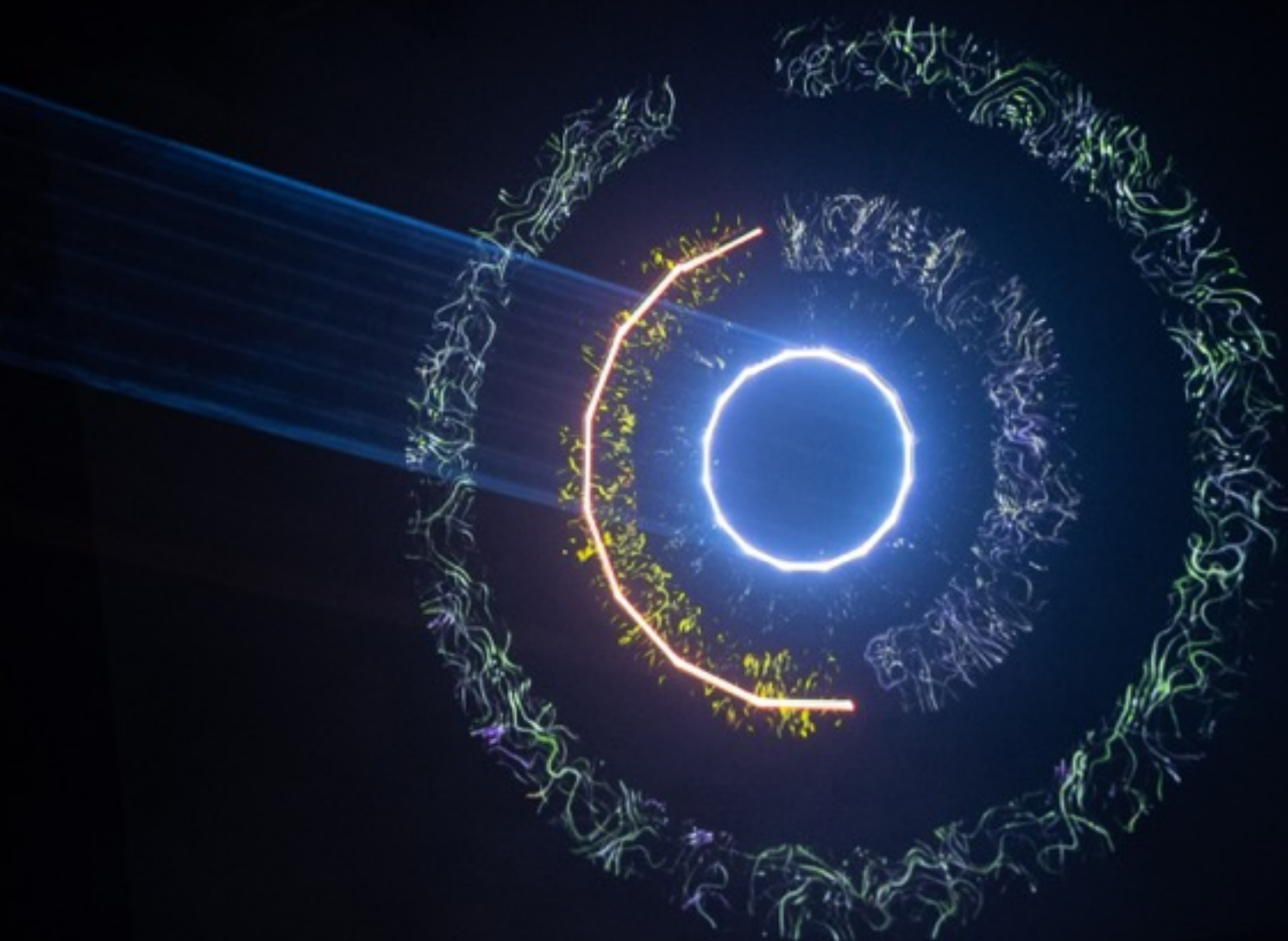


hex /A\

TECHNICAL RIDER (2022)

