As a precaution against accidental exposure to the output beam or its reflection, individuals using the system should wear laser safety glasses as required by the wavelength being generated.

Use the laser in an enclosed room. Laser light remains collimated over long distances and presents a potential hazard if not confined.

Post warning signs in the area of the laser beam to alert individuals present.

Advise all individuals using the laser of these precautions. It is good practice to operate the laser in a room with controlled and restricted access.
Electrical Safety
The OBIS laser does not contain hazardous voltages. Do not disassemble the enclosure. There are no user-serviceable components inside. All units are designed to be operated as assembled. The warranty will be voided if the enclosure is disassembled.
Electrostatic charges as high as 4000 volts easily collect on the human body and equipment when handling a device during installation or use and can discharge without detection. Although the laser has input protection, permanent damage can occur on devices subjected to high-energy electrostatic discharges.

OBIS Laser Installation
This section describes how to set up the OBIS laser to run in Continuous Wave (CW) current mode without a Remote box. In this configuration, the OBIS laser is intended for use in OEM equipment. The user is responsible for compliance with all applicable laser safety regulations.

CAUTION! The OBIS automatically starts laser emission after DC power is supplied.

For more information about modulation, interfacing, installation, heatsinking, and packaging, see the OBIS LX/LS Operator’s Manual (P/N 1184163).

Install Software
Install the software on your PC or laptop before you set up and power on the laser.

• Download the Coherent Connection software (which also contains all the necessary drivers) from the Coherent website: https://www.coherent.com/resources
• Close all programs.
• On your PC, double-click this file to start the installation process: Coherent_Connection_Setup.exe
• Follow the on-screen instructions to complete software installation.

Required Materials
An optical plate with mounting holes spaced ~1” apart is not a valid mounting surface without the use of an OBIS Heat Sink. See the OBIS LX/LS Operator’s Manual (P/N 1184163) for detailed instructions about Heat Sink requirements and options for mounting the laser.
A mini-USB cable is also needed to connect the OBIS to a host workstation.

Install the Laser
1. Remove the yellow “OEM Use Only” label from the back of the OBIS to access the 12V OEM supply connector.
WARNING!
DO NOT use thermal grease or thermal compounds. The use of thermal grease or compounds voids the Coherent warranty.

Using the 2.5 mm hex wrench, tighten the screws in a diagonal pattern.

Torque the mounting screws to 0.25 N·m (35.4 oz·in.) in a 1-2-3-4 sequence. Use the same diagonal pattern for the last torque setting of 1 N·m (141.6 oz·in.).

2. Insert the 12 VDC OBIS Power Supply connector into the power connector on the back panel of the OBIS LX SF laser.

3. Slide the lever right (to the “OPEN” position) to open the mechanical front shutter to allow light emission.

4. Apply 12 VDC power to the OBIS.

OBIS starts emitting light after it is thermally stabilized. During stabilization, the LED indicator on top of the laser blinks green.

When stabilized, the LED indicator changes to shining white and laser emission starts. Light emission starts at the last power set point.

If emission does not start within 5 minutes and the LED indicator on top displays in blue, the Auto Start feature is likely not activated. This means the laser has stabilized thermally but is waiting for a command to start emission.

5. Connect the OBIS laser to a PC using a USB Type A-to-USB Type Mini B cable.

6. Verify that the OBIS is properly connected to its 12 VDC power supply.

Start the Coherent Connection software:
- Main tab: Turn the OBIS laser on and off manually.
- Advanced tab: Activate Auto Start by checking the “Laser Auto Start” check box.
- Operating Power tab: Change the Power set point.

When Auto Start is enabled, the laser automatically starts light emission after DC power is reconnected and thermal stability is reached.

- Shutter Cord
- Shutter Cap
- Shutter Cap removed

- LED Indicator

- Turn the OBIS laser on and off manually.

- Connect the OBIS laser to a PC using a USB Type A-to-USB Type Mini B cable.
Configure Settings

Use the Operating Power tab to fine-tune the laser’s wavelength through:
- Adjusting the diode temperature.
- Adjusting the diode current by adjusting the operating power.
- Or a combination of both.

Increment power level by 1mW (or) Enter power level manually (by 1 decimal place)
Increment diode temp by 0.1°C (or) Enter diode temperature manually from 20°C to 40°C

The following screen shows the status of the laser:

**IMPORTANT**
Ensure that the laser is running in “CW:Current” (constant current mode).

Shop.Coherent.com is the official e-commerce website for lasers, energy meters and sensors, fiber optics, and accessories.