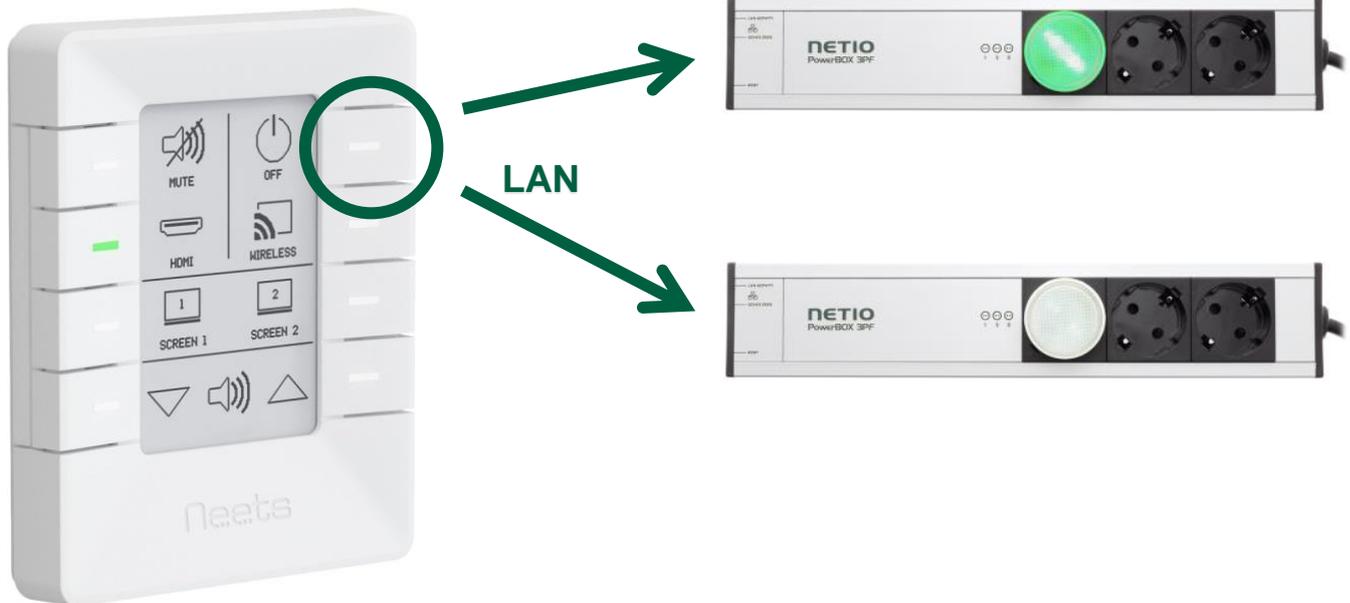


# NETIO PowerBOX 3Px

## Needs Installation Guide in 10 steps

How to control LAN connected power sockets with 3 electrical outputs from the Needs devices.



### Tested software & devices

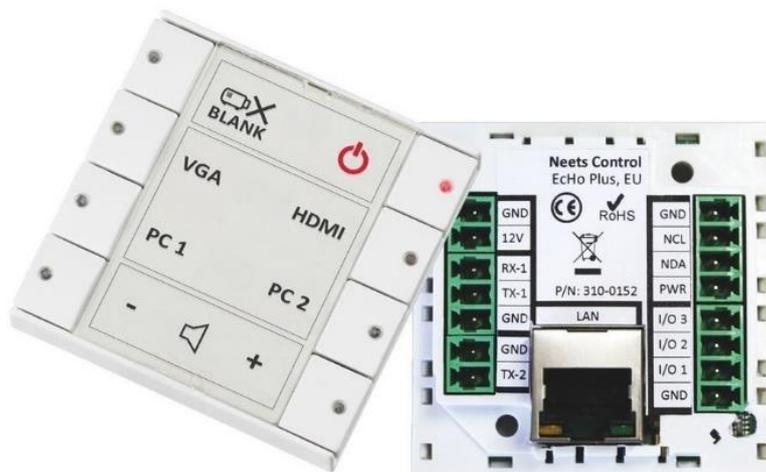
- **PowerBOX 3PE** (firmware 2.4.4 and later)
- Needs Project designer (version 1.25.1 and later)
- **Needs Echo plus** (firmware 3.24.0 and later)

### You can do with Needs & NETIO power sockets together

- Switch **On** or **Off** any power socket output by the button.
- **Toggle** state of any power socket output by the button.
- **Initiate reset sequence** (short Off) on defined power output by the button.
- Show output state by LED in the button.
  
- Define **PowerUp sequence** / delay (by NETIO PowerUp delays + PowerUp State).
- Indicate minimal / maximal power (W) or current (mA) consumption on defined output by LED blinking. Require NETIO device with power metering.

## Compatible Neets devices

- Neets **Echo plus**
- Neets **Uniform**
- Neets **Sierra II**
- Neets **Lima**
- Neets **Tango**
- Neets **Alfa II**



## Compatible NETIO devices

- NETIO **PowerBOX 3Px**
- NETIO **4**
- NETIO **4All**
- NETIO **PowerCable Modbus 101x**
- NETIO **PowerPDU 4C**
- NETIO **PowerPDU 4PS**
- NETIO **PowerDIN 4PZ**



## (1) Discover NETIO PowerBOX 3Px on the LAN

Use NETIO Discover to find your NETIO PowerBOX device.

