Installation & operation

ULTRATRONIC $C\epsilon$

Function

The electronic backwash controller ULTRATRONIC makes it possible to expand an UltraBead filter into an automatic filter and backwash controller. The ULTRATRONIC which is mounted on the 6-way valve with a protected quick coupling automatically moves the valve into the correct position and operates the filter pump and blower. The time of the backwashing and clear rinsing cycles is adjustable and can be seen in the LCD display. The switch contacts to operate the filter pump are floating contacts so that the ULTRATRONIC can be combined with as many types of filter controller as possible. The backwashing cycle can be carried out both on a time-control (by way of the integrated digital switchclock) as well as pressure-dependent basis. The adjustable pressure switch (art. no. 2000599015) is not included in the delivery package. It is also possible to start the backwashing cycle manually with a key in the housing cover. A connection for a 230 V motor-operated valve enables withdrawal of the water needed for the backwashing cycle directly from the swimming pool instead of from the overflow collecting tank and replenishment of fresh water during backwashing. An additional floating relay contact can be used during backwashing to operate a second pump (backwash pump or blower). To treat the pond with fish health products, the 6-way valve can be moved into the position Recirculation. The key for this is also located in the housing cover. For maintenance purposes the valve can also be moved into the position Closed with a further key. The respective valve position and position changes can be read on an LCD display in the housing cover without having to open the housing. The valve disk is lifted before turning to protect the star seal. The pump is switched off during this time.

Technical specifications

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Dimensions:	245mm x 140mm x 95mm
Power supply:	230V/50Hz
Power consumption of the controller:	approx.10VA
Breaking capacity:	max. 1,1 kW (AC3)
Pump:	230V
Blower:	230V
System of protection:	IP 54
Suited for:	UltraBead 2" Valve
Static water pressure:	max. 0,3bar
Water column above the valve:	max. 3,0m

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Mounting

The controller must be mounted in accordance with its system of protection so that it is protected against moisture.

The power supply to the device must be connected via an all-polar main switch with a contact gap width of at least 3 mm. The device must be switched off before the housing is opened.

Preparation of the 6-way valve

Before mounting the ULTRATRONIC it must be ensured that the valve moves easily and is free of dirt.

The 6-way valve must be in the position Filter when mounting the controller. In this position the handle of the valve must be removed by driving the fastening pin out of the valve shaft. Then insert the shorter OSF pin delivered with the device in the middle of the hole in the valve shaft. If the pin is too loose in the hole, it can be fastened with a little adhesive or grease to facilitate mounting of the controller. For later operation of the system it is immaterial whether the pin is loose because it is centred by the housing of the controller.

Shorter osf-pin

Guide groove
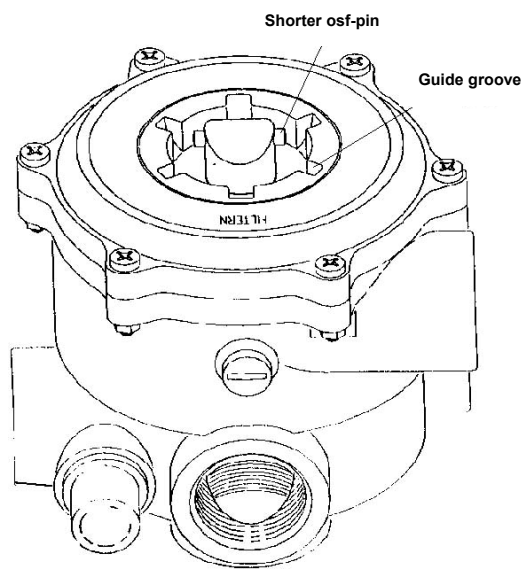
Preparation of the ULTRATRONIC:

The controller must be in the position Filter (position on delivery).

