

## OUTPUT FILTER CIRCUIT BOARD 800-250A4/306A2.

### **Forward Power Calibration.**

To calibrate the forward power directional coupler, proceed as follows:

1. Connect a 50 ohm load with a sampling port and a wattmeter with a 50 watt element for the correct frequency range to the SRPT-40E ANTENNA connector.
2. Operate the METER switch to RF OUTPUT.
3. Ensure the wattmeter indicates 40 watts.
4. Adjust forward calibration control R5 for a +1 VU meter indication.
5. Remove the test equipment.

### **Reflected Power Calibration.**

To calibrate the reflected power directional coupler, proceed as follows:

1. Disconnect the test load/antenna from the SRPT-40E ANTENNA connector.
2. Operate the CONTROL switch to TRANSMIT.
3. Adjust reflected power calibration control R6 until the front panel ANTENNA indicator illuminates.

## **PARTS LIST.**

The following text presents the SRPT-40E parts list information.

**TABLE 2. SRPT-40E 450 MHz Unit - 705-ST40-4E**

REF. DES.	DESCRIPTION	PART NO.	QTY.
----	Ribbon Cable, 14 Inches HCSD-08-D14.00-0	586-138	1
----	Cable Assembly, SRPT-40E Harness	586-169	1
----	Final Wiring, SRPT-40E	586-170	1
----	Front Panel Wiring, SRPT-40E	586-170F	1
----	SRPT-40E/450 Main Frame	700-250-39A	1
----	SRPT-40E Audio Circuit Board	800-166AE	1
----	SRPT-40E Power Supply Regulator Circuit Board	800-168-1AE	1
----	RPT-30/STL-30 450 RF Amplifier Circuit Board	800-170A4E	1
----	RPT-30/STL-30 450 Output Filter Circuit Board	800-250A4	1
----	RPT-30 Pre-Amplifier Mixer Circuit Board	800-251A	1
----	RPT-30/STL-30 Meter Circuit Board	800-252A	1
----	RPT-30/STL-30 Accessory Connector Circuit Board	800-253A	1
----	SRPT-40 Thermistor Circuit Board	800-255A	1
----	SRPT-40E/450 Frequency Synthesizer Circuit Board	800-287A4ET	1
----	SRPT-40E RF Pre-Driver Circuit Board	800-338A4	1
----	Controller Circuit Board Assembly	800-339A1	1
----	LCD Display Circuit Board Assembly	800-340A1	1
----	Display Driver Circuit Board Assembly	800-341A	1
----	Cable Switch Interface Assembly	800-343A	1
----	Power Supply Assembly, TEK150SOO-XXX	800-324A	1

**BROADCAST ELECTRONICS INC.**  
**FCC ID: DDESRPT-40E-150**  
**EXHIBIT #: 5a**

**TABLE 6. SRPT-40E AUDIO CIRCUIT BOARD - 800-166AE**  
(Sheet 1 of 2)

REF. DES.	DESCRIPTION	PART NO.	QTY.
C01	Capacitor, 470 pF 10% Type JL X5F Disc RMC	256-471	1
C02	Capacitor, Tantalum, 4.7 mF 16V ECS-F1CE47	299-470	1
C03	Capacitor, Electrolytic 10 uF 25V Radial N	219-100	1
C04	Capacitor, Electrolytic 22 uF 25V Radial NI	219-220	1
C05	NOT USED	-----	-
C06	NOT USED	-----	-
C07	Capacitor, .27 mF 100V 10% Polypro CD MTC1	226-274	1
C08	NOT USED	-----	-
C09	Capacitor, Electrolytic 220 uF 25V Radial N	219-221	1
C10	Capacitor, 68 pF 5% 200V Ceramic Dipped C31	256-680C	1
C11	Capacitor, .0082 mFD 2.5% 100V Polypro Sea	215-822	1
C12	Capacitor, .01 mF 50V GMV Disc Pace F6Z5U1	217-104	1
C13, C14	Capacitor, Electrolytic 220 uF 25V Radial N	219-221	2
C15	Capacitor, 470 pF 10% Type JL X5F Disc RMC	256-471	1
C16	Capacitor, .1 mF 100V 10% Mylar	217-103	1
C17	Capacitor, Tantalum, 4.7 mF 16V ECS-F1CE47	299-470	1
C18	Capacitor, Electrolytic 10 uF 25V Radial N	219-100	1
C19	Capacitor, Tantalum, 4.7 mF 16V ECS-F1CE47	299-470	1
C20	Capacitor, .012 mFD 2.5% 100V Polypro Seac	215-123	1
C21	Capacitor, Electrolytic 22 uF 25V Radial NI	219-220	1
C22	Capacitor, .012 mFD 2.5% 100V Polypro Seac	215-123	1
C23	Capacitor, .001 mFD 2.5% 100V Polypro Seac	215-102	1
C24	Capacitor, 47 pF 5% 200V Ceramic Dipped C31	255-470C	1
C25	Capacitor, .022 mFD 2.5% 100V Polypro Seac	215-223	1
C26	Capacitor, .0039 mFD 2.5% 100V Polypro Sea	215-392	1
C27	Capacitor, 47 pF 5% 200V Ceramic Dipped C31	255-470C	1
C28	Capacitor, .01 mF 50V GMV Disc Pace F6Z5U1	217-104	1
C29	Capacitor, 470 pF 10% Type JL X5F Disc RMC	256-471	1
C30	Capacitor, Electrolytic 22 uF 25V Radial NI	219-220	1
C31	Capacitor, .27 mF 100V 10% Polypro CD MTC1	226-274	1
D1 thru D5	Diode, 1N4148 Philips	410-914	5
D6	Diode, General Instruments 1N4007	414-007	1
IC1	Integrated Circuit, SGS TDA1054M	401-054	1
IC2	Integrated Circuit, TI LM3900N	403-900	1
L1	Inductor, 387-150M 40000-150000 uH #47271	350-032	1
P1, P1	Connector, 5-Pin Molex Header	550-125	2
PCB	PC Board, Audio RPT-2/15/30	800-166B	1
PREP	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	10
R01	Resistor, 1 k Ohm 1/4 Watt 5% Metal Film Me	145-102	1
R02	Resistor, 47 k Ohm 1/4 Watt 5% Metal Film M	145-473	1
R03	Resistor, 180 Ohm 1/4 Watt 5% Metal Film M	145-181	1
R04	Resistor, 680 Ohm 1/4 Watt 5% Metal Film M	145-681	1
R05	Resistor, 150 Ohm 1/4 Watt 5% Metal Film M	145-151	1
R06	Resistor, 100 k Ohm 1/4 Watt 5% Metal Film	145-104	1
R07, R08	Resistor, 3.3 k Ohm 1/4 Watt 5% Metal Film	145-332	2
R09	Resistor, 3.3 Ohm 1/4 Watt 5% Metal Film M	145-030	1
R10	Resistor, 3.9 k Ohm 1/4 Watt 5% Metal Film	145-392	1
R11, R12	Resistor, 100 k Ohm 1/4 Watt 5% Metal Film	145-104	2
R13	Resistor, 330 Ohm 1/4 Watt 5% Metal Film M	145-331	1
R14	Resistor, 8.2 k Ohm 1/4 Watt 5% Metal Film	145-822	1
R15	Resistor, 3.9 k Ohm 1/4 Watt 5% Metal Film	145-392	1
R16	Resistor, 33 k Ohm 1/4 Watt 5% Metal Film M	145-333	1
R17	Resistor, 220 Ohm 1/4 Watt 5% Metal Film M	145-221	1
R18	NOT USED	-----	-

**TABLE 10. SRPT-40E/215 RF AMPLIFIER CIRCUIT BOARD - 800-170A2E**

REF. DES.	DESCRIPTION	PART NO.	QTY.
C01, C02	Capacitor, Variable, Trimmer 8-45 pF FW C4	260-300	2
C03	NOT USED	-----	-
C04	NOT USED	-----	-
C05	Capacitor, .1 mF 100V 10% Mylar	217-103	1
C06	Capacitor, Electrolytic 22 uF 25V Mepco 307	219-200	1
C07, C08	Capacitor, Uncased Mica, 500 pF 33V 5% FWJ	236-501	2
C09	Capacitor, Electrolytic 22 uF 25V Mepco 307	219-200	1
C10	Capacitor, .1 mF 100V 10% Mylar	217-103	1
C11	Capacitor, Variable, Trimmer 8-45 pF FW C4	260-300	1
C12	NOT USED	-----	-
C13	NOT USED	-----	-
C14	NOT USED	-----	-
C15	Capacitor, Uncased Mica, 22 pF 33V 5% FWJ1	240-220	1
C16	Capacitor, Variable, Trimmer 8-45 pF FW C4	260-300	1
C17a	Capacitor, Variable, Trimmer 12-65 pF FW A	240-600	1
C17b	Capacitor, Uncased Mica, 22 pF 33V 5% FWJ1	240-220	1
C18, C19	Capacitor, Variable, Trimmer 25-115 pF FW	240-602	1
C20	Capacitor, Uncased Mica, 33 pF 33V 5% FWJ1	240-330	1
L01	PC BOARD	-----	-
L02	NOT USED	-----	-
L03	PC BOARD	-----	-
L04	Inductor, 8 Turn 22 AWG (CCW)	350-117	1
L05	Inductor, 15 uH Coilcraft 90-27	330-012	1
L06	Inductor, 8 Turn 22 AWG (CCW)	350-117	1
L07	PC BOARD	-----	-
L08	Inductor, Fair-Rite #2961666671	330-019	1
L09	PC BOARD	-----	-
L10	NOT USED	-----	-
L11	PC BOARD	-----	-
L12	Inductor, 8 Turn 22 AWG (CCW)	350-117	1
L13	Inductor, 15 uH Coilcraft 90-27	330-012	1
L14	Inductor, 8 turn 22 AWG (CCW)	350-117	1
L15	PC BOARD	-----	-
L16	NOT USED	-----	-
L17	NOT USED	-----	-
PCB	PC Board, Power Amplifier RPT-15 STL-10/15	800-170-2B	1
Q1	Transistor, Philips BLW81	441-433	1
Q2	Transistor, Philips BLV45/12	444-512	1
R01, R02	Resistor, 47 Ohm 1/4 Watt 5% Carbon Comp 3	145-470-C	2
R03	NOT USED	-----	-
R04	Resistor, 10 Ohm 1/4 Watt 5% Carbon Comp 3	145-100-C	1
R05	NOT USED	-----	-
----	Thermistor, Fenwal 142-102-EAG-RB1 1000 Ohm @ 25C 10%	120-002	1
----	Screw, 4-40 x 1/2" Phillips Pan Head M/S Nickel Plated	500-011	2
----	Screw, 6-32 x 5/8" Phillips Pan Head M/S Nickel Plated	500-025	4
----	Pop-Rivet, USM SD-42BS	500-105-1	1
----	Keps Nut 4 x 40 Zinc 4CNKEOZ	500-199	2
----	Brackets, #6 Keystone 634	510-210	4
----	Solder Lug, #6 Short Concord 707-1206	512-010	4
----	Spacer, 6-32 x 11/16 Hex Threaded Concord	513-043	1
----	Heatsink, Drilled SRPT-40E Amp.	520-050DE	1
----	Coax RG-188A/U Teflon 95% Shield	580-033-1	1
----	Fingerstock, Angle Contact Strip	700-260	1
----	Terminal, Vinyl Insulated C10	512-002	1

