March 2014

SERVICE MANUAL ADDENDUM

IC-F3210D

NOTE: Use these amended pages as one addendum set.
Do not mix them up with the previous master pages.

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AMENDED PAGES:

PARTS LIST

[MAIN UNIT]

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IC3	1110007320	S.IC NJM2591V-TE1-#ZZZB	B	45.8/38.9
IC4	1130015271	S.IC AK1541P4-L	T	43.2/24.0
IC5	1110006230	S.IC NJM2711F-TE1-#ZZZB	B	68.3/44.2
IC6	1130011741	S.IC TC7W66FK(TE85LF)	B	64.3/32.1
IC51	1140015010	S.IC HD64F2506RBR26DV(EMPTY)	B	83.0/14.3
IC52	1140014160	S.IC 24LC1025T-I/SM <SEI>	T	71.3/5.7
IC53	1110007780	S.IC NJU7704F3-28A-TE1-#ZZZH	T	84.7/14.6
IC54	1180003600	S.REG NJM2871BF05-TE1-#ZZZB	T	15.5/34.9
IC55	1110007610	S.IC TPA0211DGNR	B	13.3/42.1
IC58	1110002400	S.IC NJM2107F-TE1-#ZZZB	T	23.9/28.3
IC65	6910024090	S.DC ADP2370ACPZ-R7 <FE>	B	96.0/12.4
IC900	1180003680	S.REG TPS62204DBVR	T	76.4/39.0
IC901	1190002900	S.IC ADS7886SDCKR	T	77.6/32.4
IC903	1140013290	S.IC TMS320VC5509AZHH	T	86.8/36.8
IC904	1130015620	S.IC EN25Q40-100GIP <MSK>	T	78.1/28.4
IC905	1110006230	S.IC NJM2711F-TE1-#ZZZB	B	80.2/46.0
Q1	1560001700	S.FET RD07MUS2B-T112	B	28.6/13.5
Q2	1560001241	S.FET RD01MUS1-T113	B	36.3/14.4
Q3	1530003311	S.TRA 2SC5107-O(TE85RF)	B	42.2/13.1
Q5	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	67.7/37.6
Q6	1590004090	S.TRA LDTC114YET1G <SLVJ>	T	35.6/5.7
Q8	1530003311	S.TRA 2SC5107-O(TE85RF)	T	54.8/18.5
Q9	1530003311	S.TRA 2SC5107-O(TE85RF)	B	52.7/19.9
Q10	1530003311	S.TRA 2SC5107-O(TE85RF)	T	60.7/18.5
Q11	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	53.4/23.2
Q12	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	62.7/23.3
Q13	1530002921	S.TRA 2SC4226-T1 Y25 (R25) 0	T	57.5/23.6
Q14	1530002921	S.TRA 2SC4226-T1 Y25 (R25) 0	T	60.0/23.6
Q15	1530002851	S.TRA 2SC4116-BL(TE85RF)	B	64.3/18.6
Q16	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	66.3/34.2
Q17	1560000541	S.FET 2SK880-Y(T5RICOMF)	B	48.2/31.0
Q21	1560000841	S.FET 2SK1829(TE85RF)	B	28.4/30.5
Q22	1580000731	S.FET 3SK293(TE85LF)	B	25.1/27.8
Q23	1580000731	S.FET 3SK293(TE85LF)	B	36.4/26.1
Q24	1530003311	S.TRA 2SC5107-O(TE85RF)	B	38.3/42.6
Q26	1530002851	S.TRA 2SC4116-BL(TE85RF)	T	43.3/32.7
Q27	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	56.3/35.9
Q28	1530002851	S.TRA 2SC4116-BL(TE85RF)	B	63.6/44.7
Q29	1590004090	S.TRA LDTC114YET1G <SLVJ>	T	38.5/42.6
Q51	1510001090	S.TRA KTA2015Y-RTK/P	B	25.7/43.5
Q52	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	24.6/39.8
Q58	1590004220	S.TRA DRA9123Y0L	B	54.9/7.1
Q59	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	49.1/7.3
Q63	1520000460	S.TRA 2SB1132 T100 R	B	15.3/35.5
Q64	1590004590	S.TRA DMC506010R	B	19.3/36.0
Q71	1510001090	S.TRA KTA2015Y-RTK/P	B	64.3/15.7
Q72	1510000771	S.TRA 2SA1586-GR(TE85LF)	B	63.5/37.5
Q73	1510001090	S.TRA KTA2015Y-RTK/P	B	64.3/12.8
Q81	1590004100	S.TRA LDTC144TET1G <SLVJ>	B	93.6/20.3
Q82	1590004050	S.TRA LDTA144EET1G <SLVJ>	T	78.9/19.6
Q83	1590004050	S.TRA LDTA144EET1G <SLVJ>	T	78.6/17.6
Q84	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	19.2/43.8
Q85	1590004090	S.TRA LDTC114YET1G <SLVJ>	T	21.5/33.0
Q86	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	68.9/10.7
Q87	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	67.7/39.7
Q88	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	66.9/10.7
Q90	1510000920	S.TRA 2SA1577 T106 Q	T	91.3/12.5
Q91	1590004090	S.TRA LDTC114YET1G <SLVJ>	T	90.0/14.8
Q92	1590003321	S.FET TPC6103(TE85LF)	B	6.9/35.0
Q93	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	4.0/34.6
Q97	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	87.8/25.7
Q900	1590004050	S.TRA LDTA144EET1G <SLVJ>	B	73.5/48.8
Q901	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	71.7/18.5
D1	1750001910	S.DIO HVD144AKRF-E	B	16.2/16.3
D5	1750001890	S.DIO HVD142AKRF-E	B	49.6/15.2
D6	1750001890	S.DIO HVD142AKRF-E	B	49.6/16.6
D7	1750001820	S.DIO LRB706F-40T1G <SLVJ>	T	17.9/10.5
D8	1750001820	S.DIO LRB706F-40T1G <SLVJ>	B	14.5/14.2
D10	1750002170	S.DIO DB2S31400L	B	61.5/18.7
D11	1750001880	S.VAR HVL375CKRF-E	T	57.4/29.2
D12	1750001550	S.VAR HVD376BKRF-E	T	54.1/25.6
D13	1750001550	S.VAR HVD376BKRF-E	T	55.1/25.6
D14	1750001880	S.VAR HVL375CKRF-E	T	59.3/27.1
D15	1750001570	S.VAR HVL355CMKRF-E	T	59.3/29.2
D16	1750001550	S.VAR HVD376BKRF-E	T	63.7/25.1
D17	1750001550	S.VAR HVD376BKRF-E	T	62.8/23.2
D21	1750001810	S.DIO L1SS400T1G <SLVJ>	B	30.3/32.4
D22	1750001910	S.DIO HVD144AKRF-E	B	16.2/20.5
D23	1750001910	S.DIO HVD144AKRF-E	B	14.1/23.1
D24	1750001880	S.VAR HVL375CKRF-E	B	17.4/27.8
D26	1750001880	S.VAR HVL375CKRF-E	B	18.6/27.8
D28	1750001780	S.VAR HVB350BYPTL-E	B	31.0/27.8
D31	1750001910	S.DIO HVD144AKRF-E	B	40.3/30.1
D32	1750001910	S.DIO HVD144AKRF-E	T	36.6/28.4
D33	1750001910	S.DIO HVD144AKRF-E	B	36.7/39.8
D34	1750001910	S.DIO HVD144AKRF-E	T	36.5/41.0
D36	1750001790	S.DIO 1SS390 TE61	B	54.1/40.0
D37	1750001790	S.DIO 1SS390 TE61	B	51.7/36.8
D38	1750001790	S.DIO 1SS390 TE61	B	56.6/40.0
D39	1750001790	S.DIO 1SS390 TE61	B	58.1/38.6
D51	1750001820	S.DIO LRB706F-40T1G <SLVJ>	B	91.4/17.6
D52	1750002170	S.DIO DB2S31400L	B	26.2/41.0
D53	1750001810	S.DIO L1SS400T1G <SLVJ>	B	71.5/12.8

