

HE-01



12v + 230v (ø900-ø1200)
Cassette Honey Extractors
USER'S MANUAL

HONEY EXTRACTOR OPERATION

Before using the machine, read this user's manual and follow the instructions contained therein. The manufacturer cannot be held responsible for damage caused by improper use or inappropriate handling.

WARNING!!!

12 V Power supply honey extractor must not be connected via rectifier as it damages the controller
This type of damage is not covered by manufacturer's warranty.

Use only „Lyson” brand power supply or battery. Other types are not recommended.



• Electrical Safety

1. Electric installation needs to be equipped with residual current device and needs to be designed to trip on a leakage current of 30 mA. Overcurrent protection needs to be checked periodically.
2. If the power cord is damaged and needs to be exchanged it has to be done through our distribution point or by authorised point of repair in order to avoid danger. The honey extractor cannot be used if the power cord is damaged.
3. Before turning the device on, make sure that the programmer is switched off. Switch should be set to '0'.
4. Make sure that the power supply is in line with the honey extractor power supply
5. Take extra care whilst plugging a power cord
Hands have to be dry. Place on a dry surface
6. The EMERGENCY STOP button should be switched off when starting. (the button needs to pop out when switched off) Pressing the EMERGENCY button results in the immediate stop of centrifugation.
7. Keep the honey extractor lid closed during centrifugation. Opening the lid whilst spinning is strictly forbidden.
8. Honey extractor must not be moved during the spinning process.
9. Protect the motor and steering against moisture (also during storage).
10. Do not pull power cord, keep the power cord away from heat sources, sharp edges and keep it in good condition.



Safety

1. This device is not designed to be used by persons (including children) with limited physical, sensual or psychological abilities or by persons who do not have experience or knowledge of the device unless it is done under supervision

and according to the user manual passed by persons responsible for their safety. Keep away from children.

2. In case of device damage the repair needs to be carried out by the authorised point in order to avoid danger.
3. It is not allowed to carry out any maintenance works when the honey extractor is in use.
4. All casings need to be firmly attached to the device during work.
5. In case of any potential danger press the STOP button immediately. The honey extractor can be restarted once the danger has been eliminated.
6. For indoor use only! The device is not designed to be used outdoors.
7. Fan belt should remain loose. It must not be strained.
8. The device should not be switched on and be stored in the temperature below 0° C. Honey extractor should not be switched on when the temperature is below 5° C. Before switching the honey extractor on, in case when it was moved from the place with lower temperature to the place with higher temperature, wait until the temperature has balanced.



Repairing the device whilst in operation is STRICTLY FORBIDDEN



Detaching the covers during use FORBIDDEN!

Work Place

Working area should be kept clean and tidy
The proper lighting should be provided.

Storage

Once honey extracting has finished, wash the honey extractor and dry it thoroughly.

Before every season the technical check-up needs to be performed. If any fault found, contact the appropriate provider.

HONEY EXTRACTOR USER'S MANUAL

General guidelines

1. Place the honey extractor in the designated place.
2. Fix the honey extractor to the surface in order to avoid unnecessary movement.

Terms of use:

1. Honey extractor is designed to extract honey from honey frames.
2. Before using, honey extractor should be washed carefully with hot water and small amount of detergents (allowed for use in food industry) or by use of a pressure washer. (see **Maintenance section**)

3. Frames arrangement:

Place the honey frames (prepared beforehand) in the basket of the honey extractor paying special attention to their correct arrangement. Honey extractor should be selected accordingly to the frame type:

- In cassette honey extractor pay special attention to correct frames arrangement which should fit into the cassette.
- In radial honey extractor - upper beams of frames should rest on the upper and lower basket rods; Failing that (too short or too long beams) may result in extractor or/and frame damage.

Frames in both types of honey extractors have to be arranged with the upper beam facing the drum as shown on the **Fig. 2**



Fig. 1 Correct frame arrangement in the radial basket

basket



radial honey extractors

basket



cassette honey extractors



Fig. 2 Correct frames arrangement in the cassette basket

Improper frame arrangement may cause damages not covered by warranty!

4. Before commencing work:

- make sure that frames are correctly arranged in the basket of the honey extractor to avoid damages (see point 5 – honey extractor user manual)
- check if the emergency stop button is not pressed
- insert the plug into the socket, followed by turning the knob on the control panel from position "0" to position "1". Then proceed to honey extractor powering according to the honey extractor controller user manual – see **Automatic Controller section**.
- Make sure the power selector switch is set to appropriate power source (12V or 230V), and the Emergency button needs to be in OFF position.



5. First phase of the spinning should be performed slowly, in order to avoid possible breaking of honeycombs. Special attention should be paid to so called "young honey frames".

