Birdirra Test Rig Operation Manual

Contents

Revision History

Revision	Date	Author	Details
1.0	18-May-2020	R Keaney	Initial Draft

1   Introduction

This document describes the operation of the Birdirra Test Rig (BTR).

The BTR comprises a "bed of nails" style jig which connects to a single Birdirra Module using spring loaded pogo pins to facilitate connection of the module to a test computer, power supply and RF test instruments.

The BTR is used both for Birdirra Manufacturing testing and Birdirra radio compliance testing. This manual covers only the features required to use the BTR as a host system for Birdirra module radio compliance testing.

2   Test Rig Hardware

The BTR is shown in Figure 1 below. The Birdirra module is clamped into the test rig as shown. A single USB cable is supplied to provide power and serial communications to the Birdirra Module. The BTR antenna port is an SMA connector, and the rig is supplied with a 2dBi dipole antenna.
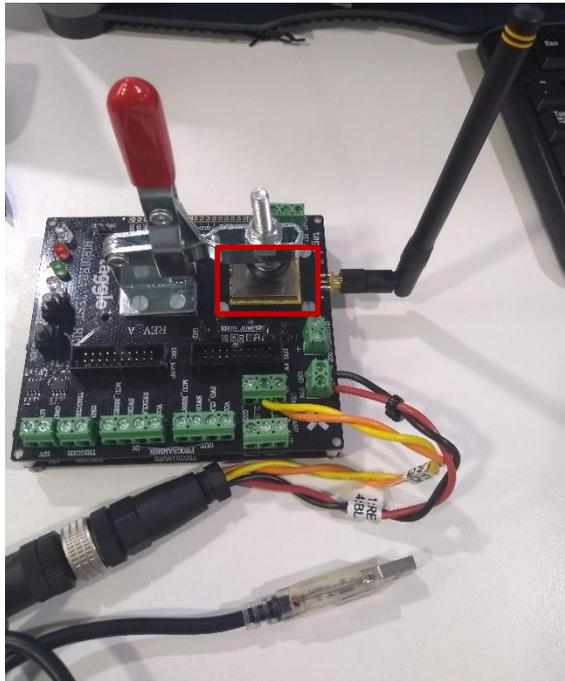
Figure 1 Birdirra Test Rig Hardware

A Windows PC is required to power and control the Module.
To set up the Hardware:
1. Connect the supplied antenna or test equipment to the SMA port.
2. Start Device Manager on the controller PC.
3. Connect the USB cable to the PC and note which COM port is opened in Device Manager.

3 Compliance Test Software

Open the provided software **RfComplTest.exe**

It will prompt you to choose the serial port, select the port noted from the previous step.
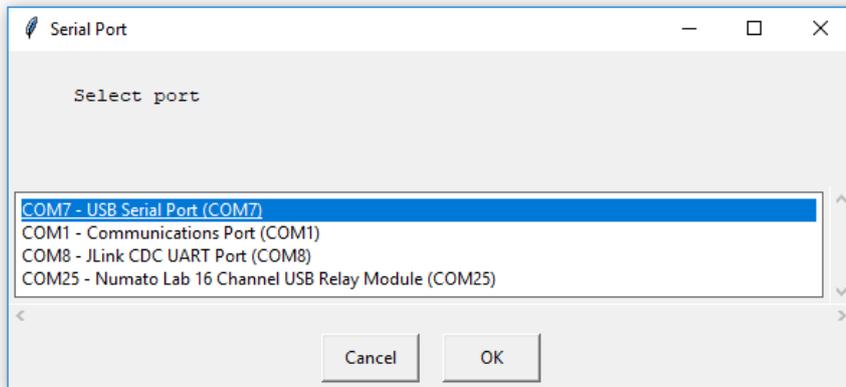
Note: If you have chosen the incorrect port the program will close.
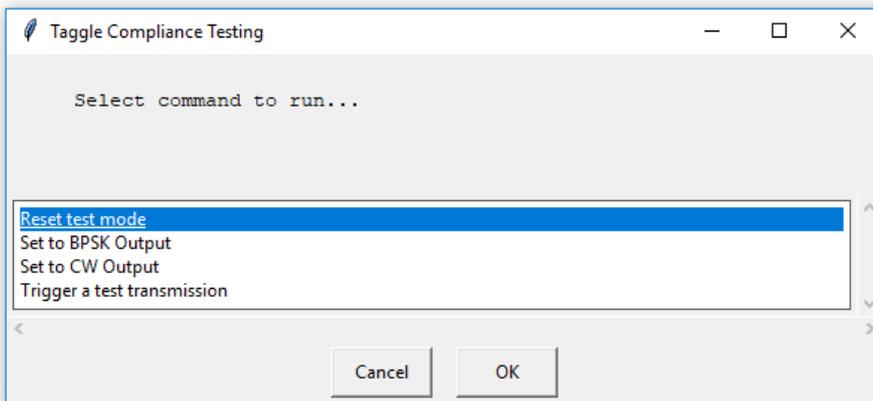
1. Select "Set to BPSK Output" and hit "OK". The module will begin to transmit modulated output continuously.
2. Select "Reset test mode" and hit "OK" to halt transmission.

The board is powered through the USB. If you have any issues you can reset it by disconnecting and reconnecting the USB.