

Manual

# **Giesemann aquariumlight**

MOONLIGHT

**Giesemann Aquaristic GmbH**  
Bürdestr. 14 · D-41334 Nettetal  
Phone +49-2157-812-990  
Fax +49-2157-812-999  
[www.giesemann.de](http://www.giesemann.de)

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## 1. General information

Dear Customer,

You have decided to buy a Giesemann quality product. We thank you for your confidence.



Giesemann products are CE approved. You'll find the CE sign either on the identification plate of your light or on the external control unit.

Our knowledge and experience in the field of aquaristics and modern lighting technique guarantees the high quality of our products.

Giesemann introduces a new generation of aquarium illumination with the INFINITI, System 230, 400, MOONLIGHT, REFLEXX and NOVA models. Their main characteristics are advanced component technology, modern styling, high quality materials and functional design.

Please read carefully these operational instructions in order to guarantee optimal functionality and a long lasting service life.

### 1.1. delivery and safety instructions

**Check, when unpacking the fixture that no parts are missing. Your aquatic dealer needs to be informed about any damage immediately in order to check on a possible claim within the warranty period. Never put a damaged fixture into operation. Please adhere to the following safety instructions: To ignore these instructions can be potentially dangerous and infringe against existing regulations. Keep original packaging – all returns need to be in the original packaging in order to avoid product damage during shipping. Any damage to products not in their original packaging will not be covered under warranty.**

Failure to observe the following safety warnings may result in serious injury. In addition, failure to observe these safety warnings will result in a waiver of all liabilities on Giesemann Lichttechnik GmbH, and will void all warranties.

- § The fixtures must **never** be operated without the corresponding protection glasses. These protection glasses will protect from splashing and U.V. radiation from the bulbs.
- § The mounting of the light should only be carried out by an authorised electrician, considering the corresponding regulations in your country
- § The fixtures should only be used for the illumination of aquaria. Do not balance the fixture on the edge of the aquarium. Do not install the light in a poorly ventilated environment where it may overheat such as behind coverings, hoods and panelling
- § Aquarium fixtures with metal halide lamps are **never** to be used without the UV filtration glasses. Unfiltered UV rays are dangerous to human beings as well as to the life in the aquarium. Before replacing the lamps or doing any maintenance work, the fixture needs to be unplugged from the mains and dismantled completely.
- § Any work on the fixture should only be carried out after, firstly, disconnecting the light from the mains and secondly, dismantling from the wall or ceiling.
- § The bulbs and tubes must only be removed after they have cooled down completely.
- § The light body and the UV filtration glasses can become extremely hot during operation.  
**HANDLE WITH CARE !** Keep away from children
- § The fixture and the external control unit need to be protected from direct water splash. When cleaning the fixture take care, that no moisture gets inside the fixture's body through the ventilation slots.
- § **Never** cover the ventilation slots and insure that air can circulate freely.

## Electrical connection

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- § **Do not** undertake any repair work yourself! Send any defective components directly to the manufacturer or to an authorised dealer (see guarantee card) for repair.
- § . In case of removing a power plug on the mains cable, please note, that there are still high voltages in the light for approx. 30 minutes after having disconnected the light from the mains .  
**HANDLE WITH CARE !**
- § **Important!: Fusing.** When discharge lamps are switched on, the current drawn from the supply can be analysed as: 1.) Inrush current - for a few milliseconds – 2) Starting current - for a few minutes – 3) Running current - after the lamp has stabilised. The fuse that protects the circuit must withstand all of the above currents with the inrush current normally being the most onerous (up to 25 x starting current). Ensure that a correctly rated fuse is used. Nuisance tripping is possible on some types of modern current limiting devices, and they may not be suitable. Consult your fuse or circuit breaker manufacturer for advice. Increasing fuse ratings will also mean that the supply cable size may need to be reviewed to support the higher fuse rating. The current ratings above will also apply to any timer switch apparatus connected to the circuit(s) or other switching apparatus controlling the circuit(s). **Ensure your domestic wiring supply is rated appropriately.**
- § only use metal halide bulbs and fluorescent tubes offered by GIESEMANN. Make sure that only 230 Volt lamps are used and that the wattage of the fixture and the wattage of the lamps are identical.
- § Make sure power cord and lamp cord are connected properly. Do not hang by power cord or lamp cord. Do not plug or unplug a lamp cord while the ballast is turned on.

### 1.2. Electrical connection

Before mounting, make sure that the chosen area is free of electrical cables i.e. in the wall or ceiling. This unit must be **grounded**, green/yellow cable.

