

ASIN AQUA[®] PRO

2024

FW 1.0

PROFESSIONAL POOL MANAGEMENT SYSTEM
FOR PUBLIC AND PRIVATE POOLS





General safety information

This user manual contains basic information that should be observed during assembly, start-up, operation, and maintenance. Therefore, this user manual must be read by installers and operators prior to assembly and start-up, and must be accessible to every user of this unit. Additionally, all further safety information in this document must be observed. Read and follow all instructions. In order to minimize the danger of injury, do not allow children to use this product. Non-compliance with safety information can result in hazards to persons, the environment and the equipment. Non-compliance with safety information will result in a forfeit of any potential right to damage compensation.

Insufficient personnel qualification

Hazards in the event of insufficiently qualified personnel, potential consequence: Injury, heavy material damage.

- The system operator must ensure compliance with the required qualification level.
- Any and all work may only be performed by correspondingly qualified personnel.
- Access to the system must be prevented for insufficiently qualified persons, e.g. via access codes and passwords.

Potential overdosing of chemical agents

Despite ASIN Aqua® comprehensive safety functions, it is possible that a probe failure and other errors could lead to an overdosing of chemical agents. Potential consequence: Injury, heavy material damage.

- Design your installation such that uncontrolled dosage is not possible in the event of a probe failure or other errors, and/or such that uncontrolled dosage is recognized and halted before damage is incurred.
- Uncontrolled overdose of chemicals can cause harm to health and property. Even though the device contains a number of security elements can not be ruled out that in case of failure of the measuring probes, or the whole device may result in overdose of chemical agents. Install the equipment so that uncontrolled overdose of chemicals was not possible and that uncontrolled overdose has been detected in time before causing any harm. It is necessary to use chemicals in such quantities that an overdose will not cause dangerous concentration of chemical agents. Do not use chemicals in too large packages or with too high concentration.

Gaseous chlorine produced from dosing in standing water if dosing outputs are not closed via the filter pump

If the flow switch is stuck or experiences another error, there is a risk of dosing into standing water. Poisonous chlorine gas can be yielded when sodium hypochlorite and pH minus come together.

Non compliance with informational text

Not observing informational text may lead to hazards. Potential consequence: gravest degree of injury, heavy material damage.

- Read all informational text carefully.
- Cancel the process if you are unable to exclude all potential hazards.

Use of new functions

Because of the continued development, a ASIN Aqua® unit may contain functions, which are not

completely described in this version of the user manual. The use of such new or extended functions without a profound and secure understanding by the operator may result in malfunctions and severe problems. Potential consequence: Injury, heavy material damage.

- Make sure to get a profound and secure understanding of a function and relevant boundary conditions, before you start to use it.
- Check for an updated version of the user manual or additional documentation available for the relevant functions.
- Make use of the integrated help function of the ASIN Aqua® to get detailed information on functions and their parameter settings.
- In case it is not possible to get a profound and secure understanding of a function based on the available documentation, do not use this function.

Overdosing if pH value is wrong

If disinfection is enabled before the pH value is stable in the ideal range of 7.0 to 7.4, then it may lead to heavy overdosing of chlorine or bromine. Potential consequence: Injury, heavy material damage.

- Do not start disinfection with chlorine until the pH value is stable in the ideal range between 7.0 and 7.4.

Conditions before using

Make sure you have a newest and updated version of the user manual and other documentation for all functions of the unit. Use and read the integrated help features. In case of not understanding the information about certain features of the unit, do not use these features.

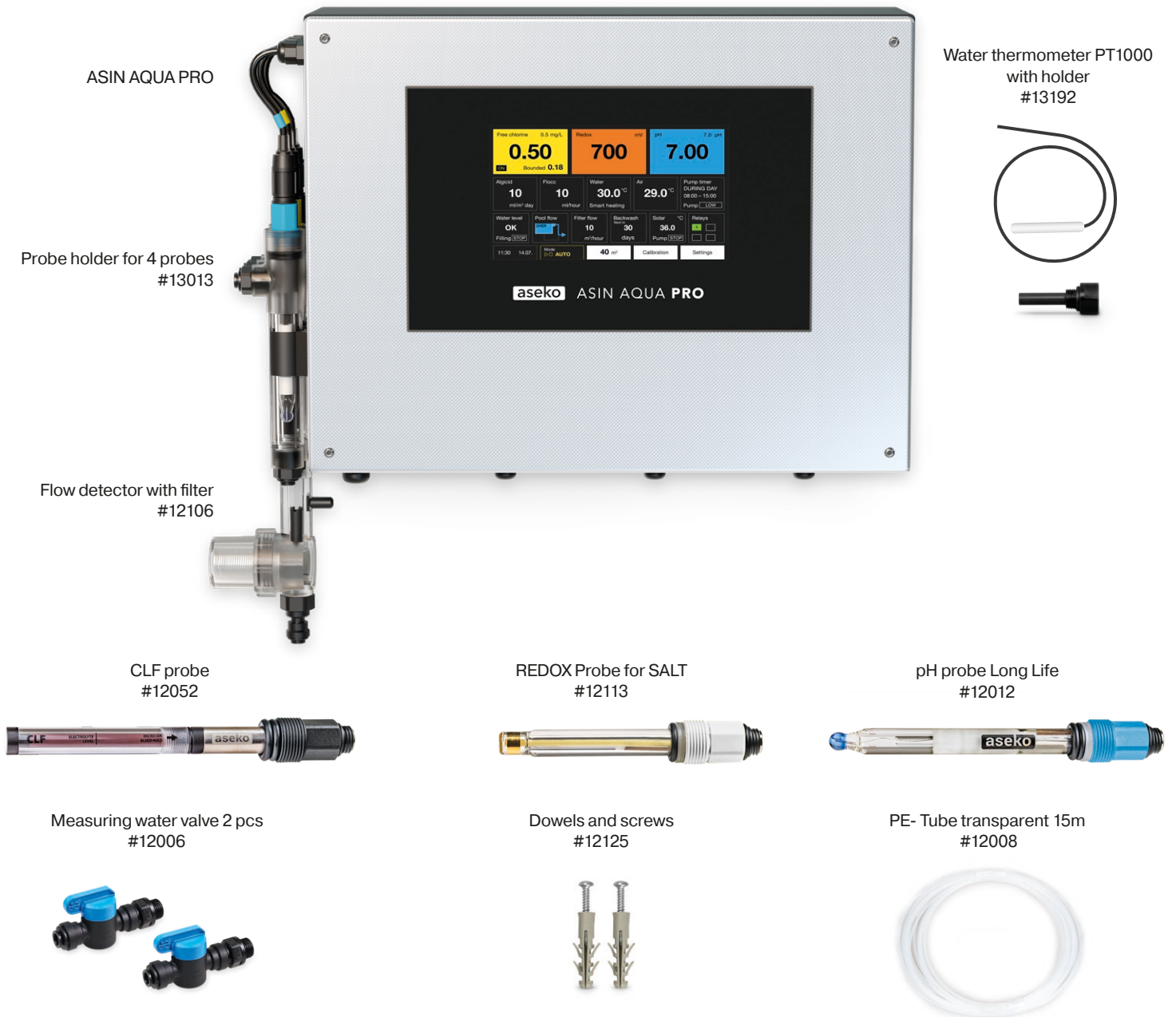
Handling chemicals for pool water treatment

The chemicals used with the ASIN Aqua must be handled in a safe manner to prevent damage or personal harm. Aseko recommends you always use personal protective safety equipment when handling the pH and chlorine agents. Refer to the Materials Safety Data Sheet (MSDS).

WARNING: Never mix the pH agent with the chlorine agent. When carrying out maintenance on the clear plastic tubes or valves always rinse with clean water to prevent mixing of the pH and chlorine agents.



What is in the box

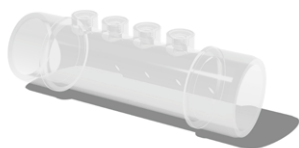


Accessories for CLT probe connection



Available optional accessories

Injection manifold 4x 1/4"
#13395



Inserting DN50 plug
1/4" threaded #12134



Pressure-type level sensor
#12086



External touch display
#12048



PP10 (12/24V)
#13263
PP60 (12/24 V)
#12053



Membrane pump DDE-5l/h
#13265
Membrane pump DDE-5l/h pH+
#13266



Membrane pump DDE 7,5l/h
#13267
Membrane pump DDA 30l/h
#13222



RL Module
#13065



FlowVis d63mm flow meter
with non-return valve
#13364



Electronics set for connecting
FlowVis flowmeter
#13365



Air thermometer
#13192



Photometer
#13076



pH 7.00 Buffer #12065
Redox Buffer #12091



BESGO 5-way
#83103



BESGO 3-way
#83130



BESGO 4-way
#83150



ASEKO original chemical solution

20 l or 5 l volume

CHLORPURE #12075



pH MINUS #12130



pH PLUS #12120



ALGICID #12156



FLOC+C #12139



Package 10 kg

BALANCER #13039



MAGNESIUM #13039



Bottle 1 kg

SUPER CHLOR #13120





MAX POOL VOLUME
2000 m³

ASIN AQUA PRO

ASIN Aqua PRO is the most advanced system for pool water treatment and pool technology management of all types of pools with all types of technologies. The pool water disinfection with liquid chlorine dosing, electrolysis or gaseous chlorine controlled with unique ASEKO CLF Probe. Precise pH regulation controlled with pH probe, dosing of Algaecide and Flocculating. Combination of these chemicals assure the crystal-clear pool water by use of the lowest necessary amount of chemical aids. The Pool Technology Management functions automate the operations of your pool and minimize the requirements for manual maintenance. The touchscreen shows all information about water quality and allows easy setup of the entire system. With internet connectivity, you can monitor your pool parameters through a Pool LIVE mobile or web application and control the system remotely with the Pool REMOTE app.

Pool water treatment

Precise dosing algorithm. Control of external dosing pumps.

Chlorine control

Through an extremely precise measurement of the chlorine content in the pool water using an ASEKO CLF-free chlorine membrane probe and Redox probe Long Life in together with the digital intelligence of the system, ASIN AQUA Pro is able to carry out a highly effective disinfection treatment of the pool water using any type of technology - liquid chlorine, salt water electrolysis, gaseous chlorine.



pH control

Accurate measuring by pH probe long-life in combination with the dosing algorithm assures the required water quality. Dosing of pH MINUS or pH PLUS.



ALGICIDE

The effective polymeric biocide protects water against algae, fungi, moulds and bacteria.

FLOC+C

FLOC+C contains flocculation and coagulation components. Its continual dosing improves filtration capability of removing even the smallest impurities.

Pool technology management

Filtration Time Control

Daily, automatic start of the filtration system in individually pre-set periods.

Water Level - Refilling

Water level can be monitored by optional **level sensor**. System can be programmed to control four different water levels at your pool and switch the water refilling or automatically use the excessive water for filter backwash.

Filter Backwashing

The system can control the filter backwash time interval and periods this function requires an optional **5-way Besgo valve**.

Smart Heating Control

The system is equipped by intelligent control of pre-set water temperature. It can switch and control the heating (**solar heating, electrical heating, gas heating, heat exchanger**) by logic of integrated smart heating functions (this function requires an optional **air thermometer**). **New solar heating function.**

Winter mode

The Winter mode ensures the pool remains at a safe temperature during cold weather conditions.

Variable speed pump control (VS pump)

In the settings, select the type of your variable speed pump. ASIN Aqua allows to use 4 speeds:

Speed 0 (OFF)

Speed 1 (LOW) for economical filtration outside the filtration TIMER.

Speed 2 (MEDIUM) during filtration TIMER.

Speed 3 (HIGH) during filter backwash.

Switching BOTTOM / OVERFLOW

At the set times of the TIMER, water flows through the OVERFLOW (the relay is activated).

Outside the set times of the TIMER, water flows through the bottom drain (relay deactivated).

The pool cover does not affect the BOTTOM / OVERFLOW switching.

During filter backwashing, water flows through the BOTTOM DRAIN.

In case of an alarm LEVEL TOO HIGH the flow will be switched to OVERFLOW until the alarm level expires.

This function requires optional **3-way Besgo valve**.

Pool cover position (relay closed)

If the pool cover is closed during the set TIMER times, the speed of the VS pump will automatically change to 1 (LOW).

Control by External touch display

ASIN AQUA Home can be monitored and controlled by external touch display (this function requires an optional **External touch display #12048**).

Mode settings

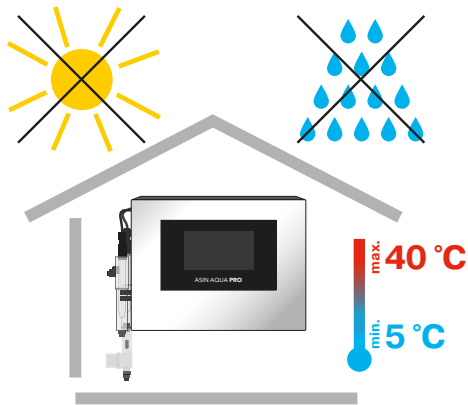
Six adjustable automatic modes for easy pool control.

Programmable relays

ASIN AQUA PRO has one integrated programmable relay to control an extra accessory. Also brings the possibility to connect optional **RL module** (relay module) to connect 4 extra relays.

Solar heating control

ASIN AQUA PRO monitors the temperature of solar panels. When solar panels reach a set threshold, the water is automatically redirected to the solar panels. This function requires an optional **4-way Besgo valve**.



ASIN AQUA Pro Installation

The ASIN AQUA Pro must be operated in indoor environment with a temperature range of +5 to +40 °C, and the relative humidity must not exceed 70 %. Direct sunlight, high humidity, and dust may damage the ASIN AQUA Pro.

- Before installing, ensure that pool water is chemically clean and without dirt.

Install the mounting rail and attach the ASIN AQUA Pro to the wall. Choose a location with a free space of at least 40 cm in all directions, and a height above the floor must not be higher than 150 cm.

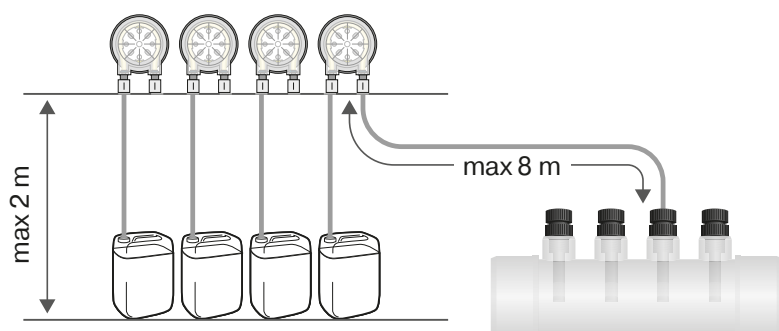
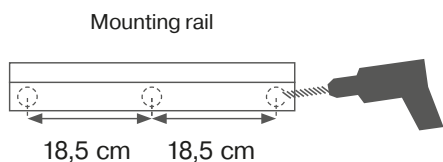
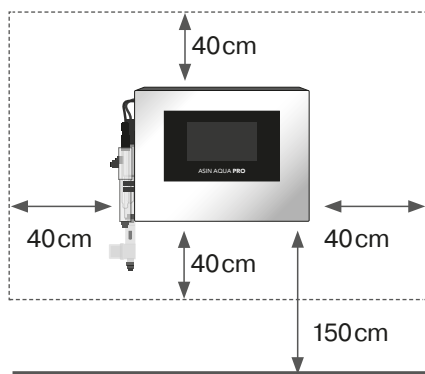
- The vertical distance between ASIN AQUA Pro and the bottom of containers must not exceed 2m.
- The maximum distance from injection valves to peristaltic pumps must not exceed 8m.

RECOMMENDATION: Install the ASIN AQUA Pro so that even in case of leakage of chemicals from the pumps or pipes, there is no damage to other equipment or spillage on the floor. Use drip trays.

Do not install any other devices under ASIN AQUA Pro.

WARNING: High relative humidity reduces the lifespan of electronic components, particularly displays. If the ASIN AQUA Pro is in an environment with high relative humidity and low temperature (such as the installation shaft, or garden house), keep the device permanently ON. The temperature in the device will be higher than the ambient temperature, resulting in a significant reduction of relative humidity within the device.

This also applies when storing the unit during the winter.



Installing the Probes

1. Carefully insert the pH, CLF and REDOX probe into the housing.
2. If you have the optional CLT probe insert it into the 4th probe housing.
3. Hand tighten or use the plastic wrench socket for probes.
4. To connect the probe tighten the connector on the probe connection cable.

After probes have been inserted, slightly tightened and connectors have been connected, ASIN AQUA Pro is ready for connection to the water system of your pool.

WARNING: Only hand tighten the probes or use the plastic wrench socket for probes. Do not use pliers or steel wrench.



