

# Installation and Operation Manual

## Cover-control.plus

Pool-cover controller  
with integrated webserver



Art. No.: 310.010.0005

### Technical Data

Dimensions:	220 x 285 x 80 (mm)
Operating voltage:	1/N/PE 230V 50Hz
Power consumption:	< 10 W
Protection class:	IP 40
Ambient temperature:	0-40°C
Air humidity:	0-95% non condensing

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## General description

The electronic control unit Cover-control.plus is used to control the pool cover and can either be used as an extension unit for the PC-45 exclusiv or as an independent device. The device can be controlled via an external touch control panel (Touch-smart Art. 310.000.0700), via external buttons on the edge of the pool and via a local network (LAN).

**Attention! Before operating it, make sure that there are no people in the pool. The device should be in a location with a view of the entire pool.**

## General instruction

The control unit has been designed for safe and reliable operation in accordance with the provisions of these operating instructions. Therefore, read these operating instructions carefully before installing the device! The instructions contained therein for installation and operation must be followed exactly. If these conditions are met, the control unit will work properly for many years.

## Mounting

The housing is fixed vertically and permanently to a solid wall with adequate load-bearing capacity. The place of installation must be dust-free and protected against water in order to ensure that the device works properly. The ambient temperature should lie between 0° C and + 40° C and should be as constant as possible. The relative humidity must not exceed 95% and no condensation may occur. Direct incidence of heat or sunlight on the device must be avoided. The control unit is not suitable for outdoor installation.

## Electrical Connection

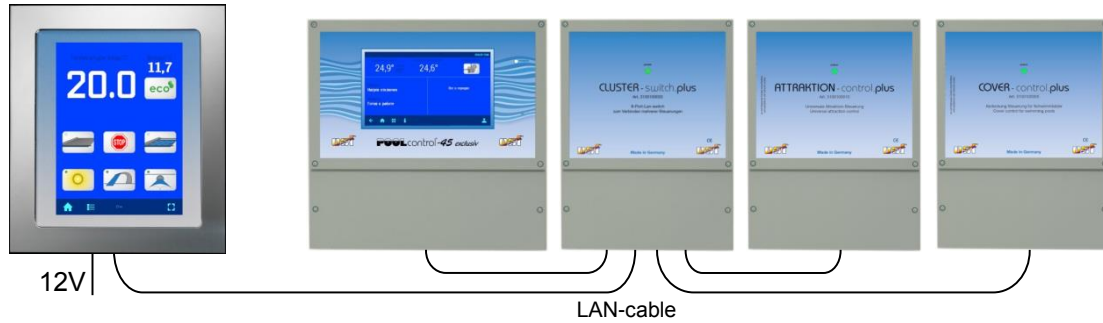
The control device must be fixed at a location where it is protected against moisture in accordance with its class of protection. The power supply to the device must be fed via an all-pin main switch with contact opening width of at least 3 mm and a residual current circuit breaker (RCCB) with  $I_{FN} \leq 30$  mA. **Before opening the housing, it is absolutely necessary to de-energize the device electrically. The electrical connection as well as the work of adjustment and servicing should be carried out only by an approved electrician! The connection diagrams enclosed and the relevant safety provisions applicable must be observed and followed.**

**Low-voltage cables should not be laid along with three-phase or AC cables in the same cable duct. In general, laying low-voltage cables near three-phase or AC cables must be avoided.**

## Connecting to LAN

The control unit has a LAN connection (Ethernet, RJ45). The device is controlled and configured exclusively via the LAN network with the PC-45 exclusive, an external smart touch panel, a computer or smartphone.

A standard network cable (patch cable, CAT5) must be used for the connection. Each device in a network cluster (PC-45 exclusiv, Cover-control.plus etc.) must be in the same local network. The easiest way is to connect all devices to a network switch. Our product range includes a suitable network switch named "Cluster-switch.plus". For more information, see the "Connect to a Computer Network and the Internet" section.

