# Alignment Procedure | RF Board Adjustment | ATW-R1820

Default Positions

| Power | SA | Noise Meter | Transmitter | Distortion | Oscilloscope | Voltmeter | Digital Countur | SSG |
|---|---|---|---|---|---|---|---|---|
| DC12V | - | 0dB | 31.25kHz | -20dB | - | - | 10Hz-80MHz | 1kHz |

Local Oscillation Frequencies
CH 1□IF1=RF1-LO1=243.950MH LO2=233.250MHz
CH 2□IF2=RF2-LO2=265.550MH LO2=254.850MHz

| Board | Item | SA | SSG | | Antenn CH | AorB 1or2 | Adj Point | Check Point | Operation | Measurement Reference |
|---|---|---|---|---|---|---|---|---|---|---|
| RF | TG Adjustment | REF LEVEL□<br>77dBuV<br>SPAN□<br>100MHz<br>TG Input□<br>80dBuV | - | | 1-A<br><br>1-B<br><br>2-A<br><br>2-B | | C1101<br>C1102<br>C2102<br>C2103<br>C4101<br>C4102<br>C5102<br>C5103 | <br>IC1101 11pin<br><br>IC2101 11pin<br><br>IC4101 11pin<br><br>IC5101 11pin | Input singnal to board using TG function of SA<br>Adj filter with watching waveform of each<br><br>SA Waveform Pattern<br><br>±0.5dB<br><br>655.500 668.000 680.375 | □ Waveform should be f<br>The value of 665.50(<br>should be within ±0.<br><br>□ Waveform level shoul<br>(It depends on adj.<br>(Level should be the<br><br>* It is ideal that v<br>adujsted maximum anc |
| RF | Adj Local Oscillation Freq.<br>Adj Secondary Freq. | | | | 1-A<br>1-B<br>2-A<br>2-B | | C3117<br>-<br>C6117<br>- | IC1201 2pin<br>IC2201 2pin<br>IC4201 2pin<br>IC5201 2pin | Adj Local Oscillation Freq.<br>Adj with watching secondary freq.<br>Check secondary freq.<br>Adj with watching secondary freq.<br>Check secondary freq. | □ Adj freq. to 233.25(<br>□ Check if freq. is 23<br>□ Adj freq. to 254.85(<br>□ Check if freq. is 25 |
| | Adj Primary Freq. | | | | 1-A<br>1-B<br>2-A<br>2-B | | -<br>-<br>-<br>- | IC1101 8pin<br>IC2101 8pin<br>IC4101 8pin<br>IC5101 8pin | Check primary freq.<br>Check primary freq.<br>Check primary freq.<br>Check primary freq. | □ 424.050MHz±0.05MHz<br>□ 424.050MHz±0.05MHz<br>□ 402.450MHz±0.05MHz<br>□ 402.450MHz±0.05MHz |
| RF | Check<br>AF distortion rate | - | MOD□<br>22.5kHz<br>RF LEVEL□<br>60dBuV | | 1-A<br>1-B<br>2-A<br>2-B | | T1201<br>T2201<br>T4201<br>T5201 | IC1201 14pin<br>IC2201 14pin<br>IC4201 14pin<br>IC5201 14pin | Input modulating signal to board with SSG<br>Check distortion rate with putting audio<br>from each IC to distortion meter | □ Distortion rate shou<br>□ Distortion rate shou |
| RF | Adj RSSI | - | MOD□<br>0kHz<br>RF LEVEL□<br>30dBuV<br>(20dBuV) | | 1-A<br>1-B<br>2-A<br>2-B | | VR1201<br>VR2201<br>VR4201<br>VR5201 | VR1201 2pin<br>VR2201 2pin<br>VR4201 2pin<br>VR5201 2pin | When the same strength signal is input to<br>adj VR output for the identical voltage<br>(Align RSSI against the same field intensity) | □ The value should be<br><br>(The value should be |

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06/10/17

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flat
)MHz and 680.375MHz
.5dB against 668.00MHz

ld be 60dBuV±3dBV
jig)
e same with each IC)

waveform to be
d flat

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0MHz±0.05MHz
33.250MHz±0.05MHz
0MHz±0.05MHz
54.850MHz±0.05MHz

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uld be minimum
uld be within 1%

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700±5mV with voltmeter

e 550±5mV with voltmeter)

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