CLF probe
#12052



REDOX Probe
for SALT
#12113



pH probe
Long Life
#12012

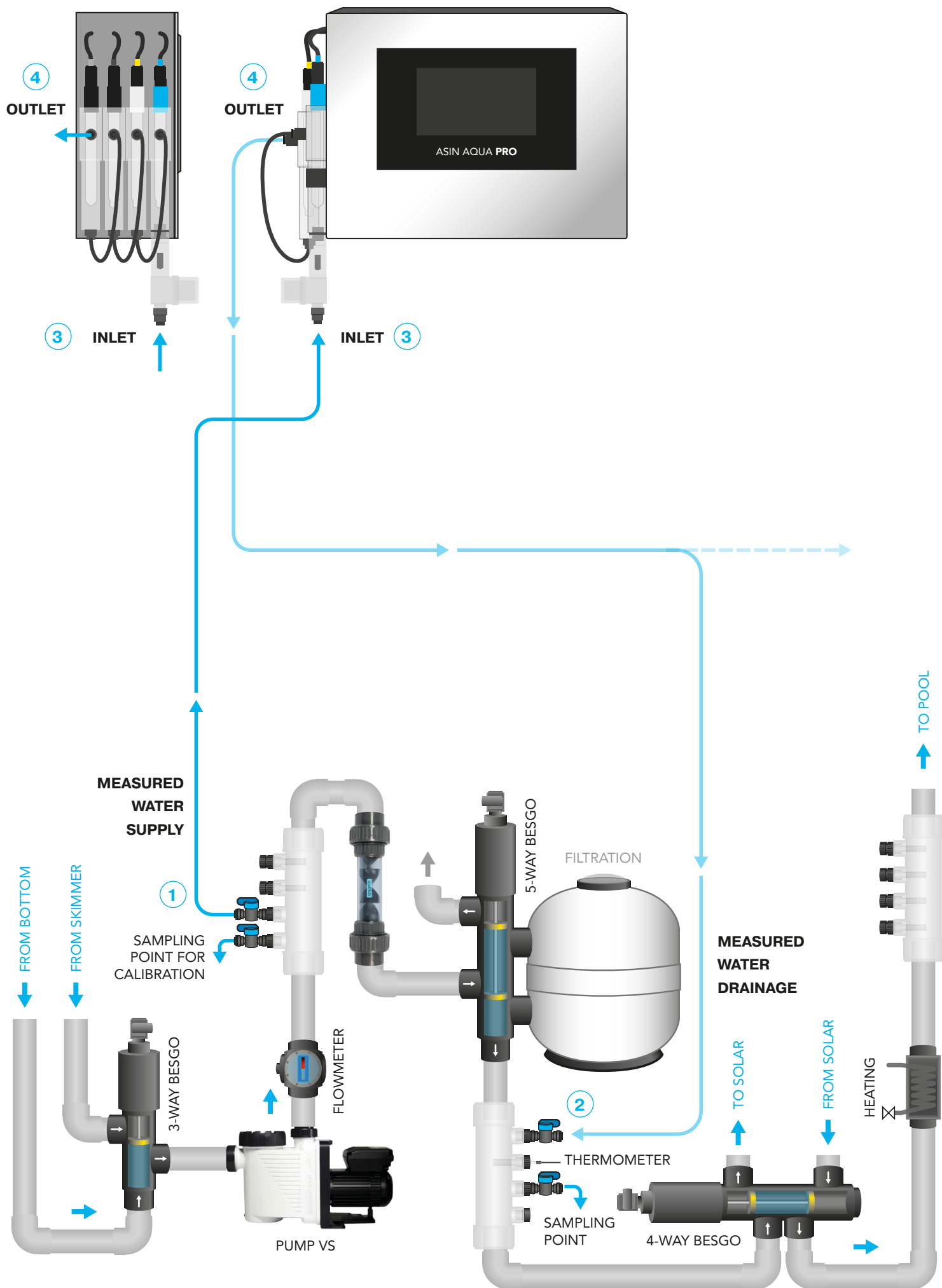


Probe wrench
#13046



CLT probe
for total chlorine
(optional)
#12079





Pool Water Connection

Screw the **measuring water valve** in the glue head D50 with thread G1 / 4" #12134, glued to the T-piece. **Tighten the measuring water valve into the head by hands only. Do not use pliers or other tools.**

- 1 Connect the **MEASURED WATER SUPPLY** to the pipe **behind the pump, and before the filter and before the coagulation mixer.**
- 2 Connect the **MEASURED WATER DRAINAGE** to the pipe **behind the filter** and behind the heating or into the overflow tank or skimmer.

To connect the measured water to the ASIN AQUA use PE tube 1/4 " (6.35 mm) #12008, which is part of the packaging.

WARNING

Cut the PE tube at an angle of 90 ° to ensure tight joints. The cut must be clean. Use special pliers #13325 to cut plastic tubes. Do not use common scissors or knives!

The measured water is easily connected to ASIN AQUA using the **Speedfit** push-in fitting.

CONNECTION Push the connecting pipe into the Speedfit fitting and pull out the hose to secure.

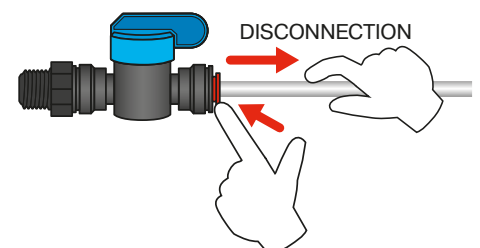
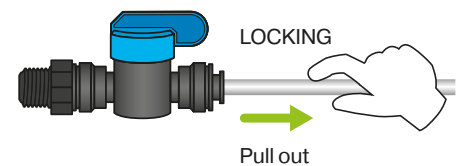
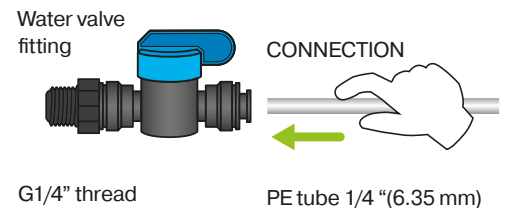
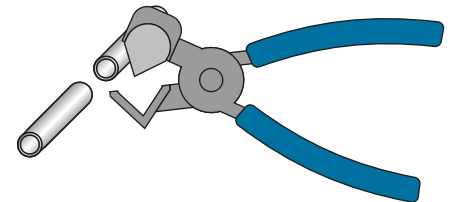
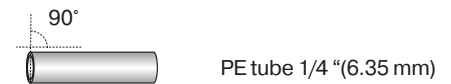
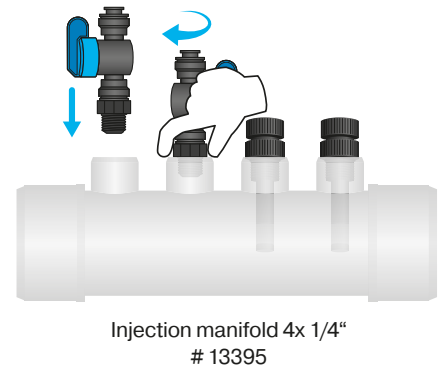
DISCONNECT push and hold the Speedfit round collet and pull out the connecting pipe.

- 3 **INLET** of the measured water to the ASIN AQUA
Connect the tube to the bottom Speedfit of the measured water filter.
- 4 **OUTPUT** of the measured water from ASIN AQUA
Connect the tube to the side Speedfit on the probe housing.

Once connected, ASIN AQUA is ready to measure disinfectant content and pH value in your pool.

Place a Plug with 1/4" (6,35mm) thread (#13082) on unused threads of Injection manifold.

Measuring Water valve #12005



ASIN AQUA Pro controls external dosing pumps.
It is possible to directly connect 6 dosing pumps.



ASEKO peristaltic pumps PP60 and PP10 12/24V are suitable for dosing of aggressive chemicals e.g. acids, lyes and disinfection agents, especially for the treating of the pool water.

These pumps are suitable for pools up to 250m³.

Connect the chlorine pump to the outputs **20** (white 12V) and **21** (blue GND).

Connect the pH- pump to the outputs **18** (white 12V) and **19** (blue GND).

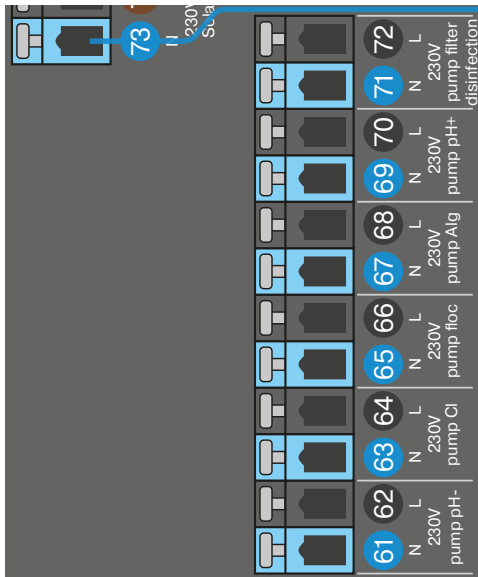
Connect the pH+ pump to the outputs **26** (white 12V) and **27** (blue GND).

Connect the Algicide pump to the outputs **24** (white 12V) and **25** (blue GND).

Connect the Floc+c pump to the outputs **22** (white 12V) and **23** (blue GND).

Connect the filter disinfection pump to the outputs **48** (white 12V) and **49** (blue GND).





Connection of Dosing Pumps 230V

Membrane pump DDE 5 l/h, DDE 7.5 l/h and DDA 30 l/h are suitable for dosing of aggressive chemicals e.g. acids, lyes and disinfection agents, especially for the treating of the pool water.

These pumps are suitable for pools over 250m³.

Chlorine dosing pump

Connect the chlorine pump to the outputs

63 (blue N) and **64** (dark gray L).

pH- dosing pump

Connect the pH- pump to the outputs

61 (blue N) and **62** (dark gray L).

pH+ dosing pump

Connect the pH+ pump to the outputs

69 (blue N) and **70** (dark gray L).

Algicide dosing pump

Connect the Algicide pump to the outputs

67 (blue N) and **68** (dark gray L).

Floc+c dosing pump

Connect the Floc+c pump to the outputs

65 (blue N) and **66** (dark gray L).

Filter disinfection dosing pump

Connect the filter disinfection pump to the outputs

71 (blue N) and **72** (dark gray L).

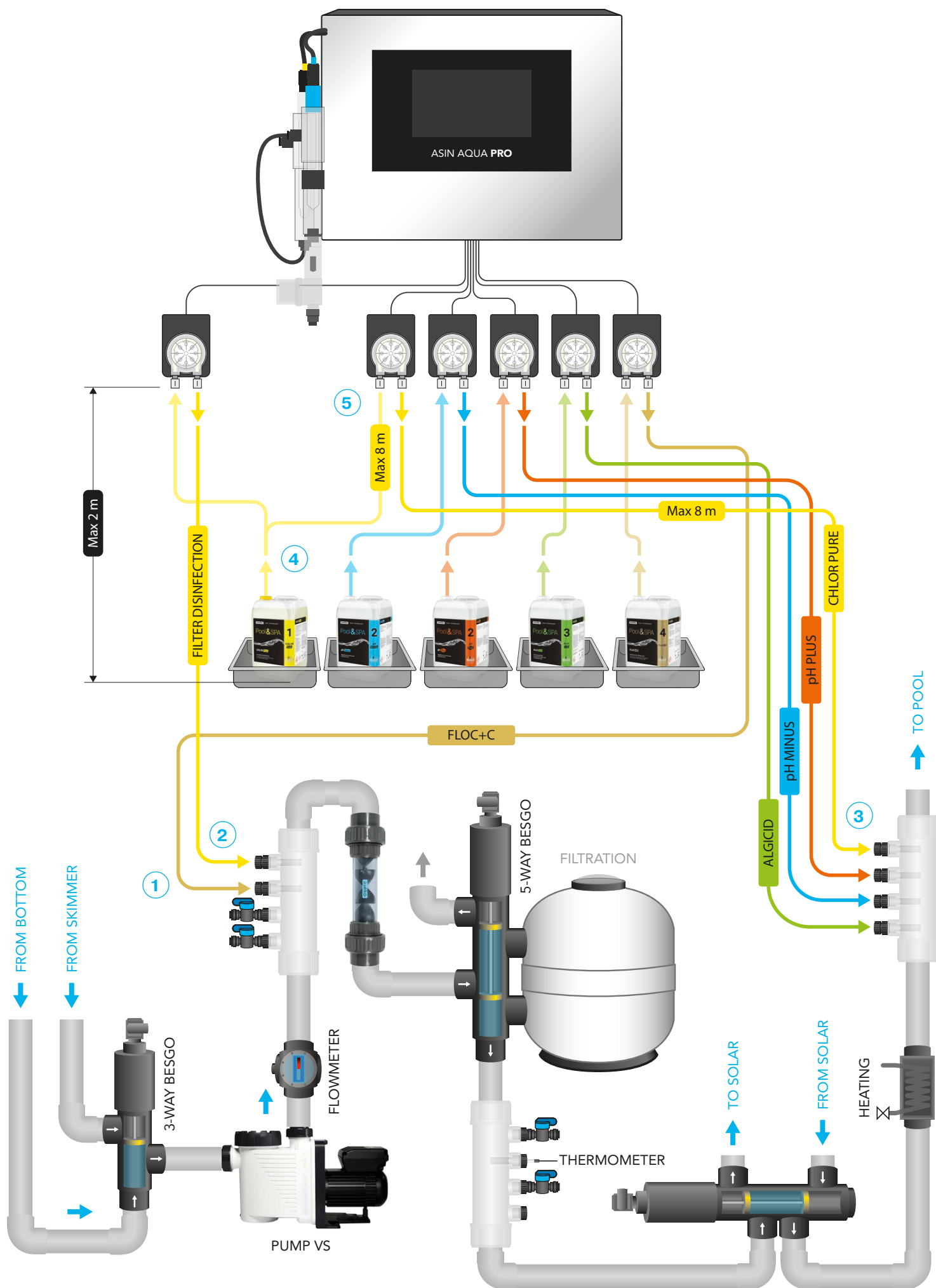
Membrane pump DDE-5l/h
#13265



Membrane pump DDE 7,5l/h
#13267

Membrane pump DDA 30l/h
#13222





Pool Chemicals Connection

Screw the **injection valve** in the glue head D50 with thread G1 / 4 " #12134, glued to the T-piece. **Tighten the injection valve into the head by hands only. Do not use pliers or other tools.**

- 1 Connect the **FLOC+C INJECTION VALVE** to the pipe **before the coagulation mixer and before the filter and after the MEASURED WATER SUPPLY**.
- 2 Connect the **FILTER DISINFECTION INJECTION VALVE** to the piping **before the besgo 5 way valve and before the filter and after the MEASURED WATER SUPPLY**.
- 3 Connect the **ALGICIDE, pH-, pH+ and CHLOR PURE INJECTION VALVE** to the pipe **behind the filter and behind the MEASURED WATER DRAINAGE**. Connect injection valves in this order to prevent formation of lime scale.

To connect reagents from cans to the ASIN AQUA and from the ASIN AQUA to the injection valve use PE Tube 1/4 "(6.35 mm) # 12008, which is part of the packaging.

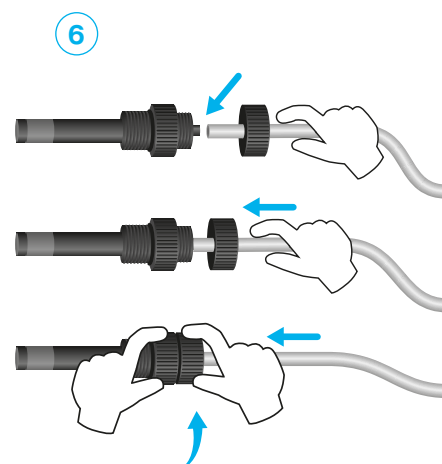
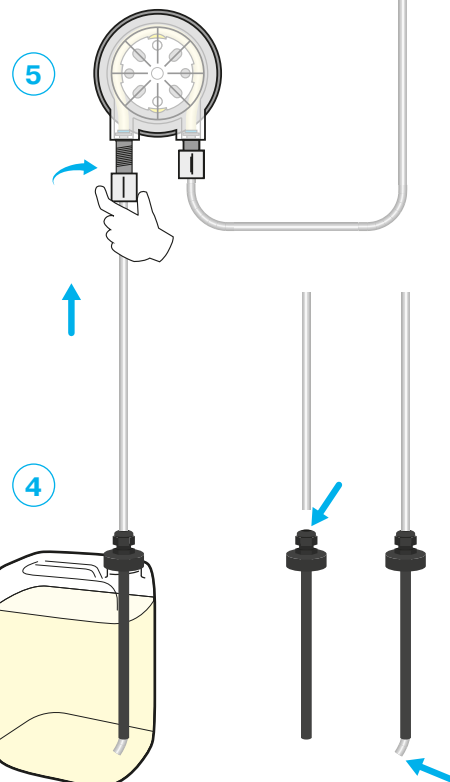
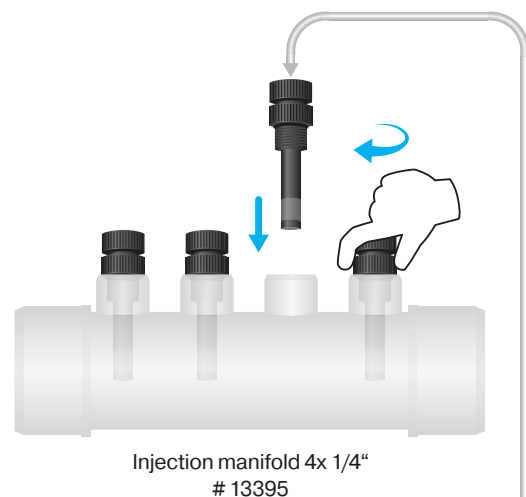
WARNING

Cut the PE tube at an angle of 90 ° to ensure tight joints. The cut must be clean. Use special pliers #13325 to cut plastic tubes. Do not use common scissors or knives!

