Crossover Readings on GP20

Sometimes where two or more GP20 readers are used in close proximity a read on one reader is echoed in a nearby reader.

There are two possible causes of this. The most common is the field in one reader being inductively coupled to the other reader because they are close. In this case there is nothing to do except separate the readers more or change the rotation of one/both the readers.

The second cause of 'echoing, can occur where it is required to operate two or more GP20 readers on the same local DC supply. If the supply is not sufficiently smoothed it is possible for any RF field in the lead of one reader to travel down the cable and appear at the other reader/s and cause a read. (Echo)
This can be particularly troublesome in situations where a bank of readers is used.

Though the effect is similar to direct interference where it is the actual field that causes the extra read this effect it can be cured without moving the readers.

The effect happens most where the DC supply wires are connected in common in the field and not taken back to the low impedance DC supply on the controller.

One solution that is very effective is to decouple the DC supply lead to the readers as below.

To other GP20 Readers.