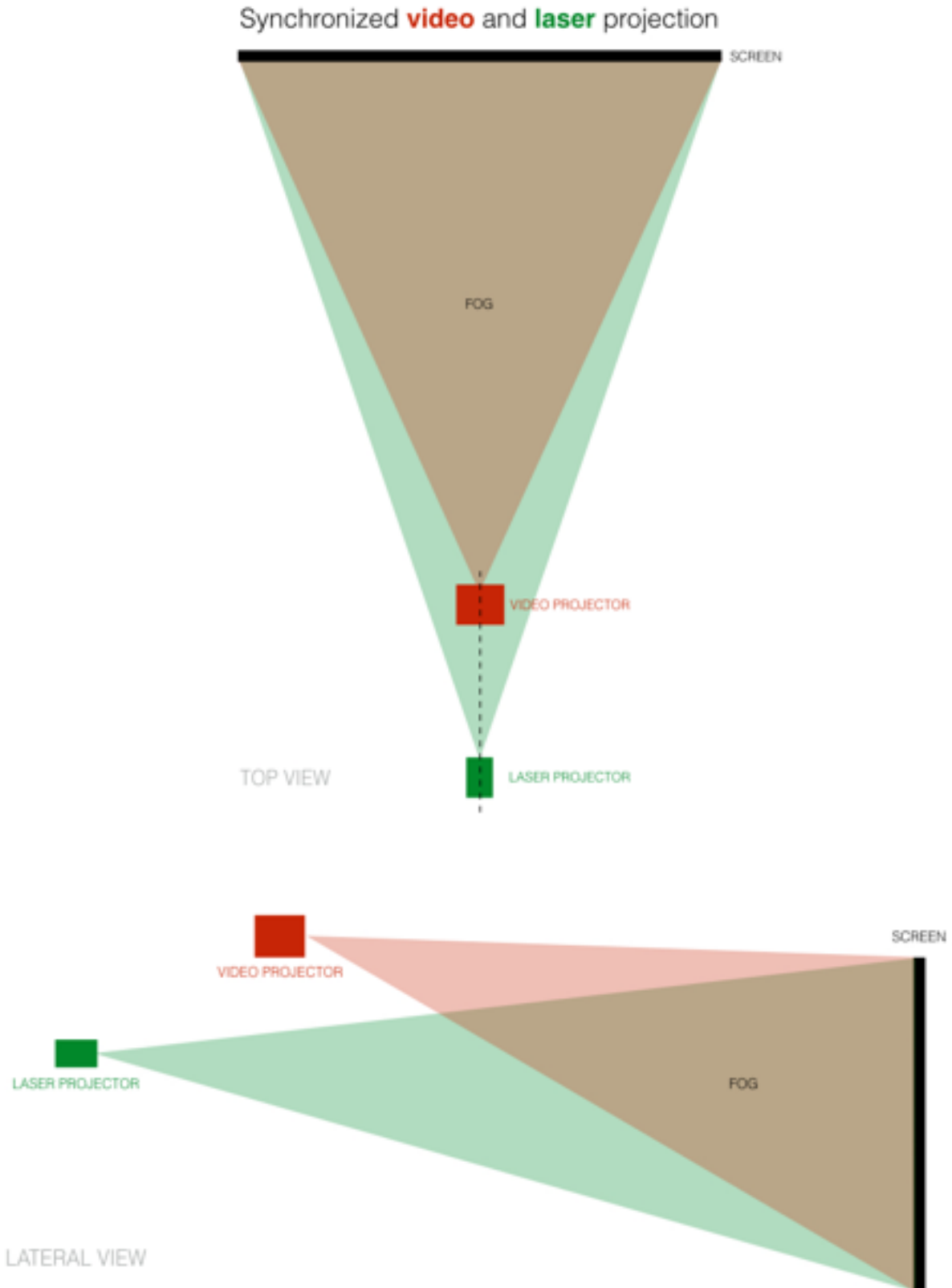


1 - OVERVIEW

hex/A| is a synchronized Audio / Video / Laser performance. It requires a regular screen for single channel front video projection and single channel front laser projection, fog and stereophonic sound system.

NB : Laser is provided and transported by the artist (see below).

The work is the result of a lot of preparation and dedication. We will make sure to deliver the best possible performance. For any information, please, feel free to contact alex.augier@gmail.com



2 - STAGE

Regular screen is required on stage. It should have the following minimal dimensions: 7 meters width and 4 meters height. Bigger is better !

