

The adjustments on the 75 KHz filter have been properly set by the manufacturer. Do not attempt to align the filter. If the filter is not functioning properly, the entire assembly should be replaced.

## 2-2 QUADRATURE DETECTOR ALIGNMENT

Set the MON-ALERT Switch to MONITOR. Connect the Signal Generator's output to the antenna mounting bolt.

Connect the oscilloscope input to Pin 1 of IC101.

Set the Signal Generator's frequency accurately to the frequency of the weather station to be received.

Set modulation to 1000 Hz, 2 KHz deviation.

Adjust the Signal Generator's output to the point where all noise just disappears in the scope pattern. Adjust the Quadrature Coil (L107) for maximum amplitude with best symmetry of the audio signal.

## 2-3 RF ALIGNMENT

Connect AC voltmeter across speaker terminals. With no input to receiver, adjust volume control until meter reads 0.3 volts of noise.

Connect generator's output to antenna mounting bolt and adjust output until reading on meter drops to 0.1 volt.

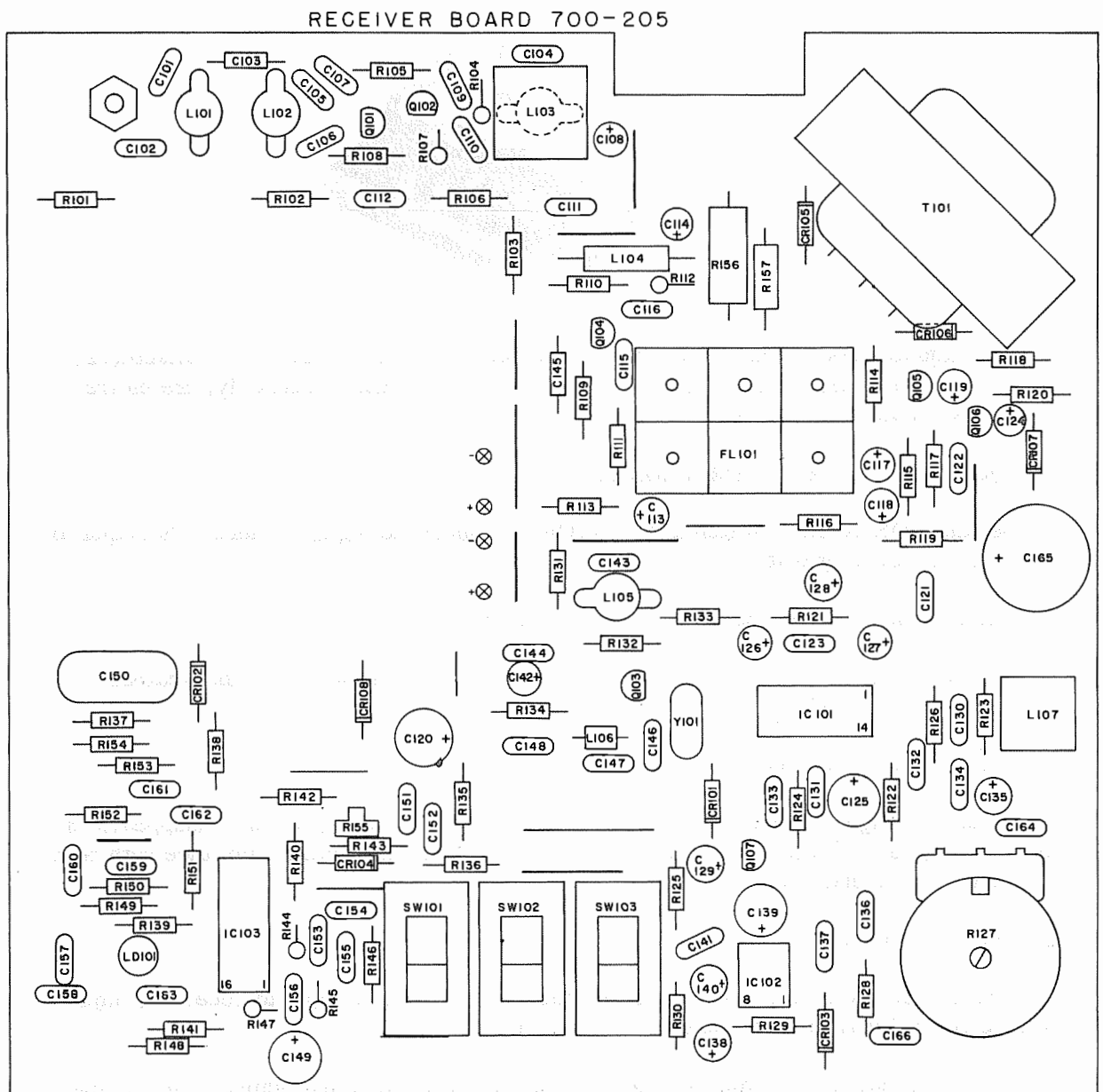
Adjust RF coils (L101 and L102) for maximum quieting (minimum meter reading).