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REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
D54	1750001810	S.DIO L1SS400T1G <SLVJ>	B	71.5/15.3
D55	1750001810	S.DIO L1SS400T1G <SLVJ>	B	22.8/34.9
D56	1790002030	S.VAR LXES15AAA1-100	T	11.3/39.3
D59	1750001850	S.DIO LDAN222T1G <SLVJ>	B	4.2/37.5
D60	1750001790	S.DIO 1SS390 TE61	B	84.8/23.2
D61	1750002230	S.DIO LRB751S-40T1G <SLVJ>	T	94.4/13.5
D901	1750002170	S.DIO DB2S31400L	T	87.1/27.9
D902	1750002170	S.DIO DB2S31400L	B	86.2/44.9
D903	1750002170	S.DIO DB2S31400L	B	92.1/30.8
D904	1750002170	S.DIO DB2S31400L	T	88.4/27.9
D905	1750002170	S.DIO DB2S31400L	B	96.3/30.8
FI1	2030000870	S.MON MFT46.3P3 46.350 MHz (FL-442)	B	35.4/34.1
FI2	2010002760	S.XTA MFT46.3J 46.350 MHz (FL-448)	T	36.6/34.5
FI3	2020002410	CER LTM450FW <JJE>		
FI4	2020002570	CER LTM450HW <JJE>		
FI5	2020002610	S.CER LTUCG450G <JJE>	T	64.7/43.6
X2	6050012380	S.XTA CR-826 DSA535SD 15.3 MHz	T	42.2/15.0
X51	6050013160	S.XTA CR-912 TSS3225A 19.6608 MHz	T	82.0/21.2
X900	6050013170	S.XTA CR-914 TTS18VSE-A11 12.288 MHz	B	75.1/46.0
L1	6200012780	S.COI 0.30-1.4-6TL 27.2N <COMO>	B	9.4/7.9
L2	6200012470	S.COI 0.30-1.7-7TL 45.3N <COMO>	B	9.6/11.7
L3	6200012910	S.COI 0.35-1.6-8TL 45.5N <COMO>	B	11.2/15.6
L4	6200002861	S.COI NLV25T-4R7J	B	18.4/17.8
L5	6200012470	S.COI 0.30-1.7-7TL 45.3N <COMO>	B	18.4/14.1
L6	6200012390	S.COI 0.30-0.92-3TR 5.8N <COMO>	B	22.0/14.1
L7	6200013010	S.COI 0.30-0.9-5TL 10.3N <COMO>	B	24.3/15.3
L8	6200013100	S.COI 0.45-1.5-5TL 18.3N <COMO>	B	25.2/19.0
L9	6200007871	S.COI ELJRF 39NJFB	B	42.2/11.3
L11	6200012470	S.COI 0.30-1.7-7TL 45.3N <COMO>	B	14.1/19.6
L12	6200011021	S.COI ELJRF 82NJFB	B	12.4/22.8
L13	6200007750	S.COI LQW2BHN56NJ03L	B	14.4/26.8
L14	6200008090	S.COI LQW2BHN68NJ03L	B	21.1/26.8
L15	6200010910	S.COI LQW18AN56NG00D	B	27.1/27.8
L16	6200010910	S.COI LQW18AN56NG00D	B	33.3/27.5
L18	6200007901	S.COI ELJRF 22NJFB	B	32.8/13.4
L19	6200011011	S.COI ELJRF 68NJFB	B	34.4/23.9
L20	6200004770	S.COI ELJNC R56J-F 0	B	39.1/26.4
L23	6200012170	S.COI MLG1608S R18J-T	T	41.9/35.7
L24	6200012170	S.COI MLG1608S R18J-T	T	45.2/34.2
L31	6200011031	S.COI ELJRF R10JFB	T	56.6/17.7
L32	6200011031	S.COI ELJRF R10JFB	B	53.1/21.7
L33	6200011031	S.COI ELJRF R10JFB	T	62.5/17.7
L35	6200008090	S.COI LQW2BHN68NJ03L	T	55.7/27.7
L36	6200011860	S.COI LQW18ANR47G00D	B	50.7/25.7
L37	6200007720	S.COI LQW2BHN33NJ03L	T	53.8/22.6
L38	6200003640	S.COI MLF1608E 100K-T	T	53.0/25.6
L39	6190002030	S.COI MLG1608S 1R0J-T	B	60.6/28.7
L40	6200007760	S.COI LQW2BHN82NJ03L	T	62.9/27.9
L41	6200003640	S.COI MLF1608E 100K-T	T	64.6/27.5
L42	6200008090	S.COI LQW2BHN68NJ03L	T	64.3/20.6
L43	6190002030	S.COI MLG1608S 1R0J-T	B	59.4/22.7
L46	6200007881	S.COI ELJRF 33NJFB	B	48.8/19.5
L51	6200014160	S.COI VLCF4028T-100M1R0-2	B	92.5/8.0
L900	6200014160	S.COI VLCF4028T-100M1R0-2	T	77.7/42.9
L901	6200007830	S.COI ELJFC 4R7K-F	B	84.5/48.0
R1	7030005070	S.RES ERJ2GEJ 683 X (68K)	B	9.1/5.7
R2	7030008280	S.RES ERJ2GEJ 271 X (270)	B	20.6/19.2
R3	7030008280	S.RES ERJ2GEJ 271 X (270)	B	20.6/18.3
R7	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	34.0/5.7
R8	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	31.1/5.7
R9	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	31.1/6.6
R10	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	33.0/11.5
R11	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	32.1/11.5
R12	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	32.8/5.7
R13	7030005530	S.RES ERJ2GEJ 100 X (10)	T	34.8/9.9
R14	7030004980	S.RES ERJ2GEJ 101 X (100)	T	35.4/7.5
R15	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	T	36.3/7.5
R16	7030010040	S.RES ERJ2GEJ-JPW	T	29.4/7.1
R19	7030008410	S.RES ERJ2GEJ 392 X (3.9K)	B	15.2/11.4
R20	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	19.2/12.3
R21	7030007250	S.RES ERJ2GEJ 220 X (22)	B	32.3/10.9
R22	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	31.0/9.2
R23	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	33.7/10.4
R24	7030005590	S.RES ERJ2GEJ 680 X (68)	B	38.4/10.9
R25	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	40.2/10.9
R26	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	38.4/9.2
R27	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	15.2/12.3
R28	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	19.2/13.2
R31	7030005530	S.RES ERJ2GEJ 100 X (10)	B	43.1/15.8
R32	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	43.1/14.9
R33	7030004980	S.RES ERJ2GEJ 101 X (100)	B	44.5/13.1
R34	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	T	81.4/13.6
R35	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	46.4/14.0
R36	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	49.6/13.1
R37	7030004980	S.RES ERJ2GEJ 101 X (100)	B	49.6/14.0
R38	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	51.8/15.7
R39	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	78.0/32.9
R40	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	78.6/34.5
R41	7030005530	S.RES ERJ2GEJ 100 X (10)	T	53.0/17.7

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R42	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	56.6/19.4
R43	7030005530	S.RES ERJ2GEJ 100 X (10)	B	55.0/21.7
R44	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	55.0/19.5
