

# INSTRUCTIONS MANUAL

## Multifunction machine with turntable or tabletop



# LYSON N

**Przedsiębiorstwo Pszczelarskie Łyson**

Spółka z o.o.

34-124 Klecza Górna, st.Pszczela 2, Poland

[www.lyson.eu](http://www.lyson.eu), e-mail; [lyson@lyson.com.pl](mailto:lyson@lyson.com.pl)

Tel. +48 33/875-99-40, +48 33/870-64-02

# This manual covers following devices (codes): W204001, W204002

## **IMPORTANT**

**Read this user's manual before use and follow the given instructions.**

**Producer cannot be held responsible for any damages caused by improper use.**

## **Usage:**

This device has been designed for bottling, pumping and creaming honey.



## **ELECTRICAL SAFETY**

- The device must be plugged into the grounded socket with a voltage specified on the rating label.
- Electricity supply must be fitted with a residual current device with a rated tripping current not exceeding 30mA. The operation of the over-current protection needs to be checked periodically.
- Check the condition of the cord periodically.

If the supply cord is damaged and needs to be replaced, this function should be performed at the guarantor or by special service or by a qualified person in order to avoid danger. Do not use the device if the power cord is damaged.

- In case of damage, in order to avoid hazard, repairs can only be carried out by a special service or a qualified person.
- Pulling the cord is strictly forbidden. Keep the cord away from sources of heat, sharp edges and ensure it is in good condition.



## **SAFETY**

- This device is not designed to be used by persons (including children) with limited physical, sensual or psychological abilities or 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!
- Place on dry surfaces only!
- Protect your engine and controller against moisture (also while storing)
- Do not use this unit near flammable materials
- It is forbidden to carry out any maintenance during operation.
- Should any hazard arise, turn the device off immediately. Once the danger has been eliminated, the device can be restarted.
- For indoor use only! Not to be used outdoors!**

## **UTILIZATION:**

Used product is subject to disposal as waste - only in selective waste collection organized by the Network of Municipal Points of Electrical and Electronic Waste Collection. The consumer has the right to return the used equipment to the network of electrical equipment distributor at least free of charge and directly, provided equipment to be returned is of equivalent type and fulfils the same function as the newly purchased device.



## **CAUTION!**




**Honey designated for bottling should be pre-warmed up to 30°C.**

## **PRIOR TO USE, FILL THE IMPELLER WITH HONEY.**

### **Directions:**

- Connect the hose to the dispenser's impeller with a buckle, paying extra care to the correct seal's arrangement.
- Once completed, fill the other end of the hose with 1 L of honey ( i.e. 0,95 kg jar)
- Hold the hose upwards until honey drips down onto the impeller (pump).

The hose is transparent to help you notice when it has gone down onto the pump.

- Once the honey has got to the pump, press the **"START"** button. 
- It is important to  place a container or jug underneath the pump ( dispenser).
- Once pumping of poured honey  has completed, stop the pump by pressing **"STOP"** button.

- Having completed the above, put the pumping hose into the barrel and start dispensing or pumping.

Pass small amount of honey through the hose to eliminate the remaining air. In order to do so, press **"START"**, once venting has completed press **"STOP"**.

- Having completed the above, the dispenser is ready to use.



### **PUMPING HOSE**

(kit does not include additional hose nor extra connectors)

The controller has been equipped with creaming mode. Creaming honey comes down to triple pumping of crystallised honey. **TECHNICAL DATA:**

- Power supply: 230 V  
Wattage:W204001=180W, W204002=360W
- Filling range: 50 g – 45 kg  
fills approx. 350 500g jars per hour(depending on the type and density of honey)
- filling accuracy: to 1200g +/- 1 %, above 1200g +/- 1,5 %
- device controlled by computer technology

- can also be used as a pump
- self-sucking, low-speed pump with silicone impeller