Table for the artist equipment is required on stage. It should have the following minimal dimensions: 100 cm width, 80 cm deep, 110 cm height. The artist will be on the left or right part of the stage, out of the laser field.

AC power for the artist equipment is required on stage: 2 x 110V or 220V European plug.

Stage must be **secured**.

3 - VIDEO

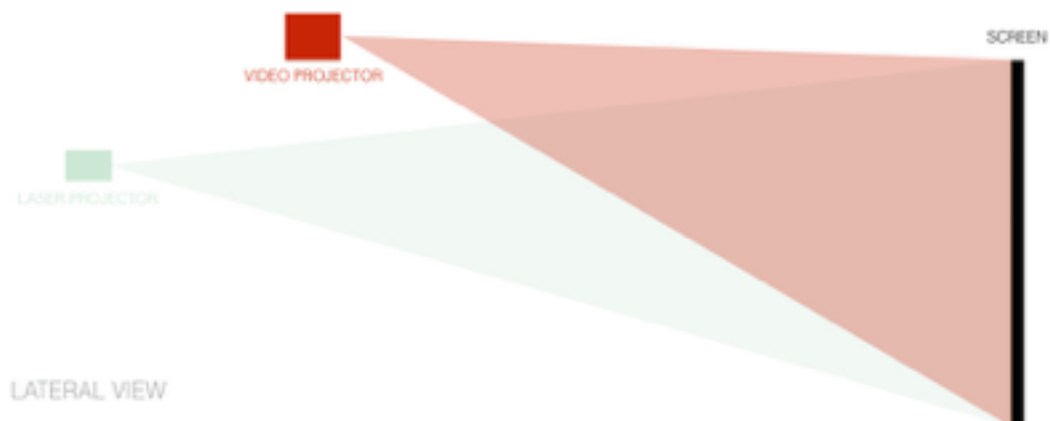
The video projection needs to be of high quality, carefully aligned, and adjusted. The video projection should cover as much of the audience's field of vision as is possible.

A single channel of **HDMI** signal is provided from a laptop located on stage, next to the artist.

The minimal resolution of the video signal is **full HD** (1920 x 1080).

Video équipement : High quality video projector capable of accepting HDMI full HD signal, capable of projecting a bright and clear image over the entire projection area, mounted and lensed appropriately to cover the screen, **minimal 10 000 lumens**, high contrast (laser technology is preferred), appropriate **front** projection video screen.

All cables and adapters necessary to route the HDMI signal from the computer to the video projector have to be provided by the organizer.



4 - LASER

The laser is provided by the artist : **ECS RGB 6W**. It satisfies all the CE standards and directives. **Certificate of compliance** and technical specifications are provided in the Annexes section.

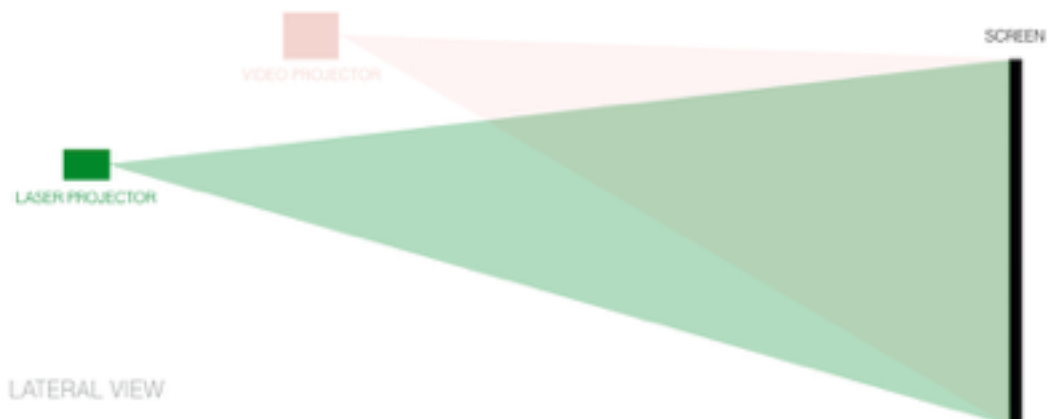
It is transported in a Pelicase by train or plane (no overweight and no oversize).