R45	7030004980	S.RES ERJ2GEJ 101 X (100)	T	63.4/17.7
R46	7030005310	S.RES ERJ2GEJ 124 X (120K)	T	62.5/19.3
R49	7030006610	S.RES ERJ2GEJ 394 X (390K)	B	80.4/28.0
R50	7030010040	S.RES ERJ2GEJ-JPW	T	33.9/11.5
R51	7030008370	S.RES ERJ2GEJ 561 X (560)	B	56.5/22.9
R52	7030008370	S.RES ERJ2GEJ 561 X (560)	B	60.4/24.4
R53	7030008340	S.RES RR0510P-182-D (1.8K)	T	55.7/23.7
R54	7030011000	S.RES RR0510P-392-D (3.9K)	T	57.9/25.9
R55	7030008340	S.RES RR0510P-182-D (1.8K)	T	61.8/23.7
R56	7030011000	S.RES RR0510P-392-D (3.9K)	T	58.9/25.9
R57	7030009320	S.RES ERJ2GEJ 4R7 X (4.7)	T	60.7/25.9
R58	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	62.3/30.7
R59	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	62.3/32.5
R61	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	82.7/42.5
R62	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	62.7/34.7
R63	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	65.7/37.6
R65	7030005720	S.RES ERJ2GEJ 563 X (56K)	B	62.7/28.3
R66	7030008300	S.RES ERJ2GEJ 184 X (180K)	B	64.3/27.4
R67	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	62.5/19.1
R68	7030005170	S.RES ERJ2GEJ 474 X (470K)	B	62.7/26.4
R69	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	64.3/25.5
R70	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	62.7/25.5
R71	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	46.8/29.6
R72	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	50.1/29.6
R73	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	51.9/31.2
R74	7030005290	S.RES ERJ2GEJ 682 X (6.8K)	B	50.1/31.2
R76	7030004990	S.RES ERJ2GEJ 221 X (220)	T	48.4/25.0
R77	7030008400	S.RES ERJ2GEJ 182 X (1.8K)	T	46.7/25.9
R78	7030010040	S.RES ERJ2GEJ-JPW	T	46.7/23.8
R79	7030008400	S.RES ERJ2GEJ 182 X (1.8K)	T	46.7/25.0
R80	7410001130	S.ARR EXB28V102JX	T	41.9/27.8
R81	7030005600	S.RES ERJ2GEJ 273 X (27K)	T	46.4/22.0
R82	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	40.1/18.8
R83	7030004970	S.RES ERJ2GEJ 470 X (47)	T	44.1/19.3
R84	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	40.1/23.7
R87	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	61.1/27.5
R88	7510001730	S.THE ERTJOEP 473J	T	58.8/10.4
R89	7030010080	S.RES ERJ2RHD 1003X (100K)	B	58.2/12.6
R101	7030005230	S.RES ERJ2GEJ 334 X (330K)	B	28.3/32.7
R102	7030005170	S.RES ERJ2GEJ 474 X (470K)	B	29.2/32.7
R103	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	31.0/30.7
R104	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	17.4/26.0
R105	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	18.3/26.0
R106	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	22.9/26.9
R107	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	22.6/30.0
R108	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	22.9/28.7
R109	7030005530	S.RES ERJ2GEJ 100 X (10)	B	23.5/30.0
R110	7030008280	S.RES ERJ2GEJ 271 X (270)	B	23.5/25.6
R111	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	24.4/30.0
R112	7030004970	S.RES ERJ2GEJ 470 X (47)	B	27.1/25.6
R113	7030008370	S.RES ERJ2GEJ 561 X (560)	B	29.2/27.5
R114	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	30.1/25.6
R115	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	31.0/25.6
R116	7030005080	S.RES ERJ2GEJ 823 X (82K)	B	34.7/28.8
R117	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	33.4/23.9
R118	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	36.4/23.9
R119	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	36.3/27.9
R120	7030005590	S.RES ERJ2GEJ 680 X (68)	B	39.2/23.9
R121	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	41.0/26.3
R122	7030004970	S.RES ERJ2GEJ 470 X (47)	B	41.9/23.9
R123	7030010040	S.RES ERJ2GEJ-JPW	B	75.9/22.5
R126	7030004980	S.RES ERJ2GEJ 101 X (100)	B	39.1/45.3
R127	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	37.9/40.8
R128	7030005010	S.RES ERJ2GEJ 681 X (680)	B	39.1/44.4
R129	7030005000	S.RES ERJ2GEJ 471 X (470)	B	37.6/22.7
R130	7030005530	S.RES ERJ2GEJ 100 X (10)	B	36.4/22.3
R131	7030005000	S.RES ERJ2GEJ 471 X (470)	B	35.4/22.3
R132	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	47.4/17.7
R134	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	91.6/14.6
R135	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	T	43.1/37.7
R136	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	T	42.9/38.9
R138	7030005000	S.RES ERJ2GEJ 471 X (470)	B	43.0/35.5
R139	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	48.3/35.5
R140	7030008410	S.RES ERJ2GEJ 392 X (3.9K)	B	46.5/34.6
R141	7030005070	S.RES ERJ2GEJ 683 X (68K)	B	46.5/33.7
R142	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	44.9/33.7
R146	7030004970	S.RES ERJ2GEJ 470 X (47)	B	45.6/44.0
R147	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	47.1/42.2
R148	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	40.9/33.7
R149	7030007060	S.RES ERJ2GEJ 684X (680K)	T	41.5/32.3
R151	7030005600	S.RES ERJ2GEJ 273 X (27K)	B	51.7/39.0
R152	7030005210	S.RES ERJ2GEJ 822 X (8.2K)	B	53.0/35.2
R153	7030005210	S.RES ERJ2GEJ 822 X (8.2K)	B	55.5/38.7
R154	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	57.8/36.9
R155	7030005600	S.RES ERJ2GEJ 273 X (27K)	B	58.8/39.8
R156	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	21.4/25.5
R157	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	31.0/23.9
