

# Laser requirements for US customers

As a requirement of the FDA variance for Christie Cinema/Enterprise fixed type installations and Enterprise rental/laser light show type installations of laser illuminated projectors (LIPs) containing Risk Group 3 LIPs, installers must complete training to perform laser installations safely.

This document provides general guidelines for customers, dealers, partners, and so on to understand the FDA laser requirements based on the installation setup as well as the laser safety standards for Christie.

For further questions or clarifications not answered by this document, contact the Christie Laser Compliance group at [lasercompliance@christiedigital.com](mailto:lasercompliance@christiedigital.com).



Enterprise refers to a non-Cinema laser projection system installation.

## Permanent show installations

Learn what is required by the FDA variance for permanent show installations.

### Cinema installation

The following table lists the requirements for a permanent Cinema installation.



Online training is not required for permanent Cinema installations.

Requirement	Description	Link
Christie Laser Projection System Installation Checklist	Checklist to ensure Christie laser projection system installations meet local, municipal, and federal standards.  The checklist must be filled out and submitted to <a href="mailto:lasercompliance@christiedigital.com">lasercompliance@christiedigital.com</a> . A copy of the checklist can remain on-site.	<a href="https://bit.ly/3Awq788">https://bit.ly/3Awq788</a>
US state registration (if applicable)	For current regulations, review the laser regulations of the state where the laser projector will be installed.	<a href="#">Laser registration for US states (on page 4)</a>
Laser warning signage	Signage is required to clearly identify the projection room to warn of laser and restricted access.	—

Requirement	Description	Link
Restricted entry to projector room	Entry to the projector room and access to the projector must be restricted by physical means (such as key, pass code locks, and so on).	—
Installation and Setup guides and User manuals	Information for installing, setting up, and operating the laser illuminated projector.  For the latest version of the manuals, on the Christie website, search for the product being purchased and switch to the <b>Downloads</b> tab.	<a href="http://www.christiedigital.com">www.christiedigital.com</a>

### Enterprise installation

The following table lists the requirements for a permanent Enterprise installation.

Requirement	Description	Link
EXTERNAL - Laser safety awareness training Course code: CS-ELSA-01	Training on the requirements of the FDA issued variance surrounding the proper installation of a laser illuminated projector (LIP).  Upon completion of the training, installers receive an email notification. The Christie Laser Compliance group also receives a dated training record from Christie University.	<a href="http://www.christieuniversity.com">www.christieuniversity.com</a>
<i>Christie Laser Projection System Installation Checklist</i>	Checklist to ensure Christie Enterprise laser projection system installations meet local, municipal, and federal standards.  The checklist must be filled out and submitted to <a href="mailto:lasercompliance@christiedigital.com">lasercompliance@christiedigital.com</a> . A copy of the checklist can remain on-site.	<a href="https://bit.ly/3Awq788">https://bit.ly/3Awq788</a>
US state registration (if applicable)	For current regulations, review the laser regulations of the state where the laser projector will be installed.	<i>Laser registration for US states (on page 4)</i>
Installation and Setup guides and User manuals	Information for installing, setting up, and operating the laser illuminated projector.  For the latest version of the manuals, on the Christie website, search for the product being purchased and switch to the <b>Downloads</b> tab.	<a href="http://www.christiedigital.com">www.christiedigital.com</a>

## Temporary show installations

The following table lists the requirements for a temporary show installation.

Requirement	Description	Link
Valid FDA laser light show variance	<p>The variance holder must follow the conditions listed by the FDA in the variance.</p> <p>For guidance on applying for an FDA laser light show variance before installation begins, contact <a href="mailto:lasercompliance@christiedigital.com">lasercompliance@christiedigital.com</a>.</p>	<a href="http://www.christieuniversity.com">www.christieuniversity.com</a>
EXTERNAL - Laser safety awareness training Course code: CS-ELSA-01	<p>Training on the requirements of the FDA issued variance surrounding the proper installation of a laser illuminated projector (LIP).</p> <p>Upon completion of the training, installers receive an email notification. The Christie Laser Compliance group also receives a dated training record from Christie University.</p>	<a href="http://www.christieuniversity.com">www.christieuniversity.com</a>
Christie Laser Projection System Installation Checklist	<p>Checklist to ensure Christie Enterprise laser projection system installations meet local, municipal, and federal standards.</p> <p>The checklist must be filled out and submitted to <a href="mailto:lasercompliance@christiedigital.com">lasercompliance@christiedigital.com</a>. A copy of the checklist can remain on-site.</p>	<a href="https://bit.ly/3Awq788">https://bit.ly/3Awq788</a>
US state registration (if applicable)	For current regulations, review the laser regulations of the state where the laser projector will be installed.	<i>Laser registration for US states (on page 4)</i>
Installation and Setup guides and User manuals	<p>Information for installing, setting up, and operating the laser illuminated projector.</p> <p>For the latest version of the manuals, on the Christie website, search for the product being purchased and switch to the <b>Downloads</b> tab.</p>	<a href="http://www.christiedigital.com">www.christiedigital.com</a>

## Laser registration for specific US states

Laser illuminated projectors (LIPs) must be installed according to applicable state or local regulations pertaining to operation of Class IIIb (3) or IV (4) or Risk Group 3 laser systems for public use. These requirements must be met prior to operating the LIP.

Certain US states have additional laser regulatory requirements and the Christie FDA variance is required for some state laser registrations. Contact [lasercompliance@christiedigital.com](mailto:lasercompliance@christiedigital.com) for additional regulatory requirements for your state.

## Frequently asked questions

Review these frequently asked questions about laser regulations for US customers.

### **When do I need to get started on these items?**

Christie recommends being proactive and taking the training as soon as possible. This ensures that installations can take place without interruption. Some steps, like state laser requirements or laser light show variances, can take time to complete; therefore, complete as much work as early as possible to avoid unnecessary delays.

### **Do I need to plan my installations differently than I did in the past?**

Yes, your planning will change slightly. Some boundaries must be considered depending on the projector and lens combination used. These boundaries are explained in detail in the product User manuals and in the online Christie University CS-ELSA-01 course. The course outlines the basic concepts that must be considered when planning for an application.

### **Where do I find all the necessary documents and forms?**

For any necessary documents and forms, contact [lasercompliance@christiedigital.com](mailto:lasercompliance@christiedigital.com).

### **Why don't I have to do this for all projector brands?**

Christie cannot speak on behalf of testing done on other brands. However, based on the recognized regulations in place and required test methodologies, Christie is confident in our test methods and that self-declaration is not an option for certain brightness levels and lens combinations. As a result, working with the FDA is mandatory for the identified projector and lens combinations.

### **What happens if the person trained leaves the company?**

Christie recommends properly training several employees on Class 1 Risk Group 3 laser projectors.

### **Who can I contact if I have any questions?**

If you have any questions or concerns, contact us at [lasercompliance@christiedigital.com](mailto:lasercompliance@christiedigital.com).