

**PRESIDENT**

**TEDDY II**

**SERVICE MANUAL**

## SPECIFICATIONS

<b>General</b>		
Frequency coverage	26.965 ~ 27.405MHz	
Operating mode	F3E (FM), A3E (AM)	
Configuration	40 EU / 40 PL / 80 d / 40 EC / 40 UK+40 CEPT / 27 In	
Antenna Impedance	50 $\Omega$	
Working temperature	-10°C~+55°C	
Frequency Tolerance	Better than 0.002%	
Input Voltage	13.2V	
Grounding Method	Negative ground	
Current Drain	Transmitter	13.2V : 2.0A Max.
	Receiver	From 150mA to 500mA 13,2V
Dimensions (W x H x D) With projections	Microphone: 60 x 41 x 82 mm Body: 125 x 151 x 45 mm	
Weight	Approx.900g	
<b>RECEIVER</b>		
Receiving System	Dual conversion superheterodyne	
IF Frequencies	Double Conversion 1st 10.695MHz/ 2nd 455KHz	
Sensitivity	-112dBm for 20dB SINAD in AM Mode	
	117dBm for 20dB SINAD in FM Mode	
Audio Output Power	3 watts max @8 $\Omega$	
Audio Distortion	Less than 5% @ 1KHz	
Image Rejection	70dB	
Adjacent Channel Rejection	60dB	
Frequency Response	300Hz to 3000Hz	
Squelch sensitivity	Threshold 0,2 $\mu$ V(-120dBm)/Tight 1mV(-47dBm)	
<b>TRANSMITTER</b>		
Output Power	FM/AM: 4.0 W	
Modulated signal distortion	Inferior to 2%	
Frequency Response	300Hz to 3000Hz	
Output Impedance	50ohms, Unbalanced	
Harmonic Suppression	More than -54dBm	

## CIRCUIT DESCRIPTION

### Frequency configuration

The receiver utilizes double conversion. The first IF is 10.695MHz and the second IF is 455kHz. The first local oscillator signal is supplied from the VCO module.

The VCO module in the transmitter generates the necessary frequencies. Fig. 1 shows the frequencies.

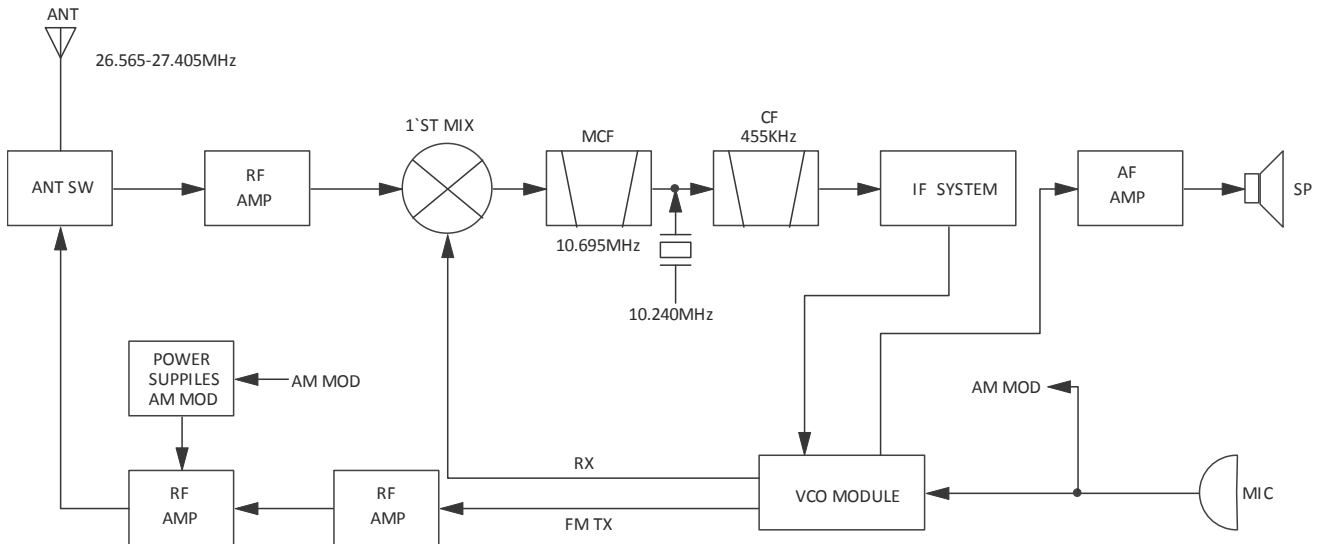


Fig. 1 Frequency configuration

### Receiver

The frequency configuration of the receiver is shown in Fig. 2.

#### ■ Front - end RF amplifier

An incoming signal from the antenna is applied to an RF amplifier (Q103) after passing through a transmit/receive switch circuit (D100, D110 and D108 are off). After the signal is filtered through a band pass filter to eliminate unwanted signals before it is passed to the first mixer.

#### ■ First Mixer

The signal from the RF amplifier is heterodyned with the first local oscillator signal from the VCO module at the first mixer (Q104) to create a 10.695MHz first intermediate frequency (1st IF) signal. The first IF signal is filtered through a band pass filter (L106, L107 and L108) and then fed through the monolithic crystal filter (MCFs : CB100) to further remove spurious signals.

#### ■ IF amplifier

The first IF signal goes into second mixer Q113, second mixer mix first IF and 10.24MHz second IF output Y100. The signal is heterodyned again with a second local oscillator signal. The second IF signal is then fed through a 455kHz ceramic filter (CF100) to further eliminate unwanted signals. The signal is amplified by Q114 and Q105, and then the second IF signal enters U101 (FM processing IC) in FM mode or changed according to Q102, Q111 and receive audio signal output.

## CIRCUIT DESCRIPTION

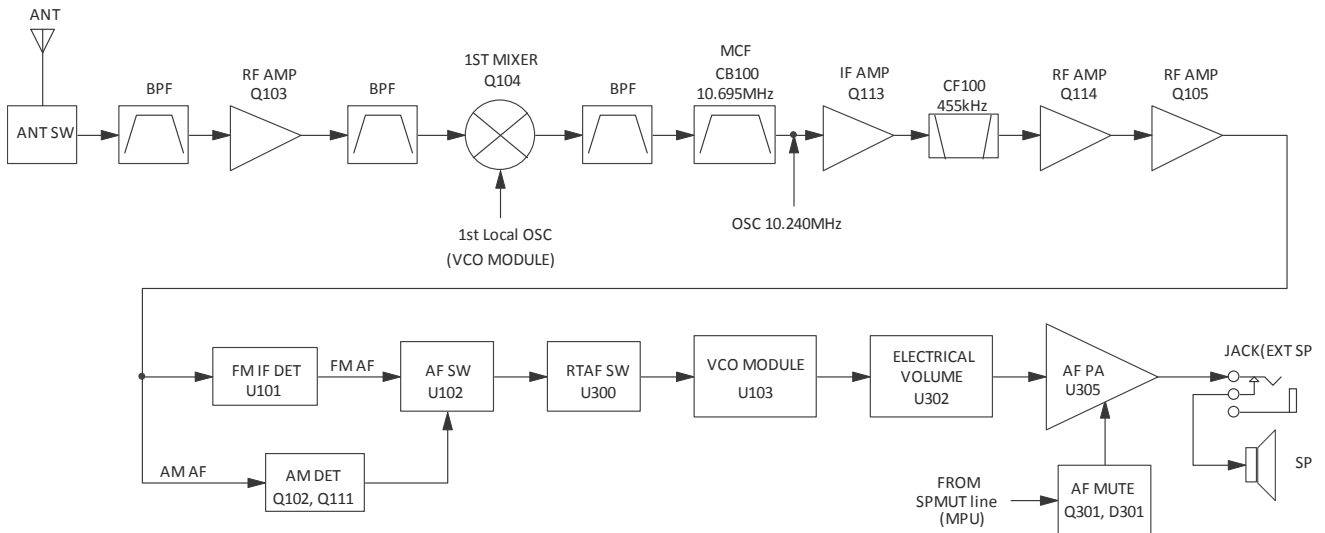


Fig. 2 Receiver section configuration

### ■ AF amplifier

The FM IC output the FM AF passes through the AF electrical switch(U102) or The AM demodulated signal from Q105 goes to AF electrical switch (U102), electrical switch (U300),VCO module, and Electrical Control Volume IC(U302). After goes to AF power amplifier IC (U305). Is routed to an audio power amplifier (U305) where it is amplified and output to the speaker. To output sounds from the speaker, U701 sends a low signal to the SPMUT line the turns Q301.