If necessary, adjust generator's output to maintain 0.1 volt reading.

## 2-4 DECODER ALIGNMENT

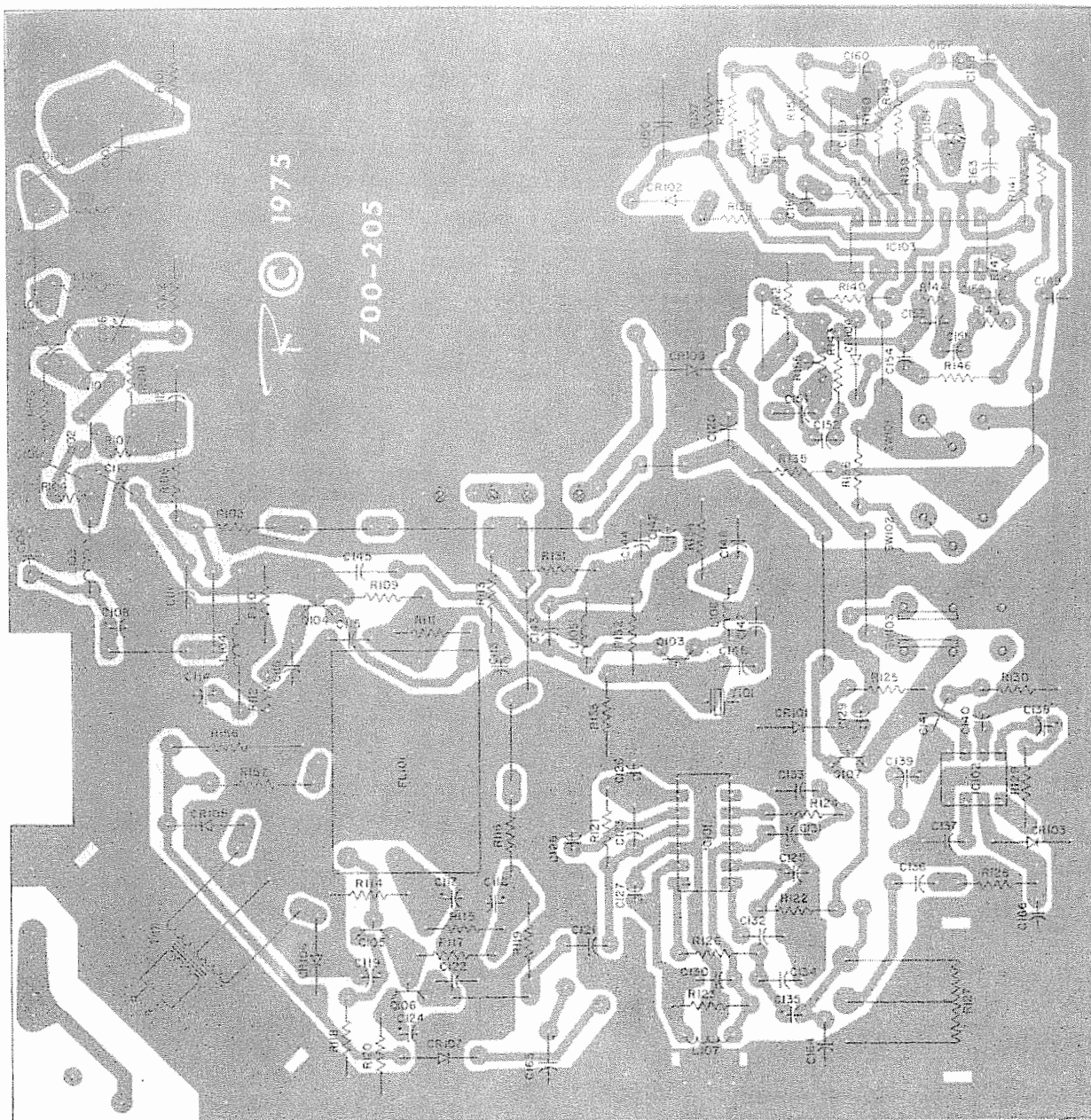
Remove all test equipment from receiver. Set MON-ALERT Switch to ALERT. Increase setting of R155 slowly until decoder "opens" on noise. Decrease setting to just below the point where decoder opens.