It is also possible to use a safety plug for variable connection. The fixture can easily be controlled using a timer. Make sure that the timer is appropriate for the respective current (16 A) and consider the high voltages which are reached during the operation of the fixture.

When the mains power plug of an operating fixture is unplugged, there are still **high voltages** at the contacts. All electrical work should be carried out by an **authorised electrician** considering the corresponding regulations. Electrical components and cables should always be positioned in such a way, that they are protected from water splash and high humidity. Never cut or remove the plug on the power cord (**warranty will be voided !!**)

### 1.3. Place of installation

**When selecting the location for installing your light, please ensure that there is adequate air circulation!!**

In order to protect the internal components and the materials, sufficient air circulation and, thus sufficient cooling **must** be provided.

If the fixture gets too hot, the noise during operation might get louder, this may be due to insufficient air circulation around the ceiling or wall, where heat may be accumulating. Check the distance of the lamp unit from these points and adjust.

The fixtures should only be used for the illumination of aquaria. Do not balance the fixture on the edge of the aquarium. Do not install the light in a poorly ventilated environment where it may overheat such as behind coverings, hoods and panelling. Do not operate the light systems in wet locations.

The minimum distance between fixture and water surface needs to be 30 cm (12”).

## 1.4. Installation of your light

When mounting the steel wires or the wall brackets it needs to be considered that the ceiling / wall can withstand the weight of the fixture. Make sure that the load bearing capacity is a multiple of the fixture weight itself. (mounting material like screws and anchors are not included, please choose the individual material for your wall / ceiling)

Drill two holes in the ceiling corresponding to the distance between the two suspension cables, ensuring the light is **centrally** aligned and taking into account the relevant **power connection means**. Install the ceiling mounting fixtures using the screws supplied, after checking that the ceiling offers sufficient support for the light.

Now screw the **cable holders** with the **steel suspension wires** into the **ceiling mounting fixture**. Screw the light holder into the M5 nut / M4 thread in upper guide rail on the light. (VERSION B). Then align the light horizontally above the aquarium. Ensure the light holder is firmly seated.

If the power supply does not come from above, simply lay the cable to the desired location without attaching it to the steel suspension wire. **DO NOT EXPAND THE POWER CORD OF YOUR LIGHT.**

Please ensure that any contact points (should you extend the power cable) do not come into contact with moisture or water.

As your light is continuously adjustable for height, it can be locked in position effortlessly by pressing down the spring-loaded mechanism in the light holder. (VERSION B)

For safety reasons the light should be lifted slightly before being adjusted for height. The lamp locks in position automatically as soon as a load is applied to the **light holder**. (VERSION B)

When mounting the steel wires or the wall holder it needs to be considered that the ceiling / wall can withstand the weight of the fixture. Make sure that the load bearing capacity is a multiple of the fixture weight itself.

Drill two holes into the ceiling. Check the distance between the mounting wires and take care, to have the fixture mounted in the middle of the aquarium and to allow the corresponding mains connection.

### Version A

Put the steel wire into the rope clamps and form a small loop. Choose the required length of the steel wire and the height for the fixture. Fix the respective hexagon nut of the rope clamp with an appropriate tool. Screw the ceiling hooks into the dowels. Now the fixture can be mounted to the ceiling hooks; the hooks should be screwed in such a way that the steel wire is protected from withdrawing.

### Version B

Mount component 2 and the attached screws and the dowels to the ceiling. Make sure that the wall / ceiling can withstand the high weight of the fixture.

Now put the steel wire (4) into the screw cap (3). This screw cap now needs to be screwed into component 2. Put the other end of the steel wire into the fixture holder (5). Now you can balance your fixture in a horizontal position above your aquarium.

## 1.5. Inserting / replacing the lamps

The bulbs and tubes **should be checked at regular intervals**. Metal halide bulbs should be renewed after approx. 4.000 hours of operation. A longer operation time will have a negative impact on the lighting colour, although the physical capability is much longer than 4.000 hours. The tubes have an operation time of approx. 3.000 hours. They should be renewed after this time as the light performance

## Inserting / replacing the lamps

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becomes poorer, a change which cannot be detected by the human eye. Metal halide bulbs, which flicker often or even switch off temporarily, should be renewed immediately in order to avoid further damage to the igniters.

When replacing the tubes or bulbs, check on the sockets (lamp holders) or connectors, whether any heating damage has occurred or whether any other defects can be noticed. The operation of bulbs and tubes with defective glass is strictly forbidden.

