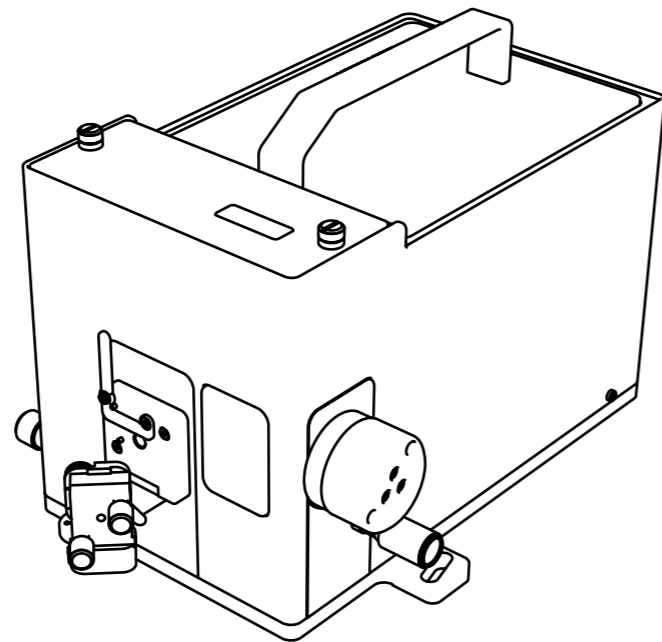


Quick Installation Guide

pulseCheck NX

Installation Video:



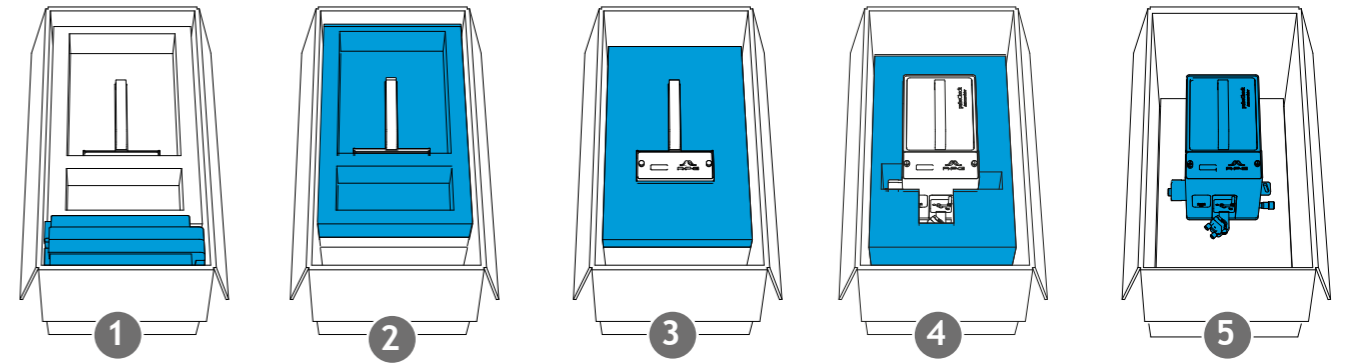
APE Angewandte Physik & Elektronik GmbH

Plauener Str. 163-165 | Haus N | 13053 Berlin | Germany
T: +49 30 986 011-30
www.ape-berlin.de



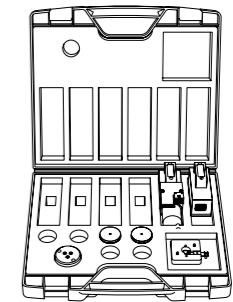
© APE GmbH | Rev. 1.0.0

01 Unboxing



Make sure the box with the pulseCheck had time to reach room temperature to avoid condensation inside the device. Take out the case with pulseCheck accessories. Then remove the foam layers as pictured above.

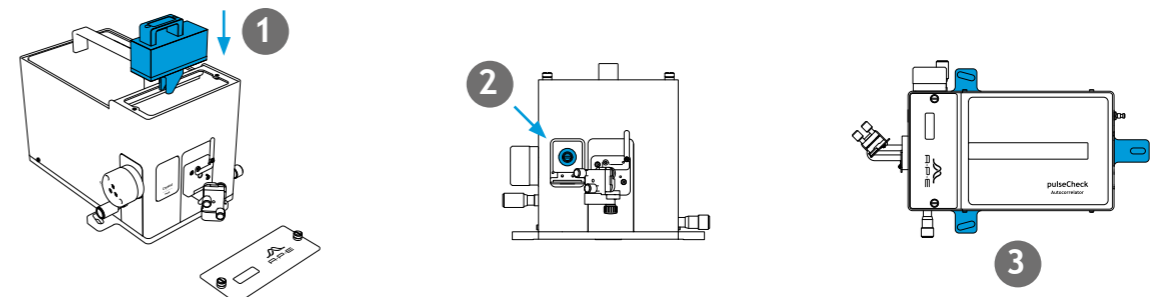
02 Accessory Case



Open the case only with the APE logo pointing up! The [Optics Set list](#) is among the provided documents. Consult the [Optics Set list](#) to see what combination of e.g. detector and crystal you need to install for the laser to be measured.

Depending on your order you'll find a set of detectors, crystals and other accessories in the suitcase.

