

## NEC Display Solutions

# How to benefit from the right laser Risk Group

Comparing projectors from different manufacturers, whilst they may provide the same light output and projection technology, with regard to the Risk Group category, some may demand significantly more effort during installation and operation than others.

Projector Risk Groups are regulated, among other things, by the International Electrotechnical Commission, IEC 62471-5:2015 standard. The standard regulates the light transmission inside and outside of the projector and covers the installation and the operation of projectors.

### How does the Risk Group impact your business?

Part of this standard refers to the categorisation of different Risk Groups, based on the hardware design of the projector. Depending on the Risk Group category, end-users and system integrators may have to invest significant effort to meet relevant safety regulations during the installation and operation of the projector.

The information required for a correct projector installation and operation is listed in the user or installation manuals.

For **Risk Group 2** projectors - no out of the ordinary safety procedures are required.

For **Risk Group 3** projectors - important safety measures must be adhered to.

Here are some key extracts listed in the manuals:

- Risk Group 3 projectors are only allowed for professional usage.
- For projectors used in overhead installations, a 3m distance is recommended between the floor and the RG3 area. This area, also known as the hazardous distance in front of the projector, must be maintained to restrict entry.
- The end-user is responsible for compliance to the safety procedures.
- The administrator/supervisor must set up a barrier to restrict anyone from entering the RG3 area in front of the projector.
  - This precaution ensures that nobody can look directly into the light beam.
  - The barrier position must maintain a safety zone of at least 1.5m beyond the RG3 area.
- The integrator must request information from the projector supplier regarding the RG3 area.

### How you can benefit from NEC laser projectors

Effortless operation of audio visual equipment is key, enabling you to focus on the operation of your business. The effort resulting from different Risk Group categories has a decisive influence on a projector's TCO calculation.

All the NEC laser projectors up to 10,000 ANSI lumen light output listed below are Risk Group 2 compliant. This means that there are no prescribed safety precautions necessary and therefore installation and operation requires less effort.

Manufacturer	Projector, Brightness	RISK GROUP 2
NEC	<b>P502HL-2</b> 5,000 lm	✓
	<b>PA653UL</b> 6,500 lm	✓
	<b>PA803UL</b> 8,000 lm	✓
	<b>PX602UL</b> 6,000 lm	✓
	<b>PX602WL</b> 8,000 lm	✓
	<b>PX803UL</b> 8,000 lm	✓
	<b>PX1004UL</b> 10,000 lm	✓
	<b>PX1005QL</b> 10,000 lm	✓

For further information, please take a look at the NEC Risk Group Whitepaper available via our web site [www.nec-display-solutions.com](http://www.nec-display-solutions.com)



The information provided in this brochure is aimed at offering a general understanding of Risk Groups and is not intended to be legal advice or conclusive in any way. Besides the IEC requirements, national regulations need to be taken into consideration.

This document is © Copyright 2017 NEC Display Solutions Europe GmbH. All rights are reserved in favour of their respective owners. The document, or parts thereof, should not be copied, adapted, redistributed, or otherwise used without the prior written permission of NEC Display Solutions Europe GmbH. This document is provided "as is" without warranty of any kind whatsoever, either express or implied. Errors and omissions are excepted.

NEC Display Solutions Europe GmbH may make changes, revisions or improvements in, or discontinue the supply of any product described or referenced in this document at any time without notice.