Depress RESET Switch and check to see that decoder does not open. If necessary, reduce setting of R155 and repeat the check.



**3-1 RECEIVER BOARD PARTS PLACEMENT DIAGRAM**

# RECEIVER BOARD 700-205



3-2 RECEIVER BOARD PARTS OVERLAY DIAGRAM

### 3-3 VOLTAGE DATA

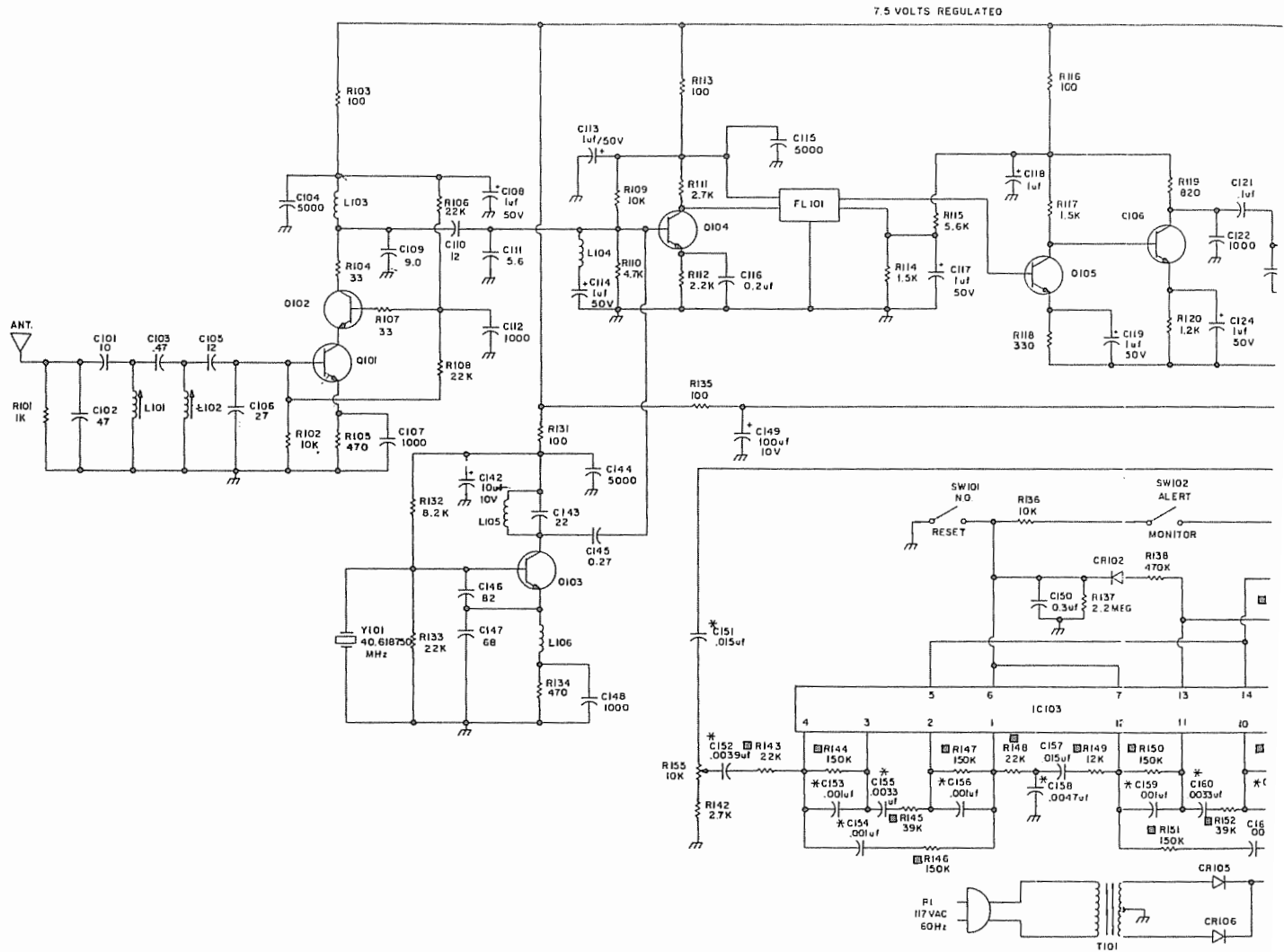
ALL VOLTAGES ARE NOMINAL  
TAKEN WITH VTVM  
NO SIGNAL INPUT

