

Royal Exclusiv pumps & skimmers

Vorgebirgsstr. 28 // 50389 Wesseling // Germany

Fon +49(0)2236/88055-0 // Fax +49(0)2236/88055-20

info@royal-exclusiv.de // www.royal-exclusiv.de



Since 1986



User manual for 10V controller for Red Dragon® 3 pumps
Interface Adapter/Adaptor 10V Control Input

v2.0

ENG



User manual for 10V controller for Red Dragon® 3 pumps Interface adapter 10V controll input

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Important Notice

Please read this manual carefully before you install the device. We recommend not to proceed the installation of the device until you read the manual. This prevents any questions and problems that might occur in installation process. As soon as you power-on the controller for the first time, you agree that you read and understood this manual. In doubt or if anything is unclear please contact your supplier/vendor or dealer before you start-up the skimmer.

1. Foreword

Congratulations on the purchase of this additional controller for the 10V interface of our **Red Dragon® 3** pumps. We have tested so far with the ProfiLux® 3.1 from the house of GHL and the AquaController from Neptune systems.

2. Contents of delivery

1x Controller-box (142mm x 85mm x 49mm)
1x Power supply with adapter plug 230V/110V
1x cable for computer/controller connecting
1x cable for pump connecting



3. Power supply

See separate operating instructions of the power supply in the packaging.



4. Start-up and connection

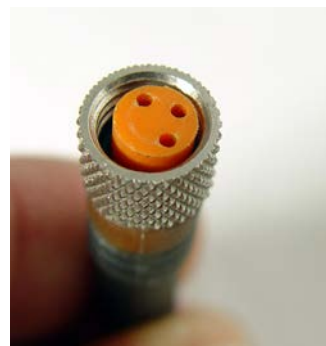
Remove the packaging from the and check the Controller and connecting cables for transport damages which must be immediately notified to the responsible retailer within 24 hours.

The 10V controller is ready for use pre-installed and can connect immediately to your aquarium-computer/controller. A wall mounting is also possible.



First, please connect the pump as shown with the connecting cable. The cap on the pump controller must be turned off before. If you do not use the 10V connection, please do not use recap, so that no moisture can penetrate into the controller.

4.1. Installation



Then, you can make the connection between the controller and the computer as shown.



After successful connection of the controller box to the pump and the computer, you can now connect the power supply unit. At the end please the mains plug of the power supply into the socket provided for this purpose.



After completing the wiring, the controller should look like this.



5. Function description of the interface

Once a voltage > 0,5V to the 10V interface is, takes over the control of the control adapter interfaces and locks the buttons of the controller.

In the area of 0,5V-0,8V the pump is switched off. From 1V the pump starts run on the lowest level (15W). The level is increased one step with an increase of approximately 0,5V. So 1V = 15W | 1,5V = 20W | 2V = 25W ... 7,5 V = 80W (50W or 60W). At a higher input voltage, the speedy stops controller to the maximum position and no longer increases. The interface adapter behaves as if the corresponding button. So, it is no matter which is connected to the pump (Speedy 50/60W or 80W), and the pump which has full time or increment. 0,5V are always one step. At the Speedy 50W, the end is therefore achieved at 4,5 V.

5.1. Meaning of the LED-colors

That LED indicates the following operating conditions: RED Speedy controller connected. There is no or a voltage under 0,5V. YELLOW/ORANGE: Pump cut off voltage 0,5- 0,8V interfaces voltage is applied. GREEN: Pump in operation. Voltage > = 1V. The voltage of the interfaces of the Aquariums computer are subject to a certain tolerance, typically 5%. The voltage values shown can therefore differ.





6. Defects and claims for compensation, disclaimer

6. Defects and claims for compensation

6.1. Barring any further claims we are only liable that the supplied goods are free of defects until the initial transfer of perils. Insignificant variations of the contracted appearance and workmanship or marginal limitation of the usability or suitability of the product are unremarkable.

The warranted condition, endurance and usability the product is solely subject to the specification agreed in writing, in the product specification and / or in this manual. Further oral agreements, especially from preliminary talks, advertising and / or in related industrial standards will be only valid as integral part of a written contract. Only conditions and specifications assured specifically by us are valid. We do not accept conditions or specifications made by third parties. Specifically the specification assured in this manual are valid. If the customer wants to use the product for other than the intended purpose, he is obliged to thoroughly check the suitability of the product for the other purposes. We give no warranty and no liability accrues for any applications that are not agreed on by us explicitly and in written form.

Any manipulation of the pump, the (needle wheel) impeller or the electronic as well as any attempt to modify the software, to influence the software or to read out or re-engineer the software of the driver unit immediately causes a loss of warranty and all claims and rights expire.

Every user is held responsible for the appropriate usage of his **Red Dragon® 3** pump. The user manual does not discharge you from your liability for a safe, appropriate and secure application, installation, operation and maintenance.