NETIO Discover can be downloaded at <https://www.netio-products.com/en/download>

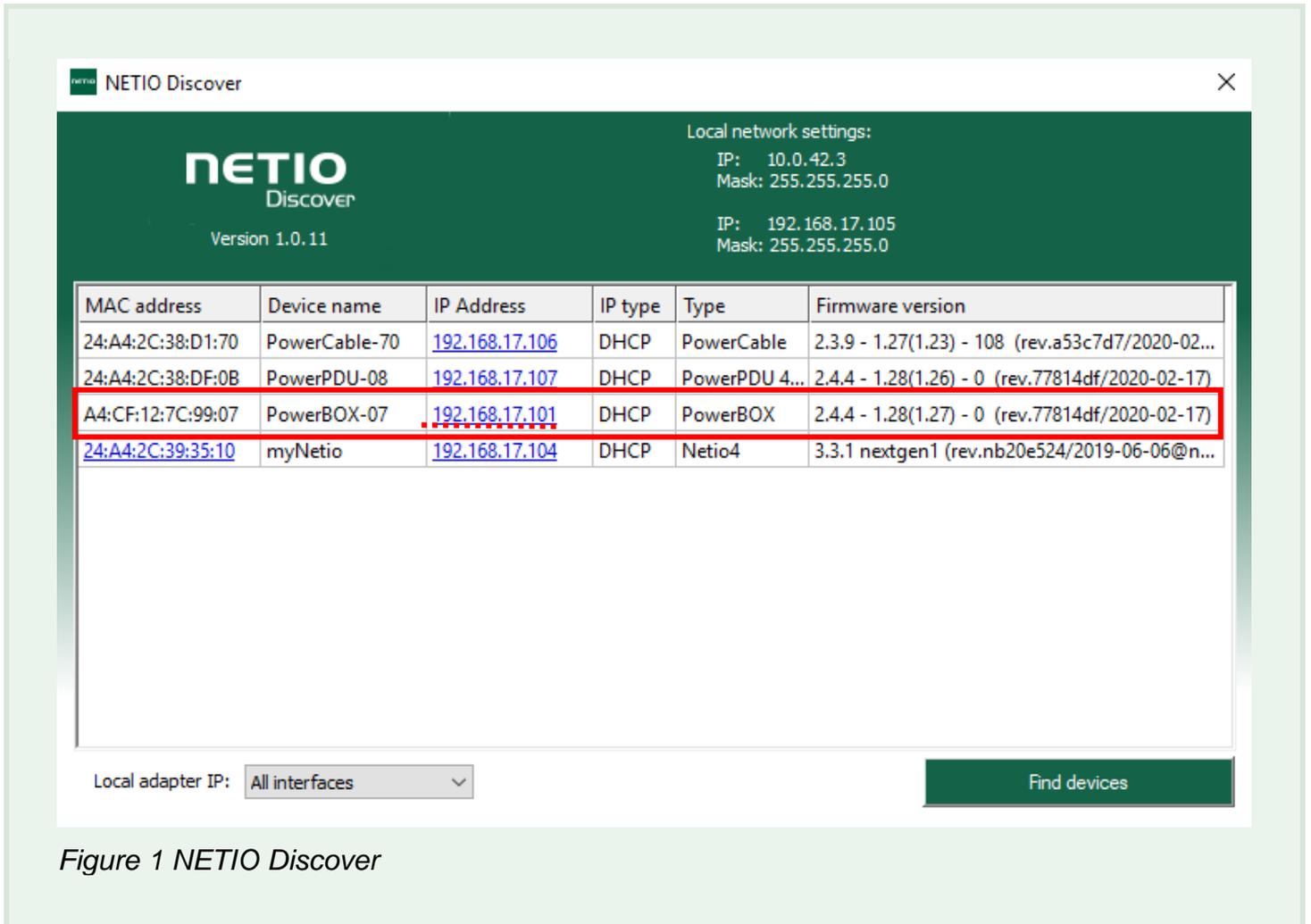


Figure 1 NETIO Discover

Open web configuration in web browser using device IP address (192.168.17.101 in our example). You can click on the IP address in NETIO Discover to do so.