6. Spinning basket should not be blocked by the honey accumulated in the drum. If that happens, stop the honey extractor in order to avoid its damage. Once honey has dripped down to a container, the spinning can be restarted.

7. Place the honey containers under the drain valves.

8. During the spinning the drain valves should be left open so that the extracted honey can flow freely.



Warning!!! Frames can only be rearranged when the basket has fully stopped!

Honey Extractor Maintenance



IMPORTANT!

Unplug the extractor from the power source prior to commencing any maintenance work.

After the honey extracting has finished, honey extractor should be washed carefully with hot water and small amount of detergents (allowed for use in food industry) or by use of a pressure washer. During the duration of washing pay special care not to wet the motor and the controller (they may be covered with a water-proof cloth during washing).

Whilst washing, make sure not to wet the bearings which are located under the drum. To avoid wetting the bearings, cover the slot inside the drum where the axis of the basket is located. Once completed, rinse the honey extractor with clean water and dry it thoroughly.

UTILIZATION:

The device needs to be utilized in the point designed for that purpose. The consumer has the right to return the used equipment to the network of electrical distributors, at least free of charge and directly, if the device returned is of proper type and performs the same function as the newly purchased equipment.

- **HE-01 Controller**



The controller is equipped with a 0/I button which is used to turn the extractor on/off, as well as EMERGENCY switch to immediately stop the spinning process and fuses located above the 0/I switch **fot.5**



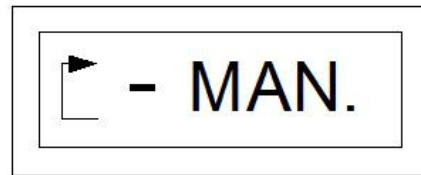
fot. 5 5A, 15A fuses (side pannel)

Control Panel is equipped with navigation buttons „PLUS”, „MINUS” and the „ON/OFF” button.

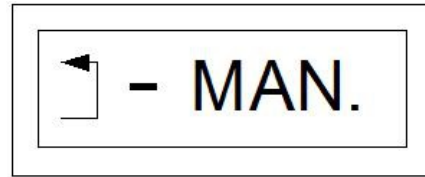
Controller description:

The controller has 3 factory preset program:

- **Two manual programs** (clockwise rotation and counterclockwise rotation)



Clockwise direction manual program



Counterclockwise direction manual program

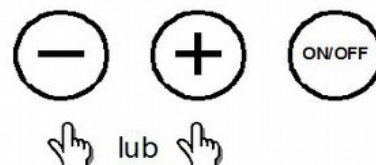
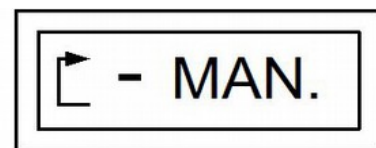
- **P-AUTO** program, that allows you to configure your own spin cycle



Automatic program

- **Turning on and program selection**

- Before turning the honey extractor on, make sure that the switch "0/1" on the controller housing is set to "0"
- Then make sure the emergency switch ("EMERGENCY STOP") is not pressed (turn to pop it out).
- Turn the switch "0/1" from "0" to "1"



- To run a manual or automatic programs select the desired

program by using the "PLUS" or "MINUS" buttons and then press the "ON / OFF" button.

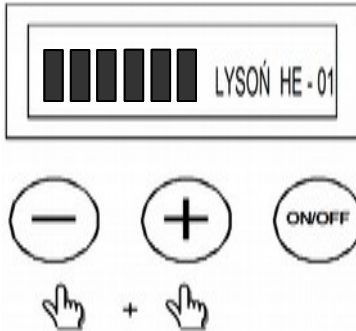
- In manual modes, the speed of rotating basket can be decreased or increased by pressing „PLUS” or „MINUS” respectively.
- Press „ON/OFF” to stop the basket.

„P-AUTO” mode Programming

The HE-01 controller allows the customer to define his own honey extraction „P-AUTO” cycle. It can be set up in the controllers programming menu.

To program a personalised cycle, enter the programming and configuration mode and set the value of 3 parameters.

Entering the configuration and programming mode.



The above picture shows the way of entering into programming mode

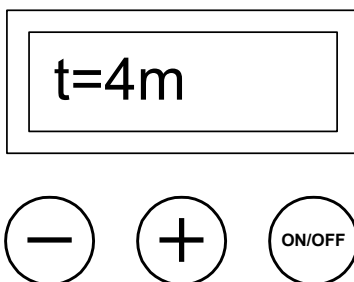
During startup the manufacturer's name will be displayed. Press both buttons simultaneously (**PLUS** and **MINUS**) until the „Prog.” message is displayed.

P-AUTO programming consists of 4 identical steps (in terms of their duration). Additionally, steps 1 & 2 and 3 & 4 have the same rotation speed.