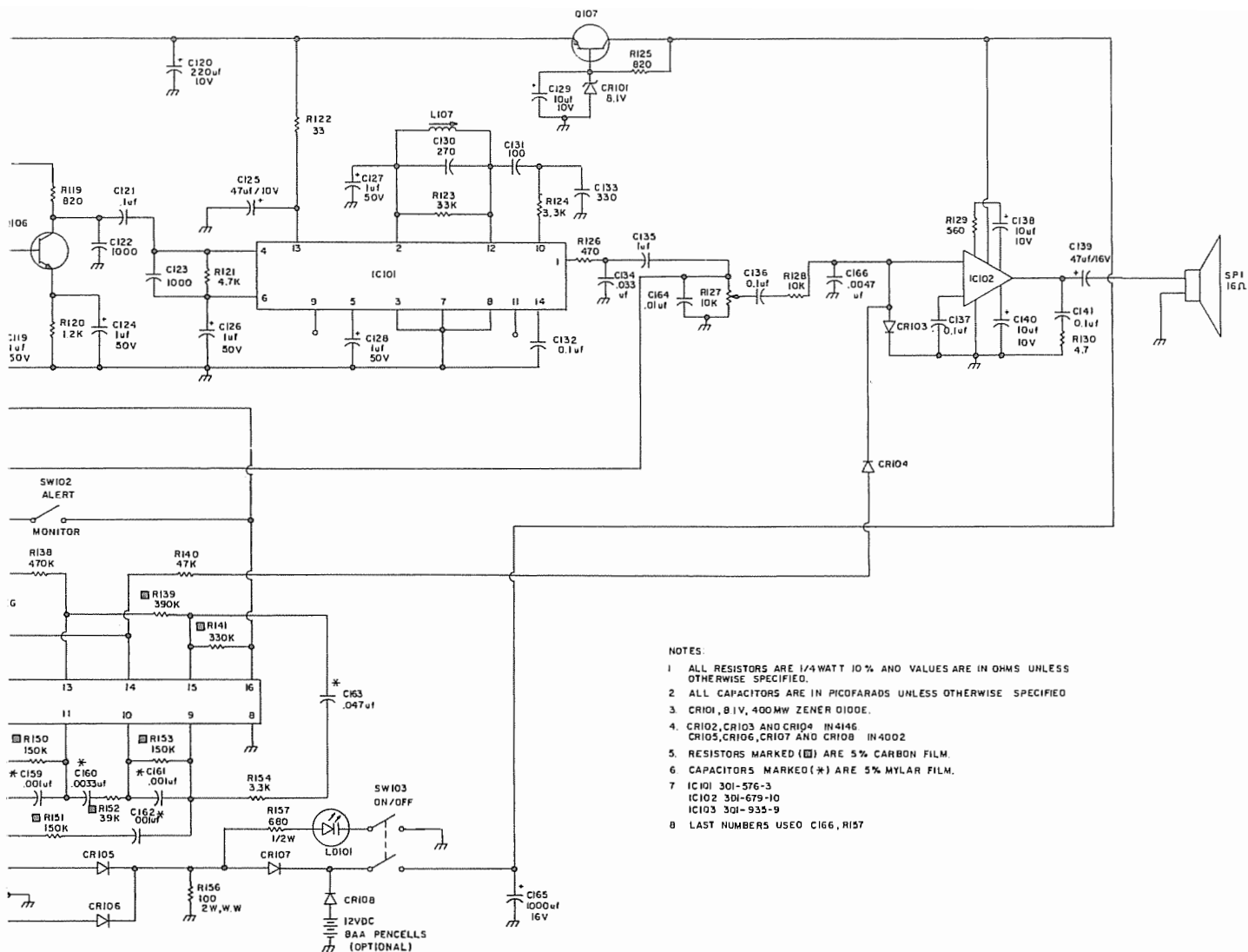
TRANSISTORS	EMITTER	BASE	COLLECTOR
Q101	0.3	1.0	3.5
Q102	3.5	4.2	7.5
Q103	4.0	3.8	7.3
Q104	1.6	2.3	7.4
Q105	0.8	1.4	3.3
Q106	2.7	3.3	5.1
Q107	7.5	8.3	13.6

### INTEGRATED CIRCUITS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
IC101	5.2	3.5	0.0	1.4	1.4	1.4	0.0	0.0	0.1	1.4	2.8	3.5	7.0	5.5		
IC102	1.4	0.1	0.1	0.0	7.0	13.6	6.9	1.4								
IC103 (Alert)	3.5	3.5	3.5	3.5	7.0	1.1	1.1	0.0	3.5	3.5	3.5	3.5	0.5	7.0	4.1	7.1
IC103 (Mon)	3.5	3.5	3.5	3.5	0.0	7.2	7.2	0.0	3.5	3.5	3.5	3.5	7.2	0.0	6.6	7.2