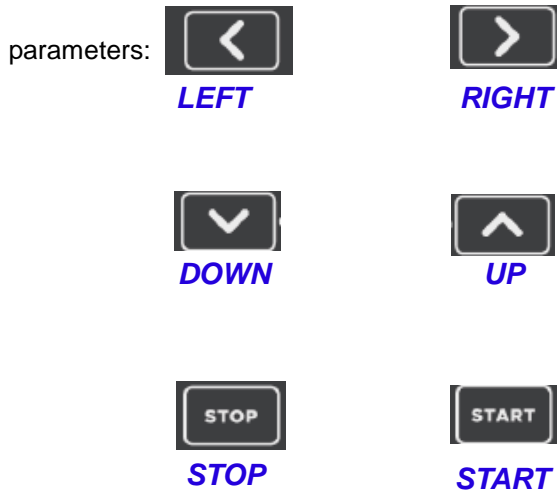
All parts honey has contact with are made of stainless steel or contact-with-food certified material.

Compact size allows various arrangements even if there is a limited space.

From technical point of view this device has been made as a cutting-edge technology which allows comfortable and professional use.

## **BUTTONS' DESCRIPTION**

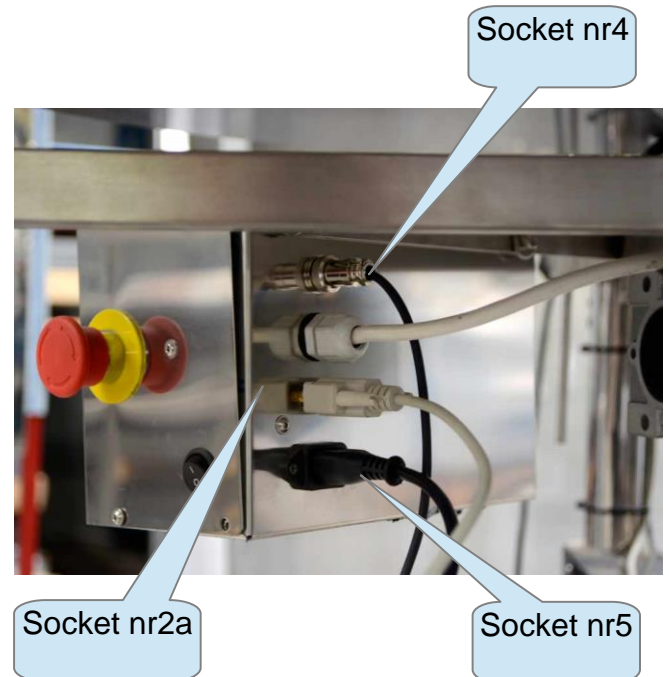
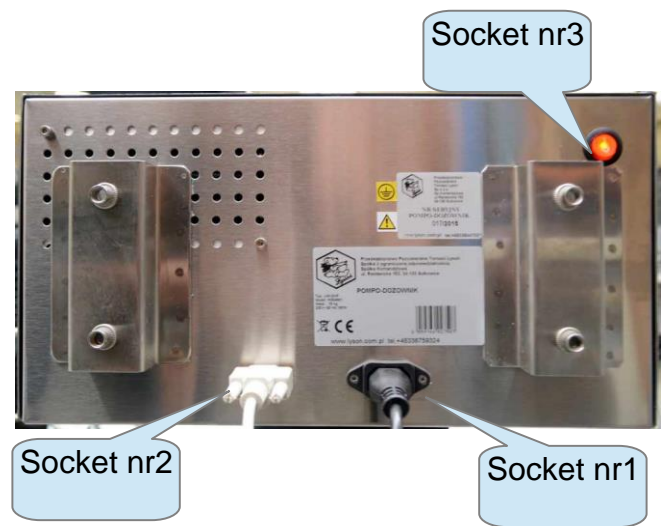
As per the buttons below one can define the required



## **MANNING AND CONFIGURATION**

Prior to use, please follow the guidelines below:

- Plug the powering cable (230V) into the socket nr 1
- Plug the dispensing pedal or the plug connecting the swivel table and the dispenser into the socket NR 2 in the back of the dispenser. Plug the other end to the socket nr 2a on the back of table's controller.
- Place the limit switch under the dispenser and plug it into the socket nr 4
- Plug the table's powering cable (230V) into the socket NR5
- Plug the dispenser along with the swivel table into 230 V voltage.
- Turn the device on by pressing button nr 3



