

# FLUVAL®

## WARRANTY REGISTRATION CARD

When complete, place Warranty Registration Card in an envelope, affix correct postage and mail to:

### GARANTIE-REGISTRERUNGSKARTE

Bitte zurücksenden zur Erhaltung der Garantie. Damit wir Sie besser betreuen können, füllen Sie bitte diese Registrierungskarte aus und schicken Sie sie an uns zurück.

## CARTE D'ENREGISTREMENT DE LA GARANTIE

Déposer la carte de garantie dûment remplie dans une enveloppe suffisamment affranchie et poster à :

### TARJETA DE REGISTRO DE LA GARANTÍA

Una vez llenada, coloque la tarjeta de registro de la garantía en un sobre debidamente franqueado y envíela a:

#### CANADA

Rolf C. Hagen Inc.  
20500 Trans Canada Hwy,  
Bate d'Urfé, Québec H9X 0A2

#### U.S.A.

Rolf C. Hagen (U.S.A.) Corp.,  
305 Forbes Blvd,  
Mansfield, MA. 02048

#### UK

Rolf C. Hagen (U.K.) Ltd.  
Castleford, W. Yorkshire  
WF10 5QH

#### FRANCE

Hagen France SA.,  
F-77388 Combs la Ville.

#### ESPAÑA

Rolf C. Hagen España S.A.,  
Av. De Beniparrell n. 11 y 13  
46460 Silla, Valencia

#### GERMANY

HAGEN Deutschland  
GmbH & Co. KG,  
25488 Holm

To register online, visit our website at [www.hagen.com](http://www.hagen.com) • Pour l'enregistrement en ligne, visitez notre site Web à [www.hagen.com](http://www.hagen.com)

Falls Sie dies vorziehen, können Sie sich stattdessen auch auf unserer Website unter [www.hagen.com](http://www.hagen.com) registrieren.

Para el registro en línea, visite nuestro sitio web en [www.hagen.com](http://www.hagen.com)



# FLUVAL®

E Series

## Advanced Electronic Aquarium Heater

INSTRUCTIONS FOR USE

**VueteCH** for precision and safety

**E50**

up to 15 U.S. gal/60 L\*

**E200**

up to 65 U.S. gal/250 L\*

**E100**

up to 30 U.S. gal/120 L\*

**E300**

up to 100 U.S. gal/375 L\*

## Dear Customer,

Thank you for purchasing the new **FLUVAL "E" series** aquarium heater. The superior performance and capability of this heater with "**VUETECH**" technology is backed by Fluval's well earned best in quality and design aquarium products. For a complete understanding of the heaters operation and capabilities, please read and follow these instructions for proper installation, maintenance and use. Failure to do so may result in loss of fish and/or damage to the unit. **SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.**

# IMPORTANT SAFETY INSTRUCTIONS

**WARNING** – To guard against injury, basic safety precautions should be observed, including the following:

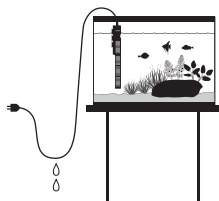
## 1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS

and all the important notices on the appliance before using the heater. Failure to do so may result in loss of fish life and/or damage to this appliance.

2. **DANGER** – To avoid possible electric shock, special care should be taken since water is employed in the use of aquarium equipment. For each of the following situations, do not attempt repairs yourself; return the appliance to an authorized service facility for service or discard the appliance.
  - A. If the appliance shows any sign of abnormal water leakage, immediately unplug it from the power source.
  - B. Carefully examine the appliance after installation. It should not be plugged in if there is water on parts not intended to be wet. Prior to installation, carefully check and make sure the glass tube is not fractured.

