WATER-INSIGHT

Application Notes

Rev 03.

AN23 - Setting the Date and Time using the EP3

This document tells you how to use your EP3 to update system time information on all your IPCs and on the EP3 itself. It is advisable to familiarise yourself with the "EP3 User Guide" in conjunction with this application note.

For small farm systems, the Water-Insight EP3 handheld tool for Irrigation Point Controllers (IPC) is ideal for making adjustments to the system. An EP3 holds a list of the unique serial numbers and names of every IPC on a farm site. IPC units operate the sprinkler valve in a fixed set watering system according to a scheduled time and duration of operation. It is important therefore that each IPC maintains the correct time. Watering schedules are periodically repeated according to a Day Cycle. In this manner IPCs can water on one day and not on another. There may be one or more days in a Day Cycle. The total number of days elapsed before the IPC starts all over again from the beginning of its schedule is called the Day Cycle Period.
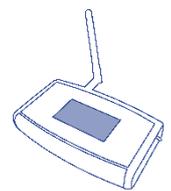
You can set the time by broadcasting it to all the IPC units in your farm network using a feature called Timeset on your EP3. But before you do that you should make sure you have the correct time on your EP3 itself.

Step	Description	Note
1	First check the time on your EP3. Turn it on and the main menu is displayed.	 Main menu
2	Tap the **settings** button then the **time** button to show the EP3 date and time.	 EP3 date and Time (older Ep3 firmware) EP3 date and Time (newer V5 Ep3 firmware)
3	Check that the time and date are correct. For accuracy use your mobile phones date and time because this is usually linked to an accurate clock.	To adjust a particular field tap on the checkbox and enter the correct value then tap enter. A keyboard display is shown when editing values.
4	**IMPORTANT FOR V3 SYSTEMS ONLY** Now adjust the Day Cycle Period. If your farm works on a multi-day cycle enter the number of days into the period field. If you don't set the period correctly it may result in IPCs watering at unexpected times and not turning off properly. **IMPORTANT for V5 systems** The day of cycle and period are automatically set and cannot be adjusted in the EP3	**IMPORTANT:** If you don't know what your Day Cycle period is then consult your schedules files (see below) or the operating time summary spreadsheet provided by IPC-Manager software program for your site or call Water-Insight.
5	If you are standing within radio range of the IPCs on your farm (less than a few hundred metres) then you can broadcast the time to all the IPCs in the vicinity by tapping the **send** button.	If your farm has units spread over a wide area, travel to different destinations on the farm and repeat the

Step	Description	Note
		process until you are confident you have sent the time to all the units.
	For V3 IPCs send the time without using a farmID For V5 IPC systems send the time using the FarmID (checkbox ticked).	
6	Once you have set the time you can then send new schedules knowing that they ought to operate on time. The clock on an IPC does drift with time and temperature so it pays to set the time every month just in case.	
7	Once you are all done turn off your EP3.	

If you want to know what your Day Cycle Period is, here is a quick check:

Step	Description	Note
	Remove the SDcard from your EP3 and insert into the SDcard adaptor or SDcard slot on your computer.	 SDcard Adaptor
	Using Windows File Explorer open the schedules folder on the card.	 File Explorer view of SDcard removable disk
	Open **schedule-1.ini** using windows notepad	
	Look for a line in the file that says cycle_length The value will be the Period value you must enter into the EP3 date time setting - Period value. In this example, the value is 2.	[header] id=1 **cycle_length=2** n_times=2 CRC=8BE5 [time1] day=1 start=00:01 duration=21 [time2] day=2 start=11:44 duration=23
	Close the file (do not save it)	
	Eject the drive and put it back in your EP3	
	Adjust the EP3 Day Cycle Period value if necessary.	

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