First parameter:

„t” - total running time of honey extractor in minutes.
The programmed total time of the cycle does not include the time needed for basket acceleration or deceleration. That surplus (time) will be added automatically. The real duration of the cycle will be then longer than that entered.

This parameter is set by pressing „PLUS” or „MINUS” buttons.



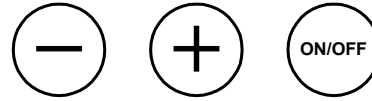
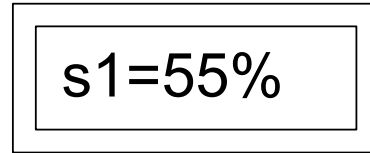
Programming – total extraction process time (from 3 to 15 minutes).

The duration of each of the four steps is the total time of spin cycle divided by four -
 for example, to set t = 4 minutes, each step takes one minute.
 Confirm the setting by pressing "ON / OFF".

Second parameter:

„s1” - spinning speed of honey extractor basket in step 1 and 2. This parameter is set by using the "PLUS" or "MINUS" .

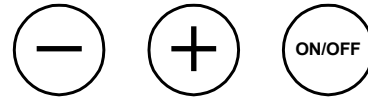
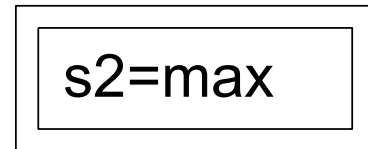
Confirm the setting by pressing "ON / OFF"



Programming - from 25% to 100%.
 100% setting is displayed as "max".

Trzeci parametr:

„s2”- spinning speed of honey extractor basket in step 3 and 4
 This parameter is set by using the "PLUS" or "MINUS" .
 Confirm the setting by pressing "ON / OFF".

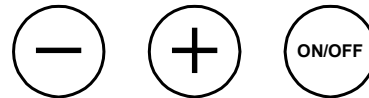
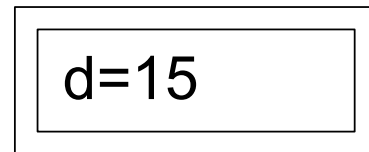


Programming – from 25% to 100%.
 100% setting is displayed as "max".

Ostatni czwarty parametr:

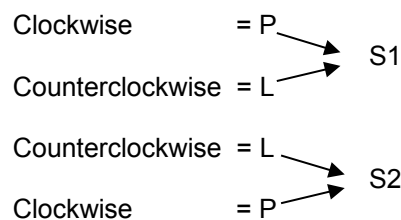
„d” - acceleration dynamics (range between 5 and 25)
 Recommended setting - 15.

This parameter is set by using the "PLUS" or "MINUS" .
 Confirm the setting by pressing "ON / OFF".



Programming – acceleration dynamics
 5 – slow acceleration,
 25 – fast acceleration.

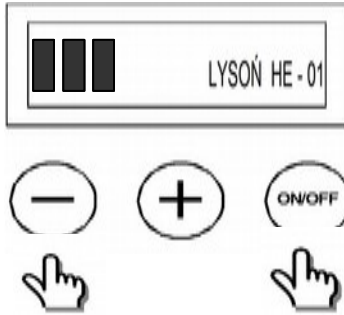
The setting has got an impact on the drive motor dynamics regardless of the cycle and mode of operation



Message "O" indicates the end of programming, followed by a restart of the controller. Honey extractor is ready to work.

• Configuration Menu – Fine Tuning

To enter the controller configuration press “MINUS” and “ON/OFF” buttons during controller's start-up and when the LCD displays the manufacturer name until “Config.” message appears.



The configuration menu allows you to tune motor drive performance according to the load - typical for the given size of honey extractor.

Menu allows you to program six parameters listed below.

- **Parameter b1** (setting 20s – 180s, default 50s)
First time of deceleration cycle, time needed to revert, decelerating from S1 velocity (lower speed defined for steps 1 and 2)
- **Parameter b2** (setting 20s – 180s, default 50s)
time of deceleration cycle, time needed to revert, decelerating from S2 velocity
(higher speed defined for steps 3 and 4) and to stop the basket of honey extractor after completing step 4)
- **Parameter bm** (setting 1-10, default 8)
Scaling of the braking time, adjustment time needed to stop the basket of honey extractor during interruption of work in automatic or manual mode.
- **Parameter ms** (setting 15 – 25, default 25) Limiting the maximum motor rotation speed (reduction in the achieved spinning speed).
- **Parameter d** (setting 5 – 25, default 25)
Drive motor dynamics (acceleration rate)
- **Parameter fs** (setting 1s – 20s, default 10s)
Setup time, forcing the drive motor starting speed (which influences the ability of honey extractor for "frame laying").