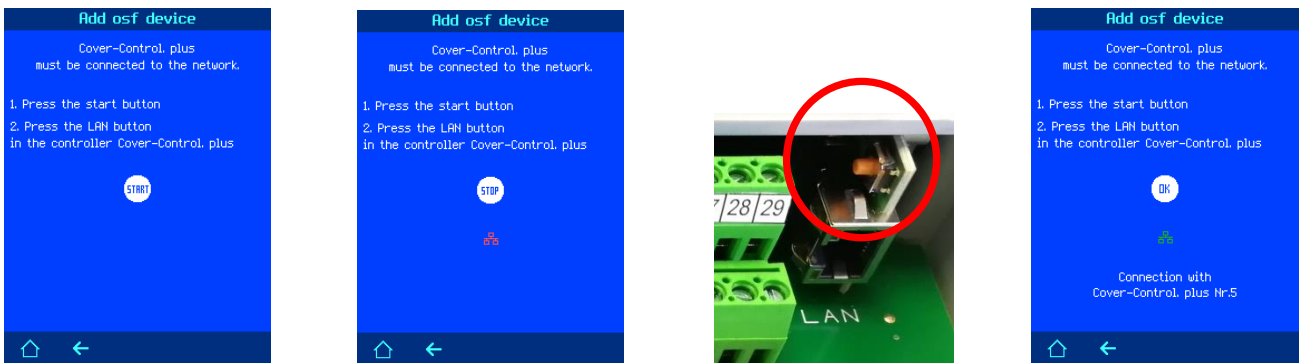


### Connection to the pool control PC-45 exclusiv

With the PC-45 exclusiv, several devices of the Plus series can be combined into a single network cluster for pool management. Data is exchanged between devices via a local computer network (LAN) and using its own communication protocol based on the UDP protocol. To connect devices, both devices must be connected to the local network.

### Connection to a "Smart-Touch" operating panel

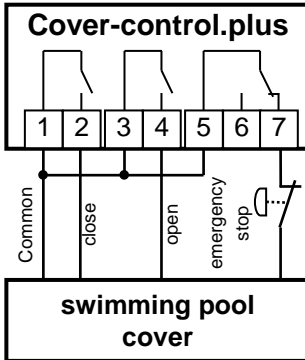
To connect the devices with each other, both devices must be connected to the local network. On the screen of the external Smart-Touch control panel, go to the "Add OSF device" menu and select the "Cover-control.plus" block. Then press the start button and then the LAN button in the Cover-control.plus according to the instructions displayed. For more information, see the instructions for the external smart touch control panel.



Please also note the installation and operating instructions for the devices PC-45 exclusiv and external smart touch control panel.

## Connection of a swimming pool cover

The swimming pool cover can be connected to terminals 1-7 so that the Cover-control.plus unit becomes the control panel of the cover.



### Connection of a swimming pool cover:

The Cover-control.plus has three relays to control the cover. Terminals 1-2 control the closing, terminals 3-4 open the cover. Terminals 5, 6, 7 activate the cover's emergency stop function.

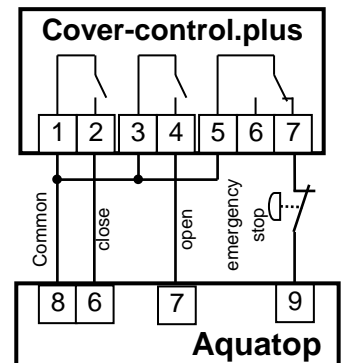
In order to move the cover in pulse mode, the corresponding relay contacts are briefly closed, which simulates pressing the button. In static mode, the same relay contacts are closed until the stop button is pressed.

### Connection of an Aqua Top swimming pool cover:

A swimming pool cover from Aqua Top can be connected to terminals 1-7.

This plan is only a connection example. The applicability of this plan for the type of cover used must be checked using the cover manufacturer's operating instructions.

The contacts at terminals 1 to 7 can be loaded with max. 230V / 1A.

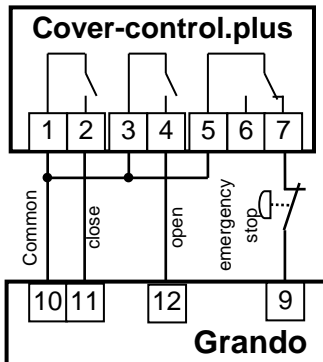


### Connection of a Grando swimming pool cover:

A swimming pool cover from Grando can be connected to terminals 1-7.

This plan is only a connection example. The applicability of this plan for the type of cover used must be checked using the cover manufacturer's operating instructions.

The contacts at terminals 1 to 7 can be loaded with max. 230V / 1A.

