INSTRUCTIONS

AUTONOMOUS SUITCASE FOR AQUATIC SAMPLING

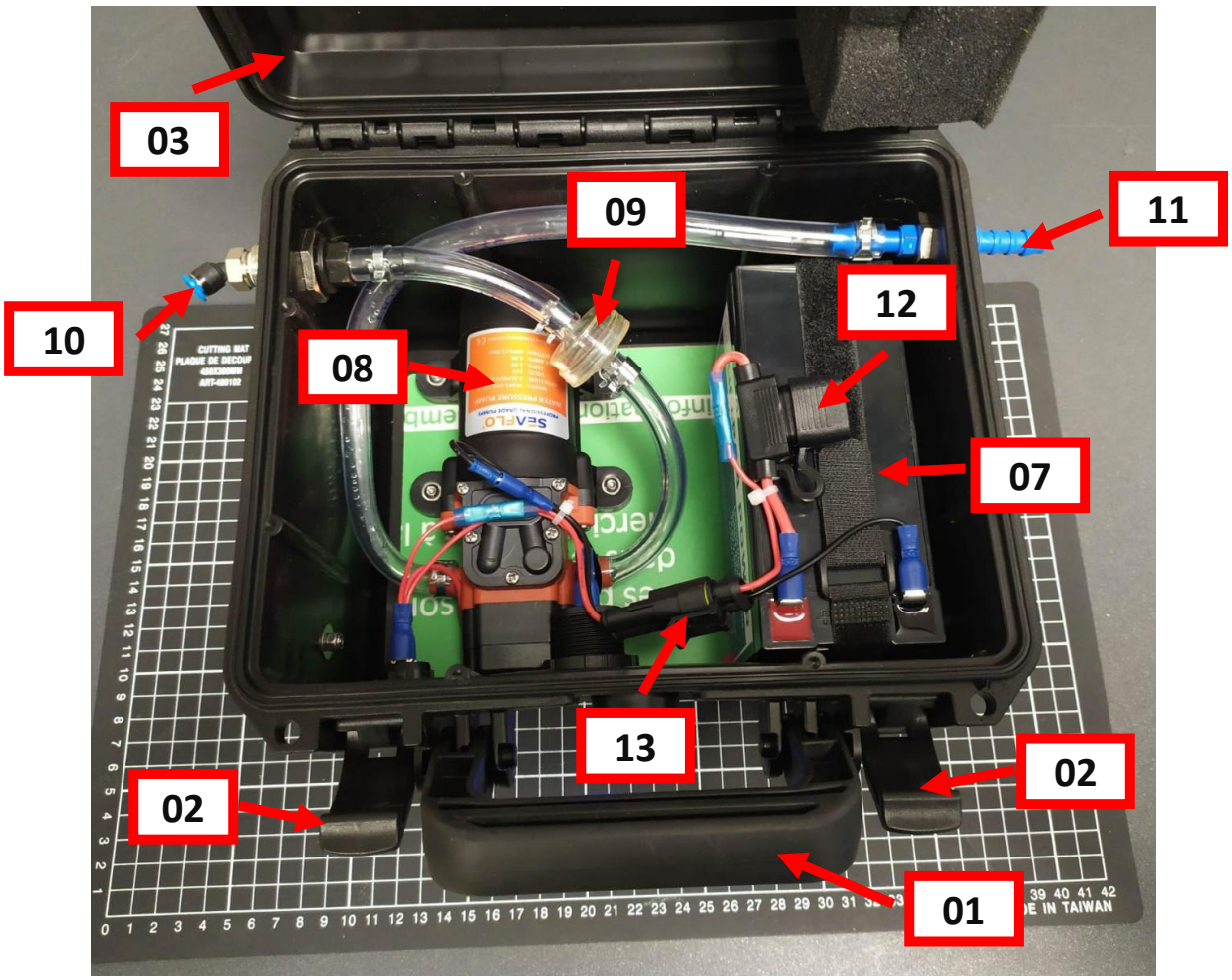
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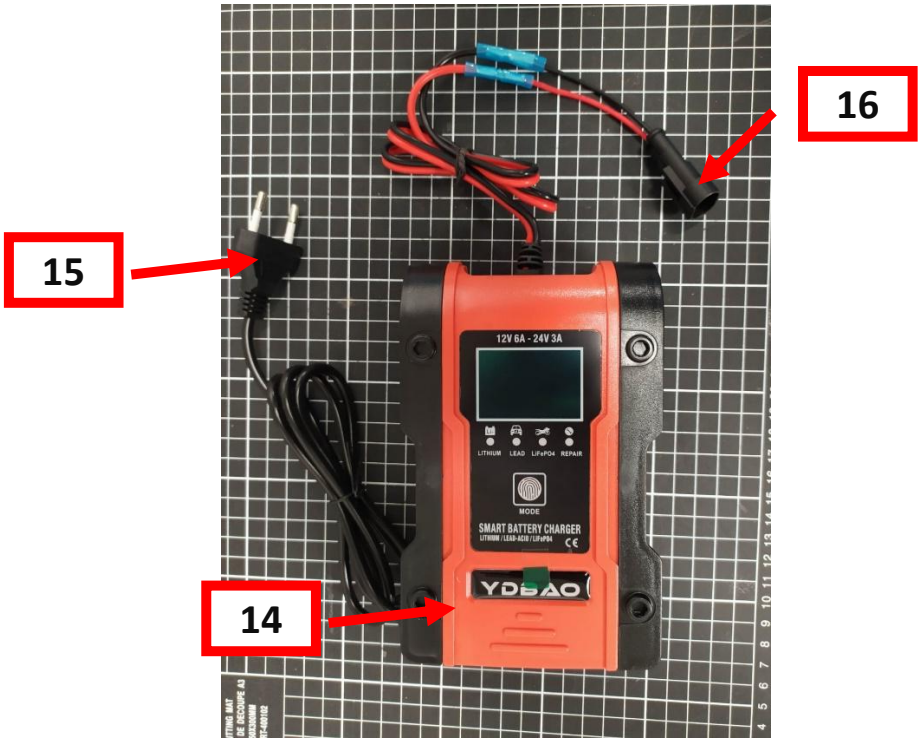


