

5. Connect the Audiogen. output of the RF test set to the Tx Audio coaxial socket. This provides audio to the exciter.
6. Select Modulation for most purposes. Select Dual Point Modulation when you want to align the dual point modulation. Select Off if you don't want to use audio to modulate the carrier, for example when you are measuring CTCSS.
7. Connect the RF output of the exciter to the RF input of the PA. Then, using the cable you made, connect DC power (a 100 W PA will draw up to 27 A) and the Tx Enable socket on the CTU to D-range 1 on the PA.
8. Select Tx Key when you are ready to key the exciter and the PA.

### Optional Connections for Receivers

#### Audio 1 and Audio 2

Two different audio test points in the receiver that are usually joined. See the relevant service manual for more information.

#### Tx Enable / RSSI

This socket gives you access to the RSSI line output, so that you can calibrate the receiver's RSSI.

### Optional Connections for Transmitters and Exciters

#### CTCSS

This socket provides a connection for measuring the CTCSS tones output by the CTCSS board in a transmitter or exciter.

#### Tx Key

The Tx Key line can be used as an input to remotely key up the Transmitter/Exciter.

## Calibration Test Unit User's Guide

The T800-01-0010 Calibration Test Unit (CTU) is designed to help you connect Tait T800 Series I and Series II radio equipment to your standard test equipment. It also lets you connect a PC running radio programming software. With a CTU, you do not need to construct your own custom wiring loom for testing.

This User's Guide explains how to connect up the CTU to your radio equipment. You cannot directly connect power amplifiers to the CTU. For diagrams of typical setups and for test procedures, see the relevant service manual.

The CTU has a top row of audio and power connectors, a middle row of switches, and a lower row containing the D-range socket for the connection to the radio equipment and other less frequently used inputs and outputs from the radio D-range.

### Connecting a Transmitter or Exciter

To connect a transmitter or exciter, carry out the steps labelled in Figure 1 and described below.

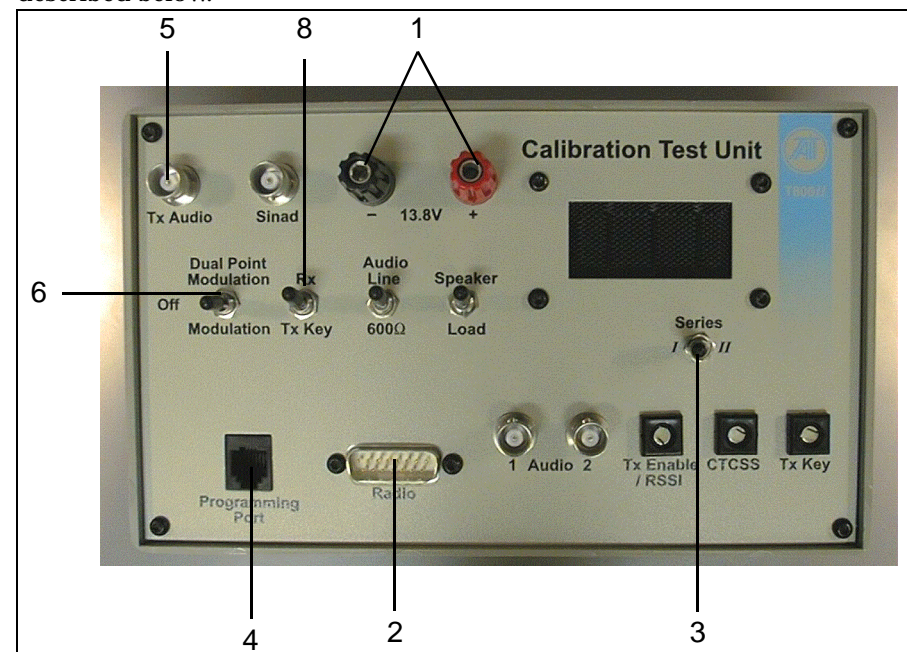


Figure 1 Connecting a Transmitter or Exciter

1. Connect 13.8 V DC power to the 13.8 V terminals. This provides power to the transmitter/exciter (a 25 W transmitter will draw 6-7 A).
2. Connect the Radio D-range to the main D-range at the rear of the transmitter/exciter, using the cable supplied with the CTU.
3. Select Series I or Series II to match the radio equipment.
4. If necessary, connect the Programming Port RJ 11 socket to a PC running the radio programming software (only for radios that are programmable through D-range 1).
5. Connect the AudioGen. output of the RF test set to the Tx Audio coaxial socket. This provides audio to the transmitter/exciter.
6. Select Modulation for most purposes. Select Dual Point Modulation when you want to align the dual point modulation. Select Off if you don't want to use audio to modulate the carrier, for example when you are measuring CTCSS.
7. Connect the RF output from the transmitter/exciter to the test set.
8. Select Tx Key when you are ready to key the transmitter/exciter.

