

# Tandy Electronics (China) Limited

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### **Alignment Procedure**

Prepared by	
Approved. by	
Rev.	Α

# Cat No. : 32-1258

Recommended Test Devices: HP8920: RFCTS HP8591: RFSA DC Power BNC cable

Recommended Alignment Conditions: Supply Voltage Receiver: Recommended AC-DC adapter or 12V±0.2V DC Power Transmitter: 3.0 ±0.05V DC

# **Alignment Procedures**

Transmitter Section

#### Frequency Accuracy Adjustment

 Connect a BNC cable's opened end to P5 point by soldering and others BNC terminal connect to the RFIN of the RFSA.
Turn on the DC power and set the SW200 (OFF/MUTE/TALK) to MUTE mode, LED D202 lights on.
Set the RFSA as below: Center freq: UUT's channel frequency Span: 50KHz
Adjust L201 and VR100 until the desired frequency +/- 1KHz is obtained from the RFSA.

#### **Distortion Tuning**

1. Connect a BNC cable's opened end to P5 point by soldering and others BNC terminal connect to the RFIN of the RFCTS.

 Connect a BNC cable's opened end to MIC+ and MIC- and others BNC terminal connect to the AUDIO OUT of the RFCTS.
Setup the RFCTS as follow: TX mode
Filter: 300-3KHz
Emphasis: ON
IF filter: 230KHz
AUDIO OUT : 9.5mV
Turn on the DC power and set the SW200 (OFF/MUTE/TALK) to TALK mode, LED

4. Turn on the DC power and set the SW 200 (OFF/MUTE/TALK) to TALK mode, LED D202 lights on. 5. Adjust VR200 until 7KHz deviation is obtained, read the distortion from the RFCTS which will be  $\leq 2\%$ .

6. If the distortion is bigger than 2%, adjust VR100 until the desired value is obtained.

#### Mike Sensitivity Tuning

 Setup the RFCTS as follow: TX mode
TX mode
Filter: 300-3KHz
Emphasis: OFF
IF filter: 230KHz
ANT IN
Insert an antenna to ANT In of the RFCTS.
Adjust the Speaker Level of the Test jig to 106dBspl .
Put the UUT into the Test Jig and set the SW200 (OFF/MUTE/TALK) to TALK mode.

5. Adjust VR200 until 7KHz deviation is obtained.