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**FCC ID: DDES RPT-40E-150**

**EXHIBIT #: 5g**

**TABLE 11. SRPT-40E/150 RF AMPLIFIER CIRCUIT BOARD - 800-170A1E**

REF. DES.	DESCRIPTION	PART NO.	QTY.
C01	Capacitor, Variable, Trimmer 25-115 pF FW	240-602	1
C02	Capacitor, Variable, Trimmer 12-65 pF FW A	240-600	1
C03	NOT USED		
C04	NOT USED		
C05	Capacitor, .1 mF 100V 10% Mylar	217-103	1
C06	Capacitor, Electrolytic 22 uF 25V Mepco 307	219-200	1
C07, C08	Capacitor, Uncased Mica, 500 pF 33V 5% FWJ	236-501	2
C09	Capacitor, Electrolytic 22 uF 25V Mepco 307	219-200	1
C10	Capacitor, .1 mF 100V 10% Mylar	217-103	1
C11	Capacitor, Variable, Trimmer 25-115 pF FW	240-602	1
C12	NOT USED		
C13	Capacitor, Uncased Mica, 200 pF 33V 5% FWJ	240-201	1
C14	Capacitor, Uncased Mica, 33 pF 33V 5% FWJ1	240-330	1
C15	NOT USED		
C16	Capacitor, Variable, Stripline 1.9-15.7 pF	230-160	1
C17	NOT USED		
C18	Capacitor, Variable, Stripline 1.9-15.7 pF	230-160	1
C19	Capacitor, Variable, Trimmer 12-65 pF FW A	240-600	1
IC1	NOT USED		
L01	NOT USED		
L02	NOT USED		
L03	NOT USED		
L04	Inductor, 8 Turn 22 AWG (CCW)	350-117	1
L05	Inductor, 15 uH Coilcraft 90-27	330-012	1
L06	Inductor, 8 Turn 22 AWG (CCW)	350-117	1
L07	NOT USED		
L08	Inductor, Fair-Rite #2961666671	330-019	1
L09	NOT USED		
L10	NOT USED		
L11	NOT USED		
L12	Inductor, 8 Turn 22 AWG (CCW)	350-117P	1
L13	Inductor, 15 uH Coilcraft 90-27	330-012	1
L14	Inductor, 8 Turn 22 AWG (CCW)	350-117P	1
L15	NOT USED		
L16	Inductor, 14 AWG Silver	350-158	1
Q1	Transistor, Philips BLW29	420-029	1
Q2	Transistor, Philips BLV45/12	444-512	1
R01, R02	Resistor, 47 Ohm 1/4 Watt 5% Carbon Comp 3	145-470-C	2
R03	Resistor, 1 Ohm 1/4 Watt 5% Carbon Film 29	145-010	1
R04	Resistor, 10 Ohm 1/4 Watt 5% Carbon Comp 3	145-100-C	1
R05	Resistor, 180 Ohm 1/4 Watt 5% Metal Film M	145-181	1
----	Thermistor, Fenwal 142-102-FAG-RB1 1000 OH	120-002	1
----	Hex Nut, #6-32 Extra Small Pattern Nickel Plated	500-001	4
----	Screw, 4-40 x 1/2" Phillips Pan Head M/S Nickel Plated	500-011	2
----	Screw, 6-32 x 5/8" Phillips Pan Head M/S Nickel Plated	500-025	4
----	Pop-Rivet, USM SD-42BS	500-105-1	4
----	Keps Nut 4 x 40 Zinc 4CNKEOZ	500-199	2
----	Brackets, #6 Keystone 634	510-210	4
----	Terminal, Vinyl Insulated C10#10 stud #10-12 Wire	512-002	1
----	Solder Lug, #6 Short Concord 707-1206	512-010	4
----	Spacer, 6-32 x 11/16 Hex Threaded Concord	513-043	4
----	Heatsink, Drilled SRPT-40E Amp	520-050DE	1
----	White Coax Cable	580-033-1	2.5
----	Fingerstock, Angle Contact Strip	700-260	13
----	PC Board, Power Amp. RPT-15 STL-10/15	800-170-2B	1

**TABLE 6. SRPT-40E AUDIO CIRCUIT BOARD - 800-166AE**  
(Sheet 2 of 2)

REF. DES.	DESCRIPTION	PART NO.	QTY.
R19	Resistor, 2.2 Meg Ohm 1/4 Watt 5% Metal Fi	145-225	1
R20	Resistor, 470 k Ohm 1/4 Watt 5% Metal Film	145-474	1
R21	NOT USED	-----	-
R22	Potentiometer, 5 k Ohm Cermet Bourns 3309P-	101-502	1
R23	Resistor, 3.3 k Ohm 1/4 Watt 5% Metal Film	145-332	1
R24	Resistor, 2.7 k Ohm 1/4 Watt 5% Metal Film	145-272	1
R25	Resistor, 4.7 k Ohm 1/4 Watt 5% Metal Film	145-472	1
R26	Potentiometer, 100 k Ohm Cermet Bourns 3309	101-104	1
R27	Resistor, 2.2 k Ohm 1/4 Watt 5% Metal Film	145-222	1
R28	Resistor, 2.2 Meg Ohm 1/4 Watt 5% Metal Fi	145-225	1
R29	Resistor, 10 Meg Ohm 1/4 Watt 5% Metal Fil	145-106	1
R30	Resistor, 8.2 Meg Ohm 1/4 Watt 5% Carbon F	145-825	1
R31	Resistor, 221 k Ohm 1/4 Watt 1% RN55D2213F	145-224-1	1
R32	Resistor, 22 k Ohm 1/4 Watt 5% Metal Film M	145-223	1
R33	Potentiometer, 100 k Ohm Cermet Bourns 3309	101-104	1
R34	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film M	145-103	1
R35, R36	Resistor, 475 k Ohm 1/4 Watt 1% RN55D4753F	145-474-1	2
R37	Potentiometer, 1 Meg Ohm Cermet Bourns'3296	104-105	1
R38, R39	Resistor, 1 Meg Ohm 1/4 Watt 5% Metal Film	145-105	2
R40	Resistor, 2.2 Meg Ohm 1/4 Watt 5% Metal Fi	145-225	1
R41	Resistor, 560 Ohm 1/4 Watt 5% Metal Film M	145-561	1
R42	Resistor, 2.2 Meg Ohm 1/4 Watt 5% Metal Fi	145-225	1
R43	Resistor, 33 k Ohm 1/4 Watt 5% Metal Film Mepco SFR25	145-333	
R44	Resistor, 8.2 k Ohm 1/4 Watt 5% Metal Film	145-822	1
R45	Resistor, 2.7 k Ohm 1/4 Watt 5% Metal Film	145-272	1
R46	Resistor, 15 k Ohm 1/4 Watt 5% Metal Film M	145-153	1
R47	Resistor, 100 k Ohm 1/4 Watt 5% Metal Film	145-104	1
----	IC Socket, 14-Pin Keltron ICS-14-3-T	550-069	1
----	Headers, DuPont #65566-131 .150 Center Sin	511-034	1
----	IC Socket, 16-Pin Keltron ICS-16-3-T	550-068	1
----	Brackets, #6 Keystone 634	510-210	2

**BROADCAST ELECTRONICS INC.**  
**FCC ID: DDESRPT-40E-150**  
**EXHIBIT #: 5d**

**TABLE 3. SRPT-40E 300 MHz Unit - 705-ST40-3E**

REF. DES.	DESCRIPTION	PART NO.	QTY.
NOT AVAILABLE			

**TABLE 4. SRPT-40E 215 MHz Unit - 705-ST40-2E**

REF. DES.	DESCRIPTION	PART NO.	QTY.
----	Ribbon Cable, 6 Inches HCSD-08-D6.00-01	586-134	1
----	Final Wiring, SRPT-40E	586-170	1
----	Cable Assembly, SRPT-40E Harness	586-173	1
----	Front Panel Wiring, SRPT-40E	586-170F	1
----	SRPT-40E/450 Main Frame	700-250-39A2	1
----	SRPT-40E Audio Circuit Board	800-166AE	1
----	SRPT-40E Power Supply Regulator Circuit Board	800-168-1AE	1
----	RPT-30/STL-30 215 RF Amplifier Circuit Board	800-170A2E	1
----	RPT-30 215 Output Filter Circuit Board	800-306A2	1
----	RPT-30 Pre-Amplifier Mixer Circuit Board	800-251A	1
----	RPT-30/STL-30 Meter Circuit Board	800-252A	1
----	RPT-30/STL-30 Accessory Connector Circuit Board	800-253A	1
----	SRPT-40 Thermistor Circuit Board	800-255A	1
----	SRPT-40E/215 Frequency Synthesizer Circuit Board	800-305A2ET	1
----	SRPT-40E RF Pre-Driver Circuit Board	800-338A2	1
----	Controller Circuit Board Assembly	800-339A1	1
----	LCD Display Circuit Board Assembly	800-340A1	1
----	Display Driver Circuit Board Assembly	800-341A	1
----	Cable Switch Interface Assembly	800-343A	1
----	Power Supply Assembly, TEK150SOO-XXX	800-324A	1

**TABLE 5. SRPT-40E 150 MHz Unit - 705-ST40-1E  
(Sheet 1 of 2)**

REF. DES.	DESCRIPTION	PART NO.	QTY.
----	Ribbon Cable, 6 Inches HCSD-08-D6.00-01	586-134	1
----	Final Wiring, SRPT-40E	586-170	1
----	Front Panel Wiring, SRPT-40E	586-170F	1
----	Cable Assembly, SRPT-40E Harness	586-173	1
----	SRPT-40E/215 Main Frame	700-250-39A2	1
----	SRPT-40E Audio Circuit Board	800-166AE	1
----	SRPT-40E Power Supply Regulator Circuit Board	800-168-1AE	1
----	SRPT-40E/150 Amplifier	800-170A1E	1
----	RPT-30 Pre-Amplifier Mixer Circuit Board	800-251A	1
----	RPT-30/STL-30 Meter Circuit Board	800-252A	1
----	RPT-30/STL-30 Accessory Connector Circuit Board	800-253A	1
----	RPT-30/STL-30 Thermistor Circuit Board	800-255A	1
----	SRPT-40E/150 Frequency Synthesizer	800-305A1ET	1
----	RPT-30/150 Output Filter	800-306A1	1
----	Power Supply Assembly, TEK150SOO-XXX	800-324A	1