### ■ Squelch

A squelch circuit is provided to prevent no-signal noise or weak signals from outputting to a speaker during transmission.

## Transmitter

### ■ Transmit audio

The audio signal from the microphone goes to the VCO module through the VCO modulation terminal for direct FM modulation. The AM modulation signal enter into RF amplifier after passing through power supplies Q306, Q307 and Q311.

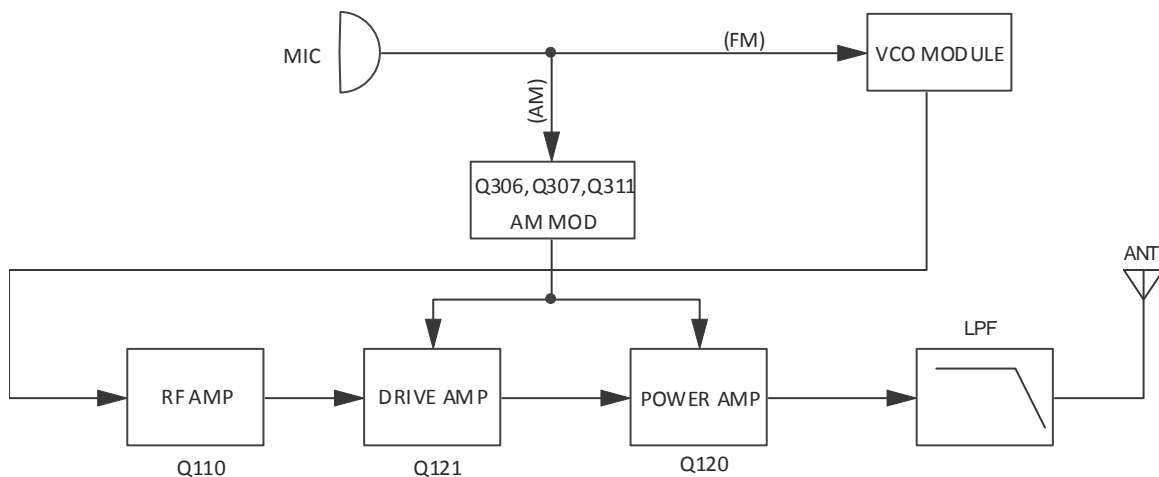


Fig. 5 Transmit circuit

## CIRCUIT DESCRIPTION

### ■ Power Amplifier Circuit

The transmit output signal from the VCO module passes through the amplified (Q110) and amplified by Q121. The amplified signal goes to the final amplifier (Q120) through a low-pass filter. The lowpass filter removes unwanted high-frequency harmonic components, and the resulting signal is transmitted through the antenna terminal.

### Power Supply

The power supply voltage is maintained to 8.0V, 5.0V and 3.3V by the series regulator (U501, U500 and U503). It is used as MCU power 8N, 8T and 8R.

8V is a common 8V.

8R is 8V for reception and output during reception.

8T is 8V for transmission and output during transmission.

5V is a common 5V.

### Control Circuit

#### ■ MPU

The microprocessor (U701) operates with an internal clock of 4MHz.

The control circuit consists of a microprocessor (U701) and its peripheral circuits. It controls the TX-RX unit. U701 mainly performs the following:

- 1) Switching between transmission and reception by the PTT signal input.
- 2) Sending frequency program data to the VCO module.
- 3) Controlling squelch on/off by the DC voltage from the squelch circuit.
- 4) Controls the second MPU.
- 5) Controls the power supply unit.

### Display Circuit

The MPU (U701) controls the display LCD and LEDs. The LCD driver (U800) and MPU (U701) communicate through the DAT, CLK, A/D lines.

CONT UNIT		
Designators	Comment	Footprint
C800	102P	S0402
C801	103P	S0402
C802	225PA	S0402
C803	103P	S0402
C804	103P	S0402
C805	475PC	S0603
C806	103P	S0402
C807	102P	S0402
D800	DLS0603-0010	SD0603(LED)
D801	DLS0603-0010	SD0603(LED)
D802	DLS0603-0007	SD0603(LED)
D803	DLS0603-0007	SD0603(LED)
D804	DLS0603-0003	SD0603(LED)
D805	DLS0603-0003	SD0603(LED)
D806	5.1V	SD0603
D807	5.1V	SD0603
DS800	HSR32661-UFTSZ	HSR32661-UFTSZ
J800	CGJ-JCJ-0120	SIPM20
J801	CB-HKCZ-0010	QFM16-6F2
LED800	CB-BGB-0028	BACK LIGHT
Q800	TS-0429	SOT323
Q801	TS-0429	SOT323
Q802	TS-0429	SOT323
R800	100R	S0402
R801	10K	S0402
R802	33K	S0402
R803	220R	S0402
R806	10K	S0402
R807	33K	S0402
R808	18K	S0402
R809	18K	S0402
R811	220R	S0402
R812	220R	S0402
R813	220R	S0402
R815	100R	S0402
R816	10K	S0402
R817	10K	S0402
R818	10K	S0402
R819	1K2	S0603
R820	1K5	S0603
R821	1K2	S0603
R822	1K5	S0603
R823	1K8	S0603
R824	3K3	S0603
R825	1K8	S0603
R826	3K3	S0603
R827	680R	S0603
R828	1K	S0603
R829	680R	S0603
R830	1K	S0603
R831	4K7	S0402
R832	4K7	S0402
R833	1K	S0402
R837	4K7	S0402
R838	4K7	S0402
R839	4K7	S0402
S800	CGJ-QCKG-0039	SKW
S801	CGJ-QCKG-0039	SKW
S802	CGJ-QCKG-0039	SKW

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Designators	Comment	Footprint
S803	CGJ-QCKG-0039	SKW
U800	TM1722	SOL-24
<b>VOL UNIT</b>		
Designators	Comment	Footprint
J900	SQPCB	CON3-1.27
J901	VOLPCB	CON3-1.27
J902	DC SW	SIP2H
W900	RP09110SNBX(B103a,KA20A11)	VRHK
W901	RP09110NOBX(B103a,KA20A11)	VRHK9.5
<b>MAIN UNIT</b>		
Designators	Comment	Footprint
C100	33P/J	S0603
C101	151P/J	S0402
C102	103P	S0402
C103	4K7	S0402
C104	103P	S0402
C105	103P	S0402
C106	103P	S0402
C107	103P	S0402
C108	102P/J	S0402
C109	225PA	S0402
C110	103P	S0402
C111	103P	S0402
C112	103P	S0402
C113	225PA	S0402
C114	225PA	S0402
C115	104PC	S0402
C116	103P	S0402
C117	223PC	S0402
C118	221P/J	S0402
C119	471P	S0402
C120	103P	S0402
C121	475PA/M	S0402A
C122	475PC	S0603
C123	105PC	S0402
C124	471P	S0402
C125	121P/J	S0402
C126	121P/J	S0402
C127	105PC	S0402
C128	0R	S0402
C129	39P/J	S0402
C130	7P/B	S0402
C131	12P/J	S0402
C132	12P/J	S0402
C133	82P/J	S0402
C134	82P/J	S0402
C135	82P/J	S0402
C136	475PC	S0603
C137	475PC	S0603
C138	104PC	S0402
C139	8P/B	S0402
C140	7P/B	S0402
C141	3P/B	S0402
C142	105PC	S0402
C143	475PC	S0603
C144	103P	S0402
C145	102P/J	S0402
C146	7P/B	S0402
C147	7P/B	S0402