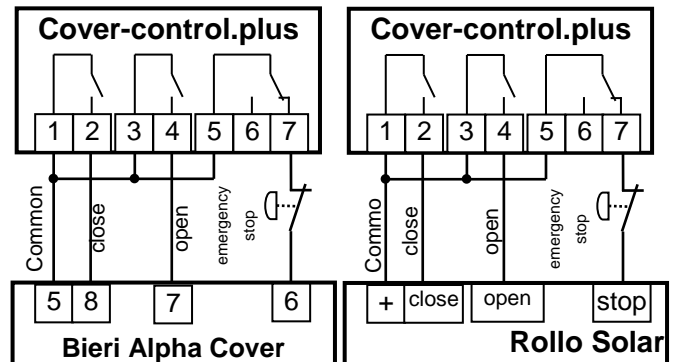


### Connection of a Bieri or Rollo Solar cover:

The connection diagrams assume that the cover control is in the factory setting. Rollo-Solar must be set to switching operation.

A swimming pool cover from Bieri or Rollo Solar can be connected to terminals 1-7.

The applicability of this plan for the type of cover used must be checked using the cover manufacturer's operating instructions.



The contacts at terminals 1 to 7 can be loaded with max. 230V / 1A.

## Buttons to control the pool cover

The cover can be controlled via external buttons on the edge of the pool. The buttons are operated with a safety extra-low voltage of 5V.

The waterproof EL button with two-tone lighting (item 1081005152) is best suited as a control button on the edge of the pool.

### EL button with lighting



The electronic EL button (item: 108.100.5152) is waterproof (IP68) and can therefore be used for installation in wet areas.

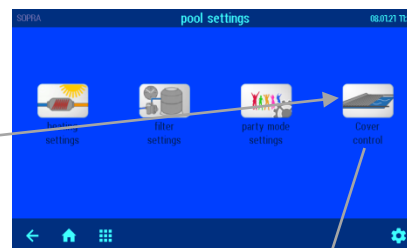
The switch housing is made of stainless steel AISI 316L (V4A, DIN 1.4404), the cable length is 1.5 meters. The delivery includes a seal and a fastening nut. Thread M22x1.

### Setup and configuration

The configuration and setting of the Cover-control.plus device can be done via the screen of the PC-45 exclusive, from the computer or smartphone.

### Configuration from the PC-45 exclusiv

After the two controls have been connected, an additional symbol appears in the main menu of the PC-45 exclusiv. Clicking this button takes you to the configuration menu.



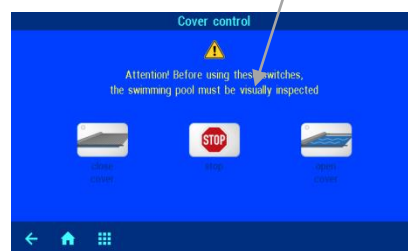
### Pool cover menu

You can close, pause, and open the pool cover from this screen.

**Attention! Before you press the button that sets the cover in motion, you need to check the pool and make sure there are no people in it. Only then the pool cover may be moved.**

### Configuration of the pool cover

The pool cover is configured via the configuration menu of the pool components (see instructions for the PC-45 exclusive). In this menu the type of cover control must be selected: static or pulse.



### Cover control settings

Press button **T**. The setup menu for the cover is displayed on the screen.



The upper button is used to set the duration during which the filter pump is switched off when the cover is opened or closed.

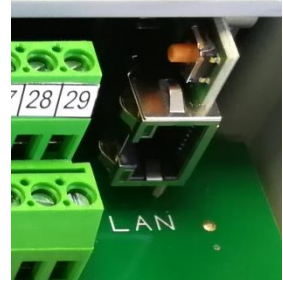
### LAN- Configuration

In this line you can activate or deactivate the operation of the cover via the local network. In the factory setting, operation via LAN is deactivated. (NO)

