

Installation Instructions for growkit 'mega deluxe'

Growkit including:

Floor pan, endwalls and housetop, digital temperature control, electric heating cable 6m / 30W, humidity/CO2 apparel set, 350 l/h, tupperware box with ceramic diffuser, perlite, ultrasonic fog-air-humidifier, digital humidity control, air circulation fan

The first step is to assemble the endwalls. Make sure the markings on each part are on the outside, and the arrows on each part point up. One „floor“ of the endwalls consists of 2 long, 2 short and 2 rounded parts. Thereby you get 2 „floors, simply put one on top of the other.

The heating cable is attached via the rubber knobs in the floor pan in serpentines. There is a black marking on the heating cable (approx. 1m from the plug). From this point the cable will heat up. This marking should be on the border of the floor pan. Connect the cable to the digital temperature control and the digital temperature control to the electrical power grid.

Evenly distribute the humidified perlite inside the floor pan. The heating cable should be completely covered by the perlite. Place the digital temperature control sensor in the middle of the pan. Make sure it is not placed directly above the heating cable. Later on you will place a substrate bag right on the sensor to measure the exact mycelium temperature, which avoids overheating of the mycelia.

Also place the petri dish around the middle and place the ultrasonic fog-air-humidifier on it, making sure the fog opening directs towards one of the longer sidewalls. It is very important the humidifier is placed horizontally/even. The fog output is set to 50% (controller on 11 o'clock).

Using the screw included, the black air circulation fan, which ensures air distribution, is attached at the upper corner of the sidewall towards which the humidifier blows the fog. The air emitting opening of the fan should be in an almost vertical position, ensuring the air flows out horizontally. The cables are led through the lower opening of the wall and connected to the AC power adaptor. According to the number of fruiting mycelia, set the voltage to 4,5V to 6V (6V if the growkit is fully packed). The circulation fan should be running permanently.

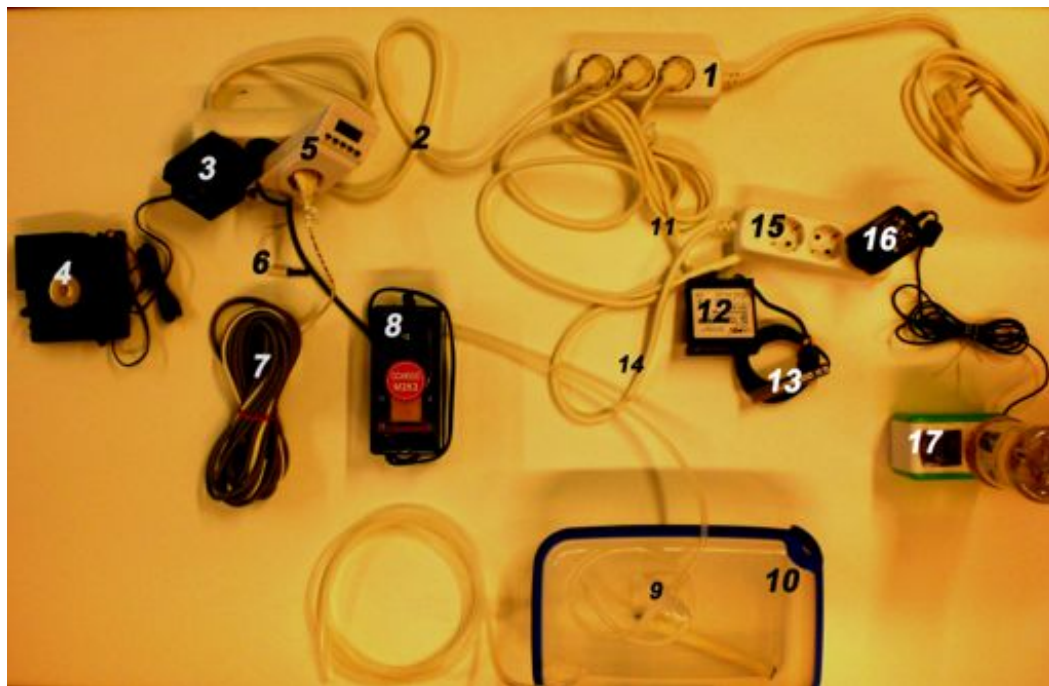
The humidity control sensor should be mounted on the same wall, in the middle at the lower hole. It is extremely important that it is hanging straight and that it is free of and protected from direct sunlight and condensed water. Connect the power supply of the humidity controller as well as the the power plug of the triple-plug to the power grid.

The AC supply of the fog-humidifier is connectetd to the triple-plug (controlled by the humidity controlling device). Now the sensor can measure the exact humidity in the growkit, triggering the control device to activate the humidifier if the humidity drops below the adjusted value. When the humidity inside the kit has reached the adjusted value, the controlling device will automatically deactivate the fog-humidifier and so on.

The last step is to connect the humidity/CO2 pump set. The hoses are led through the holes in the cover of the tupperware box. Pull out one of the hoses for about 1cm, the other one for about 4-5cm, attaching the ceramic diffuser to it. If your growkit comes with a microfilter, cut the hose to which the ceramic diffuser is attached to in two parts, and install the microfilter (ensuring it is placed in the right direction – there is an „IN“ – marking on the microfilter).

Fill the plastic box to $\frac{3}{4}$ with frsh drinking water (no soda!). The hose with the ceramic diffuser (and, eventually the microfilter) is connected to the pump. The second hose is put through the upper hole (above the humidity sensor) into the growkit.

IMPORTANT: to ensure full functionality, the cover of the box must be shut tight, the ceramic diffuser should be completely under water, and the the hose going from the plastic box inside the growkit should not be underwater! The pump should be running at any time at ist maximum output.



1. main power supply (always on)
2. power supply of air circulation/fresh air/thermotimer (always on)
3. ac power supply of the air circulation fan
4. air circulation fan
5. temperature controller (always on)
6. temperature control sensor
7. heating cable (controlled by thermotimer)
8. fresh air pump (always on)
9. microfilter
10. fresh air humidifier with ceramic diffuser
11. power supply of humidity controller (always on)
12. humidity controller
13. humidity controller sensor
14. power supply of controlled triple connector
15. controlled triple connector
16. power supply of ultrasonic air-fog-humidifier
17. ultrasonic air-fog-humidifier