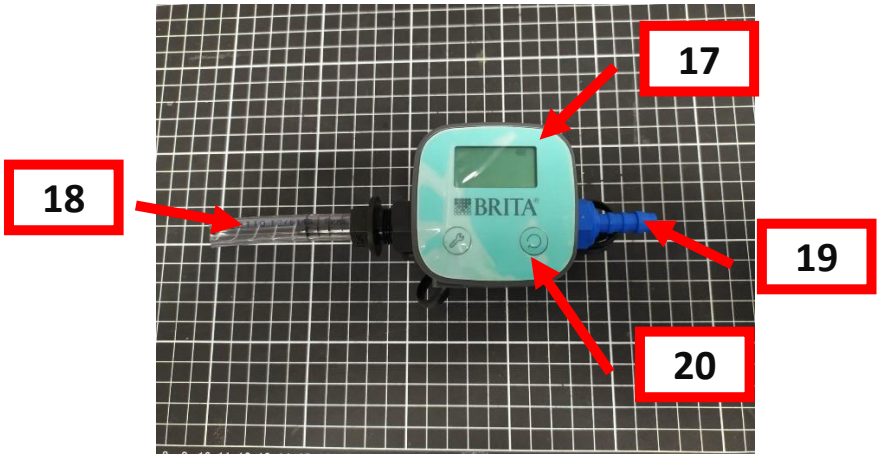
Operating and safety instructions

Before reading the operating instructions, look at the illustration below familiarize yourself with all the functions of the device.


