



Operation Manual
Light Computer

The AB Aqua Medic Light Computer is an electronical device to control the illumination in aquaria and terrariums. The main feature is the ability to program the cycles (phases) of the moon. This supports the natural rhythm of animals and plants. Their reproduction will be stimulated or induced.

1. Basics

For nearly all living organisms is light an essential factor. Therefore, the lighting in aquaria is not only for aesthetic viewing, but the primary energy provide for plants - and zooxanthellers living in corals.

Apart from being an energy provider, the light has further implications for animals. Stone corals synchronize their reproduction cycles with the phases of the moon. In this way a large quantity of animals synchronize their spawning. This increases the probability of successful fertilization.

The AB Aqua Medic Light Computer is able to regulate not only the daylight, it also simulates the natural cycles of the moon. The intensity of the simulated moonlight varies during the 28 day cycle from full moon to new moon.

2. Features

Der Light Computer has three adjustable channels. The first two are for the daylight and can be set like a standard timer. The third is for controlling the cycles of the moon light.

Daylight:

Channel 1: for every single on- and off-time for the main lighting (i.e. metal halide lamp) is a load requirement of 6 Amp, 750 Watt.

Channel 2: for every single on- and off-time for the secondary lighting (i.e. blue actinic tube) is a load requirement 1.6 Amp, 150 Watt.

Moonlight:

Channel 3: for 230 Volt incandescent lamps, maximum 100 Watt. This channel is dependent from channel 1.

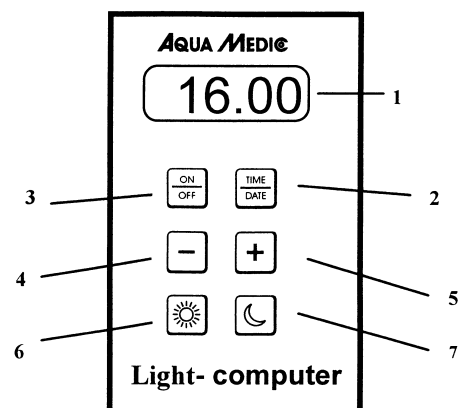
In order to generate a natural twilight the moonlight works before the switchoff of the main lighting (channel 1) initially parallel with full output for a certain time. This time is known as „intro-time“. After switching off the main lighting, the moonlight remains on at full power for a limited time (diminishing time). After completion of this time the moonlight generates the required brightness until the next morning.

In the morning the same procedure follows: Before the main lighting is switched on, the moonlight increases to full intensity (intro-time). After the main lighting starts, the moonlight remains on for the continued (diminishing) time.

The light is regulated as follows: 75% of power by full moon, 12% of power new moon (fishes need some light for their orientation).

3. Description of the Front Panel

- 1 Digital display
- 2 TIME/DATE button
- 3 ON/OFF button
- 4/5 + and - buttons
- 6 Programming-button SUN for day lighting
- 7 Programming-button MOON for moon-cycle control



4. Starting

The Light Computer-Set contains the control unit and a triple-socket.

NOTE! For the connections pay attention to the following symbols and values:

- | | | |
|----------|--|-----------|
| 1 | = Main lighting metal halide lamp, maximum values: | 4 x 70 W |
| | | 3 x 150 W |
| | | 2 x 250 W |
| | | 1 x 400 W |
| 2 | = Secondary lighting, fluorescent lamps up to 150 Watt | |
| 3 | = Moonlight, incandescent lamps up to 100 Watt | |

Starting:

1. Connect to 230 V-power source.
2. Turn the unit on by pressing the ON/OFF button.

5. Programming

5.1 Time and Date

With power, the display indicates the TIME in hours and minutes (i.e. 14.49). By briefly pressing the TIME/DATE button, the DATE is displayed in day and month (i.e. 19.05).

Adjustment:

- Press and hold the TIME/DATE button until the date display is blinking.
- Press the +/- button to set the current date.
- Press the TIME/DATE button again to store the current date.
Now a flashing hour and minute indicator indicates the need to adjust the current time.
- Set current time in the same manner as date.
- Press the TIME/DATE button to store the current time.

5.2 Lighting

For the programming/adjustment of day and moon lighting consider the following displays:

A1	On-time of channel 1 (main lighting, metal halide lamps)
A2	Off-time of channel 1
A3	On-time of channel 2 (secondary lighting, fluorescent lamps)
A4	Off-time of channel 2
II.1	Intro-time of the moonlight (coupled with A1 and A2)
II.2	Diminishing-time of the moonlight

DAYLIGHTING:

The daylighting (channel 1 and channel 2) are adjusted by using the button SUN.
Press the SUN symbol.

- Initially, A1 is alternately displayed with the on-time of channel 1.
Press the + or - button to adjust the desired on-time and press SUN again to store it.
- Now A2 is alternately displayed with the off-time of channel 1. Important: The difference between A1 and A2 must be more than one hour!!! A programming of A2 past midnight is not possible.
Press the + or - button to adjust the desired off-time and press SUN again to store it.
- Follow the same programming procedure for A3 (on-time channel 2) and A4 (off-time channel 2).

MOONLIGHT:

The programming of the moonlight is done by using the MOON button.
Intro- and diminishing time of the moonlight (see also 2.) are adjusted as follows:

Press the MOON symbol.

- Initially, II 1 is alternately displayed with the current intro-time.
Press the + or -button to adjust the desired on-time, i.e. „0.30“ for 30 minutes.
Press MOON to store the intro-time.
- Afterwards, II 2 is alternately displayed with the diminishing time.
Press the + or -button to adjust the diminishing time and press MOON again to store it.

6. Malfunctions

- In case of failures during the programming procedure, the complete program can be deleted and started again:
 - Pull out the plug.
 - After 10 seconds: Press and hold the TIME/DATE button.
 - Put in the plug.

Now all values are set to 0; the Light Computer is ready for re-programming.

- If one channel fails, i.e. because of an overload caused by lamps with a too high wattage, the unit has to be sent in.

7. Warranty

Should any defect in material or workmanship be found within 12 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.

AB AQUA MEDIC GmbH - Gewerbepark 24 - 49143 Bissendorf/Germany

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