**WARNING!** The heater core is made of glass. Handle the unit with care at all times.

- C. Do not operate any appliance if it has a damaged cord or plug, if it is malfunctioning or it is dropped or damaged in any manner. The power cord of this appliance cannot be replaced; if the cord is damaged, the appliance should be discarded. Never cut the cord.
- D. To avoid the possibility of the appliance plug or receptacle getting wet, position the appliance to one side of a wall mounted receptacle to prevent water from dripping onto the receptacle or plug. A "drip loop" (see illustration) should be arranged by the user for the cord connecting appliance to a receptacle. The "drip loop" is that part of the cord below the level of the receptacle or the connector if an extension cord is used, to prevent water traveling along the cord and coming in contact with the receptacle. If the plug or receptacle does get wet, **DON'T** unplug the cord. Disconnect the fuse or circuit breaker that supplies power to the appliance. Then unplug and examine for presence of water in receptacle.
3. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
4. To avoid injury, do not touch hot parts.
5. **CAUTION:** Always unplug or disconnect all appliances in the aquarium from electricity supply before carrying out maintenance. When inserting or removing the heater from the water, always pull out the mains electricity plug and do not pull the equipment out of the water until it has been allowed to cool for at least 30 minutes. Never yank cord to pull plug from outlet. Grasp the plug and pull to disconnect. Always unplug an appliance from an outlet when not in use.
6. This is an aquarium heater. Do not use an appliance for other than intended use (i.e.: don't use this heater on swimming pools, garden ponds, bathrooms, etc.). The use of attachments not recommended or sold by the appliance manufacturer may cause a dangerous situation.
7. This heater is suitable for **INDOOR** use only. Do not install or store the appliance where it will be exposed to the weather or to temperatures below freezing.
8. Make sure that the heater is securely installed before operating it. The heater must be immersed in water at least up to the **MIN. WATER LEVEL** indicated (but without exceeding the depth of 100 cm - 39 inches). This aquarium heater must never operate outside of water. **The heater must never operate without the heater guard.**
9. If an extension cord is necessary, a cord with proper rating should be used.



A cord rated for less amperes or watts than the appliance rating may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled. The connection should be carried out by a qualified electrical installer.

## 10. SAVE THESE INSTRUCTIONS

## FLUVAL "E" SERIES with "VOTECH" Technology

### **Immediate and clear feedback for the well-being of your aquarium inhabitants!**

The "E" series employs an advanced digital microprocessor monitoring system with dual temperature sensors which continuously monitor and display the aquarium water temperature. As well, it references the set temperature in relation to the actual water temperature. During normal operation, when water temperature is within  $-1/+1\text{ }^{\circ}\text{C}$  or  $-2/+2\text{ }^{\circ}\text{F}$  of the set temperature, the backlight of the LCD screen is green. If water temperature exceeds the set temperature by  $1\text{ }^{\circ}\text{C}$  or  $2\text{ }^{\circ}\text{F}$ , the LCD's backlight will turn red. If water temperature is lower than the set temperature by more than  $1\text{ }^{\circ}\text{C}$  or  $2\text{ }^{\circ}\text{F}$ , the LCD's backlight will turn blue. If ever the temperature goes outside  $-/+3\text{ }^{\circ}\text{C}$  or  $-/+5,5\text{ }^{\circ}\text{F}$  of the set temperature, the display will provide an alert by flashing.

\*The heater is factory calibrated. Variables such as lower room temperature, wide fluctuations, lack of an aquarium cover, presence of submersible pumps and filters, aquarium placement in proximity to cooling sources, may require a higher wattage for proper control. The volumes indicated are approximate values corresponding to water temperatures up to  $26^{\circ}\text{C}/78^{\circ}\text{F}$  with a room temperature of  $20^{\circ}\text{C}/68^{\circ}\text{F}$ . If the ambient temperature is higher than the set temperature of at least  $1^{\circ}\text{C}/2^{\circ}\text{F}$ , or external sources of heat elevate the aquarium temperature more than  $1^{\circ}\text{C}/2^{\circ}\text{F}$ , the LCD display will remain red until conditions change.

## THERMAL SENSOR

### **The temperature sensing technology as precise as an external probe!**

The internal Thermal Sensor samples the actual water temperature directly through the glass of the heater tube rather than the air temperature within the tube, as is the case with standard bi-metallic strip thermostats. Since the Thermal Sensor actually reads the true water temperature, it is more accurate and reliable than conventional bi-metallic heaters.