After booting, there will be 2 messages displayed as per the photos below (one by one):



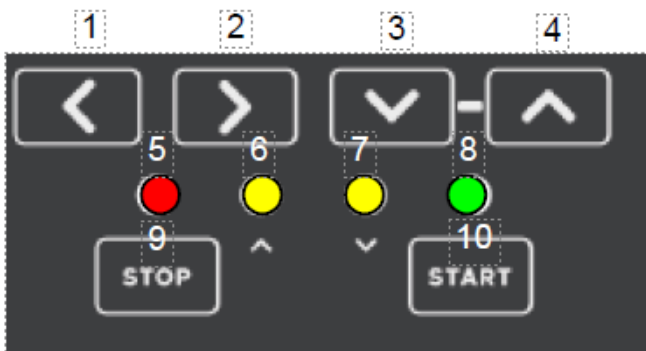
**Fot.1. Booting up view**



Fot.2. Once booting has completed

## CONTROLLING ELEMENTS

Programming the device gives the ability to set the dosing sequence precisely. Manning the device is powered by an interactive and intuitive screen menu.



Graph.1. Elements of dispenser's controller

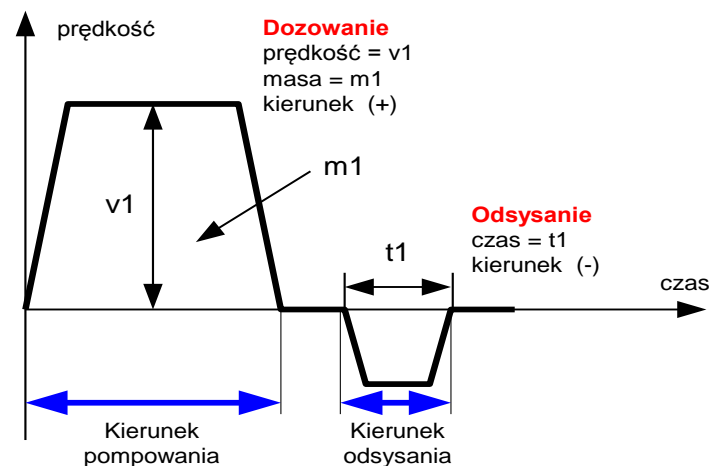
ELEMENT DESCRIPTION	FUNCTION
1	Decreasing the value of chosen parameter or zeroing the parameter
2	Increasing the value of chosen parameter or zeroing the parameter
3	Moving along the setted parameters – placing a cursor on the parameter to be modified. Pressing the buttons 3 and 4 simultaneously will result in alternating switching of continuous and weighing modes.
4	
5	STOP button pressed
6	Sucking mode ON
7	Pumping mode ON
8	LED diode lit – continuous mode ON

	LED not lit – weighing mode ON 1g
9	STOP button
10	START mode for continuous mode or weighing mode

Prior to commencing any maintenance, unplug the device.

## DOSING

PARAMETER	FUNCTION
m1	This parameter adjusts the quantity of pumped agent in 1 dosing cycle. Adjustment range: from 50[g] -5000[g]. Displayed value corresponds to the weight of dosed agent* - scaled for the actual density and temperature of pumped agent*. This setting is stored even if there is no power supply.
v1	This parameter sets agent's dosing velocity. Adjustment range: from 70[%] – 100[%]. This setting is stored even if there is no power supply.
t1	This parameter sets the time of backward movement of pumps' impeller – cutting the dripping agent off. Adjustment range: 10-990[ms]. This setting is stored even if there is no power supply.



Fot 3

## Setting parameters

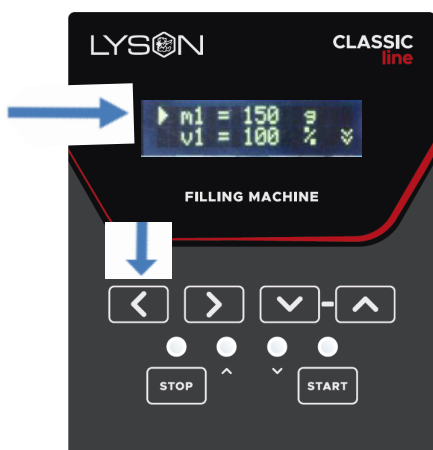
Once turned on, there will be parameters to be set displayed on the LCD screen.