R158	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	59.7/35.7
R159	7030008370	S.RES ERJ2GEJ 561 X (560)	B	54.6/35.7
R161	7030008300	S.RES ERJ2GEJ 184 X (180K)	B	62.4/42.8
R162	7030004980	S.RES ERJ2GEJ 101 X (100)	B	64.0/42.8
R163	7030004980	S.RES ERJ2GEJ 101 X (100)	B	69.5/46.4
R164	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	67.4/41.1
R165	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	65.7/44.8
R166	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	65.7/43.9
R167	7030005290	S.RES ERJ2GEJ 682 X (6.8K)	B	65.7/43.0
R169	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	65.7/42.1
R171	7030005600	S.RES ERJ2GEJ 273 X (27K)	T	36.6/27.4
R172	7030005530	S.RES ERJ2GEJ 100 X (10)	B	39.2/31.1
R173	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	41.5/32.3
R174	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	38.7/39.9
R175	7030008370	S.RES ERJ2GEJ 561 X (560)	B	35.1/38.8

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R176	7030005600	S.RES ERJ2GEJ 273 X (27K)	T	35.5/40.6
R177	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	40.1/40.7
R178	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	39.2/40.7
R181	7030010040	S.RES ERJ2GEJ-JPW	T	35.5/29.6
R182	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	T	34.0/28.4
R183	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	T	37.8/41.1
R184	7030005010	S.RES ERJ2GEJ 681 X (680)	T	37.8/39.3
R185	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	73.2/21.7
R186	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	74.1/22.6
R190	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	65.7/46.6
R243	7030005530	S.RES ERJ2GEJ 100 X (10)	B	82.1/21.8
R244	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	83.0/21.8
R357	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	58.2/10.2
R358	7030010040	S.RES ERJ2GEJ-JPW	B	56.0/8.7
R359	7030010040	S.RES ERJ2GEJ-JPW	B	56.0/10.5
R360	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	56.0/9.6
R361	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	24.8/41.7
R362	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	51.6/7.5
R363	7030005000	S.RES ERJ2GEJ 471 X (470)	B	58.2/8.6
R364	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	55.4/2.1
R365	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	26.2/38.9
R367	7030005600	S.RES ERJ2GEJ 273 X (27K)	T	53.5/2.2
R398	7030008310	S.RES ERJ2GEJ 564 X (560K)	T	43.7/11.0
R405	7030011290	S.RES ERJ12YJ1R8U (1.8)	T	31.5/35.6
R406	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	12.6/45.7
R408	7030004980	S.RES ERJ2GEJ 101 X (100)	B	35.6/46.3
R412	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	15.9/39.5
R413	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	19.1/34.7
R414	7030005230	S.RES ERJ2GEJ 334 X (330K)	B	20.7/34.1
R416	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	21.5/36.0
R417	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	B	21.3/37.2
R418	7030009280	S.RES ERJ2GEJ 391 X	B	19.8/37.9
R420	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	90.5/25.5
R421	7210003610	VAR F081-0025A <SLVJ>		
R423	7030012530	S.RES ERJ2RHD 3302X (33.0K)	T	6.2/36.5
R424	7030012530	S.RES ERJ2RHD 3302X (33.0K)	T	4.8/38.4
R425	7030012530	S.RES ERJ2RHD 3302X (33.0K)	T	4.8/37.5
R426	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	B	80.4/26.3
R427	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	79.5/26.3
R430	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	74.4/13.4
R431	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	66.0/14.3
R432	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	67.8/12.7
R433	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	65.7/38.5
R434	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	65.7/39.4
R435	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	66.0/12.7
R436	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	66.9/12.7
R437	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	15.0/37.1
R439	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	72.8/13.4
R440	7030009280	S.RES ERJ2GEJ 391 X	B	17.4/43.5
R441	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	19.1/33.8
R442	7030007280	S.RES ERJ2GEJ 331 X (330)	B	21.5/35.1
R444	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	89.5/12.8
R451	7030008290	S.RES ERJ2GEJ 183 X (18K)	T	24.6/30.5
R452	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	21.2/30.5
R453	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	21.2/29.6
R454	7030005310	S.RES ERJ2GEJ 124 X (120K)	T	23.0/30.5
R468	7030005010	S.RES ERJ2GEJ 681 X (680)	T	76.6/17.6
R469	7030008280	S.RES ERJ2GEJ 271 X (270)	T	77.5/20.4
R491	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	81.2/30.0
R492	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	B	77.7/34.5
R495	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	82.1/30.0
R496	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	78.9/32.9
R499	7030005210	S.RES ERJ2GEJ 822 X (8.2K)	B	81.3/28.0
R502	7030008300	S.RES ERJ2GEJ 184 X (180K)	B	78.1/31.3
R517	7030008400	S.RES ERJ2GEJ 182 X (1.8K)	B	65.9/26.4
R518	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	65.9/25.5
R601	7030005170	S.RES ERJ2GEJ 474 X (470K)	T	97.1/14.0
