

user manual

pcO. firmware programmer for GigE interface



pcO.

Target Audience: This camera is designed for use by technicians, engineers, and scientists.

In case of any questions or comments, please contact us at PCO.



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The cover photo shows an exemplary PCO camera system.
The lens is sold separately.

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By Thomas Hartmann

pco.firmware programmer for GigE interface V1.01 © PCO AG, Germany

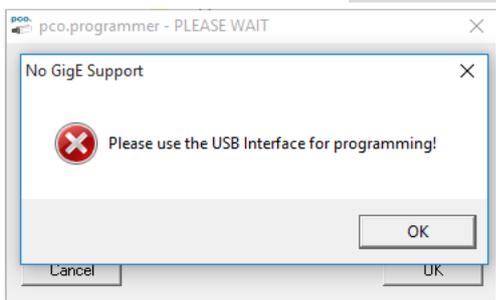
FIRMWARE PROGRAMMER FOR GIGE INTERFACE

1.1 INTRODUCTION

This manual describes the firmware update procedure of the GigE interface card in a **pco.dimax S/HD/HS** or a **pco.1200-4000** camera system.

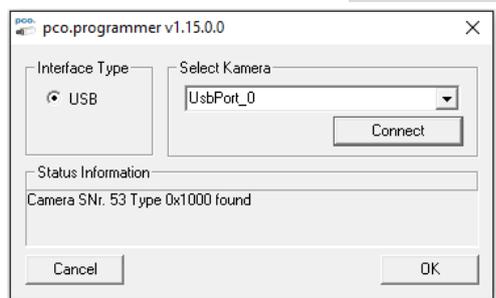
In order to update the firmware, please connect the camera to the computer using the USB interface and disconnect GigE. Unzip the firmware package to a folder of your choice and start the pco.programmer.

1.2 FIRMWARE UPDATE



The camera must be connected using the USB interface. Connect only one camera when updating the firmware. Switch on the camera and wait until you hear a beep.

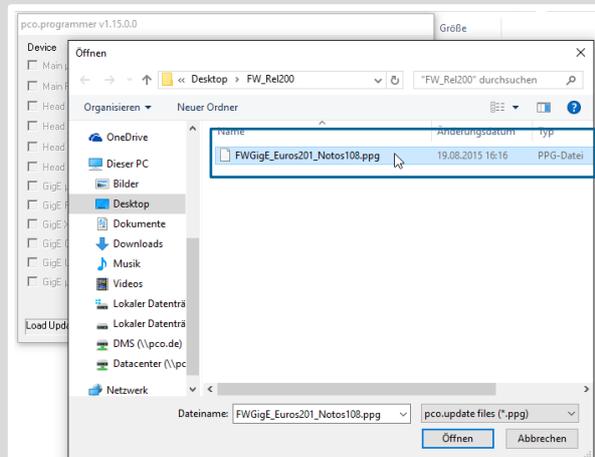
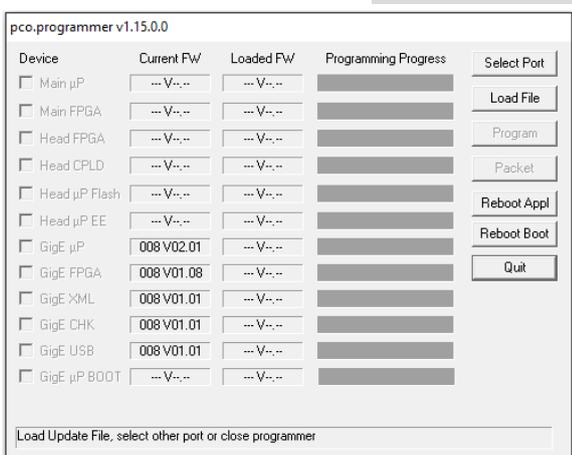
First the selection dialog is shown. Please select **USB**, in case it is not selected.