To set the chosen parameter, the cursor (arrow) needs to point out to the correct parameter as per the photo above. **Fot. 3.)**

**3.** Move your cursor up and down by using corresponding buttons. Arrows

„DOWN” and „UP”



**Fot 4**  
**Increasing or decreasing the value of chosen parameter**

When the arrow points out to the required parameter, it can be decreased by pressing “LEFT” arrow or increased by pressing “RIGHT” arrow.

**m1** – Weight of dosed honey in grams. Choose the required value by pressing “LEFT” or “RIGHT” arrow.

**Filling range in grams : from 50 g do 550g**

This parameter sets the required amount of honey to be dosed in line with the container underneath.

**v1** – Dosing velocity can be set by pressing “LEFT” or “RIGHT” arrow.

**Adjustment range is presented as a percentage (from 70% to 100%)**

This parameter is used to set the pace at which jars are filled with honey or to set pumping speed.

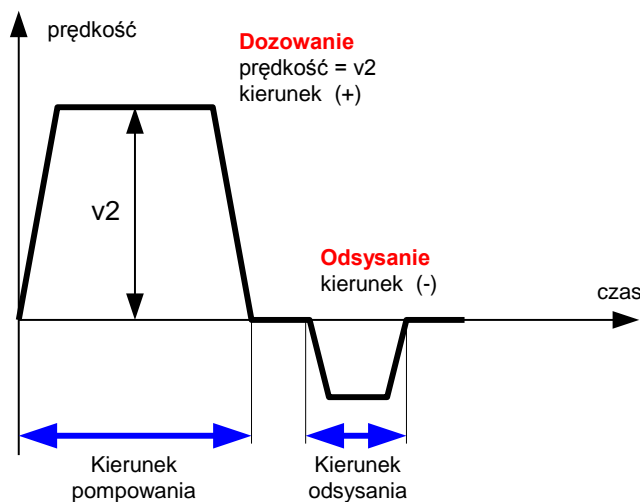
**t1** – reversing speed. Choose your required option by pressing “LEFT” or “RIGHT” arrows.

**Reversing speed range is given in ms (10ms to 200ms)**

This parameter prevents honey from dripping during filling the jars with it.

**2. WEIGHING 1[g]**

PARAMETER	FUNCTION
V2	This parameter sets the pump's velocity during weighing the agent (single dose weighing of 1 [g]). At constant working time in pumping direction, changing the velocity will result in changing the amount of dosed agent. Increasing the speed will increase the dosed amount. Settings' range: 40[%] – 100[%]. This setting is stored even if there is no power supply.



**Graph 3.: 1 g weighing process**

**v2** – Depending on honey viscosity and its temperature, 1g of honey can be filled at different time periods. Therefore filling of 1 gram can be calibrated by pump's velocity.

**v2** parameter can be adjusted by “LEFT” or “RIGHT” arrows.

To weigh 1 gram of honey, press “START” button.

If there is a green diode lit above the “START” button, it means that dispenser is in continuous pumping mode.

If the green diode is not lit, it means that dispenser is in weighing mode.

**Adjustment range for this parameter: from 40% – 100 % that is the speed at which 1 gram of honey is measured.**

**3. ADDITIONAL FEATURES**

- Creaming, Pumping

**CAUTION!**

**Before starting the process of honey creaming or pumping, remove the dosing nozzle immediately!!!**



**Step 1**



**Step 2**



**Step 3**



**Step 4**



**Step 5 tightening the cover**

**So prepared nozzle is ready for pumping or creaming.**

Creaming takes place by pumping and re-pumping.

Honey is collected and sucked in from one container and pumped into the other. Once completed, shift the hose into the full container and re-start the process. Leave some waiting time before each cycle.

Creamed honey is the result of pumping that means that during multiply pumping it gets creamy consistency. During boot up choose CREAMING mode by pressing "UP" or "DOWN" arrow until "CREAMING" message appears.



