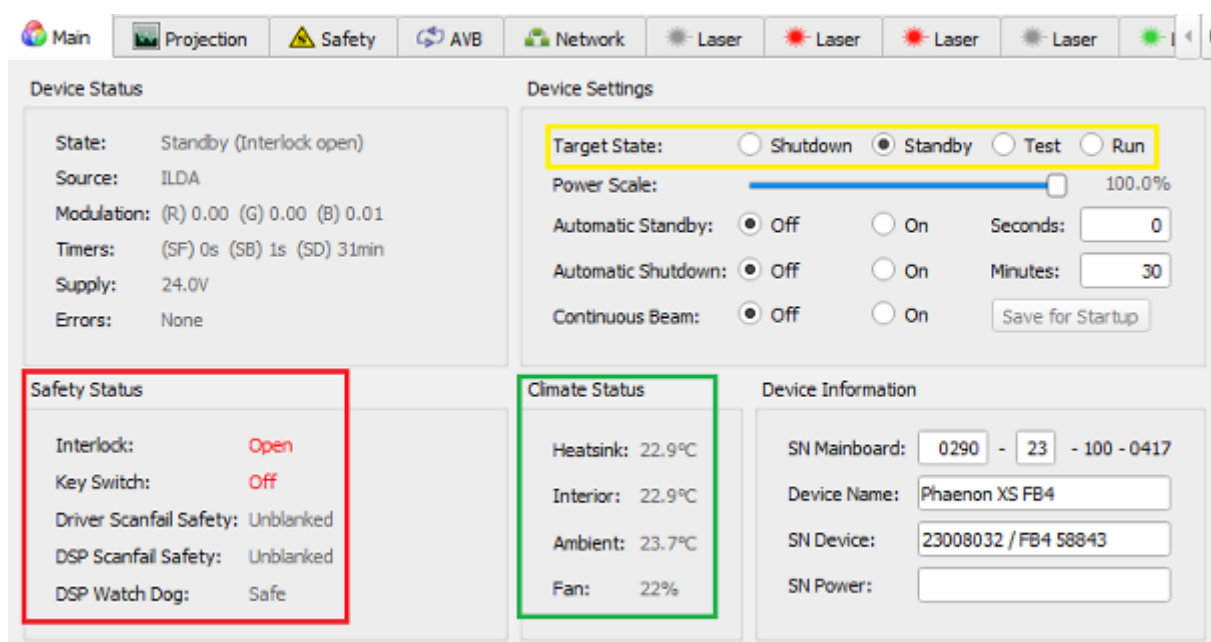


From above screen, we can see that:

- Device state is in "Standby"

- Interlock circuit is Open = E-stop button depressed or interlock connector missing ➔ no laser emission possible – unit state will automatically go to Standby

- Key switch is OFF ➔ no laser emission possible – unit state will automatically go to Standby

The "Projection" tab from LA.toolbox offers various control and adjustment options which will affect the laser projection:

- Source Select:
  Allows for modification of the input control signal between one of below listed possibilities:
  - Input: ILDA ➔ FB4 control mode
  - Input : AVB ➔ AVB / TSN streaming

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- TestPattern: Circle → when activated, projection of a test circle – power defined by Power Scale slider on Main tab.
- TestPattern: DGC → display test pattern used during DGC (Digital Geometric Correction) adjustment
- Media → select SD-card stored .AIFF files and/or timescript files to be played upon receival of suitable NTC (Net-Timecode) from LaserAnimation Sollinger
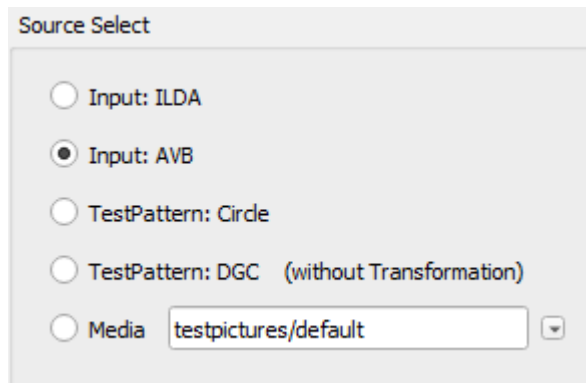


- Transformations

  Allows for modification of horizontal / vertical sizes as well as horizontal / vertical offset. Up to 4 different setups can be stored :

  - None : size 100% on H/V + no offset
  - Setups 1 → 3 : user defined setups. After performing changes, always store settings using "Save" button.
  - Different transformation setups can also be recalled via OSC / TelNet commands



- Digital Geometric Correction

  Powerful tool offering up to 16 different digital geometric corrections, which can be switched over via OSC / TelNet commands, or set manually using LA.toolbox.