## RELIABLE AND PRECISE ELECTRONIC COMPONENTS

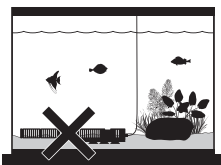
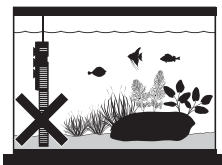
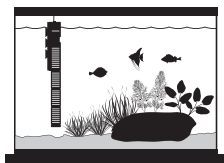
### **Advanced Electronic Circuitry, no moving parts to wear out!**

Since the FLUVAL E heater has no bi-metallic points, there are no moving parts to arc, corrode or wear. The thermostatic control of the heater is separated from the water thermal sensor, different from conventional bi-metallic heaters, where the sensor is directly built into the thermostat. It is therefore less affected by extraneous factors.

## INSTALLATION

### **It's recommended to fill the aquarium with water that is close to the desired temperature you are trying to achieve.**

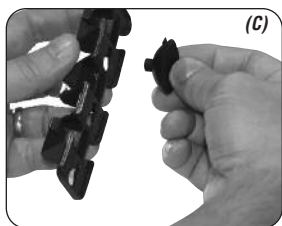
To ensure even and thorough distribution of warmed water and to provide an accurate temperature readings, the heater must be placed in close proximity to a source of water movement. Specifically, it should be placed at the rear of the aquarium, close to a filter or



pumps water output. Water **must** at all times cover the heater at least up to the MIN water level indicated. Always maintain the water level in the aquarium to compensate for water loss due to evaporation.



1. Position the heater in the aquarium and press suction cups firmly against glass, to adhere to the aquarium wall. If rear glass mounting is not possible, use the side glass mounting adapter (ill. **A**). To fit the side mounting bracket, first remove the suction cups from heater bracket, and place them in the slots of the side mounting bracket. (ill. **B** and



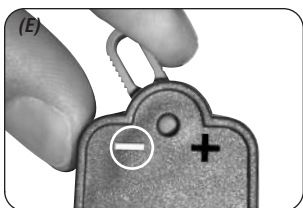
*ill. C)* The three protruding arms of the side mounting bracket are then clipped into the revealed slots of flat heater bracket (*ill. D*). **Important:** Place the heater where the unit is unobstructed, and where there is a free flow of water to ensure even heat dispersion. Ensure that the heater is positioned so that the aquarium water level is never below the MIN indicator found on the guard of the heater. If necessary, you can simply adjust the heater height by sliding it along the bracket, by squeezing the two release arms on the side of the heater guard. Be sure there are no rocks, decorations or gravel obstructions touching the heater to create uneven heat.

2. Allow heater to acclimatize in the aquarium water temperature for 20 minutes before plugging it into the electrical outlet. Be sure to arrange a drip loop for the heater cord and any other electrical item that is placed in or on the aquarium.
3. After 20 minutes, plug in the heater and set the degree scale if necessary (refer to the paragraph **"HOW TO SET °C OR °F DEGREE SCALE"** below) and the aquarium temperature (refer to the paragraph **"HOW TO SET THE AQUARIUM TEMPERATURE"** below). Once set, there is no need for readjustment.
4. At each Power-on, the E Heater goes through an initial self test procedure during which it carries out a self-diagnosis to check internal circuitry and sensors operation, followed by a period to verify the surrounding conditions. The self-diagnostic check requires several minutes to complete, during which time the E heating element is switched on for a few seconds only to verify the heater operation and application conditions. After the self-diagnosis is completed, the E Heater starts its standard operation. During the self-diagnostic test, the LCD screen will display the water temperature.

**WARNING:** The heater must never be operated outside of the aquarium. If the water level falls below the minimum water level MIN, the thermostat can no longer "read" the water temperature and therefore can no longer control the heating correctly. If it has to be taken out of the water or when transferring or changing the water, disconnect the heater from the power source and wait for at least 30 minutes to allow it to cool down.

