V2.03版

Lasescope NX

快速安装指南

Quick Installing Guide

2024年8月

目录

第一章 前言

1.1适用产品

本手册适用于基于Windows版本的激光光束分析的软件Lasescope NX。

第二章 Lasescope NX 软件简介

2.1 功能与特点

Lasescope NX适用于GigE、USB3.0、10GigE接口的光斑分析仪，其特点以及功能包括：

- 高速度、高分辨率显示 2D 和 3D 伪彩色光束轮廓
- 支持 Windows 10 及以上版本的操作系统
- 支持相机曝光、增益和分辨率的控制
- 实时进行光斑的伪彩色 2D 显示、长短轴的高斯曲线显示
- 支持 2D 模式下的连续缩放
- 可测量光斑的长短轴、椭圆率、旋转角等参数
- 支持参数的统计分析
- 可记录和导出参数，或者生成报告
- 可读取光斑图片并测量参数
- 多选择的图片保存功能
- 支持 USB3.0 接口和网口
- 可定制拓展功能

2.2运行环境

推荐配置

- 操作系统：Windows 10/11，64位，预装MS Office或者WPS
- 硬件配置：≥8G内存，CPU主频≥2.5G，内核≥4，建议i5及以上同等型号
- 最佳显示分辨率：1920*1080
- USB:USB3.0接口
- 网卡：千兆网卡

第三章 准备工作

3.1 确认装置

- Lasescope NX软件
- 分析仪配置文件
- 相机组件：带激光衰减器
- 必要连接线 ：USB3.0数据线；或者GigE网线；

3.2 确认U盘

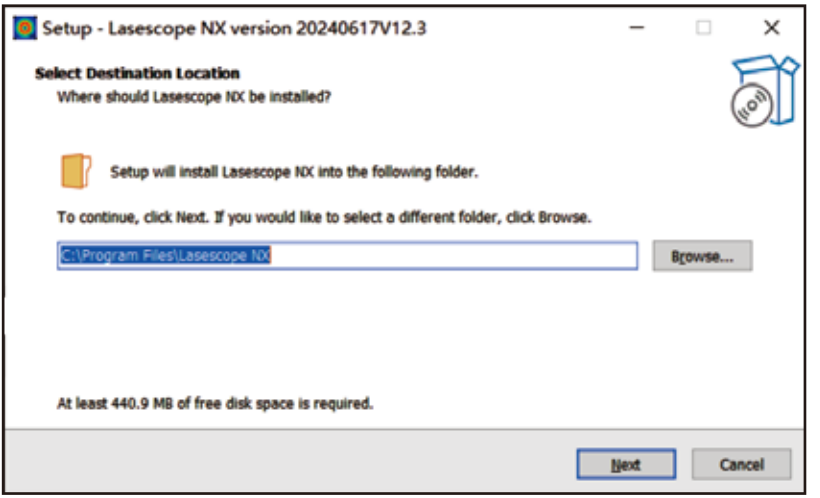
- 确保您已经收到了随产品附带的U盘，并检查U盘是否完好无损。
- 备份重要数据：在开始之前，请确保您的计算机上没有重要的未保存的数据，以防意外丢失。
- 连接U盘：将U盘接入计算机的USB接口。
- 浏览文件：双击打开U盘后，找到名为“Lasescope NX”的文件夹。双击打开该文件夹。

找到安装包文件：“LasescopeNX_setup.exe”

