ECLIPSE

SOLAR
RGB-700

700mW RGB Laser
User Manual

IMPORTANT NOTICE

- Read the instruction manual thoroughly prior to using the unit.
- Keep this manual for future reference.
- Keep the packaging so that the unit can be shipped in the original packaging in order to avoid damage.
- Make sure that there is sufficient cooling in the mounting area.
- Never plug or unplug the unit with wet hands.
- If the plug and/or mains lead are damaged, they need to be repaired by a qualified technician.
- If the unit is damaged to an extent that you can see internal parts, do not plug the unit into a mains outlet.
- Keep away from heat and direct sunlight. Make sure that neither liquids, nor small objects can enter the unit through the ventilation holes.
- Do not look directly into the lens when powered on
- Only clean the unit with a damp, dust free cloth. Do not use cleaners or solvents!
- Repairs have to be carried out by a qualified technician only.
- Only connect this unit to an earthed mains outlet of 230Vac/50Hz and 10-16A.
- Always unplug the unit during an electrical storm or when it is not in use.
- When you unplug the unit from the mains always pull the plug, never the lead.
- The unit does not contain any user replaceable parts other than those specified in this manual.
- Keep out of the reach of children.

LASER SAFTY INFORMATION

Laser projectors and effect units are different from all other types of entertainment lighting, and require extra care when using them. A laser is a special type of light that projects a straight light beam. The word "laser" itself is an acronym which stands for Light Amplification through Stimulation of Emitted Radiation. The light that comes out of a laser is emitted in radiation form and is done so via the process of stimulated emission. Lasers are divided into 4 main classes (based on their power output), the most common ones used in the entertainment industry are Class 3B, and Class 4.

Class 3B lasers are hazardous if the eye is exposed directly, but diffuse reflections such as those from paper or other matte surfaces are not harmful

Class 4 is the highest and most dangerous class of laser, including all lasers that exceed the Class 3B AEL. By definition, a class 4 laser can burn the skin, or cause devastating and permanent eye damage as a result of direct, diffuse or indirect beam viewing. These lasers may ignite combustible materials, and thus may represent a fire risk. These hazards may also apply to indirect or non-specular reflections of the beam, even from apparently matte surfaces—meaning that great care must be taken to control the beam path. Class 4 lasers must be equipped with a key switch and a safety interlock.

> *It is never advised to aim a laser projector / effect unit into a crowd or anywhere that may come into contact with someone's face or body, as you may cause serious / permanent injury.

- Do not point lasers at people or animals.
- Never look into the laser aperture or laser beams, this can potentially cause instant eye injury or blindness if laser light directly strikes the eyes.
- Do not point lasers in areas in which people can potentially get exposed, such as uncontrolled balconies, etc.
- Install the laser units such that laser beams above the audience move See section later in this manual.
- Test the laser units always first before the public is present.
- Do not point lasers into the public or at highly reflective surfaces such as windows, mirrors and shiny metal. Even laser reflections can be hazardous.
- Never point a laser at aircraft or into the sky, this is a federal offence.
- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- Do not expose the output optic (aperture) to cleaning chemicals.
- The operation of a laser is only allowed if the show is controlled by a skilled and well-trained operator familiar with the requirements that are needed.
- Do not use laser if housing is damaged or open, or if optics appear damaged in any way.
- Never leave this device running unattended.
- Always use appropriate lighting safety cables when hanging lights and effects overhead.