  Each DGC zone will convert in realtime incoming input signal to match the pre-configured output zone geometric correction.
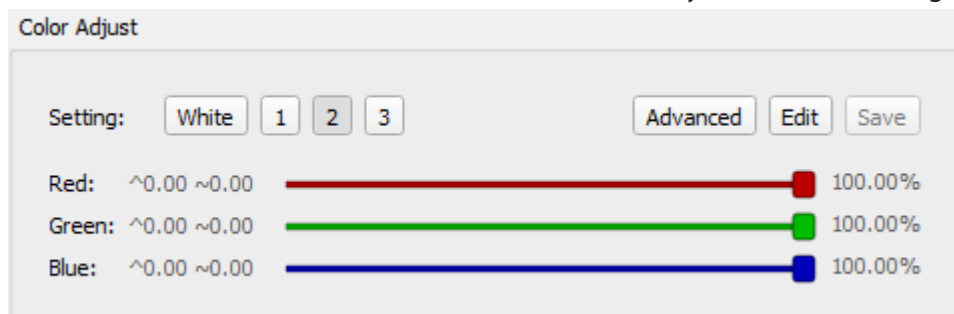
  DGC is also explained in details in our tutorial videos which are available on delivered USB stick.

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- Color adjust

  Allows for modification color settings. Up to 4 different color setups can be stored :

  - White : 100% on RGB
  - 1 ➜ 3 : user defined setups. After performing changes, always store settings using "Save" button.

Advanced buttons allows for modifications of color delay / shift and blanking signal evaluation or not



Safety Tab is explained in details in our "How to.." tutorial videos which are available on delivered USB stick.

## 6.3 FB4 Control

By default, PHAENON XS devices are set as Input source FB4 (shown as Input: ILDA) 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 DMX, set the FB4 to DMX mode (either through LAN FB4 settings or via display & rotary encoder) and connect a suitable DMX cable to the DMX IN port on the back of the device.
All settings relative to FB4 shall be made directly on the FB4 display or remotely through Pangolin software.

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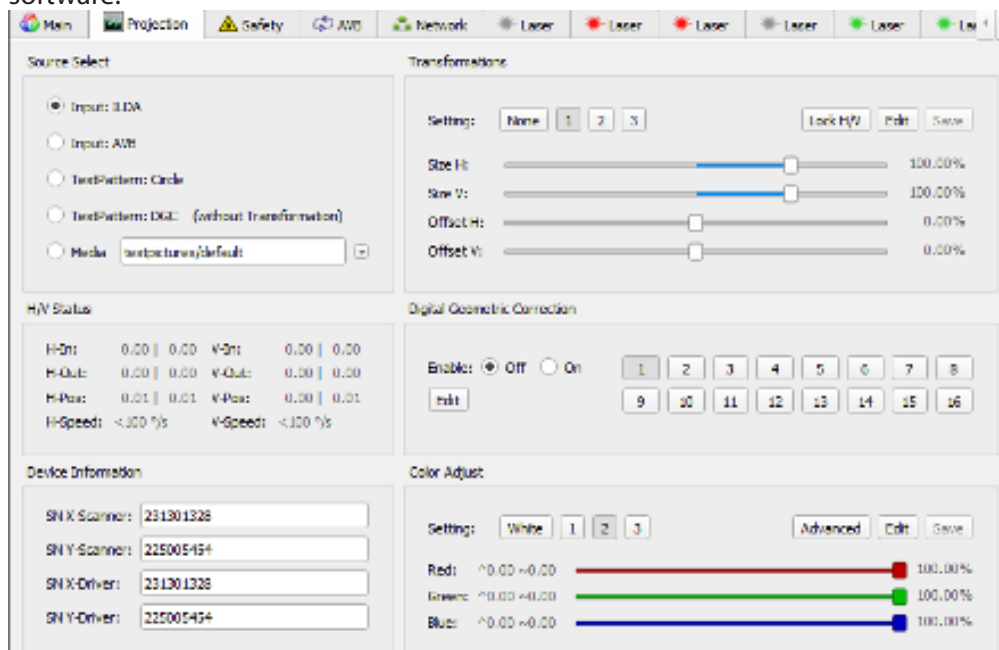
## 6.4 AVB