**TABLE 16. SRPT-40E/450 FREQUENCY SYNTHESIZER CIRCUIT BOARD - 800-287A4ET**  
(Sheet 2 of 3)

REF. DES.	DESCRIPTION	PART NO.	QTY.
D01	Diode, Zener 1N4734A 5.6V	414-734	1
D02, D03	Diode, Alpha SMV1204-99 Hyper-Abrupt Tunin	410-105	2
D04	NOT USED	-----	-
D05	Diode, General Instruments 1N4007	414-007	1
D06	Diode, Schottky Motorola 1N5818	415-818	1
D07 thru D09	Diode, 1N4148 Philips	410-914	3
IC1	Heatsink With LM317T	520-051A317	1
IC2	Integrated Circuit, OP-Amp Analog OP275GP	400-275	1
IC3	Integrated Circuit, NEC UPC 1678G (MMIC)	401-678	1
IC4	Integrated Circuit, Motorola MC12022AD	400-501	1
IC5	Integrated Circuit, Motorola MC145152-P2	400-145	1
JP1	Connector, 1 Dual Pin Header	550-184	1
L01 thru L03	Inductor, 15 uH Coilcraft 90-27	330-012	3
L04	Inductor, 10 Turn .15 uH #90-03	350-121	1
L05	Inductor, 15 uH Coilcraft 90-27	330-012	1
L06	Inductor, .33 uH Coilcraft 70-07	330-020	1
L07, L08	Inductor, 15 uH Coilcraft 90-27	330-012	1
M1	R-15C Synthesizer Oven	520-052AC	1
Q1	part of M1	-----	-
Q2	Transistor, NE68833	420-901	1
Q3 thru Q5	Transistor, Motorola 2N3904	425-301	1
R01	Resistor, 240 Ohm 1/4 Watt 2% RL07S241G DA	145-241-1	1
R02	Resistor, 1.2 k Ohm 1/4 Watt 2% RLO7S122G	145-122-1	1
R03	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film M	145-103	1
R04, R05	Resistor, 100 k Ohm 1/4 Watt 5% Metal Film	145-104	2
R06	Resistor, 2.7 k Ohm 1/4 Watt 2% RL07S272G	145-272-1	1
R07, R08	Resistor, 1 k Ohm 1/4 Watt 5% Metal Film Me	145-102	1
R09	Resistor, 4.7 k Ohm 1/4 Watt 5% Metal Film	145-472	1
R10	NOT USED	-----	-
R11	NOT USED	-----	-
R12	NOT USED	-----	-
R13	Potentiometer, 5 k Ohm Cermet Bourns 3309P-	101-502	1
R14	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film M	145-103	1
R15	Potentiometer, 5 k Ohm Cermet Bourns 3309P-	101-502	1
R16	Resistor, 30 Ohm 1/4 Watt 5% Metal Film Me	145-300	1
R17	Resistor, #263-1 k Ohm 1/8 Watt 5% Chip	185-102	1
R18	Resistor, 30 Ohm 1/4 Watt 5% Metal Film Me	145-300	1
R19	Resistor, #263-100 Ohm 1/8 Watt 5% Chip	185-101	1
R20	Resistor, #263-2.7 k Ohm 1/8 Watt 5% Chip	185-272	1
R21	Resistor, #263-100 Ohm 1/8 Watt 5% Chip	185-101	1
R22, R23	Resistor, #263-8.2 k Ohm 1/8 Watt 5% Chip	185-822	2
R24	Resistor, 10 k Ohm 1/8 Watt 5% Chip AVX#CR3	185-103	1
R25	Resistor, #263-8.2 k Ohm 1/8 Watt 5% Chip	185-822	1
R26	Resistor, 1.5 k Ohm 1/4 Watt 5% Metal Film M	145-152	1
R27	Thermistor, Fenwal 142-102-FAG-RB1 1000 OH	120-002	1
R28	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film M	145-103	1
R29	Resistor, 4.7 k Ohm 1/4 Watt 5% Metal Film	145-472	1
R30	Resistor, 47 k Ohm 1/4 Watt 5% Metal Film M	145-473	1
R31	Resistor, 39 k Ohm 1/4 Watt 5% Carbon Film	145-393	1
R32	Resistor, 27 k Ohm 1/4 Watt 5% Carbon Film	145-273	1
R33	Resistor, 330 Ohm 1/4 Watt 5% Metal Film M	145-331	1
R34	Resistor, 4.7 k Ohm 1/4 Watt 5% Metal Film	145-472	1
R35	Resistor, #263-100 k Ohm 1/8 Watt 5% Chip	185-104	1

**TABLE 18. SRPT-40E/215 FREQUENCY SYNTHESIZER CIRCUIT BOARD - 800-305A2ET**  
**(Sheet 2 of 4)**

REF. DES.	DESCRIPTION	PART NO.	QTY.
C25	Capacitor, Monolithic Chip, 22 pF 50V 5% K	270-220	1
C26, C27	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	2
C28	Capacitor, Monolithic Chip, 22 pF 50V 5% K	270-220	1
C29	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C30	Capacitor, Monolithic Chip, 2.2 pF 50V 5% K	270-202	1
C31	Capacitor, Monolithic Chip, 22 pF 50V 5% K	270-220	1
C32	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C33	Capacitor, Electrolytic 47 uF 16V Radial ME	219-470	1
C34	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C35	Capacitor, Variable .8 - 8 pF Sprague-Goodm	290-528	1
C36	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C37	Capacitor, Monolithic Chip 4.7 pF 50V 5% KE	270-407	1
C38	Capacitor, Electrolytic 22 uF 25V Radial NI	219-220	1
C39	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C40	Capacitor, Monolithic Chip, 22 pF 50V 5% K	270-220	1
C41	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C42	Capacitor, Tantalum, 2.2 mF 25V ECS-F1EE22	299-220	1
C43	Capacitor, Tantalum 33 uF 16V ECS-F1CE336K	299-330	1
C44	Capacitor, Tantalum, 4.7 mF 16V ECS-F1CE47	299-470	1
C45, C46	Capacitor, .1 mF 100V 10% Mylar	217-103	1
C47	Capacitor, Tantalum, 2.2 mF 25V ECS-F1EE22	299-220	1
C48	Capacitor, .1 mF 100V 10% Mylar	217-103	1
C49, C50	Capacitor, Variable, 3.5-36 pF Sprague-Goo	290-523	2
C51	Capacitor, 100 pF N750 5% Disc .25 Lead Spa	256-101	1
C52	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C53	Capacitor, Electrolytic 22 uF 25V Radial NI	219-220	1
C54, C55	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C56	Capacitor, Monolithic Chip 10000 pF 10% XR7 K	270-103	1
C57	NOT USED	-----	-
C58	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C59	Capacitor, Monolithic Chip 10000 pF 10% XR7 K	270-103	1
C60	Capacitor, Tantalum, 4.7 mF 16V ECS-F1CE47	299-470	1
C61	Capacitor, Tantalum 33 uF 16V ECS-F1CE336K	299-330	1
C62, C63	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C64	NOT USED	-----	-
C65	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C66	Capacitor, Electrolytic 470 uF 16V Radial 1"	219-471	1
C67, C68	Capacitor, Tantalum, 4.7 mF 16V ECS-F1CE47	299-470	2
D1	Diode, Zener 1N4734A 5.6V	414-734	1
D2	Diode, Alpha SMV1204-99 Hyper-Abrupt Tunin	410-105	1
D3	Not Applicable	410-102	1
D4	NOT USED	-----	-
D5	Diode, General Instruments 1N4007	414-007	1
D6	Diode, Schottky Motorola 1N5818	415-818	1
D7 thru D9	Diode, 1N4148 Philips	410-914	3
IC1	Heatsink With LM317T	520-051A317	1
IC2	Integrated Circuit, OP-Amp Analog OP275GP	400-275	1
IC3	Integrated Circuit, NEC UPC 1678G (MMIC)	401-678	1
IC4	Integrated Circuit, Motorola MC12022AD	400-501	1
IC5	Integrated Circuit, Motorola MC145152-P2	400-145	1
JP1	Connector, 1 Dual Pin Header	550-184	1
L1 thru L3	Inductor, 15 uH Coilcraft 90-27	330-012	1
L4	Inductor, 3.3 uH Coilcraft 70-19	330-021	1
L5	Inductor, 15 uH Coilcraft 90-27	330-012	1



**TABLE 18. SRPT-40E/215 FREQUENCY SYNTHESIZER CIRCUIT BOARD - 800-305A2ET**  
(Sheet 4 of 4)

REF. DES.	DESCRIPTION	PART NO.	QTY.
----	IC Socket, 8-Pin Keltron ICS-08-3-T	550-070	1
----	Connector, 6-Pin Molex Header	550-136	1
----	Connector, 4-Pin Molex Header	550-165	1
----	Connector, 28-Pin DIP 151-9028	550-190	1
----	Connector, KSM S.FL-R-SMT Surface Mount	550-193	1
----	Coax #421-099 High Shield RG-188	580-033	1
----	Wire, UL1429 22/7 OS-1 Red	580-043	1
----	Formed Cover, #50-CBS 2" x 2" Less Standoff	700-262	1
----	Formed Cover, #50-CBS 2" x 2" With Hole Less Standoff	700-263	1
----	Fence for 700-262 & 700-263	700-264	1

**TABLE 19. SRPT-40E/150 FREQUENCY SYNTHESIZER CIRCUIT BOARD - 800-305A1ET**  
(Sheet 1 of 3)

REF. DES.	DESCRIPTION	PART NO.	QTY.
C01	Capacitor, Electrolytic 22 uF 25V Radial NI	219-220	1
C02	Capacitor, Tantalum, 4.7 mF 16V ECS-F1CE47	299-470	1
C03	Capacitor, Tantalum, 15 mF 25V ECS-F1EE156	299-151	1
C04, C05	Capacitor, .1 mF 100V 10% Mylar	217-103	1
C06 thru C12	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	7
C13	Capacitor, Electrolytic 1000 uF 16V Radial	219-102	1
C14	Capacitor, Monolithic Chip, 22 pF 50V 5% K	270-220	1
C15	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C16	Capacitor, Electrolytic 10 uF 25V Radial N	219-100	1
C17, C18	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	2
C19	Capacitor, Monolithic Chip, 1 pF 50V 5% Kem	270-010	1
C20 thru C23	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	4
C24	Capacitor, Monolithic Chip, 10 pF 50V 5% K	270-100	1
C25	Capacitor, Monolithic Chip, 22 pF 50V 5% K	270-220	1
C26, C27	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	2
C28	Capacitor, Monolithic Chip, 22 pF 50V 5% K	270-220	1
C29	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C30	Capacitor, Monolithic Chip, 2.2 pF 50V 5% K	270-202	1
C31	Capacitor, Monolithic Chip, 22 pF 50V 5% K	270-220	1
C32	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C33	Capacitor, Electrolytic 47 uF 16V Radial ME	219-470	1
C34	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C35	Capacitor, Variable .8 - 8 pF Sprague-Goodm	290-528	1
C36	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C37	Capacitor, Monolithic Chip, 4.7 pF 50V 5% KE	270-407	1
C38	Capacitor, Electrolytic 22 uF 25V Radial NI	219-220	1
C39	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C40	Capacitor, Monolithic Chip, 22 pF 50V 5% K	270-220	1
C41	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C42	Capacitor, Tantalum, 2.2 mF 25V ECS-F1EE22	299-220	1
C43	Capacitor, Tantalum, 33 uF 16V ECS-F1CE336K	299-330	1
C44	Capacitor, Tantalum, 4.7 mF 16V ECS-F1CE47	299-470	1
C45, C46	Capacitor, .1 mF 100V 10% Mylar	217-103	2