**Assembly work** on the light may be performed only with the light dismantled from the ceiling / wall

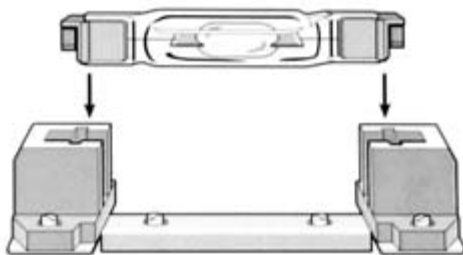
**Important note:** Never open a fixture on the display

### Inserting the metal halide bulbs(HQI)

Before inserting the bulbs make sure, that the fixture is unplugged from the mains. Please install the bulb according to the instructions which are attached to the respective bulb. Take care not to touch the glass with bare hands. Any marks or finger prints need to be removed immediately with a clean cloth and alcohol or spirit, otherwise they will be burnt into the quartz glass and destroy the bulb. 70 and 150 Watt bulbs are to be inserted into the socket so that the contact springs guarantee a secure fit and a good contact.



250 Watt double ended versions are to be put into the movable ceramic socket; under even pressure they will arrest within the socket. Take care that the lamp does not edge anywhere and that the glass bulb does not get damaged. Bulbs with screw sockets should be screwed into the socket evenly (clock-wise) without exerting too much pressure



**To remove a 250W lamp, wrap both your index fingers around each end of the lamp. Place your thumbs on the lampholders. Pull both ends simultaneously**

### Inserting the T-5 tubes

The tubes and the contacts are to be pushed into the socket evenly, if necessary, exert a slight pressure in order to press the movable socket against the springs. After having inserted the tubes turn them by 90° until they fit properly.

## Inserting the compact fluorescent tubes (DULUX)

The tubes and the contacts are to be pushed into the socket carefully. They will lock automatically.

### 1.6. Identification plate

The identification plate can be found inside the fixture's body. The identification plate contains all of the technical data for the fixture as well as the recommended voltages. **The fixture should only be connected to a power supply system with the technical data same as indicated on the identification plate.**



### 1.7. serial number

The serial number can also be found inside the fixture's body. This serial number allows the manufacturer to follow up on all manufacturing processes and on all technical data concerning this fixture. The serial number can also be found on the guarantee card. Please return the guarantee card to the address indicated on it.



### 1.8. original packaging

Please keep the Original packaging and the polyfoam pads in case you need to ship the light unit back for repair

### 1.9. Cleaning / Maintenance

Generally, the aquarium lights of Giesemann do not require any maintenance. Nevertheless, the following maintenance instructions should be followed at regular intervals.

The light body should be cleaned at regular intervals to maintain a long lasting surface quality. The UV filtration glasses are only to be cleaned very carefully with a moistened cloth after the glasses have cooled down completely. Cleaning at regular intervals will avoid the burning in of salt and thus, will prevent the glasses from discolouring.

Please make sure, that the HQI bulbs and the tubes are replaced at regular intervals. Old bulbs do not switch off completely, but flicker or fail temporarily. This has a negative impact on the integrated ignitors, which can finally lead to a total component failure.

The high quality powder coating of the Powder coated fixtures is extremely resistant. However, natural dirt during every-day operation as well as splashed water and dust are unavoidable.

Clean the fixture with a moistened cloth and make sure that no water gets inside the fixture's body through the ventilation slots.

The UV filtration glasses should be cleaned very carefully with a moistened cloth after the glasses have cooled down completely. Cleaning in regular intervals will avoid the burning in of salt and thus it will prevent the glasses from fainting.

## Cleaning / Maintenance

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Please note that your light needs to be cleaned at regular intervals, in order to protect the surface from possible discolouring.

**NEVER** use any detergents

For the following height adjustment the fixture needs to be removed from the ceiling. Take care, that when choosing the place of mounting and when installing the fixture that sufficient air circulation is necessary during operation and that the ventilation slots are not covered.

The NOVA II is controlled by an external control unit. This control unit consists of an external ballast, an ignitor and, depending on the version chosen, a capacitor circuit. The external ballast controls the power supply of the fixture. Thus, the functionality and the hours of operation of the HQI bulbs are controlled automatically. The fixture should never be used without this original control unit; the wattage of the control unit and of the fixture needs to be identical.

The fixture's cable should now be connected to the external control unit through the connector. Please make sure that the control unit has **not** been connected to the power supply yet. Make sure that the plug fits properly to the contacts.

The fixture will start operating when plugged into the mains and switched on.

