

Application Notes

Rev 02.

AN01 - Changing Schedules using the EP3

Water-Insight's EP3 handheld tool for Irrigation Point Controllers (IPC) is ideal for making adjustments to small farm systems. An EP3 holds a list of the unique serial numbers and names of every IPC on a farm site. Each IPC also has a schedule file associated with it, which can be edited to modify when the sprinkler is active. Up to 16 active periods can be defined for each IPC, spanning a number of days if desired.



This application note shows you how to manually make <u>very minor changes</u> to a schedules in your system. It is advisable to familiarise yourself with the "EP3 User Guide" in conjunction with this application note.

• This document applies to IPCs running V3 or V5 firmware (with a FarmID). Pictures may vary slightly depending on the version of EP3 firmware in use.

IPC configurations and schedules are held on a SDcard (data card), which is inserted and then loaded into the EP3. Once loaded, details of each device and its schedule can be inspected. To inspect an IPC and display its schedule, follow these steps:

IPC Configuration	IPC List	Back Name: Z1P01	Back	Td=1	llo
IPC List Sch List	Z1P01 - 9255 Z1P02 - 9272	UP Sched: 1	Prev	Day 1: 0:01, 25 mins	Down
IPC Files Sch Files	ŽIP03 - 9278 71P04 - 9279	Down Addr: C0:9B:AC:87	Next	Day 2: 8:40, 26 mins	
Settings Upgrade	ŽĺÞØ5 - 9280 Z1PØ6 - 9283	View Sleep Schedule C	Comms		0k

Turn the unit on, the main Tap IPC List button. screen appears.

Scroll up or down to select the IPC of interest then tap view.

Tap the schedule button to show its current schedule.

To return to the main menu always tap the back button on each screen. Note that on the IPC details page you will see the line Sched: 1, this is the schedule number associated with that particular IPC name (Z1PO1 in this example).

Schedule 1 is actually a text file that is stored on the SDcard (in a subfolder of a folder called schedules) and loaded into the EP3. If you want to make a quick change to the schedule you need to:

- 1. Edit the file on the SDcard (using a laptop or computer), and save it back to the SDcard,
- 2. Reinsert the SDcard into the EP3 and reload the schedules
- 3. Communicate with the IPC and send it its new schedule.

Here's how:

Step 1: Edit the schedule

First identify which IPC you want to change by its name and check its details as above noting down the Schedule ID number listed.

Remove the SDcard from the EP3 and insert it into the SDcard reader slot in your computer. You will first need to ensure that your computer or laptop is running windows and has an SDcard reader fitted.

Open file explorer and navigate to the schedules folder on the SDcard you will know you are in the right place when you see a list of files that look like the picture below. Scroll down to the one that has the schedule id that you want to change in the suffix of the filename (e.g for Schedule 1 it will be schedule-1.ini.)



Open the file in notepad or a similar editor, often you can simply right click the filename and choose edit from the pop up menu. The contents of the file will look like this.



Change the start time and the duration to suit your needs, remember that other IPCs will have their own schedule and you may need to adjust their start times if you want one IPC to turn on after another sequentially. You can repeat the process for all the IPCs that you want to change.

Tip: Don't change anything else in the file or you risk affecting operation of the system. If you have more complex scheduling requirements such as changing the day or number of cycle days you should use the Water-Insight IPC manager application to undertake the changes. Contact Water-Insight for more details if necessary.

Step 2: Reload the Schedule

Once you have saved the revised schedule to the SDcard remove it from the PC (it may pay to safely eject it first, depending on the operating system of your PC). Insert it into your EP3 and turn the EP3 on then follow these steps to load the new schedules.



Warning: You should not change or edit the IPC list if you are just changing schedules, nor should you need to reload the IPC files, just the schedules. Now you must send the new schedule to the IPC.

Step 3: Communicate with IPC and send new schedule

The best way to update your IPC out in the field is to be reasonably close to it, though the radio on the EP3 can sometimes work up to a few hundred metres. As a way of checking that you are in radio range of the IPC, it is best to poll the IPC for its status before updating its schedule.

Tip: It is always a good idea to make sure the IPC time is up to date by checking its status and if necessary sending a timeset to the IPC from your EP3. (Make sure the time on your EP3 is set correctly first!)

Follow these steps to update the schedule:



Once you tap send you will receive an acknowledgement. It's a good idea to stay on the comms page and tap the status checkbox then tap send and this should come back with confirmation that the schedule has been received and matches the schedule for that IPC on you EP3. You need to repeat this process for every IPC name for which you have changed the corresponding Schedule ID.

Sometimes Water-Insight can make the schedule edits for you, there may be a fee for this. If we change the schedules for you then we will send you the new schedule files and a summary spreadsheet of IPC operating schedules and times. You must then copy (overwrite) all the information on your SDcard with the folders and files we provide. Then you can proceed as above to load the schedules. If we also need to change the IPC details (pod-config) then you should first load the new IPC files (pod-config) before loading the new schedules on to your EP3.

If you don't know how to check the status of an IPC, set the time or other similar functions then please refer to the EP3 User Guide supplied with your unit, or contact Water-Insight and we will send you a copy.

For more information contact Water-Insight support@waterinsight.co.nz