- 4 **CANISTER CONNECTION** Drill 6.35 mm and 1 mm diameter holes in the can's cap. Pass the tube through the hole in the cap so that it reaches the bottom of the can. Place the suction tube weight at the end of the tube.
- 5 **PUMP CONNECTION** Connect the can with the left (suction) connector of the pump using a PE tube from the can.
- 6 **INJECTION VALVE CONNECTION** Pass the tube through the injection valve nut, connect the tube onto the injection valve and tighten the nut firmly by hand. Connect the tube from injection valve with the right (discharge) connector of the pump.

WARNING

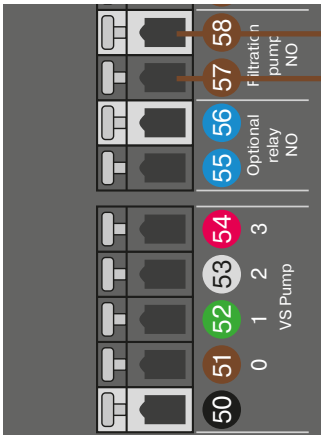
NEVER CONNECT pH minus reagent to disinfection pump or disinfectant to pH pump! In the case of a cross-connection, after ten doses ASIN AQUA displays an error message. Repair the piping installation and then you can continue to operate your ASIN AQUA.



Filtration pump

WARNING

Always check the connection according to the current user manual of your pump manufacturer.



1

1) Filtration pump

Connect the filtration pump to outputs **57** and **58**.
Connect the pump through a contactor.

2

2) Variable speed filtration pump

Connect to outputs **50** to **54**, connection depends on the type of variable pump.

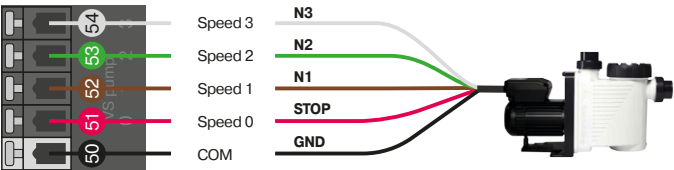
Speed	TYP A					TYP B					TYP C				
	COM	S1	S2	S3	STOP	COM	S1	S2	S3	S4	COM	S1	S2	S3	STOP
n1	ON	OFF	OFF	OFF	OFF	n1	ON	OFF	OFF	OFF	n1	ON	OFF	OFF	OFF
n2	OFF	ON	OFF	OFF	OFF	n2	OFF	ON	OFF	OFF	n2	OFF	ON	OFF	OFF
n3	OFF	OFF	ON	OFF	OFF	n3	OFF	OFF	ON	OFF	n3	OFF	OFF	ON	OFF
S	OFF	OFF	OFF	ON	ON	S	OFF	OFF	OFF	ON	S	ON	ON	ON	OFF

Relay status

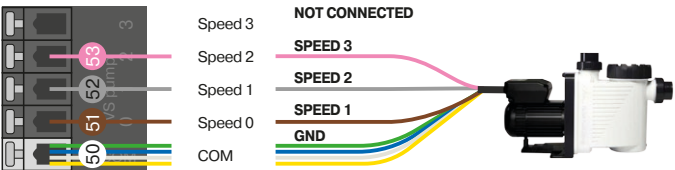
2

TYPE A

SPECK



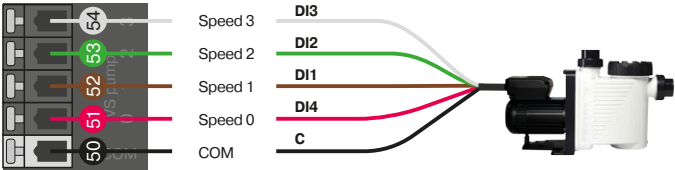
UWE EO PM



INVERTER POOL PUMP

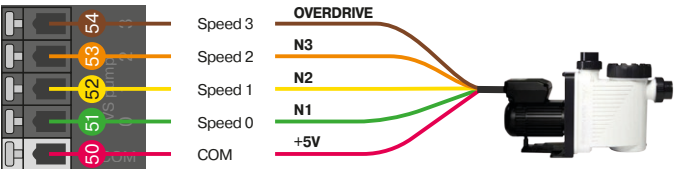


HAYWARD KS Evo VS

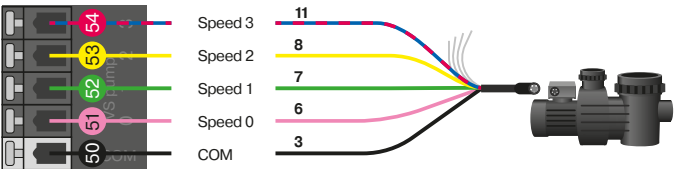


TYPE B

PENTAIR

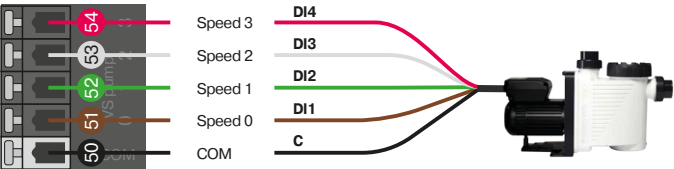


DAB E.SWIM - E.PRO



TYPE C

HAYWARD (older type)



Connection of other equipment

1) Filter backwash (5 way Besgo valve)

Connect to the 230 V outputs **79** (blue N) and **80** (dark gray L).

2) Filling solenoid valve

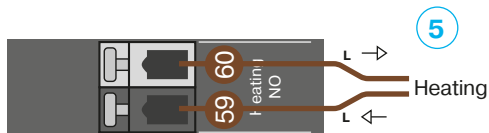
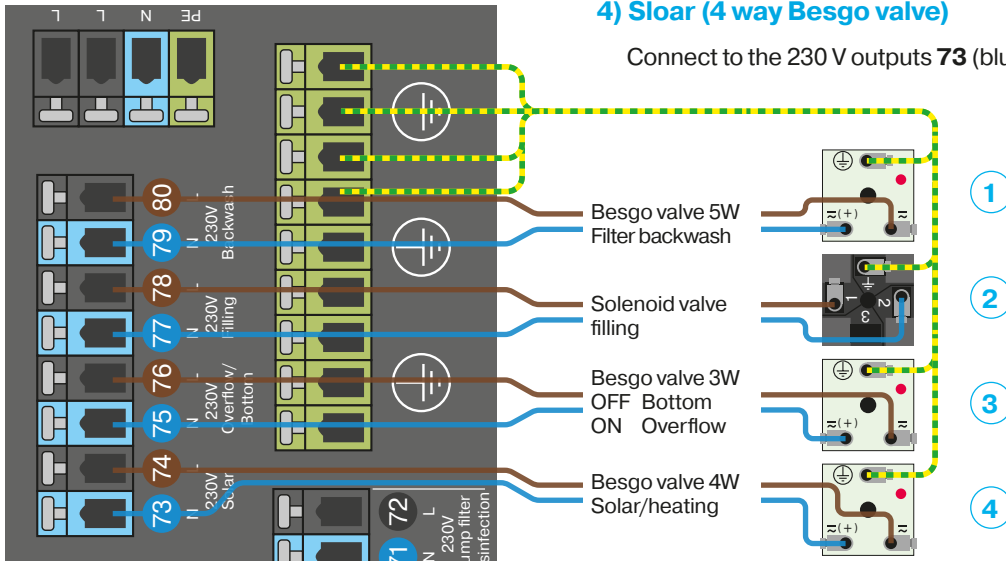
Connect to the 230 V outputs **77** (blue N) and **78** (dark gray L).

3) Overflow/Bottom (3 way Besgo valve)

Connect to the 230 V outputs **75** (blue N) and **76** (dark gray L).

4) Sloar (4 way Besgo valve)

Connect to the 230 V outputs **73** (blue N) and **74** (dark gray L).



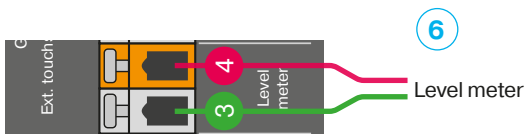
5) Heating

Connect to the non potential outputs **59** and **60**.

To connect the heating system, it is recommended to use a contactor.

6) Water level meter (pressure)

Connect to the green wire to the terminal **3** (green) and red wire to the terminal **4** (red).

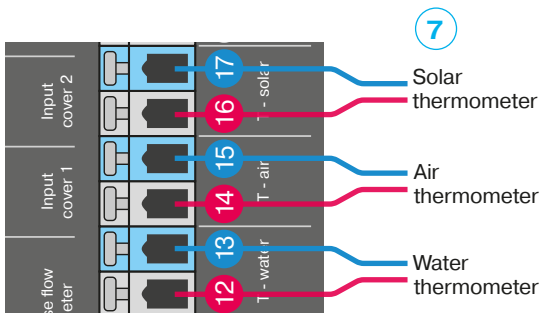


7) Thermometers

T – solar connect to the terminals **16** (red) and **17** (blue).

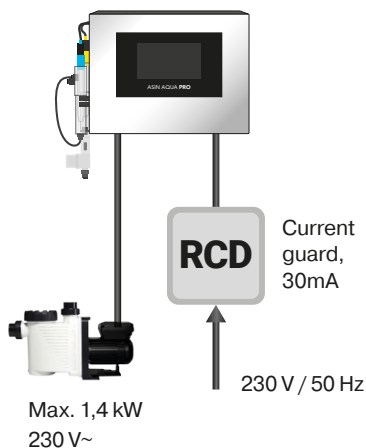
T – air connect to the terminals **14** (red) and **15** (blue).

T – water connect to the terminals **12** (red) and **13** (blue).





Installation must be protected by a residual current device (RCD).



Power Supply

Connection to the mains:

1. Leave the mains switch in the OFF position.
2. Connect filtering device to the ASIN AQUA Pro switched socket outlet (filtration power supply - max. 1.4 kW / 230 VAC).
3. Connect the 230 V / 50 Hz mains cable to ASIN AQUA Pro (on the right side). The mains socket outlet must be protected by a residual current device (RCD).
4. Change the mains switch over to the ON position.

After Device has been switched on, the display will come on and the ASIN AQUA Pro starting screen will appear.

Disconnection from the mains:

1. Change the mains switch over to the OFF position.
2. Disconnect the ASIN AQUA Home mains cable from the 230 V / 50 Hz socket outlet.
3. Disconnect the filtering unit mains cable from ASIN AQUA Pro.

WARNING: If Device is used in the manner different from that specified by the manufacturer, protection provided by Device may get damaged.

Power supply	230 V / 50 Hz
Power consumption	24 VA
Power consumption (including filter pump)	1449 VA
Maximum input power of connected filtration	1,4 kW / 230 V AC
Fuse	T1 A; T125 mA or T170 mA
Over-voltage category	II
Ingress protection	IP30
Operating temperature	+5 to +40 °C
Weight	6,7 kg
Installation	wall mounted
Relay output contacts	230 V / 1,4 kW
Discharge of dosing pumps	10ml a 60 ml / min / max. 1bar
Measured water pressure	max. 1 bar (must not be vacuum)
Dimensions	430 x 330 x 160 mm

Installation Test

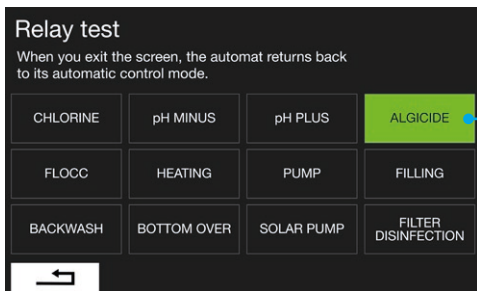
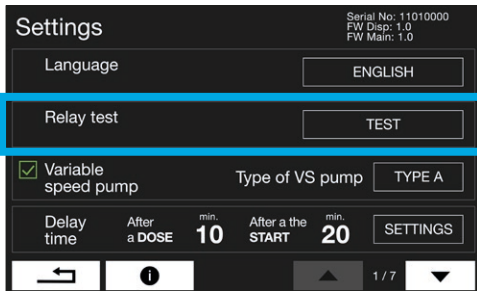
WARNING: Any obstacles, bubbles or leaks in the connecting tube will prevent ASIN AQUA Home from correct operating. The clear plastic tube allows you to monitor flow of liquid to the injecting valves.

Before commencing the operation, test ASIN AQUA Home installation.

Most problems result from incorrect installation.

Test

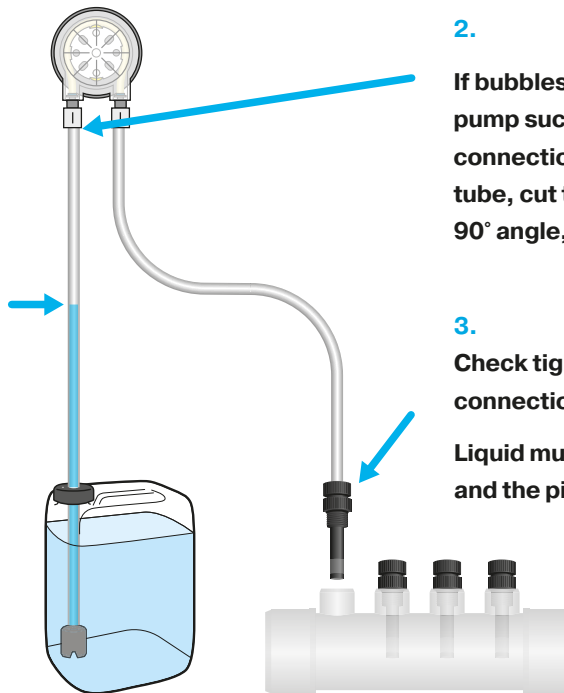
In the “Relay Test” menu, start pumps one by one and while they are running, check tightness of all the PE tube connections. Check the injecting valves for blockage and air bubbles in the PE tube.



Press to **TURN ON (GREEN)** and press again to **TURN OFF**.

DON'T FORGET! After you complete the test, stop all accessories in the menu. Do not dose in this step!

1.
Monitor level in the transparent plastic tube.



2.

If bubbles occur here, the pump sucked air. Repair the connection - disconnect the tube, cut the end carefully at a 90° angle, and plug it back.

3.

Check tightness of all the connections.

