

# **Pre-Installation Guide For Inspire™**

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# Introduction

Congratulations on your purchase of a Spectra-Physics system. This guide describes pre-installation information for your laser system.

Some preliminary planning is essential to avoid unnecessary delays during installation and to ensure easy operation and access to your system. You are requested to carefully consider your operating environment prior to installation. Proper water, power and room temperature are required for each system.

A checklist of pre-installation considerations is provided in this guide to all applicable building and safety codes.

We at Spectra-Physics intend to provide you with responsive support so that you can derive great satisfaction on and value in using our systems for your applications. We are available to you at **1-800-456-2552**.

## When the System Arrives

### Inspection

When the system arrives, any sign of damage to the shipping crates should be brought to the attention of the delivering freight company and noted on the invoice before signing the invoice. A claim must be filed with that commercial carrier (usually within 30 days).

Immediately notify the originating Spectra-Physics office of any shipping damage. Open any damaged packages to inspect the contents only at the direction of Spectra-Physics. Equipment damage due to abuse in shipping is not covered by Spectra-Physics.

Your packing list will show all items that you have ordered. Check the received items against your packing list. Multiple items may be contained in the same box. Each item should be verified at the time of installation. Do not open the packaging to look for components.

Please report any missing or damaged items to Spectra-Physics at 1-800-456-2552 or [service@spectra-physics.com](mailto:service@spectra-physics.com). You should also contact your Spectra-Physics' Field Sales Engineer at 1-800-775-5273 or [sales@spectra-physics.com](mailto:sales@spectra-physics.com).

### Review Instruction Manuals

Each system comes with a User's Manual. Please read the manual to get vital information about your system. Familiarize yourself with the system. You are encouraged to spend as much time as possible reviewing the system manual before your Spectra-Physics' Customer Service Engineer arrives for the installation and training.

### Laser Safety Considerations

In addition to reviewing the sections in the manual regarding laser safety, be sure to have the proper safety glasses available for ALL lab personnel present during the installation and testing of your system. For more information, please call Spectra-Physics at 1-800-456-2552.

### Diagnostics

During the course of installation, power measurements will be demonstrated on all the standard wavelengths. Your Customer Service Engineer can identify any other specifications that will be demonstrated and the equipment necessary to conduct the tests. A non-standard system will require special consideration.

To have other published specifications demonstrated, consult with your Customer Service Engineer prior to system installation, to determine whether additional diagnostic equipment will be required. Basic diagnostic equipment such as a power meter and spectrometer are required to maintain the laser system. We recommend that you obtain this basic diagnostic equipment before the system is installed. For assistance in the selection of the proper diagnostic equipment, please contact Newport at **1-800-222-6440** or [sales@newport.com](mailto:sales@newport.com).

## Pre-Installation Considerations

### Location and Environment

- A. A safe location that meets all applicable building codes.
- B. Easy access with adequate clearance around the instrument.
- C. An optical table that will meet the space requirement of the instruments to be installed.
- D. Proper laboratory temperature regulation, including sufficient air conditioning to remove the waste heat of the laser. For certain applications ambient room temperature changes may be an important factor for the laser system's performance. Air ducts should not blow directly on laser or optical path.

To ensure stable day-to-day operation, the recommended minimum and maximum operating room temperature is 20 - 25°C. Ideal room temperature is 22°C. Room temperature fluctuations should not exceed  $\pm 1^\circ\text{C}$  during any two-hour period. See specifications in Table 1-1 and table 1-3 in the User's Manual.

- E. In some applications vibration isolation may be required for your system. Structural integrity of the flooring could play an important role. Please evaluate any need for this, prior to system installation.
- F. Please note that the laser head is very heavy and requires a sturdy and stable optical table.
- G. The authorized pump laser and the Inspire™ must be installed on the same optical table, to ensure correct operation.

Consider room requirements for future maintenance and upgrades by your Spectra-Physics' Field Service Engineer.

### Physical Description

#### Dimensions and Weights

Product	(W x L x H) in	(W x L x H) cm
Inspire	14.2 x 37.6 x 9.1	36.0 x 95.4 x 23.2

## General Specifications Utility Requirements

### Electrical

The socket outlet should be positioned near the Inspire™ and be easily accessible.

Voltage	100-240 VAC, 50/60 Hz
Current	12A

### Computer

The Inspire™ is shipped with a dedicated, portable computer, in which the latest version of the Inspire™ control software has been installed. This computer has been tested with the product and correct operation has been verified prior to shipment.

The computer is provided for the exclusive use of the Inspire™ control software. No additional software should be installed as this may affect the correct operation of the product.

### Required Maintenance

To prolong the lifetime of the Inspire™, insure that it is kept in a clean, dry, dust-free environment. When transporting the Inspire™, at least 2 people are required to carefully lift the unit, holding the base and avoiding excessive shock. Avoid use in low ambient temperature and/or high humidity as condensation can form which may cause damage to optical components. Avoid spilling chemicals on or in the Inspire™ as this can cause damage to optical and mechanical components. Ensure that the cover remains on whenever possible to protect components from dust and other hazards and to protect users from stray laser radiation.

The Inspire™ uses a Spectra-Physics Mai Tai laser as a seed laser. Please reference the Mai Tai Pre-Installation Guide, to address concerns regarding required maintenance.

Before the arrival of your Spectra-Physics' Service Engineer please review the following pre-installation requirements. When all the requirements have been met, initial the boxes and email a signed copy to the Spectra-Physics' Service department at [serve@spectra-physics.com](mailto:serve@spectra-physics.com).

**Physical Location:**

- A location with adequate clearance around system to conduct service and accessible by Spectra-Physics personnel.
- A temperature-controlled room.
- Utility services have been installed.
- Local building and safety codes are in compliance and have been verified.

**When Your System Arrives:**

- Upon receiving your system, immediately inspect the outside of the shipping containers. If there is any sign of damage, immediately call Spectra-Physics and file a claim with the carrier.
- The Inspire™ laser will be installed on site by a factory-trained installation engineer. Do not open the laser packaging prior to the engineer's arrival unless specifically told to do so by the factory.
- Compare the packing list with your quotation. Call your Spectra-Physics office about any discrepancies.
- Check that all manuals were received.
- Save all packing and shipping material until the installation has been completed.
- Obtain the correct safety glasses and a power meter.
- Read the User's Manual, especially sections entitled **Receiving and Inspection** and **Chapter 4: Installation**

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**Customer Signature**

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**Date**

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**Phone Number**

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**Fax Number**

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**E-Mail**

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**Sales Order Number**