



**Instructions for connecting *AC-700 cooling kit to MC 1000***

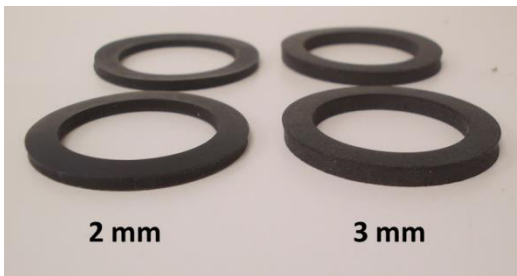


AC-625 cooling kit contains following parts:

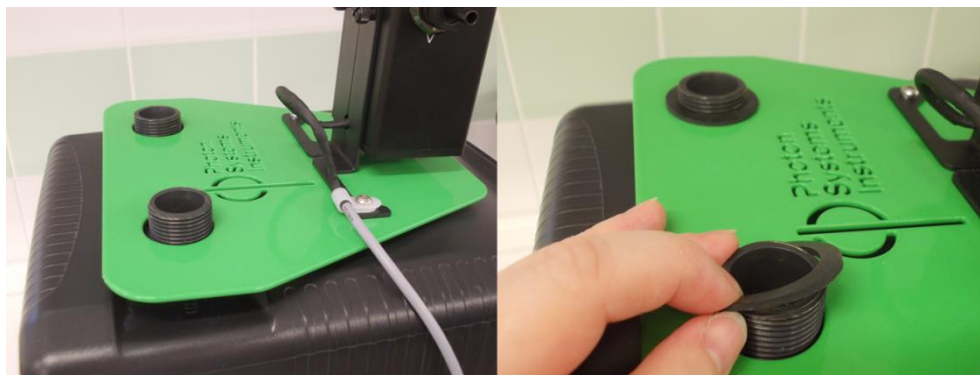
1 pc	AC-700 water pump + AUX cable
1 pc	Hailea HC-130A water chiller
1 pc	Power cable
1 pc	Elastic silicon tube 8/6 mm – 5 m length
2 + 2 pcs	Rubber seals 2 mm/3 mm

**NOTE:** The AC-700 cooling kit is supplied in two versions – for 210-240V AC and 110V AC power line.

- 1) For a safe and proper operation of the AC-700 cooling kit, **switch OFF the Multicultivator MC 1000 device** prior installing the AC-700 water pump.
- 2) To connect the water pump with water chiller place two circular rubber seals (3 mm) around the outlets on the top of the Hailea HC-130A water chiller first.



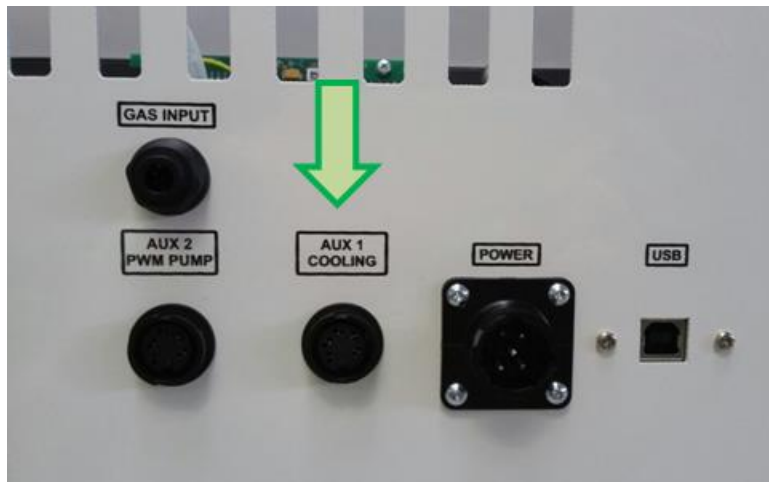
- 3) After that put the water pump on the top of the water chiller and place the other two seals (2 mm) around the outlets of Hailea HC-130A water chiller.



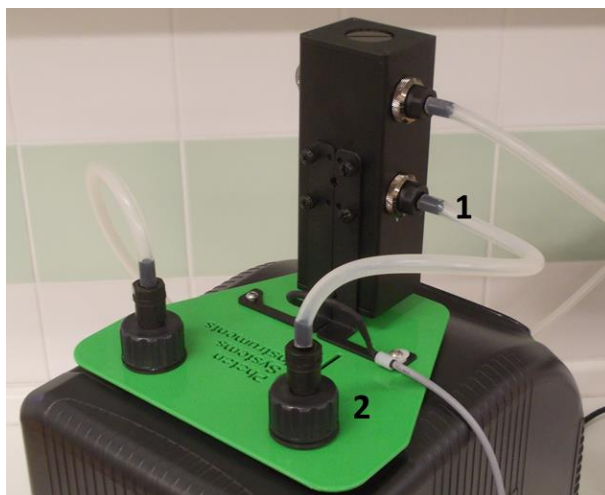
- 4) Finally, fix the water pump to the water chiller with screws.



