

Professional Dosing Technology Made in Germany



GHL Doser 2 Stand Alone Unit

Quickstart Guide

English, 2014-11-06

GHL Doser 2 *Simplify your dosing*

Congratulations on choosing our new GHL Doser 2. We are sure you will enjoy using our high end product for years to come.

Our goal was to create a dosing unit providing a combination of maximum performance and uncompromising quality. The results are impressive. Using the newest technology the GHL Doser 2 allows you to dose liquids such as fertilizer, balling salts and trace elements easily and precise. The compact and modern dosing unit GHL Doser 2 offers many features and scores additionally with its intuitive operability with our free software *GHL Control Center* and mobile apps. Set up to 150 micro dosages per day, choose between automatic or manual dosing and calibrate your dosing unit easily with your smartphone, tablet or PC.

With this guide we give you all information which you need for a quick start. Please take your time to read all operating instructions and safety information in this guide carefully and follow the recommendations before using this device.

For more information you can find the latest detailed user guide in the download section at our website www.aquariumcomputer.com.

Please note that errors of handling may lead to loss of warranty claims.

Scope of delivery

Please check the product box for following items first. If there is anything amiss please contact your retailer immediately. The shown pictures below may differ slightly from the actual products.



GHL Doser 2



Power supply



Power cord



Hose nozzle

Please verify that the accessories are in faultless condition and complete. All detected noticeable defects shall be instantly reported to your retailer to avoid warranty loss.



Under no circumstances damaged dosing pumps or their components may be operated!

Safety instructions

Please read these instructions carefully before using this product. Ignoring these warning messages may cause material damage and personal injuries.



The GHL Doser 2 may be used only for dosing of liquids in aquariums and ponds. Following liquids can be used unconsidered:

- Salt water
- Standard supplements for aquariums and ponds like fertilizer and trace elements (suited for iodine)
- Balling salts



Non-observance of these instructions may produce damages.

Unplug the device from the wall power outlet before carrying out any maintenance work.

The device has to be protected constantly against wetness, condensation, splashing and dripping water! (Salt) water or high humidity near the aquarium, pond or technics tank will destroy the dosing unit and invalidates the warranty.

Regular maintenance and proper care of the device is required. Power off the device and wipe off dust and dirt with a soft and slightly damp lint-free cloth. Saltwater deposits must be removed without delay. Do not expose the unit to fine dust or dirt that typically appears when drilling holes or during renovation. Please note that improper maintenance can lead to damages which are not covered by warranty.

In case the dosing unit or its accessories are or get damaged (for example broken or damaged cables, plugs, entered fluids or any other material, the device is wet, normal operations are disrupted or broken down, the device was dropped) it must not be used and taken out of service immediately.

Never ever attempt to disassemble, repair or alter the equipment by yourself.



Make sure to connect the power cable to a properly earthed outlet, if not, you might receive an electric shock or might cause a fire. Pay attention to the power cords and plugs and their joints and connections to the device. Do not bend or twist them excessively or modify them in any way.

Don't touch the power cord with wet hands. If the power plug has gone wet or dirty, dry or clean it with a dry cloth thoroughly. Never ever immerse the power plug or the whole unit into water.

If the unit falls into your aquarium first shut off the power supply (fuse or circuit breaker) then pull the power plug from the wall outlet. The device must never be operated again. Proceed the same way if the plug has gone wet from water trickling down the cable.

Don't leave the device unattended when children, pets or other individuals are around who are inadequately capable of safety assessment.

Intended use

The dosing unit should only be used to dose with following liquids in aquarium or pond:

- (Salt) water
- Standard supplements for aquariums and ponds like fertilizer and trace elements (suited for iodine)
- Balling salts

Location

Dosing pumps are self-priming and should be placed above the liquid container. This prevents the drainage of the container in case of leakage. The tube on the intake side of the pump should be kept short. To avoid a backflow, the tube must not hang in the aquarium water. Make sure that hose connections can not detach themselves, plug the hoses as far as possible on the pump fitting, use only suitable hoses and avoid the tensile strain.