Mounting of the ULTRATRONIC

Press the two yellow slides in completely at the same time. Place the controller on the valve carefully so that the coupling of the controller encompasses the valve shaft and the pin slides into the slot of the coupling. Make sure that the coupling is not pushed into the housing of the controller when doing so. Since the coupling does not always fit on the valve shaft easily because of dimensional tolerances in the case of some valves, the housing cover should be closed during mounting. Then turn the actuator completely to the right (approx. 45°). The slides must then catch in the guide grooves of the valve when released. The valve shaft may not be turned with the device when clipping on the controller. The OSF pin in the valve shaft must now be caught in the slot of the coupling.
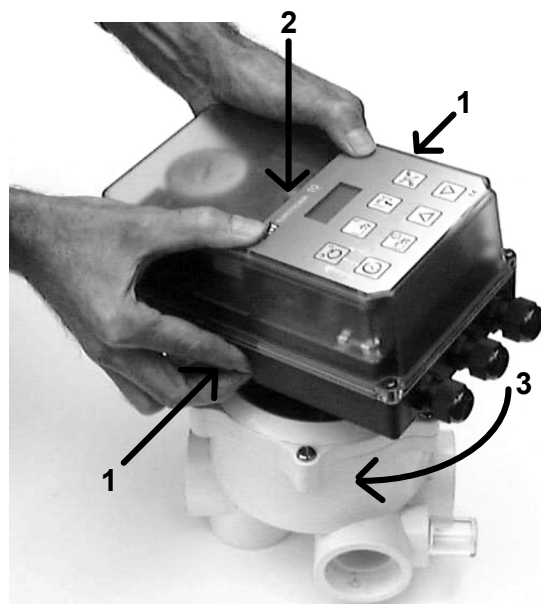
Electrical connection

Only authorised electricians may carry out electrical connection, balancing and service work! The following connection diagrams and all valid safety regulations must be followed. When working on the open housing precautions must be taken to protect the electronic components against electrostatic discharges.

ELECTRIC DIAGRAM
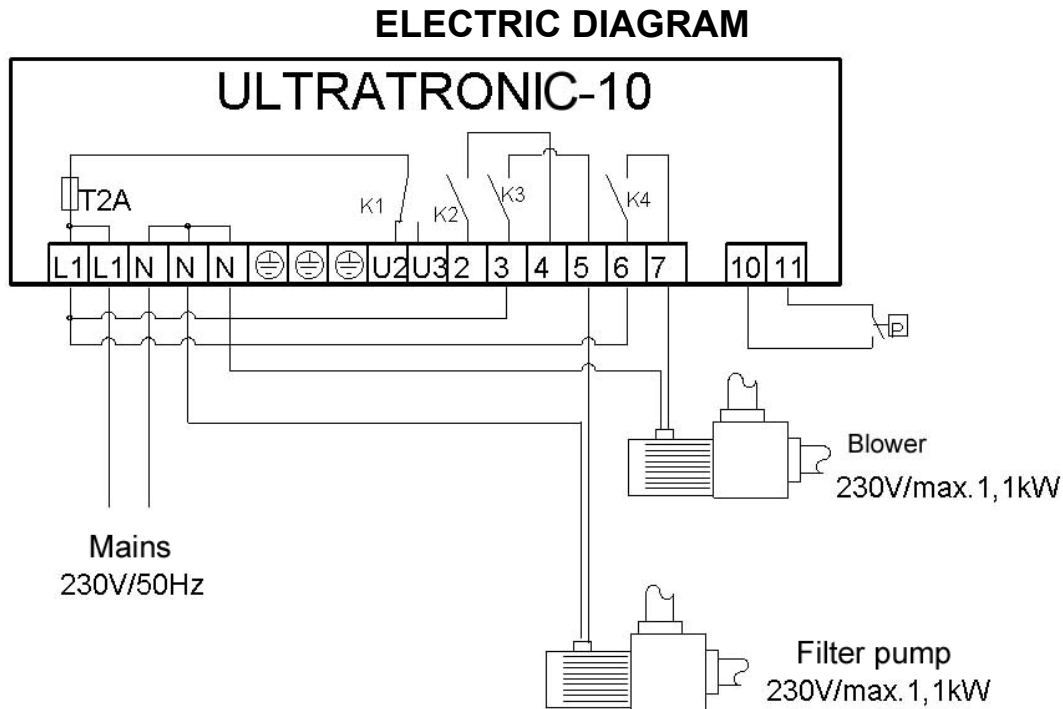
The contact K3 in the ULTRATRONIC is open when the valve has **NOT** reached one of its final positions or when the blower is active. Only during these occasions the filter pump is not running, otherwise it is running.

The contact K4 in the ULTRATRONIC is closed in Rinse / Blower position and the blower will be activated. Otherwise the contact K4 is open. After the blower interval, the blower will be deactivated and the filter pump will be activated.

The contact K1 in the EUROTRONIK supplies the terminal U3 with power during backwashing and rinsing, while for the rest of the time the terminal U2 is live.

