# eX Upgrade Kit for ProfiLux 3.1N/A/T

## 1 Description

With the *eX Upgrade Kit* you can upgrade a *ProfiLux 3.1A* (or *N* or *T*) to a *ProfiLux 3.1A* (resp. *N* or *T*) *eX*. The modification is a major intervention, in order to avoid damages you have to proceed very carefully.

Please pay attention that an electrostatic discharge can destroy electronic components. We highly recommend to carry out the modifications on an antistatic working surface; at least you should make sure that you and your environment are not electrostatically charged. You can discharge yourself by touching grounded items (water pipe or radiator).

If you are not sure that you can do the upgrade, then ask your retailer or GHL for the modification.

We reject any liability or warranty for damages that are caused by an improper modification!

#### INCLUDED IN DELIVERY

- ProfiLux Piggyback2-board
- 2 screws M3x6
- Rear plate with additional holes

#### **REQUIRED TOOLS**

- Screw driver (slotted & crosstip)
- Hexagon wrench 5.0 mm & 5.5 mm (or tongs)
- Torx screw driver



### 2 Preparation of ProfiLux for the installation of PiggyBack2

Please proceed exactly step by step according to the following instructions in order to avoid damages and faults.

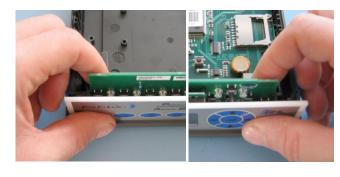


Remove the voltage supply and all other cable connections at *ProfiLux*.

Open the housing as described in the *ProfiLux* user manual.

Pull out all extension cards (if present) and remove all covering plates.

Now remove the operating unit with the display and the front plate. The operating unit and the front plate have to be pulled out smoothly upwards in order that the key buttons of the operating unit don't break. This works best if you grasp operating unit including front plate both together at the side and pull them out upwards.



As of 06/12/2016 Page 1/2



Afterwards all fastening screws and bolts of the main board and the fastening bolts at the RS232-connection have to be unscrewed.

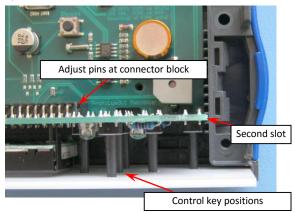


Lift the main board together with the black rear plate out and exchange the old rear plate against the new rear plate.

Then insert the main board including the new rear plate again into the housing. Pay attention that the main board is inserted into the

housing in the correct direction (the housing is not symmetric).

Before the main board can be screwed in place again, the operating unit including front plate has to be inserted again into the housing. Take the operating unit at the same time with the front plate and make sure that all key buttons are in the correct position. Adjust the front plate at the provided position and insert it carefully together with the operating unit into the corresponding slots. As soon as the operating unit is placed correctly, it can be inserted smoothly together with the front plate until the connection pins are placed completely in the connector block. Pay attention that all pins of the connector block disappear in the base and that no pin is bent!

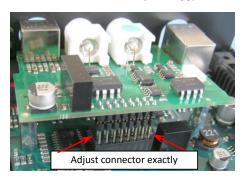


After this, screw the fastening screws and bolts of the main board in again at the corresponding positions with care and without force, otherwise the housing or the circuit board will be damaged.

Screw also the holding bolt of the RS232-connection firmly again without force.

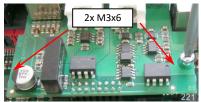
## 3 Installation of the PiggyBack2 expansion card

Now the extension card ProfiLux Piggyback2 can be inserted into the ProfiLux.



For that first put the connections through the holes of the rear plate (during this, the board is a bit in a diagonal position). Then position the *Piggyback2* in a way that the pins are exactly over the connector block and insert it carefully and without force into the connector block. Pay attention that all pins of the connector block disappear in the base and that no pin is bent. You must be able to see the thread of the bolts in the middle below the holes of the *Piggyback2*-board!

After you have made sure that the *Piggyback2*-board and the rear plate are placed properly, screw the board with the two delivered screws M3x6 firmly.



Now the extension cards resp. covering plates are again built in and the housing of the *ProfiLux* is closed.

The *ProfiLux* is now ready again and you can establish the cable connections at *ProfiLux* again that have been removed before. Finally supply *ProfiLux* with voltage.

GHL Advanced Technology GmbH & Co. KG Marie-Curie-Str. 20 67661 Kaiserslautern www.aquariumcomputer.com







As of 06/12/2016 Page 2/2