SCANLAB
innovators for industry

Installation and First Steps

laserDESK Version 1.6



laserDESK
laser processing software

Doc. Rev. 1.9.7 en-US

2026-08-14

SCANLAB GmbH
Siemensstr. 2a
82178 Puchheim
Germany

Tel. +49 (89) 800 746-0
Fax: +49 (89) 800 746-199

info@scanlab.de
www.scanlab.de

© SCANLAB GmbH 2026

SCANLAB reserves the right to change the information in this document without notice.
No part of this manual may be processed, reproduced or distributed in any form (photocopy, print, microfilm or by any other means), electronic or mechanical, for any purpose without the written permission of SCANLAB.
All mentioned trademarks are registered trademarks of their respective companies.

Contents

1 Installation 4
- 1.1 Scope of Supply 4
- 1.2 PC and System Requirements 4
- 1.3 Installing laserDESK 5

2 First Steps with laserDESK 6
- 2.1 Starting laserDESK 6
- 2.2 Assigning Access Authorizations and Read and Write Permissions 7
- 2.3 Configuring the Laser and Scan System 8
- 2.4 Reading Important Information 10

1 Installation

1.1 Scope of Supply

The complete laserDESK software package includes

- 1 laserDESK installation file (no CD anymore)
- 1 USB-dongle (software protection plug) for running laserDESK in full mode

The software can also be downloaded from the SCANLAB homepage.
If you wish to purchase a dongle for this purpose, please contact SCANLAB.

1.2 PC and System Requirements

Before you install the laserDESK software, verify that your system meets the following PC and system requirements:

- 64-bit operating system:
  Microsoft Windows ≥ 10 (with Framework 4.7.2).
- Required hard disk space:
  Approx. 350 MB (incl. Help file)
- USB dongle:
  If you want to run the laserDESK program with full functionality (i.e. not just demo mode) you need a valid USB dongle (software-protection device). Without valid dongle, only the demo mode is usable. In demo mode, nothing is savable and hardware control isn't possible. Laser jobs can't be executed.
  Furthermore, the dongle's configuration defines the functional range of laserDESK. Two software packages - Standard and Premium - are available.
- SCANLAB RTC5 board or RTC6 board:
  laserDESK jobs can only be executed, if the PC that controls the laser scan system (production PC) can address an RTC5 or RTC6 board.

  Certain functions (e.g. Processing-on-the-fly) are only usable if the corresponding option has been activated on the RTC5 board.
  In contrast, **no** RTC board is required for creating jobs. Thus, jobs can be created on any PC (even without an RTC board) for later execution on the production PC (with RTC board and installed laserDESK software).

1.3 Installing laserDESK

Notes

- Before you install the laserDESK software, check for updates at the SCANLAB website.
- The laserDESK software can be installed even without a dongle and without an RTC5 PC interface board.

- If you install laserDESK from an installation CD, insert the CD into your PC drive. Then the Installation Wizard will start automatically.
- Otherwise run 'laserDESKx64_installer.exe' from the software package.

  Installation then proceeds automatically via the Windows Installer.
- Follow the Wizard's instructions to install laserDESK.

2 First Steps with laserDESK

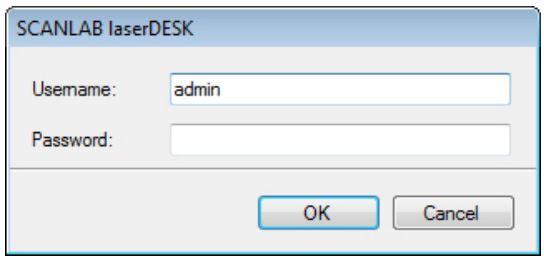
2.1 Starting laserDESK

Right after installing the laserDESK software, it is recommended to proceed with the following steps:

(1) For using laserDESK with full functionality (i.e. not just demo mode), connect the supplied dongle to any USB port of the PC.

(2) Start laserDESK via the 'SLLaserDesk.exe' program file or use a shortcut on the desktop or in the start menu.

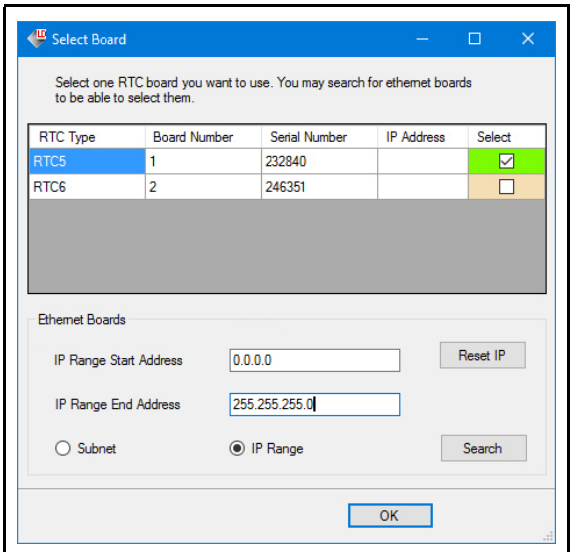
(3) In the 'SCANLAB laserDESK' dialog box, enter "Admin" as user name and no password (see Figure 1). This is the default user. Confirm with **OK**.



