



# OMS-Nano

– made for 10Micron –



#2455031

## Instruction Manual and Recommended Use

Thank you for your purchase of the Remote-Switch OMS-Nano for 10Micron Mounts. It is used to turn your 10Micron mount on and off from remote.

To ensure optimal performance, please read this instruction manual before using the OMS-Nano, we recommend that you study this manual before installing and using it.



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# BAADER PLANETARIUM

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## Scope of Delivery



- 1 OMS-Nano switch
- 2 Power supply unit with adapters
- 3 LAN-cable
- 4 USB-cable

# Mode of operation

A 10Micron mount can be switched on and off remotely via this external switch module (OMS – Observation Management System Nano). For this, the 3-pin stereo jack EXT SWITCH ① is connected in parallel with its two front contacts (stereo left and right, without ground) to the ON / OFF switch ②. This is a rocker switch that is only active for the duration the rocker switch is pressed (one to three seconds).

The switch box must perform the same function as the rocker switch. It must close the contact for one to three seconds, but not continuously.



## Connecting the Switch

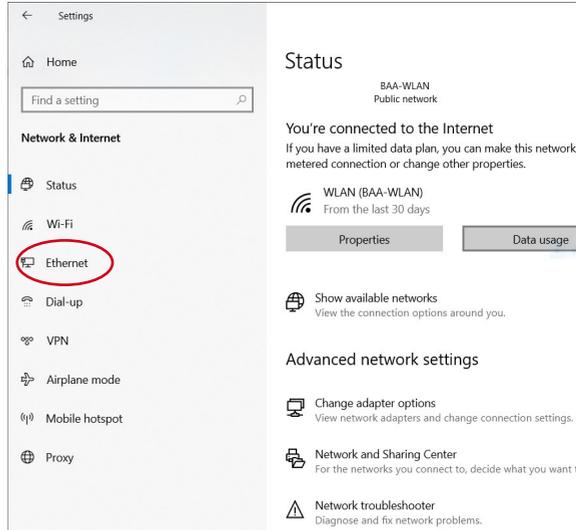
- Switch off the mount manually at the control box by using the ON/OFF switch ②.
- Wait for the red LED ③ to turn off. This can take up to 30s.
- Disconnect the mount from the power supply (pull the plug).
- Plug the jack plug of the switch module into the jack socket EXT. SWITCH ① of the control box.
- Connect the supplied power supply unit to the switch module.
- Connect the LAN port of the switch module to your network, e.g. a switch, or directly to your computer using the network cable.
- **Optional:** Connect the switch module to your computer using the USB cable in order to configure the network settings of the switch module or to import firmware updates. For normal operation, you only need a connection via the network cable.
- Reconnect the power supply to the mount.

**Note:** The rocker switch on the control box of the mount is out of operation after plugging in the jack plug of the switching module. If you unplug the connection cable from the 10Micron control box, it will power up/shut down. This makes a manual operation possible.

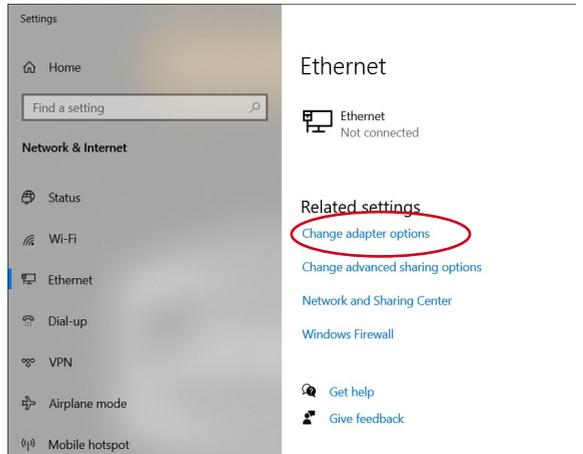
## Network Settings

Open network and internet-settings on your computer (on the example of Windows 10)

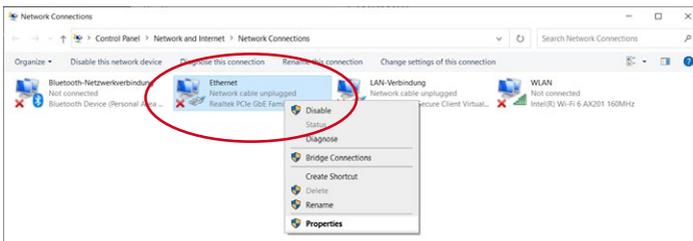
Go to *Ethernet – Settings*:



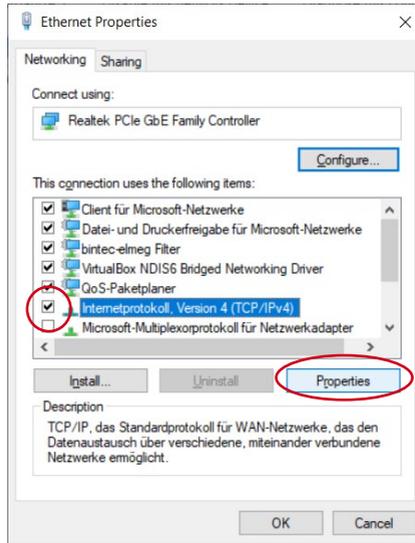
Choose *Change adapter options*:



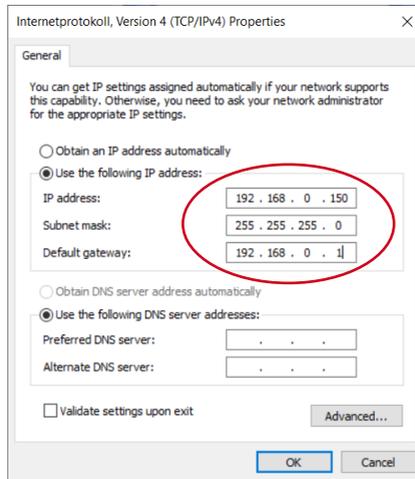
Right-click on *Ethernet* and choose *Properties*.