R602	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	96.2/14.0
R614	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	65.9/27.4
R619	7030005530	S.RES ERJ2GEJ 100 X (10)	T	96.5/19.3
R620	7030008300	S.RES ERJ2GEJ 184 X (180K)	T	95.3/9.3
R621	7030005720	S.RES ERJ2GEJ 563 X (56K)	T	96.2/9.3
R623	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	T	6.4/46.2
R624	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	91.7/10.5
R625	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	7.8/37.2
R626	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	6.2/37.2
R627	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	77.5/21.3
R628	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	86.2/18.0
R629	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	84.8/21.8
R630	7030010040	S.RES ERJ2GEJ-JPW	B	67.1/25.8
R631	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	82.5/25.5
R632	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	82.6/23.0
R633	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	85.6/24.3
R634	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	85.0/17.7
R635	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	76.4/6.3
R636	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	76.8/7.5
R637	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	87.4/19.9
R638	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	77.7/15.1
R639	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	80.4/16.3
R640	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	74.4/11.6
R641	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	77.5/22.2
R642	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	80.5/17.9
R643	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	78.6/14.4
R644	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	80.3/10.6
R645	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	75.7/7.1
R646	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	93.7/22.8
R647	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	90.3/21.0
R651	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	76.8/3.8
R652	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	90.4/22.2
R653	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	85.7/21.8
R657	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	76.8/5.1
R661	7410001130	S.ARR EXB28V102JX	B	90.9/12.3
R662	7410001130	S.ARR EXB28V102JX	B	90.9/14.8
R663	7410001130	S.ARR EXB28V102JX	B	88.4/22.3
R664	7410001150	S.ARR EXB28V471JX	B	80.3/22.3

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R665	7410001130	S.ARR EXB28V102JX	B	77.8/22.3
R666	7410001130	S.ARR EXB28V102JX	B	75.4/9.9
R667	7410001130	S.ARR EXB28V102JX	B	79.4/6.4
R668	7410001130	S.ARR EXB28V102JX	B	82.4/6.4
R669	7410001130	S.ARR EXB28V102JX	B	85.2/6.4
R683	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	90.7/19.7
R688	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	81.3/12.7
R691	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	84.7/16.4
R692	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	92.3/20.4
R693	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	93.7/21.9
R694	7030012540	S.RES ERJ2RHD 1502X (15.0K)	B	91.9/20.6
R700	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	82.5/12.2
R701	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	86.5/15.9
R702	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	88.1/10.8
R703	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	86.2/17.1
R705	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	87.8/15.5
R706	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	87.4/12.0
R707	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	88.3/12.6
R901	7410001170	S.ARR EXB28V470JX	B	79.5/36.7
R904	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	74.6/20.9
R905	7030007250	S.RES ERJ2GEJ 220 X (22)	T	75.2/34.3
R906	7030005210	S.RES ERJ2GEJ 822 X (8.2K)	T	75.2/31.6
R907	7030005210	S.RES ERJ2GEJ 822 X (8.2K)	T	75.2/32.5
R908	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	75.6/20.9
R910	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	79.8/33.6
R913	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	71.1/21.8
R915	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	84.8/34.2
R917	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	85.6/32.1
R920	7030007270	S.RES ERJ2GEJ 151 X (150)	B	83.0/30.0
R921	7030007270	S.RES ERJ2GEJ 151 X (150)	T	79.8/34.5
R922	7030004980	S.RES ERJ2GEJ 101 X (100)	B	85.5/35.2
R923	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	72.3/47.0
R925	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	75.5/49.3
R930	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	83.1/28.2
R931	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	82.2/28.2
R932	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	82.2/29.8
R933	7030004970	S.RES ERJ2GEJ 470 X (47)	B	72.3/46.1
R934	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	76.9/48.6
R935	7030004970	S.RES ERJ2GEJ 470 X (47)	B	81.4/48.6
R936	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	79.6/48.6
R937	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	78.7/48.6
R938	7030004980	S.RES ERJ2GEJ 101 X (100)	B	80.3/43.8
R939	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	79.9/42.0
