

# AHC-01



## DRUM HEATED SETTLER (HONEY LIQUIFIER / DECRISTLIZATOR) USER'S MANUAL

## 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.



## SAFETY

- a) The device must be plugged into the grounded socket with a voltage specified on the rating label.
- b) 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.
- c) Check the condition of the cord periodically.
- d) 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 power cord is damaged.
- e) 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!.
- f) In case of damage or fault, in order to avoid hazard, repairs can only be carried out by a special service or a qualified person.



## SAFETY

- a) This device has been designed to liquefy / de-crystallize honey
- b) Place on dry surfaces only!
- c) Close the lid prior to commencing any work.
- d) Do not move or adjust the decrystallizer whilst in use.
- e) Do not perform any maintenance whilst in use.
- f) Should any hazard arise, unplug the device immediately.
- g) Once danger has been eliminated, the device can be restarted
- h) Do not use the unit near flammable materials
- i) Do not power up without honey to be de-crystallized.
- j) For indoor use only! Not to be used outdoors!
- k) Protect your controller against moisture (also while storing)



**CAUTION!**

**Pulling the cord is strictly forbidden. Keep the cord away from sources of heat, sharp edges and ensure it is in good condition.**

## MAINTENANCE



**IMPORTANT!**

**Wash and dry the device thoroughly before first use.**



**IMPORTANT!**

**Unplug the device before performing any maintenance!**

Wash the device with hot water and small amount of detergent (food contact certified) with soft cloth and make sure that the electrical elements are properly secured.

Rinse thoroughly with clean water after washing. Leave until it dries.

Store the device in a dry place.

Do not perform any maintenance of any elements by the use of chemicals.

# Honey de-crystallization:

## Honey de-crystallizing should be performed at the maximum temperature of 35°- 40°C

(it is crucial not to overheat the honey as, as pollen alike, it loses its attributes at the temperature above 40°C).

Fresh honey is thick and transparent. It crystallizes naturally in time.

Heating the honey up to the temperature of 40°C and maintain that temperature over few days will cause the transformation from solid into liquid state.

Digital temperature controller with LCD display – temperature regulation within the range 30-55 °C.

## AHC-01 temperature controller user's manual



pic.1 temperature controller

### Controller Set-up

1. Make sure that the controller is switched off before plugging the device in. The main (0/I) switch should be set to „0”
2. Once plugged turn the switch from „0” to „1”
3. The controller should be customized to the user's needs.
4. To enter programming mode („Prog”) press „+” and „-” buttons simultaneously during boot-up

To program the controller proceed as follows:

Set the first parameter **T1** – that is the melting temperature. The value of T1 parameter can be decreased by pressing „-” button and increased by pressing „+” button. Press „ON/OFF” button to confirm your choice.

It is followed by :

- setting of duration ( **in hours**) where „-” decreases the number of hours and the „+” increases it accordingly. Press „ON/OFF” to confirm.

- **setting** of duration ( **minutes**) where „-” decreases the number of minutes and the „+” increases it accordingly. Press „ON/OFF” to confirm.

Once completed, move onto **T2 & T3** parameters' settings and their duration.

Follow the given procedure accordingly.

After inputting into controller's memory the parameters of

each 3 steps, a message will be displayed on the LCD panel showing the range of regulated temperature and the total duration.

The controller will reboot and will enter into the work mode.

When „ON/OFF” is pressed the device will start working whereas re-pressing the „ON/OFF” button will stop the device working.

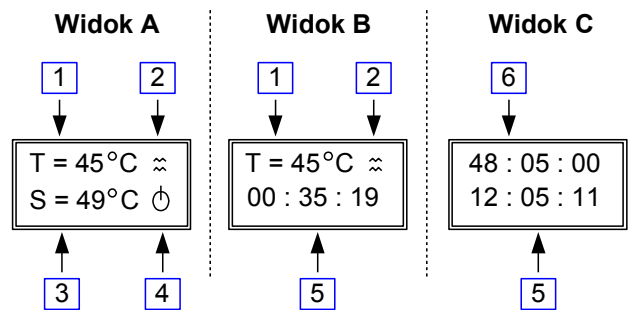
### Example of settings 3 parameters

Stages	T	S
Stage 1	T1 = 38°C	S = 2 hours and 15 min.
Stage 2	T2 = 39°C	S = 3 hours and 15 min.
Stage 3	T2 = 40°C	S = 3 hours and 30 min.

After powering up the controller begins its task by executing the programmed cycles. In stage 1 it will heat and raise the temperature to 38 °C . That temperature is maintained over the period of 2h and 15 m.

Once the required time is over, the controller will enter Stage 2 and raise the temperature up to 39°C and maintain it over the next 3 hours and 15 minutes. In the last step (Stage 3) the controller will raise the temperature up to 40°C and maintain it over the next 3 hours and 30 minutes.

Once all cycles are completed the controller will shut down.



Graph 2. Working mode screen views

SCREEN VIEW	VIEW'S DESCRIPTION
A	Current temperature and set temperature.
B	Current temperature and heating cycle's time elapsed.
C	Set and elapsed heating cycle's time.

ELEMENT DESCRIPTION	FUNCTION
1	Real temperature – measured.
2	Graphics indicating working heater. Heaters on – graphics displayed. Heaters off – no graphics displayed.
3	Temperature set – adjusted during cycle's programming
4	Graphics indicating working controller. Cycle execution- graphics on ; cycle off – no graphics displayed.
5	Heating cycle elapsed time.
6	Heating cycle set time.

E-201	Pressed/ locked „+” button
E-202	Pressed/ locked „ON/OFF” button
E-301	Temperature sensor faulty
E-302	Sensor's temperature too high (value exceeds the range)
E-303	Sensor's temperature too low (value exceeds the range)
E-304	Heating cycle's temperature too high
E-305	Heating cycle's temperature too low

MICROPROCESSOR CONTROLLER	
Range of measured temperature:	From 0°C to +85°C
Settings' range of stabilised temperature:	From +30°C to +60°C
Regulation type:	Bistable (ON / OFF)
Reading resolution / temperature setting:	1°C
Temperature's regulation hysteresis:	±1°C
Guaranteed temperature accuracy:	±0.5°C within the range: 0°C to 85°C
Number of heating cycle steps:	3
Step's minimal duration:	1 minute
Step's maximal duration:	32 hours 59 minutes
Maximum total cycle duration:	≈ 99 hours (4 days 3 hours)
Default cycle parameters for step 1	+45°C / 6h
Default cycle parameters for step 2	+45°C / 21h
Default cycle parameters for step 3	+45°C / 21h

**E-304** – error displayed when on powering the device up, the measured temperature exceeds the highest set temperature by 10°C.

**E-304** – error displayed when despite 2 cycle steps' lapse (step 1 and step 2), the measured temperature has not reached the threshold ( the lowest set temperature less 5 °C). The moment of reaching the minimal described temperature is signalled by a short beep.

ERROR CODE	ERROR DESCRIPTION
E-100	Programme's memory error
E-101	Configuration memory error
E-102	Operating memory error