**TABLE 20. RPT-30/STL-30450 OUTPUT FILTER CIRCUIT BOARD - 800-250A4**

REF. DES.	DESCRIPTION	PART NO.	QTY.
C1 thru C3	Capacitor, Uncased Mica, 8.2 pF 33V 5% FWJ	240-802	2
C4 thru C9	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	6
D1, D2	Diode, Motorola MMBD101L Chip	410-305	2
L1	Inductor, 1 Turn 20 AWG	350-116P	1
L2	Inductor, 3 Turn 20 AWG (CW)	350-111P	1
L3	Inductor, 1 Turn 20 AWG	350-116P	1
L4	Inductor, 3 Turn 20 AWG (CW)	350-111P	1
L5	Inductor, 16 Turn 20 AWG	350-140P	1
PCB	PC Board, RF Output RPT-30	800-250B	1
R1, R2	Resistor, 68 Ohm 1/4 Watt 5% Carbon Comp 3	145-680-C	2
R3, R4	Resistor, 4.7 k Ohm 1/4 Watt 5% Metal Film	145-472	2
R5, R6	Potentiometer, 5 k Ohm Cermet Bourns 3309P-	101-502	1
----	Pop-Rivet, USM SD-42BS	500-105-1	1
----	Pop-Rivet, 3 x 6mm Gesipa Metric	500-158	1
----	#4 Bracket, Keystone 612	510-191	1
----	Terminal, Insulated Feed-Thru Staffel TFF9	511-004	1
----	Connector, SO-239A UHF Panel Receptacle A	550-012	1
----	Connector, 4-Pin Molex Angle Header	550-158	1
----	Wire, UL1429 22/7 OS-1 Yellow	580-044	1
----	Output Filter Box, RPT-30	700-250-8P	1
----	Shield, RPT-30 Output Filter Box	700-250-14P	1
----	Fingerstock, Angle Contact Strip	700-260	1

**TABLE 21. RPT-30 215 OUTPUT FILTER CIRCUIT BOARD - 800-306A2**

REF. DES.	DESCRIPTION	PART NO.	QTY.
C1 thru C3	Capacitor, Uncased Mica, 16 pF 33V 5% FWJ1	240-160	3
C4 thru C9	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	6
D1, D2	Diode, Motorola MMBD101L Chip	410-305	2
L1	Inductor, 2 Turn 20 AWG	350-143P	1
L2	Inductor, 4 Turn 20 AWG	350-142P	1
L3	Inductor, 2 Turn 20 AWG	350-143P	1
L4	Inductor, 4 Turn 20 AWG	350-142P	1
L5	Inductor, 16 Turn 20 AWG	350-140P	1
R1, R2	Resistor, 220 Ohm 1/4 Watt 5% Carbon Comp	145-221-C	2
R3, R4	Resistor, 1 k Ohm 1/4 Watt 5% Metal Film Me	145-102	2
R5, R6	Potentiometer, 5 k Ohm Cermet Bourns 3309P-	101-502	2
----	Pop-Rivet, USM SD-42BS	500-105-1	1
----	Pop-Rivet, 3 x 6mm Gesipa Metric	500-158	1
----	#4 Bracket, Keystone 612	510-191	1
----	Terminal, Insulated Feed-Thru Staffel TFF9	511-004	1
----	Connector, SO-239A UHF Panel Receptacle A	550-012	1
----	Connector, 4-Pin Molex Angle Header	550-158	1
----	Wire, UL1429 22/7 OS-1 Yellow	580-044	1
----	Shield, RPT-30 Output Filter Box	700-250-14P	1
----	Output Filter Box, RPT-30	700-250-8P	1
----	Fingerstock, LH-55-52400 X 24	700-258	1
----	Fingerstock, Angle Contact Strip	700-260	1
----	PC Board, RPT-30/150/215 Output Filter Bd	800-306B	1

**TABLE 23. SRPT-40E/450 MHz RF PRE-DRIVER CIRCUIT BOARD - 800-338A4**

REF. DES.	DESCRIPTION	PART NO.	QTY.
C01	Capacitor, Variable, 5-25 pF Sprague-Goodman GKU-25000	290-521	1
C02	Capacitor, Variable Trimmer 9-50 pF #24AA024	290-525	1
C03	Capacitor, Variable, 2.8-10 pF Sprague-Goodman GKU-10000	290-522	1
C04	Capacitor, Variable Trimmer 9-50 pF #24AA024	290-525	1
C05	Capacitor, Variable, 2.8-10 pF Sprague-Goodman GKU-10000	290-522	1
C06, C07	Capacitor, Monolithic Chip, 1000 pF 50V 5% KemetC1206C102J5GACTR	270-102	2
C08	Capacitor, .1 mF 100V 10% Mylar	217-103	1
C09	Capacitor, Monolithic Chip, 10000 pF 10% XR	270-103	1
L01	Jumper	n/a	4
L02 thru L04	Inductor, 8 Turn 22 AWG (CCW)	350-117	3
L05, L06	Inductor, 8 Turn 22 AWG (CCW)	350-117	2
L08	Inductor, 1 Turn, 20 AWG (CCW)	350-116	1
PCB	PC Board, SRPT-40E RF Driver REV 2	800-338B	1
Q01	Transistor, Philips 8TT9A	420-098	1
Q02	Transistor, Philips BLW80 2N5945	425-945	1
R01	NOT USED		
R02	Resistor, #263-100 Ohm 1/8 Watt 5% Chip	185-101	1
R03	Resistor, 15 Ohm 1/8 Watt 5% Chip Dale #CRCW1206150JT	185-150	1
R04	Inductor, 1 Turn, 20 AWG (CCW)	350-116	1
R05	Resistor, 47 Ohm 1/4 Watt 5% Carbon Comp 30BJ250	145-470-C	1
R06	Resistor, 330 Ohm 1/2 Watt Carbon Comp	105-331	1
----	Cable Assembly W/ 1 Conn. KSM-2191-0	586-122	1
----	Fingerstock, Angle Contact Strip	700-260	5.5
----	Hex Nut, #4-40 Regular Nickel Plated	500-002-1	3
----	Screw, 4-40 x 1/2" Philips Pan Head M/S Nickel Plated	500-011	3

**TABLE 24. SRPT-40E/215 MHz RF PRE-DRIVER CIRCUIT BOARD - 800-338A2**  
(Sheet 1 of 2)

REF. DES.	DESCRIPTION	PART NO.	QTY.
C01	Capacitor, Variable, 5-25 pF Sprague-Goodman GKU-25000	290-521	1
C02	Capacitor, Variable Trimmer 9-50 pF #24AA024	290-525	1
C03	Capacitor, Variable, 2.8-10 pF Sprague-Goodman GKU-10000	290-522	1
C04	Capacitor, Variable Trimmer 9-50 pF #24AA024	290-525	1
C05	Capacitor, Variable, 2.8-10 pF Sprague-Goodman GKU-10000	290-522	1
C06, C07	Capacitor, Monolithic Chip, 1000 pF 50V 5% KemetC1206C102J5GACTR	270-102	2
C08	Capacitor, .1 mF 100V 10% Mylar	217-103	1
L01	Inductor, 3 Turn, #20 AWG, 0.1" dia., STL-15C/215	350-168	1
L02	Inductor, 8 Turn 22 AWG (CCW)	350-117	1
L03	Inductor, 3 Turn 20 AWG (CCW)	350-112	1
L04	Inductor, 15 uH Coilcraft 90-27	330-012	1
L05, L06	Inductor, 8 Turn 22 AWG (CCW)	350-117	1
PCB	PC Board, RF Driver	800-338B	1
Q01	Transistor, Motorola MRF555	420-555	1

**TABLE 26. CONTROLLER CIRCUIT BOARD - 800-339A1**  
(Sheet 1 of 2)

REF. DES.	DESCRIPTION	PART NO.	QTY.
C101B	Capacitor, Electrolytic 1000 uF 6.3V Radial SMG6.3VB102M8X11LL	218-102	1
C102	Capacitor, .1 mF 104 K Ceramic Dip X7R 50V	255-104C	1
C112	Capacitor, .01 mF 50V GMV Disc Pace F6Z5U1c103Z-JT	217-104	1
C113	Capacitor, .1 mF 104 K Ceramic Dip X7R 50V	255-104C	1
C114	Capacitor, .01 mF 50V GMV Disc Pace F6Z5U1c103Z-JT	217-104	1
C115, C116	Capacitor, .1 mF 104 K Ceramic Dip X7R 50V	255-104C	2
C117, C118	Capacitor, .01 mF 50V GMV Disc Pace F6Z5U1c103Z-JT	217-104	2
C119	Capacitor, Electrolytic 1000 uF 6.3V Radial SMG6.3VB102M8X11LL	218-102	1
C120	Capacitor, Tantalum, 4.7 mF 16V ECS-F1CE475K	299-470	1
C121 thru C124	Capacitor, .01 mF 50V GMV Disc Pace	217-104	4
D101	Diode, Zener 1N4733A	414-733	1
D103 thru D106	Diode, Germanium BKC 1N270	412-494	4
DS101B	LED, Green mv5454a T-1 3/4 DIFUSED QT	415-454	1
J101B	Connector, 4 Dual Pin Header	550-197	1
J102	Connector, 8-Pin Socket Molex 90147-1108	550-210	1
J102A	Connector, 6-Pin Socket Molex 90147-1206	550-209	1
J103B	8-Pin Dual Row Header Cut From 550-181	550-219	1
J104B	Connector, 2 Dual Pin Header	550-191	1
J105B	Connector, 4 Dual Pin Header	550-197	1
J106B	Connector, 1 Dual Pin Header	550-184	1
J107B	Connector, 2 Dual Pin Header	550-191	1
P104 thru P107	Open Top Two Circuit Shunt Molex 15-38-1024	550-182	4
Q101	Transistor, Motorola 2N2907A	422-907	1
R101	Resistor, 100 Ohm 1/2 Watt Carbon Comp 30BJ500	105-101	1
R102	Resistor, 1 k Ohm 1/4 Watt 5% Metal Film Mepco SFR25	145-102	1
R102	Resistor, 4.7 k Ohm 1/4 Watt 5% Metal Film Mepco SFR25	145-472	1
R111	Resistor, 1 k Ohm 1/4 Watt 5% Metal Film Mepco SFR25	145-102	1
R112	Resistor, 100 k Ohm 1/4 Watt 5% Metal Film Mepco SFR25	145-104	1
R113, R114	Resistor, 22 k Ohm 1/4 Watt 5% Metal Film Mepco SFR25	145-223	
R115	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film Mepco SFR25	145-103	1
R116	Resistor, 22 k Ohm 1/4 Watt 5% Metal Film Mepco SFR25	145-223	1
R117	Resistor, 2 k Ohm 1/4 Watt 2% RL07S202G	145-202-1	1
R118	Resistor, 30 Ohm 1/4 Watt 5% Metal Film Mepco SFR	145-300	1
R119	Resistor, 100 k Ohm 1/4 Watt 5% Metal Film Mepco SFR25	145-104	1
R120	Resistor, 2 k Ohm 1/4 Watt 2% RL07S202G	145-202-1	1
R121	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film Mepco SFR25	145-103	1