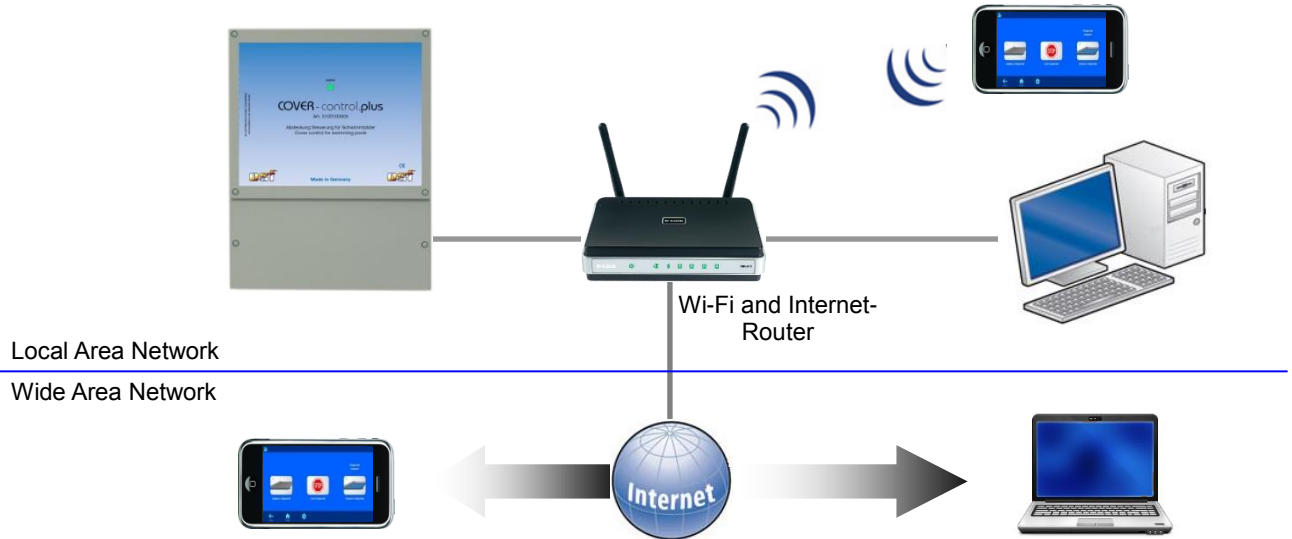


## Connect to a computer network and the Internet

The Cover-control.plus has a LAN connection (RJ-45, Ethernet) and supports the Fast Ethernet protocol with a speed of up to 100 Mbit / s.



Below is a typical diagram for connection of the Cover-control.plus to a computer network that enables access to the device parameters both from the local network and via the global Internet.



A standard Ethernet network cable must be used for a connection. You can access the device remotely via the existing connection.

Enter the device's IP address in an Internet browser to access it over the network. The IP address can be read in the "Network OSF device cluster" menu.

If the local network has internet access and access to one of the OSF communication servers, you can easily organize remote access to the device from anywhere in the world via the internet.

### Use of the OSF communication server

The communication server provides plug and play internet access to the coverage control unit. The Cover-control.plus is permanently connected to the communication server

<http://devices2.osf.de/>.

**Register** When you visit the server for the first time, you will need to register and create a personal account.

**Your profile** Each device has an individual ID number consisting of 6 characters (numbers and letters). To get remote access to the device, you need to enter and save the ID number in your profile. You can find the number on the label attached to the device housing near the LAN port.

Ser.No.: 0	ID: xxxxxx
IP: 192.168.123.165	
MAC: 00:50:c2:ee:0a:00	

**Your devices** The device then appears in the device overview and can be operated via the communication server.

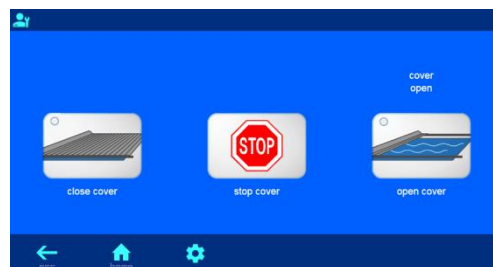
To delete a device from the list of devices, simply delete its identification number from the profile and click the update button.

## Webserver

The web server creates HTML pages for Cover-control.plus and sends them to the internet browser of a computer or smartphone on request.

The integrated web server enables remote control of the pool cover from any computer or smartphone. Thanks to the tsi communication server, access from anywhere in the world is very easy.

The web server has three levels of access: overview page, user access, and service access.



### About Cover-control.plus

The page with information on the serial number and firmware number as well as the update option can be accessed by pressing the "esc" button on the main screen. The update link is displayed if there is service access and the device has a micro SD card.

## Page «main menu»

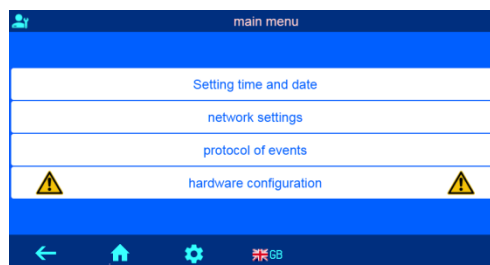
The settings menu can only be called up after the PIN code has been entered successfully.