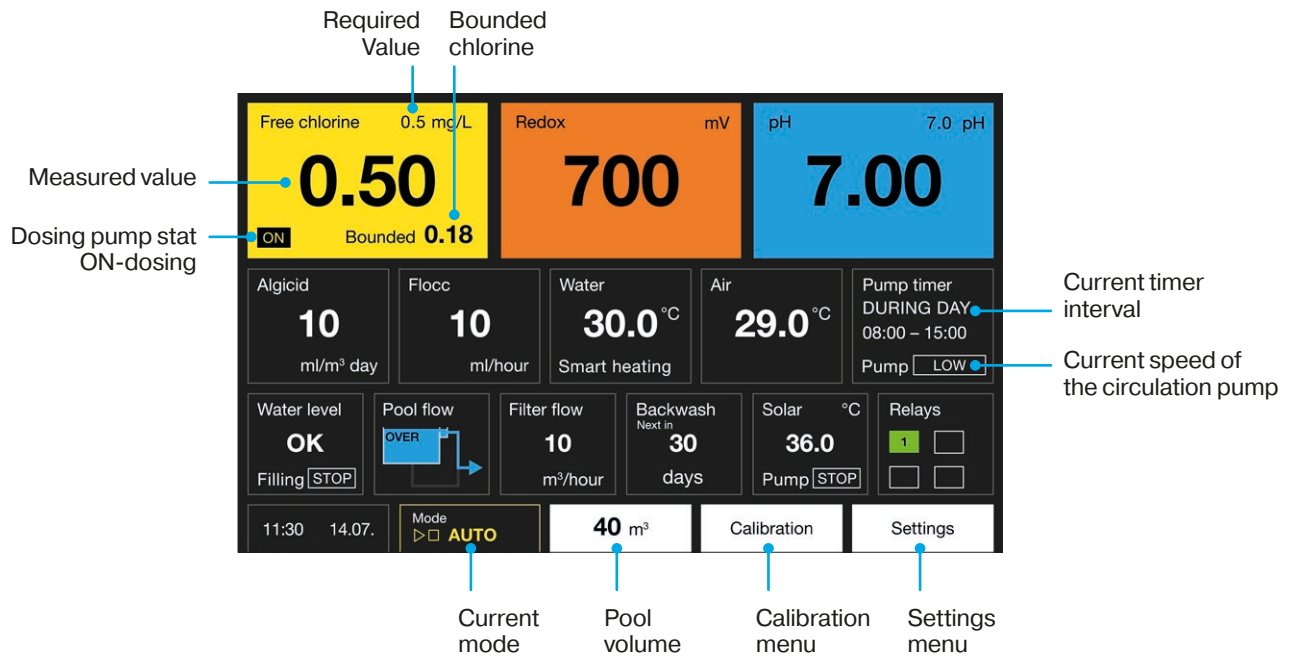
Liquid must reach injection valve and the pipe.

Touch screen description

Home Screen

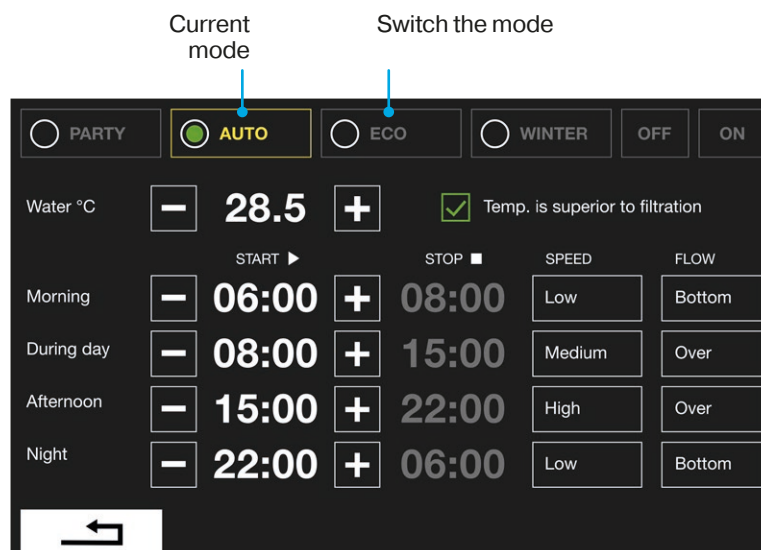
The home screen displays measured values, required values and status information.

E.g. click on the **Chlorine** to enter the setting of the required chlorine value.

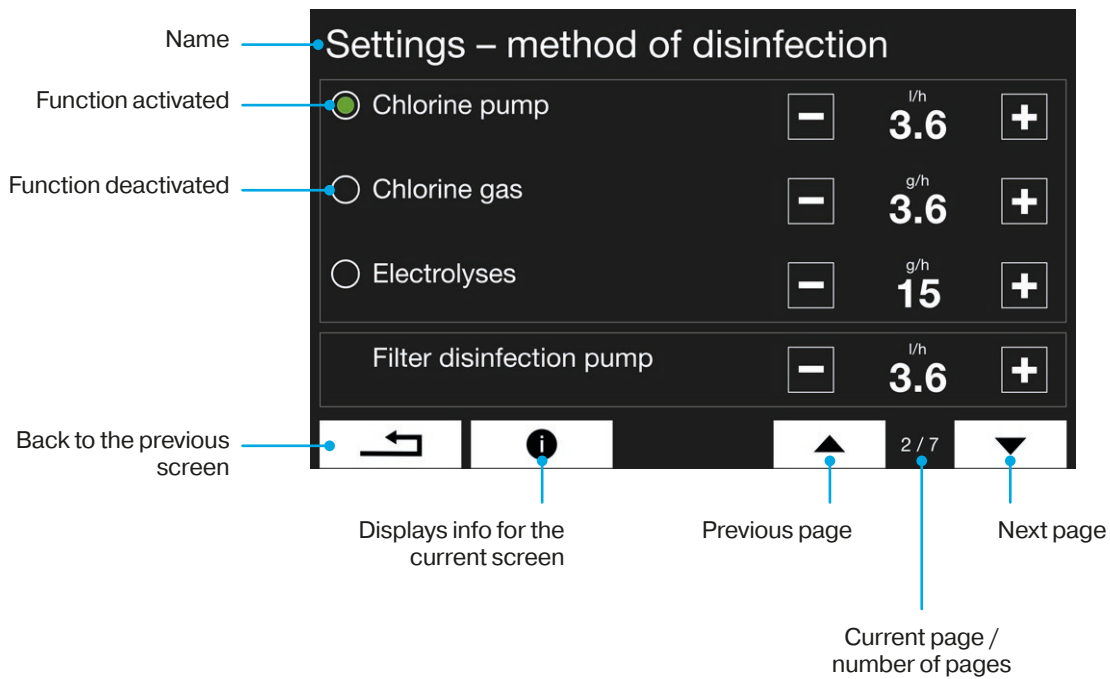


Mode selection

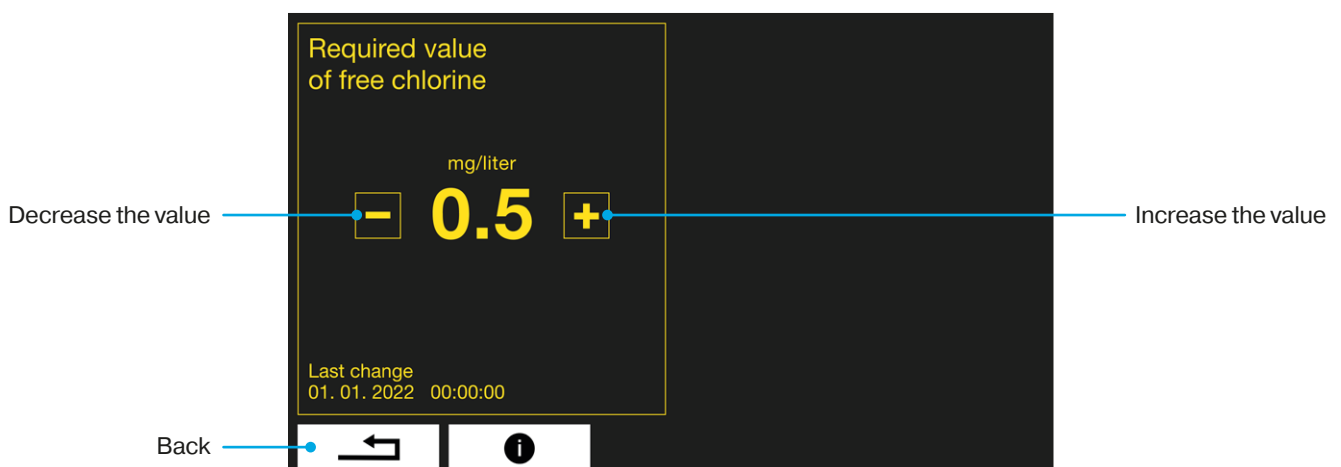
Mode selection and setting.



Movement in the menu



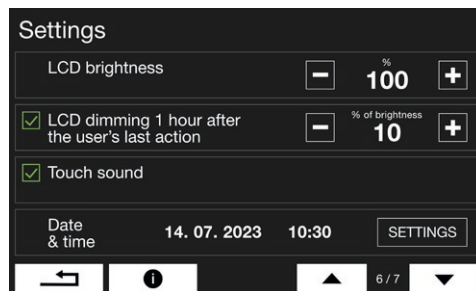
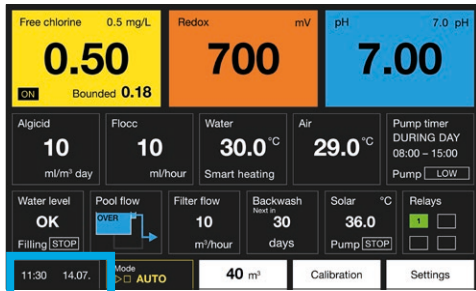
Value setting



Configuration

Date and Time

To ensure the correct function of timers, set the current date and time. Enter this menu by clicking on the date on the home screen or through the settings.



Pool Volume

Pool Volume

To ensure the correct function of ASIN AQUA, enter the correct volume of your pool. Enter this menu by clicking on the volume in the middle of the home screen.

Calculate your pool volume in m³:

Length (L) times width (W) times depth (D) is volume (V) - ($L \times W \times D = V$).

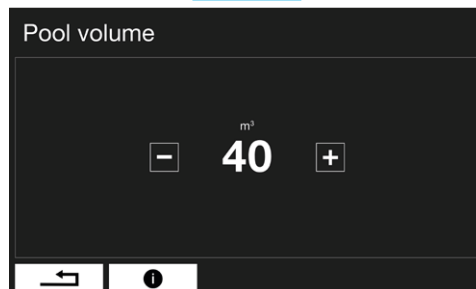
Enter the value using + and - buttons.

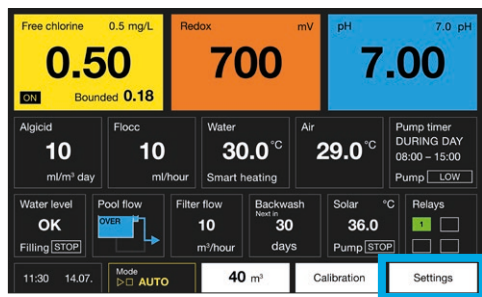
WARNING: The pool volume has effect on the maximum safe dose, enter the value correctly.

Pool type

Set the correct type of your pool.

WARNING: The pool type has effect on the maximum safe dose, set the type correctly.





Settings

Language

Choose one of available languages.

Relay test

Test of the installation.

Press to **TURN ON (GREEN)** and press again to **TURN OFF**.

DON'T FORGET! After you complete the test, stop all accessories in the menu. Do not dose in this step!

Variable speed pump

Activate the function in the settings, and in the VS pump menu select the type of your variable speed pump.

ASIN AQUA allows you to use 4 speeds of your VS pump.

Speed 0 (OFF)

Speed 1 (LOW) for economical filtration outside the TIMER.

Speed 2 (MEDIUM) for filtration during TIMER periods.

Speed 3 (HIGH) during filter backwash.

By default, the variable speed pump runs at speed 2 during filtration timer periods. Outside of the filtration timer periods, when the standard circulation pump is off, the variable speed pump can run at speed 1 or be OFF (depending on its setting). During filter backwash, the pump is automatically set to speed 3.

Individual speeds are set directly on the pump according to the pump manufacturer's manual.

Delay

Delay time after dose is time for which ASIN AQUA does not dose and wait for the response of probes. The average response time is 4 to 10 min.

Delay time after start of the filtration pump (upon timer switching ON) is time after start for which ASIN AQUA does not take any action and waits for stabilization of a signal from probes.

Delay time test after the start of this function the unit starts dosing and starts counting time. When the probe response to the dose of agent the count stops. Measured time is exact **delay time after dose**.

Settings - method and power of disinfection

Choose the type of disinfection

Choose the type of disinfection and enter its power.

Liquid chlorine dosing pump

Chlorine gas

Electrolysis of salt pool water

Disinfection Method	Unit	Power
☒ Chlorine pump	l/h	3.6
☐ Chlorine gas	g/h	3.6
☐ Electrolyses	g/h	15
Filter disinfection pump	l/h	3.6

Filter disinfection pump

Turn ON if you use the separate filter disinfection pump.

Enter the power of the filter disinfection pump in l/h.

Standard power of the filter disinfection pump is 3,6 l/h.

Turn ON only pumps you are using.

Disinfection Method	Unit	Power
☒ Chlorine pump	l/h	3.6
☐ Chlorine gas	g/h	3.6
☐ Electrolyses	g/h	15
Filter disinfection pump	l/h	3.6

Settings - pump power

pH- and pH+ pump power

Turn ON and enter the power of the pH- and pH+ pumps.

Turn ON only pumps you are using.

Pump Type	Unit	Power
pH - pump	l/h	3.6
pH + pump	l/h	3.6
☒ Algicide pump	l/h	3.6
☒ Floculant pump	l/h	0.6

Algicide pump power

Enter the power of the algicide pump.

Turn ON only if you are using algicide pump.

Pump Type	Unit	Power
pH - pump	l/h	3.6
pH + pump	l/h	3.6
☒ Algicide pump	l/h	3.6
☒ Floculant pump	l/h	0.6

Floculant pump power

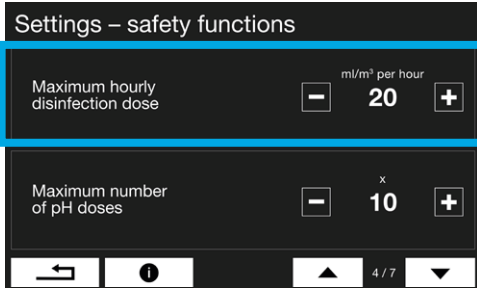
Enter the power of the algicide pump.

Standard power of the floculant pump is 0,6l/h.

Turn ON only if you are using floculant pump.

Pump Type	Unit	Power
pH - pump	l/h	3.6
pH + pump	l/h	3.6
☒ Algicide pump	l/h	3.6
☒ Floculant pump	l/h	0.6

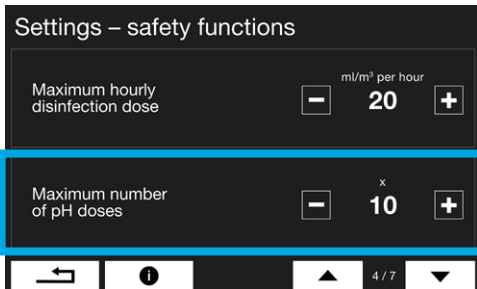
Settings - safety functions



Maximum hourly disinfection dose

Overdose protection.

We recommend leaving the factory value of 20 ml per m³ per hour.



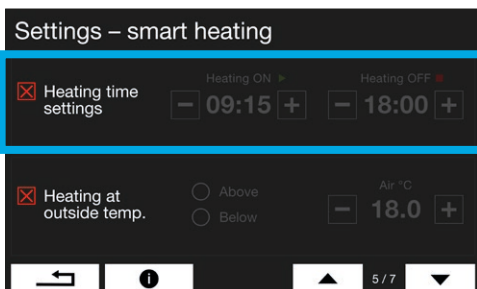
Maximum number of pH doses - without probe response

If the measured pH value does not change after preset maximum number of doses (according to the settings), ASIN AQUA stops pH dosing and an error message appears on the display.

The other ASIN AQUA functions are not limited.

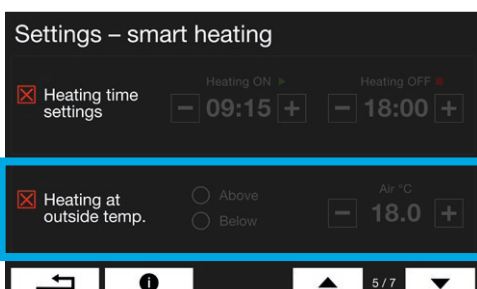
The error message must be canceled manually.

Settings - smart heating



Heating time settings

This function allows to set a time for which the heating will be in operation. The heat pump has higher efficiency during the day when outdoor temperature is higher.



Heating at outdoor temperature (above or below)

This feature allows to set the outdoor air temperature, at which or below which ASIN AQUA starts heating. To use this feature, an outdoor air thermometer must be installed.

Above

This function is used to optimize the effectiveness of heat pump, which has higher efficiency at higher air temperature.

Below

When using the solar heating and a the heat pump simultaneously, the SMART HEATING gives an option to automatically deactivate the heat pump and prioritize the solar heating which optimizes electric consumption.

- Check the BELOW option. Set the temperature between 30 to 40 °C.

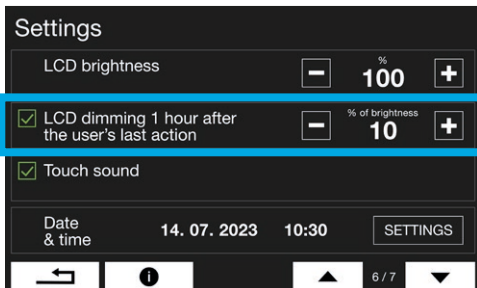
NOTE: Other heating functions can be set individually for each mode in the **MODE Settings** (ref. to the chapter MODE settings).