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Designators	Comment	Footprint
C148	102P/J	S0402
C149	221P/J	S0402
C150	102P	S0402
C151	221P/J	S0402
C152	103P	S0402
C153	104PC	S0402
C155	15P/J	S0402
C156	22P/J	S0402
C157	101P/J	S0402
C158	101P/J	S0402
C159	101P/J	S0402
C160	101P/J	S0402
C161	101P/J	S0402
C162	101P/J	S0402
C163	101P/J	S0402
C164	102P	S0402
C165	20P/J	S0402
C166	103P	S0402
C167	13P/J	S0402
C168	5P/B	S0402
C169	103P	S0402
C170	105PC	S0402
C172	103P	S0603
C173	103P	S0603
C174	103P	S0402
C179	39P/J	S0402
C180	18P/J	S0402
C183	181P/J	S0402
C184	104PC	S0402
C185	104PC	S0402
C186	104PC	S0402
C187	104PC	S0402
C188	104PC	S0402
C189	104PC	S0402
C190	103P	S0402
C191	103P	S0402
C192	103P	S0402
C194	103P	S0402
C195	103P	S0402
C196	103P	S0402
C197	103P	S0402
C200	102P/J	S0402
C201	102P/J	S0402
C203	102P/J	S0402
C204	102P/J	S0402
C205	821P/J	S0402
C206	33P/J	S0402
C207	33P/J	S0402
C208	33P/J	S0402
C209	223PC	S0402
C210	47P/J	S0402
C211	101P/J	S0402
C212	101P/J	S0402
C214	225PA	S0402
C215	221P/J	S0402
C217	20P/J	S0402
C220	225PA	S0402
C221	472P	S0402
C222	103P	S0402
C224	475PE	S0805



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Designators	Comment	Footprint
C225	103P	S0402
C226	82P/J	S0603
C227	24P/J	S0603
C228	39P/J	S0603
C229	5P/B	S0603
C230	472P	S0402
C233	561P2AJ	S0805
C234	331P/J	S0402
C236	103P	S0603
C241	221P/J	S0603
C242	221P/J	S0603
C244	224PC	S0402
C245	224PC	S0402
C247	121P/J	S0603
C249	103P	S0402
C250	103P	S0402
C252	561P/J	S0402
C253	561P/J	S0402
C254	102P/J	S0402
C255	10P/J	S0603
C256	151P/J	S0603
C257	15P/J	S0603
C258	121P/J	S0603
C260	121P/J	S0603
C261	181P2AJ	S0805
C262	271P2AJ	S0805
C269	472P	S0402
C270	103P	S0402
C271	1P/B	S0603
C275	105PC	S0402
C300	103P	S0402
C301	103P	S0402
C302	103P	S0402
C303	103P	S0402
C304	104PC	S0402
C305	104PC	S0402
C306	104PC	S0402
C307	104PC	S0402
C308	104PC	S0402
C309	472P	S0402
C310	472P	S0402
C311	475PA/M	S0402A
C312	475PA/M	S0402A
C313	224PC	S0402
C314	104PC	S0402
C315	104PC	S0402
C316	104PC	S0402
C317	104PC	S0402
C318	104PC	S0402
C319	104PC	S0402
C320	103P	S0402
C321	104PC	S0402
C322	104PC	S0402
C323	104PC	S0402
C324	475PA/M	S0402A
C325	223PC	S0402
C326	225PA	S0402
C327	683PC	S0402
C328	102P	S0603
C330	103P	S0402

# TEDDY II

Designators	Comment	Footprint
C332	103P	S0603
C333	102P	S0603
C334	103P	S0603
C336	221P/J	S0402
C337	103P/J	S0402
C338	123P	S0402
C339	103P	S0402
C340	561P/J	S0402
C341	475PA/M	S0402A
C342	475PA/M	S0402A
C347	475PC	S0603
C351	103P	S0402
C354	475PC	S0603
C355	475PC	S0603
C363	102P	S0603
C371	104PC	S0402
C372	104PC	S0402
C374	102P	S0402
C375	103P	S0603
C376	332P	S0402
C377	224PE	S0603
C378	475PC	S0603
C381	103P	S0603
C500	103P	S0603
C501	103P	S0603
C502	104P	S0603
C503	103P	S0603
C504	103P	S0402
C505	103P	S0402
C507	103P	S0402
C512	103P	S0402
C513	103P	S0402
C514	103P	S0402
C515	103P	S0402
C522	225PA	S0402
C523	475PC	S0603
C532	104P	S0603
C533	104P	S0603
C534	475PC	S0603
C700	103P	S0402
C701	103P	S0402
C702	103P	S0402
C703	475PA/M	S0402A
C704	103P	S0402
C705	103P	S0402
C706	471P	S0402
C707	103P	S0402
C708	103P	S0402
C709	103P	S0402
C710	475PA/M	S0402A
C711	103P	S0402
C713	103P	S0402
C716	475PA/M	S0402A
C724	103P	S0402
C725	103P	S0402
C728	103P	S0402
C730	104PC	S0402
C731	103P	S0402
C732	475PA/M	S0402A
CB100	QI-0014	M10.7

# TEDDY II

Designators	Comment	Footprint
CF100	FCI-0006	K455E5
D100	1SS400	SOD523
D102	1SS400	SOD523
D103	1SS400	SOD523
D105	1SS400	SOD523
D106	1SS400	SOD523
D108	1SS356	SOD323
D110	1SS356	SOD323
D115	DS-0251	SOT323A
D116	DS-0251	SOT323A
D119	1SS400	SOD523
D122	BA892	SOD523
D123	BA892	SOD523
D300	1SS400	SOD523
D301	5V1	SOD523
D302	12V	SOD523
D303	5V1	SOD523
D305	1SS355	SOD323
D306	DS-0251	SOT323A
D307	1SS400	SOD523
D308	5V1	SOD523
D309	5V1	SOD523
D310	1SS400	SOD523
D500	B340A	SOD-106
D501	B340A	SOD-106
D700	1SS372	sc70-123
E100	CGJ-JCJ-0529	ANT
E300	22uF/25V	SRB0.10(5MM)
E301	100uF/25V	SRB0.125(6MM)
E302	100uF/25V	SRB0.125(6MM)
E303	470uF/25V	SRB0.160(8MM)
E500	470uF/25V	SRB0.160(8MM)
E501	470uF/25V	SRB0.160(8MM)
E503	220uF/16V	SRB0.125(6MM)
E504	470uF/25V	SRB0.160(8MM)
E505	220uF/16V	SRB0.125(6MM)
J300	CGJ-JCJ-0035	SIP2T2
J500	LMA-0008	TSK13.3*15*3.8
J501	CGJ-JCJ-0035	SIP2T2
J701	CGJ-JCJ-0040	CON2.0-3
J704	CGJ-JCJ-0120	SIPM20
JK300	CGJ-JCJ-0118	PJ-302
JK302	CGJ-JCJ-0411	EJ-2503-35-GP
L1	LWS1008-0030	LWS1008.2520
L100	LWS0805-0056	LWS0805.2012
L101	220nH	S0402
L103	LWS0805-0059	LWS0805.2012
L104	LWS0805-0059	LWS0805.2012
L105	LWS0805-0059	LWS0805.2012
L106	LWS2520-0011	LWS1008.2520
L107	LWS2520-0011	LWS1008.2520
L108	LWS2520-0011	LWS1008.2520
L109	22uH	S0603
L110	6.8uH	S0603
L111	LWS3225-0003	LWS1210.3225
L112	LWS3225-0006	LWS1210.3225
L114	8.2uH	S0603
L115	470nH	S0603
L119	LAI-0076	
L120	LAI-0076	