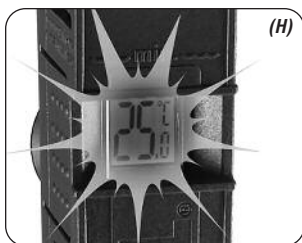
#### HOW TO SET °C OR °F DEGREE SCALE

The heater is factory set on the °C degree scale for 50 Hz markets and °F degree scale for 60 Hz markets. In case you need to change the degree scale, hold the set lever in the full left (-) position for at least 5 seconds (*ill. E*). When the new degree scale is displayed, you may release the lever. After a few seconds, the display will automatically return to display the water temperature (*ill. F*).



#### HOW TO SET THE AQUARIUM TEMPERATURE



The heater is factory set at 25 °C / 77 °F. If a different water temperature is desired, use the easy set lever on the top of the heater. Push the lever to the right or left and release; the LCD screen will start to flash showing the set temperature (*ill. G and H*). Each subsequent



push of the lever to the right or to the left will increase or decrease the set temperature by 0.5 degree intervals (°C or °F). Once the adjustment has been made, release the lever. After a few seconds, the display will stop flashing and will return to the normal working condition displaying the aquarium water temperature.

### INTELLIGENT ERROR MESSAGES

The advanced E Heater microprocessor detects and displays some abnormal or non-optimal usage conditions, which require verification and proper action by the owner. The possible error codes are the following:

Displayed Error Code	Heater Status	Possible cause and solution
<b>E1</b> , DISPLAY IS FLASHING, ALL COLORS ARE ALTERNATELY DISPLAYED 	The "E" Heater has gone into error status and has removed power from the heating element. This error status can only be reset by unplugging the unit.	The "E" Heater has detected an abnormal usage condition. Unplug the heater. Check that all application conditions are correct according to the instructions, including the respect of the MIN water level. Start up the heater again following the "Installation" instructions above.
<b>LF (LOW FLOW)</b> IS DISPLAYED EVERY FEW SECONDS 	The "E" Heater will keep on operating, although its proper operation is inhibited due to poor water circulation around the heater. The error status will be automatically reset once adequate water circulation around the heater has been provided and the heater has had time to re-calibrate itself..	The "E" Heater has detected poor water circulation around the heater. The even and thorough distribution of warmed water inside the tank could be limited by the inadequate circulation. Ensure adequate water circulation around the heater and inside the aquarium. Verify installation conditions outlined in the "INSTALLATION" instructions

**WARNING:** This aquarium heater must never operate outside of water. If the heater is accidentally removed from water while operating, DO NOT re-submerge it in water. Unplug it and let it cool down for at least 1 hour before reusing.

### MAINTENANCE

**CAUTION: Unplug all appliances in the aquarium before carrying out maintenance. Unplug the heater and allow it to cool for at the least 30 minutes before taking it out of the water.**

Clean the heater guard and the glass tube regularly to remove encrustation and deposits that could impair the heating performance and the sensitivity of the thermostat.

1. Remove the heater from the suction cups bracket by squeezing the two release arms on the side of the heater guard and separating it from the bracket (*ill. I*).
2. In order to reach the internal glass tube, remove the heater guard as explained in the paragraph "REMOVE THE HEATER GUARD FROM THE UNIT" below.
3. Clean the heater glass tube regularly to remove deposits that could impair the heater performance. Deposits on heater can be removed by soaking the heater tube in vinegar, then rinsing with fresh water before repositioning in aquarium.
4. Clean the heater guard under a stream of water, assuring that all openings are free from dirt and debris. If required use a soft cleaning brush.

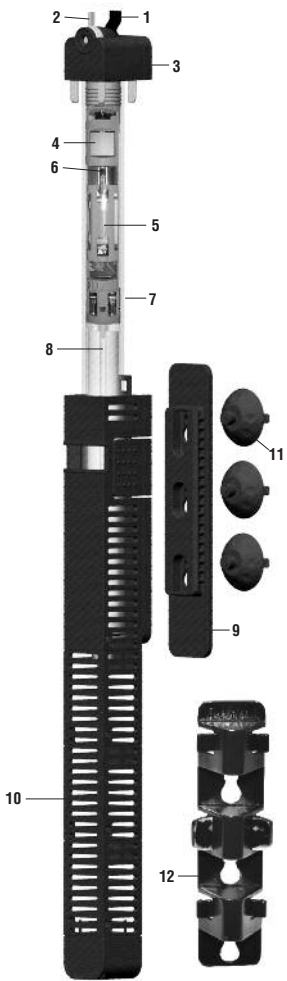
### HOW TO REMOVE THE HEATER GUARD FROM THE UNIT

Once the heater has been removed from the aquarium and suction cup bracket, you can remove the heater guard and have access to the internal glass tube. Using a flathead screwdriver, slightly lift the secure lock tab at the back of the heater cap to free and remove the heater guard, as shown in the pictures below.