## (2) Device Web login

Log in to web administration. Default username / password is admin / admin

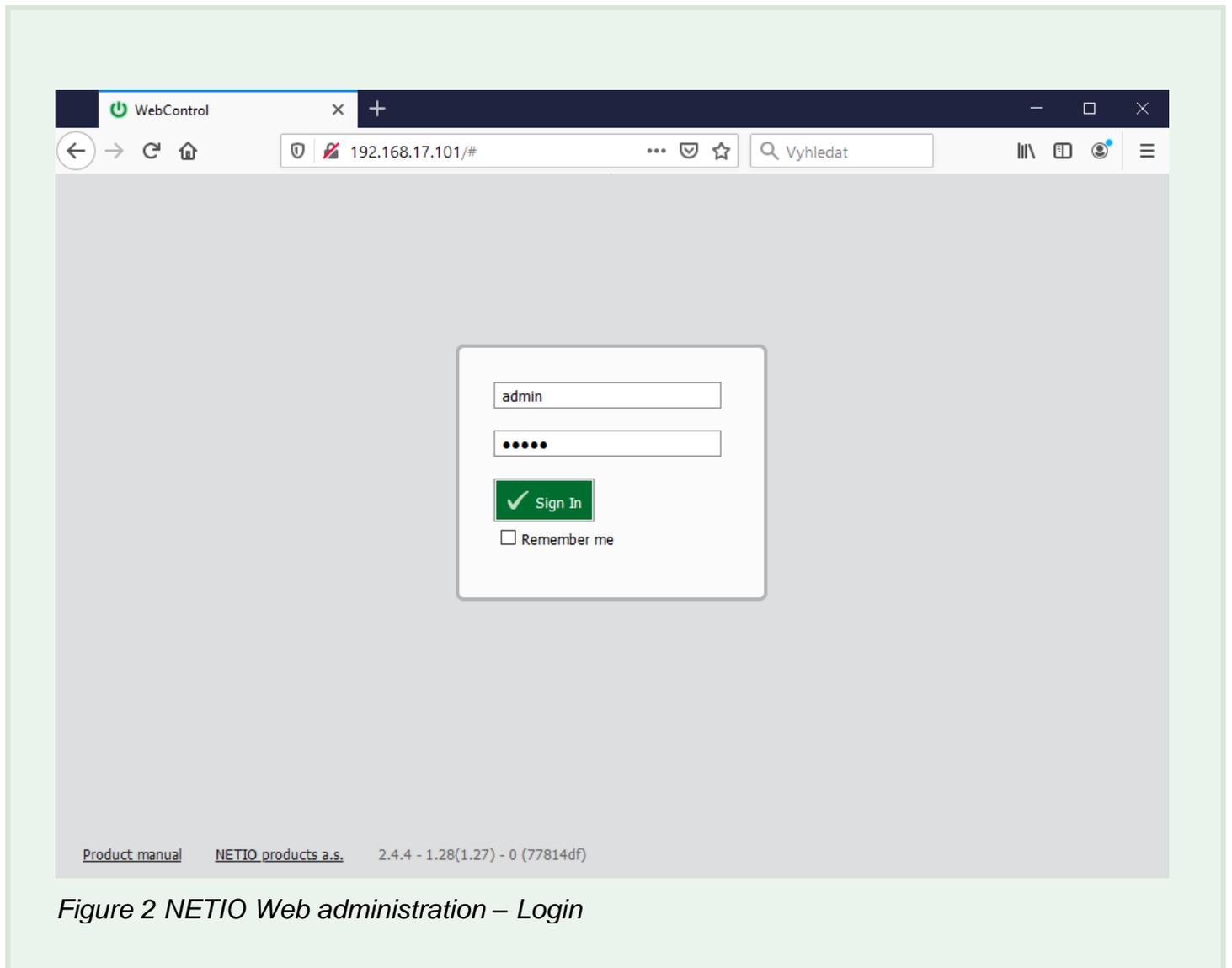
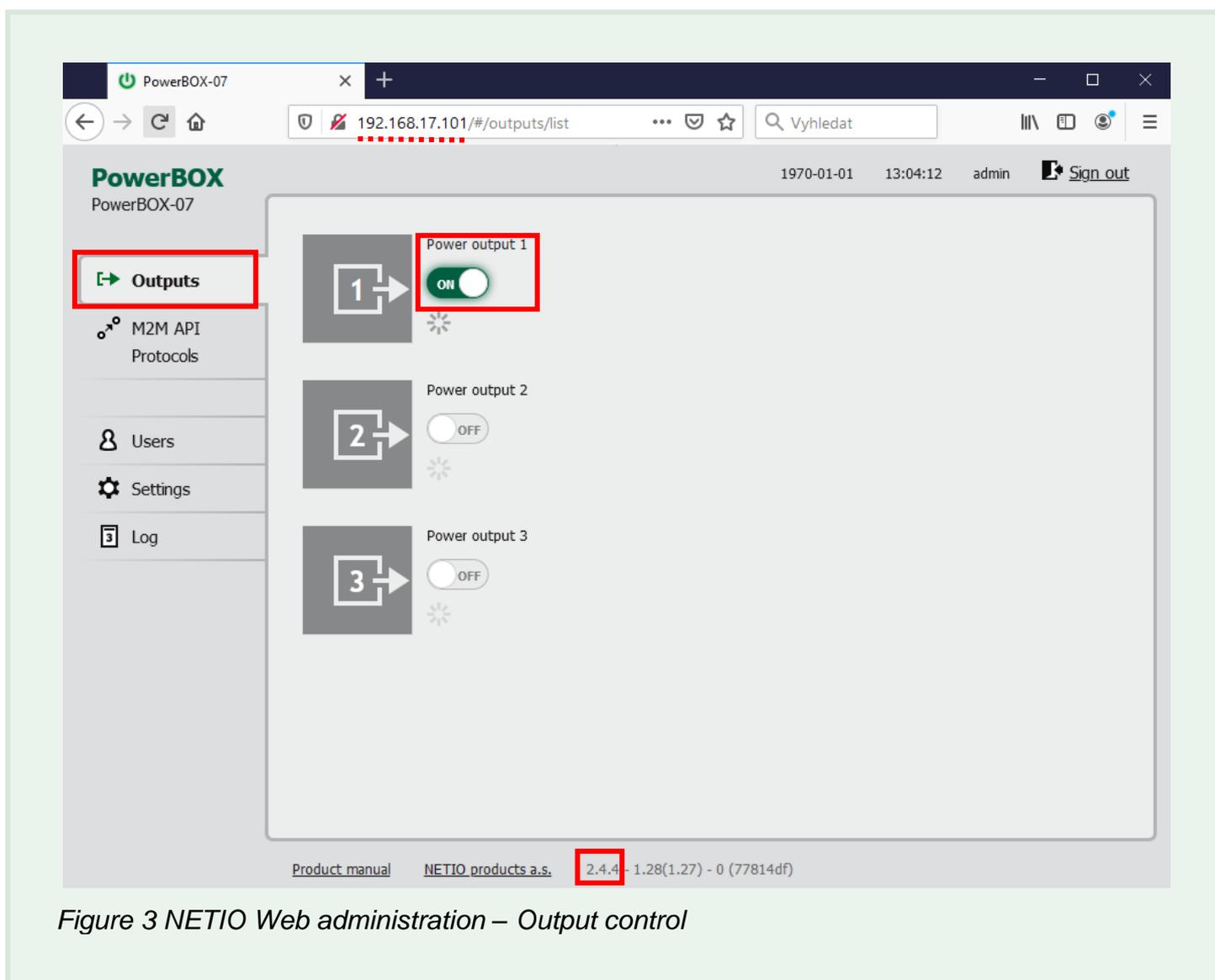


Figure 2 NETIO Web administration – Login

### (3) Device Web administration

Try to control the power socket output.

- LEFT MENU: **Outputs**
- Use Off/On control element and change output state to make sure, you are connected to the correct NETIO device.
- Check your device has supported firmware version according to the top page in this document



## (4) Enable protocol Modbus/TCP

- LEFT MENU: - **M2M API Protocols**
- Check „**Enable Modbus/TCP**” and check Port (default 502)
- Save Changes