1

If only one RTC board (RTC5 or RTC6) is installed in the PC, the program window opens immediately.

If both an RTC5 board and an RTC6 board are installed in the PC, firstly the 'Select Board' dialog box (see Figure 2) appears.



2

(4) Select the required RTC board by activating the corresponding check box in the 'Select' column and confirm with **OK**.
The program window opens.

But if you want to use an Ethernet board, proceed as follows:

(1) In the 'Select Board' dialog box, click the appropriate radio button (Subnet or IP Range) for the kind of search.

(2) Define subnet IP address and subnet mask or the IP address range (start and end) in the corresponding input fields.

(3) Click the **Search** button to start the searching. All found Ethernet boards will be listed additionally.

(4) Select the required Ethernet board by activating the corresponding check box and confirm with **OK**.
The program window opens.

If no valid dongle is detected, then laserDESK automatically switches to demo mode.

2.2 Assigning Access Authorizations and Read and Write Permissions

Before any further use of laserDESK, your system administrator must assign the required read and/or write permissions to all program users (depending on their level of laserDESK access authorization, see topic 'Defining the User's Access Authorization' in the Online Help; open with <F1> key):

(1) To each user with laserDESK access authorization "Administrator", "Supervisor" or "Designer", assign read and write permissions for the laserDESK data directory 'C:\ProgramData\Scanlab\SLLaserDesk\' with subdirectories.

(2) To each other user, assign read permission only (access authorization "Production" and "Viewer") for the 'C:\ProgramData\Scanlab\SLLaserDesk\' directory with subdirectories.

2.3 Configuring the Laser and Scan System

The further steps must be performed by a user with laserDESK access authorization “Administrator” (and thus has the respective write permissions):

(1) Copy the RTC correction file corresponding to your laser scan system into any directory.

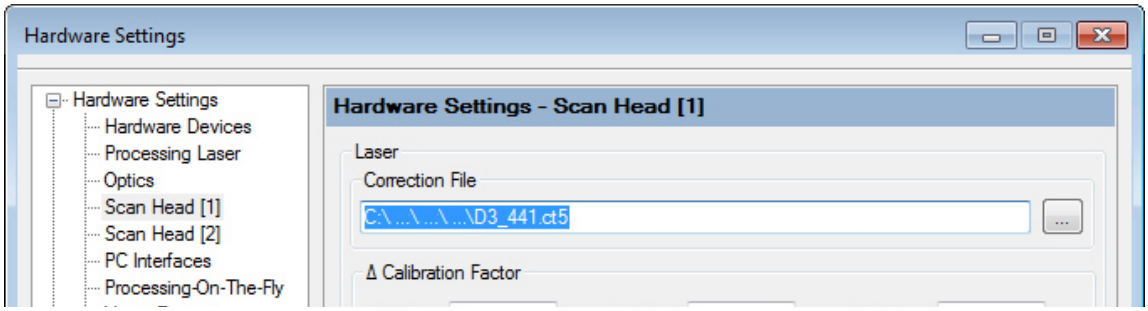
(2) Assign the RTC correction file to the laserDESK program:
- Open the menu ‘File\Open >\Hardware Configuration’ in laserDESK.
- In the ‘Hardware Settings’ dialog box, select directory ‘Scan Head [1]’ (see Figure 3).
- Open the Windows standard ‘Open’ dialog box, via button **...** and select the corresponding RTC correction file in the appropriate directory.

(3) Define your laser control settings:
- In the ‘Hardware Settings’ dialog box, select directory ‘Processing Laser’ (see Figure 4).
- Select your laser type.
  If you use a specified laser, you have finished.
  Otherwise you must select ‘GeneralType’.