R940	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	78.2/41.2
R941	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	77.5/43.1
R942	7030007270	S.RES ERJ2GEJ 151 X (150)	B	71.8/35.3
R943	7030004990	S.RES ERJ2GEJ 221 X (220)	B	77.8/38.0
R944	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	83.4/40.7
R945	7410001140	S.ARR EXB28V104JX	T	86.5/43.9
R946	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	83.4/41.6
R947	7410001140	S.ARR EXB28V104JX	B	93.8/37.6
R948	7410001140	S.ARR EXB28V104JX	B	87.8/35.8
R949	7410001140	S.ARR EXB28V104JX	B	93.9/33.0
R950	7410001140	S.ARR EXB28V104JX	B	88.4/33.0
R951	7410001140	S.ARR EXB28V104JX	T	85.3/29.3
R952	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	78.5/36.9
R953	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	78.9/37.8
R956	7030010040	S.RES ERJ2GEJ-JPW	B	96.3/32.9
R957	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	94.7/30.9
R958	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	85.7/42.4
R961	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	90.9/30.9
R962	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	89.5/28.4
R963	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	95.4/32.9
R964	7410001140	S.ARR EXB28V104JX	B	85.9/39.4
R965	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	79.8/31.7
R966	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	79.8/32.6
R968	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	86.2/18.9
R969	7030005160	S.RES ERJ2GEJ 105 X (1M)	T	88.3/19.9
R970	7030010040	S.RES ERJ2GEJ-JPW	B	71.0/39.1
R974	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	78.1/29.7
R975	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	80.3/29.7
R981	7030010040	S.RES ERJ2GEJ-JPW	T	79.8/9.2
R982	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	82.7/39.5
R983	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	64.6/37.8
R984	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	64.6/36.9
R988	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	T	97.1/9.3
C2	4030017620	S.CER C1005 CH 1H 100C-T	B	10.3/6.1
C3	4030017410	S.CER C1005 CH 1H 240J-T	B	7.4/12.0
C4	4030017570	S.CER C1005 CH 1H 040B-T	B	11.5/11.4
C5	4030017650	S.CER C1005 CH 1H 270J-T	B	12.4/11.4
C6	4030017550	S.CER C1005 CH 1H 1R5B-T	B	11.5/13.0
C7	4030017640	S.CER C1005 CH 1H 150J-T	B	12.4/13.0
C8	4030017460	S.CER C1005 JB 1H 102K-T	B	14.5/17.2
C11	4030017460	S.CER C1005 JB 1H 102K-T	B	20.6/20.1
C15	4030017400	S.CER C1005 CH 1H 220J-T	B	16.3/14.3
C16	4030017390	S.CER C1005 CH 1H 180J-T	B	17.9/11.3
C20	4030017460	S.CER C1005 JB 1H 102K-T	B	20.4/14.1
C21	4030008560	S.CER C1608 CH 1H 300J-T	B	21.3/10.4
C22	4030007040	S.CER C1608 CH 1H 180J-T	B	22.0/12.4
C23	4030008560	S.CER C1608 CH 1H 300J-T	B	22.7/10.4
C24	4030017530	S.CER C1005 CH 1H 0R5B-T	B	13.6/11.4
C25	4030017460	S.CER C1005 JB 1H 102K-T	T	19.8/10.5
C26	4030017460	S.CER C1005 JB 1H 102K-T	T	29.4/5.7
C27	4030017460	S.CER C1005 JB 1H 102K-T	T	37.2/5.8
C28	4030017460	S.CER C1005 JB 1H 102K-T	T	33.0/13.1
C29	4030016930	S.CER C1005 JB 1A 104K-T	T	31.2/11.5
C30	4030018890	S.CER C1005 JB 0J 224K-T	T	32.8/6.6
C31	4030016930	S.CER C1005 JB 1A 104K-T	T	34.8/11.5
C32	4030017460	S.CER C1005 JB 1H 102K-T	T	35.7/9.9
C33	4030017460	S.CER C1005 JB 1H 102K-T	T	37.2/7.5
C34	4030018860	S.CER C1005 JB 0J 105K-T	T	38.1/7.5
C35	4030017420	S.CER C1005 CH 1H 470J-T	B	37.5/9.2
C36	4030017460	S.CER C1005 JB 1H 102K-T	B	39.3/9.2

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C37	4030017530	S.CER C1005 CH 1H 0R5B-T	B	13.6/12.3
C38	4030017460	S.CER C1005 JB 1H 102K-T	T	17.9/12.7
C40	4030017420	S.CER C1005 CH 1H 470J-T	T	21.4/13.2
C41	4030017460	S.CER C1005 JB 1H 102K-T	B	28.0/17.6
C43	4030017490	S.CER C1608 JB 1A 105K-T	B	27.8/20.3
C44	4030017460	S.CER C1005 JB 1H 102K-T	T	32.7/16.6
C45	4030017460	S.CER C1005 JB 1H 102K-T	T	21.4/12.3
C46	4030017510	S.CER C1005 CH 1H 680J-T	B	32.8/12.4
C48	4030017460	S.CER C1005 JB 1H 102K-T	B	32.8/9.2
C49	4030017420	S.CER C1005 CH 1H 470J-T	B	31.9/9.2
C51	4030017460	S.CER C1005 JB 1H 102K-T	B	23.5/22.8
C52	4030017460	S.CER C1005 JB 1H 102K-T	B	32.8/14.4
C53	4030017460	S.CER C1005 JB 1H 102K-T	B	37.5/10.9
C54	4030016790	S.CER C1005 JB 1E 103K-T	B	39.3/10.9
C55	4030017490	S.CER C1608 JB 1A 105K-T	B	33.5/16.6
C56	4030017430	S.CER C1005 CH 1H 101J-T	B	39.9/13.1
C57	4030017460	S.CER C1005 JB 1H 102K-T	B	43.1/16.7
C58	4030017420	S.CER C1005 CH 1H 470J-T	B	43.9/11.3
C59	4030017460	S.CER C1005 JB 1H 102K-T	B	42.2/10.4
C60	4030017460	S.CER C1005 JB 1H 102K-T	B	44.5/12.2
C63	4030017650	S.CER C1005 CH 1H 270J-T	B	46.4/14.9
C64	4030016790	S.CER C1005 JB 1E 103K-T	B	49.6/12.1
C65	4030017460	S.CER C1005 JB 1H 102K-T	B	51.2/14.0
C71	4030017620	S.CER C1005 CH 1H 100C-T	B	51.8/16.6
C72	4030017460	S.CER C1005 JB 1H 102K-T	B	51.2/17.8
C73	4030017460	S.CER C1005 JB 1H 102K-T	T	53.0/19.4
C74	4030017590	S.CER C1005 CH 1H 070C-T	T	58.0/18.9
C75	4030017460	S.CER C1005 JB 1H 102K-T	T	54.1/20.4
C76	4030017460	S.CER C1005 JB 1H 102K-T	B	55.0/18.6
C77	4030017460	S.CER C1005 JB 1H 102K-T	T	64.3/17.7
C78	4030017460	S.CER C1005 JB 1H 102K-T	T	58.9/18.9
C79	4030016930	S.CER C1005 JB 1A 104K-T	B	64.4/21.3
C80	4030017460	S.CER C1005 JB 1H 102K-T	B	63.0/35.6