### Time and date settings

In this menu you can set the current time and date manually or automatically.

### Settings for LAN network

In this menu you can enter an individual name for the Cover-control.plus, which will be displayed in the header of the Internet browser and on the overview page of the communication server.



### Event log

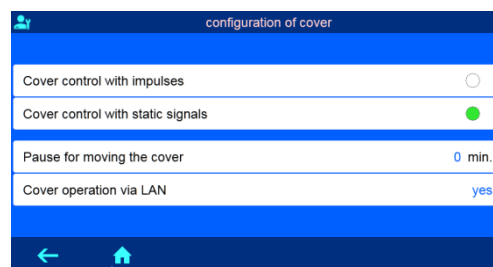
The last three monthly event log files on the SD card can be accessed from the Event Log menu. The arrows in the top line change the logs for the current month, the last month and the month before last.

### Cover configuration

This menu is only available for service.

Setting options:

- Coverage control types: static or pulsed.
- Set the length of time the filter pump will stop while the cover is moving. Factory setting: 0 min.
- In this line you can activate or deactivate the control of the coverage via the local network. Control from the Internet is always prohibited. Factory setting: no operation via LAN (NO).







### Fuses

The following fuses are located on the circuit board:

A 0.25A fuse protects the control output of the button lighting

A 0.5A fuse protects the entire circuit board

### Factory setting

All parameters are reset to the factory setting by pressing and holding the button next to the LAN connection for ten seconds.

The following are the factory settings

for important parameters required for a successful connection of the device to a computer network:

IP address automatically (DHCP server) - yes.

Automatic internet time - yes.

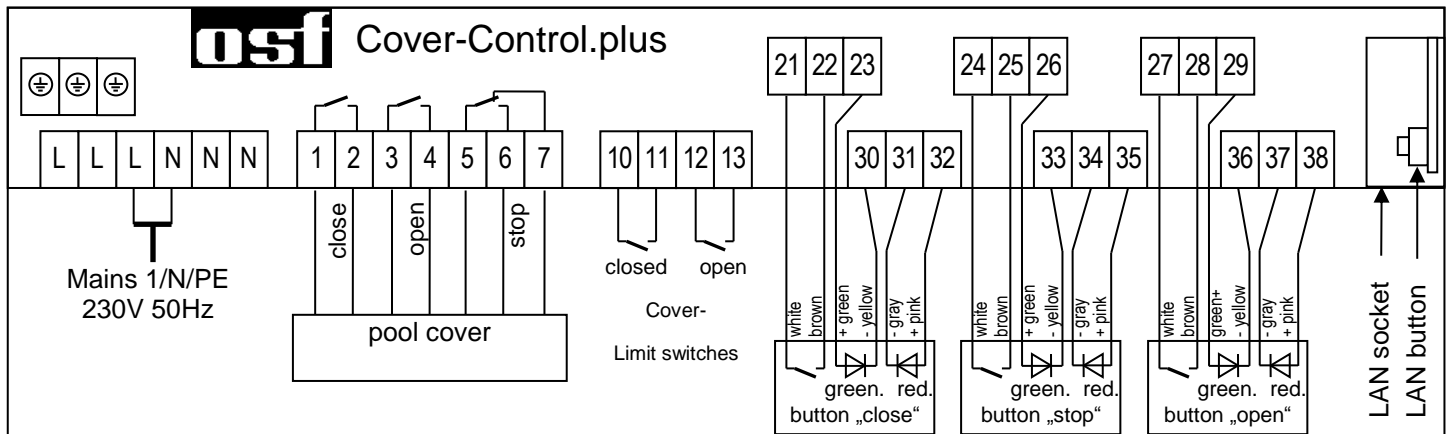
Time zone - GMT + 1. (Central Europe). The required time zone must be set manually for correct operation.

PIN for user access – 1234

PIN for service access – 5678

Resetting to the factory settings does not reset the statistical information on the operating hours. All operational logs remain unchanged.

## Wiring diagram



Further information can be found on the Internet at the following address:

<https://osf.de/download/documents/documents.php?device=Cover-Control-plus>



We wish you a lot of fun and relaxation in your swimming pool