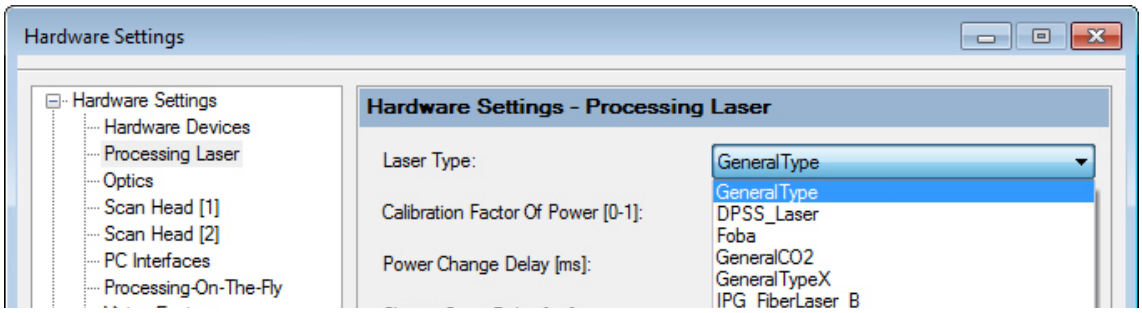
(4) Confirm the assignment of the correction file and the selection of the laser with **OK**.

(5) Finally, save the ‘Hardware Configuration’ file – otherwise the settings will not be applied.

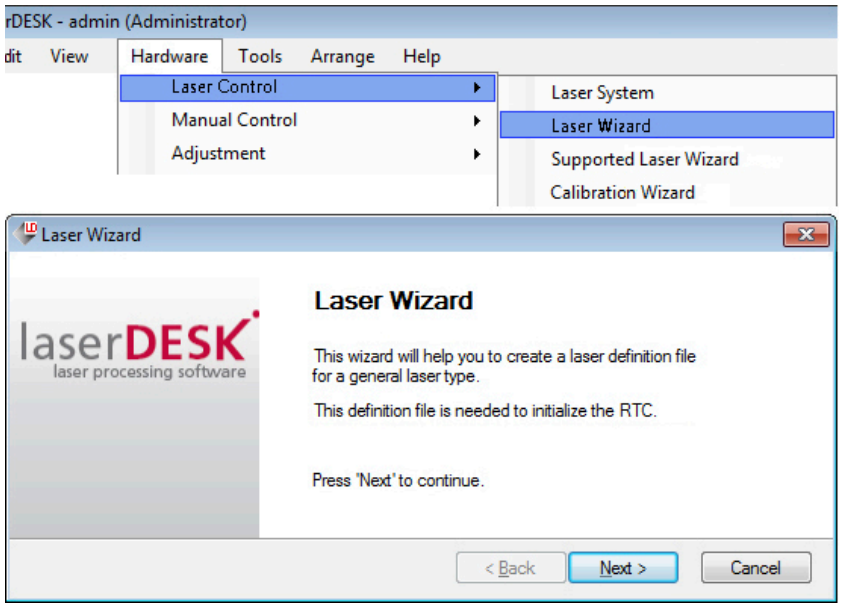
(6) If you have selected ‘GeneralType’ in ‘Processing Laser’, you need to create a laser definition file. There you will define your laser.
For it, open the Laser Wizard via the ‘Hardware\Laser Control\Laser Wizard’ menu (see Figure 5).
The procedure is described detailed in the Online Help (<F1>, see ‘Creating a Laser Definition File for a General Type Laser’).


Hardware Settings
Hardware Settings
Hardware Devices
Processing Laser
Optics
Scan Head [1]
Scan Head [2]
PC Interfaces
Processing-On-The-Fly
Hardware Settings - Scan Head [1]
Laser
Correction File
C:\ ...\ ...\ ...\D3_441.ct5
Δ Calibration Factor

3


Hardware Settings
Hardware Settings
Hardware Devices
Processing Laser
Optics
Scan Head [1]
Scan Head [2]
PC Interfaces
Processing-On-The-Fly
Hardware Settings - Processing Laser
Laser Type:
GeneralType
Calibration Factor Of Power [0-1]:
Power Change Delay [ms]:
GeneralType
DPSS_Laser
Foba
GeneralCO2
GeneralTypeX
IPG_FiberLaser_B

4


rDESK - admin (Administrator)
dit
View
Hardware
Tools
Arrange
Help
Laser Control
Manual Control
Adjustment
Laser System
Laser Wizard
Supported Laser Wizard
Calibration Wizard
Laser Wizard
laserDESK
laser processing software
Laser Wizard
This wizard will help you to create a laser definition file for a general laser type.
This definition file is needed to initialize the RTC.
Press 'Next' to continue.
< Back
Next >
Cancel

5

2.4 Reading Important Information

Before any further application of laserDESK, all laserDESK users must read the 'Safety' topic in the Online Help (<F1>). Moreover it is highly recommended to read the 'laserDESK Software – Overview' topic (or the 'laserDESK_QuickGuide.pdf' file) . This topic describes the program structure, which functions are available in laserDESK, and what is the best way to create and execute a laserDESK job.