X10DR Noise reduction

Grounding strap

Depending on the quality of the grounding of the associated radio equipment there may be situations where extraneous noises can be heard, especially when the attached host mobile radio is transmitting. These noises can be generally be eradicated by fitting a grounding strap. The grounding strap should be as short as locallised grounding allows, 60cm is ideal.

A ground connection can easily be implemented during the installation process by soldering a wire (~22AWG) to the metal housing of the RJ45 connector that plugs into the X10DR Gateway, and then attaching the wire to a suitable chassis point near the Gateway. The ground strap should be soldered and secured to the cable via a small cable-tie as shown.

Finally, always make sure the SMA connector is firmly secured ideally using a small 8mm spanner or crescent wrench. (take care and be careful NOT to overtighten)

These noises can be more evident when:

- External mounted Antenna's base is not attached to a well grounded roof or vehicle rack.
- When the installed XIC interface cable is longer than the supplied standard 1.5m length.
- When connected to TDMA radios e.g. TETRA DMR, MotoTrbo radios etc.
- When a number of X10DRs are connected to the one host mobile radio
- when other third party products are attached.









