RED LABEL CONTROL BOX INSTRUCTION MANUAL

F2030001 DRUM FILTER 20/25 F2030002 DRUM FILTER 30/35 F2030003 DRUM FILTER 50/55 F2030004 DRUM FILTER 75/80 F2070001 PLUG & PLAY 30/35 F2040001 COMBI FILTER 20/25 F2040002 COMBI FILTER 30/35 F2040003 COMBI FILTER 50/55 F2040004 COMBI FILTER 75/100 F2040005 COMBI FILTER 100/200







Red Label Filter series

AquaKing is proud to present its high-end, quality Red Label filtration Series. The foundation of this series is the already famous Red Label Drum Filter. A Dutch manufactured and highly innovative produced product. The filter is made from polypropylene (PP) material and the drum consists of 70 micron sieve cloth allowing the best possible filtration machanism possible. The combination of high quality production and the easy-to-use control panel, make the Red Label Filtration series unique and unparalleled in the field of filtration.

The ideal extension to the Drum Filter is the Red Label Moving Bed Filter. A necessary addition to acquire perfect biological filtration. The combination of these two is so attuned that a stable bacterial environment is guaranteed with an optimal breakdown of pollutants.

The Red Label Filtration series are driven by the extremely powerful Red Label pumps.

These pumps can be adjusted to varying power capacities, are low maintenance and durable.

Many years of experience in filtration, the latest and best manufacturing techniques and high quality production has been put into the development of the Red Label Filtration series. All Red Label series products have been designed to allow optimal water quality while retaining reliable and ease-of-use.

The Red Label series offers a solution to any filtration situation.

How the Red Label Drum Filter works

A drum filter is a mechanical filter that sieves dirt, grime and bacteria out in the water flow. Water flows in through the drum filter, the mesh cloth collects the filth from the water. Once a certain amount of filth has been collected the water levels will drop as the flow will automatically be decreased due to the filth build-up. This will be registered by an internal sensor which activates an automatic cleansing cycle. The drum will rotate while the sprayers spray the filth into a drainage channel. This will be discharged from the drum filter into the drainage pipes. Once the cycle is completed the flow of the water resumes until the water flow reaches the appropriate levels and the cycle will then again repeat. This ensures that all filth will be collected and discarded.

How the Moving Bed Filter works

Once the filth has been collected and removed from the drum filter, the water passes on into the Moving Bed Filter. Here the water is brought into contact with healthy bacteria which is grown on to plastic bio carriers.

The amount of Bio-carriers depends on the amount of water flow and pond size. The greater the amount of water, the more Bio-carriers required. The Bio-carriers are kept in constant motion via two implemented air stones. Healthy bacteria is essential for healthy pond waters, this is the reason the drum filter's cloth is limited to 70 microns. The Red Label Moving Bed Filters are supplied with standard two air stones and 100 litre of Bio-carriers.



General Safety Instructions for Red Label Filter series

This device may be hazardous and can cause bodily harm when used incorrectly and/or improperly. Safety instructions must be followed. This device should not be used by children or persons 16 years and younger. Individuals with reduced mental, physical and/or sensory abilities should be accompanied by a responsible adult while using this device. It is strongly recommended that people that are subject to mentioned disabilities, that they do not use this device for their own safety. Cleaning and maintenance of this device must be carried out by a responsible adult!



Water and electricity hazards

Electric shock can be caused if this device is used incorrectly and/or improperly. The combination of water and electricity can cause injury or death. Always switch off all electrical appliances prior to reaching into the water.



Pacemakers

The cover of this device has a magnetic circuit. The magnetic field generated may have an effect on pacemakers.





Electrical installation according to regulations

Electrical installations must comply with national and local laws and should only be carried out by a qualified electrician. A qualified electrician is a person that by virtue of his or her training, schooling, knowledge and experience is capable and competent to perform and execute electrical operations. The work of a qualified electrician also includes the ability to recognize potential hazards and work in accordance to national and local laws adhering to those standards, regulations and provisions.