# TEDDY II

Designators	Comment	Footprint
L121	LAI-0076	
L122	LAI-0076	
L123	LAI-0236	
L127	LAI-0239	
L128	LWS1008-0031	LWS1008.2520
L129	6.8uH	S0603
L130	LWS0805-0059	LWS0805.2012
L131	220nH	S0402
L300	6.8uH	S0603
L301	6.8uH	S0603
L500	LWS0630-0001	INDUCTORS-7.8*7.0MM
L700	CB-LJX-0097	JMP
Q100	RT1N141U	EMT3
Q101	RT1N141U	EMT3
Q102	TS-0430	SOT323
Q103	TS-0217	SOT23
Q104	TS-0217	SOT23
Q105	TS-0217	SOT23
Q106	TS-0430	SOT323
Q107	TS-0430	SOT323
Q108	TS-0430	SOT323
Q109	TS-0430	SOT323
Q110	ST2SC3202Y	TO92-ECB
Q111	TS-0430	SOT323
Q113	TS-0217	SOT23
Q114	TS-0217	SOT23
Q115	TS-0429	SOT323
Q116	TS-0429	SOT323
Q117	TS-0431	SOT323
Q120	FQP13N10	TO-220AB
Q121	2SC2314(F)	TO126
Q300	RT1N141U	EMT3
Q301	RT1N141U	EMT3
Q302	TS-0429	SOT323
Q303	RT1N141U	EMT3
Q304	RT1N141U	EMT3
Q306	2SA2022	TO220F-V-BCE-V2.0
Q307	2SB1132	SOT89
Q308	KTC3875S(GR)	SOT23
Q310	LMBT3906LT1G	SOT23
Q311	2SC2712(GR)	SOT23
Q312	RT1N141U	EMT3
Q313	L2SD1781KRLT1G	SOT23
Q314	RT1N141U	EMT3
Q500	UMC5N	SOT353
Q501	UMC5N	SOT353
Q502	UMC5N	SOT353
Q700	DTC144TE	EMT3
R100	220R	S0805
R101	1K	S0402
R102	3K3	S0402
R103	3K3	S0402
R104	2K4	S0402
R105	4K7	S0402
R106	220R	S0402
R107	18K	S0402
R108	1K	S0402
R109	470R	S0402
R110	470R	S0402
R111	470R	S0402

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Designators	Comment	Footprint
R112	470R	S0402
R113	470R	S0402
R114	470R	S0402
R115	10K	S0402
R116	4K7	S0402
R117	10K	S0402
R118	10K	S0402
R119	10K	S0402
R120	1K	S0402
R121	47K	S0402
R122	RTS-0023	S0402
R123	1K	S0603
R124	10K	S0402
R125	1K	S0402
R127	1K	S0603
R128	0R	S0603
R129	470R	S0402
R130	18K	S0402
R131	10K	S0402
R132	100K	S0402
R133	180K	S0402
R134	10K	S0402
R135	0R	S0402
R136	100K	S0402
R137	330R	S0402
R138	220R	S0402
R139	220R	S0402
R140	220R	S0402
R141	220R	S0402
R142	1M/F	S0402
R143	220R	S0402
R144	270K/D	S0402
R145	10R	S0402
R146	1K	S0402
R147	1K	S0402
R148	1K	S0402
R149	10K	S0402
R150	0R	S0402
R151	220R	S0402
R153	2K2	S0402
R154	47R	S0402
R155	5K6	S0402
R156	1K5	S0402
R157	1M/F	S0402
R158	10K	S0402
R159	3K3	S0402
R160	3K3/D	S0402
R161	220R	S0402
R162	680R	S0402
R163	680R	S0402
R164	100R	S0402
R165	22K	S0402
R166	47K	S0402
R167	2K2	S0402
R168	2K2	S0402
R169	2K2	S0402
R170	2K2	S0402
R171	510R	S0402
R172	10K	S0402
R173	1K8	S0402

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Designators	Comment	Footprint
R174	10K	S0402
R175	47R	S0402
R176	15R	S0402
R177	33K	S0402
R178	39K	S0402
R179	47K	S0402
R180	47K	S0402
R181	47K	S0402
R182	47K	S0402
R183	68K/D	S0402
R184	47K	S0402
R185	47K	S0402
R186	330R	S0402
R187	330R	S0402
R188	470K	S0402
R189	3K3	S0402
R190	47K	S0402
R191	150K	S0402
R192	2K4/D	S0402
R193	100K/D	S0402
R195	150K	S0402
R196	390R	S0402
R197	33K	S0402
R198	510R	S0402
R199	10K	S1206
R203	33R	S0603
R206	10K	S0603
R208	8K2	S0603
R209	100K	S0402
R211	0R	S0603
R213	680R/D	S0402
R214	3K3	S0402
R218	56R	S0402
R222	10K	S0402
R232	0R	S0402
R233	10K	S0402
R234	1K	S0402
R235	2K2	S0603
R300	1K5	S0402
R301	10K	S0402
R302	10K	S0402
R303	22K	S0402
R304	3K3	S0402
R305	10K	S0402
R306	10K	S0603
R307	1K	S0402
R308	1K	S0402
R309	1K	S0402
R310	1K	S0402
R311	1K	S0402
R312	1K	S0402
R314	1M	S0402
R315	1M	S0402
R316	47K	S0402
R317	10K	S0402
R318	10K	S0603
R320	4K7	S0402
R321	22K	S0402
R322	10K	S0402
R323	10K	S0402

# TEDDY II

Designators	Comment	Footprint
R324	10K	S0402
R325	10K	S0402
R326	6K8	S0603
R327	1K5	S0402
R328	10K	S0402
R329	47K	S0402
R330	3K3	S0402
R331	4K7	S0402
R332	10K	S0402
R333	3K3	S0402
R334	10K	S0402
R335	100K	S0402
R336	33K	S0402
R337	100K	S0402
R338	10K	S0402
R339	1M	S0402
R340	1K	S0402
R341	0R	S0402
R342	470K	S0402
R343	100K	S0402
R344	4K7	S0402
R345	4K7	S0402
R346	4K7	S0402
R347	22R	S0402
R348	4K7	S0402
R349	3K9	S0402
R350	1K	S0402
R351	10K	S0402
R352	820K	S0402
R353	3K9	S0402
R354	1K	S0402
R355	22K	S0402
R356	2K2	S0402
R357	15K	S0402
R358	100K	S0402
R359	CB-LJX-0127	JMP(12.5MM)
R360	47K	S0402
R361	2K2	S0402
R362	3K3	S0603
R363	3K3	S0402
R365	5K6	S0402
R366	2K2	S0402
R367	5K6	S0402
R369	4K7	S0402
R370	47K	S0402
R371	330K	S0402
R372	220R	S0603
R375	27K	S0402
R380	33K	S0402
R381	2K2	S0603
R382	100R	S0805
R387	4R7	S0805
R404	470R	S0603
R405	1K	S0402
R705	15K	S0402
R706	1K	S0402
R707	220R	S0402
R712	10K	S0402
R715	1K	S0402
R716	1K	S0402

**TEDDY II**

<b>Designators</b>	<b>Comment</b>	<b>Footprint</b>
R717	1K	S0402
R718	1K	S0402
R726	10K	S0402
R728	22K	S0402
R731	150K	S0402
R732	47K	S0402
R733	68K	S0402
U100	TS-0461	SOT25
U101	AA32416	SSOP16
U102	TS-0454	SOT363
U103	QA8558	QFN4X4-20B
U300	TS-0454	SOT363
U301	TS-0454	SOT363
U302	M62429	SOP8
U303	ICS-0733	ICS-SSOP-B8
U304	ICS-0733	ICS-SSOP-B8
U305	YD1517P	SDIP18
U500	ME6118A50B3G	SOT223-123
U501	ICS-0730	TO-252(DPAK)
U503	ME6206-33M	SOT23-123
U701	ICS-0639	LQFP7X7-48
X100	QSSMD-0064	TCXO-2520
Y100	QI-0004	XTAI
Y101	FDI-0001	K450V2



## Testing Mode Adjusting

.....  
**Note : Testing voltage 13.2V/Equipment HP8921A**  
 .....