- 1 POWER CORD
- 2 EASY SET TEMPERATURE LEVER
- 3 WATERTIGHT SAFETY SEAL
- 4 LCD TEMPERATURE DISPLAY
- 5 ELECTRONIC MONITORING SYSTEM
- 6 THERMAL SENSOR
- 7 GLASS TUBE
- 8 CERAMIC HEATER CORE
- 9 ADJUSTABLE SUCTION CUP BRACKET
- 10 HEATER GUARD
- 11 SUCTION CUPS (3)
- 12 SIDE MOUNTING ADAPTER

FOR FRESH AND  
SALTWATER AQUARIUMS



#### FOR AUTHORIZED GUARANTEE REPAIR SERVICE:

For Authorized Warranty Service please return (well packaged and by registered post) to the address below enclosing dated receipt and reason for return.

If you have any queries or comments about the operation of this product, please let us try to help you before you return the product to your retailer. Most queries can be handled promptly with a phone call. When you call (or write), please have all relevant information such as model number, age of product, details of aquarium set-up, as well as the nature of the problem.

**CANADA:** Hagen Industries, Consumer Repair, 3235 Guénette, Montréal QC H4S 1N2

**U.S.A.:** Rolf C. Hagen (U.S.A.) Corp., 305 Forbes Blvd, Mansfield, MA. 02048

**UK:** Rolf C. Hagen (UK) Ltd, Customer Service Department  
California Drive, Whitwood Ind Est., Castleford, West Yorkshire WF10 5QH

#### CALL US ON OUR TOLL-FREE NUMBER:

**Canada only:** 1-800-554-2436 between 9:00 a.m. and 4:30 p.m.  
Eastern Standard Time. Ask for Customer Service.

**U.S. only:** 1-800-724-2436 between 9:00 a.m. and 4:00 p.m.  
Eastern Standard Time. Ask for Customer Service.

**U.K. only:** Helpline Number 01977 556622.

Between 9:00 AM and 5:00 PM, Monday to Friday (excluding Bank Holidays).

To register your warranty on line or for more information on this and other products go to [www.hagen.com](http://www.hagen.com).

# WARRANTY REGISTRATION CARD

Return to validate your guarantee. Or, if you prefer, you may register on our web site at [www.hagen.com](http://www.hagen.com)

Name											
Address											
City/Town				Prov./State/County				Store			
Postal/Zip Code				MM		DD		YY		Date Purchased	
City/Town				Prov./State/County				Store			
Was this a gift? <input type="checkbox"/> Yes <input type="checkbox"/> No				Age		Sex <input type="checkbox"/> M <input type="checkbox"/> F		Tel.:			

Size of aquarium

Type(s) of fish

€50

€100

€200

€300

**FLUVAL®**

## 5 YEAR WARRANTY

Fluval E Series Heaters are guaranteed against defects in material or workmanship under normal aquarium usage and service for 5 years. We offer a 5 year guarantee on all non-replaceable parts which means that the heater will be repaired or replaced at the manufacturer's discretion, free of charge, when the complete heater is returned with proof of purchase and postage paid. This warranty does not apply to any heater that has been subjected to misuse, negligence, or tampering. No liability is assumed with respect to loss or damage to livestock or personal property irrespective of the cause thereof.

### RECYCLING

This symbol bears the selective sorting symbol for waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European Directive 2002/96/EC in order to be recycled or dismantled to minimize its impact on the environment. For further information, please contact your local or regional Authorities.

**Electronic products not included in the selective sorting process are potentially dangerous for the environment and human health due to the presence of hazardous substances.**