- For your own safety, always refer to your electrician for any quastions and/or problems experienced.
- The power supply must be equal to or greater than the filter itself.
- The filter must be protected by a circuit breaker with a fixed maximum current filter 30 mA.
- Use strictly extension cords and power dividers that are waterproof and are equal in diametre to the already supplied cables.
- Protect the electrical connections from moisture.
- Device should only be used on a correctly installed socket without a dimmer.





Guidelines for safe usage

- Do not use this device if there are any defective and/or damaged electrical cords or broken casings.
- Do not transport device once connected/installed. Do not pull on the power cables!
- Lay the cables via a secure route. Ensure that no person can trip or stumble over the cables
- When cleaning and maintaining this device, follow the instructions and only remove protective casings if instruction manual specifically states to do so.
- Use this device as specified in this operating manual.
- Consult your dealer in the event that the device is faulty and/or non-responsive.
- Use only original spare parts.
- Do not attempt to make any technical changes to this device.
- In the event of a damaged cable, the cable and socket (complete unit) must be replaced in its entirety.
- Keep the control box, control panel and plug sockets dry.
- Overvoltage can lead to malfunction of this device.
- Do not inhale spray mist of the flushing sprayers on this device. Spray mist may contain harmful bacteria. On lifting the lid the flushing sprayers stop functioning. Do not open the lid directly after a rinse cycle has been completed, allow a little time to elapse.





Installation

In the case that planned installation deviates considerably from what is indicated within this manual, we strongly recommend that you have a professional technician or experienced person thoroughly check your device installation.

The drum filter must always be placed below water level (gravity) and placed in a filter well. The bottom of the filter must be fully supported and placed preferably upon a leveled cement floor. Ensure enough room is allowed for maneuverability during cleaning and maintenance of the device.

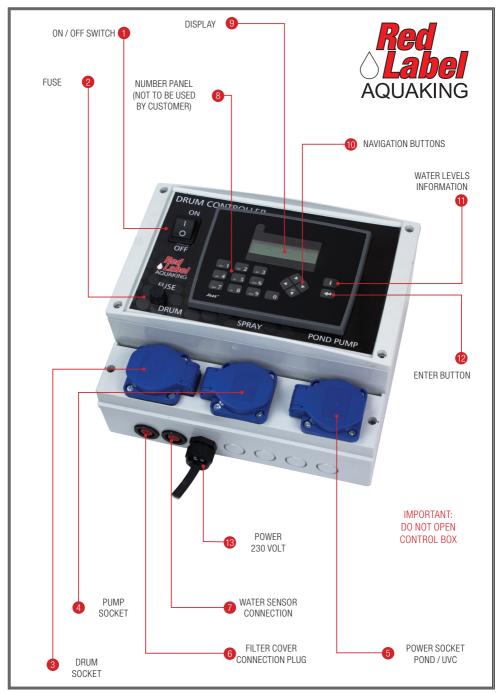
The maximum water level in the filter is indicated on the inner side of the filter chamber. Correct water level must be maintained to ensure consistent and proper filter operations. The water level should not deviate more than 3 cm below maximum and 1 cm above. Water levels that deviate from this will result in a the filter no longer being able to gauge water levels. Excess water will flow out through the discharge chute into the drains. To maintain correct water levels an automatic filling station with overflow can be placed near pond.



Water level indication as seen on the filter

For optimal flow capacity, proper connecting pieces and products should be used. Preferably flexible, rubber connections for piping. This will ensure the natural resonance frequency of the coil and water flow. Rubber connections will also reduce noise and dampen vibrations. Use ball valves on front of and behind the filter pipes so that the filter can be emptied during maintenance.

The chute can be connected to drainage pipes ø 110 mm. It may be necessary to apply a down-slope pipe/connector. Use preferably rubber fittings/connecting pieces as these will compensate for any possible size deviations and dampen vibrations. They are also easily detached for maintenance.





Important!

The control box should not be opened under any circumstances!