C81	4030017360	S.CER C1005 CH 1H 030B-T	T	58.5/17.3
C83	4030017540	S.CER C1005 CH 1H R75B-T	T	58.9/21.2
C85	4030017460	S.CER C1005 JB 1H 102K-T	T	57.1/21.2
C86	4030017660	S.CER C1005 CH 1H 330J-T	T	57.0/25.9
C87	4030017660	S.CER C1005 CH 1H 330J-T	T	58.0/21.2
C88	4030017660	S.CER C1005 CH 1H 330J-T	T	56.1/25.9
C89	4030017660	S.CER C1005 CH 1H 330J-T	T	57.9/27.5
C90	4030017460	S.CER C1005 JB 1H 102K-T	B	60.6/34.5
C92	4030017420	S.CER C1005 CH 1H 470J-T	T	53.2/28.5
C94	4030017420	S.CER C1005 CH 1H 470J-T	B	59.9/21.7
C95	4030017610	S.CER C1005 CH 1H 090C-T	T	53.2/27.5
C97	4030020000	S.CER C1005 JB 1A 105K-T	B	68.9/23.1
C99	4030020000	S.CER C1005 JB 1A 105K-T	B	69.1/24.3
C100	4030016930	S.CER C1005 JB 1A 104K-T	B	70.6/35.9
C101	4030017530	S.CER C1005 CH 1H 0R5B-T	T	59.8/21.2
C102	4030016930	S.CER C1005 JB 1A 104K-T	T	56.2/21.8
C103	4030017460	S.CER C1005 JB 1H 102K-T	T	61.8/21.8
C104	4030017390	S.CER C1005 CH 1H 180J-T	T	59.8/25.9
C105	4030017660	S.CER C1005 CH 1H 330J-T	T	60.7/21.2
C106	4030017510	S.CER C1005 CH 1H 680J-T	T	61.6/26.0
C107	4030017660	S.CER C1005 CH 1H 330J-T	T	61.1/27.2
C109	4550008090	S.TAN TCTU0J105K8R	B	61.5/34.8
C110	4030017340	S.CER C1005 CH 1H 010B-T	T	61.1/29.2
C111	4030017440	S.CER C1005 CH 1H 221J-T	T	62.7/25.3
C112	4030017460	S.CER C1005 JB 1H 102K-T	B	61.1/32.2
C113	4030017360	S.CER C1005 CH 1H 030B-T	T	64.7/23.5
C114	4030017360	S.CER C1005 CH 1H 030B-T	T	63.8/23.1
C115	4030017610	S.CER C1005 CH 1H 090C-T	T	64.7/25.3
C116	4030018860	S.CER C1005 JB 0J 105K-T	B	62.7/27.4
C117	4030018820	S.CER C1005 JB 1H 561K-T	B	61.1/26.5
C118	4030017420	S.CER C1005 CH 1H 470J-T	B	64.3/28.3
C119	4030016930	S.CER C1005 JB 1A 104K-T	B	61.1/31.3
C120	4030017460	S.CER C1005 JB 1H 102K-T	B	64.3/26.4
C121	4030019560	S.CER GRM21BB31C106KE15L	B	59.4/19.6
C122	4030016790	S.CER C1005 JB 1E 103K-T	B	66.0/15.9
C123	4030017460	S.CER C1005 JB 1H 102K-T	B	51.9/29.6
C124	4030017460	S.CER C1005 JB 1H 102K-T	B	51.0/31.2
C127	4030017460	S.CER C1005 JB 1H 102K-T	B	61.1/25.6
C128	4030017460	S.CER C1005 JB 1H 102K-T	B	70.6/35.0
C129	4030016930	S.CER C1005 JB 1A 104K-T	T	67.6/33.3
C132	4550007550	S.TAN F931V334MAABMA	T	48.3/21.4
C134	4550007590	S.TAN F931V474MAABMA	T	46.7/29.8
C136	4030017460	S.CER C1005 JB 1H 102K-T	T	66.7/33.3
C137	4030016930	S.CER C1005 JB 1A 104K-T	T	69.0/27.6
C138	4030017460	S.CER C1005 JB 1H 102K-T	T	69.0/26.7
C139	4030020000	S.CER C1005 JB 1A 105K-T	B	68.2/24.3
C140	4030020000	S.CER C1005 JB 1A 105K-T	B	70.0/24.3
C141	4030017620	S.CER C1005 CH 1H 100C-T	B	50.4/19.5
C144	4030017430	S.CER C1005 CH 1H 101J-T	T	43.7/20.5
C145	4030018890	S.CER C1005 JB 0J 224K-T	T	42.8/20.5
C146	4030018890	S.CER C1005 JB 0J 224K-T	T	41.5/20.5
C147	4030017460	S.CER C1005 JB 1H 102K-T	T	46.4/21.1
C148	4030019560	S.CER GRM21BB31C106KE15L	B	44.0/26.2
C149	4030017430	S.CER C1005 CH 1H 101J-T	T	44.6/20.5
C150	4030016790	S.CER C1005 JB 1E 103K-T	T	43.9/28.1
C151	4030017430	S.CER C1005 CH 1H 101J-T	T	43.9/27.2
C152	4030017460	S.CER C1005 JB 1H 102K-T	T	44.0/29.0
C153	4030017420	S.CER C1005 CH 1H 470J-T	T	43.2/30.4
C154	4030017420	S.CER C1005 CH 1H 470J-T	T	42.3/30.4
C155	4030017420	S.CER C1005 CH 1H 470J-T	T	41.4/30.4
C156	4030016930	S.CER C1005 JB 1A 104K-T	T	40.5/30.4
C157	4030017460	S.CER C1005 JB 1H 102K-T	T	41.0/18.8
C158	4030017620	S.CER C1005 CH 1H 100C-T	T	39.2/18.8
C159	4030016930	S.CER C1005 JB 1A 104K-T	T	40.1/11.0
C160	4030017460	S.CER C1005 JB 1H 102K-T	T	41.9/11.0
C167	4030017630	S.CER C1005 CH 1H 120J-T	B	50.4/20.4
C168	4030017630	S.CER C1005 CH 1H 120J-T	B	48.9/21.6
C169	4030017620	S.CER C1005 CH 1H 100C-T	B	48.8/20.4
C171	4030018120	S.CER C1005 CH 1H 110J-T	B	16.2/18.5
C172	4030017640	S.CER C1005 CH 1H 150J-T	B	13.9/22.1
C173	4030017460	S.CER C1005 JB 1H 102K-T	B	13.4/24.4
C174	4030017580	S.CER C1005 CH 1H 060C-T	B	12.4/24.4

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C175	4030017620	S.CER C1005 CH 1H 100C-T	B	12.9/26.5
C176	4030017430	S.CER C1005 CH 1H 101J-T	B	16.2/26.6
C177	4030017340	S.CER C1005 CH 1H 010B-T	B	16.4/27.8
C178	4030017550	S.CER C1005 CH 1H 1R5B-T	B	18.0/29.2
C179	4030017370	S.CER C1005 CH 1H 3R5B-T	B	19.6/27.8
C180	4030017430	S.CER C1005 CH 1H 101J-T	B	19.2/26.0
C181	4030017370	S.CER C1005 CH 1H 3R5B-T	B	22.9/27.8
C182	4030017460	S.CER C1005 JB 1H 102K-T	T	21.4/24.6
C183	4030017460	S.CER C1005 JB 1H 102K-T	B	16.2/25.7
C184	4030016930	S.CER C1005 JB 1A 104K-T	T	20.9/26.7
C186	4030016930	S.CER C1005 JB 1A 104K-T	B	21.7/30.0
C188	4030016930	S.CER C1005 JB 1A 104K-T	B	25.3/30.0
C189	4030017460	S.CER C1005 JB 1H 102K-T	B	27.1/23.9
C191	4030016790	S.CER C1005 JB 1E 103K-T	B	28.7/28.7
C192	4030017460	S.CER C1005 JB 1H 102K-T	B	26.2/25.6
C193	4030017460	S.CER C1005 JB 1H 102K-T	B	25.3/25.6
C195	4030017570	S.CER C1005 CH 1H 040B-T	B	28.2/27.5
C196	4030017460	S.CER C1005 JB 1H 102K-T	B	29.2/25.6
C197	4030017350	S.CER C1005 CH 1H 020B-T	B	31.0/29.8
C198	4030017460	S.CER C1005 JB 1H 102K-T	B	32.3/25.8
C199	4030017380	S.CER C1005 CH 1H 050B-T	B	34.4/26.6
C200	4030017580	S.CER C1005 CH 1H 060C-T	B	34.7/27.9
C201	4030017460	S.CER C1005 JB 1H 102K-T	T	31.8/23.6
C202	4030017460	S.CER C1005 JB 1H 102K-T	B	29.2/23.9
C203	4030016930	S.CER C1005 JB 1A 104K-T	B	30.1/23.9