After having switched on the fixture for the first time, the metal halide bulbs need a few minutes to reach their full illumination capacity. The operation of new bulbs might cause minor colour variations and short time flickering. These are caused by physical processes which are typical of this technique.

HQI-bulbs are, as already described, high voltage discharge lamps. This technique requires high voltages for the ignition and the operation of up to 4500 Volt.

The implementation of inductive ballasts can cause, mainly during the starting phase, but also during general operation, a minor noise within the control unit. Although any physical and electrical optimisation were undertaken to reduce the operational noise, it is not possible to eliminate it completely, due to typical features of this technology.

Because of the modern technology of the electronic ignitors used by Giesemann Lichttechnik, they need not be exchanged when replacing a bulb.

After having switched off the bulb, allow approx. 15 - 20 minutes to let it cool down before restarting it again.



## 2. MOONLIGHT

Check, when unpacking the fixture that no parts are missing. Your aquatic dealer needs to be informed about any damage immediately in order to check on a possible claim within the warranty period. Never put a damaged fixture into operation.

### 2.1. Checking oecdtkudqx

Remove the system from the box along with all additional parts :

- § lightbody with UV filter lenses and ventilation slots
- § metal halide bulbs (MEGACHROME)
- § T-5 tubes (POWERCHROME)
- § hanging suspension kit (version B)
- § allen key open the light
- § warranty card

### 2.2. assembling the light

GIESEMANN introduces with the MOONLIGHT series a new generation of aquarium illumination. Their main characteristics are advanced component technology, modern styling, high quality materials and functional design.

The filter glasses are in combination with the ventilation slots responsible for bearing the complete light body. Therefore the slots are fitting very tight in the rail, to allow the glasses to extend by operation temperatures up to 600°C.

Using the Allen key supplied slacken the six screws on the end panel (opposite side of the display).

Remove the acrylic protection covers for the T-5 tubes (1). The tubes and the contacts are to be pushed into the socket evenly, if necessary, exert a slight pressure in order to press the movable socket against the springs. After having inserted the tubes turn them by 90° until they fit properly. The covers can now be reassembled in reverse order. Place the little metal plates (2) on each end to push the acrylic cover down.

Remove now the ventilation slot (3) of one side and the UV filter glass. Please install the bulb eventually according to the instructions which are attached to the respective bulb. Take care not to touch the glass with bare hands. Any marks or finger prints need to be removed immediately with a clean cloth and alcohol or spirit, otherwise they will be burnt into the quartz glass and destroy the bulb. 70 and 150 Watt bulbs are to be inserted into the socket so that the contact springs guarantee a secure fit and a good contact. 250 Watt TS-versions are to be put into the **movable** ceramic socket; under even pressure they

will arrest within the socket. Take care that the lamp does not edge anywhere and that the glass bulb does not get damaged.

The fixture can now be reassembled in reverse order. Be careful to slide the UV-filtration glasses into the correct position with the utmost care. Take care that they do not twist (risk of breakage). **Assembly work** on the light may be performed only with the light dismantled from the

To simplify the reassembling of you light, it can be helpful to press the lightbody slightly together before screwing the endplate tighten.

### 2.3. First operation

When mounting the steel wires or the wall brackets it needs to be considered that the ceiling / wall can withstand the weight of the fixture. Make sure that the load bearing capacity is a multiple of the fixture weight itself. Before mounting, make sure that the chosen area is free of electrical cables i.e. in the wall or ceiling. This unit must be **grounded**, green/yellow cable.

Drill two holes in the ceiling corresponding to the distance between the two suspension cables, ensuring the light is **centrally** aligned and taking into account the relevant **power connection means**. Install the ceiling mounting fixtures using the screws supplied, after checking that the ceiling offers sufficient support for the light. Now screw the **cable holders** with the **steel suspension wires** into the **ceiling mounting fixture**. Screw the light holder into the M4 thread in upper ventilation slot on the light.

Then align the light horizontally above the aquarium. Ensure the light holder is firmly seated.

If the power supply does not come from above, simply lay the cable to the desired location without attaching it to the steel suspension wire.

Please ensure that any contact points (should you extend the power cable) do not come into contact with moisture or water.




As your light is continuously adjustable for height, it can be locked in position effortlessly by pressing down the spring-loaded mechanism in the light holder.

For safety reasons the light should be lifted slightly before being adjusted for height. The lamp locks in position automatically as soon as a load is applied to the **light holder**.