Settings - general



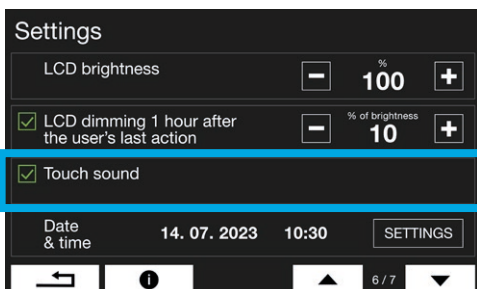
LCD brightness

Set the LCD brightness.



LCD dimming

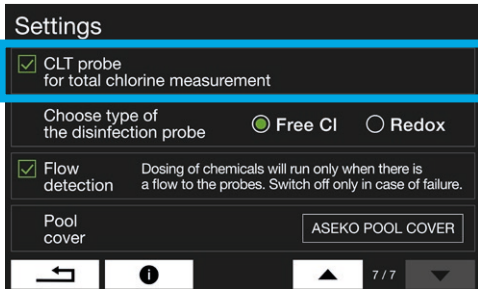
If enabled, after 60 minutes without interaction ASIN AQUA PRO will reduce the brightness of the screen.



Touch sound

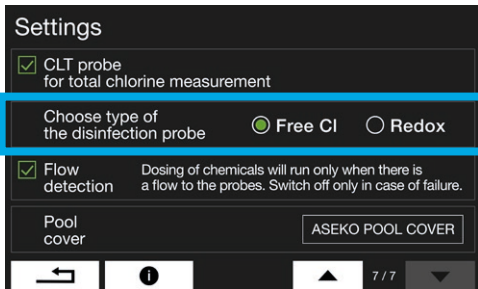
If enabled, every touch on the touchscreen will make a sound.

Settings - others



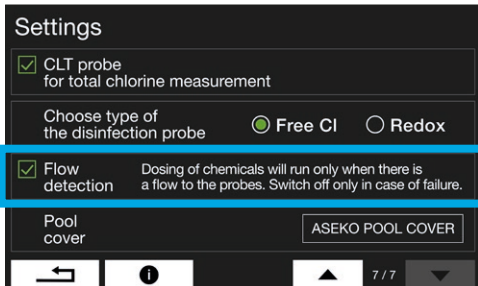
CLT probe

Check if you use the CLT probe for measuring of the total and bounded chlorine.



Choose the type of the disinfection probe

Choose the probe which controls the dosing of disinfection.

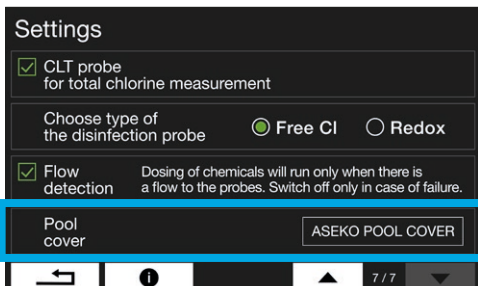


Flow detection

The flow detector detects flow of measured water. Dosing of chemicals will take action only if the water flow to probes is detected.

Wash the strainer on the measuring water filter on a regular basis.

Warning: Only switch off the flow detection in case of Flow detector failure.

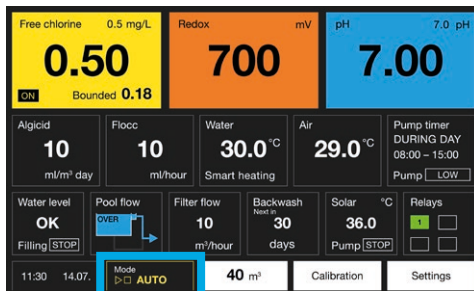


Pool Cover position detection

FW 1.0 NOT available

If the pool cover is closed during the filtration time set by the timer, the VS pump will change the speed to the Speed 1 (LOW).

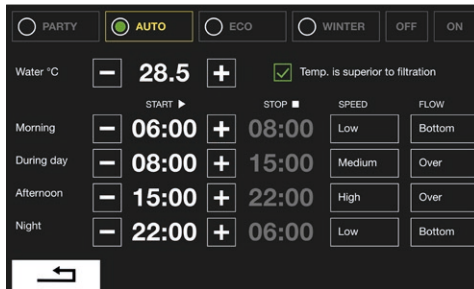
Mode settings



Automate your pool with 6 adjustable modes.

Party | Auto | Eco | Winter | Off | On

Change modes through ASIN AQUA Pro screen, external touchscreen, or smartphone app Pool REMOTE.



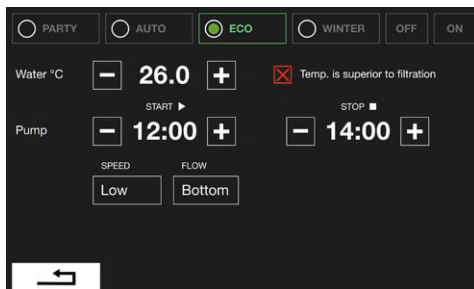
AUTO

The Auto mode for regular use of the pool. It uses all functions in a balanced way to achieve comfort and economic operation.

Set the filtration times: **morning** | **durin day** | **afternoon** | **night** and desired temperature. For each filtration time set the pool water flow, and the speed of the circulation pump.

Temperature is superior to the filtration timer

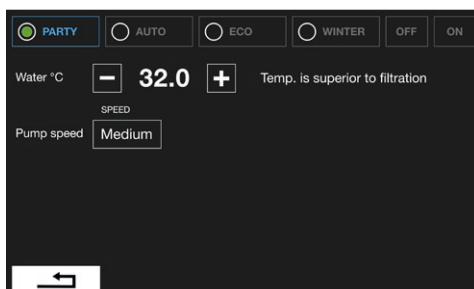
Enabling this function will keep both the heating and the circulation pump operational until the desired water temperature is reached.



ECO

The ECO mode is designed to operate the swimming pool in your absence or when you want to operate economically. Keeps the pool ready for a switch to normal operation.

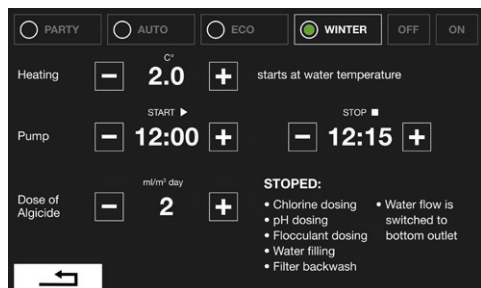
Allows to set the desired temperature, the pool water flow, the speed of the circulation pump, and one filtration time.



PARTY

This mode switches ON the circulating pump on preset speed and heating to the required temperature.

This mode has no time functions. To switch OFF the circulation pump and the heating change the mode.



WINTER

Activating this function set the device into the special Winter mode. This mode prevents the pool water from freezing and keeps the water clean with dosing of algaecide. **In the Winter mode following function are deactivated:** chlorine dosing, pH dosing, flocculant dosing, water filling, filter backwash. **Water flow is set to the bottom drain.**

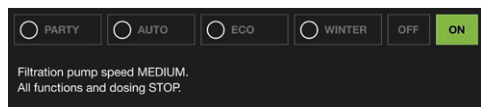
Every day the filtration pump runs in preset filtration timer.

Outside of the filtration timer the filtration pump remains OFF but is automatically activated for the period of 15 minutes when the outdoor temperature drops below 0 °C.

- If, after this period, the water temperature is under the required value (0 - 6 °C), the filtration pump stays ON, and the heating is activated until the water temperature exceeds 2 °C.
- If, after this period, the water temperature is higher than the required value (0 - 6 °C), the circulation pump is turned OFF.

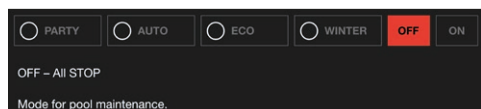
If the outdoor temperature stays below 0 °C this cycle is repeated every 6 hours.

When using the Winter mode without the **outdoor air thermometer**, the system acts as it always detects 0 °C outdoor temperature.



ON

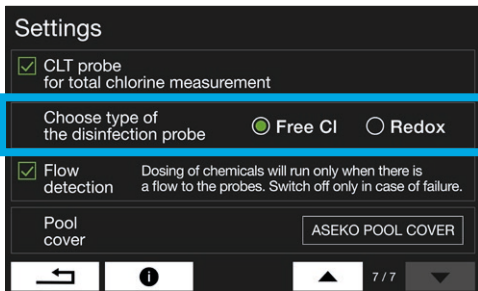
The filtration runs NONSTOP. The heating is OFF.



OFF

Everything is OFF.

Choosing the disinfection control probe



ASIN AQUA PRO allows to control the disinfection dosing with the CLF probe or the Redox probe. Choose the control probe. The second measured value will be indicative.

1. CLF free chlorine probe

Free chlorine measurement, CHLOR PURE dosing



2. Redox probe

Measurement of redox potential, CHLOR PURE dosing



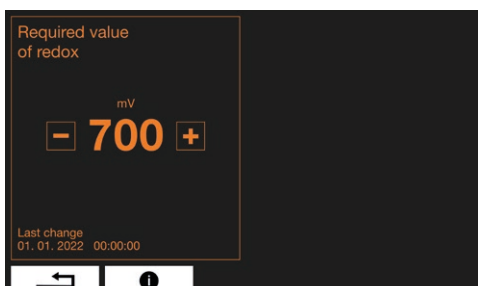
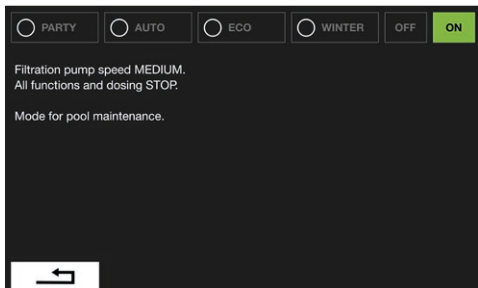
Commissioning procedure and required value setting

Commissioning procedure

The water in the pool must be clean without any additives especially free of chlorine stabilizers (cyanuric acid).

Ideally fill the pool with fresh water from the water main.

- Set the system to **MODE ON** - filtration NONSTOP 24 hours
- If you control with the CLF probe, set the disinfection to 0.0 mg/l.
If you control with the REDOX probe, set the disinfection to 000 mV.



CLOSE



Close the water supply to the probes

ASIN AQUA displays no flow to the probes.



SuperCHLOR
#13120

Perform shock chlorination

Perform shock chlorination of pool water with Super CHLOR (inorganic active chlorine without stabilizers).

Follow the instructions on the packaging (1 kg = 80 m³).

Before opening the water supply to the probes

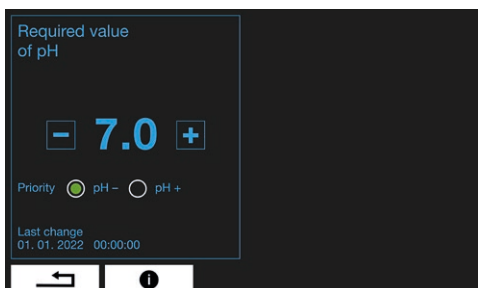
The water must be **clean** and the **chlorine concentration** measured by the digital tester must be between **0.3 and 1.2 mg/l**. If the **concentration is lower**, repeat shock chlorination. If the **concentration is higher**, wait till the chlorine concentration in the water drops down.

OPEN



Open the water supply to the probes

Warning No flow to probes turns off automatically.

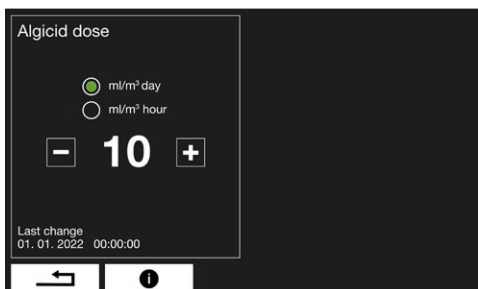


pH setting

It is recommended to enter the required pH value equal to pH value of water you refill or slightly lower.

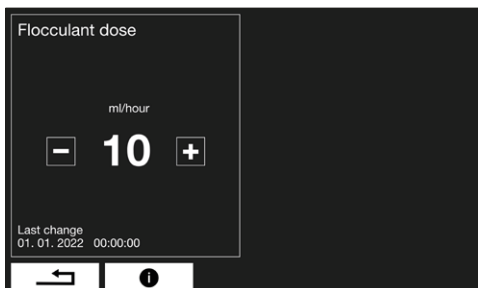
Required pH value = refilled water pH value (in the range from 6.8 to 7.5)

pH may change during operation but if it is in the range from 6.8 to 7.5 you do not have to change this setting.



ALGICIDE setting

A sufficiently effective dose for most pools is 10 ml/m³ per day. If green algae appear in the pool, you can increase the dose. After algae have disappeared, the dose can be returned to 10 ml.



FLOC+C setting

The FLOC + C dose is calculated from the amount of circulating water, which flows through the filtration. Based on your circulating pump power (in m³/h), adjust the FLOC + C dose value. E.g. with the circulation pump with power of 10 m³/h set the FLOC + C dose to 10ml/h.

This value ranges from 10 to 40 ml per hour for most private pools.

Required values

If you control with the CLF probe

For the correct functionality of the CLF probe you must observe the following conditions:

pH of the pool water

The pH value should be between **6.8 and 7.5**.

The pH of the pool water must be stable.

If the pH value fluctuates, the value of the chlorine changes accordingly.

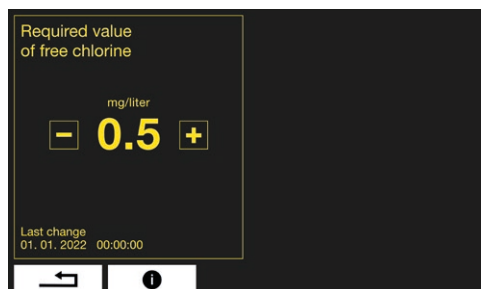
Chlorine content mg/l	Water temperature
0.3 to 0.5	24 to 26 °C
0.5 to 0.8	26 to 32 °C
0.8 to 1	Over 32 °C

Determination of the required chlorine value in pool water

The required concentration of chlorine in pool water varies with the temperature of the pool water. However it should never be less than 0.3 mg/l. Determine the required value using the table on the left.

WARNING

Before proceeding to setting of the required values, keep the probe connected to the water for at least 1 hour, ideal 24 hours, to stabilize its measurement.



How to set the required chlorine value

Use a colorimeter or digital Pool Tester to measure the chlorine value in pool water sample.

If the chlorine concentration (measured with a colorimeter or digital Pool Tester) is:

- **ADEQUATE** to the value shown on the ASIN AQUA Home, your device is ready to maintain the required concentration of chlorine in pool water.
- **BELOW** the required value shown on the ASIN AQUA Home, increase the required value **by 0.1 (by 0.2 mg/l max)** (regardless of the required value according to the table).

Repeat the measurement after the water in the pool is mixed thoroughly and the value shown on the ASIN AQUA is stable.
Repeat the process until the **chlorine concentration in pool water matches your required value** then set the correct required value according to the table. Additionally, you can perform the calibration of the CLF probe (see the chapter CLF Probe Calibration).
- **HIGHER** than the required value shown on the ASIN AQUA Home display - you can calibrate the CLF probe (see the chapter CLF Probe Calibration).

NOTIFICATION:

Fix the **low chlorine value** in pool water by **increasing required disinfection value on the display of the unit**.

RECOMMENDATION: Check the chlorine value in the pool once a week using the colorimeter or digital pool tester.

If you control with the Redox probe

For the correct functionality of the REDOX probe, you must observe the following conditions:

pH of the pool water

The pH value should be between **6.8 and 7.5**.

The pH of the pool water must be stabilized.

If the pH value fluctuates, the value of the Redox changes accordingly.

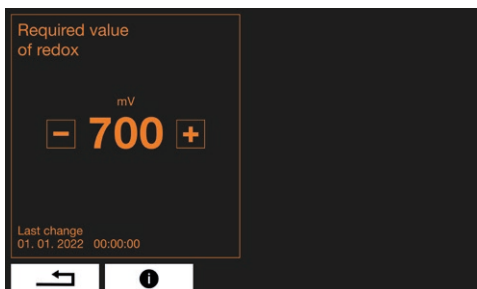
Chlorine content mg/l	Water temperature
0.3 to 0.5	24 to 26 °C
0.5 to 0.8	26 to 32 °C
0.8 to 1	Over 32 °C

Determination of the required chlorine value in pool water

The required concentration of chlorine in pool water varies with the temperature of the pool water. However it should never be less than 0.3 mg/l. Determine the required value using the table located on the left.