Your PHAENON XS mainboard is AVB compliant and can be controlled via AVB / TSN stream. Mandatory condition for AVB control : the internal LAN connection from LAS mainboard must not go through the internal network switch (being non-AVB compliant).
Kindly contact your LaserAnimation Sollinger key account should you have questions about this modification.
Further information about AVB stream connection can be found in our tutorial videos.
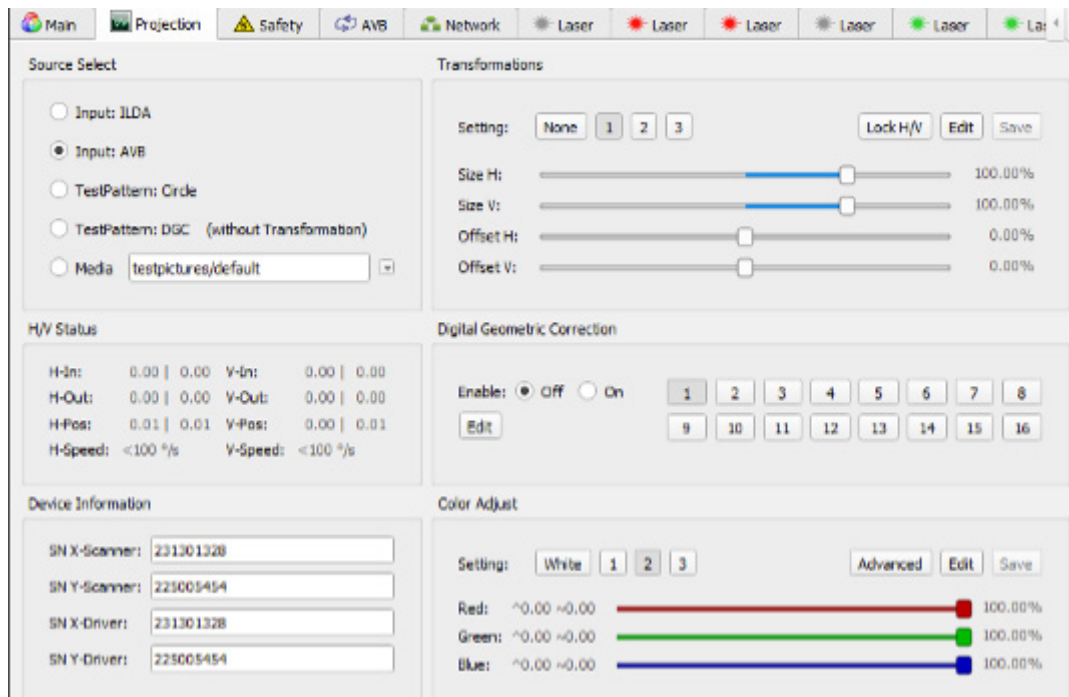


## 6.5 SD card / timescript

Customer saved .AIFF files can be played back via the Media source selection. Browse through the SD card content by clicking on the down arrow on the right side, and click on the desired file to start playback of it. You can also stored a valid timescript file (.tsc) which will contain all pertinent information to the laser projector to react on an incoming NTC Net-Timecode signal. Further information about our timescript solutions can be found in our tutorial videos.