### 2.4. The moonlight control

Programming the timer is very user friendly, i.e., the LCD display informs the user which steps need to be taken. After having connected the fixture to the mains, the electronic timer carries out a first test (self test). Then the display asks the user to choose the requested language.

Pressing the respective keys the user gets access to any further information in English, German, French or Italian.

-  Set values and menu items in ascending order
-  Set values and menu items in descending order
-  confirms data input (Enter)

After having switched on the fixture the following information will be displayed (depending on the programming): Time – Lunarphase – Dimming (%)

## **Description of the menu options**

### **Selecting the language**

When switching on the timer for the first time the German language will appear in the display. The language displayed will change according to the user's selection.

### **Setting date and time**

After having programmed the correct date and time, the data will be recorded in the EPROM. In case the fixture is disconnected from the mains the time needs to be programmed again. As the date is daily recorded within the EPROM, it only needs to be reset in case the disconnection from the mains is longer than 1 day.

### **Setting the switch on and off times**

Within this menu the switch on and off times for the tubes and HQI (metal halide) bulbs are programmed. For each channel two switch on and off times are possible. In case the switch on and off times are identical the channel will not be ignored (channel switched off).

### **Switch on and off times moon light**

Within this menu the switch on and off times for the moon light are set. The user can programme one switch off and one switch on time (moon waxing and waning).

### **Selecting the moon phase**

The moon phase is divided into two steps; 15 days each. The moon phase increases gradually from the first day on until full moon is reached (day 15). During the following 14 days the moon phase decreases gradually. The display symbolises the increasing moon phase with the "+"-sign, the symbol for the decreasing moon phase is the "-"-sign. On this level the requested moon phase can be selected.

### **Exchange times of the bulbs / tubes**

Here the recommended exchange times (in hours) for the bulbs and tubes can be set. During the switch on phase of the bulbs / tubes the timer records the length of the operation period. In case the given time is exceeded, a warning will be displayed. It is very important to change the bulbs constantly to protect the whole unit for damage.

### **Display illumination**

Here you can set LCD backlight time in minutes from 1 to 250 minutes. If you enter 250, the LCD will remain lit all the time. Please note that the backlight has a limited service life and in the event of a failure the entire control system will have to be replaced.

### **Cloud simulation**

The cloud simulation works only in the 100 % phase of bulbs and tubes - **random** intervals (but not during sunrise or sunset). In between the dimming phase – the cloud simulation will not work. The 100 % phase needs to be minimum 2hrs.

### **T-5 dimming function – (not for all versions available)**

Before dimming the tubes the first time, the need to run minimum 60 hours in a 100 % modus (by using the Test Mode menu) Otherwise there might be malfunctions during the dimming cycle. New tubes (after replacing) needs to run as well in this (burn in) modus

### **Internal temperature monitor**




To prevent the light from overheating, an internal temperature monitor has been installed. If the temperature inside the light exceeds 90°C, all T-5 lamps are automatically dimmed until the temperature has dropped back down to approx. 60°C. The message "Übertemperatur Notdimmung" appears on the display.

### **External temperature monitor (optional)**

An external temperature monitor (optional accessory) can be connected to measure the water temperature. If it rises above a user-set value of between 0° and 35°C, the fluorescent tubes are dimmed to

prevent the tank warming up any further due to the radiated energy. Normal operation is resumed only when this threshold value has dropped by at least 2°C. The message "Übertemperatur Notdimmung" appears on the display. If NO external sensor has been connected, the message "No sensor connected!" appears on the display.

## 2.5. Programming the MOONLIGHT electronics





Press the Enter key  for approx. 2 s to switch to program mode. You can use the arrow keys  and  to toggle between the individual menu items. The electronics menu is organised as follows.

MOND:02+ 11:22. HQI 0% TL 100%
-----------------------------------

**Standard operating display**








SPRACHE WÄHLEN
DEUTSCH

**Select language**

Open the menu with the Enter key  to select the menu language. Use the arrow keys  and  to toggle between German, Italian, French and English. Confirm your selection with the Enter key .





AKTUELLE UHRZEIT EINGEBEN
UHRZEIT EINGABE 11:23

**Clock time setting**

To set the internal real-time clock, open the menu with the Enter key . You can now use the arrow keys  and  to set the hour value. Now switch to the minute value with the Enter key  and set using the arrow keys  and . Finish by saving the values with the Enter key .


ATUELLES DATUM EINGEBEN
DATUM 21.12.06

**Date setting**

Set the current date in the same way as you set the time. On opening the menu with the Enter key  you can set the values for the day, month and year with the arrow keys  and  confirm your selections by pressing Enter .