Setup and use of the laser is ensured by the artist himself because he has a level 3 laser safety training. **This training was provided by Laser Conseil and respects all European standards. Certificate of training is provided in the Annexes section.**



The laser needs to be :

- Installed as far as possible from the screen (*smaller the aperture angle, more effective it is*). Ideal aperture : 20°, maximal aperture : 40°
- Carefully centered in relation to the screen in width and in the axis of the video projector (*top view*)
- Carefully centered in relation to the screen in height (*lateral view*). However, it must be installed out of reach of the public, at least 3 m from the floor, and must be hung in such a way that it cannot be moved under the effect of disturbances such as crowd movements, vibrations.



Only laser scanning is done. Laser shot is impossible due to software and hardware securities (*Laser scanning: beam emitted in permanent motion. Laser shot: straight and static emitted beam*).

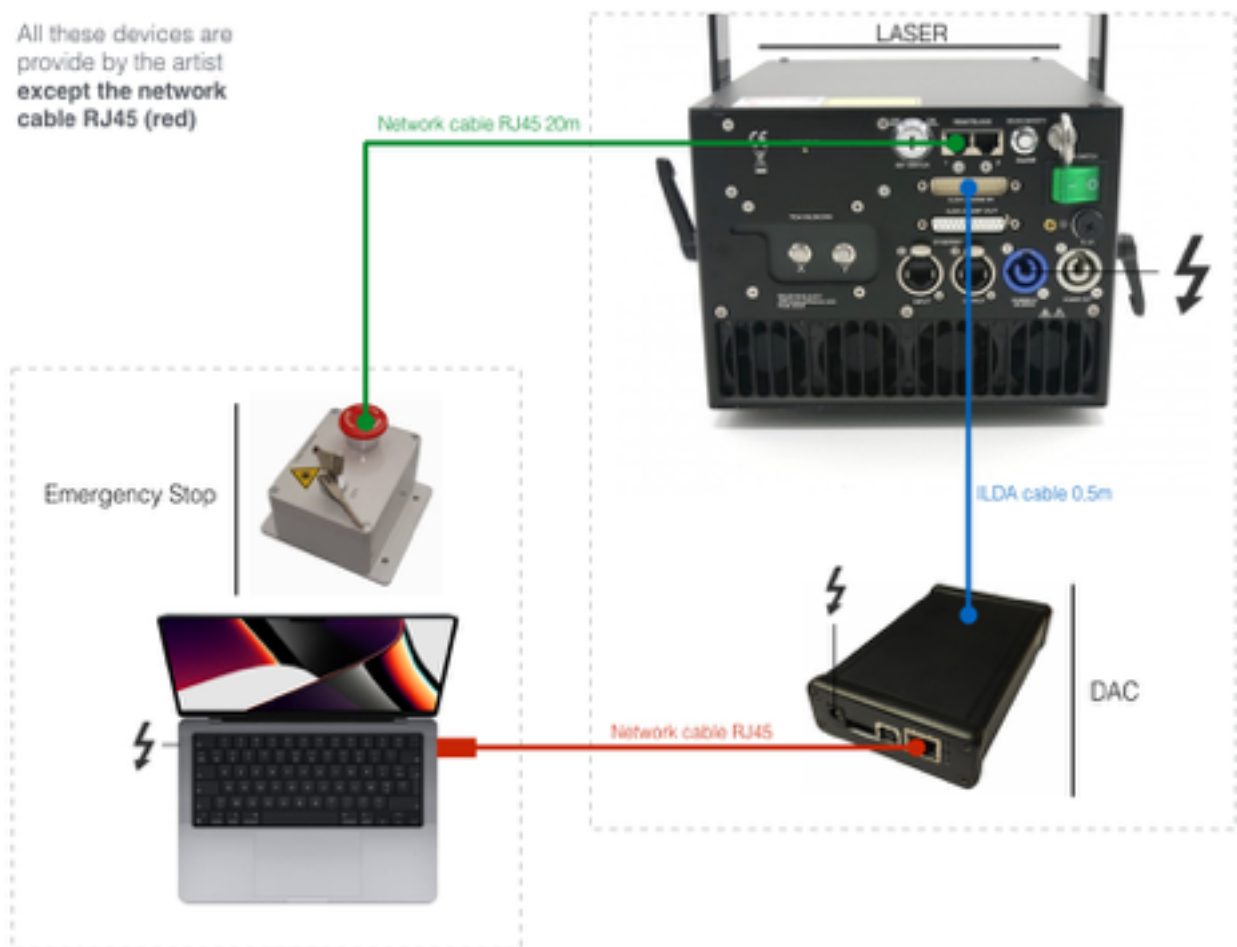
Laser cannot emit outside the screen because the **scan area is controlled** by software and hardware securities. So, the setup avoid any specular reflections.