Select *Internet Protocol Version 4* and click on *Properties*.



Enter the following IP data. Your computer must be in the range 192.168.0.0 to 192.168.0.255; the IP-adress 192.168.0.123 is occupied by the OMS-Nano.



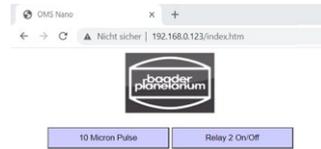
To finish this process click *OK* and close the setting windows.

# Control of the Switch

Open a web browser and enter the assigned IP-address:

[192.168.0.123/index.htm](http://192.168.0.123/index.htm)

The web interface opens. This address can be defined in the web browser as a bookmark or start page, so that the switch module can be found automatically the next time the browser is called up.



**Switch on the mount:** Click on *10 Micron Pulse*.

The mount now starts up, which is indicated in the keypad display by showing *Connecting...*, if it was previously defined that the Virtual Keypad should connect via Auto Connect after the mount has been started.

As soon as the mount has booted, the Virtual Keypad displays the connection data.

Remember to move the mount to its designated park position before switching it off.

**Switching off the mount:** Click the button *10 Micron Pulse* again.

The mount is now shutting down.

**Attention:** Prior to restarting, the mount must be completely shut down. The red LED of the control box must have been extinguished. Since this is not visible in remote mode, you should wait at least 30 seconds before operating *10 Micron Pulse* again.

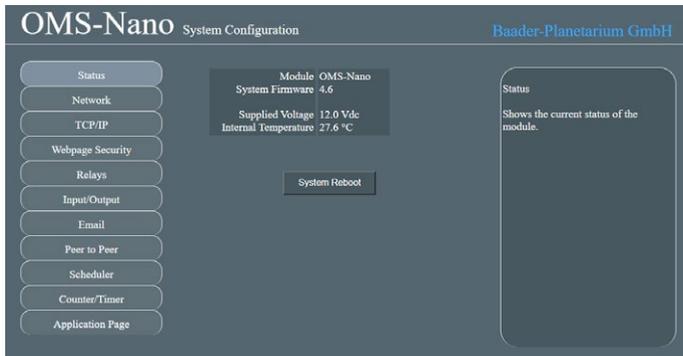
## Configuration

This function requires a USB connection to the switch box. This is used to secure access.

Open a web browser and enter the following IP address:

[192.168.0.123/config.htm](http://192.168.0.123/config.htm)

The configuration web interface opens. This address can also be saved as a bookmark in the web browser, so that the next time the browser is opened, the switching module is easier to find.



Under the menu item *Network*, you can now make all the necessary changes to your own network. However, it is recommended to use a fixed IP address as far as possible.

OMS-Nano System Configuration Baader-Planetarium GmbH

Status  
Network  
TCP/IP  
Webpage Security  
Relays  
Input/Output  
Email  
Peer to Peer  
Scheduler  
Counter/Timer  
Application Page

Host Name: OMS Nano  
IP Address: 192.168.0.123  
Subnet Mask: 255.255.255.0  
Gateway Address: 192.168.0.1  
Primary DNS: 192.168.0.1  
Secondary DNS: 8.8.8.8  
Enable DHCP:

Network  
Configure network IP address and associated parameters.

Update Pending

**Please note:**

If changed settings have not yet been transmitted to the switch box, the *Update Pending* button lights up red. In this case, wait until the button turns grey again.



Under the menu item *Relays*, all necessary settings for the functions of the two relays can be made.

Under *Relays-No. 1* the preset values for the control of the mount can be viewed. **Do not change these values!** Relay 1 is activated by pressing the *10 Micron Pulse* button.

OMS-Nano System Configuration Baader-Planetarium GmbH

Status  
Network  
TCP/IP  
Webpage Security  
Relays  
Input/Output  
Email  
Peer to Peer  
Scheduler  
Counter/Timer  
Application Page

Relay No. 1  
Relay Name: 10 Micron Pulse  
Pulse/Follow: 500  
Set Relay: Rt1  
Reset Relay:   
Toggle Relay:   
Power-up Restore:

Relay Names  
These are the labels on the relay buttons on the application page to give each relay a unique and descriptive name.  
Maximum 20 characters.

Update Pending

Under *Relays-No. 2* the second relay (labelled "I/O Switch" on the OMS-Nano) can be freely programmed for future applications.



If you already want to use the second relays now, we can provide the documentation, if you contact us at [kontakt@baader-planetarium.de](mailto:kontakt@baader-planetarium.de). Please note that the warranty is void once the housing is opened or the second port is reprogrammed. These alterations are done at your own risk.

## Completion of the work

After each change of the settings, the switch box must be switched off and on again to successfully complete the programming. After changing the IP address and a restart, the OMS-Nano can be reached under the new IP address. Please remember to make the necessary changes to the bookmarks as well.

Likewise, the IP-4 details in the network settings can be reset to the original values if necessary.

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