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04
06


03
09
11
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07
13
02
02
01


16
15
12V 6A - 24V 3A
LITHIUM
LEAD
LiFePO4
REPAIR
MODE
SMART BATTERY CHARGER
14


17
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BRITA
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EQUIPMENT PRESENTATION

Keep these operating instructions in a safe place.
Familiarize yourself with the instrument’s features before the first use and inform yourself about the correct handling of the power tools. Read these operating instructions. Also provide all documents to the person to whom you will hand over the instrument.

INTENDED USE

- ➔ This device is designed exclusively to ensure the flow of water through a primary filter system upstream of the sampling case.
- ➔ This device is to be used only for water sampling for environmental DNA analysis.
- ➔ Use the device only as described and for the purposes indicated here.
- ➔ Any other use or modification of the device is considered improper and presents a significant risk of accidents.
- ➔ The manufacturer accepts no liability for any damage caused by improper use.

INSTALLATION

EQUIPEMENTS

1. Carrying handle
2. Lid locking levers
3. Lid case
4. Voltmeter display
5. On/off switch
6. Rings for carrying strap
7. Service battery
8. Diaphragm pump
9. Pump protection filter (NA MOD.S001-21-1)
10. Pump inlet connector
11. Pump output connector
12. Electrical circuit protection fuse 3 A
13. Electrical connector/timer
14. Automatic intelligent battery charger
15. 240V power supply socket
16. Battery connection coding connector
17. Flowmeter
18. Flowmeter input connection
19. Flowmeter output connection
20. Flowmeter function control
21. Carrying strap

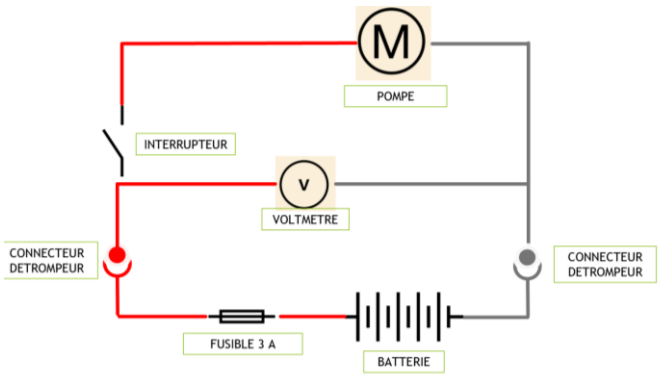
TECHNICAL SPECIFICATIONS

- **SEAFLO diaphragm pump:**
  - Volts : 12 V DC
  - AMPS : 1.6 A
  - Max AMPS : 4.0 A
  - Pressure supplied: 40 PSI (2.8 bar)
- **Service battery:**
  - Type LiFePO4
  - Rated voltage: 12.8 V
  - Capacity : 7.5 Ah
  - Energy capacity : 96 Wh
- **Automatic Smart Battery Charger:**
  - Brand : YDBAO
  - Input 230V/ 50/60 Hz
  - Output 6A/12V/24V automatic
- **Flowmeter Brita:**
  - Measuring range 10 à 100 L/h
  - Internal battery 12 V

SUPPLIES

- Suitcase with pump, filter and battery
- Battery charger
- Flowmeter
- Carrying strap

ELECTRICAL DIAGRAM



INTRODUCTION / GENERAL SAFETY INSTRUCTIONS FOR POWER TOOLS

General Safety Instructions for Power Tools

Keep all safety and instruction manuals for future reference!

The term "power tool" as used in these safety instructions refers to power tools that operate on AC power (with AC cord) and power tools that operate on batteries (without AC cord).

Do not use the unit in an explosive atmosphere containing flammable liquids, gases or dusts.

