

ANALOGUE OUTPUTS INSTALLATION

Photon

Manual

Version: 1.0
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madur
E L E C T R O N I C S

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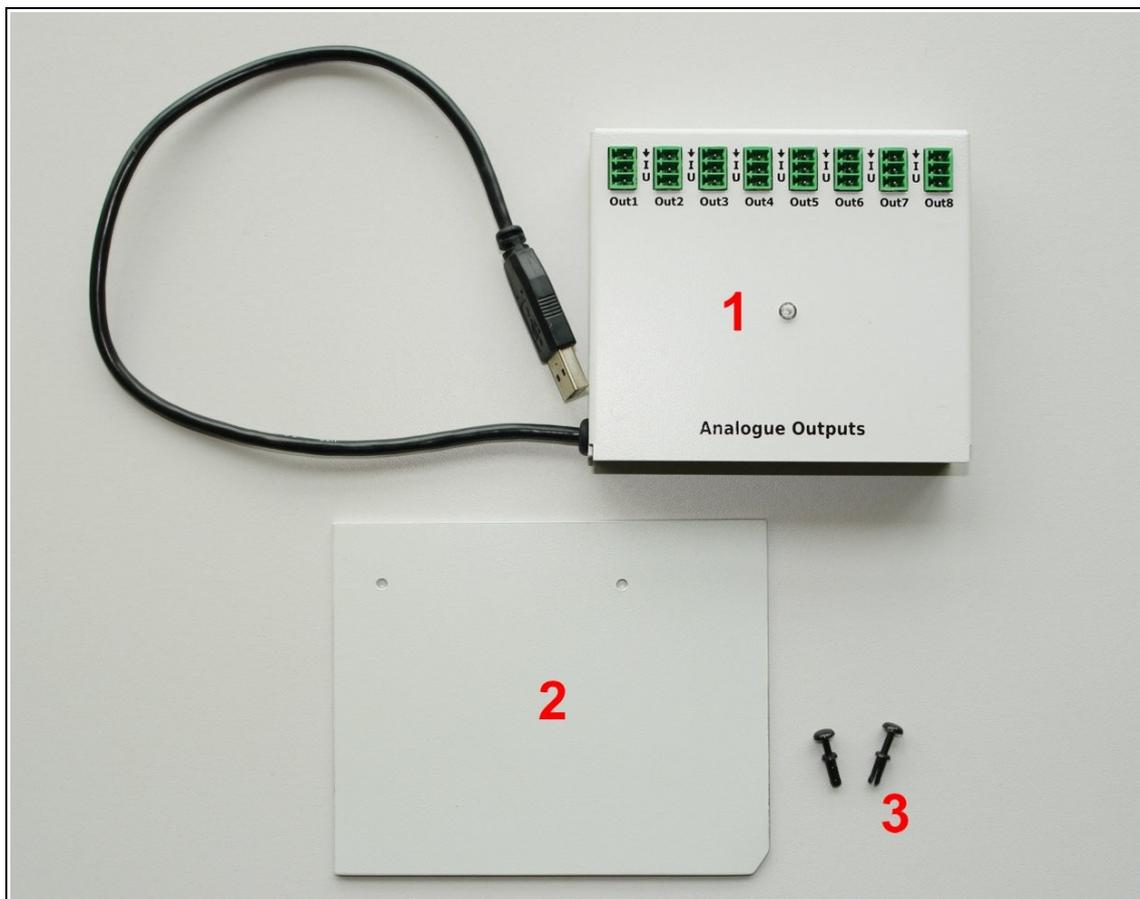
1. INTRODUCTION

The analogue outputs are the optional equipment of the Photon II analyser and are delivered as a separate module connected to the outer USB socket. To run the analogue outputs properly the firmware of at least version 1.0.0. is needed. The most recent programme version can be downloaded at www.madur.pl/downloadcenter .

2. MOUNTING THE ANALOGUE OUTPUTS

The analogue outputs module is delivered in the mounting set shown in Picture 1. The mounting set consists of the following elements:

1. Analogue outputs module
2. Stencil for drilling the mounting holes
3. Mounting pins



Picture 1. The analogue outputs module mounting set: 1 – analogue outputs module; 2 – stencil for drilling the mounting holes; 3 – snap-rivets.