Technical information

- Model IP65
- Voltage VAC 230V
- Power plug 16A euro
- Total capacity 3520 W
- Cable length 5 metre
- Fuse 10 A
- Magnetic lid seal
- Dry-run protection
- Internet ready

Pre-programmed settings

The control box that is supplied with your filter product has been pre-programmed specifically for your situation. Water levels have already been set for optimal performance. You do not have to do a thing.

General

The control box is equipped with 3 sockets; a power cable, a connection for the magnetic lid and a connection for the pneumatic pressure sensor. The left socket is used to connect the drum motor. The middle socket is deemed for the sprayers and the right socket for the pond pump or UVC lamps with a maximum of 2000 watts.

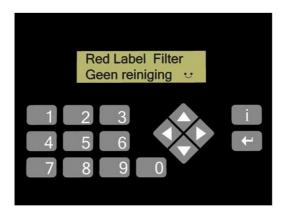
The control box is splash-proof but is required to be hanged in a dry area.

Once filter placement is completed, open all inlet and outlets on the filter except the drainage. Once filter has been filled and is operational, check the water levels to ensure the filter is operating to optimal conditions.



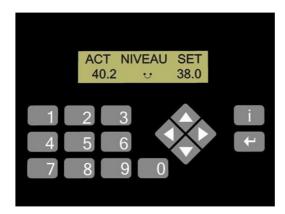
Control box Start-up

- 1 Ensure the power supply plug is not plugged in
- Connect the magnetic lid plug to the correct socket (this plug is marked with a white stripe)
- 3 Connect the pneumatic sensor plug into the correct socket (this plug is marked with a white stripe)
- 4 Connect the filter motor plug to the correct socket, 'DRUM'
- 5 Connect the flushing pump to the middle socket, 'SPRAY'
- 6 Connect the pond pump to the correct socket, 'POND PUMP'
- Tensure that the power button is 'OFF'!



- Plug the filter power supply into the socket and switch power 'ON'
- The controller starts after a few moments and your filter is then operational. The Control box display screen will appear with the basic start-up display information
- If the water supply to the filter drum is hindered or lessened , the water level in the drum section will lower. Once the water level reaches a set-point, as is pre-programmed, the drum will rotate and the sprayers will spray clean the sieve of the drum, this being the cleaning cycle
- During the cleaning cycle the display will indicate that the filter is operating the cleaning cycle
- You can manually operate the cleaning cycle by holding the '0' button in for 1 second

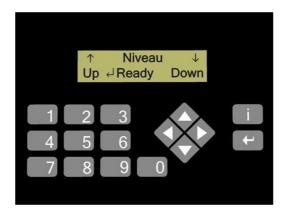




Standard operations

The standard display will show 'No cleaning' while filter is operating You may view additional water level information on the display by pressing the 'I' button

- Press the 'i' button
- On the left of the display, underneath 'ACT', the water level is indicated in respect to the sensor
- On the right of the display, underneath 'SET', the water level is indicated in respect to the pressure sensor
- The 'Smiley' icon is shown underneath 'NIVEAU', this is to indicate that operations and water levels are correct



Adjust cleaning cycle

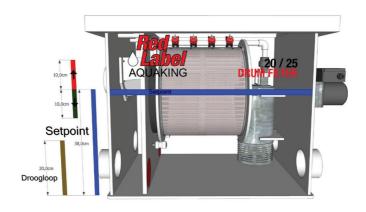
Should you wish to want to alter the frequency of the cleaning cycle then this is possible. To adjust the frequency or moment of flushing/cleaning cycle the water level set-point needs to be set to a different level either 15 cm above or below the pre-programmed set-point. By doing this you increase or decrease the distance between the sensor and water levels, which results in longer or shorter time between flush cycles. Increasing the water levels results in shorter cleaning cycles. Decreasing will provide a more frequent flushing cycle.