SCHALTZEITEN LEUCHTST.LAMPE
LEUCHTST.LAMPE (1) EIN 10:15

**Set time tubes**



Open this menu with the Enter key  to set the lighting times for the fluorescent tubes.

### Tubes on

Begin by selecting the time (hour, minute) when the fluorescent tubes are to come on in the same way as you set the current time.

LAMPE (1) DIMMEN BIS 11:00
-------------------------------

### Dimtime max. until

Once on, the tubes start giving off light at 1% of their output and gradually dim up to the maximum brightness value set under "Set program for tubes" (see below). Using the arrow keys  and  you can now enter the time when the fluorescent tubes are to reach their maximum brightness (this corresponds to the end of the sunrise phase). After confirming your entries with the

Enter key **↵** you can then enter the sunset times.

LEUCHTST.LAMPE (1) AUS 22:30
---------------------------------

LAMPE (1) DIMMEN BIS 23:23
-------------------------------

SCHALTZEITEN HQI BRENNER
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**Set time MH  
bulbs**

HQI BRENNER (1) EIN 12:15
------------------------------

HQI BRENNER (1) AUS 15:00
------------------------------

HQI BRENNER (2) EIN 16:00
HQI BRENNER (2) AUS 19:35

SCHALTZEITEN MONDLICHT
MONDLICHT EIN 22:59

**Set time  
moonlight**

MONDLICHT AUS 04:24
------------------------

AUSWAHL MONDPHASE
MONDPHASE 02+

**Select  
moon phase**

### Tubes off

Here you can set the time (hour, minute) when the sunset phase is to begin.

### Dimtime min. until

Here you can use the arrow keys **←** and **→** to set the time when the dim phase ends and the fluorescent tubes are switched off.

Open this menu with the Enter key **↵** to define the lighting times for the metal halide (MH) bulbs.

### MH bulbs on

Set the time (hour, minute) when the MH bulbs are to come on in the same way as you set the current time.

### MH bulbs off

Now use the arrow keys **←** and **→** to enter the time when the MH bulbs are to go off and save with the Enter key **↵**.

### MH bulbs ...

The MOONLIGHT lights feature an interval function for the MH bulb ON and OFF times. These alternative settings for MH bulbs (2) have not been implemented as yet and can therefore be ignored when programming the light.

To set the ON and OFF times for the moonlight light, open the menu with the Enter key **↵**.

### Moonlight on

With the arrow keys **←** and **→** start by entering the moonlight start time.

### Moonlight off

Then set the moonlight end time and save by pressing the Enter key **↵**.

The moonlight follows the natural 28-day rhythm. To synchronise the artificial moonlight emitted by your MOONLIGHT light with the actual phases of the moon, you can set the current moon phase here. Open the menu

with the Enter key **↵** and then use the arrow keys **←** and **→** to select the current moon day. The entry 00 signifies a new moon, and by entering a value between 01 and 14 you can specify the gap between the current day and the new moon. After confirming with the Enter key **↵** you can then define the interval selected as a waxing moon phase (+) or a waning moon phase (-). Complete your settings by confirming with the Enter key **↵**.

LEUCHTST.LAMPE  
PARAMETRIEREN

**Set program for tubes**

Here you can specify your preferred default values (parameters) for controlling the fluorescent tubes.

DIMMWERT TL  
MAX 100%

DIMMWERT TL  
MIN 48%

**Max. output tubes**

Start by entering the value for the maximum luminous intensity of the fluorescent tubes to be achieved on a sustained basis between the end of the sunrise phase and the start of the sunset phase.

**Min. output tubes**

This is where you define the minimum output for the fluorescent tubes.

TAUSCHZEIT TL  
STD 2548

**Replacement time tubes**

Finally, enter the scheduled life span for your fluorescent tubes. For new tubes set this value to 3,000 hours, for example, to receive a reminder to replace the tubes at the end of the scheduled life span.

HQI BRENNER  
PARAMETRIEREN

**Set program for MH bulbs**

**Replacement time MH bulbs**

TAUSCHZEIT HQI  
STD 3000

After opening the menu with the Enter key **↵** you can enter the scheduled life span for the MH bulbs in use and read off the number of operating hours currently remaining.

WOLKENSIMULATION  
EIN-AUS SCHALTEN

**Cloud simulation**

Under this menu item you can activate or deactivate the cloud simulation function. During standard operation an active simulation is indicated by a dot on the right of the main display.