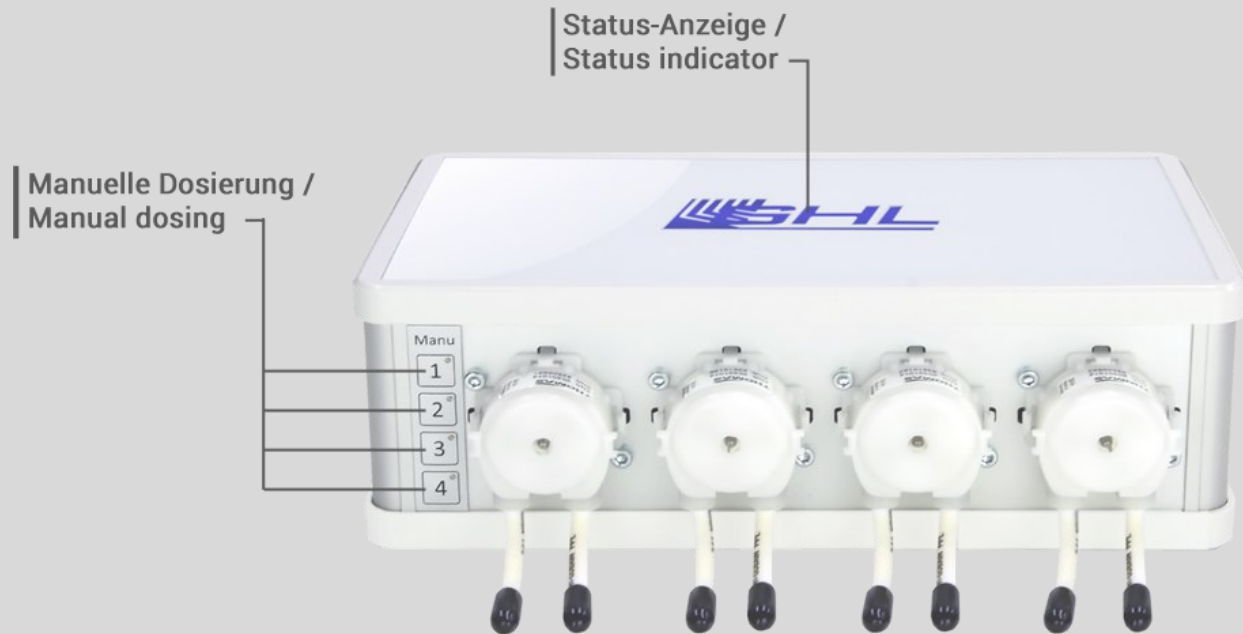
Pump heads can be rotated 180°. Therefor press both latches and pull the pump head off, rotate and push it carefully onto the motor shaft. Make sure that the motor shaft goes between pressure rollers – do not use force. The pump head latches should snap in the front panel.