**TABLE 27. LCD DISPLAY CIRCUIT BOARD - 800-340A1**

REF. DES.	DESCRIPTION	PART NO.	QTY.
DS201	LED, Red Rectangular #604-L113HDT	410-155	1
DS202	LED, Green Rectangular #604-L113GDT	410-255	1
DS203	LCD, Varitronix VI-201-DP-FC-S	410-201	1
J201, J202	Connector, 8-Pin Single Row Cut From 550-214	550-280	2
R201	Resistor, 2 k Ohm 1/4 Watt 2% RL07S202G	145-202-1	1
S201	Switch, MC10191-00 Micro-Cosmos	530-064	1
S201	Buttons #805500009 For MC10191-00 Switch	530-064-1	1
S203	Switch, MC10191-00 Micro-Cosmos	530-064	1
S203	Buttons #805500009 For MC10191-00 Switch	530-064-1	1

**BROADCAST ELECTRONICS INC.**  
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**EXHIBIT #: 599**



**TABLE 28. DISPLAY DRIVER CIRCUIT BOARD - 800-341A**

REF. DES.	DESCRIPTION	PART NO.	QTY.
C301 thru, C308	Capacitor, Tantalum, 4.7 mF 16V ECS-F1CE475K	299-470	8
C309	Capacitor, .22 uF 50V 10% Film CD MTC1P22K	226-224	1
C310 thru C313	Capacitor, .01 mF 50V GMV Disc Pace F6Z5U1c103Z-JT	217-104	4
J302, J303	Connector, 8-Pin Socket Molex 90147-1108	550-210	2
Q301	Transistor, Motorola 2N3904	425-301	1
R302	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film Mepco SFR25	145-103	1
R303, R304	Resistor, 39 Ohm 1/4 Watt 5% Carbon Comp 30BJ250	145-390	2
R305	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film Mepco SFR25	145-103	1
RA301, RA302	Resistor Network, CTS 750-101-R-1021 k 1/4W 10-Pin Single Line	186-102	2
U301	IC Socket, 8-Pin Keltron ICS-08-3-T	550-070	1
U302	IC Socket, 24-Pin (Wide) A24-LC-TT	550-169	1
U303	IC Socket, 16-Pin Keltron ICS-16-3-T	550-068	1

**BROADCAST ELECTRONICS INC.**  
**FCC ID: DDESRPT-40E-150**  
**EXHIBIT #: 5ab**

**TABLE 26. CONTROLLER CIRCUIT BOARD - 800-339A1**  
**(Sheet 2 of 2)**

REF. DES.	DESCRIPTION	PART NO.	QTY.
R122	Resistor, 560 Ohm 1/4 Watt 5% Metal Film Mepco SFR25	145-561	1
R123	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film Mepco SFR25	145-103	1
S101B	Switch, MC10191-00 Micro-Cosmos	530-064	1
U101	Integrated Circuit, CD4011BE	404-011	1
U102	IC Socket, 14-Pin Keltron ICS-14-3-T	550-069	1
U104	Integrated Circuit, CD40193BE Harris	401-930	1
U106	Integrated Circuit, Motorola NE555N	400-555	1
U106	IC Socket, 8-Pin Keltron ICS-08-3-T	550-070	1
U107	IC Socket, 16-Pin Keltron ICS-16-3-T	550-068	1
U108	Integrated Circuit, Motorola NE555N	400-555	1
U108	IC Socket, 8-Pin Keltron ICS-08-3-T	550-070	1
U109	Integrated Circuit, 28C04	402-804	1
U109	IC Socket, 24-Pin (Wide) A24-LC-TT	550-169	1
U110	Integrated Circuit, 28C04	402-804	1
U110	IC Socket, 24-Pin (Wide) A24-LC-TT	550-169	1

**BROADCAST ELECTRONICS INC.**  
**FCC ID: DDESRPT-40E-150**  
**EXHIBIT #: 52**



**TABLE 24. SRPT-40E/215 MHz RF PRE-DRIVER CIRCUIT BOARD - 800-338A2**  
(Sheet 2 of 2)

REF. DES.	DESCRIPTION	PART NO.	QTY.
Q02	Transistor, Philips BLW80 2N5945	425-945	1
R01	NOT USED		
R02	Resistor, #263-100 Ohm 1/8 Watt 5% Chip	185-101	1
R03	Resistor, 15 Ohm 1/8 Watt 5% Chip Dale #CRCW1206150JT	185-150	1
R04	Resistor, 3.3 Ohm 1/4 Watt 5% Carbon Comp 30BJ250	145-030-C	1
R05	Resistor, 47 Ohm 1/4 Watt 5% Carbon Comp 30BJ250	145-470-C	1
----	Cable Assembly With 1 Conn. KSM-2191-05	586-122	1
----	Hex Nut, #4-40 x 1/2" Ogukuoas Oab Gead M/S Nickel Plated	500-002-1	3
----	Screw, 4-40 x 1/2" Phillips Pan Head M/S Nickel Plated	500-011	3
----	Fingerstock, Angle Contact Strip	700-260	5.5

**TABLE 25. SRPT-40E/150 MHz RF PRE-DRIVER CIRCUIT BOARD - 800-338A1**

REF. DES.	DESCRIPTION	PART NO.	QTY.
C01	Capacitor, Variable, 5-25 pF Sprague-Goodman GKU-25000	290-521	1
C02	Capacitor, Variable Trimmer 9-50 pF #24AA024	290-525	1
C03	Capacitor, Variable, 2.8-10 pF Sprague-Goodman GKU-10000	290-522	1
C04	Capacitor, Variable Trimmer 9-50 pF #24AA024	290-525	1
C05	Capacitor, Variable, 2.8-10 pF Sprague-Goodman GKU-10000	290-522	1
C06	Capacitor, Monolithic Chip, 1000 pF 50V 5% Kemet C1206C102J5GACTR	270-102	1
C07	Capacitor, Monolithic Chip, 1000 pF 50V 5% Kemet C1206C102J5GACTR	270-102	1
C08	Capacitor, .1 mF 100V 10% Mylar	217-103	1
L01	Inductor, 3 Turn, #20 AWG, 0.1" Dia., STL-15C/215	350-168	1
L02	Inductor, 8 Turn 22 AWG (CCW)	350-117	1
L03	Inductor, 3 Turn 20 AWG (CCW)	350-112	1
L04	Inductor, 15 uH Coilcraft 90-27	330-012	1
L05, L06	Inductor, 8 Turn 22 AWG (CCW)	350-117	2
PCB	PC Board, RF Driver	800-338B	1
Q01	Transistor, Motorola MRF555	420-555	1
Q02	Transistor, Philips BLW80 2N5945	425-945	1
R03	Resistor, 15 Ohm 1/8 Watt 5% Chip Dale #CRCW1206150JT	185-150	1
R04	Resistor, 3.3 Ohm 1/4 Watt 5% Carbon Comp 30BJ250	145-030	1
R05	Resistor, 47 Ohm 1/4 Watt 5% Carbon Comp 30BJ250	145-470	1
R06	Resistor, 100 Ohm 1/2 Watt Carbon Comp 30BJ500	105-101	1
----	Cable Assembly W/1 Conn. KSM-2191-05"	586-122	1
----	Fingerstock, Angle Contact Strip	700-260	1
----	Hex Nut, #4-40 Regular Nickel Plated	500-002-1	1
----	Screw, 4-40 x 1/2" Phillips Pan Head M/S Nickel Plated	500-011	1
----	Fingerstock, Angle Contact Strip	700-260	1

**BROADCAST ELECTRONICS INC.**  
FCC ID: DDESPT-40E-150  
EXHIBIT #: 5X

**TABLE 22. RPT-30/150 MHZ OUTPUT FILTER CIRCUIT BOARD - 800-306A1**

REF. DES.	DESCRIPTION	PART NO.	QTY.
C1 thru C3	Capacitor, Uncased Mica, 22 pF 33V 5% FWJ101	240-220	3
C4 thru C9	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	6
D1, D2	Diode, Motorola MMBD101L Chip	410-305	2
L1	Inductor, 3 Turn 20 AWG (CW)	350-111	1
L2	Inductor, 6 Turn AWG (CW)	350-110	1
L3	Inductor, 4 Turn 20 AWG	350-142	1
L4	Inductor, 6 Turn AWG (CW)	350-110	1
L5	Inductor, 16 Turn 20 AWG	350-140P	1
R1, R2	Resistor, 220 Ohm 1/4 Watt 5% Carbon Comp	145-221-C	2
R3, R4	Resistor, 1 k Ohm 1/4 Watt 5% Metal Film Me	145-102	2
R5, R6	Potentiometer, 5 k Ohm Cermet Bourns 3309P-	101-502	2
----	Pop-Rivet, USM SD-42BS	500-105-1	1
----	Pop-Rivet, 3 x 6mm Gesipa Metric	500-158	1
----	#4 Bracket, Keystone 612	510-191	1
----	Terminal, Insulated Feed-Thru Staffel TFF9	511-004	1
----	Connector, SO-239A UHF Panel Receptacle A	550-012	1
----	Connector, 4 Pin Molex Angle Header	550-158	1
----	Wire, UL1429 22/7 OS-1 Yellow	580-044	1
----	Shield, RPT-30 Output Filter Box	700-250-14P	1
----	Output Filter Box, RPT-30	700-250-8P	1
----	Fingerstock, Angle Contact Strip	700-260	1
----	PC Board, RPT-30/150/215 Output Filter Board	800-306B	1

