

A major advance in drip irrigation using a clay pot

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Subsurface clay pot



Unpowered Clay Pot Drip Irrigation Controller

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1. Installation of the Unpowered Clay Pot Drip Irrigation Controller

- 1 Select a drip irrigation zone where all the plants in the zone have the same irrigation requirement.
- 2 Select a typical dripper and replace it with a subsurface clay pot.



- 3 Connect the clay pot to the controller.



- 4 Connect a dripper inside the controller.



- 5 Connect the water supply for the zone to the inlet of the controller (between 10 kPa and 800 kPa).



6 Connect the irrigation zone to the outlet of the controller.



7 Fill the controller with water until the float is partially covered.



8 Turn on the water supply and all the plants will be watered automatically without power.

2. How to use the Unpowered Clay Pot Drip Irrigation Controller

The Unpowered Clay Pot Drip Irrigation Controller allows you to automatically irrigate your garden using gravity feed from an elevated rainwater tank without using a pump and without power.

The controller can be used for surface and subsurface irrigation using either non pressure compensating (NPC) drippers or pressure compensating (PC) drippers.

Using PC drippers on sloping land or NPC drippers on flat land, the interval between irrigation events adjusts automatically to ensure that the discharge from each dripper during an irrigation event is the same as the on-demand discharge from the subsurface clay pot since the previous irrigation event.

You may wish to replace more than one dripper with subsurface clay pots. The number of drippers inside the controller should be the same as the number of subsurface clay pots. In this case the discharge from each dripper during an irrigation event is the same as the average on-demand discharge from the subsurface clay pots since the previous irrigation event.

3. Key features

1. Unpowered (no batteries, no solar panels, no electronics, no computers, and no WiFi)
2. Use for gravity feed or pressurised irrigation
3. Use for PC (pressure compensating) drippers or NPC (non pressure compensating) drippers
4. Use for subsurface or surface drip irrigation
5. Use for drip tube or drip tape
6. The water supply pressure should be between 10 kPa and 800 kPa
7. The water usage is controlled by the demand from the plants
8. The discharge from each dripper during an irrigation event is the same as the on-demand discharge from the subsurface clay pot since the previous irrigation event
9. The water usage increases significantly during a heat wave
10. With a continuous water supply, you can leave your irrigation application unattended for months on end