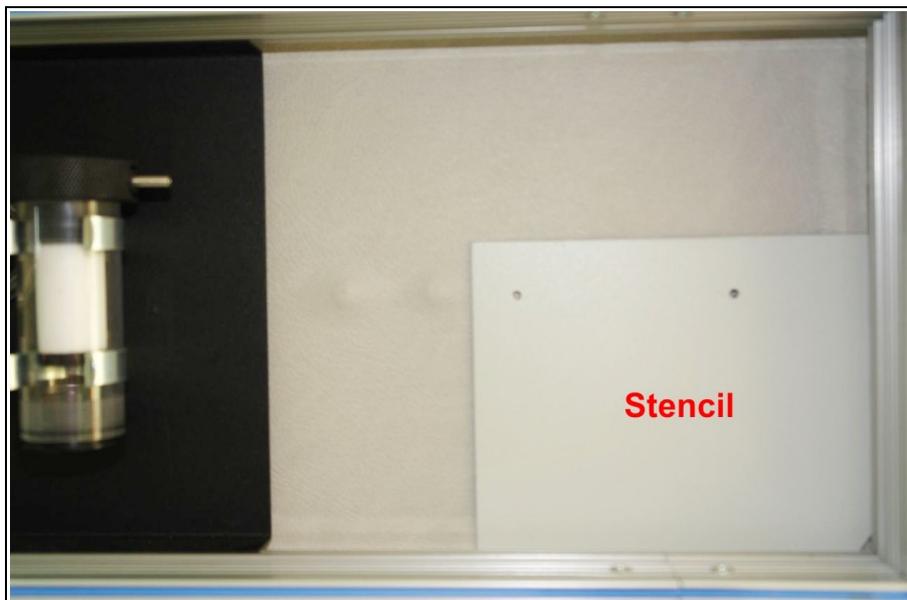
During the installation process the tools shown in Picture 2 will be needed: a drill and a $\text{Ø}=3\text{mm}$ drill bit.



Picture 2. The tools needed while installing the analogue outputs module: a drill and a $\text{\O}=3\text{mm}$ drill bit.

In order to install the analogue outputs in the Photon II analyser it is necessary to proceed the following operations:

1. Switch the analyser off and disconnect it from the power supply.
2. Apply the stencil (the element 2 shown in Picture 1) to the bottom right corner of the inner side of the analyser chest's cover.



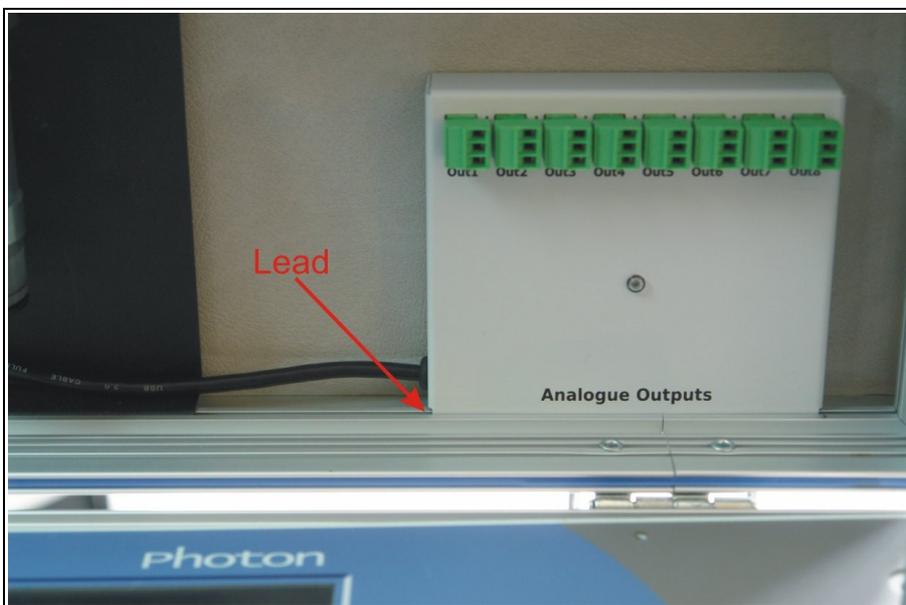
Picture 3. The position of the stencil on the inner side of the analyser chest's cover.

3. Drill the holes of 3mm diameter in the cover through the stencil's holes. Hold the stencil with one hand throughout the drilling process.



Picture 4. Drilling the holes in the cover with the help of the stencil.

4. Install the analogue outputs module in the chest's cover so that the bottom edge of the module's casing fits the cover's lead. Make sure the mounting holes at the back of the module cover the holes made earlier in the cover.



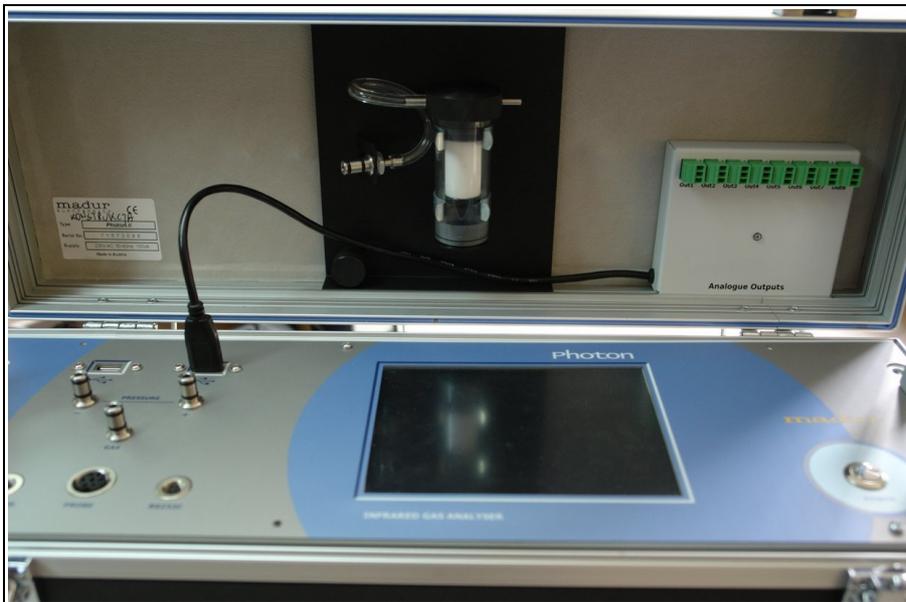
Picture 5. Installing the module in the chest's cover.