**Test mode:** When radio is off , press and hold the PTT+ MODE + EMG key and turn on radio, LCD shows “tS” in 5s, Press **EMG → MODE then full display**, enter into the testing mode. press **【▼or▲】** or microphone’s **【UP or DN】** to select menu, Press PTT then press **【▼or▲】** to adjust parameter.

**FM LP adjustment:** In testing mode, select [PL] channel, turn off the signal of modulation, Under the launching state press **【▲】** or **【▼】** adjust the power to 3.9W

**FM deviation testing mode:** In testing mode, select [F2] channel , 1.25k 30mV, Under the launching state press **【▲】** or **【▼】** adjust the deviation to 1.9KHz

**AM LP adjustment:** In testing mode, select [AL] channel, 1.25K 30mV, Under the launching state press **【▲】** or **【▼】** adjust the amplitude to 90%

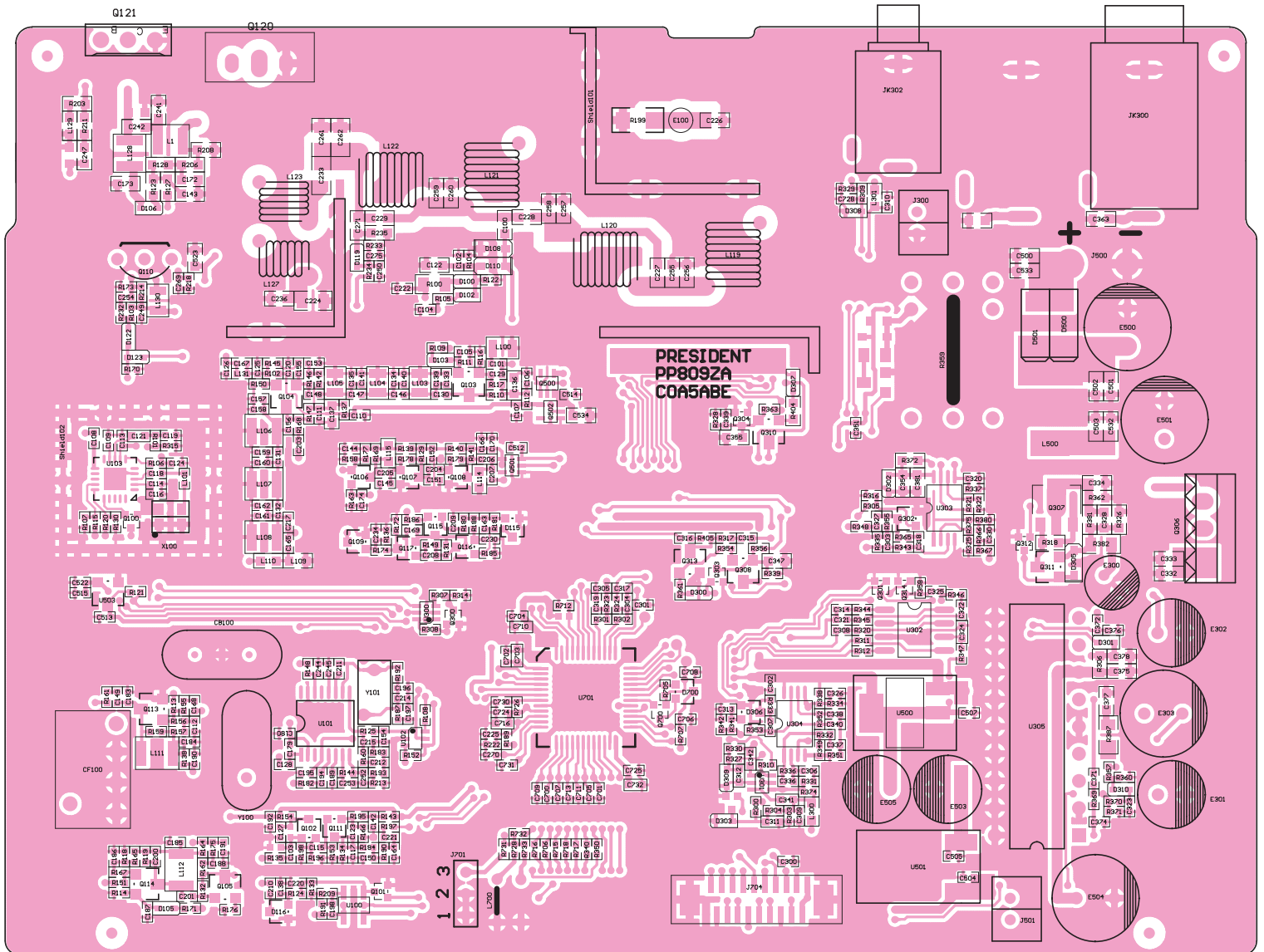
**S-meter adjustment:** In testing mode, select [rl] channel, 1K 1.2KHz, Under the launching state press **【▲】** or **【▼】** adjust the S-meter pointer at “3. bar” positions.

Default : 36 (-67dBm)

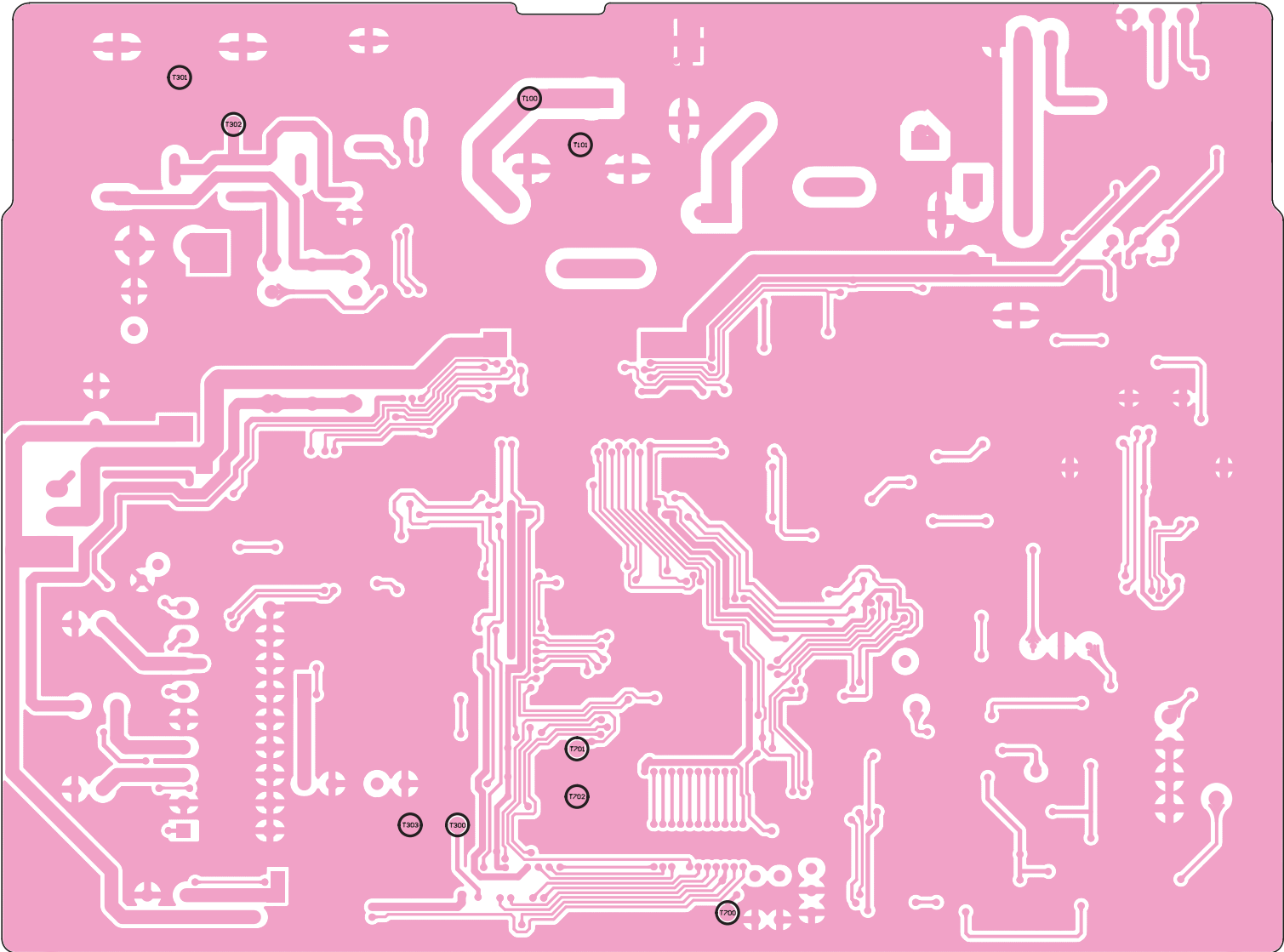
Equipment setting: In Rx status, RF Gen Freq : 27.255MHz , Amplitude : set value, AF Gne1Freq : 1KHz, AF Gne1 To : 1.2KHz, AF Gne2 Freq : 1KHz, AF Gne2 To : OFF