By using this manual you agree that in no circumstances the manufacturer can or will be held liable for any personal injuries or property damages which possibly occur due to the usage of the device. This applies specifically for any damages that are due to inappropriate piping or plumbing. Insufficient or missing cleaning- or maintenance intervals and damages that might result due to these are not covered by warranty. This applies especially for calcinations (salt water usage) and accumulated foreign particles (pond usage) such as sand or gravel, which lead to damages on rotors, bearings, rotor housing or motor housing, that are not covered by warranty.

6.2. Our warranty for defects is strictly limited to supplementary performance. This is upon our choice either removal of defects or replacement delivery free from defects. In the case of challenge, impossibility or failure of the supplementary performance the customer has the right for impairment or the right to withdraw from the contract.

Additional expenses which arise because the customer has brought the sales item to another place than his subsidiary. The manufacturer explicitly limits the warranty to the pump itself. We are not liable for consequential damages, or damages that are caused by a malfunction or failure of the skimmer, such as a loss of animals. It is in the responsibility of the customer to provide back-up devices for the case of a potential malfunction or failure of the pump.

6.3. The customer has to check the goods immediately thoroughly, also for product safety. Apparent damages have to be reported in written form immediately. Hidden damages have to be reported immediately after their discovery. The customer is liable to report transport damages within 24 hours to the carrier and/or the delivery service. Disregarding the rules for checking and reporting results in a loss of warranty.

6.4. Furthermore we are not liable for the consequences of inappropriate application, usage, maintenance and handling of the product by the customer or his subsidiaries, neither for normal abrasion. This applies specifically to the consequences of thermal, chemical, electrochemical or electrical influences as well as for infringements against our uses- and maintenance manuals. The same applies to damages which are the result of changes or adjustments by the customer which have not been approved by us in beforehand.

6.5. Our liability for wanton negligence is limited to claims of injury of life, body and health, to claims based upon the law on product liability and to claims from culpable fundamental breach of the contract which entail contractual obligations. For the rest our liabilities for wantonly negligent breach of contractual obligations, which are foreseeable at the time of the conclusion of the contract, are barred.

Damages, which are unambiguously attributed to inappropriate usage of the product, are in general to be accounted for by the customer. In the case of returns of the product the customer has to use break-proof packaging for the product. The customer is liable for any damages that can be accounted to an inappropriate packaging.



6.6. Claims against us become time-barred within a year after the initial delivery of the goods to the customer. The same applies to claims for damages regardless of their juridical cause. The limitation period does not apply to claims based upon the malicious concealment of damages from the injury of life, health or body and for other damages that result out of intention or wanton negligence.

6.7. If it becomes apparent during our examination of damages reported by the customer or in the course of our removal of defects, that the reported damages or claims were made wantonly negligent or unwarranted, we may charge an adequate consideration for our examination and for the removal of defects. The customer has the right to neglect a necessary repairing and to demand the return of the skimmer. In general every examination of damages is bound to lump-sum compensation if it occurs that the customer has to be accounted for the damages.

6.8. Spare parts

Our liability to deliver and hold spare parts available is limited to the period of 5 years after initial shipment of the product. Our respective list prices apply for spare parts.

6.9. Disposal

We offer our customers to take back products that fall under the restriction of hazardous substances directive (ElektroG) within Germany free of charge, for products, which were brought into circulation after the 13th of August 2005. We will take care for the disposal. If a customer chooses not to let us take care for the disposal, he takes the responsibility of a disposal according to legal regulations and discharges us from our liabilities according to §10 sect. 2 ElektroG and any associated liabilities of others.

6.10. Subject to alterations

The manufacture has the right for changes in hardware and software of the product at any time without preliminary notice, as long as these changes advance reliability or quality of the skimmer. No claims can be made if for instance design, functionality or performance of the skimmer changes elementary. The assured specification of the skimmer is always guaranteed.

7. Manufacturer's declaration

Titles against **Royal Exclusiv®** concerning the products described in this manual address on the **Royal Exclusiv®** guarantee clauses. Specification may vary due technical improvements.

7.1. Manufacturer

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Made in Germany

Royal-Exclusiv® EAR-number: WEE.Reg.No. 83082352

7.2. Informations and support

Thank you for purchasing a product from **Royal Exclusiv®**. This manual is supposed to help you to setup the device for use and to advice you with the necessarily maintenance procedures.

To ensure longlasting satisfaction with this product we please you to read this manual carefully and follow our guidelines.

Royal Exclusiv® guarantees 5 years of spare part availability.

Should the device in some way not meet the high demands you expect from **Royal Exclusiv®** please contact the dealer where you purchases your Bubble King® Double Cone protein skimmer. This is usually the best way for product support. However you may feel free to contact our support on our website: <http://www.royal-exclusiv.de>