5. Holding the analogue outputs module fix it to the cover by means of the mounting pins (the element 3 shown in Picture 1) fixed from the outside of the cover.



Picture 6. Fixing the analogue outputs module by means of the mounting pins.

6. If the 1.0.0 version of the firmware is installed in the analyser, the module can be connected to either of the USB sockets at the front plate of the device. If not, perform the update of the firmware described in point 2.1.



Picture 7. Connecting the analogue outputs module to the USB socket.

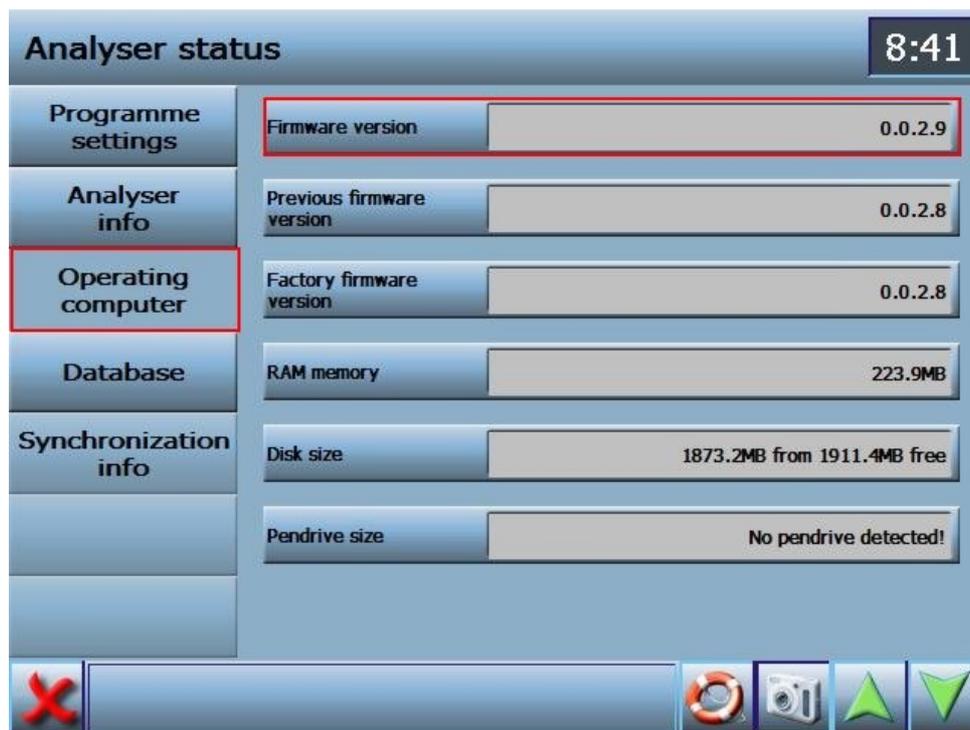
2.1. Updating the firmware

Attention!

If the analogue outputs are to run properly it is crucial that the device is operated by the firmware of at least version 1.0.0.

To check the version of the installed firmware it is necessary to proceed the following operations:

1. Choose the 'Status' icon from the Quick Menu.
2. Switch to the 'Operating Computer' tab.
3. Check the version of the installed firmware in the 'Firmware version' bar.



Picture 8. The Analyser Status window.

To update the firmware download the most recent version of the programme for Photon II analyser at www.madur.pl/downloadcenter . Then proceed the following operations:

1. Run the downloaded file (for example mPhoton_v.0.1.0.0.exe) on a stationary computer. In the appearing window define the main directory of the USB flash drive (Pendrive) to which the installation files will be copied.



Picture 9. Indicating the disk to which the update files will be unzipped.

2. Turn the analyser on and after logging in remain on the main results screen.
3. Connect the portable memory with the updated firmware to either of the USB sockets. Confirm the appearing Firmware update inquiry note.



Picture 10. The firmware update confirmation note.

Attention!

If the note on the new firmware version does not appear disconnect and reconnect the portable memory to the USB socket.

4. After a few minutes the installation will be completed and the new firmware will be ready to operate. Now it is possible to connect the analogue outputs to either of the USB sockets on the front plate of the analyser.

If all the operations have been completed successfully the *Current analogue outputs* and *Voltage analogue outputs* setting options can be accessed from the menu.