**SW version:** In testing mode, select [S] channel, press PTT to view.

## PC board views

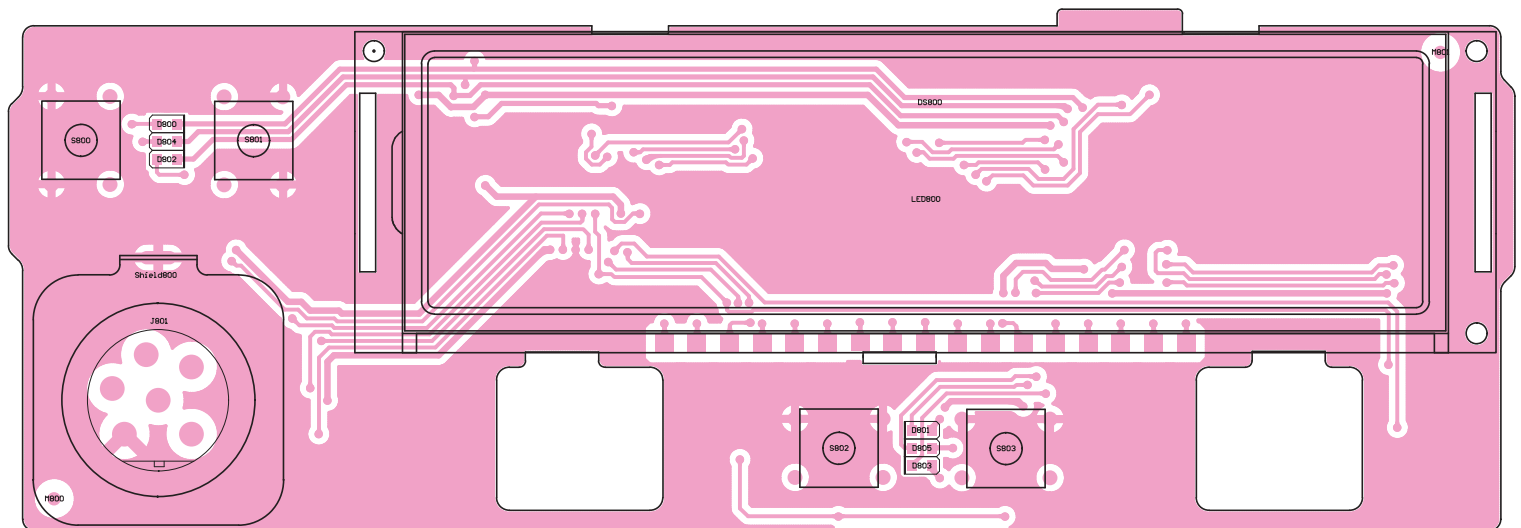


PC board views



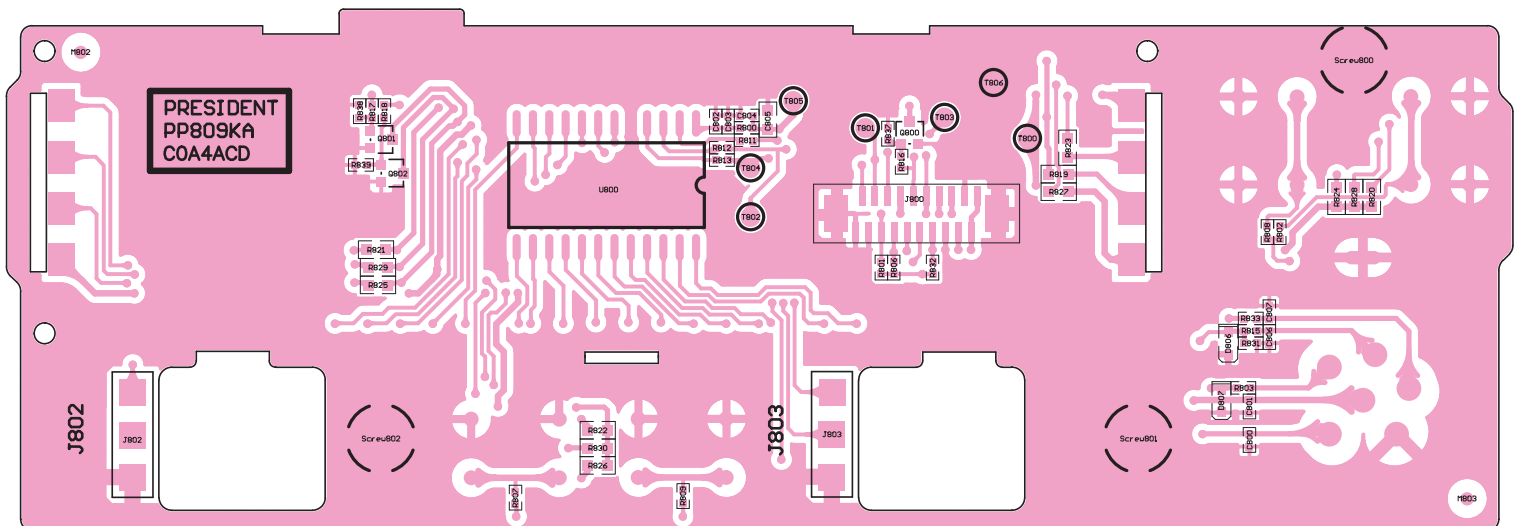
# TEDDY II

## PC board views



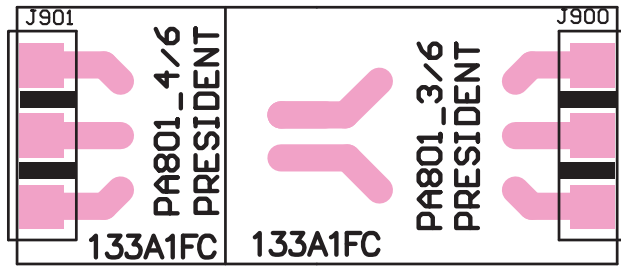
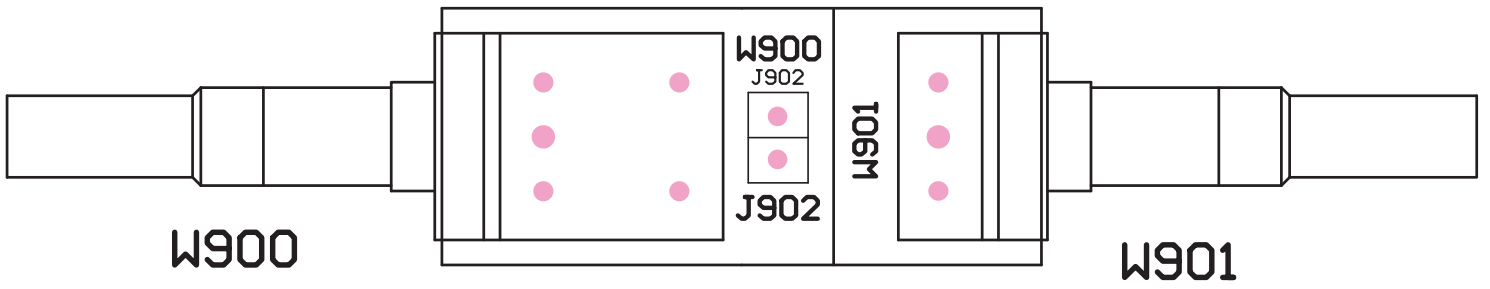
# TEDDY II