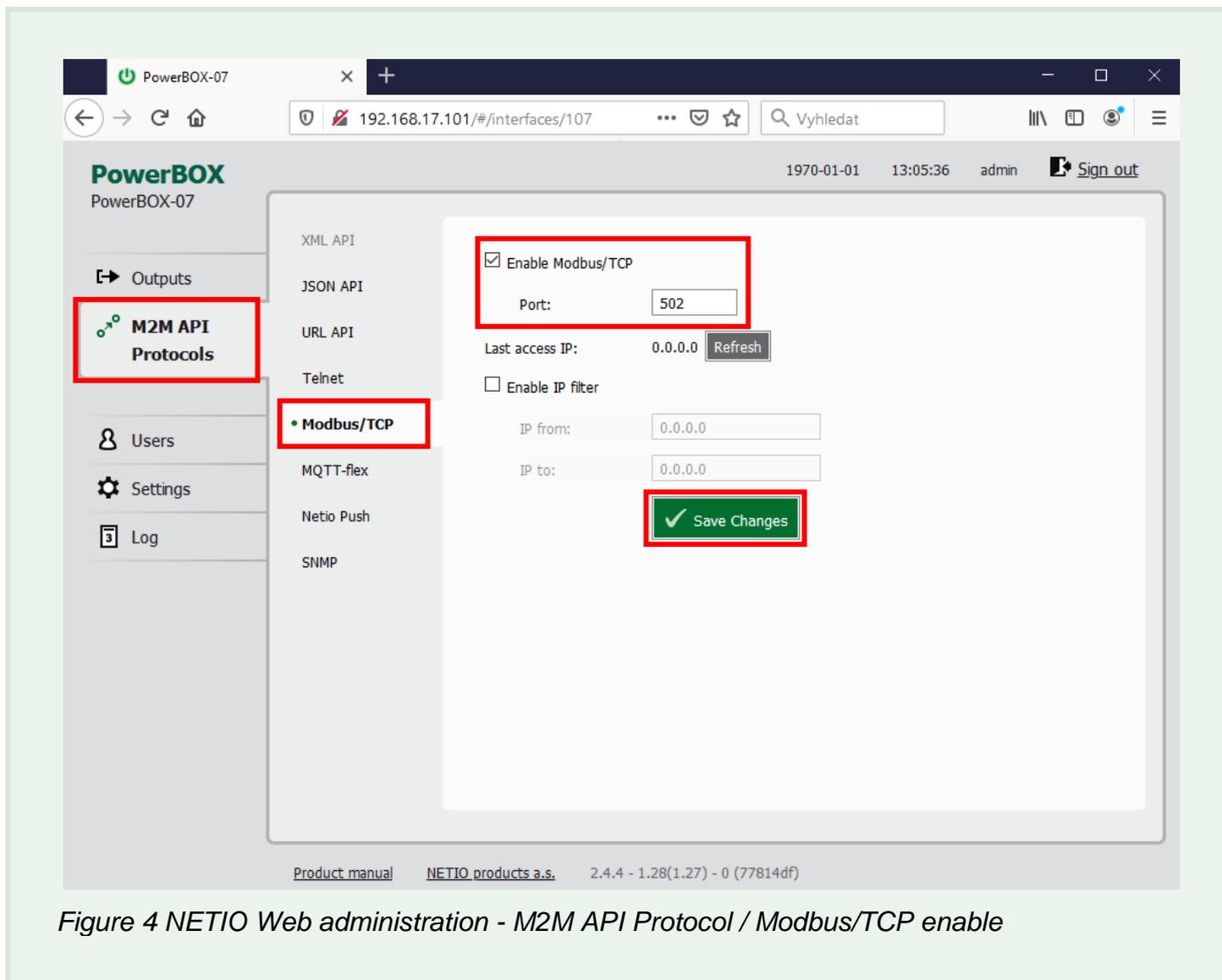


Figure 4 NETIO Web administration - M2M API Protocol / Modbus/TCP enable

The NETIO device is now ready for use with Neets control system.

## (5) Do not use default password

**Default username / password for the NETIO device is “admin” / “admin”.**

It's only device settings access, but professional installations we recommend you to change it.

**Set your own password for admin the NETIO device.**

- LEFT MENU: Users
- Enter Current password (default admin)
- Enter Password and Confirm password
- Save Changes

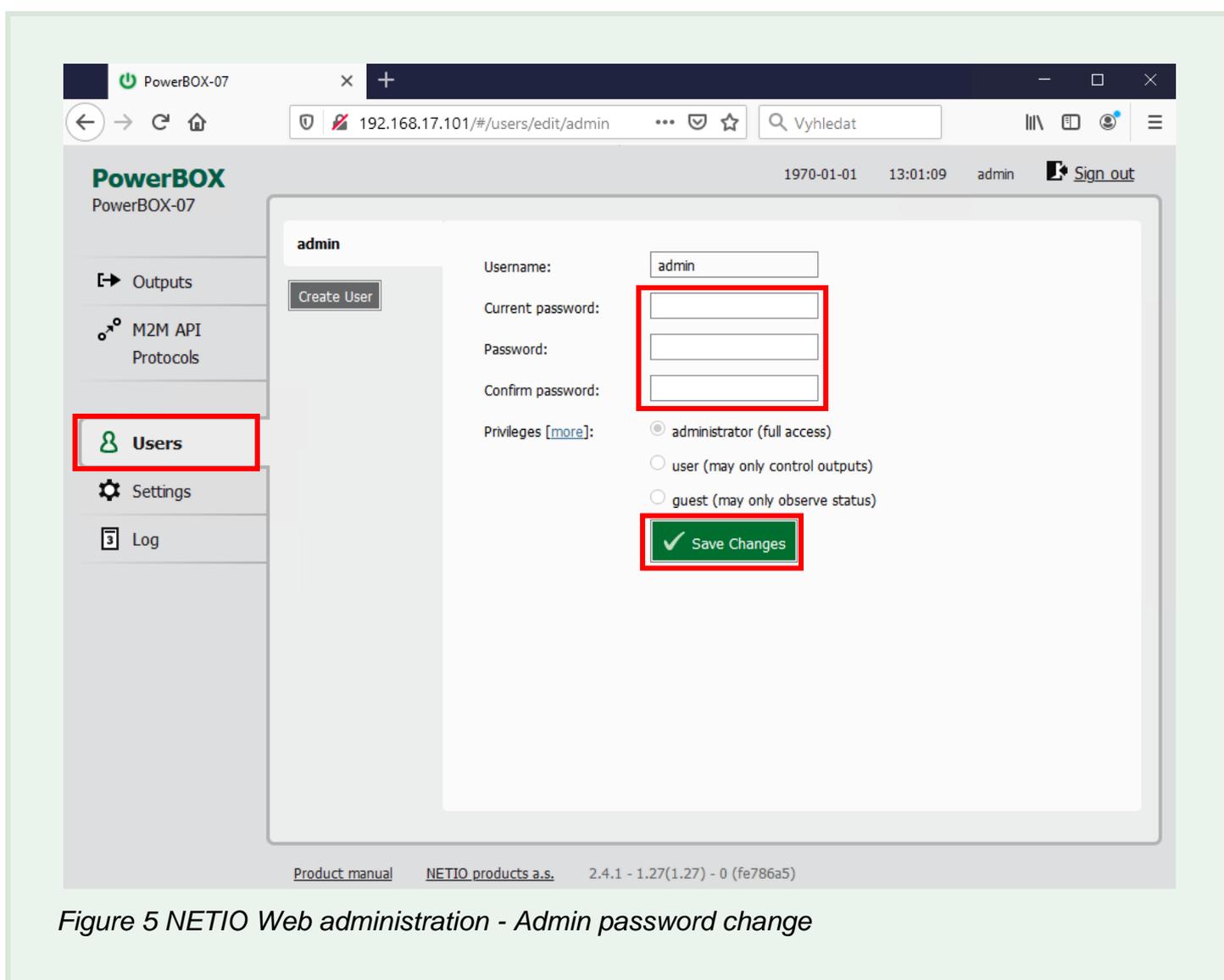


Figure 5 NETIO Web administration - Admin password change

## Neets configuration

### (6) Start Neets Projects Designer

Use Neets Project Designer to create a **new blank project** with Neets Echo Plus.