第四章 软件安装

4.1安装流程

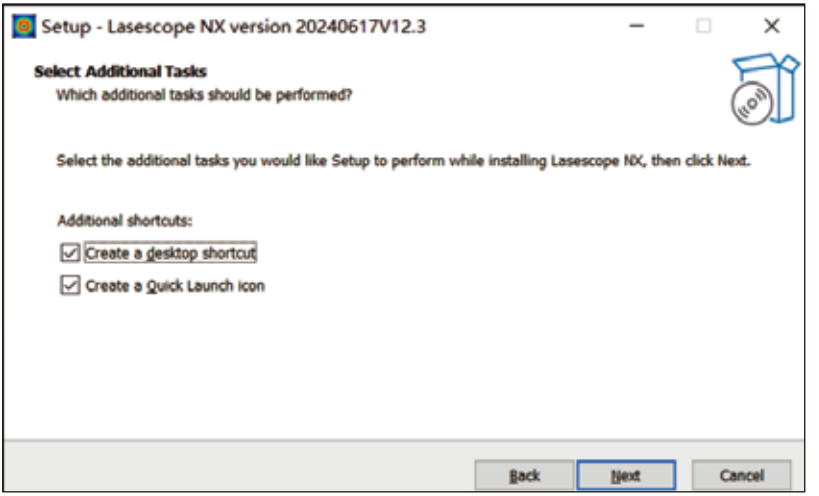
运行安装程序：双击“LasescopeNX_setup”文件以启动安装向导。



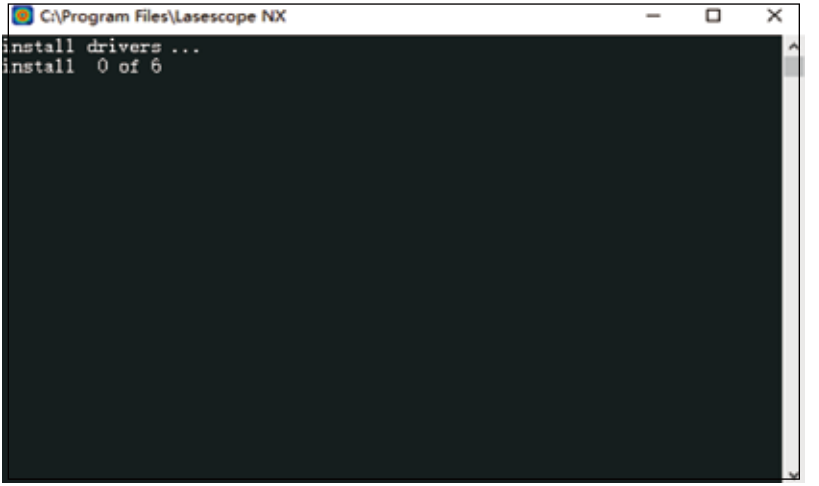
选择安装路径：您可以选择默认的安装路径，也可以点击

“Browse”按钮选择其他位置。

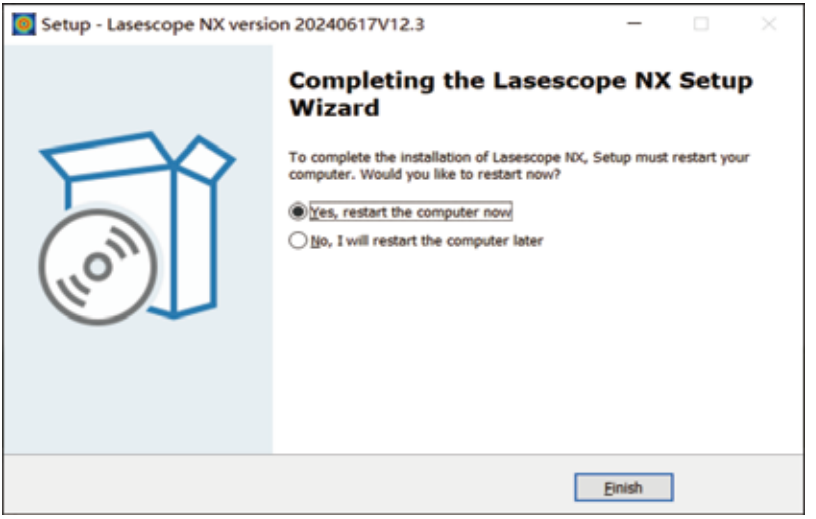
配置安装选项：点击“Next”按钮，进入安装选项配置，根据您的需要选择相应的安装选项，例如是否创建桌面快捷方式等。



开始安装：点击“Next”和“Install”按钮开始安装过程。整个安装时间大概1-2分钟，请耐心等待直至安装完成。



完成安装：安装完成后，您可以选择立即重启计算机或稍后重启。首次安装时会安装运行引擎，安装运行引擎会占用较长时间。引擎安装完毕后会提示重启，只有重启计算机后才能正常使用本软件，否则将产生缺少函数的错误。已安装过运行环境的情况下，仅安装应用程序则不必重启。点击“Finish”按钮结束安装。



