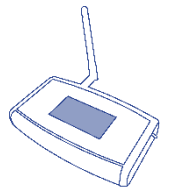




Application Notes

Rev 03.

AN10 - How to Discover the Radio Channel of an IPC



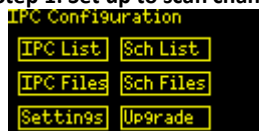
For small farm systems, the Water-Insight EP3 handheld tool for Irrigation Point Controllers (IPC) is ideal for making adjustments to the system. . An EP3 holds a list of the unique serial numbers and names of every IPC on a farm site. Each IPC communicates on a pre-programmed radio channel numbered 1-25. These radio channels are normally programmed in the factory specifically for the farm site but occasionally they need to be changed to avoid miscommunication with neighbouring farms. This document tells you how to discover the operating channel if you don't know what it is.

Scanning the radio channels (settings > comms > scan channels) helps identify if the IPC is operating on the incorrect channel. You can fix IPCs with incorrect channel assignments by setting the programming channel (settings > comms) to be the same value as the channel that the unit responds on, then view the IPC and send the radio channel followed by request status to set the channel correctly.

Be aware that an IPC will also not respond if it is in hibernation mode or if the battery is flat. You should verify that you are not dealing with these issues before trying to scan channels.

It is advisable to familiarise yourself with the "EP3 User Guide" in conjunction with this application note. You must remain within radio communications range of the IPC of which you are attempting to discover its radio channel. Its best to be right beside the IPC, if you are uncertain. Follow these steps to find the operating channel:

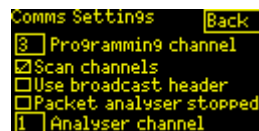
Step 1: Set up to scan channels



1. Turn the unit on, the main screen appears.



2. Tap settings then tap comms



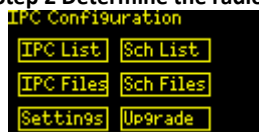
3. Select (tick) the checkbox "scan channels"

4. Tap back to return to the main menu.

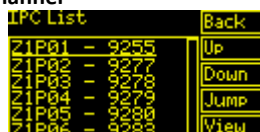
Note

- for IPCs on version 3.xx, deselect the "use broadcast header" setting.
- for IPCs on version 5.xx, select the "use broadcast header" setting.
- You can tell the difference by looking at the IPC details which will list a farmID for the device or not.
- If unsure repeater the scan channels process with and without the broadcast header selected.

Step 2 Determine the radio channel



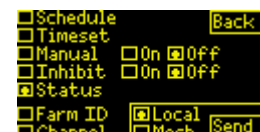
1. From the main screen tap ipc list



2. Select each ipc in the list and tap view



3. Tap comms



4. Select status checkbox and local checkbox Tap send

The device will cycle through each channel and send a status request. Watch carefully and when the IPC responds the channel number will be displayed on the screen.

If the channel number displayed is different from the channel number listed (e.g. Z1P01 is required to be on channel 7 in the example above), then the IPC may need to have its channel changed to correspond to the podlist. Let's say that the IPC responds on channel 16.

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