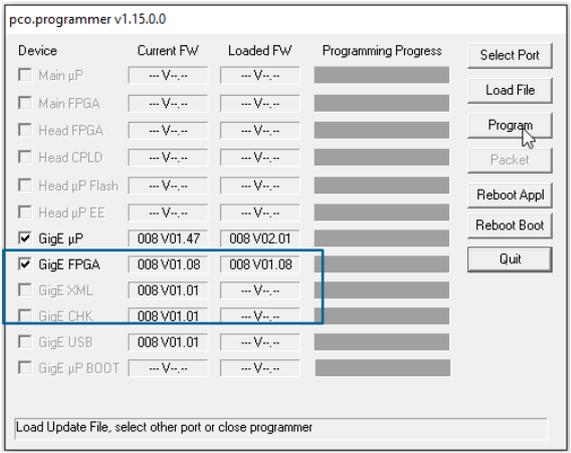


Press **Connect**. Now the status information should display a camera with its serial number.

Click **OK** to proceed to the programming step.

Select **Load File** and open the **ppg-file: FWGige_Euros201_Notos108.ppg**





The pco.programmer dialog shows the current firmware version and the version of the loaded (new) firmware.

Always select **both** devices GiE µP and GigE FPGA.

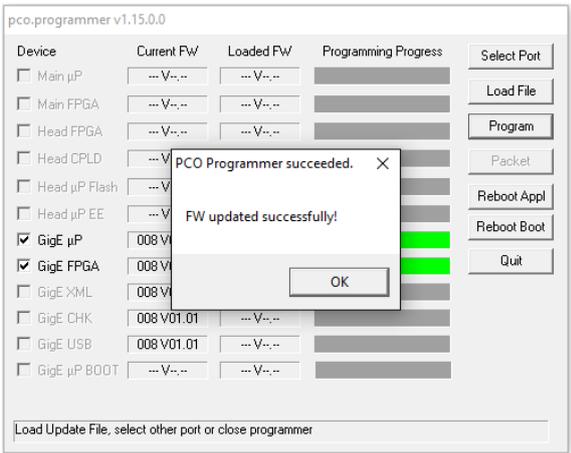
Updates are available for **GigE interface microcontroller** (GigE µP) and **FPGA** (GigE FPGA).

Press **program**, which will first create a backup of your current firmware. The camera will **beep** several times during the update process. The update will start after the backup process is finished.

Wait until the complete process is finished. This can take **a few minutes**.

NOTICE

DO NOT UNPLUG
DO NOT UNPLUG AND/OR SWITCH OFF ANY OF YOUR DEVICES, NEITHER THE PC, NOR THE CAMERA, DURING THE UPDATE.



After a successful firmware programming process you should see two green bars inside the programming dialog and the message **FW updated successfully** will pop-up.

Press **ok** and then **quit** to leave the pco.programmer.

NOTE
If you hear two beeps something went wrong. Please try to repeat the firmware update.

In order to connect with GigE please **unplug the USB cable** and **connect GigE**.

After a few seconds you should hear **one beep**. This indicates that the update has been finished successfully and the camera is ready for use.

ABOUT PCO



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In 1987, PCO was founded with the objective to develop and to produce specialized, fast and sensitive video camera systems, mainly for scientific applications. Meanwhile the product range of PCO cameras covers digital camera systems with high dynamic range, high resolution, high speed and low noise, which are sold in the scientific and industrial market all over the world.

Currently PCO is one of the leading manufacturers of scientific cameras. Worldwide representatives, together with our own sales department and technical support assure that we keep in touch with our customers and their needs. The actual wide range of specialized camera systems is the result of technical challenge and product specific know-how. A design according to advanced techniques, a high standard of production and strict quality controls guarantee a reliable operation of the cameras. Our own developments in conjunction with an excellent contact to leading manufacturers of image sensors ensure our access to state-of-the-art CCD and CMOS technology for our cameras.

Since 2001, PCO is located in its own facility building in Kelheim at the shore of the beautiful and international river Danube. Here in the county Bavaria, which is well known for its excellent support and conditions for high technology companies, we share the benefits of the simple access to high performance products and services in the surrounding area.

Kelheim itself is a historical town, first documented in 866. The small city is founded at the confluence of the Danube and the Altmühl, which has been converted into the Rhine-Main-Danube bypass channel for water transport. Located in Danube valley, it is the heart of a beautiful river and forest covered lime plateau landscape. It's landmark, the Hall of Liberation, was built by Ludwig I. in 1863 on the Mount Michael and is visible from all over the city and valley. The beautiful Danube Gorge, which is protected as natural monument since 1840, is located between Kelheim and the famous abbey Weltenburg.

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