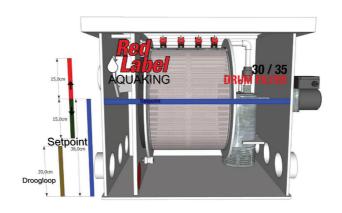
- Press the 'ENTER' button
- Navigate up or down with the arrow buttons
- Once desired level is reached, press the 'ENTER' button
- View and check the new settings by pressing the 'i' button

Diagrammatic representation of Set-points per filter

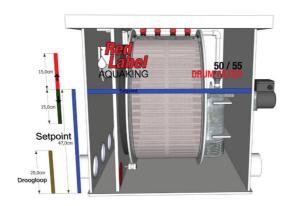
The following images indicate the possible pre-programmed set-points per filter. The dry-run protection operation is also indicated as is the possible cleaning cycle.

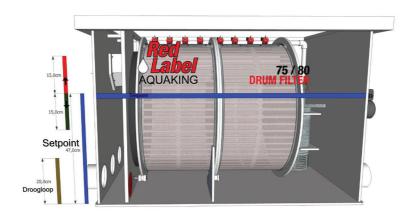
Set-point 38,0 cm is applied to drum filter model 20/25 en 30/35.





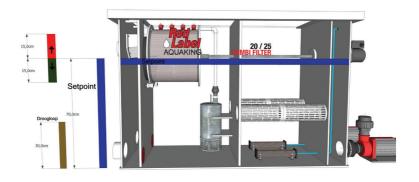
Set-point 47,0 cm is applied to drum filter model 50/55 en 75/80.

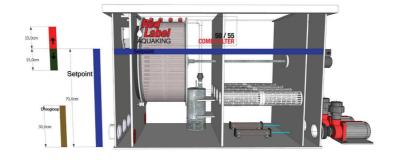




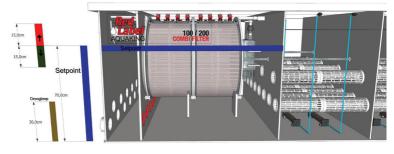
Set-point 70,0 cm is applied to all combi filters; 20/25, 30/35, 50/55, 75/100, 100/200 and the Plug & Play total system

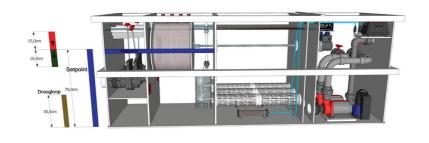












Warranty Conditions

2 year warranty is valid on all AquaKing Red Label products. Warranty covers factory defects and imperfections.

For a warranty claim to be valid there are a number of conditions to adhere to.

- You must be in possession of the original purchase receipt which clearly states the following; where, what and when the product was purchased.
- The customer is responsible for transporting the product to the dealer for warranty claim. In the event that that is physically impossible, an email is to be sent to info@aquaking.nl and AquaKing will then handle the warranty claim.
- In the evnt that the product cannot be transported and an email has been sent to info@aquaking.nl, a service representative will contact the customer.

The warranty is void in the following cases:

- Any alterations, adjustments, dissembling and reassembling of the filter and parts without explicit permission from AguaKing.
- Incompetent and negligent usage without adhering to this manual
- Products that have not been purchased from a dealer and/or products that have been attained illegally.
- Mesh elements from drum filters.

Important note

Do not allow the filter to freeze. Do not modify or adjust the electronics. Do not disassemble any parts of the product as to view the inner workings. Prevent damage to the product at all times with correct and careful handling and usage. Regularly clean and maintain the product. Do not connect any appliances and/or devices to the product that have not been specifically designed for this product.

A mechanical filter system requires regular cleaning and maintenance. Inquire when in doubt at your dealer for more information related to maintenance. Use this manual and keep it safe. Ensure that the power supply is correct and properly connected.



Proof of Purchase / Warranty	
Shop stamp	
Date of purchase://	
Model: Controller Box suited for filter models indicated.	
Warranty 2 years	
Questions? Contact your dealer or Red Label AquaKing; info@aquaking.nl	



CONTROL BOX INSTRUCTION MANUAL



In the event of any uncertainties and/or doubt, please at all times contact your Red Label dealer.

We hope you enjoy your Red Label series product.