注意事项

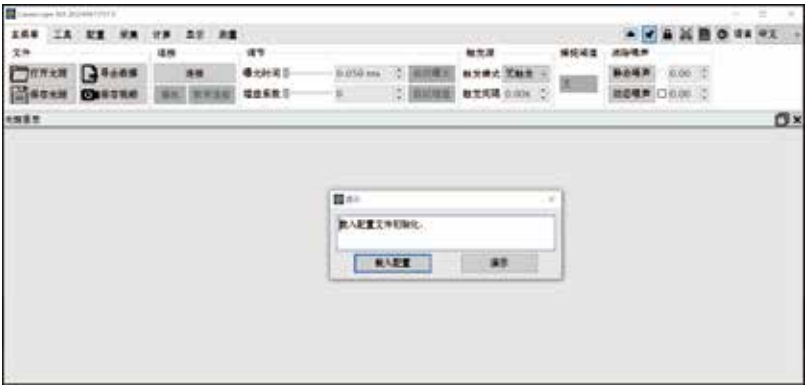
- 兼容性检查：确认您的计算机满足安装程序所需的最低系统要求。
- 防病毒扫描： 在运行安装程序之前，建议使用防病毒软件扫描U盘以确保安全。
- 保持电源稳定： 在安装过程中，请确保您的计算机连接稳定的电源，避免因断电导致安装失败。
- 软件安装过程中不要求硬件必须连接。

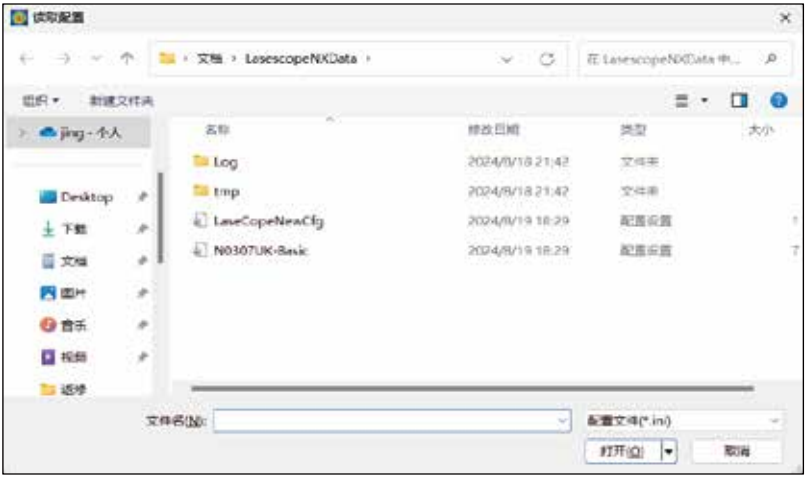
4.2数据线连接

软件安装完成后，将相机通过随产品附带的数据线与电脑连接。

4.3 配置初始化

初次使用软件需先初始化。双击软件图标运行程序，出现提示对话框。点击提示对话框的“载入配置”按钮，出现配置文件的文件夹，选择U盘中的配置文件，例如选择“N0307UK-Basic”，点击“打开”按钮进行配置文件载入。

