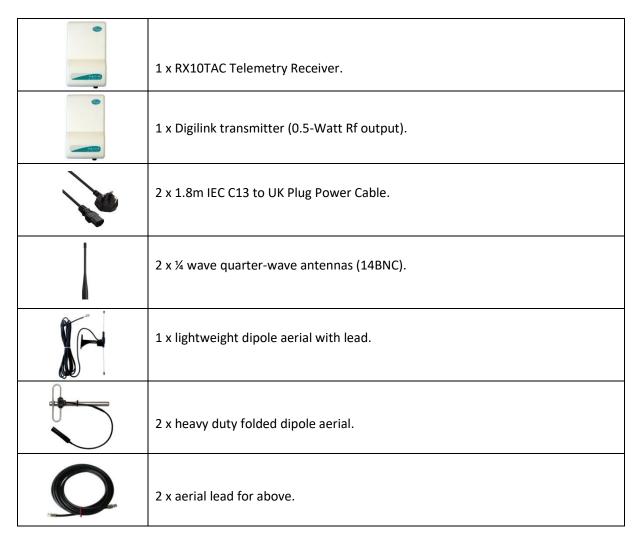
#### **Scope Communications UK Ltd**

RTESTT User Manual



# **RTESTT User Manual**

#### **Contents**



Radio range testing and site surveys should only be carried out by suitably qualified radio installation engineers who are fully conversant with all matters relating to UHF radio propagation characteristics within a commercial environment.

This test kit can be used to simulate several products. Before continuing it is essential that you know which product family is being proposed for the site so you can conduct the relevant test(s). If you don't know, stop, and find out, if any further advice is needed or technical manuals, please call our Technical Support Department on 01803 860720 or <a href="mailto:support@scope-uk.com">support@scope-uk.com</a>

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### **RTESTT User Manual**

Scope offers free training at our manufacturing site in Devon on all our Scope products. If you would like to see the operation/capability of the complete Scope range for Fire, Lockdown, DDA, SOS, lone worker (with location), wireless link for fire panels (conform to BS5839-1:2017 (24.2b) and BSEN54-25:2008 (4.2.6) and more applications, please contact us to discuss available dates. If you would like any additional information, please refer to our Datasheets available for all products at <a href="https://www.scope-uk.com">www.scope-uk.com</a>

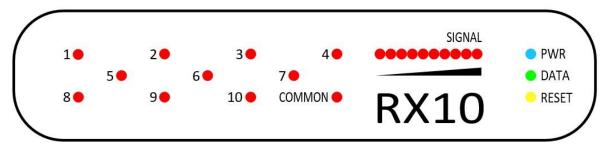
NOTE: MAKE SURE THE TRANSMITTER IS NEVER ON WITHOUT AN AERIAL CONNECTED TO OUTPUT BECAUSE DAMAGE MAY RESULT.

# **Conducting the test**

- 1. Attach the quarter-wave antenna (14BNC) to both the DigiLink and RX10TAC
- 2. Position the DigiLink and RX10TAC **vertically** and as near to the final mounting position as possible.
- 3. Connecting both mains leads to a standard 230V ac outlet. DigiLink will transmit every 20 seconds.
- 4. When the two units are in range of each other, every transmission from the DigiLink will activate Zone 1 of the RX10TAC for 10 seconds, then deactivate for 10 seconds. The RX10TAC will indicate an RSSI value (signal strength), the received value is displayed on the front panel as a level for a period of 2 seconds. The level meter follows the convention of:

1-4 red LED's = low,

5 and above red LED's = good.



Please monitor the background noise levels for when the Digilink transmissions are not present, the higher levels of background noise (not necessarily on the same frequency &/or on the RF baud rate) it will impede the range of the system.

PLEASE BE AWARE THAT ALL TESTS CAN ONLY MONITOR RADIO TRAFFIC AT THE TIME THE TESTS ARE CARRIED OUT, WE CANNOT PREDICT THE FUTURE OR ANY FURTHER EXPANSIONS ON SITE. THESE TESTS GIVE A BRIEF TIME WINDOW OF WHAT CAN BE REASONABLIY EXPECTED IN TERMS OF FACTORS THAT MAY AFFECT SCOPE EQUIPMENT SUCH AS BACKGROUND NOISE & RADIO INTERFERENCE.

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# A) If Full coverage is not achieved

Repeat the test using the LDPBNC, ensuring it is placed at a suitable position in the correct orientation (refer to the instruction sheet)

If it is possible for the final system to be installed at a different (more favorable) location, repeat the tests from this location.

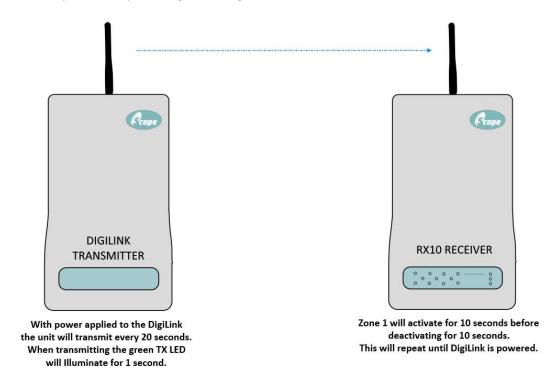
# B) If Full coverage is still not achieved

Repeat the test using the the half-wave heavy-duty folded dipole antenna (FDANT), ensuring it is placed at a suitable position in the correct orientation (refer to the instruction sheet) Make sure the aerial element is vertical and the cable is fully uncoiled (without causing a trip hazard). The FDANT aerial can be supplied with 5m, 10m or 15m feed cable. This cannot be coiled or easily shortened so the correct length must be ordered.

# C) If Full coverage is not achieved Transponder Option

If full coverage is still not achieved, a transponder system may be required. This would normally be sited as close as possible to the receiver, but still within range of the main transmitter.

Set up the test system at this point and repeat each step of the test procedure from the start until you have optimal signal strength on the receiver.



If any further advice is needed, please call our technical support department on 01803 860720 or email support@scope-uk.com.

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