## PC board views

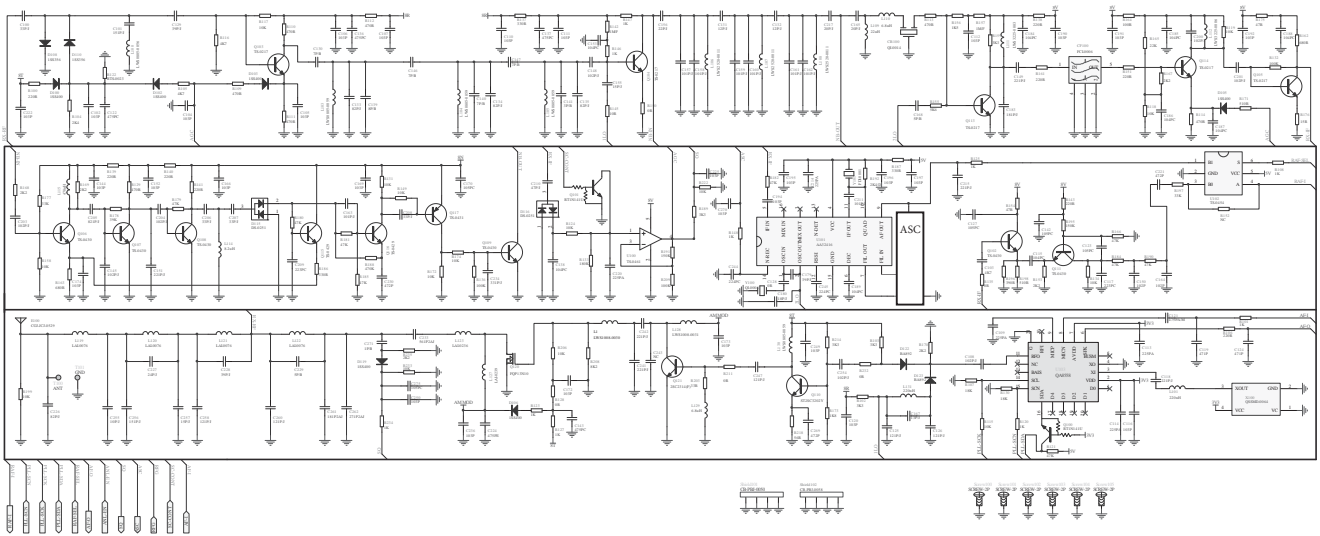


TEDDY II

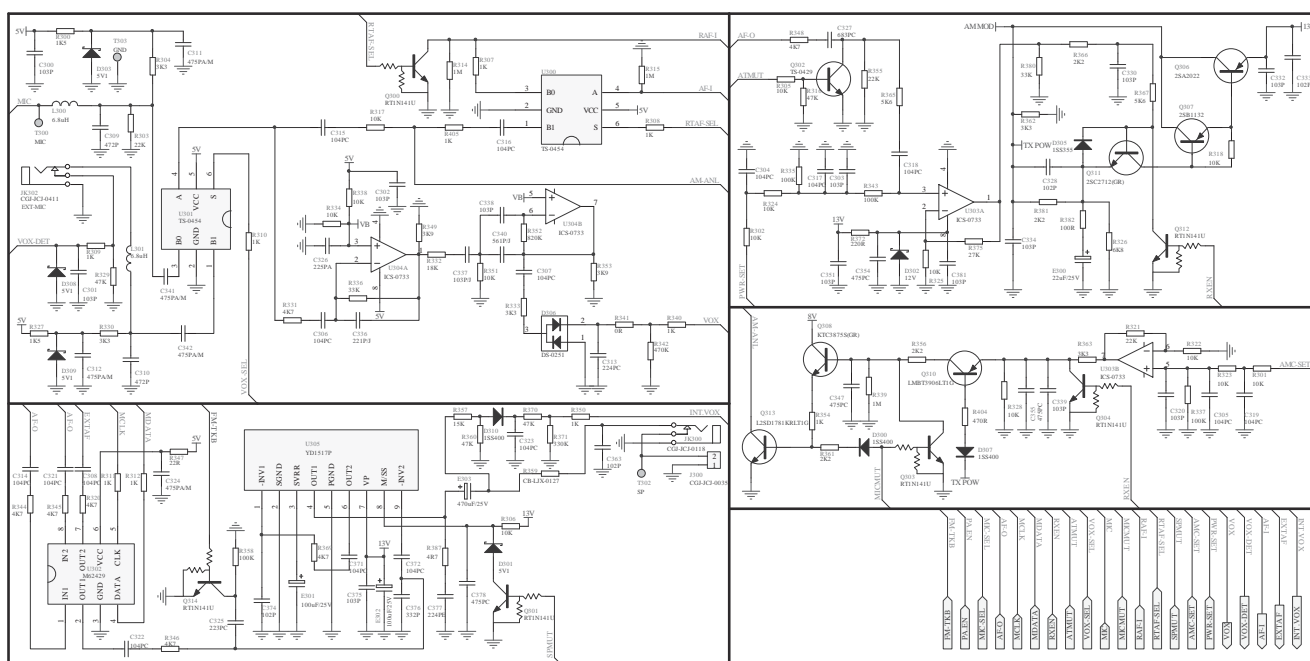
PC board views



**SCHEMATIC DIAGRAM**

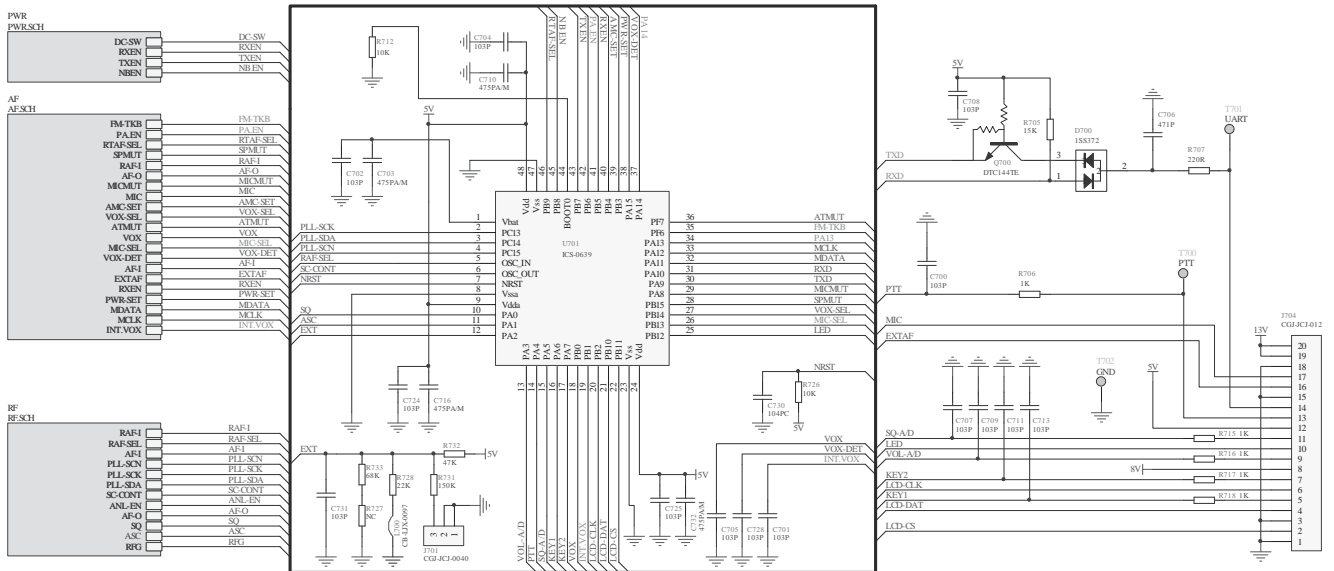


SCHMATIC DIAGRAM

