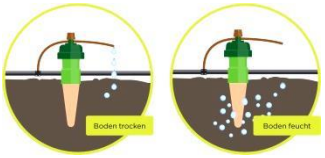
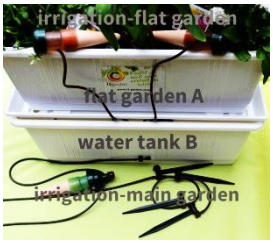
Short manual for the **i3garden-irrigation system**

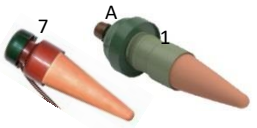


detailed video documentation at: http://i3-garden.com/en

The i3-garden-irrigation system integrates a fully automated system for plant irrigation developed and produced in Tirol based on the tension principle (made in Austria by Blumat GmbH & COKG).

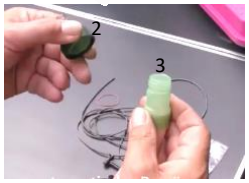


Product Intelligence: The central Control (main garden) consists of an adjustable earth ceramic sensor (1) with drips and 2 ceramic sucker XL (7) (flat garden). If the soil substrate is dry in the area of the ceramic sensor (A) (main garden) or ceramic sucker XL (7) (flat garden), water will be sucked out of the ceramic to the soil – a vacuum arises in the ceramic cone –
-in the **main garden** this vacuum opens the water flow –water flows to the dropper until the set humidity value is reached at the ceramic sensor – the water flow stops.
-in the **flat garden**, the vacuum in the 2 ceramic sucker XL simply sucks water from the water reservoir B. This way the individual plants are irrigated at the roots as needed. Based on the construction of the i3-garden system and reduction of evaporative surfaces we achieve a reduction of the water consumption up to 75% without energy, electronics or timer!



Installation:

Important: Before inserting the ceramic sensor (1), the soil substrate should be irrigated based on the soil moisture. Place the garden in a straight upright position and slowly pour ½ litre of water in the front area (near plants) in the soil substrate - 2 to 3 times.



Step 1

-Main garden: Unscrew the green sensor head (2) and fill the ceramic part (3) with water. Screw the green sensor head (2) firmly onto the water-filled ceramic part (3).
-Flat garden: Pull the green lid from the ceramic SaugerXL (7), fill the ceramic part with water and put the green lid back on tightly.

Step 2

Put the water-filled cone for approx. 30 minutes in water for ully moistening the ceramic.

Step 3

Open/turn the brown screw (A) on the sensor head to the left, lead the 3mm drip hose (B) through the sensor head (2) and close/turn the brown screw (A) on the sensor head to the right again.

Step4

Plug the dropper (D) into the drip-supports (C) and place them evenly in the soil substrate in the main garden (approx. 1cm distance from the insertion plate (E) and approx. 1cm distance to the earth substrate, as otherwise roots can clog the dropper (d).

Step 5

Cut correspondingly long pieces of the 3mm supply hose for the connecting the droppers (D) and push them firmly onto the connecting pieces of the droppers. Put the black end cap on the "last" dropper.
Do not use lubricants (grease, soap, etc.)!
Important: Keep the individual hose pieces as short as possible and as long as necessary.

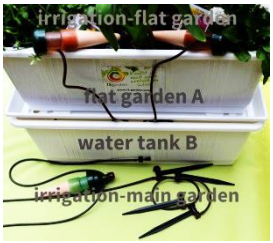
Step 6

Cut a 30cm long piece of the 3mm supply hose, connect it to the first dropper, lead through one of the notches (6) on the back and insert the 3mm distributor (f).

Step 7

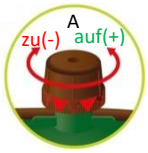
Break the sensor position (5) in the plate with a pair of scissors or a knife, cutting out the breakout points and the substrate bag generously so that the ceramic sensor (1) can be easily introduced.

Step 8



Fill the **Flat Garden B/integrated water tank** with water, place the base plate on the integrated water tank, place **Flat Garden A** on the base plate. Put the 2 ceramic sucker XL (7) in firmly into the soil of the **Flat Garden A**, simply out the suction hoses into the integrated water tank.

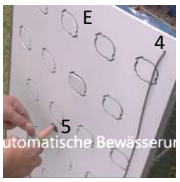
Step 9



Sensor setting: Turn the brown adjustment screw (A) counterclockwise (left) until water drips out of the supply hose. Then turn the brown adjusting screw (A) slowly clockwise (right) until a drop of water remains on the supply hose (b).
Now just turn the adjusting screw clockwise 1 „marker-arrow“ to the right.
Attach the supply hose (B) to the 3mm distributor (f)= connecting the hose.
Attach the black cap to the open end of the 3mm distributor – here you can control the water flow.
Check: After installation the water flow should be checked for approx. 1 – 2 weeks and if needed to be adjusted accordingly , by turning counterclockwise (+ more water) or turning clockwise (-less water) if necessary. In most cases a fine setting by ½ „marker-arrow“ is enough.

Step 10

main Garden: Insert the ceramic sensor into the sensor position (5). Ensure good contact with the surrounding soil.



<u>Additional water connection possibilities:</u>
-direct water connection with a water pipe using the i3-pressure **- a**vailable as **an** i3-garden accesso**ry**.

-DIY-High-Tank: There are instructions and assembly material availabele to make a tank out of a canister.
To ensure a satisfying water-pressure, a high tank must be at least 10cm higher than the irrigation droppers for each 1 m hose length, e.g. at a length of 5 m hose, i.e. at least 50cm.

What if...

...no more water in earth ceramic sensor (1) or ceramic sucker XL (7)?

Error Source: poor sealing=poorly screwed/attached; bent supply hose; poor contact with surrounfing soil; interrupted water supply.
Error correction: refill the ceramic sensor (1)/ceramic sucker XL (7) with water, assemble, repeat step 1, 2, 9.

... the ceramic sensor (1) does not stop the water supply?

Error Source: Membrane has too little preload (may occur after cold nights).
Error correction: Turn the adjustment screw (A) approx. ½ mark to the right (=increase preload).

... there is no water coming from the supply hose?

Error Source: Hose (B) clogged/glued/bent; air in the supply hose; no water in the ceramic sensor (1).
Error correction: Pull the hose slightly out of the sensor head, squeeze the compressed position between the fingers. Re-suction until water flows out of the supply hose. Repeat step 1, 2, 9.

... water doesn’t come out of a dropper?

Error Source: Dropper (D) is contaminated by algae formation or root vegetation.
Error correction: Screw out (ounterclockwise) the black screw on the dropper (D) around one turn or turn the black screw completely out and clean the dropper (d).

Maintenance/hibernation: Clean ceramic parts inside and outside with water and store frost proof. Rigidity can be easily removed with sand paper. Everything else can remain free of water in the garden.

Important notes: Always refill the water tank in time. If the water supply is interrupted for a longer period, the roots can suck the water completely from the ceramic parts.

Attention: It is essential to ensure that any leaking water cannot cause damage (e.g. floor). No liability can be accepted for consequential costs resulting therefrom.