**BROADCAST ELECTRONICS INC.**  
**FCC ID: DDES RPT-40E-150**  
**EXHIBIT #: 5V**

**TABLE 19. SRPT-40E/150 FREQUENCY SYNTHESIZER CIRCUIT BOARD - 800-305A1ET**  
(Sheet 2 of 3)

REF. DES.	DESCRIPTION	PART NO.	QTY.
C47	Capacitor, Tantalum, 2.2 mF 25V ECS-F1EE22	299-220	1
C48	Capacitor, .1 mF 100V 10% Mylar	217-103	1
C49, C50	Capacitor, Variable, 3.5 - 36 pF Sprague-Goo	290-523	2
C51	Capacitor, 100 pF N750 5% Disc .25 Lead Spa	256-101	1
C52	Capacitor, Monolithic chip, 1000 pF 50V 5%	270-102	1
C53	Capacitor, Electrolytic 22 uF 25V Radial NI	219-220	1
C54, C55	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	2
C56	Capacitor, Monolithic Chip 10000 pF 10% XR7 K	270-103	1
C57	NOT USED		
C58	Capacitor, Monolithic Chip. 1000 pF 50V 5%	270-102	1
C59	Capacitor, Monolithic Chip, 1000 pF 10% XR7 K	270-103	1
C60	Capacitor, Tantalum, 4.7 mF 16V ECS-F1CE47	299-470	1
C61	Capacitor, Tantalum 33 uF 16V ECS-F1CE336K	299-330	1
C62, C63	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	2
C64	NOT USED		
C65	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C66	Capacitor, Electrolytic 470 uF 16V Radial 1	219-471	1
C67, C68	Capacitor, Tantalum, 4.7 mF 16V ECS-F1CE47	299-470	2
D1	Diode, Zener 1N4734A 5.6V	414-734	1
D2	Diode, Alpha SMV1204-99 Hyper-abrupt Tunin	410-105	1
D4	NOT USED		
D5	Diode, General Instruments 1N4007	414-007	1
D6	Diode, Schottky Motorola 1N5818	415-818	1
D7 thru D9	Diode, 1N4148 Philips	410-914	3
IC1	Heatsink, W/LM317T	520-051A317	1
IC2	Integrated Circuit, OP-Amp Analog OP275GP	400-275	1
IC3	Integrated Circuit, NEC UPC 1678G (MMIC)	401-678	1
IC4	Integrated Circuit, Motorola MC12022AD	400-501	1
IC5	Integrated Circuit, Motorola MC145152-P2	400-145	1
JP1	Connector, 1 Dual Pin Header	550-184	1
L1 thru L3	Inductor, 15 uH Coilcraft 90-27	330-012	3
L4	Inductor, 3.3 uH Coilcraft 70-19	330-021	1
L5	Inductor, 15 uH Coilcraft 90-27	330-012	1
L6	Inductor, 3.3 uH Coilcraft 70-19	330-021	1
L7, L8	Inductor, 15 uH Coilcraft 90-27	330-012	2
M1	R-15C Synthesizer Oven	520-052AC	1
PCB	PC Board, STL-15C/215 Freq. Synthesizer	800-305B	1
Q2	Transistor, Siliconix SST-310	421-310	1
Q3, Q4, Q5	Transistor, Motorola 2N3904	425-301	3
R01	Resistor, 240 Ohm 1/4 Watt 2% RL07S241G DA	145-241-1	1
R02	Resistor, 1.2 k Ohm 1/4 Watt 2% RLO7S122G	145-122-1	1
R03 thru R05	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film Mepco SFR25	145-103	3
R06	Resistor, 2.7 k Ohm 1/4 Watt 2% RL07S272G	145-272-1	1
R07	Resistor, 1 k Ohm 1/4 Watt 5% Metal Film Me	145-102	1
R08	Resistor, 1 Ohm 1/4 Watt 5% Carbon Film 29AB250-1	145-010	1
R09	Resistor, 4.7 k Ohm 1/4 Watt 5% Metal Film	145-472	1
R10	NOT USED		
R11	NOT USED		
R12	NOT USED		
R13	Potentiometer, 5 k Ohm Cermet Bourns 3309P-	101-502	1
R14	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film M	145-103	1
R15	Potentiometer, 5 k Ohm Cermet Bourns 3309P-	101-502	1
R16	Resistor, 30 Ohm 1/4 Watt 5% Metal Film Me	145-300	1
R17	Resistor, #263-1 k Ohm 1/8 Watt 5% Chip	185-102	1
R18	Resistor, 30 Ohm 1/4 Watt 5% Metal Film Me	145-300	1

**TABLE 16. SRPT-40E/450 FREQUENCY SYNTHESIZER CIRCUIT BOARD - 800-287A4ET  
(Sheet 3 of 3)**

REF. DES.	DESCRIPTION	PART NO.	QTY.
R36	Resistor, 27 k Ohm 1/4 Watt 5% Carbon Film	145-273	1
R37	NOT USED	-----	-
R38	Resistor, 330 Ohm 1/4 Watt 5% Metal Film M	145-331	1
R39	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film M	145-103	1
R40	Resistor, 4.7 k Ohm 1/4 Watt 5% Metal Film	145-472	1
R41	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film M	145-103	1
R42	Resistor, 36 k Ohm 1/4 Watt 2% RL07S363G	145-363-1	1
S1, S2	Connector, 8-Pin Socket Molex 90147-1108	550-210	1
Y	Crystal, 12.8 MHz, Fundamental AT cut, HC-	011-280	1
Z	Ceramic Filter, SR9000SPQ0514BY .620" lon	360-040	1
----	Eyelet, GS-612 Brass	500-190	1
----	Connector, 6-Pin Molex Header	550-136	1
----	Connector, 4-Pin Molex Header	550-165	1
----	Crystal Socket, CS-109-07	520-040	1
----	IC Socket, 8-Pin Keltron ICS-08-3-T	550-070	1
----	Coax #421-099 High Shield RG-188	580-033	1
----	Wire, UL1429 22/7 OS-1 Red	580-043	1
----	Formed Cover, #50-CBS 2" x 2" Less Standof	700-262	1
----	Formed Cover, #50-CBS 2" x 2" With Hole Less	700-263	1
----	Fence For 700-262 & 700-263 52-CBS 8" Fence	700-264	1
----	PC Board, STL-15C Frequency Synthesizer	800-287B	1
----	IC Socket, 28-Pin DIP 151-9028	550-190	1
----	Connector, KSM S.FL2-R-SMT Surface Mount	550-193	1
----	Screw, #4 x 1/4" Phillips Pan Head SM Type	500-077	1

**TABLE 17. SRPT-40E/300 FREQUENCY SYNTHESIZER CIRCUIT BOARD - 800-305A3ET**

REF. DES.	DESCRIPTION	PART NO.	QTY.
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NOT AVAILABLE

**TABLE 18. SRPT-40E/215 FREQUENCY SYNTHESIZER CIRCUIT BOARD - 800-305A2ET  
(Sheet 1 of 4)**

REF. DES.	DESCRIPTION	PART NO.	QTY.
C01	Capacitor, Electrolytic 22 uF 25V Radial NI	219-220	1
C02	Capacitor, Tantalum, 4.7 mF 16V ECS-F1CE47	299-470	1
C03	Capacitor, Tantalum, 15 mF 25V ECS-F1EE156	299-151	1
C04, C05	Capacitor, .1 mF 100V 10% Mylar	217-103	1
C06 thru C12	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	7
C13	Capacitor, Electrolytic 1000 uF 16V Radial	219-102	1
C14	Capacitor, Monolithic Chip, 22 pF 50V 5% K	270-220	1
C15	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C16	Capacitor, Electrolytic 10 uF 25V Radial N	219-100	1
C17, C18	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	2
C19	Capacitor, Monolithic Chip, 1 pF 50V 5% Kem	270-010	1
C20 thru C23	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	4
C24	Capacitor, Monolithic Chip, 10 pF 50V 5% K	270-100	1

**TABLE 18. SRPT-40E/215 FREQUENCY SYNTHESIZER CIRCUIT BOARD - 800-305A2ET**  
(Sheet 3 of 4)

REF. DES.	DESCRIPTION	PART NO.	QTY.
L6	Inductor, 3.3 uH Coilcraft 70-19	330-021	1
L7, L8	Inductor, 15 uH Coilcraft 90-27	330-012	1
M1	R-15C Synthesizer Oven	520-052AC	1
PCB	PC Board, STL-15C/215 Freq. Synthesizer	800-305B	1
Q1	Part of M1	N/A	-
Q2	Transistor, Siliconix SST-310	421-310	1
Q3 thru Q5	Transistor, Motorola 2N3904	425-301	3
R01	Resistor, 240 Ohm 1/4 Watt 2% RL07S241G DA	145-241-1	1
R02	Resistor, 1.2 k Ohm 1/4 Watt 2% RL07S122G	145-122-1	1
R03 thru R05	Resistor, 10k Ohm 1/4 Watt 5% Metal Film M	145-103	3
R06	Resistor, 2.7 k Ohm 1/4 Watt 2% RL07S272G	145-272-1	1
R07	Resistor, 1 k Ohm 1/4 Watt 5% Metal Film Me	145-102	1
R08	Resistor, 1 Ohm 1/4 Watt 5% Carbon Film 29AB250-1	145-010	1
R09	Resistor, 4.7 k Ohm 1/4 Watt 5% Metal Film	145-472	1
R10	NOT USED	-----	-
R11	NOT USED	-----	-
R12	NOT USED	-----	-
R13	Potentiometer, 5 k Ohm Cermet Bourns 3309P-	101-502	1
R14	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film M	145-103	1
R15	Potentiometer, 5 k Ohm Cermet Bourns 3309P-	101-502	1
R16	Resistor, 30 Ohm 1/4 Watt 5% Metal Film Me	145-300	1
R17	Resistor, #263-1k Ohm 1/8 Watt 5% Chip	185-102	1
R18	Resistor, 30 Ohm 1/4 Watt 5% Metal Film Me	145-300	1
R19	NOT USED	-----	-
R20, R21	Resistor, #263-100 Ohm 1/8 Watt 5% Chip	185-101	2
R22	NOT USED	-----	-
R23	Resistor, #263-8.2 k Ohm 1/8 Watt 5% Chip	185-822	1
R24	Resistor, 10 k Ohm 1/8 Watt 5% Chip AVX#CR3	185-103	1
R25	Resistor, #263-8.2 k Ohm 1/8 Watt 5% Chip	185-822	1
R26	Resistor, 1.5 k Ohm 1/4 Watt 5% Metal Film M	145-152	1
R27	Thermistor, Fenwal 142-102-FAG-RB1 1000 OH	120-002	1
R28	Resistor, 4.7 k Ohm 1/4 Watt 5% Metal Film	145-472	1
R29	Resistor, 1 Ohm 1/4 Watt 5% Carbon Film 29AB250-1	145-010	1
R30	Resistor, 47 k Ohm 1/4 Watt 5% Metal Film M	145-473	1
R31	Resistor, 39 k Ohm 1/4 Watt 5% Carbon Film	145-393	1
R32	Resistor, 27 k Ohm 1/4 Watt 5% Carbon Film	145-273	1
R33	Resistor, 330 Ohm 1/4 Watt 5% Metal Film M	145-331	1
R34	Resistor, 4.7 k Ohm 1/4 Watt 5% Metal Film	145-472	1
R35	Resistor, #263-100 k Ohm 1/8 Watt 5% Chip	185-104	1
R36	Resistor, 27 k Ohm 1/4 Watt 5% Carbon Film	145-273	1
R37	NOT USED	-----	-
R38	Resistor, 330 Ohm 1/4 Watt 5% Metal Film M	145-331	1
R39	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film M	145-103	1
R40	Resistor, 4.7 k Ohm 1/4 Watt 5% Metal Film	145-472	1
R41	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film M	145-103	1
R42	Resistor, 36 k Ohm 1/4 Watt 2% RL07S363G	145-363-1	1
S1, S2	Switch, 8 Position DIP AMP 571-4356405	530-060	2
Y1	Crystal, 12.8 MHz, Fundamental AT Cut, HC-	011-280	1
Z1	Resonator, Coaxial (Freq. In MHz To 3 Deci	360-039	1
----	Screw, #4 x 1/4" Phillips Pan Head SM Type A Zinc Plated	500-077	1
----	Crystal Socket, CS-109-07	520-040	1