The setup must not be able to allow the public and any people to be able to be in the scanning field of the beam. Some accesses may be condemned to make sure that people keep out of the laser field. It is possible to use pictograms.



A punch-type emergency stop system is installed on the laser power supply (cable : 20 meters).

The laser is controlled from the laptop via a DAC *Ether Dream*. The DAC is connected to the laser with a ILDA cable 0,5 m, provided by the artist, and needs a power supply. The laser signal is sent to the DAC with a network cable (RJ45) that must be provided by the organizer.



The laser setup needs to be checked directly with the artist in the order to make sure that it will work fine and it will be safe for any people. Please, feel free to contact the artist directly : alex.augier@gmail.com

5 - FOG

Fog machine is required. It is a fundamental aspect of the performance because it allow to the laser beam to be visible. Fog must be **diffuse and homogeneous**.

Fog have to be present in the venue during setup and performance. One technician have to check the fog quality in the venue during the showtime and controlled the fog quantity if necessary in the order to have a beautiful visibility of the laser beam.

6 - AUDIO

The performance uses a stereophonic diffusion and requires a powerful and balanced stereophonic sound system that needs to be able to deliver undistorted signal over the whole frequency range from 20Hz - 20 KHz. This system must includes appropriate **subwoofers** and **sound monitors**.

The artist provides **2x channels** of audio signal. Audio signal come from a RME Fireface UC soundcard (on stage next to the artist) and are line level analog audio, on balanced 1/4" TRS Jack. Audio signal from the soundcard is routed directly to the house mixing board via DI boxes. The organizer have to provide all audio cables necessary including 2x 1/4" TRS cable to connect the soundcard to the DI boxes.

Subwoofers : low-frequency mix of the stereo channels

Sound monitors.: 2x, on stage

The organizers must provides all audio cables necessary

7 - VARIOUS

7.1 Venue

- Stage must be secured
- Sound and video technician must be present during balance and performance

7.2 Power supplies

The project requires **2x power supplies**, on stage.

Laser + DAC requires **2x power supplies**, as described previously.

8 - CONTACT

alex.augier@gmail.com

+33 (0)6 24 40 82 61

MATERIALS PROVIDED BY THE ORGANIZER

- 1x video projector
- All video cables necessary to route a single channel video signal from the computer to the video projector (HDMI)
- Any devices required to hang the laser
- 1x Network cable RJ45 with appropriate length (from the laptop on stage to the DAC next to the laser)
- Stereophonic sound system (including monitors on stage)
- All audio cables and DI boxes necessary to route a 2-channels audio signal from the soundcard (output 2x Jack 1/4")
- 1x table for the artist equipments on stage (100 x 80 cm minimal, 110 cm height)

MATERIALS PROVIDED BY THE ARTISTS

- Laser ECS RGB 6W
- Emergency stop with 20 m specific cable
- DAC Ether Dream
- Soundcard RME Fireface UC
- Laptop Macbook Pro
- Controllers Monome Grid 128, Grid 64 and Arc

AUDIO / VIDEO / LASER / STAGE SETUP + CHECK = 3 HOURS

Certificate of Compliance



No. 00150804.LST042

Test Reports no. ATT-2015SZ0717088E, ATT-2015SZ0717088S

Certificate's
Holder:

LIGHTING SPACE LIMITED

Bangshen Yi Road, Jinghu Avenue, Huadu District,
Guangzhou City, Guangdong Province, China
510805

Certification ECM
Mark:



Product:
Model(s):

Laser Projector

RGB700, RGB2000, RGB3000, RGB6000,
RGB12000, RGB22000, RGB30000.