WARNING

Before proceeding to setting of the required values, keep the probe connected to the water for at least 1 hour, ideal 24 hours, to stabilize its measurement.



How to set the required Redox value

Set the required REDOX value to **650 mV**

Use the tester to check if the **chlorine content in pool water is within the range of 0.5 - 1.2 mg/l**.

Fine-tuning

Use the colorimeter or Pool Tester to measure the chlorine value of the pool water. If the manually measured chlorine value in pool water is:

- **ADEQUATE**, your ASIN AQUA Home is ready to maintain the required concentration of chlorine in pool water.
- **LOW**, increase the required REDOX mV value in the menu.
- **HIGH**, reduce the REDOX mV value in the menu.

Every 10 mV corresponds approximately to 0.1 mg/l of chlorine in the pool water.

EXAMPLE:

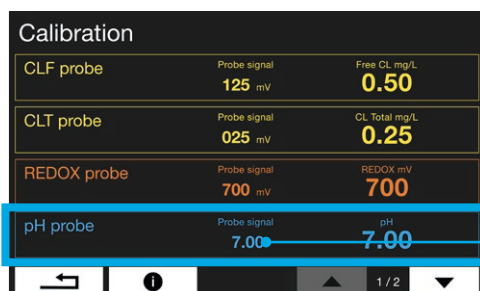
The chlorine value in the pool water is 0.3 mg/l - the displayed value is 650 mV. If you want to increase the chlorine value to 0.5 mg/l. You have to increase the preset value of the redox by 20 mV to 670 mV.

NOTE:

The relationship of Redox potential and chlorine value in pool water cannot be determined by the exact table. The correct value of the Redox must be observed by several check measurements.



In operation measurement and calibration



pH probe calibration

When pH is being measured in operation, there may be a difference between the value measured by ASIN AQUA and the actual pH value in water. Proceed to the calibration.

pH probe calibration menu

Non-calibrated value

The pH probe calibration menu always displays the original non-calibrated value. Calibration of the pH probe is not possible when the new value differs by more than 1 from the non-calibrated value. If the difference from the non-calibrated value exceeds 1, the probe should be sent for inspection or replaced with a new one.

Calibration is not possible when the new value differs by more than 1 from the non-calibrated value.

The pH probe can only be calibrated in the pH range of 6.2 to 7.8.

The pH probe cannot be calibrated when the LOW or HIGH warning is displayed.

pH probe calibration process

Calibration can be done in two ways:

1. With a buffer

- **Close the water supply to the probes.**
- Remove the probe from ASIN AQUA Home :
rinse the probe with clean water and wipe it.
- The probe must remain connected to the device via the cable. Dip the probe in the calibration buffer and after the value displayed on ASIN AQUA is stable, enter the buffer value into the pH Probe Calibration menu.

2. With a colorimeter or Pool Tester

- **The water supply to the probes must be open**
- Measure the pH value directly in pool water using a colorimeter or Pool Tester.
- Then enter this value into the pH Probe Calibration manu. Calibration can be performed in the range of 6.4-7.8.

pH 7.00 Buffer #12065



Photometr #13076



In operation measurement and calibration

Calibration		
CLF probe	Probe signal 125 mV	Free CL mg/L 0.50
CLT probe	Probe signal 025 mV	CL Total mg/L 0.25
REDOX probe	Probe signal 700 mV	REDOX mV 700
pH probe	Probe signal 7.00	pH 7.00

CLF probe calibration

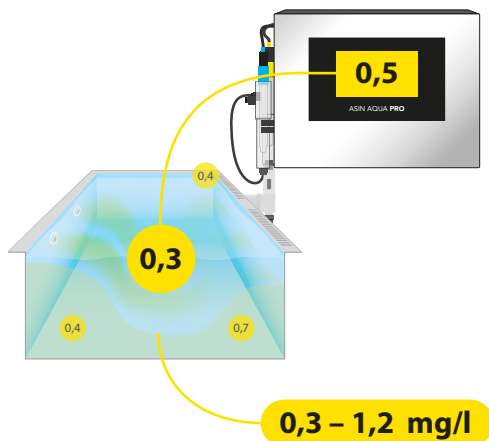
Do not calibrate the probe until the water in the pool is thoroughly mixed and the value displayed on the ASIN AQUA is stable.

This may take several hours.

Perform calibration of the CLF probe when the manually measured value of free chlorine is equal to or higher than the value you want to have in your pool.



Calibration is performed by entering the manually measured value of chlorine concentration (using a photometer) in the CLF probe calibration menu.



Calibration **is not necessary** if the difference between the photometer measured value and the value shown on the display **is less than 0.2 mg/l**.

Calibration is best performed with chlorine concentrations in the pool water in the range of **0.3 - 1.2 mg/l**.

Calibration restrictions

The CLF probe cannot be calibrated if the output **signal is less than 20 mV**.

The CLF probe can only be calibrated in the CL range **vfrom 0.3 to 5.0 mg/l**.

In operation measurement and calibration

Calibration		
CLF probe	Probe signal 125 mV	Free CL mg/L 0.50
CLT probe	Probe signal 025 mV	CL Total mg/L 0.25
REDOX probe	Probe signal 700 mV	REDOX mV 700
pH probe	Probe signal 7.00	pH 7.00

Redox probe calibration

Use a buffer

- **Close the water supply to the probes.**
- Remove the probe from ASIN AQUA Pro:
rinse the probe with clean water and wipe it with a paper towel.
- The probe must remain connected to the device via the cable during the calibration. Dip the probe in the calibration buffer and after the value displayed on ASIN AQUA Pro is stable, enter the buffer value into the Redox probe calibration menu.

Redox Buffer 650mV
#12091



RECOMMENDATION: Perform the calibration using the buffer 650mV.

In operation measurement and calibration

CLT probe calibration

Do not calibrate the probe until the water in the pool is thoroughly mixed and **the value displayed on the ASIN AQUA is stable.**

This may take several hours.

Calibration is performed by entering the manually measured value of total chlorine content (using a photometer) in the CLT probe calibration menu.

Calibration		
CLF probe	Probe signal 125 mV	Free CL mg/L 0.50
CLT probe	Probe signal 025 mV	CL Total mg/L 0.25
REDOX probe	Probe signal 700 mV	REDOX mV 700
pH probe	Probe signal 7.00	pH 7.00
← ⓘ ▲ 1/2 ▼		



Photometr
#13076

Calibration **is not necessary** if the difference between the photometer measured value and the value shown on the display **is less than 0.2 mg/l.**

Calibration restrictions

The CLT probe cannot be calibrated if the output **signal is less than 20 mV.**

Calibration		
Water thermometer	Water °C 29.0	°C 29.0
Air thermometer	Air °C 29.0	°C 29.0
Solar thermometer	Temp. °C 53.0	°C 53.0
Filter flow meter	Signal m³/h 11.5	Flow m³/h 11.5

Water thermometer calibration

If the temperature of water in the pool is different from the temperature shown on ASIN AQUA, calibrate the water thermometer in the water thermometer calibration menu.

Calibration		
Water thermometer	Water °C 29.0	°C 29.0
Air thermometer	Air °C 29.0	°C 29.0
Solar thermometer	Temp. °C 53.0	°C 53.0
Filter flow meter	Signal m³/h 11.5	Flow m³/h 11.5

Air thermometer calibration

If the temperature of air is different from the temperature shown on ASIN AQUA, calibrate the air thermometer in the air thermometer calibration menu.

Calibration		
Water thermometer	Water °C 29.0	°C 29.0
Air thermometer	Air °C 29.0	°C 29.0
Solar thermometer	Temp. °C 53.0	°C 53.0
Filter flow meter	Signal m³/h 11.5	Flow m³/h 11.5

Solar thermometer calibration

If the temperature of solar is different from the temperature shown on ASIN AQUA, calibrate the solar thermometer in the solar thermometer calibration menu.

Calibration		
Water thermometer	Water °C 29.0	°C 29.0
Air thermometer	Air °C 29.0	°C 29.0
Solar thermometer	Temp. °C 53.0	°C 53.0
Filter flow meter	Signal m³/h 11.5	Flow m³/h 11.5

Filter flow meter calibration

If the pool water flow in the pool is different from the value shown on the ASIN AQUA, calibrate the filter flow meter in the filter flow meter calibration menu.

Stabilizer in water

BALANCER #13039



Alkalinity

Alkalinity volume in the water should range from **80 to 120 ppm**. Alkalinity stabilizes the pH and reduces its consumption. To increase the Alkalinity in the water, use **Pool & SPA BALANCER** (#13039).

Cyanuric acid

The value of Cyanuric acid must be **0 ppm**. Cyanuric acid greatly diminish the effectiveness of chlorine, making it difficult to accurately measure and control its concentration.

Cyanuric acid

The value of Cyanuric acid must be 0 ppm!

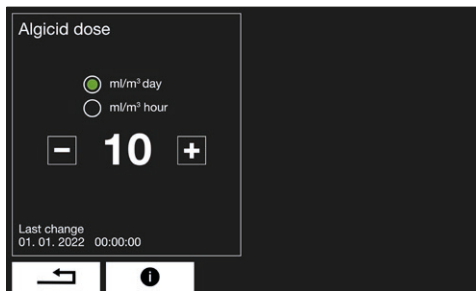
Functions

ALGICIDE setting

Press the algicide square to enter the required algicide dose menu.

A sufficiently effective dose for most pools is 10 ml/m³ per day. If green algae appear in the pool, you can increase the dose. After algae disappears, return the dose to 10 ml.

The required algicid dose menu allows the notification if the level in the chemical can drop under the set percentage.

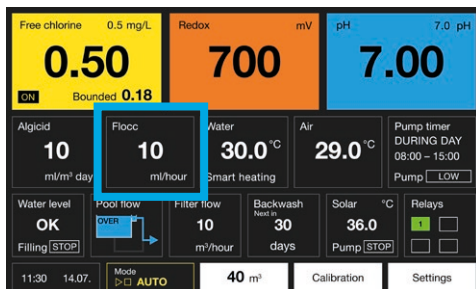


FLOC+C setting

The FLOC + C dose is calculated from the amount of circulating water, which flows through the filtration.

Based on your circulating pump power (in m³ per hour), adjust the FLOC + C dose value. E.g. with the circulation pump with power of 10 m³/h set the FLOC + C dose to 10ml/h. This value ranges from 10 to 40 ml per hour for most private pools.

The required Flocculant dose menu allows the notification if the level in the chemical can drop under the set percentage.



Functions

Smart heating

Water temperature measurement and heating control

The water thermometer should be installed in the inlet pipe coming from the pool. Never install it behind the heat exchanger. When the temperature drops below the required value, the relay switches ON your heat source (heat pump, electric heating, gas boiler circulating pump).

Heating time settings

This function allows to set a time for which the heating will be in operation.

This is particularly useful for switching on the heat pumps which have a higher efficiency during the day when outdoor temperature is higher. Eventually, turn off the heat pump during a specific time to reduce the noise from the heat pump.

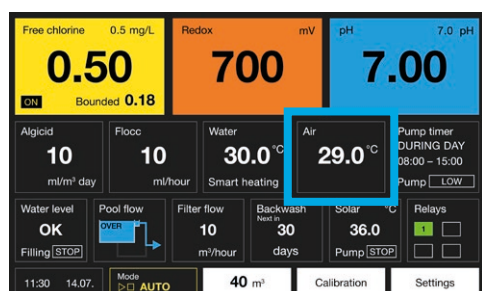
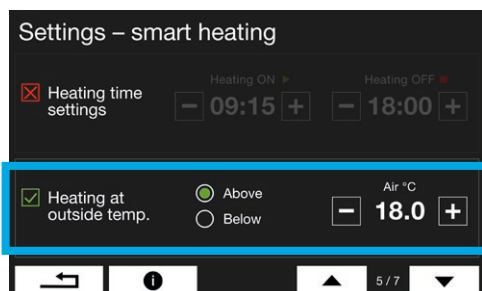
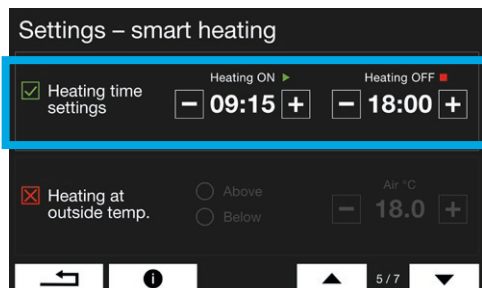
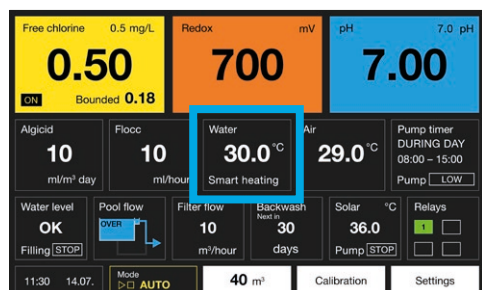
Heating at outdoor temperature (above or below)

This feature allows you to set the outdoor air temperature, at which or below which ASIN AQUA starts heating. To use this feature, an outdoor air thermometer must be installed. This function is used to optimize the effectiveness of air heat pumps, which have higher efficiency at higher temperatures.

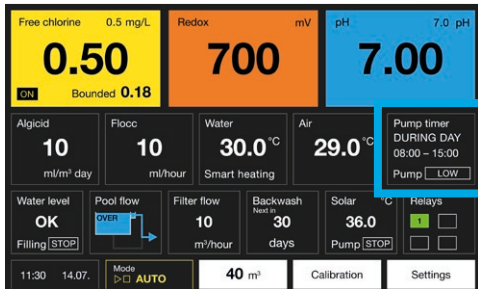
Other heating functions can be set individually for each mode in the **MODE Settings**

Air temperature in the pool area

The box shows the air temperature in the pool area. The value is used for smart heating and for the winter mode - protection against water freezing.



Functions



Pump timer

The field displays the current filtration timer interval and the current speed of the filtration pump.

Press the field to go to the settings of the current mode.



Level sensor - level monitoring and automatic refilling

The water level is monitored using a pressure-type level sensor, which is easy installed by inserting the probe into the buffer tank or the blind nozzle of skimmer pools. ASIN AQUA monitors four different levels, which can be set in centimeters in the water level meter menu.

Setting:

High level ALARM - too much water in buffer tank

After this level is reached, following actions may start:

1. If the automatic filter backwash is enabled, one backwash cycle starts and drains the waste water.
2. If the automatic filter backwash is not enabled, the relay 19 switches on (filter backwash) for the period of time until level is OK. The second circulating pump or automatic drain valve can be connected to this relay.

Refilling OFF - required level

Refilling stops

Refilling ON - level at which refilling starts

Refilling starts when the water level stays for at least 10 seconds below this value (in order to prevent oscillating).

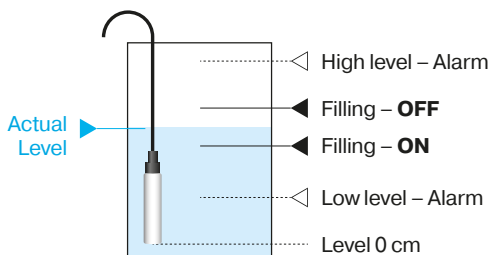
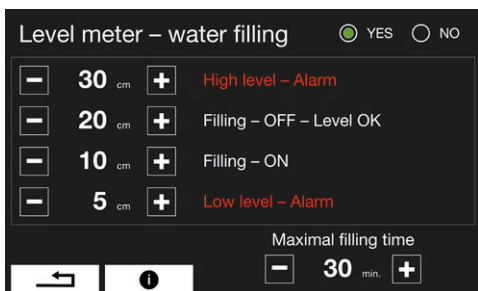
Low level ALARM

Circulation (filtration) pump shuts off.

Maximum Refilling Time

Maximum time to reach the required water level. If the water level is not reached within the preset maximum refilling time an error message appears.

Set the maximum filling time to 0 to disable the maximal filling time function.



Functions

Switch Overflow / Bottom drain – Besgo 3w

The box shows the current direction of water flow to the filtration.

Enable this function to change the direction of the water flow.