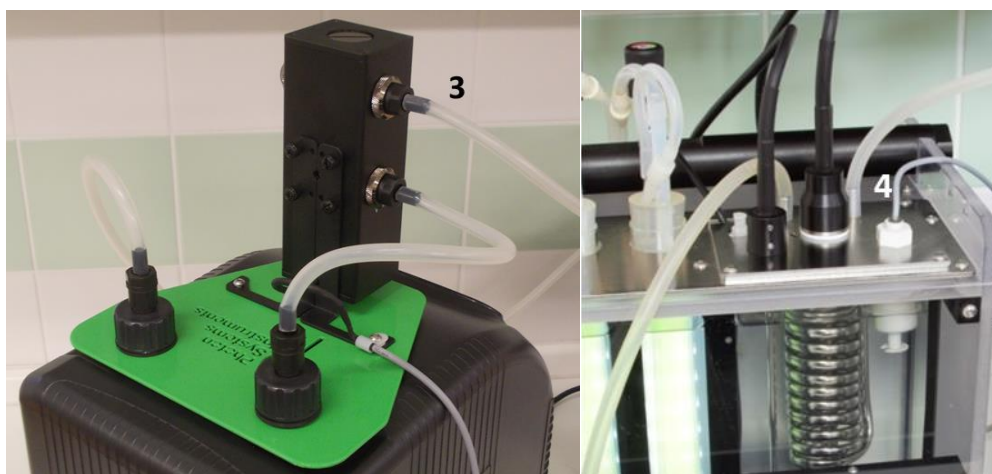
- 5) Plug the *AC-700 water pump* connector into the **AUX1** output on the rear panel of the *MC 1000*. This connection maintains the powering of the pump and controls its function in remote mode (*MC 1000* controls the circulation of the water in water cooling circuit).



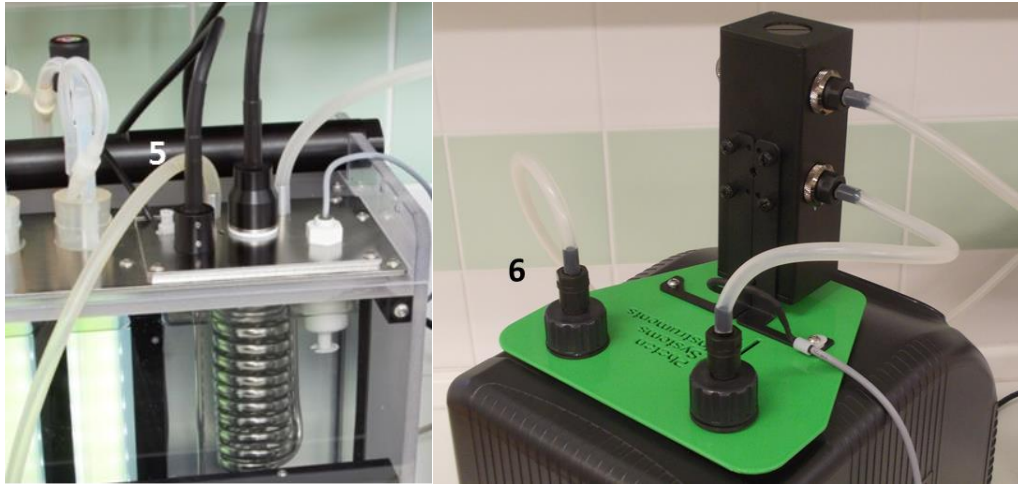
- 6) Connect the water circulation hose to the *AC-700 water pump* and *MC 1000* cooling spiral. First connect the short 20 cm silicon hose to the **lower port** (1) on the right side of the water pump. Connect the second end of the 20 cm tubing to the right top input of the water chiller (2).



- 7) Second connect the short 50 cm silicon hose to the **upper port (3)** on the right side of the water pump. Connect the second end of the 50 cm tubing to the right top input of the cooling spiral (4).



- 8) Use the long 1 m silicon hose to connect left output of the *MC 1000* cooling spiral (5) with the *HC-130A* water chiller (6).



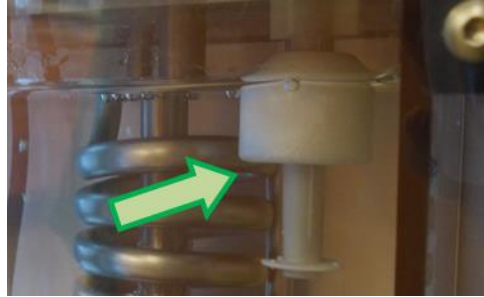
- 9) Put the *Hailea HC-130A* water chiller in 220V or 110V AC plug (depend on the cooling kit version).

- 10) Switch ON the *HC-130A* water chiller by the main switch on the right side of the instrument. Front display shows the actual temperature in the small water reservoir positioned inside of the *HC-130A*. Read the attached *HC-130A* manual for more information.

- 11) Unscrew the top cover of the *AC-700* water pump. This way you access the small filling tank of the water circuit.



12) Switch ON the *MC 1000* device. Fill the *MC 1000* water bath distilled water while the water level in water bath is optimal.



13) Set the low temperature via display: **Sensors > Temperature > 15°C**. Then set the temperature control ON: **Sensor > TControl > ON**.

14) Pour carefully approximately 1 liter of deionized water in the water pump reservoir. Let the water be pumped into the cooling system. Fill the water into the system the water returns from the **upper port** on the right side of the water pump.



15) Let the bubbles leave out and add the water into the filling tank. It must stay filled up to the **upper port** on the right side of the water pump.

16) Screw back the top cover of the *AC-700 water pump*.



17) Set the required temperature of the water in the water chiller always to 5 °C. It is easily done by long push of the **SET** button on the front panel. Then (set value is blinking) change the temperature to 5 °C and accept by the short **SET** push.



18) *MC 1000* now can control the temperature in the water bath by circulating the water from the water chiller.

19) For the proper function of the *AC-700 cooling device* with the *MC 1000-OD* it is IMPORTANT to regularly check the water level in the cooling circuit. Water should be re-filled as described in step 14 when the water level in water pump reservoir drops to 50%. It is recommended not to let the water amount drop below this level as the cooling unit will not

operate properly and the required temperature in *MC 1000-OD* may not be stable and increase.

Note: It is recommended not to leave the tank without the water. However the **pump operation without the water will not damage the AC-700 Unit.**