03 Installation

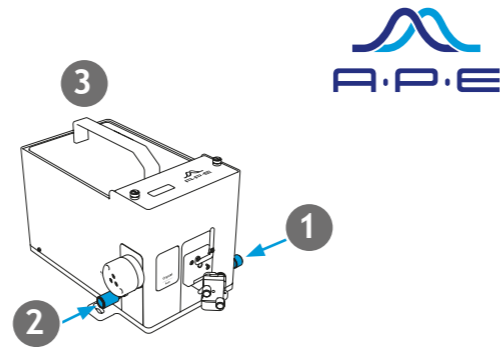


1. Connect the detector cable and mount the detector.
2. Install a crystal (does not apply for TPA configuration).
3. Fasten the pulseCheck NX on the optical table.

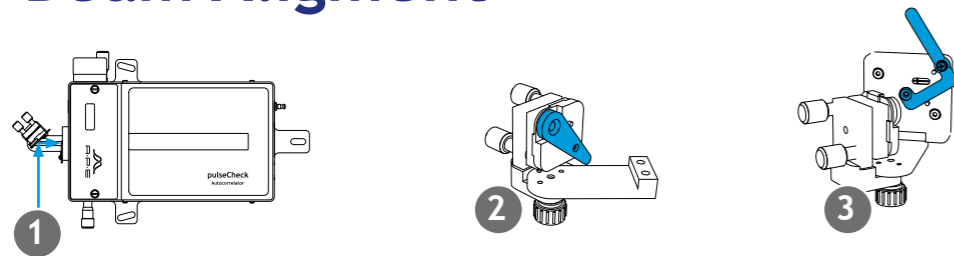
04 Screw Position

Read the [Test Report](#) and set screws to the reported values.

1. "Beam Distance"
2. "Focus"
3. "Delay" (only pulseCheck NX 50)



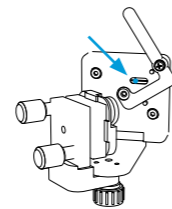
05 Beam Alignment



1. Direct the beam at the input mirror.
- 2.& 3. Flip the two apertures down to center the beam more easily.

06 Precision Alignment

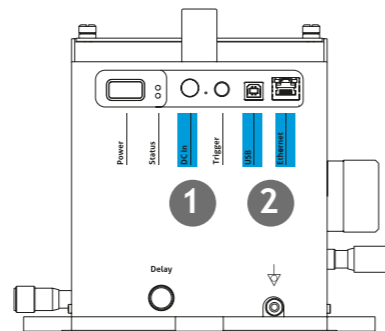
If necessary use an IR viewer to align the beam to the cross hair. For easy alignment set the "Beam Distance" screw to collinear. The correct value is recorded in the provided [Test Report](#).



Laser beam on crosshair window.

07 Cable Connection

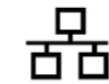
1. Connect the power supply.
2. Connect the pulseCheck NX with either the USB or the ethernet cable to the PC.
3. Turn the pulseCheck NX on.



08 USB or Ethernet

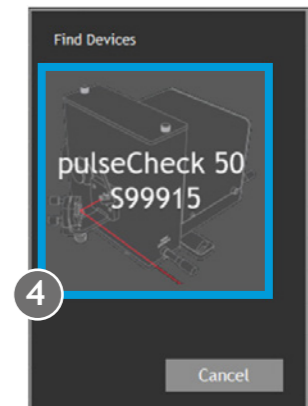
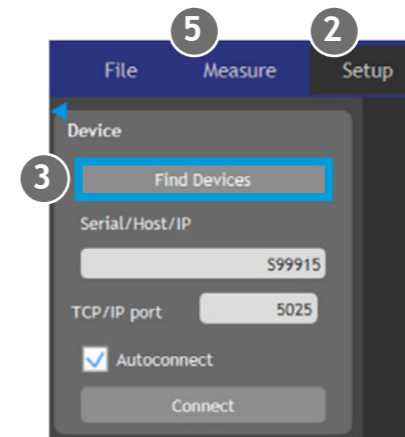


1. USB
pulseCheck NX will show up as mass storage on your PC operating system. The software and the manual as well as the other documents can be found here. Copy the software to the PC or start it directly. Installation is not required.



2. Ethernet
pulseCheck NX will show up as network device (similar to network printers, routers or media servers). Double click it in e.g. Windows Explorer to open its web page. From here you can download the software to the PC.

09 Software



1. Start the software.
2. Go to the tab "Setup"
3. Click "Find Devices"
4. Click in the icon with the serial number of your pulseCheck NX to connect it.
5. In the tab "Measure" you'll find all controls to tune the crystal to the laser wavelength and to set the appropriate signal intensity and scan range.

For more details please consult the PDF manual which is stored in the pulseCheck NX.

...FROG Option

Your pulseCheck NX is ready to be upgraded with FROG (Frequency-resolved Optical Gating) anytime. FROG allows you to not only measure the pulse duration but to characterize the pulse completely. For more information on how you can retrieve the spectral and temporal phase of a laser pulse, scan the QR code to visit our website.



- Crystal Modules
- FROG Setup:
1. Crystal module within pulseCheck
 2. Replacement focus Mirror
 3. FROG software upgrade