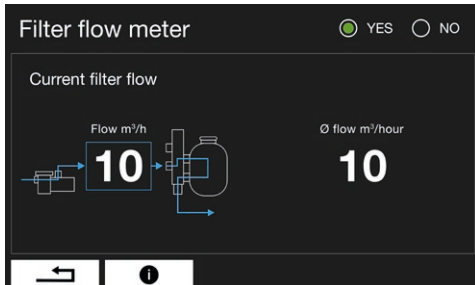
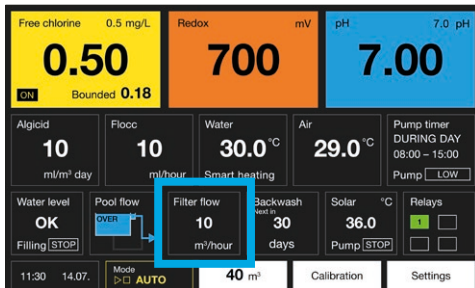
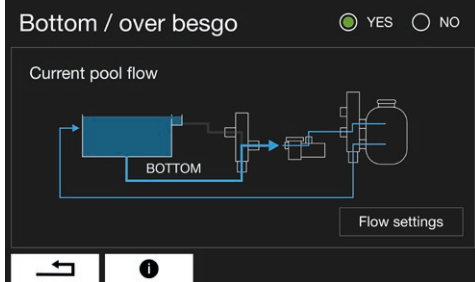
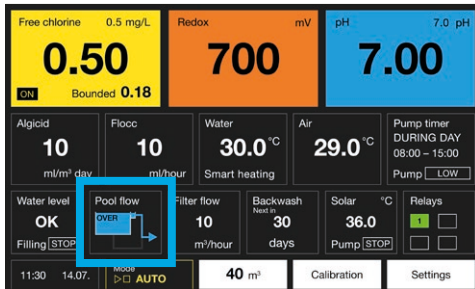
This change will be valid until the next timer event.

During filter backwash, water flows through the BOTTOM DRAIN.

An alarm WATER LEVEL TOO HIGH switches the water flow to the OVERFLOW until the alarm expires.

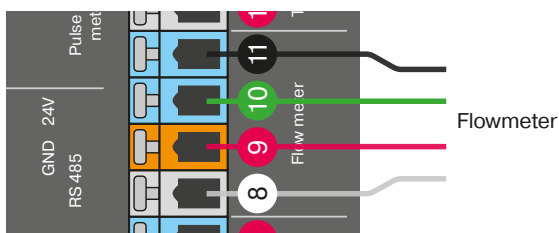
The pool cover has no effect on the BOTTOM / OVERFLOW switching.

The three-way BESGO should be connected in a way that when the solenoid valve is not powered, water flows through the BOTTOM.



Filter flow

Measurement of pool water flow through filtration, the value is displayed in m³/h.



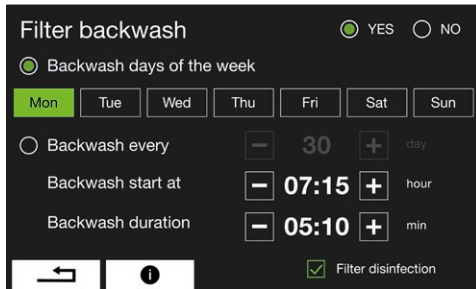
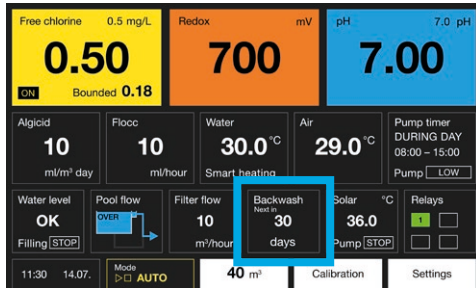
Functions

Automatic filter backwash

The ASIN AQUA technology is in particular based on the high efficiency of filtering and removing even the finest impurities, it is necessary to **wash the filter on a regular basis**. The automatic filter backwashing function ensures the filter washing on a regular basis in the preselected intervals.

To enable this function, it is necessary to use the automatic 5-way BESGO valve. The ASIN AQUA controls the BESGO valve with relay output.

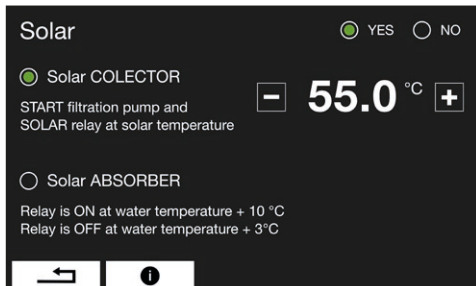
When the relay switches ON, the BESGO valve switches to the required position with the pressure of water or air and performs the filter backwash. See the BESGO manual.



Solar

Menu shows the solar settings.

Activate this function and set the required temperature for the solar panels. Once the required temperature of the solar panels is reached, the solar relay will activate. The solar relay can control the Besgo 4-way or the solar panel circulation pump.



Functions

Relays

ASIN AQUA PRO has one integrated programmable relay to control one extra accessory. It is also possible to connect optional **RL module** (relay module) to connect 4 extra relays.

Integrated relay has a only week timer function and can be set and controlled directly on the ASIN AQUA Pro screen or via the Pool REMOTE app.

Extra relays from the RL module have funtions: Week timer, Countdown and ON / OFF. Extra relays can be set and controlled only via the Pool REMOTE app.



Relay 1 – Week timer

Selected function
☒ Week timer ☐ Countdown ☐ ON / OFF relay

Mon Tue Wed Thu Fri Sat Sun

RELAY START STOP
 - 06:00 + - 08:00 +

☒ COVER CLOSE set the relays OFF

Relay 1 – Countdown

Selected function
☐ Week timer ☒ Countdown ☐ ON / OFF relay

Off after Hours Min.
 - 00:15 +

☒ COVER CLOSE set the relays OFF

Relay 1 – ON / OFF relay

Selected function
☐ Week timer ☐ Countdown ☒ ON / OFF relay

☒ COVER CLOSE set the relays OFF

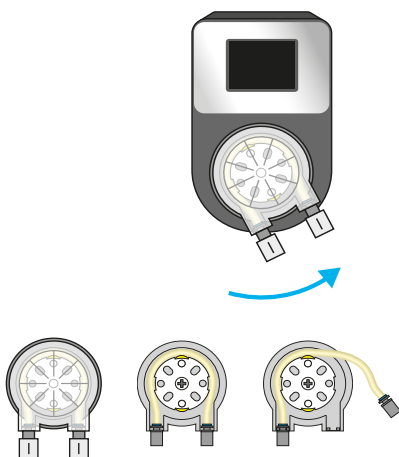
Week timer - Set the specific days and times for relay activation.

Countdown - Set the time for which the relay is active. Turn on the relay manually or with the Pool REMOTE app. The relay switches OFF after the time countdown is complete.

ON / OFF relay - Control the relay manually or with the Pool REMOTE app.

Maintenance

#12073 Replacement hose for the pump PP 60



To ensure the optimum efficiency, perform visual checks and maintenance of ASIN AQUA on a regular basis.

PP60 and PP10 tube replacement

To prevent the pump from failing, it is recommended to replace the tube #12073 every 24 months.

In doing so, proceed as follows:

- Switch off ASIN AQUA.
- Turn the pump cover cassette anticlockwise and take it out.
- Release both tube ends and take it out of the cassette.
- Lubricate the new tube with the supplied grease.
- Insert the lubricated tube into the cassette.
- Place the cassette back on the pump and turn it clockwise to lock it.
- Use new nuts, which are part of the replacement tube set, for connection of the PE tube.

#12005 Injection valve



Injection valve maintenance

On a regular basis, check throughput of the injection valves, rubber band integrity, remove scale.

In case of private pools, replace injection valve rubber bands #13087 every 2 years. In case of public pools, replace #12005 every year.

#13087 Replacement rubber band for injection valve



Flow detector #12106



Flow detector with filter

Rinse the filter of the flow detector regularly.

Fuse Replacement

Fuse T 125 mA #13078
Fuse T 1 A #13079



T125 mA or T170 mA fuse

Fuse protecting the inner electronics. In case of its burnout, check the inner electronics.

T1 A fuse

Fuse protecting external sensors. In case of burnout of this fuse, check the level sensor, flow detector, and external display.

pH - Buffer 7,00 #12065



pH probe testing

Take the probe out of ASIN AQUA housing and clean it from impurities. Check for visible mechanical damage on the probe.

Measure the pH value and ensure it falls within the tolerance range of ± 1.0 . For example, if the water pH is 7.2 and the probe measures 7.9, it is in tolerance, the probe is considered okay.

Test the probe's response to positive or negative changes in water or buffer by immersing it in a 7.0 pH buffer and observing the response after one minute. The response should be at least 90%.

Follow the instructions in the user's manual for the probe.

CLF probe testing

The free chlorine probe should output a signal of at least 20 mV at a free chlorine concentration of 0.8 mg/liter.

If the signal is lower, send the probe for inspection.

Conduct a test with clean water (standing for 24 hours) and ensure the signal is lower than 20 mV. Otherwise, send the probe for inspection.

Redox Buffer 650 mV #12091



REDOX probe testing

Take the probe out of ASIN AQUA housing and clean it from impurities. Check for visible mechanical damage on the probe.

Ensure that the redox probe's sensitivity does not exceed -12% and that it measures above 595 mV at the buffer value of 650 mV.

Test the probe's response to positive or negative changes in water with 0 chlorine concentration.

There is no manufacturer of pH and REDOX probes that cover its products with warranty. ASEKO has decided to cover supplied probes to its clients by two year warranty period that cover free repair of supplied probe that will have higher tolerance than above described.

External touch display



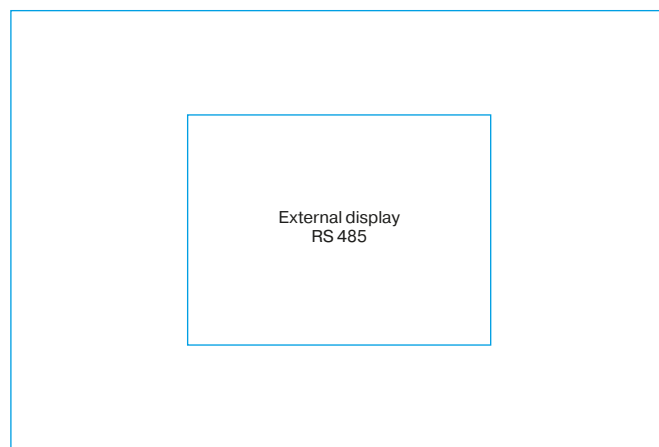
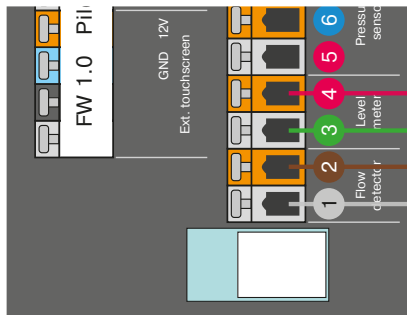
External
Touchscreen Display
#12048

FW 1.0 NOT available

The external display shows

1. Pool water parameters:
Temperature, pH value, redox potential or chlorine concentration.
2. Parameters of the air in the pool area:
relative humidity and temperature.

The setpoints can be set on the ASIN AQUA device and a probe calibration can be carried out via the external display.



Enhancement of filtering efficiency



AFM® activated filter media

AFM is direct substitute for filter sand. It doubles efficiency of the existing filtration system. AFM® is resistant to biological pollution and formation of so-called bio-film.

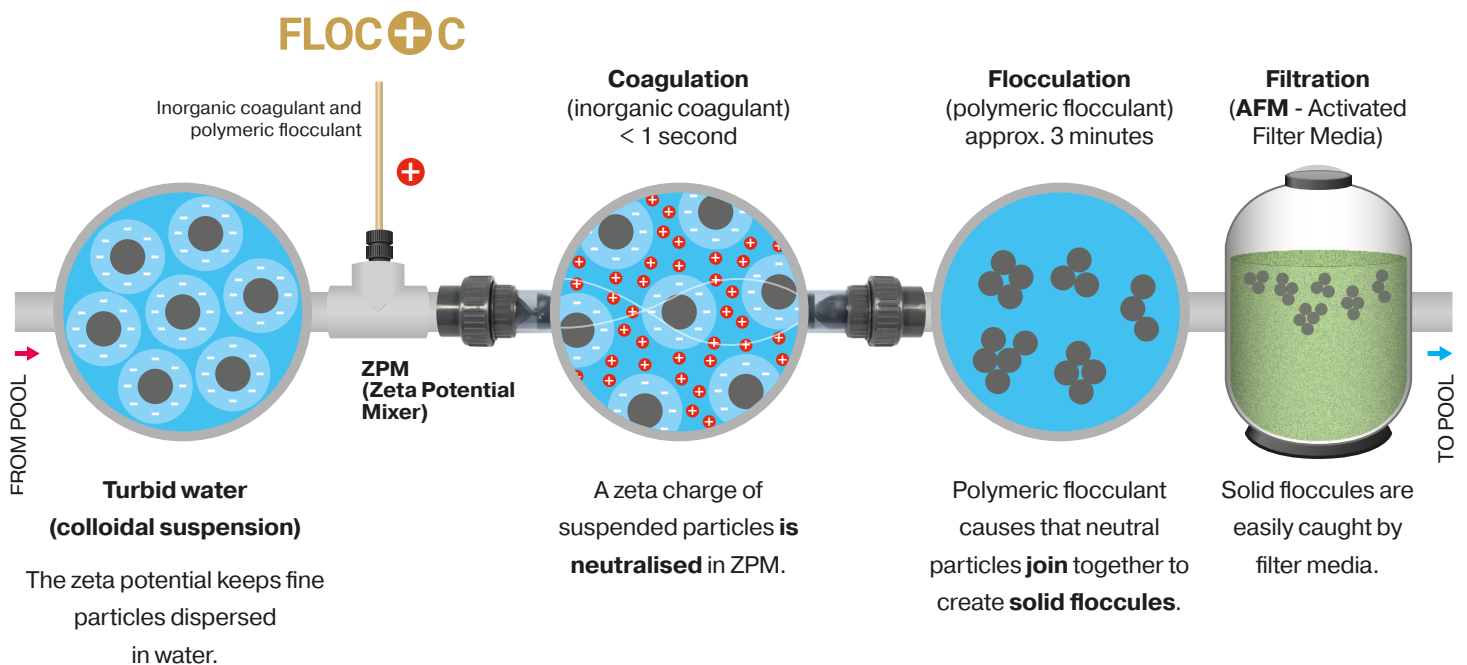


ZPM® coagulation mixer

ZPM increases effects of coagulation and flocculation for transition of smaller dissolved solids (turbidity) to larger particles that can be removed by filtering.

ASEKO Pool & Spa FLOC + C

A unique mixture of coagulant and flocculant for increasing the efficiency of the filter. The coagulant neutralizes the zeta potential, which keeps impurities dispersed into a fine turbidity. The flocculant produces flakes that are better captured by the filter.



Internet connection

The LAN connector is to be connected to the domestic router.
Data are sent in the intervals of 10 seconds to the address
pool.aseko.com, the route must not be blocked by the firewall.

If you are not able to setup the connection by your own ask your IT specialist for help.

Possible connection methods

Home network

Connect the ASIN AQUA Home to your router via LAN cable.

Mobile network

In case you have no direct internet access you can use the data transmission over the mobile network. Connect the ASIN AQUA Home to your mobile network router via LAN cable.

Wifi connection

If you install the ASIN AQUA Home in place where is no access to your private network by wired connection but your Wifi has enough signal, you can connect the ASIN AQUA Home to your Wifi by use of Wifi extender.

Powerline via 230V/DC

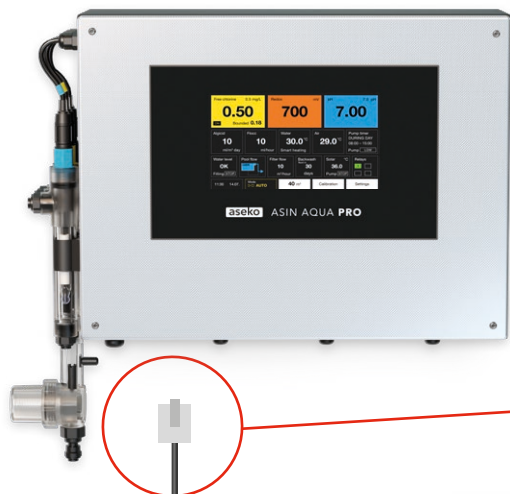
If you have no wired access to your LAN network but your ASIN AQUA Home is in the at the same electric network you can connect the LAN network via 230 V power line socket adapter.