Rated Voltage: 110/230 V AC; Frequency: 50-60 Hz;
Input Power: 120/150/200/350/450/600/1000 W

Verification to:

Standard:

EN 55022:2010, EN 55024:2010,
EN 60950-1:2006+A11:2009+A1:2010+
A12:2011+A2:2013, EN 61000-3-2:2014,
EN 61000-3-3:2013

related to CE Directive(s):

2014/35/EU (Low Voltage)

2014/30/EU (Electromagnetic Compatibility)

Remark: The product(s) has been verified on a voluntary basis. The product(s) satisfies the requirements of the Certification Mark of ECM, in reference to the above listed Standard(s). The above Certification Mark can be affixed on the product(s) accordingly to the ECM regulation about its release and its use. Regulation can be found at www.entecerma.it.

Whereas the Manufacturer is responsible of the CE certification of the product(s) and not exempted to perform all the necessary activities before placing the product(s) on the market.

The Manufacturer is also responsible to maintain efficient the internal production control to ensure the product(s) are in compliance with the Certification ECM Mark.

This certificate can be checked for validity at www.entecerma.it

Date of issue 04 August 2020

Expiry date 03 August 2025

Chief Manager
Tim Mahan



Deputy Manager
Vigia Miller



Ente Certificazione Macchine Srl

Via Cassinella, 45 – Loc. Castello di Serravalle – 40053 Valsamoggia (BO)

+39 051 6705141

+39 051 6705156

info@entecerma.it

www.entecerma.it

ECS RGB6000

PRODUCT SPECIFICATION SHEET



Type	Full-color RGB laser projector
Suitability	Indoor laser display
Source	Full diode
Class	4
Guaranteed Power at aperture	5800 mW
Power Blue	2500 mW Diode 445nm (1.0 mrad full angle, 3 mm * 3 mm - 1 diode)
Power Green	1800 mW Diode 520nm (1.0 mrad full angle, 3 mm * 3 mm - 2 diodes)
Power Red	1500 mW Diode 637nm (1.0 mrad full angle, 3 mm * 3 mm - 8 diodes)
Modulation	Analogue
Beam size	3 mm
Beam divergence	1.0 mrad (full angle)
X-Y Scanners	40 Kpps @ ± 25°, Maximum 30 Kpps @ ± 40° (PT 42K)
System control	ILDA
Power Requirement	110/230 V AC, 50-60 Hz, Neutrik powerCON TRUE1

Size	220 * 266 * 166 mm
Weight	10 Kg
Compliant with	EN 60825-1
Laser safety features	Keyed interlock, scan safety, adjustable aperture masking plate, emergency STOP system with keyed remote and manual RESTART button



**FORMATION PROFESSIONNELLE
ATTESTATION DE FORMATION
« SÉCURITÉ LASER »**



LASER CONSEIL certifie que :

Monsieur Alexandre AUGIER

a suivi avec assiduité le stage de formation :

« Laser & sécurité » - Niveau 3 – Responsable Sécurité Laser

organisé les lundi 10, mardi 11 & mercredi 12 janvier 2022

et a satisfait au contrôle des connaissances réalisé en fin de session

En référence aux articles R. 4452-3, R. 4452-19 & R. 4452-21 du Code du Travail
(Décret N° 2010-750 du 2 juillet 2010)

Fait à Lannion, en un exemplaire, le vendredi 21 janvier 2022

LASER CONSEIL
5, rue Fulgence Bienvenue
22200 LANNION
☎ 02.96.48.79.96 - ☎ 02.96.48.79.97
✉ info@laserconseil.fr - www.laserconseil.fr
S.A.R.L au capital de 10 000 € - RCS Saint-Brieuc 432 173 524 00021
APE 7112B - N° T.V.A. FR 57 432 173 524

Directeur

CONSEIL – FORMATION – AUDIT – ASSISTANCE TECHNIQUE – MARQUAGE CE – PROTECTEURS

LASER CONSEIL – Technopôle Anticipa – 5, rue Fulgence Bienvenue – 22300 Lannion

☎ 02.96.48.79.96 - ☎ 02.96.48.79.97 - ✉ info@laserconseil.fr & www.laserconseil.fr
S.A.R.L. au capital de 10 000 Euros - RCS Saint-Brieuc 432 173 524 00021 - APE 7112B
T.V.A. Intracommunautaire N° FR 57 432 173 524

SETUP EXAMPLE (Residency in Salle Micro, Stereolux, Nantes, France)