# Regency ACT-C1W





3-4 SCHEMATIC

## SECTION 4 PARTS LIST

## 4-1 RECEIVER BOARD

Item No.	Description	Part No.	Item No.	Description	Part No.
<b>RESISTORS</b>			<b>CAPACITORS</b>		
R101	10K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0103-042	C101	10pf, 10%, NPO	1500-0569-905
R102	10K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0103-042	C102	47pf, 5%, NPO	1524-0470-002
R103	100, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0012-042	C103	.47pf, 10%	1510-0478-900
R104	33, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0330-042	C104	.005pf	1503-0502-005
R105	470, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0471-042	C105	12pf, 10%, NPO	1500-0120-605
R106	22K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0223-042	C106	27pf, 10%, NPO	1500-0270-650
R107	33, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0330-042	C107	.001mf	1503-0102-003
R108	22K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0223-042	C108	1mf, 50V	1513-0010-004
R109	10K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0103-042	C109	9.0 $\pm$ .05pf, NPO	1500-0090-505
R110	4.7K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0472-042	C110	12pf, 5%, NPO	1500-0120-505
R111	2.7K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0272-042	C111	5.6pf, 10%, NPO	1500-0569-905
R112	2.2K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0222-042	C112	.001mf	1503-0102-003
R113	100, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0012-042	C113	1mf, 50V	1513-0010-004
R114	1.5K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0152-042	C114	1mf, 50V	1513-0010-004
R115	5.6K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0562-042	C115	.005mf	1503-0502-005
R116	100, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0012-042	C116	.2mf	1502-0204-006
R117	1.5K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0152-042	C117	1.0mf, 50V	1513-0010-004
R118	330, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0331-042	C118	1.0mf, 50V	1513-0010-004
R119	820, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0821-042	C119	1.0mf, 50V	1513-0010-004
R120	1.2K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0122-042	C120	250mf, 10V	1513-0251-001
R121	4.7K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0472-042	C121	.01mf	1503-0103-007
R122	33, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0330-042	C122	.001mf	1523-0102-002
R123	33K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0333-042	C123	.001mf	1523-0102-005
R124	3.3K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0332-042	C124	1mf, 50V	1513-0010-004
R125	820, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0821-042	C125	50mf, 10V	1513-0500-001
R126	470, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0471-042	C126	1.0mf, 50V	1513-0010-004
