

# DRAIN BATTERY INSTRUCCIONES MANUAL

## 1 GETTING STARTED

### 1.1 Welcome

The **Drain Battery** system is a state of the art product suitable for many applications requiring timed dosing. The simplicity of the programming process makes this a user friendly dispenser.

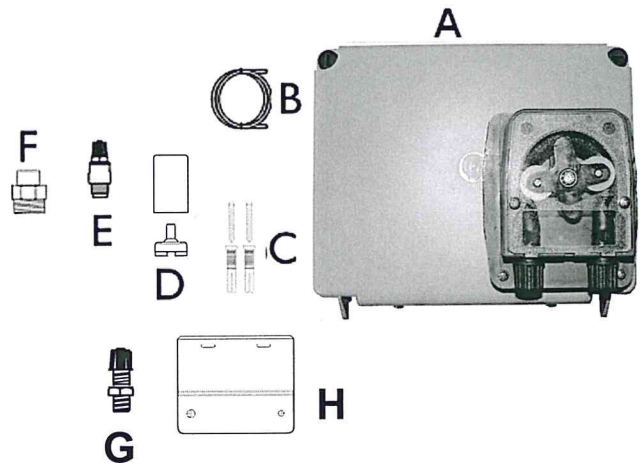
➡ Please review this manual carefully. Pay particular attention to warnings and precautions. Always follow good safety procedures, including the use of proper clothing, eye and face protection.

✋ Please be sure to read this manual and select operating mode before installation.

### 1.2 What's in the box?

Before you start, check that your box contains the following items:

- A. Drain Battery system
- B. PVC 4x6 mm (1/4" OD) tube 4m (12 ft)
- C. Wall Anchors + screws
- D. Ceramic weight + Foot filter
- E. FPM non-return valve (3/8" GAS)
- F. Adaptor for non-return valve
- G. Injection fitting
- H. Mounting bracket



### 1.3 Technical features

- Power supply: lantern battery (x2) 6 VDC
- Consumption: 3.5 W
- Flow rate: 6 l/h (3.5 oz)
- Max back pressure: 0,1 bar (1.5 PSI)
- IP65 water resistant enclosure for protection of the electronics and battery.
- Dimensions: H 234 x W 162 x L 108 mm (H 6,4" x W 7,8" x D 5,1")
- Weight: 0.9 Kg (2 lbs).

### 1.4 Warnings

✋ Read this manual carefully before installation and before starting up the Drain Plus.

✋ When using the installation and programming settings indicated in this manual.

✋ For all connections refer to the topographical diagram for the control circuit given in this manual.

☠ **WARNING:** Always follow the necessary safety procedures, including the use of adequate protection for the eyes, face, hands, and clothing.

☠ **WARNING:** When installing or carrying out maintenance on this equipment, always disconnect it from the power supply.

➡ We are constantly striving to improve all its products, and we therefore reserve the right to make changes at any time without notice.

➡ Failure to abide by the indications given in this manual may result in injury to people or property damage, or compromise or damage the equipment itself.

### 1.5 Material required during installation

➡ An installation kit is available (see Maintenance & Accessories).

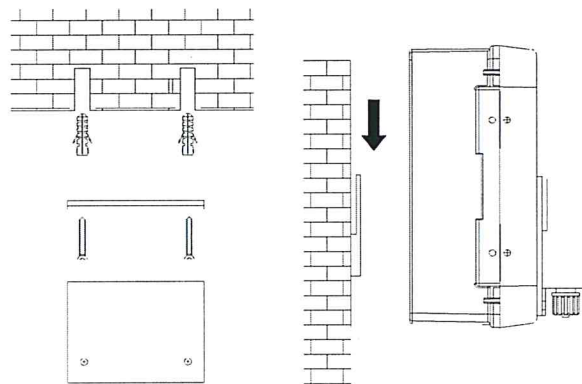
Check all applicable plumbing and electrical codes before proceeding with the installation. This will help to ensure that the system is installed in safe and suitable manner.

**CAUTION:** Do not mount the unit in the direct path of steam. This can short circuit and permanently damage the unit.

**WARNING:** Before installing the device and before intervening in any way on the metering unit, make sure that the power supply is disconnected.

## 2.1 Mounting the system

- Wall mount the system with the supplied brackets and screws
- Determine a suitable location for the system
- Using the bracket as a template, mark and drill holes for securing the system to the wall
- Insert the anchors in the holes
- Screw the bracket in place (flat side against the wall with holes on bottom) with the hardware provided



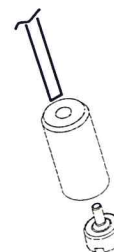
Picture 1

## 2.2 Plumbing

The following installation steps apply for the pump:

Suction Line - Assemble the foot filter to insert in the chemical container (See picture 2). –

- Insert the 4x6 mm (1/4" OD) PVC tube through the ceramic weight.
- Connect the PVC tube on to the barbed fitting of the plastic filter.
- Slide on the ceramic weight in order to secure the connection.
- Slide the filter and the tube into the chemical container so that it reaches the bottom.
- Connect the other side of the tube into the pump inlet fitting



