

Application Note

Rev 01

AN48 –Converting a Post Position to a Sprinkler in IMS

Introduction

This guide is useful for Installers who are creating a new site in IMS, wherein the post positions have already been defined and imported to IMS as a google KML or KMZ file. Installers can then proceed to each post, fit a sprinkler controller (IPC) and immediately associate the IPC serial number with the post (or pod) and set it to work. This process can be done on a smartphone if internet access is available.

This guide does not cover creating the post position in IMS but provides the steps to convert it to a sprinkler. We use the term 'post' here but the guide applies equally to pods and other fixed set systems that use the Water-Insight IPC.

Our online documentation can also be found at www.waterinsight.co.nz.

Post Positions

Posts positions are generally known as "Points of Interest" (POI). They represent placemarks for anything the farmer wants to remember the location of, for example drain points, posts that do not have a sprinkler controller, slave sprinkler posts or even gates between paddocks. For a new site the POI can be imported and then IMS used on a phone to assist installer with installing new sprinklers onto posts as part of setting a new irrigation site to work. The figure below shows a site that is partially complete. Places of interest (yet to have an IPC fitted) are represented as **brown** dots. Other dots with sprinklers are usually **green** if they are operating normally. Clicking on a dot in IMS reveals its post name (or sprinkler name).



Figure 1

Converting a POI to a Sprinkler

To add a sprinkler to a POI the user must add some details, specifically the IPC serial number to the post. You must be signed in to IMS to do this. Follow these steps:

1. Click the farm settings icon (cog) and select Points of Interest from the Manage Assets Category in the pop up menu that appears.

2. Either scroll through the list of POIs (posts) or otherwise type the name of the post in the search filter (e.g. P348). This selects the post you want to convert to a sprinkler. (figure 2).
3. Click the convert icon (double headed arrow next to the pencil icon) to start the conversion
4. Enter the serial number of the IPC. IMS will look up the radio (MAC) address for the unit. If it does not appear do not proceed and contact Water-insight for assistance.
5. Verify that the FarmID and Channel are correct for the Site. If you do not know what these are contact Water-Insight for support to refer to our online documentation.
6. Choose the means of communication. Use local if the unit is within clear radio range of the IMS gateway on the property and mesh otherwise. If you are unsure choose mesh. Communications speed will be sacrificed for higher message reliability over wide terrain.
7. Click the convert button at the bottom of the form. This will remove P348 from the list as a POI and add it into another list as an Irrigation device.
8. To verify click the farm settings icon and select Irrigation devices from the Manage Assets category in the pop up menu that appears.
9. If you are prompted to update the gateway click the update gateway button, this will send the information from IMS to the farm site to enable communications with the IPC.
10. Scroll through the list to find P348. The new sprinkler will also appear as a red dot on the sprinkler view screen until its first communication with IMS.

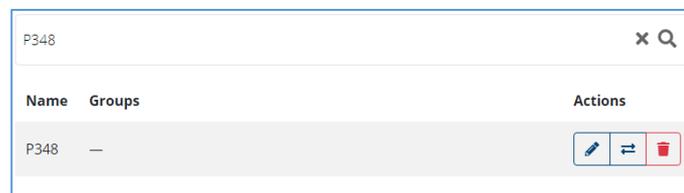


Figure 2

CONVERT TO SPRINKLER

Serial Number * MAC Address *

Farm Id Channel

Comms Mode | v

Figure 3

Next Steps - Setting the Sprinkler to Work

If the IPC has been programmed with the correct FarmID and Radio channel it will respond to communications from IMS on your phone, tablet or PC. Follow these steps:

1. Select the sprinkler (e.g. click on the dot on the sprinkler view screen) and click the link to open the status information card for the device. (figure 4)
2. Click the refresh icon (circle arrow) to request the status of the device. If the unit is newly installed it will probably have a time error, a schedule error and or a battery level error and the screen will update to show an orange error indication:
 - a. IMS will automatically correct the time error when it next synchronises the time on the site to the IMS.
 - b. A low battery error may occur if the new unit has been in storage and out of sunlight for some time. It is best to leave the unit on the post (make sure the transport magnet has been removed) and monitor the device as it recharges.
 - c. A schedule error will usually occur when the IPC is first installed because it will not have a watering schedule and indeed schedules for the site may not be completed until some time after the site is first installed. Also for example, sample test schedules for operation may be developed in order to test

valve operation of the devices before finalising the schedule requirements for the start of an irrigation season.

3. To provide a schedule to the IPC the user must first either assign the device to a schedule group (group management) by adding and removing members of a group, or importing a schedule that has been designed with QTech or RX Plastics schedule design software. Please refer to online documentation or contact Water-Insight for support with schedule design.
4. For IPCs that have an associated schedule then the schedule can be sent to the device to remove a schedule error condition by clicking the device settings icon (cog icon next to the refresh icon) on the status information form then clicking the send schedule button (figure 4) then follow the on screen instructions to transmit the schedule to the IPC.
5. To do a quick check to see if the valve/solenoid is operating click the device settings (cog) icon and click the valve operation – on button (figure 4), wait a few seconds then click the off button. If the pipeline is water pressurized the valve should operate and water flow. If the line does not have water in it listen for the click of the solenoid. It can take up to a minute for the IPC to turn on and off when instructed.

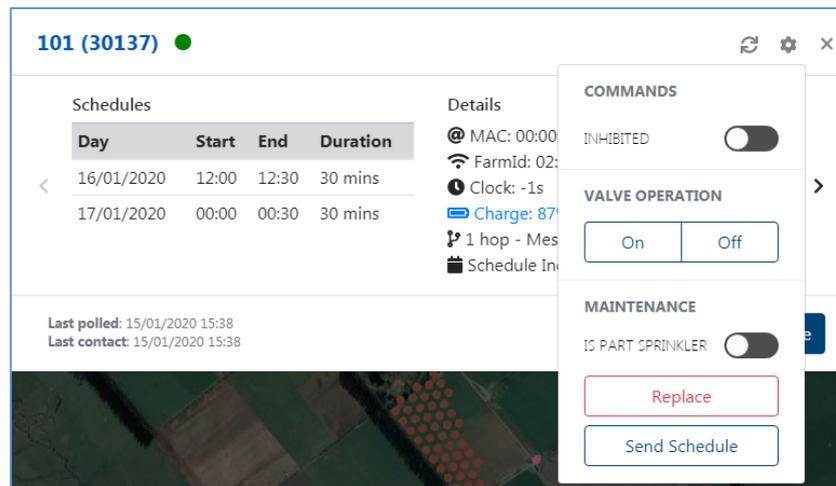


Figure 4

For more information email support@waterinsight.co.nz