R127	10K, $\Omega$ , VARIABLE (VOLUME)	4750-3231-701	C127	1.0mf, 50V	1513-0010-004
R128	10K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0103-042	C128	1.0mf, 50V	1513-0010-004
R129	560, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0561-042	C129	10mf, 10V	1513-0100-001
R130	4.7, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0479-042	C130	270pf, 5%	1506-0271-550
R131	100, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0012-042	C131	100pf, 5%	1506-0101-550
R132	8.2K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0822-042	C132	.1mf	1502-0104-005
R133	22K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0223-042	C133	330pf	1523-0331-002
R134	470, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0471-042	C134	.033mf, MYLAR	1508-0333-610
R135	100, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0012-042	C135	1.0mf, 50V	1513-0010-004
R136	10K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0103-042	C136	.1mf	1502-0104-005
R137	2.2 MEG, $\frac{1}{4}W$ , 10%	4701-0225-042	C137	.1mf	1502-0104-005
R138	470K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0474-042	C138	10mf, 10V	1513-0100-001
R139	390K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0394-042	C139	50mf, 16V	1513-0500-002
R140	47K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0473-042	C140	10mf, 10V	1513-0100-001
R141	330K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0334-042	C141	.1mf	1502-0104-005
R142	2.7K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0272-042	C142	10mf, 10V	1513-0100-001
R143	2.2K, $\Omega$ , $\frac{1}{4}W$ , 5%	4704-0223-032	C143	22pf, 10%, NPO	1500-0220-650
R144	150K, $\Omega$ , $\frac{1}{4}W$ , 5%	4704-0154-032	C144	.005mf	1503-0502-005
R145	39K, $\Omega$ , $\frac{1}{4}W$ , 5%	4704-0393-032	C145	.27pf	1510-0278-900
R146	150K, $\Omega$ , $\frac{1}{4}W$ , 5%	4704-0154-032	C146	82pf	1524-0820-002
R147	150K, $\Omega$ , $\frac{1}{4}W$ , 5%	4704-0154-032	C147	68pf, 5%, NPO	1524-0680-002
R148	22K, $\Omega$ , $\frac{1}{4}W$ , 5%	4704-0223-032	C148	.001mf	1503-0102-003
R149	12K, $\Omega$ , $\frac{1}{4}W$ , 5%	4704-0123-032	C149	100mf, 10V	1513-0101-001
R150	150K, $\Omega$ , $\frac{1}{4}W$ , 5%	4704-0154-032	C150	.33mf	1508-0334-610
R151	150K, $\Omega$ , $\frac{1}{4}W$ , 5%	4704-0154-032	C151	.015mf, 5%	1508-0153-510
R152	39K, $\Omega$ , $\frac{1}{4}W$ , 5%	4704-0393-032	C152	.0039mf, 5%	1508-0392-510
R153	150K, $\Omega$ , $\frac{1}{4}W$ , 5%	4704-0154-032	C153	.001mf, 5%	1508-0102-510
R154	3.3K, $\Omega$ , $\frac{1}{4}W$ , 10%	4701-0332-042	C154	.001mf, 5%	1508-0102-510
R155	10K, $\Omega$ , VARIABLE (TONE LEVEL)	4751-0103-002	C155	.0033mf, 5%	1508-0332-510
R156	100, $\Omega$ , 2W	4701-0101-031	C156	.001mf, 5%	1508-0102-510
R157	680, $\Omega$ , $\frac{1}{2}W$	4701-0681-044	C157	.015mf, 5%	1508-0153-510
			C158	.0047mf, 5%	1508-0472-610