To begin the process press "START"



Creaming is a quick and easy method of creamed honey production. It is done by adding the crystallised honey onto the fresh, clear and fluid one, in order to begin a controlled, small-grained (creamed) crystallisation.

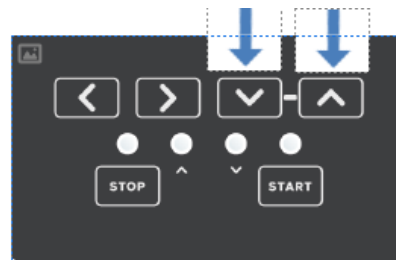
This process involves a cyclic aeration and intensive honey stirring for a few nights, until the desired consistency is obtained. That consistency is maintained over many months if the honey is kept at the same, appropriate level of temperature.

Creaming is performed several times a day.

"Creaming" is to produce many small nucleation and prevent the growth of existing crystals of honey.

It is mechanical "grinding" of honey crystals.

### DISPENSER CAN ALSO BE USED AS A PUMP



**Fot. 5**



**phot. 6**

To enable continuous pumping mode press "UP" and "DOWN" arrow simultaneously and hold them pressed for a while. Dispenser is then set to continuous pumping mode and the green LED diode is lit. Pressing these buttons again will cause the device to enter dosing mode. Press "START" to start pumping. Press "STOP" to stop pumping.

## 4.FUNCTIONS

PARAMETER	FUNCTIONS
p1	Dosing cycles counter – counts forwards. Possibility of setting customised value that the counter starts counting from. Settings range: 0-999.
p2	Filling progress indicator. The value shown represents the percentage of finished process in comparison to the value set by parameter m1. Readings range:from 0[%] to 100[%]. Readings raster: 5[%].
p3	Positive correction coefficient. This coefficient enables precise increase of the dosed weight m1 – if the dosed weight is too small comparing to the set value and 10 g changing step is too high to precisely set the required dose. Increasing the

	coefficient will result in the higher amount of the dosing agent. Setting range: 0-50. This coefficient does not refer to the current weight's setting i.e. it adds the same amount(weigh) both to 50 [g] and 1500 [g] settings. These settings remain stored even in the event of power-cut.
p4	Negative correction coefficient. This coefficient enables precise decrease of the dosed weight m1 – if the dosed weight is too high comparing to the set value and 10 g changing step is too high to precisely set the required dose. Increasing the coefficient will result in the lower amount of the dosing agent. Setting range: 0-20. This coefficient does not refer to the current weight's setting i.e. it deducts the same amount(weigh) both from 50 [g] and 1500 [g] settings. These settings remain stored even in the event of power-cut.

E-202	PRESSED/LOCKED „START” BUTTON
E-203	PRESSED/LOCKED “DOWN” BUTTON
E-204	PRESSED/LOCKED “UP” BUTTON
E-205	PRESSED/LOCKED “LEFT” BUTTON
E-206	PRESSED/LOCKED “RIGHT” BUTTON

**If the above errors are displayed, please contact our technical support at “LYSON”.**

## 7. Working with swivel table

Prior to commencing any work, proceed as follows:

Set the limit switch according to the required jar's type. Limit switch is a sensor that stops passing jars under the nozzle. Run a blind test using empty jars.



Correctly set limit switch should be located under the dispenser nozzle

**Parameters p3 and p4** – are designed to calibrate the weight of pumped honey. If underweight of filled jar occurs (after weighing) , increase **p3** parameter by the missing amount until it reaches the proper weight. If overweight occurs, decrease **p4** parameter until it reaches the proper weight.

### FILLING

Once powered on, the LCD will display the values that had been used during last filling.

Adjust the dispenser as per the parameters included in the user's manual.

Filling the jars is performed by pushing the pedal each time the jar is changed. The dispenser fills the jar with the pre-set amount of honey

(**fol. 1, 2, 3**)

Replace the filled jar with an empty one and push the pedal again.

**This device is very precise and accurate - +/- 1 g**

This high accuracy prevents from overflowing.



