

Operation Manual GB



With the purchase of an AB Aqua Medic cooling unit, you have selected a top quality product. It has been specifically designed for the cooling of closed water cycles like fresh and sea water aquaria.

The TITAN coolers are supplied with heat exchanger made from sea water proof Titanium steel. These heat exchangers are corrosion-resistant and free of contaminations. The cooling units can be used in fresh and sea water as well as in various chemicals.

The coolers have a one-phase cooling system containing the cooling medium R 134 a (FCKW-free). They work with capillary injection as control system.

1. Product description

The AB Aqua Medic cooling units TITAN 150, 500, 1500 and 2000 are supplied with:

- a temperature computer incl. digital display
- connections for water in- and outlet
- main switch and fuse to be changed from outside (not valid for Titan 2000)
- solid cover made of plastic and metal

2. Set-up and installation

1. The cooling unit must be set up at a well-ventilated place. The complete heat taken out of the water by the unit and the waste heat of the unit itself are emitted at the unit into the air. A build-up of heat directly at the cooling unit leads to a heavily reduced cooling power output. Therefore, a sufficient ventilation is essential. The exhaust air must be able to escape from the back (where the water connections are placed).

The environmental temperature should not exceed 35° C.

2. The cooling unit has to be connected at the connecting pieces to a closed water cycle. It is recommended to place the unit below the water surface. In case of leakage of the angled connecting piece, push union nut back and tighten the internal screw connection again firmly.

3. Switch the water flow on. **It is important that the water flows continuously through the cooler.** Because the temperature-sensor is placed inside the unit, the heat exchanger cannot freeze in case of a failure of water supply.

The flow rates are:

Titan 150:	minimum	200, maximum	1,500 litres/h
Titan 500:	minimum	500, maximum	2,000 litres/h
Titan 1500:	minimum	800, maximum	2,500 litres/h
Titan 2000:	minimum	2,000, maximum	4,000 litres/h

4. Before starting, the cooler should stand up straight for at least 1 hour. Connect it to 230 V power source and switch the unit on (plug in the mains and switch on). Now, the actual water temperature is shown on the display. Because the thermo sensor is placed in the water inlet, always a temperature which corresponds to the temperature in the tank is shown.

Attention: **Cooling unit may not be used under pressure!**
 Maximum height below water level: 150 cm

3. Temperature control

The cooling units of the TITAN series are supplied with a digital temperature controller.

Programming: The display shows the actual temperature of the water.

Check the set point: Press the „SET“ button (shortly). Now, the set point is shown in the display and a LED (top, left) flashes. After some seconds, the unit switches back to the actual temperature.

Adjustment of the set point: Press the „SET“-button for approx. 5 sec. Now, the set value is displayed and flashes. The set value can now be changed in steps of 1°C, using the □+ and □- buttons. By pressing the “SET” button again, the set point is saved.

The status of the cooler (compressor on or off) is indicated on the small LED in the display (between the second and third digit of the display).

4. Technical data cooling unit

	Titan 150	Titan 500	Titan 1500	Titan 2000
Power (compressor)	1/10 HP	¼ HP	½ HP	1 HP
Power uptake (watts)	150 Watt	190 Watt	375 Watt	550 Watt
Cooling power (watts)	200 Watt	395 Watt	790 Watt	1,650 Watt
For aquariums up to (Δ T = 10°C) (Δ T = 5°C)	100 l 250 l	250 l 500 l	700 l 1,500 l	1,500 l 2,500 l
Recommended water flow (litres/h)	200 – 1,500	500 – 2,000	800 – 2,500	2,000 – 4,000
Weight	13,7 kg	14,5 kg	16,6 kg	31,5 kg
Cooling gas	R 134 a			
Quantity of coolant	100 g	200 g	220 g	450 g
Dimensions (LxBxH) (LxWxH)	35 x 30 x 35 cm 14"x 12"x 14"	39 x 34 x 39 cm 15.6"x 13.6" x 15.6"	40 x 50 x 44 cm 16"x 20" x 17.6"	
Heat exchanger	Titanium			
Temperature controller	digital, accuracy 0.1°C Set point adjustment in 1° step			

5. Maintenance

The cooler has the same requirements with respect to maintenance like conventional cooling units (refrigerators etc.). Maintenance and/or repairs should be done exclusively either by a service engineer or by the manufacturer. Clean the air-cooled condenser regularly.

We recommend to flush the heat exchanger thoroughly once a year to remove any muddy parts.

6. Warranty

Should any defect in material or workmanship be found within twelve months of the date of purchase AB Aqua Medic GmbH undertakes to repair or, at our option, replace the defective part free of charge – always provided the product has been installed correctly, is used for the purpose that was intended by us, is used in accordance with the operating instructions and is returned to us carriage paid. The warranty term is not applicable on the all consumable products.

Proof of Purchase is required by presentation of an original invoice or receipt indicating the dealer's name, the model number and date of purchase, or a Guarantee Card if appropriate. This warranty may not apply if any model or production number has been altered, deleted or removed, unauthorised persons or organisations have executed repairs, modifications or alterations, or damage is caused by accident, misuse or neglect.

We regret we are unable to accept any liability for any consequential loss.

Please note that the product is not defective under the terms of this warranty where the product, or any of its component parts, was not originally designed and / or manufactured for the market in which it is used.

These statements do not affect your statutory rights as a customer.

If your AB Aqua Medic GmbH product does not appear to be working correctly or appears to be defective please contact your dealer in the first instance.

Before calling your dealer please ensure you have read and understood the operating instructions. If you have any questions your dealer cannot answer please contact us.

Our policy is one of continual technical improvement and we reserve the right to modify and adjust the specification of our products without prior notification.

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- Technical changes reserved – 07/2010