ELECTRICAL SAFETY when using the 240V/12V battery charger

- **The mains plug of the unit must fit easily into the socket. The plug must never be modified. Do not use an adapter with grounded appliances.** An intact plug and a proper outlet will reduce the risk of electric shock.
- **Avoid physical contact with grounded surfaces, e.g., pipes, heaters, ovens and refrigerators.** High risk of electric shock when grounded.
- **Do not expose this equipment to rain or moisture.** Water entering an electrical device increases the risk of electric shock.
- **Never use the cable to carry or hang the unit or to disconnect the plug from the wall outlet. Keep the cable away from heat sources, sharp edges or moving parts of the equipment.** A twisted or tangled cord increases the risk of electric shock.
- **When using a power tool outdoors, use only an extension cord that is approved for outdoor use.** Using an extension cord rated for outdoor use reduces the risk of electric shock.
- **If the power tool is to be used in a wet environment, a ground fault circuit interrupter (GFCI) should be used.** The use of a ground fault circuit interrupter reduces the risk of electric shock.

USE AND HANDLING OF A BATTERY OPERATED DEVICE

- **Charge the battery only with chargers recommended by the manufacturer**. A charger that is compatible with some types of batteries may cause a fire if used with other batteries.
- **Only use the battery specified for use with the case.** The use of different batteries may cause injury or fire.
- **Keep unused batteries far from staples, coins, keys, nails, screws, and other metal objects that could short-circuit the contacts.** A short circuit between the battery contacts can cause burns or fire.
- **The battery may leak if used improperly. Avoid contact with this liquid. Wash with water in case of unintentional contact. If the liquid gets into your eyes, seek medical attention.** Liquid leaking from batteries can cause skin irritation or burns.
- **CAUTION! RISK OF EXPLOSION!**

ORIGINAL ACCESSORIES / ADDITIONAL DEVICES

- **Only use accessories and replacement devices that are mentioned in the operating instructions.** The use of replacement devices other than those recommended in these operating instructions, or other accessories, can lead to a risk of injury.

BEFORE OPERATING

Charge the battery before first use

- **WARNING! RISK OF ELECTRIC SHOCK!**
- Before cleaning or servicing the charger or battery pack, always remove the mains plug from the socket.
- **Note!** A new battery or one that has not been used for a long time must be recharged before it is used for the first time/again.
- **CAUTION!** Always remove the power plug from the mains socket before connecting or disconnecting the battery.
- Never charge the battery pack if the ambient temperature is below 10 °C or above 40 °C.
- **Refer to the charger's specific instructions** for use before making any electrical connection between the charger and the battery pack.
- **Make sure the LiFePO4 battery type is configured before connecting the charger to the mains.**
- **Charger/battery connection**:

- Open the case to access the battery connection
- Plug the charger connector (16) into the battery connector (13)
- **Leave the case open while charging the battery**
- Reverse method for disconnecting the charger/battery
- Follow the indications displayed on the charger. If the voltage is >12.6, the battery is charged.

COMMISSIONING

➔ **Powering up:**
- Open the case to access the battery connection
- Check that the service switch **(05)** is set to 0
- Plug the general circuit connector **(13)** into the one connected to the battery (13)
- Check the battery voltage on the voltmeter (04)
  - ⇨ Battery is full if voltage is >12.6 V
- Check that the pump safety filter (09) is clean
  - ⇨ If the filter is dirty, replace it.

Close the case with the two closing levers (02).

STANDARD USE

➔ Before any use, check that the battery of the pump is sufficiently charged to carry out your samples (approximately 12 hours of use at full charge).

➔ Connect the filtered water flowmeter (17) to the pump outlet (11) using the small silicone connector attached to the flowmeter.
- The flowmeter must be horizontal, with the water entering from the left.
- Attach the drain hose to the flowmeter outlet (blue part) (11).

➔ Place the filtered water discharge hose in a bucket or directly downstream of the sampling point.

➔ Check that the desired volume of water has been programmed and that the flowmeter is ready to measure the volume.
- To reset the count, press the control (20) for three seconds.
- The volume to be filtered will be displayed.
- Refer to the specific instructions enclosed.

➔ Connect the general connector/timer, located in the box (13).