- Select **System** from the bottom menu.
- Make sure, your Neets and NETIO devices use the same IP subnet.
- We have set up Echo Plus to use DHCP in our example.

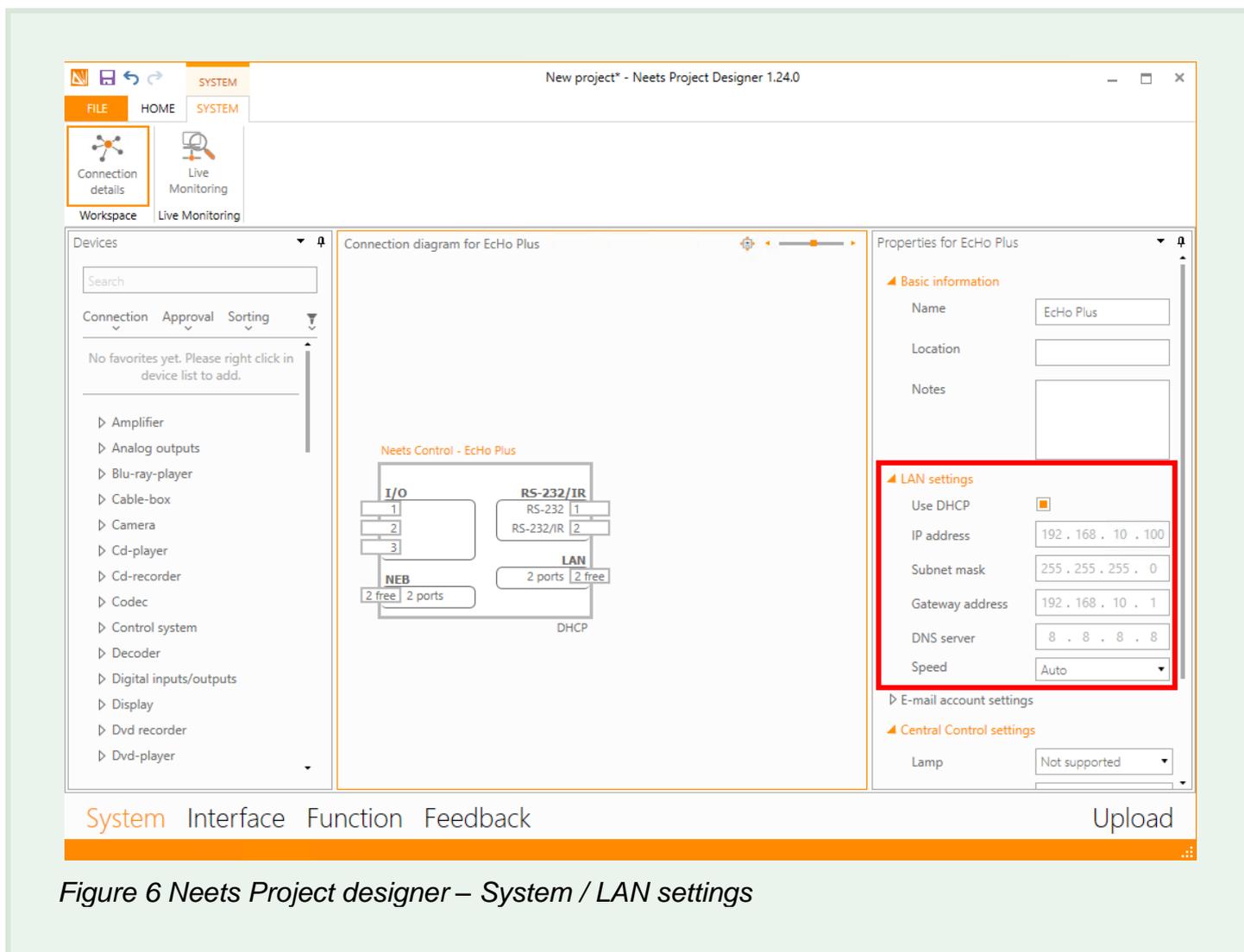


Figure 6 Neets Project designer – System / LAN settings

## (7) Add NETIO device in the System view

- Window “**Devices**” - Navigate to **Others / NETIO Products**
- Drag&drop device “**PowerBOX 3Px**” to window “Connection diagram for EcHo Plus”
- Click on “PowerBOX 3Px” and enter IP address and Port in “LAN Settings”  
(in our example 192.168.17.101 and port 502)