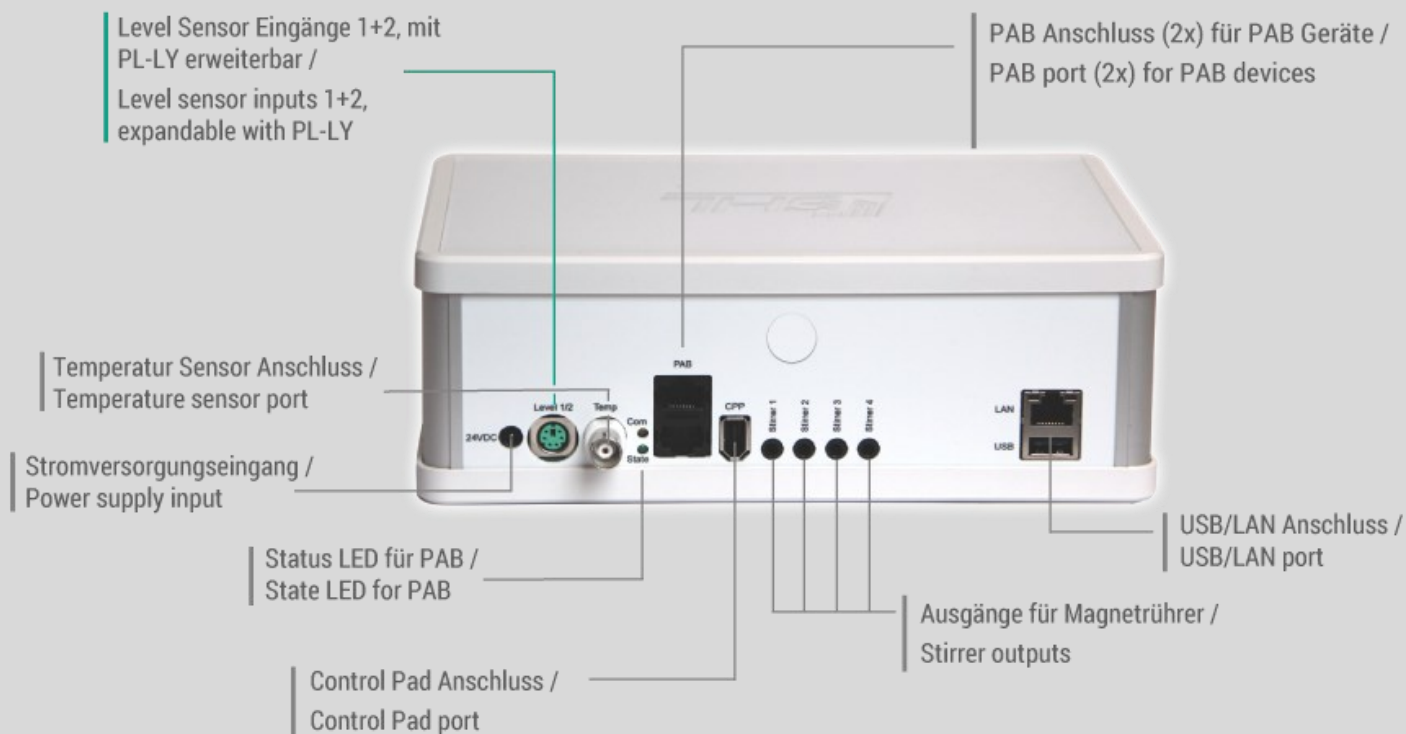
Technical data

	GHL Doser 2	Power supply
Dimensions (h x b x l)	70 mm x 150 mm x 220 mm	40 mm x 68 mm x 245 mm
Weight	1.9 kg	0.1 kg
Cable length		approx. 2.3 m for power supply
Dosing amount	Adjustable to 0.1 ml	

All specifications are relating to average parameters and can vary according to component tolerances and ambient conditions.

Operating elements and connections





Before connecting GHL Doser 2 to your PC you should first install our software *GHL Control Center*.

System requirements:

- Vista / Windows 7 / Windows 8 / Windows 8.1
- USB port



Tip:

The free of charge PC software ***GHL Control Center*** enables you to program, to configure, to run and to maintain your doser easily.

The software is available at the download section at the GHL homepage www.aquariumcomputer.com.

Installing GHL Doser 2

Connection

Plug the power supply jack (24 VDC, polarity: inside +, outside -) to the socket on the dosing unit and the power cord to wall power outlet.

You can connect the **slave** unit (**without own control**) with the control cable to the PAB port.

Operation

The integrated controlling system supports up to 16 dosing pumps independently from each other.

This device's dosing pumps are assigned to channel 1 to 4. If the slave dosing unit is connected, further pumps are assigned to channel 5 to 8.

The dosing amount is determined by switch-on time. One dosing pump delivers between approx. 8 ml and approx. 45 ml in one minute according selected speed.

Important advice: Regarding the programming you have to ensure that pumps operate maximum 15 minutes straight, the following pause must be at least as long as the operating time! Otherwise the lifetime will be shortened.

The dosing unit is equipped with buttons which allow manual dosing. This is especially useful for liquid pre-suction. Furthermore the buttons have integrated LEDs which show the activity of each pump.

Sdettings and operation via PC



Install the software *GHL Control Center* on your PC first. You can download it on our website „www.aquariumcomputer.com“.

