By measuring between this new terminal and GND with a digital voltmetre, you can measure a DC voltage which is proportional to the received signal strength.

The quiescent nominal voltage measured with no radio transmission (ie background noise) should fall between 1.0 and 1.9 volts d.c.

If the quiescent voltage is higher than 2.0 V d.c. you may have some active transmitters working in the area at or about 303MHz which could cause problems. In this case a Radio Elite may not be your best option.

Once the quiescent voltage has been established, operate one of the transmitters within 1 metre of the aerial and measure the received signal. A strong signal will give a reading of 3.2 to 3.5 volts d.c.

Now measure the signal strength with the transmitter at the farthest distance from the aerial that you wish it to work at.

For reliable operation the measured voltage from the transmitter at this point should at least 0.5v above the quiescent voltage. Ie if quiescent level is 1.5 volts then the minimum signal strength during transmission should be 2.0 volts.

By monitoring signal strength and transmitting a continuos signal you can move the aerial around to find the best possible location. When selecting the aerial location the transmitter should be about 10 metres away from the aerial.

If necessary you can extend the aerial to a central location by running a length of standard coax cable back to the panel. Strip back the outer insulation and the braided screen to a length of 250mm and fix this end in the best location as determined by the tests detailed above.

RADIO NOTES