If you have connection problems:

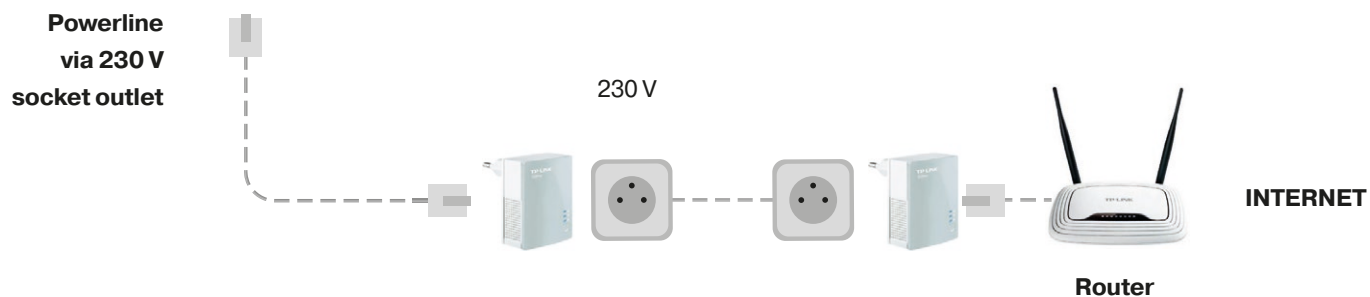
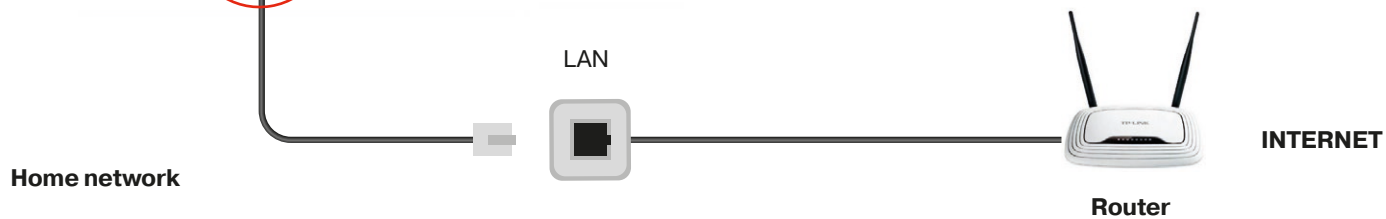
Please switch off ASIN AQUA.

Restart the router and switch on the ASIN AQUA again.

The home network must be open to communication on both sides
for URL: **pool.aseko.com**



Connect ASIN AQUA PRO via the LAN cable



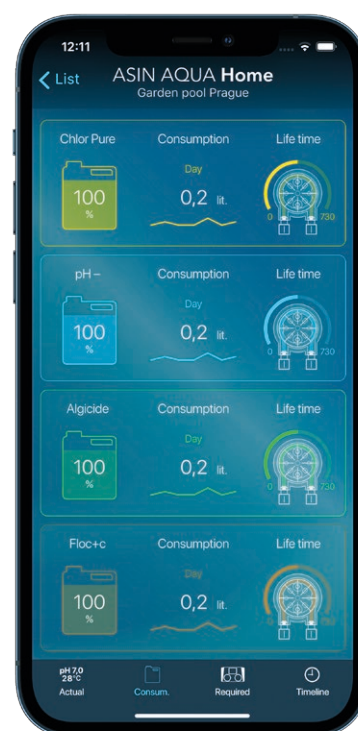
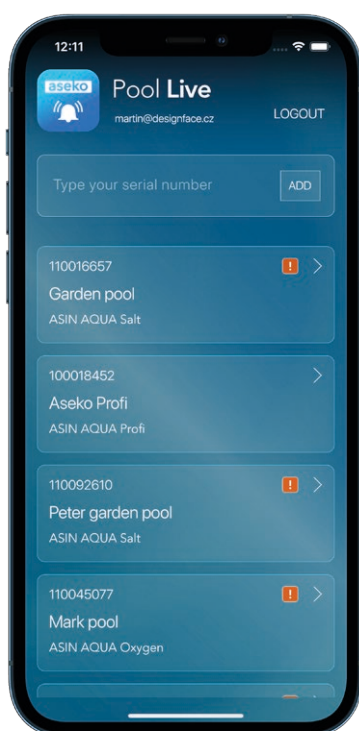
Aseko Cloud Services

Pool Live app

The internet connection allows you to use the Pool Live mobile application and monitor your pool on mobile devices wherever the internet connection is available.

After you connect the ASIN AQUA to the internet download the Pool Live application to your smartphone. Application is available for iOS and Android operation systems.

App's main screen, after opening, will ask for typing your ASIN AQUA serial number. You can add more units to the Pool live app.



Pool LIVE
App Soter



Pool LIVE
Google Play



Aseko Cloud Services

<https://pool.aseko.com>

The web application for detailed monitoring of the pool water quality by means of well-arranged graphs. It shows all the measured parameters and ASIN AQUA actions up to 30 days back.

This application is giving you the detailed information of the pool status and detailed review of all events, taken actions and act levels of monitored items up to 30 days back.

Transparent graphic environment of chart lines is giving fast report and you can easily see interconnection of monitored values.

This application is useful at public pool installations where you need to observe the history and monitor the pool water quality and maintenance. In case of any discrepancy in water quality you can find all actions, provided in that moment and in relation to other values you can diagnose the reason of such discrepancy.



Aseko Cloud Services

Pool REMOTE App

App for iOS and Android smartphones to set the modes and control the pool technology connected to the ASIN AQUA PRO device.

With firmware version 1.0, use the device exclusively for switching modes.



Pool REMOTE
App Store

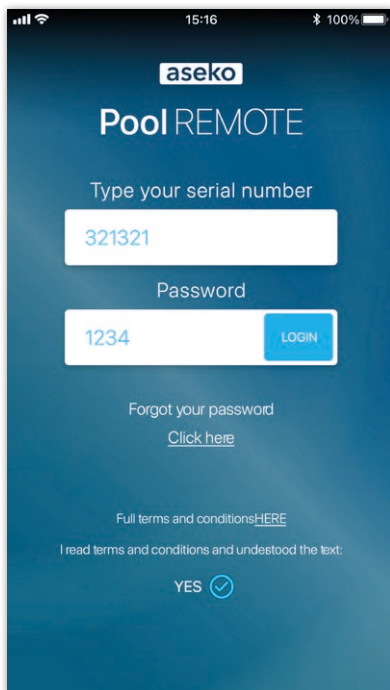


Pool REMOTE
Google Play



Pool REMOTE installation

Install the Pool REMOTE application from **App Store** or **Google play**.



First time login

Before the first login it is necessary to read and confirm your acceptance of "Terms and Conditions".

Enter serial number

Enter the serial number of your ASIN AQUA PRO.

First time login

Please, be sure to use **1234** as a **password** for first time login.

FIRST TIME
LOGIN

Create new password

Type your serial number

Enter the serial number of your ASIN AQUA PRO.

Recovery email

Provide a valid email address to which you have access. E-mail address serves to remind the forgotten password.

Create new password

When signing in for the first time, choose a password you will use. ASIN AQUA PRO will remember the new password.

Installation time zone

Set the time zone of the ASIN AQUA PRO location.

Forgotten password

To recover your password, use the forgotten password in the app.

Overview

The screen provides all the important information about the current status of your pool and the connected components controlled by ASIN Pool.



Reload data

Actual operation mode

Water temperature, air temperature, solar panel temperature

Pool technology status

ASIN AQUA paired device status

Overview

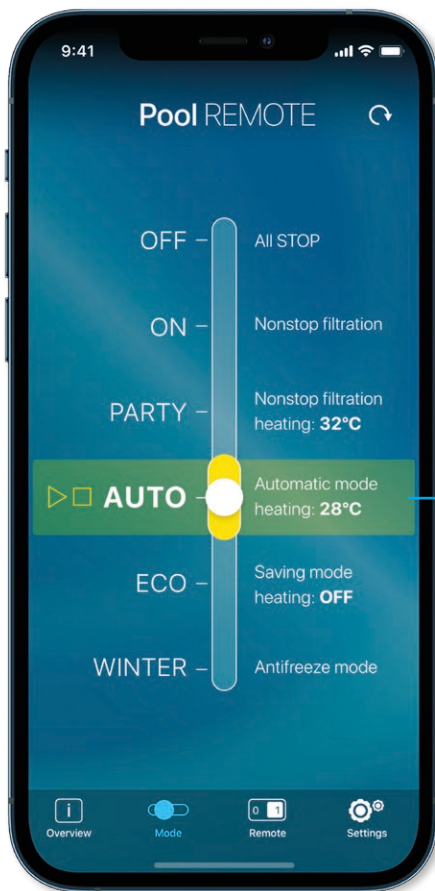
Remote

Mode

Settings

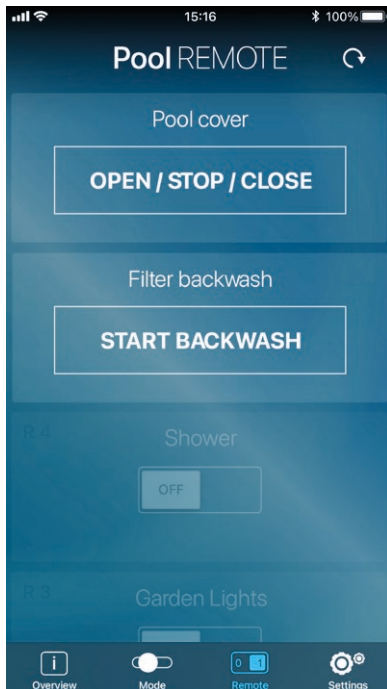
Mode selection

The screen serves to switch between operation modes of your pool controlled via ASIN Pool.



The slider serves to control your pool operation modes.

Direct control



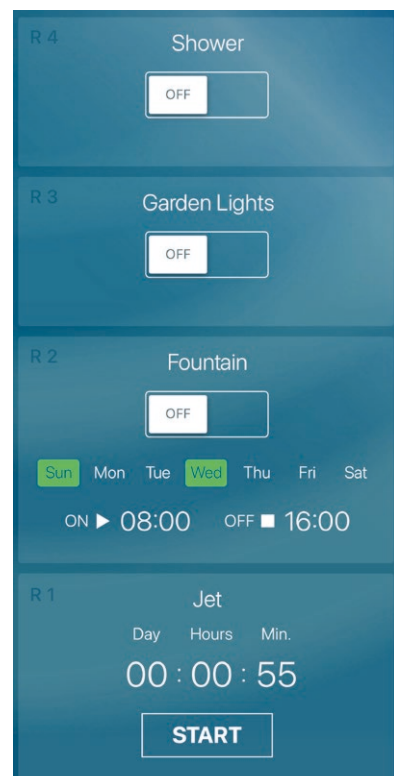
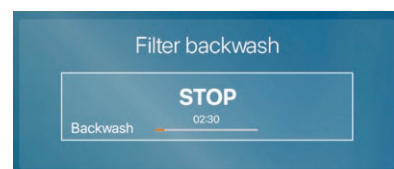
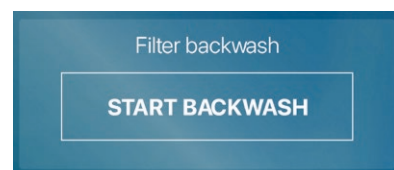
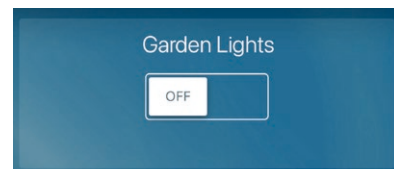
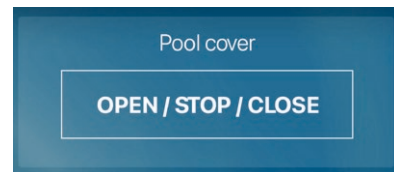
Open / close cover

or

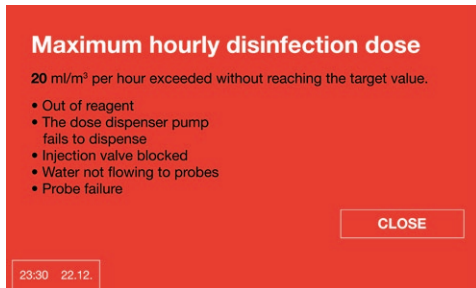
Turns the lights on/off

Switches on the filter backwash process

Relay module



Warnings

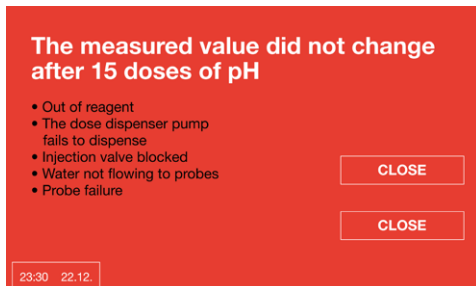


Maximum hourly disinfection dose

If the maximum hourly dose of disinfection is exceeded with no probe response, ASIN AQUA PRO stops dose dispensation and displays a warning.

Recommended settings:

Pool	15 – 20
Whirlpool	20 – 50
Whirlpool high stress	30 – 99

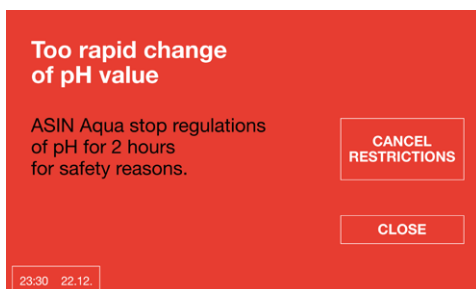


The measured value did not change after 15 doses of pH

If the maximum number of pH doses is exceeded with no probe response, ASIN AQUA PRO stops dose dispensation and displays a warning.

The present hardness affects the dose amount:

Soft water	< 9° dH	10 doses
Hard water	9 – 21° dH	30 doses

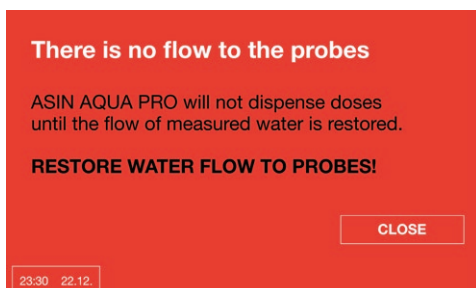


Too rapid change of pH value

Too rapid change of pH is usually caused by refilling water directly to the skimmer. If such rapid change of pH occur, ASIN AQUA PRO stops controlling pH for two hours.

This limitation can be manually disabled.

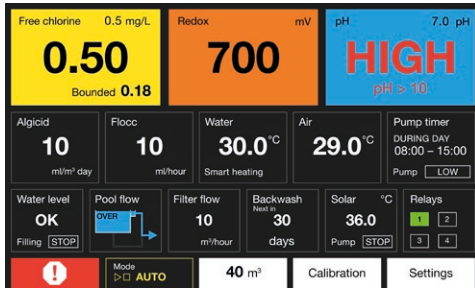
After pH has been stabilized or two hours have elapsed, ASIN AQUA PRO changes over to the normal mode.



There is no flow to the probes

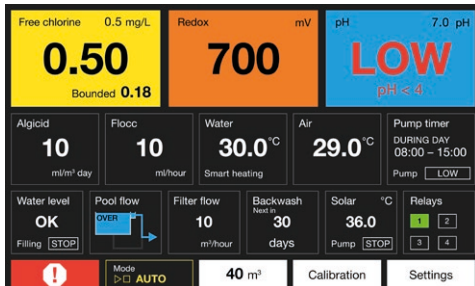
No flow to the probes was detected.

Warnings



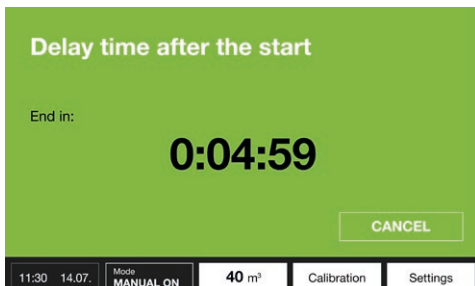
The probe shows a pH > 10

Check the pool water and probe.



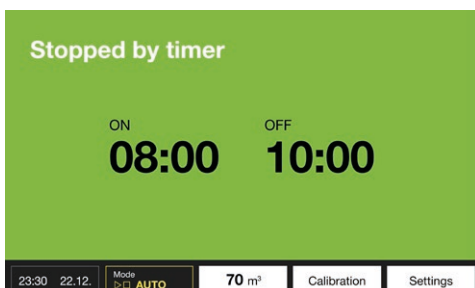
The probe shows pH < 4

Check the pool water and probe.



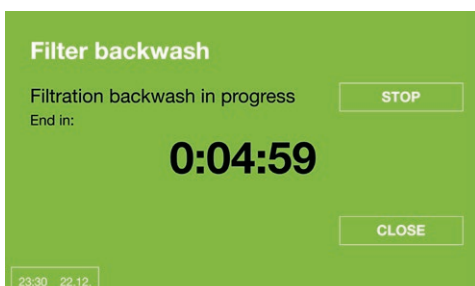
Delay time after the start

Waiting for the pool water to mix after the start.



Stopped by timer

Filtering and dosing is stopped by a timer.



Filter backwash

Filter backwash in progress.



USER'S MANUAL

ASIN AQUA **PRO**

2024

FW 1.0

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