The legal requirements for using laser entertainment products vary from country to country. The user is responsible for the legal requirements at the location/country of use.
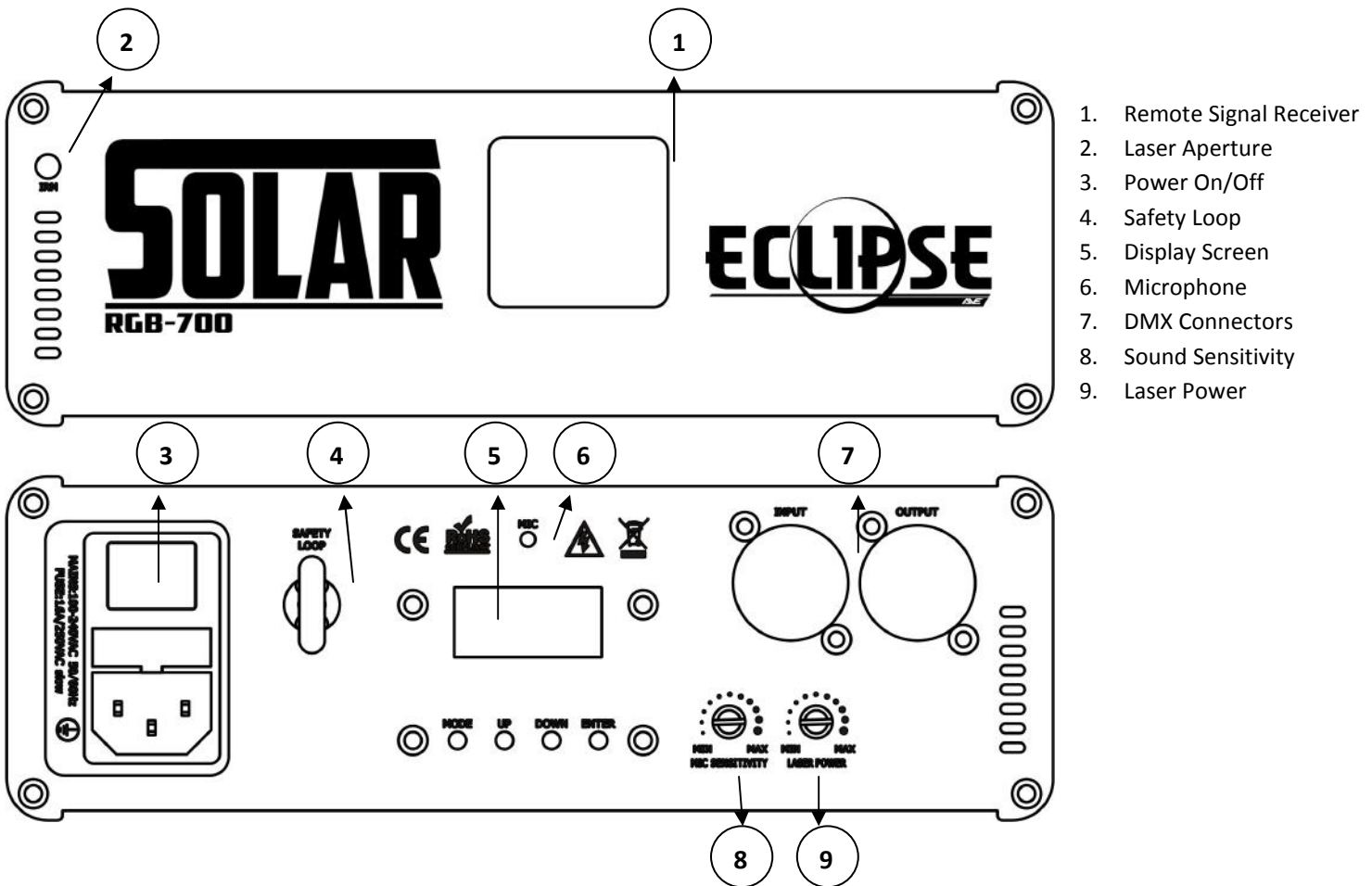
Safety Recommendations:

- Always connect the Solar700 to a mains wall outlet or an earthed mains lead.
- Do not obstruct the openings on the housing in order to ensure a proper cooling.
- Do not aim directly into an audience
- Do not place any objects on the Laser projector.
- Do not look directly into the Laser projector

Installation and use:

1. Unpack the unit. Ensuring all packaging is removed from the machine
2. Connect to mains power and turn power on.
3. Set the fixture to the desired mode / program via the control panel or included IR remote control.

Front and Rear Panel View:

1. Remote Signal Receiver
2. Laser Aperture
3. Power On/Off
4. Safety Loop
5. Display Screen
6. Microphone
7. DMX Connectors
8. Sound Sensitivity
9. Laser Power

Menu Display:

Display	Working Mode	Description
AUTO	Auto Mode	Pre-Sequenced Show
SOUD	Sound Mode	Pre-Sequenced Show to Music
d***	DMX Mode	*** is the DMX address (001 - 512)
SLAV	Slave Mode	
tESt	Test Mode	'Up' or 'Down' to select the pattern

DMX Channel

CH1	Mode	0 - 63	Laser OFF
		64 - 127	Auto Mode
		128 - 191	Sound Active
		192 - 255	DMX Mode (CH2~CH8 valid)
CH2	Pattern Select	0 - 255	Selecting built-in patterns
CH3	Zooming	0 - 127	Manual adjust the pattern size
		128 - 255	Loop Zooming In or Out
CH4	X Axis rolling	0 - 127	Manual rolling
		128 - 255	Choose the rolling speed
CH5	Y Axis rolling	0 - 127	Manual rolling
		128 - 255	Choose the rolling speed
CH6	Z Axis rolling	0 - 127	Manual rolling
		128 - 255	Choose the rolling speed
CH7	X Axis Moving	0 - 127	Manual adjust position
		128 - 255	Choose the horizontal moving speed
CH8	Y Axis Moving	0 - 127	Manual adjust the position
		128 - 255	Choose the vertical moving speed
CH9	Colours	0 - 63	Original
		64 - 95	Red
		96 - 127	Green
		128 - 159	Blue
		160 - 191	Yellow
		192 - 223	Pink
		224 - 255	Cyan

Trouble Shooting:

1. If the power indicator is off and the laser doesn't work, please check the power supply and input connection
2. In Sound mode if the power supply indicator is ON and the sound active indicator is OFF but the laser doesn't work;
    a. Check sound sensitivity level
    b. Check run mode is set to Sound Mode and not DMX or Slave Mode.
3. In Master/Slave mode the slave lasers aren't working;
    a. Check that there's only 1 master in the chain
    b. Make sure your connections and cables are secure
    c. Check the master is on an auto mode (sound / auto)
4. In DMX mode, the unit can't be controlled with a DMX controller but the DMX signal is flashing.
    a. Check the DMX address is the same on the controller and the unit
    b. Check the DMX controller is not on 'blackout'
5. If the output beam direction is skewed or of centre, reset the unit. If problem persists return to place of purchase for calibration.
6. If the unit fails, power OFF and wait 5 minutes before powering on again.

If you come across additional problems contact the manufacturer AVE on 03 9706 5325