## 6. ERROR CODES

ERROR CODE	FAULT DESCRIPTION
E-100	MICROPROCESSOR'S CONTROLLER INTERNAL MALFUNCTION
E-200	PRESSED/LOCKED “START FILLING” BUTTON
E-201	PRESSED/LOCKED „STOP” BUTTON

**IMPORTANT!** Swivel table and dispenser are coupled.

Therefore, remember whilst running tests, to switch the dispenser off by pressing “**Service**” button which turns the dispenser off.

**b)** Kit includes a dedicated pedal. It starts the dispenser (when the pedal is pushed one jar is filled with honey.

**c)** Once the limit switch has been set, proceed to honey dosing parameters.

After boot-up, the dispenser displays two parameters: **m1** and **v1**, which can be set by pressing the “**LEFT**” or “**RIGHT**” arrows, depending on the required values.

To move to the next parameter press the “**DOWN**” arrow, to go back press “**UP**” arrow.

The controller is ready for changes to be made once switched on – this means you do not need to go back to MENU to adjust your parameters.

Once set, the dispenser stores the given parameters.



- **m1** – amount of grams to be set between 4g - 45000g
- **v1** – filling speed – e.g. 100% , if honey is pumped too fast and gets over-aerated decrease the filling velocity – from 70 % to 100%
- **t1** – reversing speed in ms (0-990ms) – it is recommended to set this parameter after the first attempt of filling as that will show whether after the whole process the dispenser reverses the honey so it does not drip.
- **v2** – 1 g weighing velocity ( manual option used when jars are filled by pushing the pedal)

- **p1** – not to be set – counter of filled jars
- **p2** – not to be set – it shows the percentage of a filled jar (in%)
- **p3** - Positive correction coefficient. This coefficient enables precise increase of the dosed weight m1 – if the dosed weight is too small comparing to the set value. i.e. the dispenser fills the jar with 480 g instead of 500g. Set the required dose by changing p3 parameter that is to increase it by 20g. Setting range: 0-50. These settings remain stored even in the event of power-cut.
- **p4** - Negative correction coefficient. This coefficient enables precise decrease of the dosed weight m1 – if the dosed weight is too high comparing to the set value. i.e. the dispenser fills the jar with 505 g instead of 500 g. Set the required dose by changing p4 parameter that is to decrease it by 5g .After dispenser re-booting, all weighing parameters sum up and the jar is filled with 500g precisely.

These settings remain stored even in the event of power-cut.

Having done the above, fill the impeller with honey and set the dispenser to pumping mode by pressing “UP” and “DOWN” arrows simultaneously.

This procedure enables to completely fill the hose with honey and prevents from inaccurate filling of first jars.

As soon as the hose is filled with honey, stop the dispenser by pressing “STOP” button.

Pumping output: from 250 - 300 litres of honey /hour

Dispenser is equipped with adjustable height facility.

## 9. CLEANING

**Wash and dry the device thoroughly after each use.**

**Important!**

**Wash the dispenser and pump thoroughly after use.**

The process of cleaning should be performed in 2 phases: initial phase and final phase (disinfecting).

**Initial Phase** – is to rinse the honey out of the nozzle and the dosing module. After completed filling **do not dismantle** the device. Just after the filling is complete, move the sucking hose and place it into a container with hot water and pump 40 litres of warm water through to rinse the module or the dispenser. You will need approx. 40 litres of warm water warmed up to 50°C - 60°C. This process is crucial to prevent the device from potential damage that crystallized honey may cause ( i.e. breaking the seal and honey leakage)

In case of improper rinse, the sealant on the pumping shaft may burst. All faults caused by improper handling (lack of proper rinsing) are not warranty covered.

**Final phase - disinfecting** – dismantle the nozzle and the impeller as per the photos below. Wash and dry thoroughly and reassemble.

Use only contact-with-food certified detergents and wash & dry it thoroughly.

Unscrew the impeller's cover

### step 1

Remove cover



### Step 2 Remove the impeller



### Step 3 Remove 'Seeger' ring



### Step 4



### Step 5



Remove nozzle





## **6. Warranty**

The product purchased from the Lyson Company is covered by a manufacturer's warranty. The warranty period is 24 months from the date of purchase.

All purchased products come with receipts or VAT invoices.

Warranty details at:

**[www.lyson.com.pl](http://www.lyson.com.pl)**