Operating elements

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LCD WEERGAVE
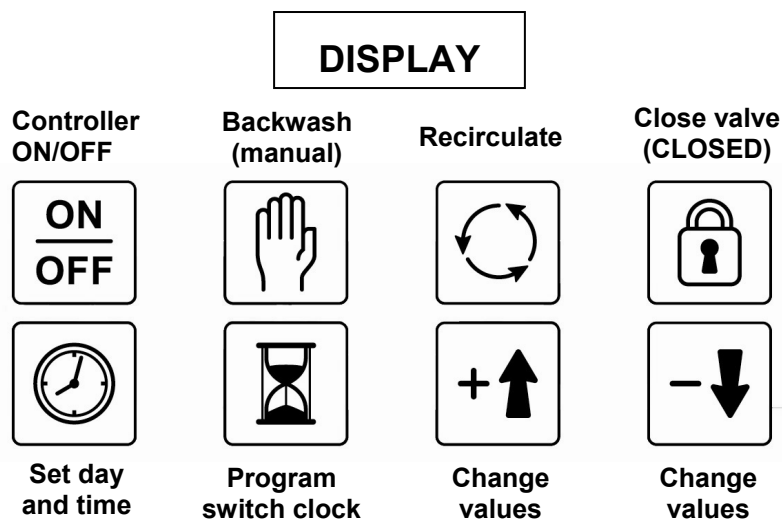
Display	Description
MA 14:46 **FILTER**	Normal operating display showing the current time and valve position.
TILLEN → **RINSE**	The rinsing cycle has been started. The valve disk is first lifted.
DRAAIEN → **RINSE**	The valve disk is turned into the position Rinse (for Blower).
ZAKKEN → **RINSE**	The valve disk is lowered into the position Rinse (for Blower).
0:20 **BLOWER**	Blower is running. The remaining backwash time is displayed (in Min.:Sec.).
0:05	5 second break to let the blower close well.
0:10 **POMP**	Pump is running to fill closure. The remaining backwash time is displayed (in Min.:Sec.).
TILLEN → **BACKWASH**	The backwashing cycle has been started. The valve disk is first lifted.
DRAAIEN → **BACKWASH**	The valve disk is turned into the position Backwash.
ZAKKEN → **BACKWASH**	The valve disk is lowered into the position Backwash.
4:39 **BACKWASH**	The backwashing cycle is running. The remaining backwash time is displayed (Min:Sec).
TILLEN → **RINSE**	After backwashing the valve disk is lifted again.
DRAAIEN → **RINSE**	The valve disk is turned into the position Rinse.
ZAKKEN → **RINSE**	The valve disk is lowered into the position Rinse.
0:10 **RINSE**	The rinsing cycle is running. The remaining rinsing time is displayed (in Min. : Sec.)
TILLEN → **FILTER**	The valve disk is lifted to be turned into the position Filter.
DRAAIEN → **FILTER**	The valve disk is turned back into the position Filter..
ZAKKEN → **FILTER**	The valve disk is lowered into the position Filter.
TILLEN → **RECIRC.**	The valve disk is lifted to be turned into the position Recirculate.
DRAAIEN → **RECIRC.**	The valve disk is turned into the position Recirculate.
ZAKKEN → **RECIRC.**	The valve disk is lowered into the position Recirculate.
POMP AAN **RECIRC.**	The valve disk is in the position Recirculate. Filter pump is running.

TILLEN CLOSED	The valve disk is lifted to be turned into the position Closed.
DRAAIEN → CLOSED	The valve disk is turned into the position Closed.
ZAKKEN → CLOSED	The valve disk is lowered into the position Closed.
KLEP → CLOSED	The valve is in the position Closed. The filter pump is disabled.
TILLEN → OFF	The ULTRATRONIC has been switched off. The valve disk is lifted to be turned into the position Filter (home position).
DRAAIEN → OFF	The valve disk is turned into the position Filter (home position).
ZAKKEN → OFF	The valve disk is lowered into the position Filter (home position).
APPARAAT IS UIT	The ULTRATRONIC and the filter pump are off. The valve is in the position Filter.
SCHAKELAR DEFECT	The bottom final position of the valve disk has not been detected. The microswitch in the bottom part of the housing is possibly damaged. When the fault has been repaired, the controller can be switched off and back on again with the ON/OFF key.

Switching the ULTRATRONIC on/off

ON OFF

The controller is switched on and off with the key . Note! This does not switch off the power supply to the device! If the valve is not in the position Filter when the controller is switched off, it is turned there automatically..

Setting the time

The time and weekday are set with this key:
1. Press the key ⊘ → in the display appears:

MA 0:00
FILTER

2. The time can then be set with the keys −↓ and +↑ .

To save the time, press the ⊘ key again. If, during setting, more than 10 seconds pass without a key being pressed, the last time displayed is saved automatically and the normal operating display appears again..