WOLKENSIMULATION  
EIN-AUS SCHALTEN

**Select cloud simulation**

Here you can specify your preferred default values (parameters) for controlling the cloud simulation function.

WOLKENSIMULATION  
ALLE 26 min

**Cloud simulation distance.. min**

Begin by setting the interval (1 to 250 minutes) for the gap between the simulated clouds.

## System messages during operation

---

WOLKENDAUER  
18 min

### Cloud simulation time.. min

Then specify how long the clouds are to be present.

LAMPE TL DIMMEN  
AUF 33%

### Output tubes

Finish by defining the brightness value to which the fluorescent tubes are to be dimmed during cloud simulation. If the output selected is the same as the maximum value for the sunrise phase (see above.), *no* cloud simulation will take place for the corresponding lamp.

SYSTEMPARAMETER  
EINTRAGEN  
LCD BELEUCHTUNG  
DAUER: 4 min

### Set system data

### Display illumination

Here you can set LCD backlight time in minutes from 1 to 250 minutes. If you enter 250, the LCD will remain lit all the time. Please note that the backlight has a limited service life and in the event of a failure the entire control system will have to be replaced.

WASSERTEMPERATUR  
MAX: 29 °C

\* **Water temp. max:** \_\_\_ °C

If the optional interface to the water temperature sensor has been installed, you can enter your preferred maximum water temperature here.



\***Note: this feature must be ordered from the factory and cannot be retrofitted.**

TESTMODUS  
AKTIVIEREN  
TEST LAMPE TL  
DIMMUNG: 0%

### Test mode



This mode allows you test the function of your light sources.

### Check tube dim

During selection with the arrow keys  and  the fluorescent tubes are operated at the current percentage value.

TEST LAMPE HQI  
1

### Check bulb dim

The MH bulbs can be switched on (1) and off (0) using the arrow keys  and .


TEST MONDLAMPE  
MOND: 05

### Check moonlight

For the moonlight test you can select any day of the moon phase using the arrow keys. There is no need to distinguish between a waxing and a waning moon.

PROGRAMMIERUNG  
ENDE

### Memory

Select this menu with the Enter key  to exit program mode and save your choices. Operating mode can be entered only if the program mode has been exited properly. A timeout function is not planned at present.

## 2.6. System messages during operation

Please change bulbs/tubes

When the number of operating hours entered have elapsed, the message "Please change MH bulbs" or "Please change tubes" alternates with the standard operating display. To erase this status message, enter a new replacement time for the corresponding light source.

**“Übertemperatur Notdimmung”** (optional, where provided for):

This message appears on the display if the external temperature monitor (only if the sensor is connected) registers a water temperature higher than the value set by the user or if the internal temperature of the light rises above 90°C. This message will not disappear until the temperature has fallen 2°C below this maximum temperature.

**No sensor connected** (optional, where provided for):

This message appears on the display if you try to enter a value for the maximum water temperature in program mode and no sensor has been connected.

**Error! Check data:**

This message appears on the display prior to exiting program mode if the switching times or output values you have entered overlap, preventing the control unit from functioning properly. In this case please check the data entered.





## 2.7. General information

### Time, date and moon phase

The time and date settings are not erased when the light is switched off (they are stored in a memory buffer powered by a lithium battery for a maximum of five years). The clock and the calendar will automatically take into account the 30/31/28 day rhythm, including leap years, until 2100.

The clock does *not* switch automatically between summer and winter time. In the event of a power failure, the current moon cycle will be stored and will run for a maximum of one day before having to be reset.

### Entering the time, switching times, moon phase, operating hours

All entries are made with the arrow keys  and  and the Enter key . Select the desired values using the arrow keys and store by pressing the Enter key  to jump to the next setting or to exit the menu. Press and hold down the keys to activate a quick settings function.

On exiting program mode, a check for nonsensical or overlapping data is run and an error message will appear on the display, if applicable.

**Exception:** When setting the date, no check is made whether the month has 28, 29, 30 or 31 days. This must be taken into account when you enter the date.

### Programme checks

Several tests are run to check whether the data read from memory is correct in order to suppress possible EMC interference and thus ensure the light functions without any problems. Times entered are also read out as soon as they are stored and checked to ensure they have been stored correctly. If this is not the case, the data is written to the memory module until it is correct.

## warranty terms

### Warranty Coverage

GIESEMANN warranty obligations are limited to the terms set forth below:

GIESEMANN warrants the original purchaser of this product against defects in materials and workmanship for a period of (1) year from the date of original retail purchase. If a defect exists, at its option GIESEMANN will (1) repair the product at no charge using new or refurbished replacement parts, (2) exchange the product with a product that is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original product. A replacement product assumes the remaining warranty on the original product or 90 days; whichever is longer.