**TABLE 19. SRPT-40E/150 FREQUENCY SYNTHESIZER CIRCUIT BOARD - 800-305A1ET**  
**(Sheet 3 of 3)**

REF. DES.	DESCRIPTION	PART NO.	QTY.
R19	NOT USED		
R20, R21	Resistor, #263-100 Ohm 1/8 Watt 5% Chip	185-101	2
R22	NOT USED		
R23	Resistor, #263-8.2 k Ohm 1/8 Watt 5% Chip	185-822	1
R24	Resistor, 10 k Ohm 1/8 Watt 5% Chip AVX#CR3	185-103	1
R25	Resistor, #263-8.2 k Ohm 1/8 Watt 5% Chip	185-822	1
R26	Resistor, 1.5 k Ohm 1/4 Watt 5% Metal Film M	145-152	1
R27	Thermistor, Fenwal 142-102-FAG-RB1 1000 OH	120-002	1
R28	Resistor, 4.7 k Ohm 1/4 Watt 5% Metal Film	145-472	1
R29	Resistor, 1 Ohm 1/4 Watt 5% Carbon Film 29AB250-1	145-010	1
R30	Resistor, 47 k Ohm 1/4 Watt 5% Metal Film M	145-473	1
R31	Resistor, 39 k Ohm 1/4 Watt 5% Carbon Film	145-393	1
R32	Resistor, 27 k Ohm 1/4 Watt 5% Carbon Film	145-273	1
R33	Resistor, 330 Ohm 1/4 Watt 5% Metal Film M	145-331	1
R34	Resistor, 4.7 Ohm 1/4 Watt 5% Metal Film	145-472	1
R35	Resistor, #263-100 k Ohm 1/8 Watt 5% Chip	185-104	1
R36	Resistor, 27 k Ohm 1/4 Watt 5% Carbon Film	145-273	1
R37	NOT USED		
R38	Resistor, 330 Ohm 1/4 Watt 5% Metal Film M	145-331	1
R39	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film M	145-103	1
R40	Resistor, 4.7 Ohm 1/4 Watt 5% Metal Film	145-472	1
R41	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film M	145-103	1
R42	Resistor, 36 k Ohm 1/4 Watt 2% RL07S363G	145-363-1	1
S1, S2	Switch, 8 Position DIP AMP 571-4356405	530-060	1
Y1	Crystal, 12.8 MHz, Fundamental AT Cut, HC-	011-280	1
Z1	Resonator, Coaxial (Freq. In MHz to 3 deci	360-039	1
----	Screw, #4 X 1/4" Phillips Pan Head SM Type A Zinc Plated	500-077	1
----	Crystal Socket, CS-109-07	520-040	1
----	IC Socket, 8 Pin Keltron ICS-08-3-T	550-070	1
----	Connector, 6 Pin Molex Header	550-136	1
----	Connector, 4 Pin Molex Header	550-165	1
----	Connector, 28 Pin DIP 151-9028	550-190	1
----	Connector, KSM SFL-R-SMT Surface Mount	550-193	1
----	Coax #421-099 High Shield RG-188	580-033	1
----	Wire, UL1429 22/7 OS-1 Red	580-043	1
----	Formed Cover, #50-CBS 2" x 2" Less Standoff	700-262	1
----	Formed Cover, #50-CBS 2" x 2" W/Hole Less Standoff	700-263	1
----	Fence For 700-262 & 700-263	700-264	1
----	Capacitor, Monolithic Chip, 1 pF 50V NPO	270-010	1

**BROADCAST ELECTRONICS INC.**  
**FCC ID: DDESRPT-40E-150**  
**EXHIBIT #: 5+**

**TABLE 16. SRPT-40E/450 FREQUENCY SYNTHESIZER CIRCUIT BOARD - 800-287A4ET**  
**(Sheet 1 of 3)**

REF. DES.	DESCRIPTION	PART NO.	QTY.
C01	Capacitor, Electrolytic 22 uF 25V Radial NI	219-220	1
C02	Capacitor, Tantalum, 4.7 mF 16V ECS-F1CE47	299-470	1
C03	Capacitor, Tantalum, 15 mF 25V ECS-F1EE156	299-151	1
C04	Capacitor, .1 mF 100V 10% Mylar	217-103	1
C05	Capacitor, Tantalum, 15 mF 25V ECS-F1EE156	299-151	1
C06 thru C12	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	7
C13	Capacitor, Electrolytic 1000 uF 16V Radial	219-102	1
C14	Capacitor, Monolithic Chip, 22 pF 50V 5% K	270-220	1
C15	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C16	Capacitor, Electrolytic 10 uF 25V Radial N	219-100	1
C17, C18	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	2
C19	Capacitor, Monolithic Chip 4.7 pF 50V 5% KE	270-407	1
C20 thru C23	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	4
C24, C25	Capacitor, Monolithic Chip 4.7 pF 50V 5% KE	270-407	2
C26	Capacitor, Monolithic Chip, 10 pF 50V 5% K	270-100	1
C27	Capacitor, Monolithic Chip, 100 pF 50V 5%	270-101	1
C28	Capacitor, Monolithic Chip, 22 pF 50V 5% K	270-220	1
C29	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C30	Capacitor, Monolithic Chip, 2.2 pF 50V 5% K	270-202	1
C31	Capacitor, Monolithic Chip, 22 pF 50V 5% K	270-220	1
C32	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C33	Capacitor, Electrolytic 47 uF 16V Radial ME	219-470	1
C34	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C35	Capacitor, Variable .6 - 4.5 pF Sprague-Goo	290-527	1
C36	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C37	Capacitor, Monolithic Chip, 22 pF 50V 5% K	270-220	1
C38	Capacitor, Electrolytic 22 uF 25V Radial NI	219-220	1
C39	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C40	Capacitor, Monolithic Chip, 22 pF 50V 5% K	270-220	1
C41	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C42	Capacitor, Tantalum, 2.2 mF 25V ECS-F1EE22	299-220	1
C43	Capacitor, Tantalum 33 uF 16V ECS-F1CE336K	299-330	1
C44	Capacitor, Tantalum, 4.7 mF 16V ECS-F1CE47	299-470	1
C45	Capacitor, .1 mF 100V 10% Mylar	217-103	1
C46	Capacitor, Tantalum, 15 mF 25V ECS-F1EE156	299-151	1
C47	Capacitor, Tantalum, 2.2 mF 25V ECS-F1EE22	299-220	1
C48	Capacitor, .1 mF 100V 10% Mylar	217-103	1
C49, C50	Capacitor, Variable, 3.5-36 pF Sprague-Goo	290-523	1
C51	Capacitor, 100 pF N750 5% Disc .25 Lead Spa	256-101	1
C52	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C53	Capacitor, Electrolytic 22 uF 25V Radial NI	219-220	1
C54 thru C56	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	3
C57	Capacitor, Electrolytic 22 uF 25V Radial NI	219-220	1
C58	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C59	Capacitor, Monolithic Chip 10000 pF 10% XR7 K	270-103	1
C60	Capacitor, Tantalum, 4.7 mF 16V ECS-F1CE47	299-470	1
C61	Capacitor, Tantalum 33 uF 16V ECS-F1CE336K	299-330	1
C62 thru C65	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	4
C66	Capacitor, Tantalum, 15 mF 25V ECS-F1EE156	299-151	1
C67	Capacitor, Tantalum, 2.2 mF 25V ECS-F1EE22	299-220	1
C68 thru C70	Capacitor, Monolithic Chip 4.7 pF 50V 5% KE	270-407	3

**BROADCAST ELECTRONICS INC.**  
**FCC ID: DDESRPT-40E-150**  
**EXHIBIT #: SM**

**TABLE 15. RPT-30/STL-30 THERMISTOR CIRCUIT BOARD - 800-255A**

REF. DES.	DESCRIPTION	PART NO.	QTY.
C13, C14	Capacitor, Monolithic Chip 10000 pF 10% XR7 K	270-103	2
C23	Capacitor, Tantalum, 2.2 mF 25V ECS-F1EE22	299-220	1
C27	Capacitor, Electrolytic 220 uF 25V Radial N	219-221	1
PCB	PC Board, Thermistor RPT-30	800-255B	1
Q01	Transistor, Motorola 2N2907A	422-907	1
R02	Resistor, 270 Ohm 1/4 Watt 5% Metal Film M	145-271	1
----	Connector, 6-Pin Molex Header	550-136	1

**BROADCAST ELECTRONICS INC.**  
**FCC ID: DDESRPT-40E-150**  
**EXHIBIT #: 5L**



TABLE 14. RPT-30/STL-30 ACCESSORY CONNECTOR CIRCUIT BOARD - 800-253A

REF. DES.	DESCRIPTION	PART NO.	QTY.
C1 thru C6	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	6
D2	Diode, Fagor 1N5402	415-401	1
L1	Inductor, Fair-Rite #2961666671	330-019	1
L2 thru L5	Inductor, 10 uH 1-43LQ105-1	330-018	4
L6	Inductor, Fair-Rite #2961666671	330-019	1
PCB	PC Board, Accessory Connector RPT-30	800-253B	1
----	Connector, D-Sub 9-Pin Angle Keltron DNR-0	550-154	1
----	Connector, 6-Pin Molex Angle Header	550-149	1

BROADCAST ELECTRONICS INC.