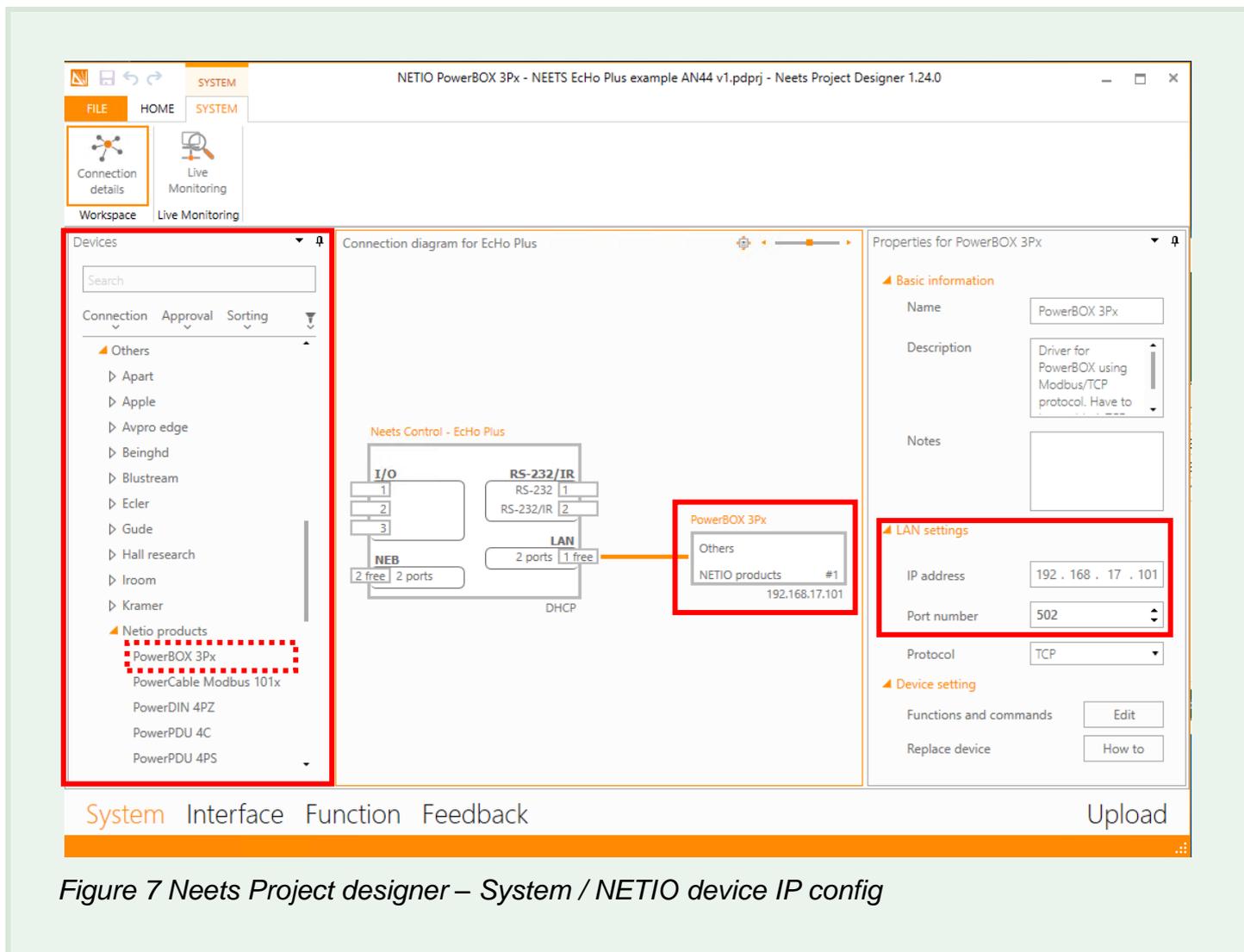


Figure 7 Neets Project designer – System / NETIO device IP config

## (8) Edit EcHo Plus Interface

Select **Interface** from the bottom menu.

Our example uses top **left button** to control output 1 – invert status of the output (Toggle) by pressing the button.

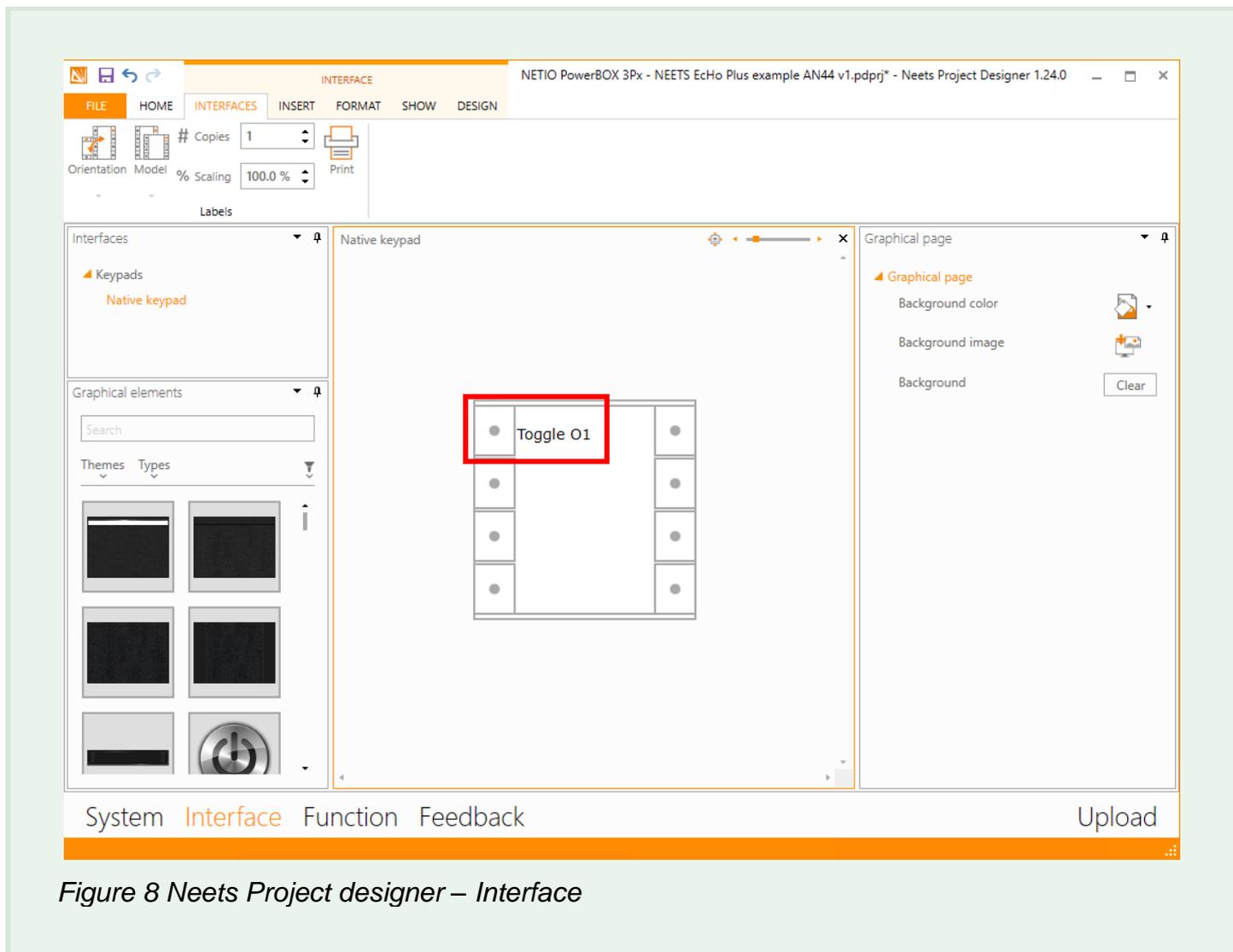


Figure 8 Neets Project designer – Interface

## (9) Define Echo Plus function per button

- Select **Function** from the bottom menu.
- Drag & drop sequence “**Output 1 = Toggle**” to the **top left button**
- Set the Wait time to “**0**” in “**Action**” window