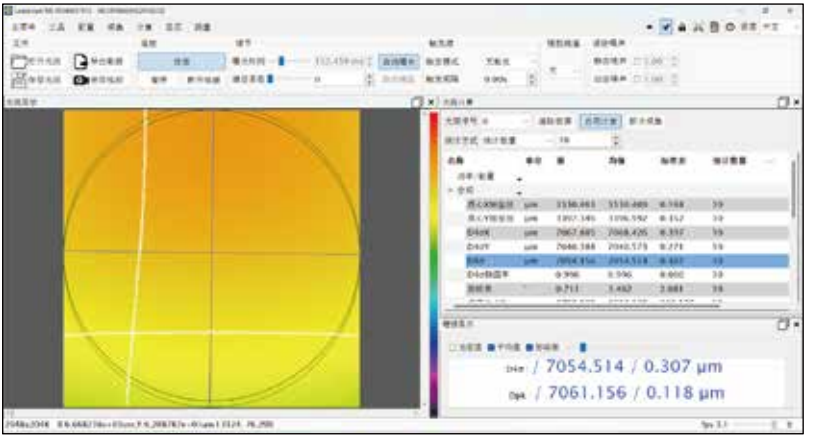




注：配置存放位置：用户可以根据自己的实际使用需求将配置文件放置于适合的位置，用户也可以自己保存适用于自己测试的配置文件用于后续使用。

4.4 相机连接

载入配置后，软件会自动识别相机型号及序列号，输入密码即可完成软件的启动。若需要连接其他相机，重复4.2及4.3的操作即可。

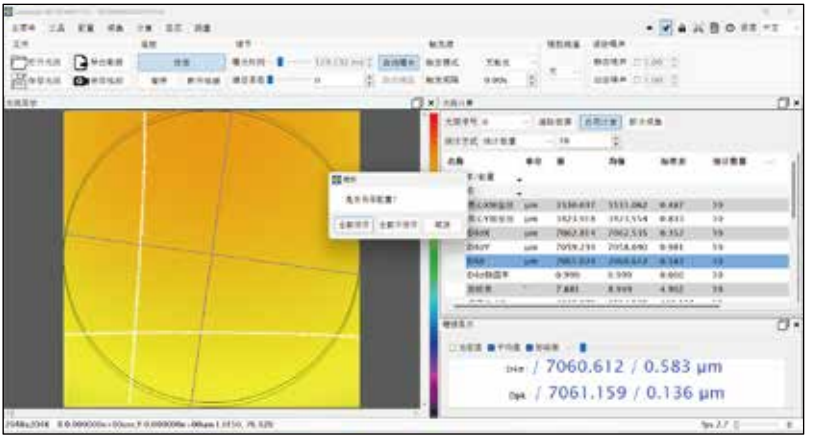


注意事项

连接相机后请查看相机指示灯，亮蓝灯为正常；若亮红灯，则表示连接故障，可更换USB连接口或电脑进行尝试。

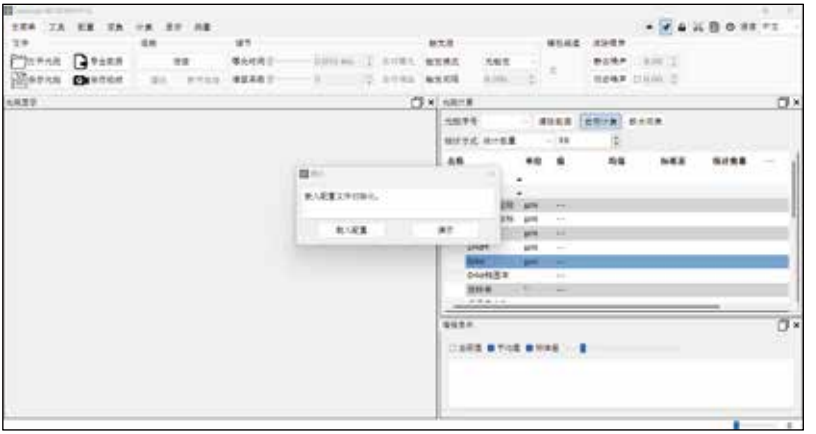
4.5 退出保存

测试完毕后可直接关闭软件，与移除相机在操作上没有绝对的先后关系。点击关闭按钮后，软件会出现关于配置的提示对话框。如果想保存配置信息以便下次使用，点击“全部保存”按钮，软件随即关闭；如果对配置信息没有保存需求，也可点击“全部不保存”按钮，软件也随即关闭。



4.6 再次打开相机

➢ 若退出时点击了“全部不保存”，再次使用软件则需要重复步骤4.3的过程。



➢ 若退出时点击了“全部保存”，再次打开软件，则会直接进入到步骤4.4的过程。

NC(2312)

Quick Installing Guide for Lasescope NX

2024.8
Version V2.03

Chapter 1: Introduction

1.1 Applicable Products

This manual applies to the Windows-based laser beam analysis software, Lasescope NX.

Chapter 2: Overview of Lasescope NX

2.1 Features and Capabilities

Lasescope NX is a versatile and user-friendly software designed specifically for the comprehensive analysis of laser beam profiles. This software is compatible with GigE, USB3.0, and 10GigE interface spot analyzers, providing a robust solution for a wide range of applications. Key features and functions include:

- High-Speed, High-Resolution Display: Offers 2D and 3D pseudo-color displays of laser beam profiles with exceptional speed and resolution.
- Compatibility: Supports Windows 10 and later operating systems, ensuring compatibility with modern computing environments.
- Camera Control: Enables users to adjust camera settings such as exposure, gain, and resolution directly from the software interface.
- Real-Time Analysis: Provides real-time pseudo-color 2D display of the laser spot, along with Gaussian curve displays for

both major and minor axes.