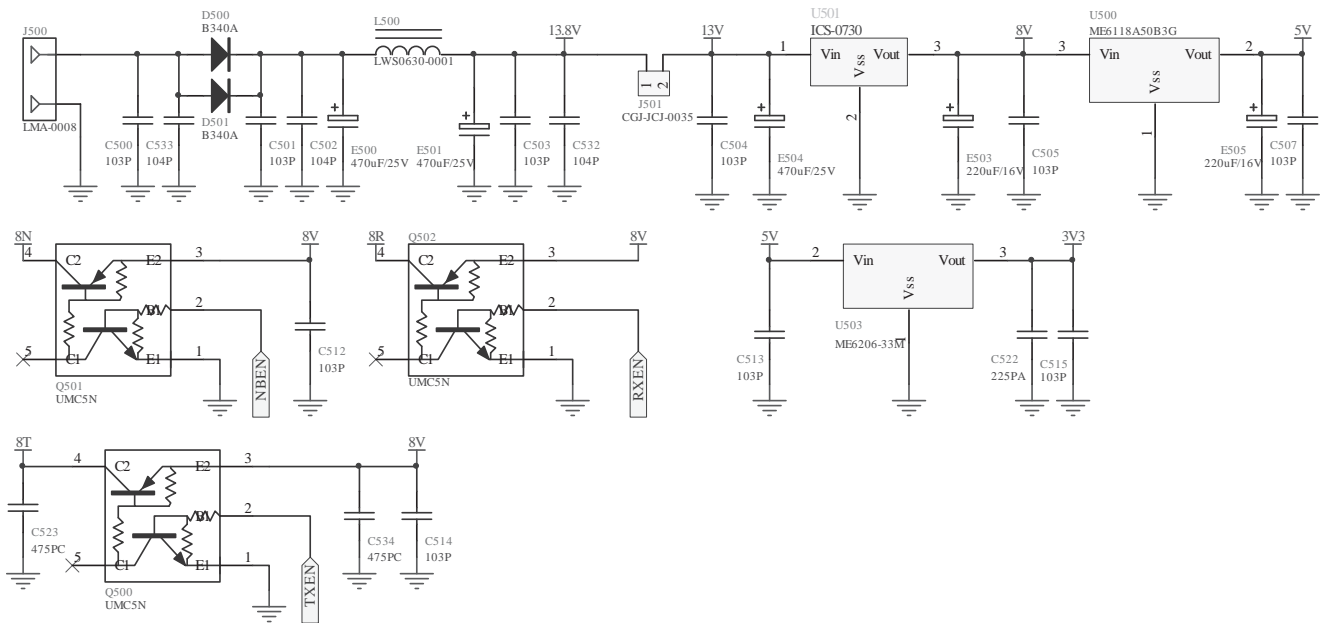




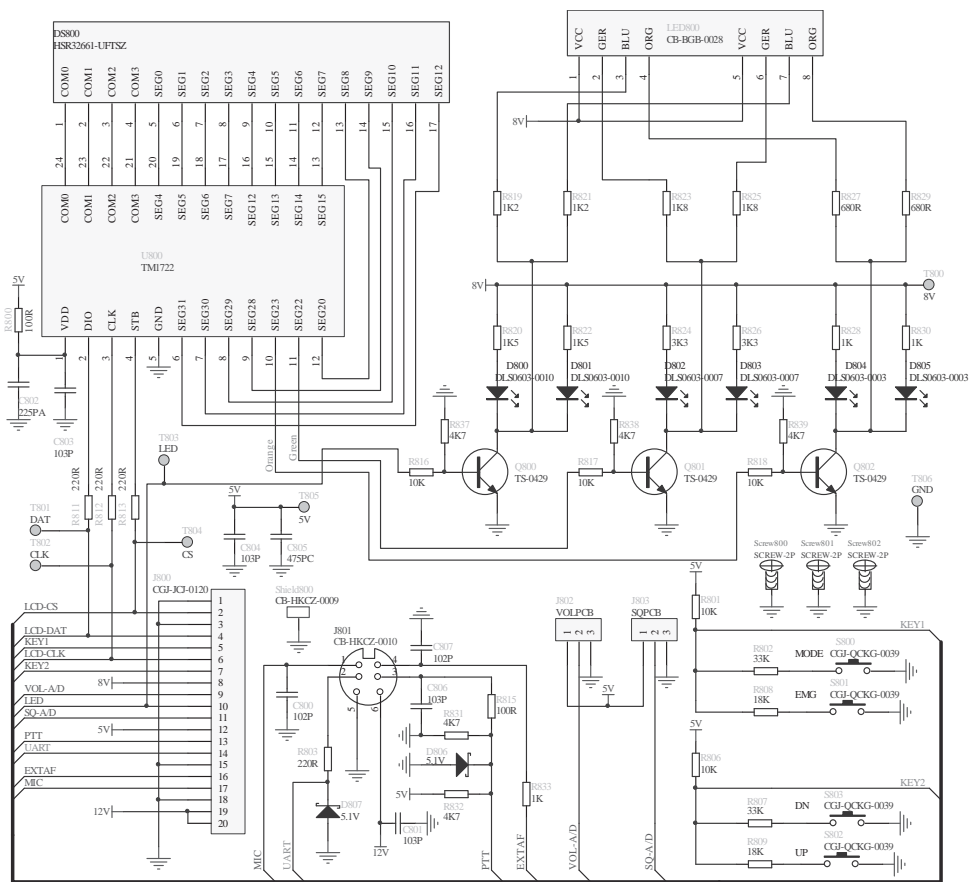
SCHEMATIC DIAGRAM



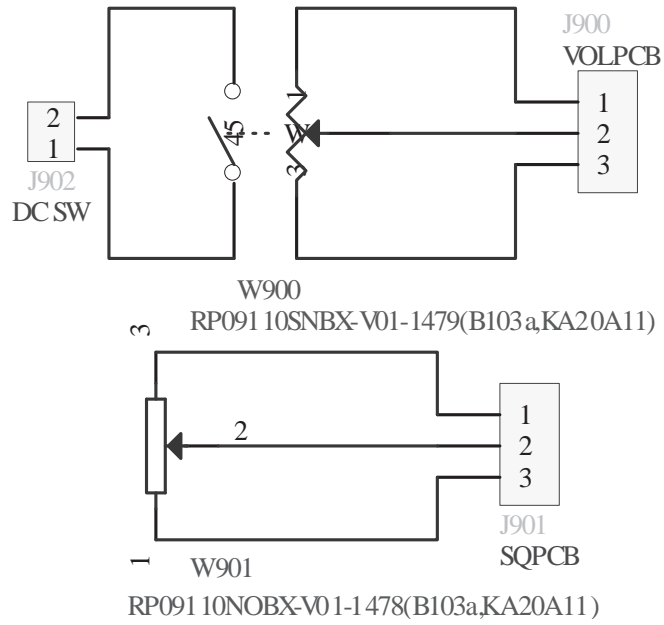
SCHEMATIC DIAGRAM



SCHEMATIC DIAGRAM



SCHEMATIC DIAGRAM



## BLOCK DIAGRAM