FCC ID: DDESRPT-40E-150

EXHIBIT #: 5k

**TABLE 13. RPT-30/STL-30 METER CIRCUIT BOARD - 800-252A**

REF. DES.	DESCRIPTION	PART NO.	QTY.
B1	Subminiature Lamp, Lumex IFL-LX2162-16T	510-196	1
C1	Capacitor, .01 mF 50V GMV Disc Pace F6Z5U1	217-104	1
C2	Capacitor, Electrolytic 22 uF 25V Radial NI	219-220	1
C3, C4	Capacitor, .01 mF 50V GMV Disc Pace F6Z5U1	217-104	2
D1, D2	Diode, LED, TLBR-5410 (Blinking)	415-410	2
D3	Diode, Zener Motorola 1N4741A 11V 5%	410-110	1
IC1	Integrated Circuit, TI LM393P	400-293	1
M1	Meter, Model HS-10 VU	030-039M	1
PCB	PC Board, Meter RPT-30	800-252B	1
R01	Resistor, 30 Ohm 1/4 Watt 5% Metal Film Me	145-300	1
R02	Resistor, 10 Ohm 1/4 Watt 5% Metal Film Me	145-100	1
R03	Resistor, 180 Ohm 1/4 Watt 5% Metal Film M	145-181	1
R04	Resistor, 100 Ohm 1/4 Watt 5% Metal Film M	145-101	1
R05	Resistor, 1 k Ohm 1/4 Watt 5% Metal Film Me	145-102	1
R06	Resistor, 2.2 k Ohm 1/4 Watt 5% Metal Film	145-222	1
R07	Resistor, 10 k Ohm 1/4 Watt 5% Metal Film M	145-103	1
R08	Resistor, 180 Ohm 1/4 Watt 5% Metal Film M	145-181	1
R09	Resistor, 22 k Ohm 1/4 Watt 5% Metal Film M	145-223	1
R10	Resistor, 1 k Ohm 1/4 Watt 5% Metal Film Me	145-102	1
R11	Resistor, 560 Ohm 1/4 Watt 5% Metal Film M	145-561	1
----	Screw, 4-40 x 1/4" Phillips Pan Head M/S N	500-004	1
----	Terminal, Keystone 1238	511-038	1
----	Spacer, 4-40 x 13/16 Hex Threaded Concord	513-033	1
----	Connector, 6-Pin Molex Header	550-136	1

**BROADCAST ELECTRONICS INC.**  
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**TABLE 12. RPT-30 PRE-AMPLIFIER MIXER CIRCUIT BOARD - 800-251A**

REF. DES.	DESCRIPTION	PART NO.	QTY.
C01, C02	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	2
C03, C04	Capacitor, Electrolytic 22 uF 25V Mepco 307	219-200	2
C05, C06	Capacitor, Monolithic Chip, 27 pF 50V 5% K	270-270	2
C07	Capacitor, 10 pF 5% NPO Disc Pace F6NPO1C1	255-100	2
C08	Capacitor, Electrolytic 22 uF 25V Mepco 307	219-200	1
C09, C10	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	2
C11, C12	Capacitor, Electrolytic 22 uF 25V Mepco 307	219-200	2
C13, C14	Capacitor, Monolithic Chip, 27 pF 50V 5% K	270-270	2
C15	Capacitor, 10 pF 5% NPO disc Pace F6NPO1C1	255-100	1
C16	Capacitor, Electrolytic 22 uF 25V Mepco 307	219-200	1
C17, C18	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C19, C20	Capacitor, Electrolytic 22 uF 25V Mepco 307	219-200	2
C21, C22	Capacitor, Monolithic Chip, 27 pF 50V 5% K	270-270	2
C23	Capacitor, 10 pF 5% NPO Disc Pace F6NPO1C1	255-100	1
C24	Capacitor, Electrolytic 22 uF 25V Mepco 307	219-200	1
C25, C26	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	1
C27, C28	Capacitor, Electrolytic 22 uF 25V Mepco 307	219-200	2
C29, C30	Capacitor, Monolithic Chip, 27 pF 50V 5% K	270-270	2
C31	Capacitor, 10 pF 5% NPO Disc Pace F6NPO1C1	255-100	1
C32, C33a	Capacitor, Electrolytic 22 uF 25V Mepco 307	219-200	2
C33b, C34 thru C36	Capacitor, Monolithic Chip, 1000 pF 50V 5%	270-102	4
IC1, IC2	Integrated Circuit, Philips NE5532AN	405-532	2
J1 thru J4	Connector, XLR Receptacle Insert	550-155-1	4
PCB	PC Board, Pre-Amp/Mixer RPT-30	800-251B	1
R01	Resistor, 2.2 k Ohm 1/4 Watt 5% Metal Film	145-222	1
R02, R03	Resistor, 1.5 k Ohm 1/4 Watt 5% Metal Film M	145-152	2
R04, R05	Resistor, 100 k Ohm 1/4 Watt 2% RL07S104G	145-104-1	2
R06	Resistor, 15 k Ohm 1/4 Watt 5% Metal Film M	145-153	1
R07	Potentiometer, 25 k Ohm Linear Taper PC Mount	100-143	1
R08	Resistor, 2.2 k Ohm 1/4 Watt 5% Metal Film	145-222	1
R09, R10	Resistor, 1.5 k Ohm 1/4 Watt 5% Metal Film M	145-152	2
R11, R12	Resistor, 100 k Ohm 1/4 Watt 2% RL07S104G	145-104-1	2
R13	Resistor, 15 k Ohm 1/4 Watt 5% Metal Film Mount	145-153	1
R14	Potentiometer, 25 k Ohm Linear Taper PC Mount	100-143	1
R15	Resistor, 2.2 k Ohm 1/4 Watt 5% Metal Film	145-222	1
R16, R17	Resistor, 1.5 k Ohm 1/4 Watt 5% Metal Film Mount	145-152	2
R18, R19	Resistor, 100 k Ohm 1/4 Watt 2% RL07S104G	145-104-1	2
R20	Resistor, 15 k Ohm 1/4 Watt 5% Metal Film Mount	145-153	1
R21	Potentiometer, 25 k Ohm Linear Taper PC Mount	100-143	1
R22	Resistor, 2.2 k Ohm 1/4 Watt 5% Metal Film	145-222	1
R23, R24	Resistor, 360 k Ohm 1/4 Watt 5% Carbon Film	145-364-1	2
R25, R26	Resistor, 1.5 k Ohm 1/4 Watt 5% Metal Film Mount	145-152	2
R27, R28	Resistor, 100 k Ohm 1/4 Watt 2% RL07S104G	145-104-1	2
R29	Resistor, 15 k Ohm 1/4 Watt 5% Metal Film Mount	145-153	1
R30	Potentiometer, 25 k Ohm Linear Taper PC Mount	100-143	1
R31, R32	Resistor, 22 k Ohm 1/4 Watt 5% Metal Film Mount	145-223	2
R33	Resistor, 5.6 k Ohm 1/4 Watt 5% Metal Film	145-562	1
S1	Switch, Side Action Slide DPDT Ark-Les S-9	530-051	1
----	Connector, 6-Pin Molex Angle Header	550-149	1
----	Grounding Strap, RPT-30 Pre-Amp	700-250-15P	1

**BROADCAST ELECTRONICS INC.**

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**TABLE 7. SRPT-40E POWER SUPPLY REGULATOR CIRCUIT BOARD - 800-168-1AE**

REF. DES.	DESCRIPTION	PART NO.	QTY.
C01, C02	Capacitor, Monolithic Chip, 10000 pF 10% XR7K	270-103	2
C03, C04	Capacitor, Electrolytic 22 uF 25V 105c Cornell Dubilier 201B220P025XX	219-250	2
C05	Capacitor, Monolithic Chip, 10000 pF 10% XR7K	270-103	1
PCB	PC Board, Regulator RPT-15 STL-10	800-168-1B	1
R01	Resistor, 240 Ohm 1/4 Watt 2% RL07S241G	145-241-1	1
R02	Potentiometer, 5 k Ohm Cermet Bourns 3006W-1-502	100-532	1
----	#4 Bracket, Keystone 612	510-191	1
----	Connector, Crimp Terminal Pin Molex 08-50-0187	550-126	1
----	Wire, UL1429 22/7 OS-1 Orange	580-047	1
----	Wire, UL1429-18/19 #18 Red	580-133	1
----	Wire, UL1429-18/19 #18 Blue	580-136	1

**BROADCAST ELECTRONICS INC.**  
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**EXHIBIT #: 5e**

**TABLE 8. SRPT-40E/450 RF AMPLIFIER CIRCUIT BOARD - 800-170A4E**

REF. DES.	DESCRIPTION	PART NO.	QTY.
C01, C02	Capacitor, Variable, Trimmer 2.5-7	260-100	2
C03	Capacitor, Uncased Mica, 16 pF 33V	240-160	1
C04	Capacitor, Uncased Mica, 22 pF 33V	240-120	1
C05	Capacitor, .1 mF 100V 10% Mylar	217-103	1
C06	Capacitor, Electrolytic 22 uF 25V Me	219-200	2
C07, C08	Capacitor, Uncased Mica, 500 pF 33V	236-501	2
C09	Capacitor, Electrolytic 22 uF 25V Me	219-200	2
C10	Capacitor, .1 mF 100V 10% Mylar	217-103	1
C11, C12	Capacitor, Variable, Trimmer 4-20 p	260-200	2
C13	NOT USED		
C14	NOT USED		
C15	Capacitor, Uncased Mica, 33 pF 33V	240-330	1
C16, C17	Capacitor, Variable, Trimmer 4-20 p	260-200	2
C18	Capacitor, Variable, Trimmer 25-115	240-602	1
C19	NOT USED		
L01	NOT USED		
L02	NOT USED		
L03	NOT USED		
L04	Inductor, 8 Turn 22 AWG (CCW)	350-117	1
L05	Inductor, 15 uH Coilcraft 90-27	330-012	1
L06	Inductor, 8 Turn 22 AWG (CCW)	350-117	1
L07	NOT USED		
L08	Inductor, Fair-Rite #2961666671	330-019	1
L09	NOT USED		
L10	NOT USED		
L11	NOT USED		
L12	Inductor, 8 Turn 22 AWG (CCW)	350-117	1
L13	Inductor, 10 uH 1-43LQ105-1	330-018	1
L14	Inductor, 8 Turn 22 AWG (CCW)	350-117	1
L15	NOT USED		
L16	NOT USED		
PCB	PC Board, Power Amplifier RPT-15 STL-10/	800-170-2B	1
Q1	Transistor, Philips BLW81	441-433	1
Q2	Transistor, Thomson SD1434	443-030	1
R01, R02	Resistor, 47 Ohm 1/4 Watt 5% Carbon	145-470-C	2
R03	NOT USED		
R04	NOT USED		
R05	NOT USED		
----	Thermistor, Fenwal 142-102-FAG-RB1	120-002	1
----	Screw, 4-40 x 1/2" Philips Pan Head M/S n	500-011	2
----	Screw, 6-32 x 5/8" Philips Pan Head M/S n	500-025	4
----	Pop-Rivet, USM SD-428S	500-105-1	4
----	Keps Nut 4 x40 Zinc 4CNKEOZ	500-199	2
----	Brackets, #6 Keystone 634	510-210	4
----	Insulation, Softshield II CHOGAS139	510-261	0.33
----	Solder Lug, #6 Short Concord 707-12	512-010	4
----	Spacer, 6-32 x 11/16 Hex Threaded C	513-043	4
----	Heatsink, Drilled SRPT-40E	520-050DE	1
----	Fingerstock, Angle Contact Strip	700-260	0.55

**TABLE 9. SRPT-40E/300 RF AMPLIFIER CIRCUIT BOARD -**

REF. DES.	DESCRIPTION	PART NO.	QTY.
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NOT AVAILABLE

**BROADCAST ELECTRONICS INC.**  
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**EXHIBIT #: 5f**