- Continuous Zoom: Offers continuous zoom functionality in 2D mode for detailed examination of the laser spot.
- Measurement Tools: Measures critical parameters including the major and minor axes, ellipticity, and rotation angle of the laser spot.
- Statistical Analysis: Supports statistical analysis of measured parameters, enabling users to evaluate the consistency and quality of their laser beams.
- Data Management: Allows users to record and export measured parameters or generate reports for documentation and further analysis.
- Image Processing: Can read and measure parameters from laser spot images, providing flexibility for post-processing and analysis.
- Image Saving: Offers multiple options for saving processed images, facilitating documentation and sharing of results.
- Connectivity: Supports USB 3.0 and Ethernet interfaces for seamless integration with hardware devices.
- Customizable Extensions: Can be extended with custom features and functionalities.

2.2 System Requirements

Recommended Configuration

- Operating System: Windows 10/11, 64-bit, with Microsoft Office or WPS pre-installed.
- Hardware Configuration: At least 8 GB of RAM, CPU clock

speed of at least 2.5 GHz, and at least 4 cores; Intel i5 or equivalent processors are recommended.

- Display Resolution: Optimal resolution of 1920×1080.
- USB Interface: USB 3.0 port.
- Network Card: Gigabit Ethernet card.

Chapter 3: Preparations

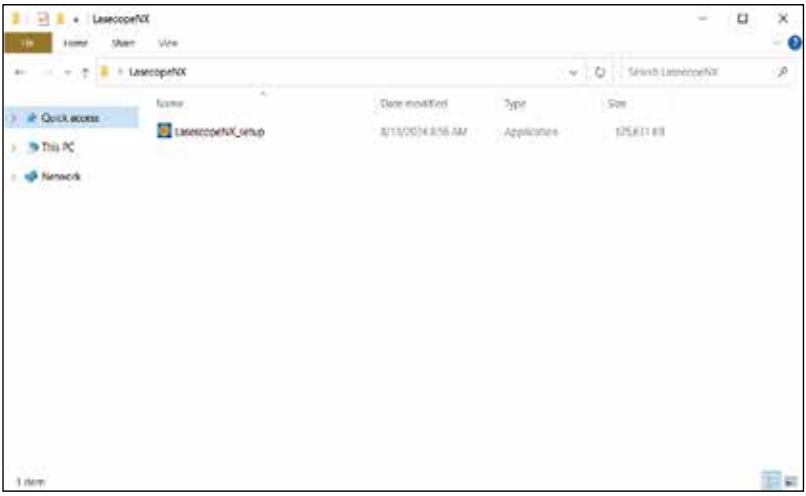
3.1 Confirming the Product

- Lasescope NX Software: The core software component that enables high-speed, high-resolution display of 2D and 3D pseudo-colored beam profiles. It supports real-time analysis, measurement of various beam characteristics, statistical analysis, and data management capabilities.
- Analyzer Configuration Files: Verify that you have the necessary configuration files for your specific analyzer model.
- Camera Module (with laser attenuator): A high-quality camera designed to capture precise and detailed images of laser beams. It offers adjustable settings such as exposure, gain, and resolution to optimize the imaging process.
- Connection Cables: Necessary cables for establishing a stable connection between the camera module and the computer, ensuring seamless data transfer. The system supports USB 3.0 and GigE interfaces for reliable connectivity.

3.2 Preparation of the installation package

- Confirm USB Drive: Ensure you have received the USB drive included with the product and check that it is intact.
- Backup Important Data: Before starting, make sure there are no important data on your computer to prevent accidental loss.
- Confirm USB Drive: Ensure you have received the USB drive included with the product and check that it is intact.
- Backup Important Data: Before starting, make sure there are no unsaved important data on your computer to prevent accidental loss.
- Connect the USB Drive: Plug the USB drive into your computer's USB port.
- Browse Files: After opening the USB drive, you will see a folder named "Lasescope NX". Double-click to open this folder.Confirm USB Drive: Ensure you have received the USB drive included with the product and check that it is intact.
- Backup Important Data: Before starting, make sure there are no unsaved important data on your computer to prevent accidental loss.
- Connect the USB Drive: Plug the USB drive into your computer's USB port.
- Browse Files: After opening the USB drive, you will see a folder named "Lasescope NX". Double-click to open this folder.
- Find the Installer: In the "Lasescope NX" folder, you will find an executable file named "LasescopeNX_setup.exe", which is the