When a product or part is exchanged any replacement item becomes your property and the replaced item becomes GIESEMANN property. When a refund is given, your product becomes GIESEMANN property.

### Obtaining Warranty Service

(1) If you have purchased your product in the U.S or Canada, please contact your authorized dealer, or XENIA Northamerica Inc. or check the website [www.xeniainc.com](http://www.xeniainc.com) to find the nearest authorized Warranty Service provider.

(2) Any and all warranty claims must be accompanied with original purchase invoice and warranty card.

(3) Products may be returned only after gaining written permission from , GIESEMANN and all goods must be returned freight prepaid to our warehouse. The original packaging (outer carton and inner packaging) is required on all returns. Goods returned under warranty and found defective will be repaired or replaced at the discretion of XENIA Northamerica Inc., and returned to the customer freight prepaid. Goods returned under warranty and found to be not defective or damaged caused by accident, abuse, misuse, misapplication or non GIESEMANN products; and to a product or a **part that has been modified without the written permission of GIESEMANN will be returned to the customer freight collect. Normal Handling charges will apply.**

### Exclusions and Limitations

**The GIESEMANN warranty applies only to products manufactured by or for GIESEMANN that can be identified by the GIESEMANN trademark, trade name or logo affixed to them. GIESEMANN warranty does not apply to any non-GIESEMANN product even if packaged or sold with GIESEMANN products.**

**GIESEMANN, XENIA Northamerica Inc. and their authorized dealers are not liable for any damage or loss to housing or animal life living in aquariums and damages caused during transport.**

**This warranty does not apply: (a) to damage caused by accident, abuse, misuse, misapplication or non GIESEMANN products; (b) to a product or a part that has been modified without the written permission of GIESEMANN or XENIA Northamerica Inc.**

**Light bulbs are guaranteed to operate when first installed. No warranty exists when the glass is broken. The wide variety of ballasts now being used operate over a wide range of specifications and make any blanket warranty impractical. Any claim for warranty coverage must be made according to our warranty conditions**

**THIS WARRANTY SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES AND CONDITIONS, WHETHER ORAL WRITTEN, EXPRESSED OR IMPLIED. GIESEMANN LICHTTECHNIK GMBH SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. GIESEMANN IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITIONS, OR UNDER**

**ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOST PROFITS, DOWNTIME, GOODWILL, DAMAGE TO OR REPLACEMENT OF EQUIPMENT AND PROPERTY, ANY COSTS OF RECOVERING. REPURCHASING OR REPRODUCING ANY MATTER STORED OR USED WITH GIESEMANN PRODUCTS. GIESEMANN SPECIFICALLY DOES NOT REPRESENT THAT IT WILL BE ABLE TO REPAIR ANY PRODUCT UNDER THIS WARRANTY OR MAKE A PRODUCT EXCHANGE WITHOUT RISK TO OR LOSS OF AQUARIUM LIFE.**

## Troubleshooting

Before a GIESEMANN light is delivered to a customer, it will be checked once more in detail. Besides checking on the functionality, a number of electrical tests will be carried out and recorded in order to guarantee the customer a functionally working lamp.

Nevertheless, should an operation error occur, it might be for one of the following reasons:

If the bulb or the tube does not start, there might be a problem with the contacts. Please make sure that the bulb's contacts were slid evenly into the socket. The tubes need to be tight and correctly installed in the socket.

Your light is equipped with electronic ballasts for the T-5 tubes. Each ballast controls two T-5 tubes. If one tube fails, the second tube will be switched off automatically. Please change always both tubes together and use only the original D-D / Giesemann tubes.

If you do not hear any operational noise when starting an HQI-fixture, either a mistake was made when programming the timer or the connection to the power supply was not carried out properly.

If the fuse has either been considerably overloaded or there is a technical defect at the fixture. Please contact an authorised electrician.

If the luminaire does not light:

- § Check that the mains power is connected and switched on both at the wall and at the switch on the timer.
- § Check if the timer is on Auto, that it is set correctly to come on at the desired time.
- § Check that the luminaire is rated for the same supply voltage that you are using.
- § Check that the Lamps are of the correct wattage, type and length for the luminaire.
- § Check that the lamps are installed correctly (the linear fluorescent variants require the lamp to be twisted through 90° once placed in the connectors).