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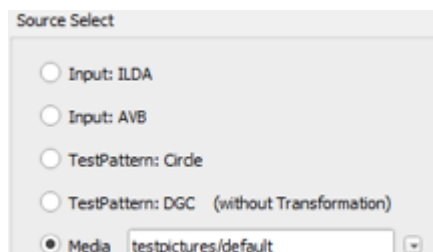
## 7 Pin Assignments

## 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) |

## 7.2.1 Interlock Plug (included)



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.

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## 7.3 DMX

DMX connectors for FB4 DMX control:



DMX in (male)    DMX thru (female)

| Pin No. | DMX in | DMX thru |
|---------|--------|----------|
| 1 | DMX Shield | DMX Shield |
| 2 | DMX In- | DMX THRU- |
| 3 | DMX In+ | DMX THRU+ |
| 4 | n.c. | n.c. |
| 5 | n.c. | n.c. |

Please note that „DMX in" is not terminated with 120 Ohm. This needs to be done externally (most easily using a terminating connector on „DMX thru").

## 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 protector after operation.
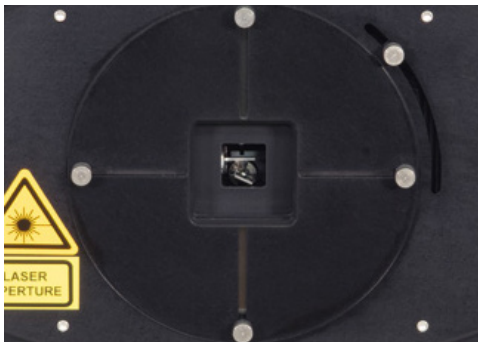


The laser emission window can be polluted during the operation (fog machines, open air operation etc.). A polluted window can reduce the laser output power and influence the beam quality. We recommend the laser output window to be cleaned from time to time. Please use methanol (against finger prints) and/or acetone and lens paper for cleaning.

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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.

## 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
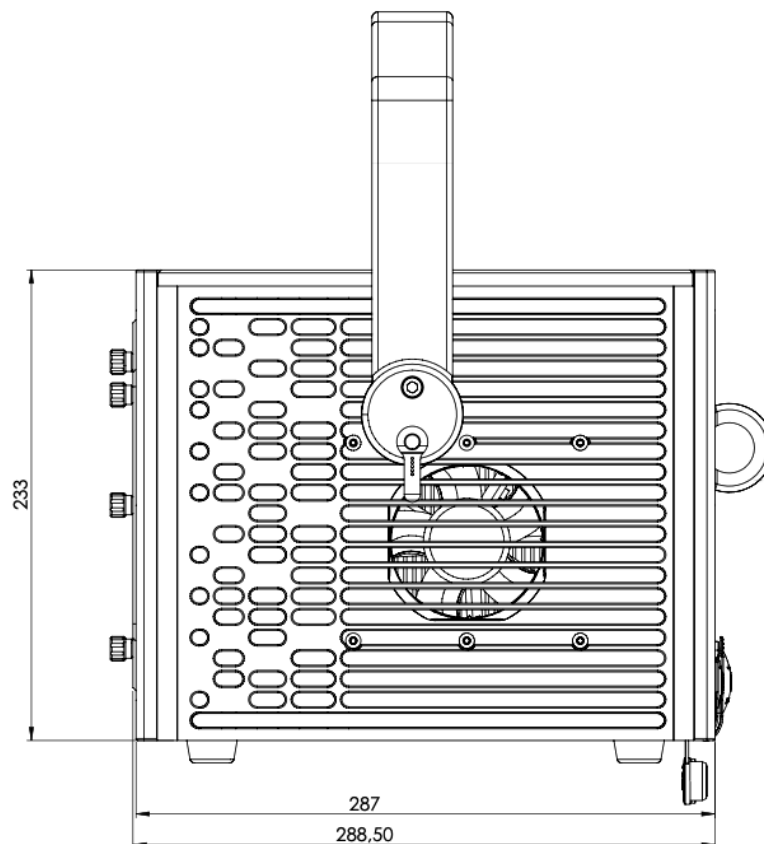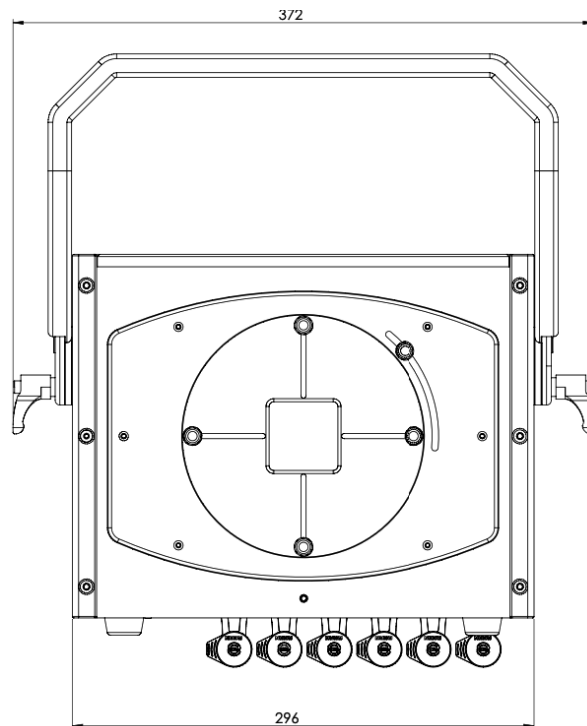and frequency fluctuations.
We recommend the online UPS type