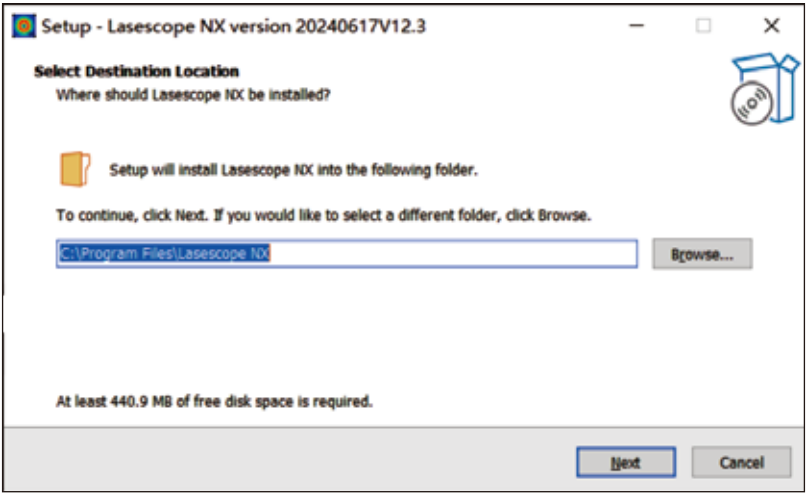
installation program.

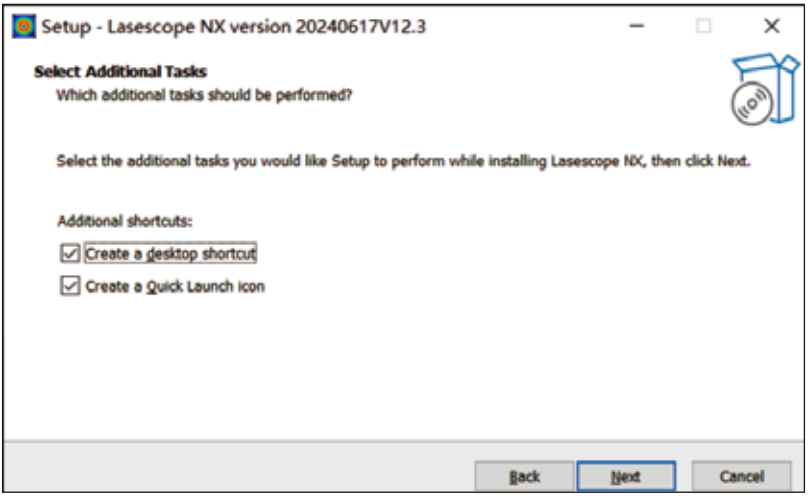


Chapter 4: Software Installation

4.1 Ins tallation Process

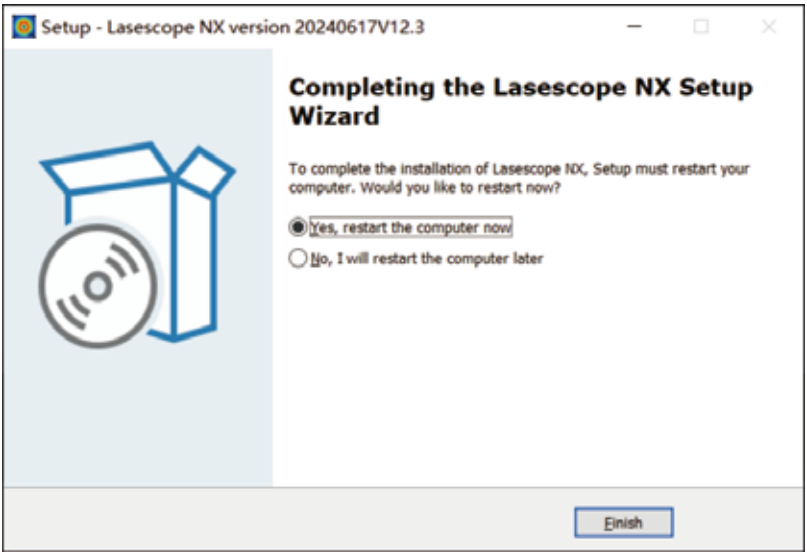
- Run the installer: Double-click the "LasescopeNX_setup" file to start the installation wizard.
- Choose Installation Path: You can choose the default installation path or click the "Browse" button to select another location.
- Configure Installation Options: Click the "Next" button to enter the installation options configuration. Select the appropriate installation options based on your needs, such as creating a desktop shortcut.





➢ Begin Installation: Click "Next" and then "Install" to start the installation process. The entire installation time is approximately 1-2 minutes; please wait patiently until the installation is complete.