## 4-2 CHASSIS ASSEMBLY

Item No.	Description	Part No.
C159	.001mf, 5%	1508-0102-510
C160	.0033mf, 5%	1508-0332-510
C161	.001mf, 5%	1508-0102-510
C162	.001mf, 5%	1508-0102-510
C163	.047mf, 5%, (10%)	1508-0472-610
C164	.01mf	1503-0103-007
C165	1000mf, 16V	1513-0102-002
C166	.0047mf	1508-0472-610

### DIODES

CR101	Zener, 8.1V, 400MW	4808-0000-018
CR102	IN4148	4805-1241-200
CR103	IN4148	4805-1241-200
CR104	IN4148	4805-1241-200
CR105	IN4002	4806-0000-004
CR106	IN4002	4806-0000-004
CR107	IN4002	4806-0000-004
LD101	Light Emmiting	4810-1282-900

### COILS

L101	RF	1800-3152-002
L102	RF	1800-3152-002
L103	RF	1800-3152-010
L104	Choke is $\mu$ hy	1802-0150-004
L105	RF	1800-3152-010
L106	Choke	1801-1236-900
L107	Quadrature	1800-3245-300

### TRANSISTORS

Q101	SM4306-5	4801-0000-100
Q102	SM4306-5	4801-0000-100
Q103	SM4306-5	4801-0000-100
Q104	SM4306-5	4801-0000-100
Q105	SPS-952	4801-0000-010
Q106	SPS-952	4801-0000-010
Q107	SPS-952	4801-0000-010

### INTEGRATED CIRCUITS

IC101	(301-576-3)	3130-3157-603
IC102	(301-679-10)	3130-3167-910
IC103	(301-935-9)	3130-3193-509

Item No.	Description	Part No.
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### ELECTRICAL COMPONENTS

T101	Transformer, Power	5604-5109-900
SP1	Speaker 2 1/4 inch, 16 OHM	1301-3213-402
SW101	Reset	5113-3231-501
SW102	Monitor-Alert	5113-3231-601
SW103	Off-On	5113-3245-901
FL-101	IF Filter	2706-5122-000
Y101	Cyrstal, 40.61875 MHZ, (WX1 & WX2)	2326-3244-901
Y102	Cyrstal 40.60 MHZ, (WX3)	2326-3244-905

### MECHANICAL COMPONENTS

ANT		1201-5108-801
	Case (Top)	1411-7014-101
	Case (Bot)	1411-7014-001
	Knob (Volume)	2402-6039-602
	Knob (Switch)	2402-6039-702
	Door, Cyrstal Access	1411-7014-201
	Feet	1402-3231-901