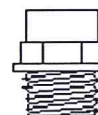
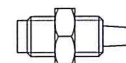
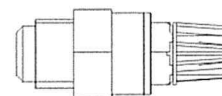
Picture 2

**i** Periodically clean it from possible residues.

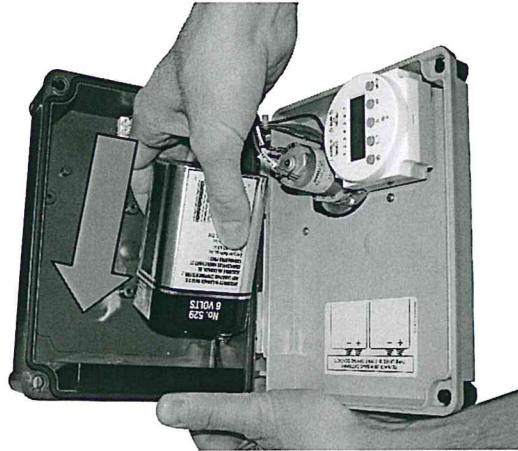
- Delivery Line – Connect PVC tube to delivery side of pump. Connect other end to the check valve or injection fitting.

The following components are included:

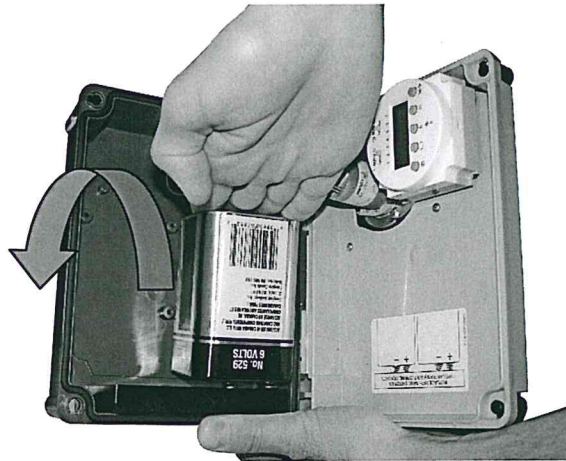
- duck check valve in FPM:  
**Threads: 3/8" Standard**  
**Drill bit size: 14 mm (9/16")**
- Injection fitting:  
**Threads: 1/8" Standard**  
**Drill bit size: 8,5 mm (5/16")**
- Adaptor  
**Threads: 3/8" Standard Female -1/2" Standard Male**



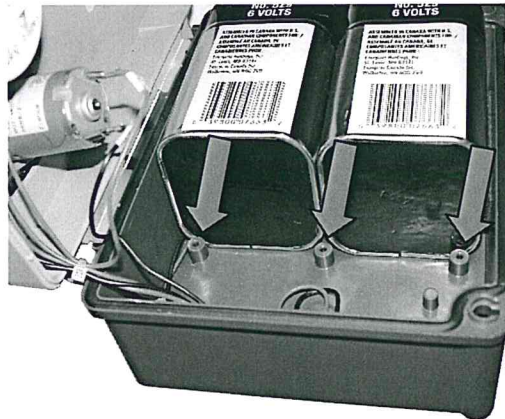
Insert the Lantern batteries by following the following steps:



Be aware of the battery polarization direction.



Push the battery completely to the side of the system and embed it to the bottom of the system.



Repeat the same steps to insert the other battery, make sure they are hooked back to the columns.

**i** It's recommended to use battery with the following specifications:

- Lantern battery 6 VDC
- Alkaline battery
- Spring version
- Dimensions: (H x W x L)109x66x66 mm



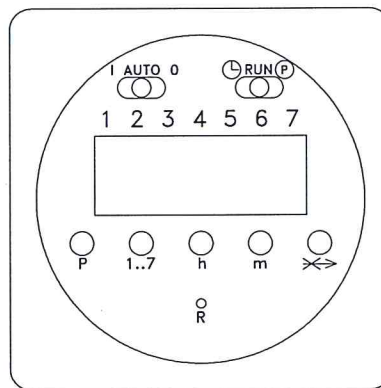
## 3.1 Controls of the digital clock

The clock is situated on the inside of the front cover. On the front of the clock there are the following elements:

- **I AUTO O**: switch for selecting the operating mode, *continuous* (I), *automatic* (AUTO), system excluded (O).
- **⌚ RUN P**: selector for *setting the time on the timer* (⌚), for *operating the timer* (RUN), for *programming the timer* (P).
- **Numbers from 1 to 7**: series of numbers useful for programming the timer and the clock. They indicate the day(s) of the week by means of the symbol(s) ▲ on the display in positions corresponding to the numbers
- **push-button "P"**: to confirm the programming that has been done and go on to the next step
- **push-buttons "1...7"**: for selecting the programming blocks by means of the symbols ▲ shown on the upper part of the display.

The sequence is cyclic, and is: 1 (Monday), 2 (Tuesday), 3 (Wednesday), 4 (Thursday), 5 (Friday), 6 (Saturday), 7 (Sunday); 1...5 (from Monday to Friday), 6...7 (Saturday and Sunday); 1...6 (from Monday to Saturday), 1...7 (from Monday to Sunday).

