The control system can operate either in online mode (where a WiFi connection is needed), or offline mode, if you are out of range of a WiFi network. Online mode allows you to manage and monitor from anywhere, as well as receive alerts for low water, dry soil, or high/low temperatures.

Comprehensive instructions and videos are available online at www.harvst.co.uk/setup

Setup in online mode

1. Turn the control box on
2. Wait for the slow beep sound
3. Connect to 'harvst-wifi'
4. Follow the phone's prompt to login to the WiFi network
5. Click to configure WiFi, add your details, and save.
6. Unit will make a celebration noise, and restart. The double-beep indicates that it's connected OK.

After WiFi details have been set up, the unit will no longer broadcast its own 'harvst-wifi' and you can either control the system using the web app at https://app.harvst.co.uk, or if you are on the same network as the control unit, click the blue IP address link on the app dashboard.

If you are not automatically redirected to the dashboard once you have connected to harvst-wifi: with a web browser (eg Chroe, Safari) visit the URL **192.168.4.1**

Assigning a control unit to your Harvst account

If you are running your control system in online mode, you will need a Harvst account - it's free. Create one at https://app.harvst.co.uk, then from the 'locations' screen follow the prompts to add your control unit to your account. Now you can manage it from anywhere.

Sound and light feedback

<u>Button on top flashing once a second</u> : all OK.
<u>No flashing</u> : system is asleep or turned off.
<u>Siren (two tone) sound while watering</u> : water tank is low (pumping air) or pump not connected.
<u>Falling / descending tone</u> : Battery low. Going to sleep.
<u>Rising tone</u> : Unit is waking up.
<u>Fast beep</u> : Unit is looking for a WiFi signal.
<u>Slow beep</u> (once a second) : Unit is waiting to be configured with WiFi details and is broadcasting 'harvst-wifi'.
<u>Double beep</u> : Unit has completed setup and is ready.
<u>Single long beep</u> : bad one-off sensor reading

Setup in offline mode

1. Hold down the "wake" button on top of the control box while you turn it on using the button on the right.
2. When you hear the double beep, find a WiFi network on your phone similar to "HARVST-A5DC". The code will be unique to your control system. Connect to this.
3. Follow the phone prompt to access the control system dashboard.
4. Click Settings, and then change the "connection mode" to "offline".
5. Save settings.

The control box will remain operating in offline mode unless you change the settings back to online mode, at which point you can try to connect to WiFi. Each time it wakes up, it will broadcast the HARVST-xxxx WiFi network for you to connect to.

Changing from offline mode to online mode

You might want to do this if you have added a WiFi extender and now have WiFi within range of your system, or you have brought the control box near your WiFi router to update the firmware.

Updating firmware

The 'firmware' is the program running on the control system. Units connected in online mode will automatically update themselves. If your control system is in offline mode, you will need to bring it within range of a WiFi network periodically to get the latest firmware.

Once you have connected to WiFi (see instructions above), leave the unit turned on for a couple of hours. You can see your firmware version on the settings screen of the system control panel, and (for online units) in the web app.

Manual watering with phone - online mode

1. Wake up the control box by pressing the button on top. You'll hear a rising tone.
2. Wait for the double beep which indicates it's connected to your WiFi.
3. Ensure you are on the same WiFi network with your phone.
4. Use the green buttons in the relevant tab of the dashboard in your web app to water manually.

Manual watering with phone - offline mode

1. Wake up the control box by pressing the button on top. You'll hear a rising tone.
2. Wait for the double beep which indicates it's ready and transmitting a WiFi signal.
3. Connect to the 'HARVST-XXXX' network and follow the phone prompt to login to the WiFi network.
4. From the system control panel, click [1] or [2] to access the controls for that watering zone.
5. Use the blue buttons to water now.

Manual watering with the button (30 seconds)

1. Wake the control system up, and wait for the double beep.
2. Press and hold the button on top; let go after one beep to water zone 1, let go after the double beep to water zone 2, and let go after the triple beep to cancel manual watering.

Are you getting shorter watering times?

When the battery is low, it usually means that there has not been much sun for a day or two, and the control system will reduce the watering time accordingly either by half or quarter, depending on the state of the battery.

Changing watering settings - online mode

Update the settings from the dashboard in the web app. Next time your control unit sends an update, it will collect the latest settings. If you want to update settings immediately, connect to the same WiFi network as the control system then click the blue IP address link on the app dashboard (it will be similar to 192.168.1.10) - this will take you to the *system control panel*.

Save settings and the unit will be updated immediately. Don't change any settings on the app. The app will be updated next time an update is sent. You can force an update by manually watering for ten seconds.

Changing watering settings - offline mode

Follow steps 1-4 from manual watering above, then change the settings on the system control panel directly. Don't forget to save!

Setting the system time on the device directly

The time is set at the factory. You may want to alter it for daylight savings when the season changes. Check the system time on the dashboard on the *system control panel*. Update the time by following the green "set system time" button, and save.

Alerts and notifications

If your control system is online, you can choose to receive email and/or SMS alerts when the water tank has run low, when soil is dry, when temperature is high/low and more. Manage your notifications in the web app.

Controlling the aux output

The socket on the left hand side can be used for any compatible Harvst 12v device. For solar powered control units, this is typically an extra pump. For mains powered units it could also be heaters or grow lights. Use the settings in your web app, or the [aux] button from the control panel in offline mode.

Changing sensor type
Temperature **or** *Temperature & humidity*
Soil sensors version 1/2/none

Configure which sensors are connected to your control unit using the **settings** screen on the *system control panel* (you will need to access the device directly either in offline mode, or from the IP address link on the web app dashboard). Once you have saved the settings, turn the control unit off and on again.

Viewing recent activity

In online mode, you can view recent events and data using the 'charts' link from the web app dashboard.

In offline mode, use the 'view logs' button on the system control panel. These are stored on the device for 7 days. You can also view these if your system is set up for online mode; access the system control panel via the IP address link on the web app dashboard.