➢ Complete Installation: Upon completion, you can choose to restart your computer immediately or later. During the first installation, the runtime engine will be installed, which may take longer. Once the engine installation is finished, you will be prompted to restart. Only after restarting your computer can you use the software properly, otherwise, function errors may occur. If you have already installed the runtime environment, you do not need to restart when installing only the application. Click the "Finish" button to complete the installation.



Important Notes

① Compatibility Check: Confirm that your computer meets the minimum system requirements for the installation program.

② Antivirus Scan: Before running the installation program, we recommend scanning the USB drive with antivirus software to ensure safety.

③ Stable Power Supply: During the installation process, ensure your computer is connected to a stable power source to avoid installation failure due to power interruptions.

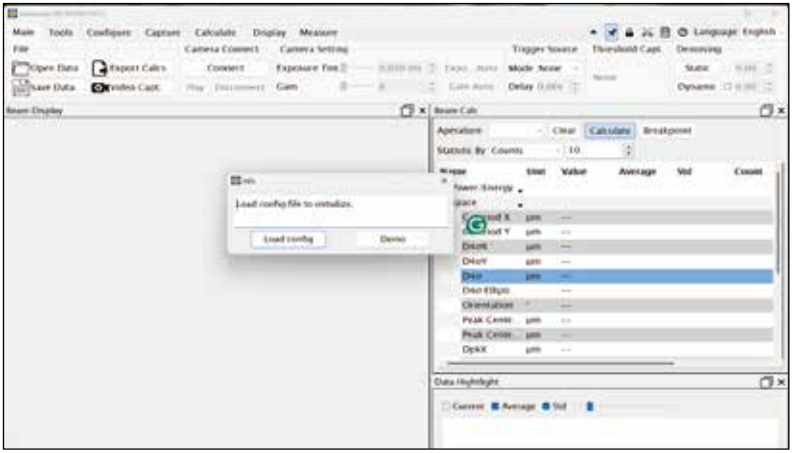
④ Hardware connection is not required during software installation.

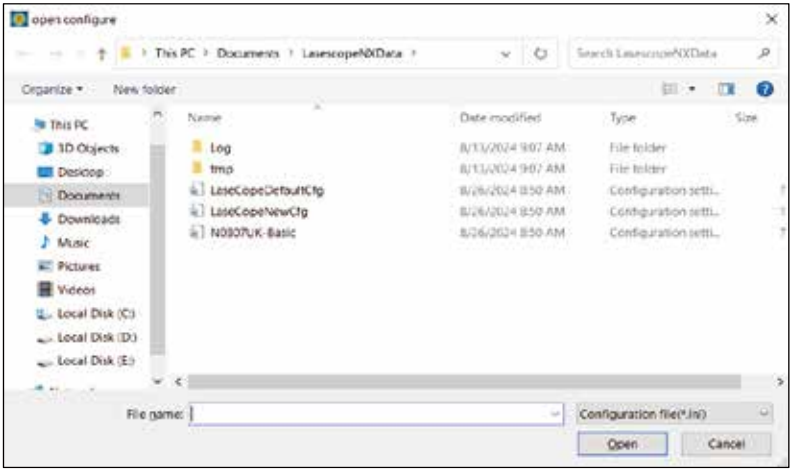
4.2 Connecting the Camera

➢ After installing the software, connect the camera to the computer using the data cable provided with the product.

4.3 Configuration initialization

➢ Software Initialization: On the first use, the software needs to be initialized. Double-click the software icon to run the program. A prompt dialog box will appear. Click the "Load config" button in the prompt dialog box, and a configuration file folder will open. For example, select "N0307UK-Basic" and click the "Open" button to load the configuration file.



