

ALIGNMENT PROCEDURES

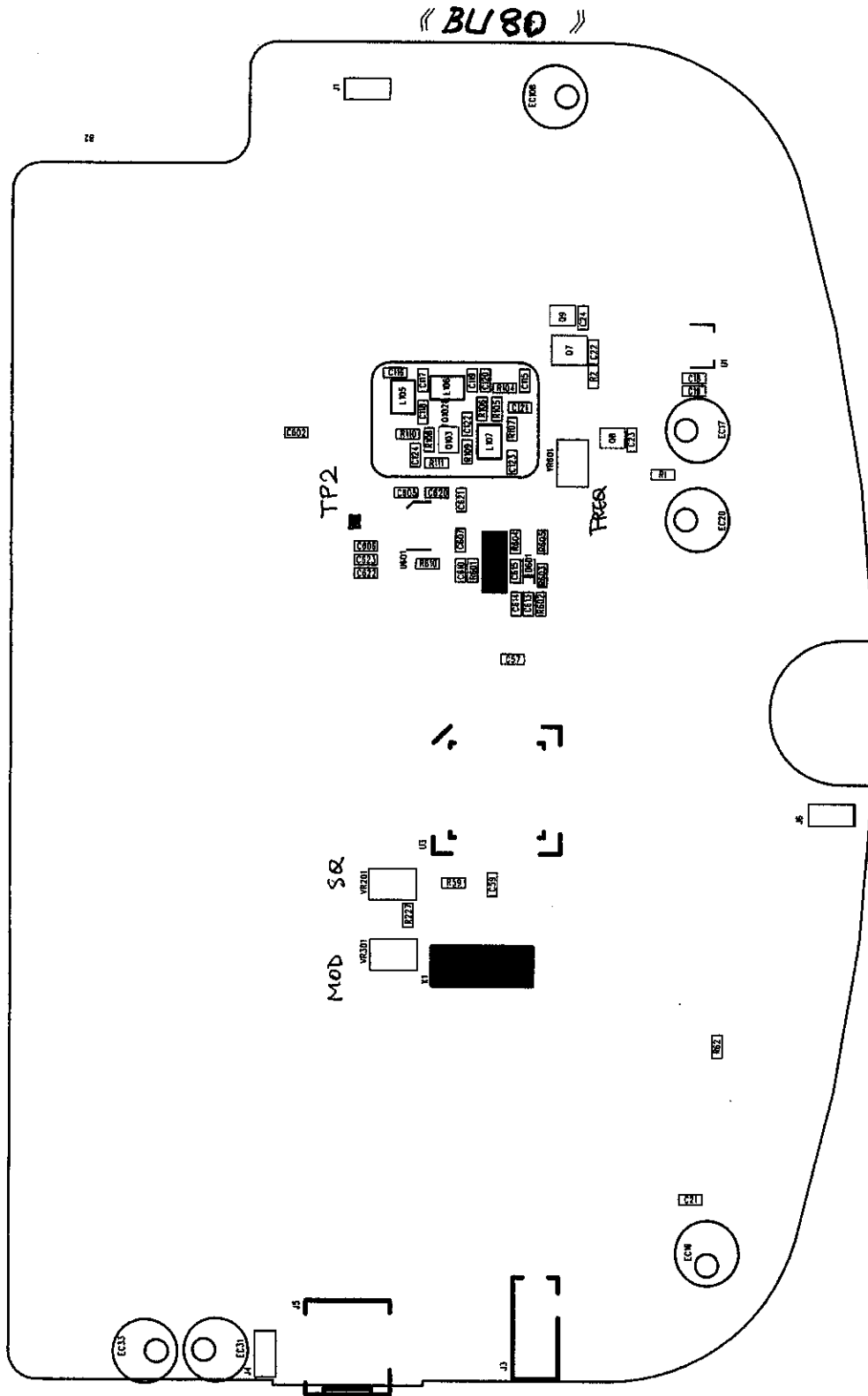
Model No : BU80

Destination : MUSICAL ELECTRONICS LIMITED

Frequency Range : 462.5625 ~ 467.7125 MHz

PCB Alignment Point

Location of Adjustment in PCB



« PLL Alignment »

Conditions :

1. Frequency	.....	CH-1, CH-14
2. Squelch	.....	Open
3. Volume	.....	Min
4. Power Supply	.....	6.0 V DC

Procedures

[FRS VCO]

- 1) Set a reception Frequency to CH-1.
- 2) Connect a Digital Voltmeter with T.P2, and Confirm that a Voltage Should be a Range of 0.4 V ~ 1.0 V.
- 3) Set a Reception Frequency to CH-14 and Switch to Transmit Mode.
- 4) Confirm That a Voltage Should be Within a Range of 2.0 ~ 3.0 V.

« *Transmission Alignment* »

Conditions :

1. <i>Dummy Load</i>	.....	<i>50 ohm</i>
2. <i>Frequency</i>	.....	<i>CH-1, CH-14.</i>
2. <i>Squelch</i>	.....	<i>Open</i>
3. <i>Volume</i>	.....	<i>Min</i>
4. <i>Power Supply</i>	.....	<i>6.0 V DC</i>

Procedures

A) RF output Power Alignment

- 1) *Set Supply Voltage to 6.0 V.*
- 2) *Adjust a Frequency to CH-1 and Switch to Transmit Mode.*
- 3) *Confirm That the RF Power obtained at CH-1 and CH-14 must be Within a Range of 0.32W.*

B) TX Frequency Alignment

- 1) Set a Frequency to CH-7, and Switch to Transmit Mode.
- 2) Adjust VR601 so that a Frequency Counter Reading Should be Within 462.7125 MHz ± 100 Hz.

C) Deviation Alignment

- 1) Set a Frequency to CH-7, and Switch to Transmit Mode.
- 2) Input 1 KHz, From AG (Audio Generator), 100 mV (Open Voltage) to the EXT-MIC Terminal, and Adjust VR301 so that Deviation is ± 2.3 KHz.
- 3) Lower the AG output, and Adjust the Deviation to 1.5 KHz. In that case, Confirm That AG output Voltage is Within a range of 10 ~ 30 mV (Open Voltage).

« Receiver Alignment »

Conditions :

- | | | |
|-----------------|-------|----------|
| 1. Frequency | | CH-7. |
| 2. Squelch | | Open |
| 3. Power Supply | | 6.0 V DC |
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Procedures

A) RX Sensitivity Alignment

- 1) Set a Frequency to CH-7.
- 2) Confirm that 12 dB Sinad is -9 dB approx.
- 3) Confirm that a 12 dB Sinad of the Frequency at CH-1 and CH-14 Must be below -7 dB.

B) Squelch Sensitivity Alignment

- 1) Set a Frequency to CH-7.
- 2) Set a Signal Generator Output Level -13.0 dB μ V e.m.f.
- 3) Adjust the VR201 so that Audio Signal Close Point.