Connect the dosing unit with USB cable to your PC after a successful software installation. The driver will be installed automatically.

The screenshot shows the GHL Control Center software interface. The main window is titled "Doser - GHL Control Center". The interface is divided into several sections:

- Top Bar:** Contains menu items: Geräte, Ansicht, Hilfe, Tools, Extras, and Sichern und Wiederherstellen.
- Left Panel:**
 - Geräte:** Includes buttons for Verbinden, Trennen, Verwalten..., and Einstellungen.
 - Doser:** A tree view showing the dosing unit hierarchy. The "System" folder is expanded, showing a list of dosing pumps (Dosierpumpe 1 to 16). A red circle with the number 3 is next to "Dosierpumpe 1".
 - Hardware:** Images of the ProfiLux, Mitras LX 6xxx, and the Doser unit. A red circle with the number 1 is next to the "Doser" unit.
- Main Area:**
 - Doser - Allgemein:** A table showing dosing schedule data.

Nummer	Start	Menge/Dosierung [ml]
1	10:00:00	30
2	10:09:36	30
3	10:19:12	30
4	10:28:48	30
5	10:38:24	30
6	10:48:00	30
7	10:57:36	30
 - Doser - Dosierpumpe 1:** A graph showing the dosing schedule over a 24-hour period. A red circle with the number 4 is next to the graph.
 - Füllstand:** A vertical bar chart showing the tank level. A red circle with the number 5 is next to the "System" folder in the left panel.
 - Manuell dosieren:** A button to manually dose.
- Right Panel:**
 - LAN / Wi-Fi Eigenschaften:** A sub-window for network settings.
 - Modus:** Radio buttons for W-LAN (selected) and LAN.
 - IP Einstellungen:**
 - Radio buttons for IP-Adresse automatisch beziehen (selected) and Folgende Einstellungen verwenden.
 - IP-Adresse: 0 . 0 . 0 . 0
 - Subnet-Maske: . . .
 - Standard Gateway: . . .
 - W-LAN Einstellungen:**
 - Administrator Passwort: [Empty field]
 - Radio buttons for Client and Access Point (selected).
 - SSID: GHL-DOSER.2
 - Verschlüsselung: WPAPSK
 - Verschlüsselungstyp: TKIPAES
 - W-LAN Schlüssel: 12345678
 - W-LAN Modus: 11b/g/n gemischt
 - Kanal: Automatisch
 - Buttons: Speichern, Abbrechen.

1

Open the GHL Control Center and choose the dosing unit. If the dosing unit is not displayed, you must add the device through the „Administrate“ button in the top menu bar.

2

Connect GHL Control Center with the dosing unit by pressing the „Connect“ button in the top menu bar.

3

After the GHL Control Center is connected you can access the settings for each pump via the navigation menu on the left side. Therefor click on the plus symbol to the left of the „Dose overview“ menu item and choose one of the displayed dosing pumps.

4

After you've chosen one dosing pump, the new window with all settings for this pump is displayed to the right of the navigation menu. You can calibrate, refill the pump and set dosing times here.

5

Click on the „System“ menu item in the navigation menu to change WiFi and network settings.

6

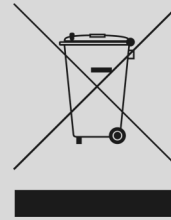
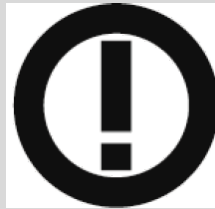
You can set the connection of the GHL Doser 2 to local network in the new window. The device connects to local network via WiFi or ethernet cable. Additionally you can choose between dynamic and static IP address and also the WiFi protection

Warranty and liability

The legal warranty rights of your country are valid.

Please pay attention to all given operating instructions and safety information of this guide. Improper usage as well as usage not intended for, non observance of these guidelines or improper handling and maintenance could result in damages, the repair of these damages may not be covered by the warranty.

The manufacturer disclaims any liability for any direct or consequential damage which may happen using this product, as far as legally allowed.



You may download the CE Declaration of conformity from our website.



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Technische Änderungen und Irrtümer vorbehalten.

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