➔ Connect the rigid water inlet pipe (diameter 6 mm) to the pump inlet (10) and place the filter capsule at the other end of the pipe. Then place the capsule on the surface of the water, where the filtration will take place.

➔ Turn the switch button from O to I position to start the pump.

➔ During the filtration process, make sure that the filter is laying in the water without touching the bottom and that the water is draining out through the drain hose.

➔ When the desired volume of water has been filtered, stop the pump: switch the button to O position.

➔ When the filtration is finished, check that the hoses and the pump are empty of residual water by activating the pump with the hoses out of the water (empty hoses).

➔ When the hoses have been emptied of residual water, switch off the case by disconnecting the general connector/timer (13).

IMPORTANT INFORMATION ABOUT THE FLOW METER: This device **estimates** the volume of water filtered. The figure displayed is **approximate** due to potential variations in water turbidity.

MAINTENANCE AND CLEANING

- Before performing all cleaning and maintenance tasks, disconnect the general connector/desolder (13).
- Prevent liquids from entering the unit's housing.
- Use a cloth to wipe the housing.
- Never use gasoline, solvents or detergents that attack the plastic.

AFTER-SALES SERVICE

WARNING!

- Refer all servicing to qualified service personnel or electricians and use only genuine spare parts.
- This will ensure the safe operation of the unit.

WARNING!

- To avoid danger, always have the plug or power cord replaced by the manufacturer or his service representative.
- This will ensure the safe operation of the unit.

WARRANTY

- This unit has a 2-year warranty from the date of purchase.
- The device has been manufactured with care and has been thoroughly checked before distribution.
- If the warranty applies, please contact your service representative by telephone.
- The warranty is only valid for material and manufacturing faults, not for transport damage, wearing parts or damage to sensitive parts, e.g. switches or batteries.
- The warranty is void in the event of improper handling, rough handling and in the event of service not performed by our authorized service center.
- This warranty is not a restriction of your legal rights.

DISPOSAL

- **Never dispose of electrical tools in household waste!**
- According to the European directive 2002/96/EC on used electrical and electronic equipment and its implementation under national law, used electrical tools must be collected separately and disposed of in an environmentally friendly recycling system
- **Do not dispose of batteries in the household waste!**
- Defective or used batteries must be recycled in accordance with Directive 2006 / 66 / EC.
- Take the battery and/or the device to one of the collection points provided.
- Your local authority or town hall will inform you about the possibilities of disposing of the used device.

DECLARATION OF CONFORMITY/MANUFACTURER

We, the undersigned, **S.A.S ARGALY** represented by BELLEMAIN Éva, President, 20 Place René Cassin, 73800 Montmélian, hereby declare that this product is in conformity with the following standards, normative documents and reference documents, and EC directives:

- ➔ Machinery Directive (2006 / 42 / EC)
- ➔ EC Low Voltage Directive (2006 / 95 / EC)
- ➔ Electromagnetic Compatibility (2004 / 108 / EC)

- ➔ Designation of the device: **eDNA sampling**

At BOURGET DU LAC, 09/07/2026

Signature

BELLEMAIN Éva, President





We reserve the right to make technical changes to improve the product.

FAQ

Is the pump not working?

- Plug the connector into the housing.
- Check the connections (black wire to the black terminal, red wire to the red terminal).
- Switch on the switch located on the outside of the housing.
- Recharge the battery (maximum charging time: 4 hours).
- Replace the fuse.
- Check that it isn't overheating; if you're in direct sunlight, find a shady spot and let it cool down.

Is the flow very slow?

- Remove the Parafilm from the end of the rigid tube.
- Place the capsule directly in the water to pump and avoid placing a tube upstream (between the water and the capsule).
- The capsule is probably clogged. Make sure you use another capsule if the filtered volume is insufficient.

Is the flow meter not working?

- Insert the battery.
- Change the battery.
- Try resetting it.

Is the pump not recharging?

- Check that the charger is set to the LifePO4 setting.
- Check the connections.