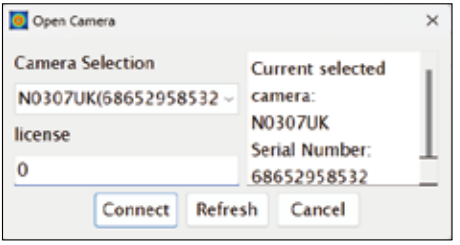


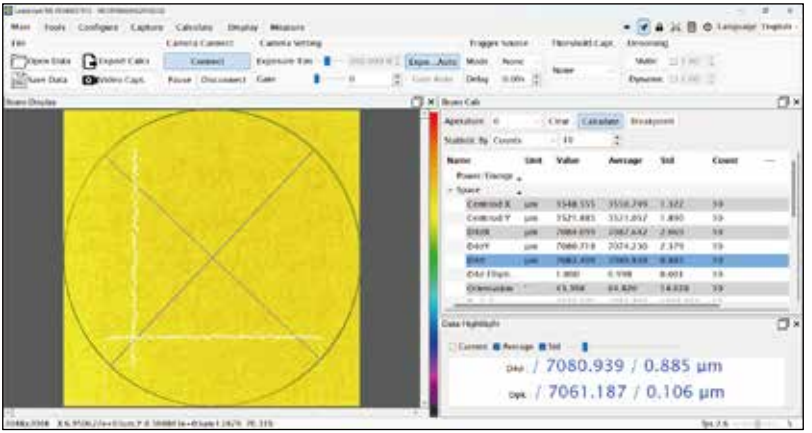
Note: Configuration Storage Location

Users can place the configuration files in a suitable location based on their actual usage needs. Users can also save their own configuration files for subsequent use, tailored to their testing requirements.

4.4 Camera Connection

After loading the configuration, the software will automatically recognize the camera model and serial number. Enter the password to complete the software startup. If you need to connect additional cameras, simply repeat the steps in 4.2 and 4.3.



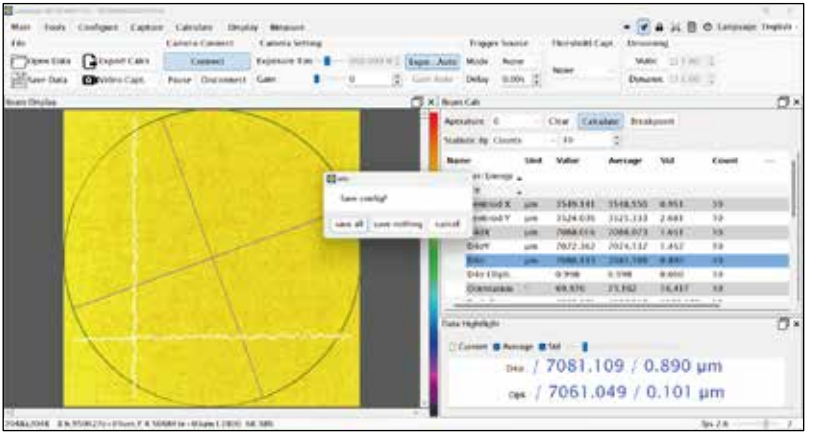


Cautions

After connecting the camera, please check the camera indicator light, bright blue light is normal; if red light, it means the connection failure, you can replace the USB connection port or computer to try.

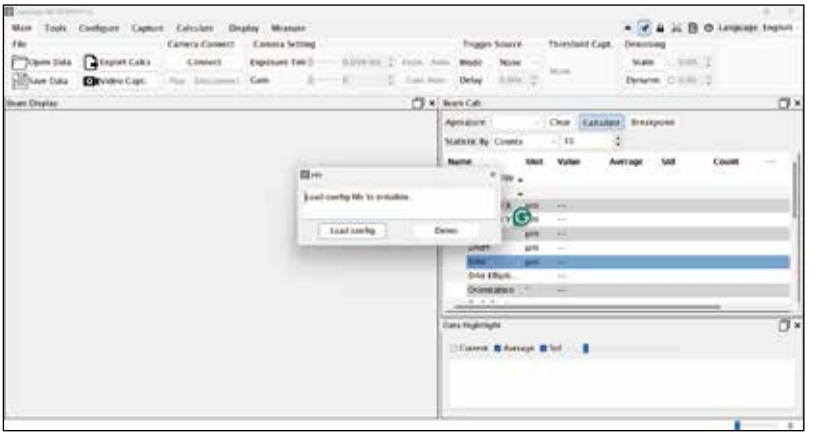
4.5 Exit the software

After testing, you can directly close the software. There is no absolute order between closing the software and disconnecting the camera. After clicking the close button, the software will display a prompt dialog box about saving configurations. If you want to save the configuration information for future use, click the "Save All" button, and the software will close. If you do not need to save the configuration information, you can also click the "Do Not Save All" button, and the software will close.



4.6 Reopening the Camera

➢ If "Save Nothing" was selected when exiting: When reopening the software, you will need to repeat the process outlined in step 4.3.



- If "Save All" was selected when exiting: When reopening the software, it will directly proceed to step 4.4.