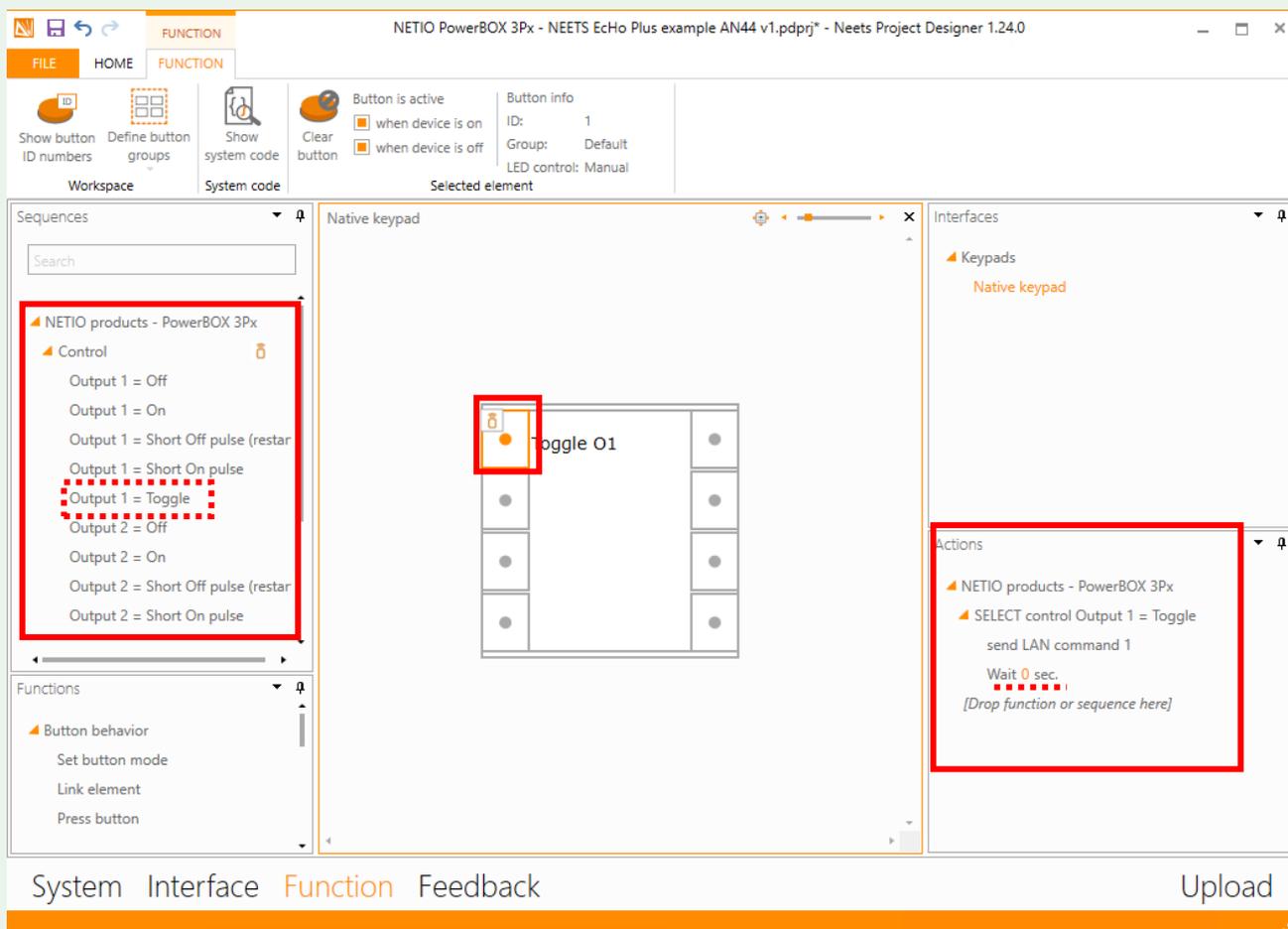


Figure 9 Neets Project designer – Function

## (10) Upload and test!

- Now, you are ready to upload the project to Echo Plus
- When upload finishes and Echo Plus starts use the top left button on Echo Plus to control power Output 1.

*Every time you press this button on Echo Plus the Power Output 1 should change its state from On to Off or vice versa.*

# NETIO AN44 example project

We have created the example projects to show Functions (output control) and Feedback (Monitoring of output state).

