Application Notes

Rev 02

AN43 – Working with IPCs using IMS

Introduction

You can now use your smartphone to undertake control of IPC's, if you have IMS installed for your farm site. Many of the functions previously attributed to the EP3 handheld control unit are now available via IMS aswell as most of the gateway (INC) functions. In this article we will summarise some quick and easy tasks you can do with your smartphone

Some familiarity with using IMS, an EP3, FarmID and radio channels is needed in order to follow the processes described herein. You must also have an IMS account and have IMS on your farm.

In this note we use the solid set mounting system (pod or post) synonymously but we will use post for convenience.

Overview

Here is a summary of what you can do. Where it is listed IMS can do something, it may be done from a desktop PC or laptop, smartphone or tablet. The devices must have an internet connection.

Task	EP3	INC	IMS
Change Radio Channel	●		
Set FarmID	●		
Send Individual Time to an IPC	●		
Scan radio channels to see what channel an IPC is on	●		
Request Status from an IPC	●	●	●
Send Global Time to whole Site	●	●	●
Send individual schedule to one IPC	●	●	●
Inhibit one IPC	●	●	●
Manually turn on/off an IPC valve	●	●	●
Inhibit many IPCs (in a group or whole site)		●	●
Turn off valves on whole site		●	●
Send Schedules to whole site		●	●
Request Status from whole Site		●	●
Edit an IPC post location or IPC name			●

Note that there are some functions you can still only do with an EP3 right now and you have to be in direct radio range to do them.

"How To" Tips

Request Status of an IPC

IMS updates the status of each IPC on a periodic basis. This is determined by the status period setting in the INC gateway and is a multiple of hours. Typically to avoid excessive power consumption in the IPC by lots of radio activity the period is set to between 3 days and 7 days in winter months and 1-3 days during summer. However, the status of a unit can be updated on demand from an EP3 (or IMS).

On an EP3 the new status is displayed immediately if you are in radio range of the IPC and slightly slower if you are farther away and have to use mesh communications. On a phone IMS requests the status from the gateway which then requests it from the IPC. This can take a couple of minutes and the results will be displayed if you refresh your IMS screen. If a result is not immediately forthcoming the gateway will update IMS within the hour.

To check on an IPC simply search for it by name or serial number in IMS or select it from the list of IPCs on the screen when you view the map of the farm by clicking or tapping on the sprinklers button
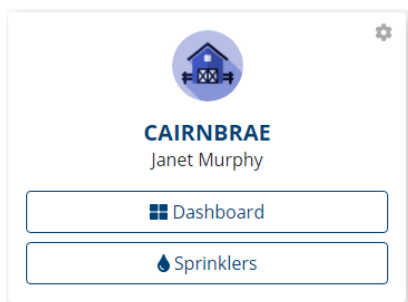

Figure 1

When you have selected the IPC its details "card" is shown. In the top right corner there are several icons: The refresh icon will request the status of the IPC. You will receive a notification saying the command has been requested, then later another notification saying if the command completed successfully or not. It may not if the IPC cannot be contacted.
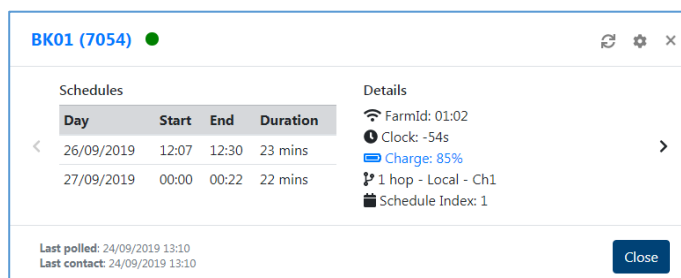

Figure 2

Other Commands

Other commands feature in the overview can be executed on a single IPC. Click the settings icon to show a set of menu options
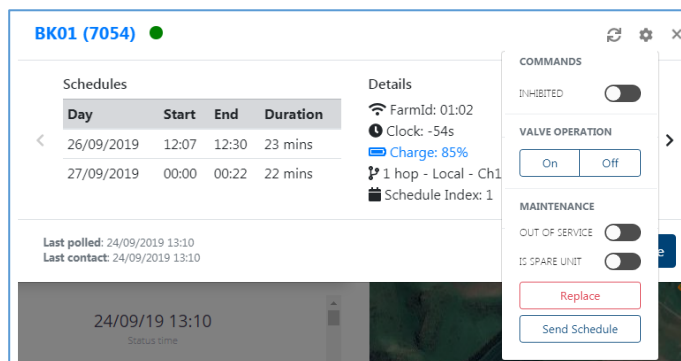

Figure 3

To **inhibit** the unit from watering tap the Inhibit slider, this will turn on (or off) the scheduled watering for the device

To **manually turn on** (or off) the valve solenoid, select from valve operation.

To **send the current schedule** stored in the gateway out to the IPC click the Send Schedule button.

To **replace** the IPC on the post with another click the replace button and follow the instructions to enter a new serial number. This is more fully described in the application note AN40 ("Swapping IPCs in the field using IMS").

To Mark the unit as **out of service** click the slider. This changes the colour of the indicator on a map to pink and the status values are not included in the overall dashboard status report. Marking units as out of service allows spare units to be held on site and clearly marks posts that have had the unit temporarily removed for repair.

To turn the unit into a **spare** unit click the slider. These are units that will be used for future replacements of working units and allow them to be kept on the site without altering the overall dashboard status and also they are placed into a special group called spares, from which you can swap IPCs out in the field. Remember to mark spare units as out of service (since they are not actively used for watering.

Battery History

Here's a quick tip: If you want to see the IPCs battery voltage history click on the "charge" details highlighted in blue on the IPC details card.

For more information email support@waterinsight.co.nz