## Connecting a Receiver

To connect a receiver, carry out the steps shown in Figure 2 and described below.

1. Connect 13.8 V DC power, to provide power to the receiver.
2. Select Series I or Series II to match the receiver.
3. If necessary, connect the Programming Port RJ 11 socket to a PC running the radio programming software (only for radios that are programmable through D-range 1).
4. Connect the Sinaid coaxial socket to the audio input of the test set.
5. Select Speaker to send the receiver's speaker output to the CTU speaker. Otherwise select Load to send the speaker output to a 4 Ohm load.
6. Select Audio Line if the test equipment connected to the Sinaid coaxial socket has 600 Ohm input impedance. If it has high input impedance, select 600 Ohm.

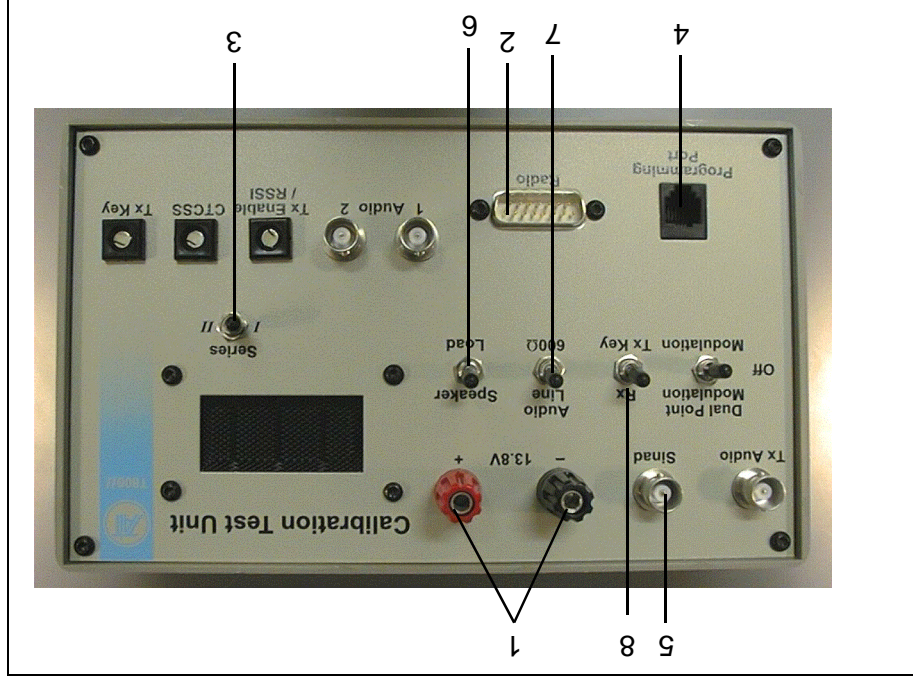


Figure 2 Connecting a Receiver

## Connecting an Exciter with Power Amplifier

For this combination, only the exciter is connected to the CTU. Make up a separate cable to supply 13.8 V DC to the PA D-range and to make the PA D-range pin 12 (Tx Key) available for connection to the Tx Enable socket on the CTU. Then carry out the steps labelled in Figure 1 and described below.

1. Connect 13.8 V DC power to the 13.8 V terminals. This provides power to the exciter.



**Caution**

Do not connect the PA D-range to the Radio D-range on the CTU. The CTU will not withstand the amperage required.

2. Connect the Radio D-range to the main D-range at the rear of the exciter, using the cable supplied with the CTU.

3. Select Series I or Series II to match the exciter.

4. If necessary, connect the Programming Port RJ 11 socket to a PC running the radio programming software (only for exciters that are programmable through D-range 1).