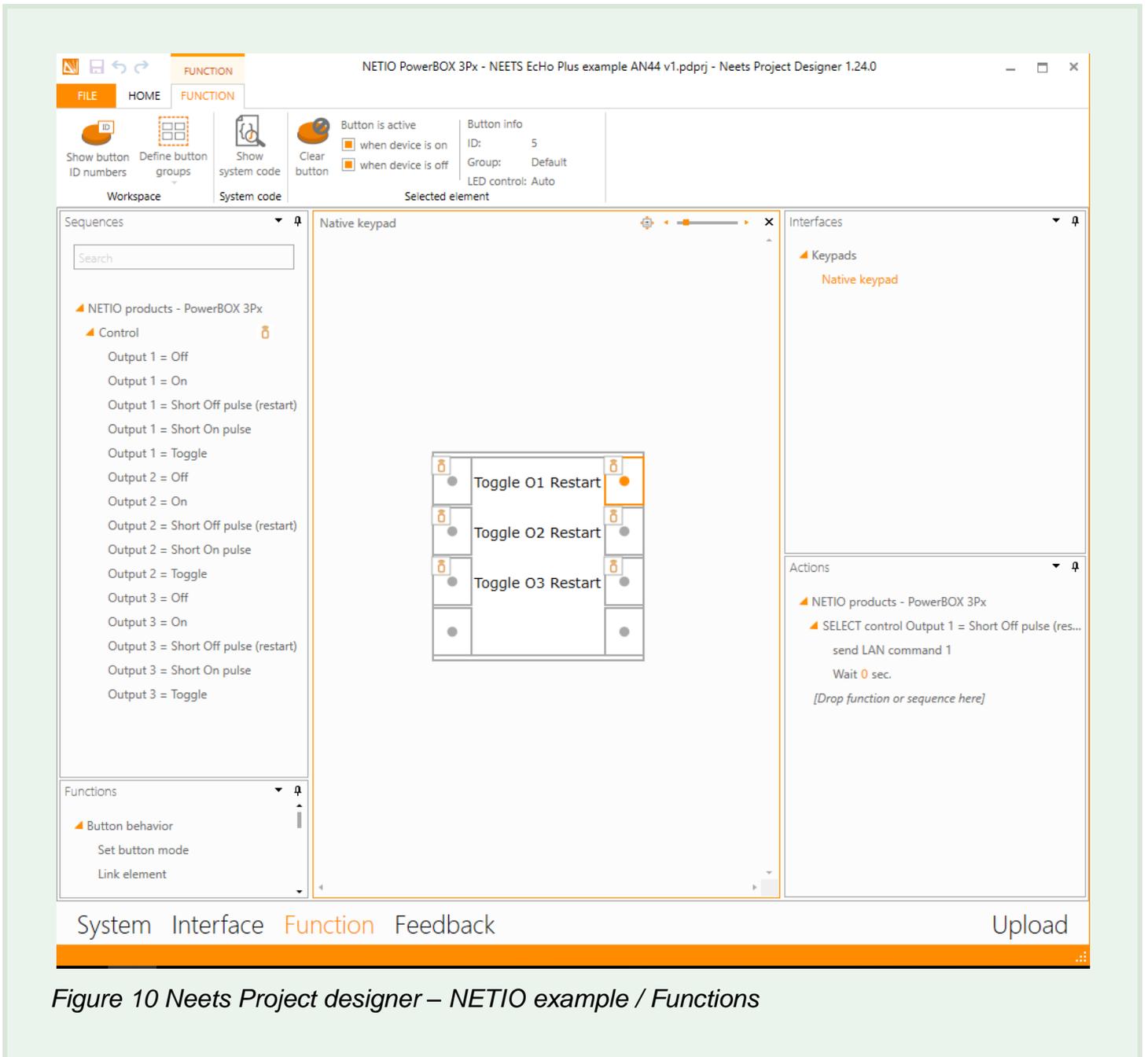


Figure 10 Neets Project designer – NETIO example / Functions

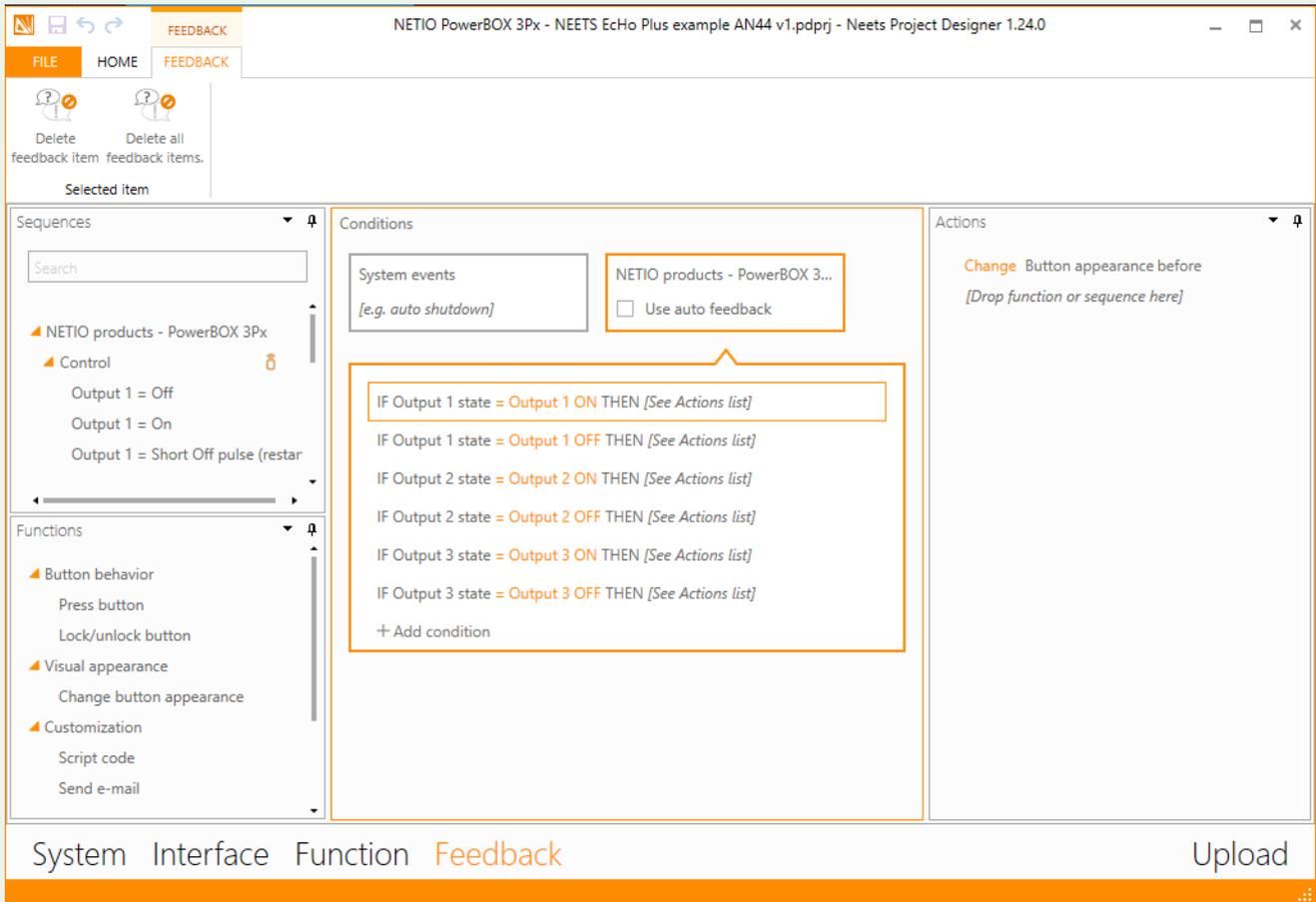


Figure 11 Neets Project designer – NETIO example / Feedback

### NETIO Application Note

On the manufacture website you can find Application Note how to make NETIO working with NEETS product: [AN44 – EcHo Plus \(NEETS\) for AV applications controlling electrical power sockets 230V](#)

You can download example project for Neets Project Designer there.