Programming the switch clock

The integrated weekly switch clock for automatic backwashing and clear rinsing is programmed with this key :

1. Press the key ⧖ → in the display appears:

TIJD
BLOW: 300

2. The desired duration for the blower (in seconds) can then be set with the keys −↓ and +↑ .
The maximum backwashing time that can be set is 600 seconds (10 minutes).
If a time of 0 seconds is set, the switch clock is inoperative.

3. Press the ⧖ key again → in the display appears:

TIJD
POMP: 60

4. The desired duration for filling the closure (in seconds) can then be set with the keys −↓ and +↑ .
The maximum time that can be set is 60 seconds (1 minute).
If a time of 0 seconds is set, the pump will not run.

5. Press the ⧖ key again → in the display appears:

TIJD
BACKW 60

6. The desired duration for backwashing (in seconds) can then be set with the keys ⌄ and ⌃.
The maximum backwashing time that can be set is 600 seconds (10 minutes).
If time of 0 seconds is set, the switch clock is inoperative.

7. Press the ⧗ key again → in the display appears:

> TIJD
> RINSE 60

8. The desired duration for rinsing (in seconds) can then be set with the keys ⌄ and ⌃.
The maximum backwashing time that can be set is 600 seconds (10 minutes).

9. Press the ⧗ key again → in the display appears:

> -------------
> 1. SPOEL

10. The desired point in time for backwashing can then be set with the keys ⌄ and ⌃.

11. Further backwashing cycles can then be programmed as described in points 9 and 10.
A total of 15 backwashing cycles per week can be programmed.

12. To save the switch times, press the ⧗ key again. If, during setting, more than 10 seconds pass without a key being pressed, the last switch time displayed is saved automatically and the normal operating display appears again.

If backwashing times have already been programmed, they can be deleted with the key ⧗ :

1. Press the key ⧗ repeatedly until the backwashing time that is to be deleted appears in the display:

> DI 14:00
> 2. SPOEL

2. Set the backwash time on

> -------------
> 2. SPOEL

with the keys ⌄ and ⌃ (between Sun. 23:59 and Mon. 0:00).).

3. To delete the switch time, press the ⧗ key again.


Backwashing (manual)

A backwashing cycle can be started manually at any time – irrespective of how the switch clock has been programmed – with the ✋ key.

The duration of the backwashing cycle is the same as that entered during programming of the switch clock.

This key can also be used to end a backwashing cycle already in progress.

Valve position Recirculate (no Filtration)

When this key is pressed for more than 5 seconds, the valve will move into the Recirculate position and the filter pump will be activated. Recirculation cycle can be ended by pressing the ↻ key again.


Closing the valve (for service)

The 🔒 key is used to turn the valve into the position Closed for service purposes. In this valve position the filter pump is disabled. The valve is turned back into the position Filter by pressing this key again.

SELECTING A LANGUAGE

You can select a different language with a DIP switch on the upper circuit board inside the ULTRATRONIC. The housing has to be opened to access these operating elements.

The power supply to the device must be switched off first! Since the interior of the ULTRATRONIC contains electronic components that react sensitively to the discharging of static electricity, the tools used must first be discharged by touching a grounded metal part. The electronic components should not be touched as far as possible.

DIP-switch
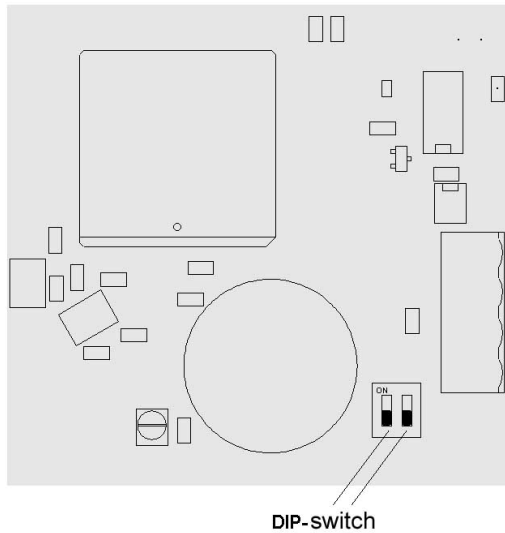
Selecting a language

Dutch text.

Dutch text, Backwash, Rinse and other valve positions names in English.

German text.

English text.

Subject to change!