- **push-button "h"**: for selecting the hours at the time of programming.
- **push-button "m"**: for selecting the minutes at the time of programming.
- **push-button "→"**: SKIP push-button.
- **push-button "R"**: reset.



**Picture 8**

## 3.2 Digital Timer Programming Instructions

### Step 1. – Set The Current Day And Current Time

Set upper left slide switch to middle or "AUTO" position

Set upper right slide switch to the left (Clock Face Icon) position

Use the 1...7 button to scroll to the current day – 1/Monday thru 7/Sunday

Use the hour (h) and minute (m) buttons to set the current time

### Step 2. – Set "Dosing Start" And "Dosing Stop" Times

Move the upper right slide switch completely to the right or "P" position

(A light bulb icon and the number 1 will appear in the display)

Use the 1...7 button to scroll to the day or days that dosing is to occur (1 = Monday thru 7 = Sunday)

Use the **hour (h)** and **minute (m)** button to set the "**START DOSING**" time. Press "P" button to set

(The display will now be flashing and the number 2 will appear indicating that the "**STOP DOSING**" time must be set)

Use the 1...7 push button to scroll to the days that dosing will occur as above

Use the **hour (h)** and **minute (m)** push button to set the "**STOP DOSING**" time

(NOTE: With the standard squeeze tube, the SEKO Drain Battery System will feed approximately 3.5oz/min.)

Press "P" button to set.

(The TDS accepts up to eight dosings per day by repeating the above instructions for program steps 3 thru 16).

If no more dosing times are to be set, move the upper right slide switch to the "RUN" position



*The intervals of operation can be overlapped, as per the following example:*

*One weekly cycle from 9.00-12.00 a.m. and one daily cycle on Mondays from 11.00 a.m. to 2.00 p.m. will cause a cycle on Mondays from 9.00 a.m. to 2.00 p.m.*

### 3.3 Cancelling cycles

To cancel a single cycle of activation of the system, proceed as follows:

Select the time at which the cycle is to start using the "P" push-button. Keep the "P" and "→" push-buttons both pressed until the display flashes with the time 0.00. Repeat the same operation with the time at which the cycle is to end.

### 3.4 Skip function

This function enables activation of the programs for the next day to be avoided, by pressing the "→" push-button (with the right-hand switch in the "RUN" mode). Activation is highlighted by the appearance of the → symbol on the display.

The SKIP order will start at 0.00 a.m. and end at 12.00 p.m. on the day following selection. It can only be revoked before the day for which the SKIP function has been activated.

When the SKIP function comes into effect, the symbol disappears from the display and the time of day will flash throughout the day. The push-button pad will be inactive for the whole SKIPPED day. Once the effect of this command has started, it can no longer be cancelled. Do not press the "→" push-button on the skipped day, otherwise the SKIP command will also be extended to the next day.

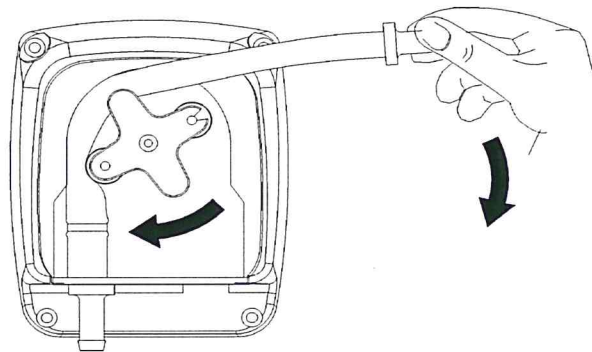
## 4 MAINTENANCE AND ACCESSORIES

### 4.1 Replacing the squeeze tube

Make sure that the right-hand switch is on the “ O ” position and proceed as follows:

- Remove the screws and cover protecting the peristaltic pump.
- Place the thumbscrew holder with the two thumbscrews in a vertical position.
- Remove the connector situated to the left of the pump from its seat and pull the tube fitting towards the front panel. While the tube is being withdrawn, follow its path by turning the roller in a clockwise direction by hand until the connector to the right of the pump can also be removed.
- To re-assemble, move the roller assembly so the two rollers are horizontal to each other.
- Push the connector to the left of the pump in as far as it will go, with the curved part towards the bottom;
- Press the tube fitting into its seat, following its path progressively by turning the roller assembly in a clockwise direction by hand, until the tube fitting situated to the right of the pump can also be seated properly.
- Replace the protecting cover into place and resecure with the screws.

It will now OK to position the right-hand switch on “ I ”.



## 5 TROUBLESHOOTING

### 5.1 Pump will not activate:

- Check pump output terminals for loose screws and disconnected wires.
- Check for proper voltage across motor windings.
- Check for obstruction in pump head.
- Check the program time and quantity and also clock time.

### 5.2 Pump runs too slowly:

- Check roller block for binding.
- Check for lubrication on squeeze tube.

### 5.3 Loss of pump prime:

- Check pickup line for any holes or air leaks.
- Check squeeze tubing in pump for any cracks or pin holes.
- Check tubing for deterioration.