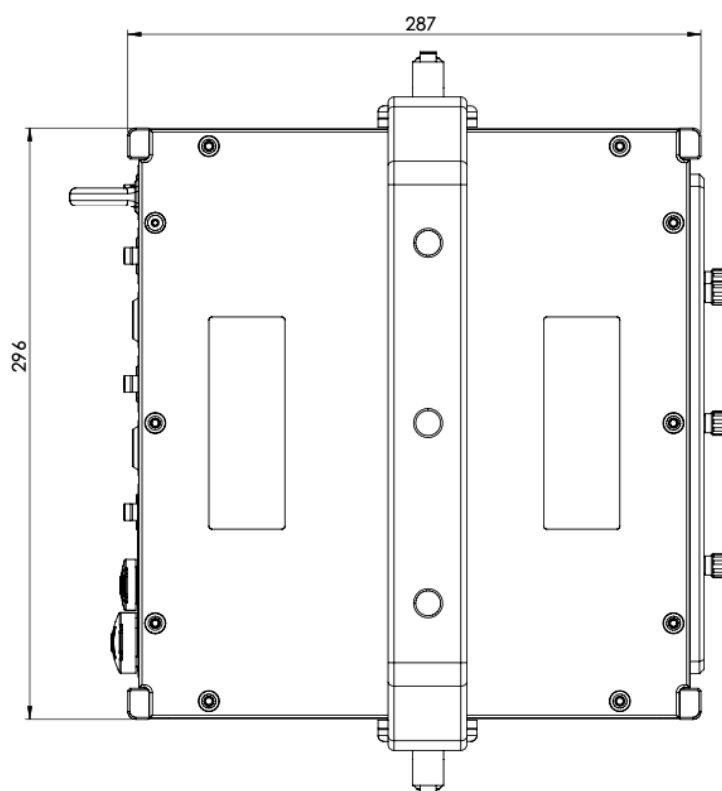APC Smart-UPS SRT 2200 VA, 230 V  SRT2200XLI" by APC Schneider Electric Inc.

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

## 12 Technical Drawings - PHAENON XS

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PHAENON XS
Dimensions in mm
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## 13 Technical Specifications

| Device dimensions (L x W x H) | 289 x 296 x 233 mm (w/o bracket) | | |
|---|---|---|---|
| Laser Source | Laseranimation Sollinger RSL Gen. 3 | | |
| Type | CW analog modulated, laser class 4 | | |
| Typical wavelengths | 637 nm | 525 nm | 455 nm |
| Scan fail safety | 500°/s minimum scanner speed | | |
| Observation time | 1 ms | | |
| Beam divergence* | 0.7 mrad* | | |
| Beam diameter | 5 mm | | |
| Operation mode | AVB / TSN interface, AIFF player function, stand-alone player, DMX / Art Net, Control software "LA.toolbox" included | | |
| Power supply | 85 VAC – 264 VAC, 50 - 60 Hz, universal | | |
| Operationg temperature | + 5°C - +45°C | | |
| IP rating | IP65 | | |
| Connectors | | | |
| AC Mains Connector | powerCON TRUE1 | | |
| Remote | 3pin XLR (external key switch, interlock) | | |
| DMX in /thru | 5pin XLR | | |
| LAN | RJ-45 Jack | | |
| Optional Built-in | LA.brush | | |

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| Device-dependent laser specifications | | |
|---|---|---|
| **PHAENON XS 15** | | |
| Total power (after optics) | 13,000 mW | |
| Power per color | 4,500 mW (637 nm) | 6,600 mW (525 nm) | 6,000 mW (455 nm) |
| Scanner system | 45 kpps 8° | |
| Scan angle | max. 50° | |
| Power consumption | 600 W | |
| Weight (net) | 20 kg | |
| **PHAENON XS 15 CT** | | |
| Total power (after optics) | 13,000 mW | |
| Power per color | 4,500 mW (637 nm) | 6,600 mW (525 nm) | 6,000 mW (455 nm) |
| Scanner system | CT-6210 with LAS Turboscan driver; 60 kpps 8° | |
| Scan angle | max. 60° | |
| Power consumption | 600 W | |
| Weight (net) | 20 kg | |
| **PHAENON XS 30** | | |
| Total power (after optics) | 26,500 mW | |
| Power per color | 9,000 mW (637 nm) | 13,200 mW (525 nm) | 12,000 mW (455 nm) |
| Scanner system | 45 kpps 8° | |
| Scan angle | max. 50° | |
| Power consumption | 800 W | |
| Weight (net) | 20 kg | |
| **PHAENON XS 30 CT** | | |
| Total power (after optics) | 26,500 mW | |
| Power per color | 9,000 mW (637 nm) | 13,200 mW (525 nm) | 12,000 mW (455 nm) |
| Scanner system | CT-6210 with LAS Turboscan driver; 60 kpps 8° | |
| Scan angle | max. 60° | |
| Power consumption | 800 W | |
| Weight (net) | 20 kg | |

*FWHM average depending on model

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# EU Declaration of Conformity
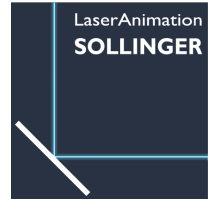
## Manufacturer:
LaserAnimation Sollinger GmbH

## Product Name:

| | |
|---|---|
| PHAENON XS 15 | PHAENON XS 30 |
| PHAENON XS 15 CT | PHAENON XS 30 CT |

Products covered by this declaration: Laser display systems

We here declare that the product described above is in conformity with the following directives:

— 2014/35/EU Low Voltage Directive
— 2014/30/EU Electromagnetic Compatibility Directive
— 2014/53/EU Directive for harmonisation of the laws of the Member States relating to the making available on the market of radio equipment

The following harmonized standards have been applied:

— DIN EN 61000-6-1 VDE 0839-6-1:2007-10
  Electromagnetic compatibility (EMC)
  Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments
— DIN EN 61000-6-2 VDE 0839-6-2:2006-03
  Electromagnetic compatibility (EMC)
  Part 6-2: Generic standards - Immunity for industrial environments
— DIN EN 61000-6-3 VDE 0839-6-3:2011-09
  Electromagnetic compatibility (EMC)
  Part 6-3: Generic standards – Emission standard for residential, commercial and light-industrial environments
— DIN EN 61000-6-4 VDE 0839-6-4:2011-09
  Electromagnetic compatibility (EMC)
  Part 6-4: Generic standards – Emission standard industrial environments
— DIN EN 60825-1 VDE 0837-1:2015-07
  Safety of laser products
  Part 1: Equipment classification and requirements
— DIN EN 55032:2016-02 VDE 0878-32:2016-02
  Electromagnetic compatibility of multimedia equipment - Emission Requirements

The included technical documents (files) demonstrate that the product has been produced according to the requirements of the abovementioned directives.
The EU declaration of conformity is available for inspection by the market surveillance authorities at any time.

Berlin, 02.06.2025

Martin Werner

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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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