C206	4030017620	S.CER C1005 CH 1H 100C-T	B	47.4/16.8
C210	4030017630	S.CER C1005 CH 1H 120J-T	B	35.4/23.9
C211	4030017460	S.CER C1005 JB 1H 102K-T	B	34.4/22.3
C214	4030017460	S.CER C1005 JB 1H 102K-T	B	37.4/23.9
C215	4030017390	S.CER C1005 CH 1H 180J-T	B	41.9/26.3
C216	4030017460	S.CER C1005 JB 1H 102K-T	B	41.0/23.9
C217	4030016790	S.CER C1005 JB 1E 103K-T	B	40.1/23.9
C218	4030016790	S.CER C1005 JB 1E 103K-T	B	37.5/28.5
C223	4030017460	S.CER C1005 JB 1H 102K-T	B	41.9/22.3
C224	4030017460	S.CER C1005 JB 1H 102K-T	B	47.4/18.6
C225	4030017460	S.CER C1005 JB 1H 102K-T	T	39.5/38.8
C226	4030016790	S.CER C1005 JB 1E 103K-T	B	37.3/44.4
C227	4030016790	S.CER C1005 JB 1E 103K-T	B	36.3/40.8
C231	4030017430	S.CER C1005 CH 1H 101J-T	B	40.6/42.6
C232	4030017660	S.CER C1005 CH 1H 330J-T	T	42.0/38.9
C233	4030017460	S.CER C1005 JB 1H 102K-T	B	41.2/38.9
C235	4030019560	S.CER GRM21BB31C106KE15L	B	44.5/42.6
C236	4030017460	S.CER C1005 JB 1H 102K-T	B	47.1/43.1
C238	4030017460	S.CER C1005 JB 1H 102K-T	B	41.2/39.8
C239	4030017720	S.CER C1005 JB 1H 331K-T	T	43.1/40.1
C240	4030017460	S.CER C1005 JB 1H 102K-T	B	44.7/35.5
C241	4030017420	S.CER C1005 CH 1H 470J-T	B	48.3/33.7
C242	4030017710	S.CER C1005 CH 1H 181J-T	B	48.3/34.6
C243	4030017710	S.CER C1005 CH 1H 181J-T	B	46.5/35.5
C244	4030016930	S.CER C1005 JB 1A 104K-T	B	50.2/37.0
C246	4030018860	S.CER C1005 JB 0J 105K-T	B	73.2/20.1
C247	4030017670	S.CER C1005 CH 1H 390J-T	B	73.2/24.0
C251	4030017360	S.CER C1005 CH 1H 030B-T	T	44.1/36.8
C252	4030017500	S.CER C1005 CH 1H 560J-T	T	42.5/36.8
C253	4030017580	S.CER C1005 CH 1H 060C-T	T	44.1/35.9
C254	4030017500	S.CER C1005 CH 1H 560J-T	T	42.6/34.6
C255	4030016790	S.CER C1005 JB 1E 103K-T	T	45.1/32.1
C256	4030017620	S.CER C1005 CH 1H 100C-T	T	39.2/23.7
C257	4030016790	S.CER C1005 JB 1E 103K-T	T	40.9/34.6
C261	4030016930	S.CER C1005 JB 1A 104K-T	B	50.5/38.6
C262	4030016930	S.CER C1005 JB 1A 104K-T	B	50.2/40.7
C263	4030016930	S.CER C1005 JB 1A 104K-T	B	57.1/41.5
C264	4030016930	S.CER C1005 JB 1A 104K-T	B	53.0/36.1
C265	4030016930	S.CER C1005 JB 1A 104K-T	B	58.7/36.9
C266	4030016930	S.CER C1005 JB 1A 104K-T	B	56.3/37.5
C267	4030016930	S.CER C1005 JB 1A 104K-T	B	58.1/35.7
C271	4030016930	S.CER C1005 JB 1A 104K-T	B	61.5/43.8
C272	4030016930	S.CER C1005 JB 1A 104K-T	B	62.4/41.9
C273	4030016930	S.CER C1005 JB 1A 104K-T	B	65.7/45.7
C274	4030016930	S.CER C1005 JB 1A 104K-T	B	68.9/42.0
C275	4030017040	S.CER C1005 JB 1A 333K-T	B	67.9/46.4
C276	4030017650	S.CER C1005 CH 1H 270J-T	B	67.3/42.0
C277	4030016930	S.CER C1005 JB 1A 104K-T	B	65.8/41.2
C282	4030016790	S.CER C1005 JB 1E 103K-T	B	40.8/31.1
C283	4030017590	S.CER C1005 CH 1H 070C-T	B	39.0/35.3
C284	4030016790	S.CER C1005 JB 1E 103K-T	B	36.7/38.8
C286	4030016790	S.CER C1005 JB 1E 103K-T	T	34.9/28.4
C288	4030017600	S.CER C1005 CH 1H 080C-T	T	39.9/32.6
C290	4030016790	S.CER C1005 JB 1E 103K-T	T	37.8/40.2
C291	4030016930	S.CER C1005 JB 1A 104K-T	B	42.4/32.3
C292	4030016930	S.CER C1005 JB 1A 104K-T	T	38.3/44.1
C293	4030017460	S.CER C1005 JB 1H 102K-T	T	40.1/42.4
C311	4030018860	S.CER C1005 JB 0J 105K-T	T	26.3/31.4
C312	4030017710	S.CER C1005 CH 1H 181J-T	T	23.0/31.4
C313	4030016930	S.CER C1005 JB 1A 104K-T	T	21.2/28.0
C318	4030016790	S.CER C1005 JB 1E 103K-T	B	75.1/24.4
C323	4030016930	S.CER C1005 JB 1A 104K-T	T	81.2/14.5
C327	4030017900	S.CER C1005 JB 1E 123K-T	B	65.0/24.6
C328	4030020010	S.CER C1005 CH 1H 271J-T	B	65.9/28.3
C334	4030017460	S.CER C1005 JB 1H 102K-T	B	15.0/46.6
C335	4030017460	S.CER C1005 JB 1H 102K-T	B	24.6/38.2
C336	4030018860	S.CER C1005 JB 0J 105K-T	B	57.3/8.6
C337	4030017460	S.CER C1005 JB 1H 102K-T	B	52.5/7.5
C338	4030017460	S.CER C1005 JB 1H 102K-T	B	50.7/7.5
C339	4030017460	S.CER C1005 JB 1H 102K-T	B	53.4/7.5
C340	4030016930	S.CER C1005 JB 1A 104K-T	B	57.3/10.2
C341	4030018860	S.CER C1005 JB 0J 105K-T	B	59.1/10.2
C342	4030017460	S.CER C1005 JB 1H 102K-T	B	47.1/6.6
C343	4030019560	S.CER GRM21BB31C106KE15L	B	57.6/6.9
C344	4030016930	S.CER C1005 JB 1A 104K-T	B	55.1/2.0
C364	4030017630	S.CER C1005 CH 1H 120J-T	T	42.8/11.0
C381	4030016930	S.CER C1005 JB 1A 104K-T	B	81.1/25.1
C382	4030016930	S.CER C1005 JB 1A 104K-T	B	79.4/25.1
C383	4030018860	S.CER C1005 JB 0J 105K-T	B	77.6/25.1
C384	4030018860	S.CER C1005 JB 0J 105K-T	B	72.8/14.3

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REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C385	4030016930	S.CER C1005 JB 1A 104K-T	B	72.8/12.5
C388	4030017460	S.CER C1005 JB 1H 102K-T	B	20.9/3.5
C389	4030017460	S.CER C1005 JB 1H 102K-T	B	43.9/2.5
C390	4030017460	S.CER C1005 JB 1H 102K-T	B	53.3/2.6
C391	4030017420	S.CER C1005 CH 1H 470J-T	B	37.3/46.3
C392	4030017420	S.CER C1005 CH 1H 470J-T	B	29.1/43.9
C393	4520000020	S.NIO NOJC227M006RWJV	B	19.8/40.5
C394	4030017460	S.CER C1005 JB 1H 102K-T	B	28.2/43.9
C395	4520000020	S.NIO NOJC227M006RWJV	T	21.2/37.1
C396	4030017460	S.CER C1005 JB 1H 102K-T	T	27.1/47.4
C397	4030017460	S.CER C1005 JB 1H 102K-T	T	25.2/37.4
C398	4030017460	S.CER C1005 JB 1H 102K-T	B	12.2/32.0
C399	4030016930	S.CER C1005 JB 1A 104K-T	B	22.2/37.2
C400	4550007520	S.TAN F931A106MAABMA	T	12.9/40.8
C401	4030016930	S.CER C1005 JB 1A 104K-T	B	12.2/37.6
C403	4030018890	S.CER C1005 JB 0J 224K-T	B	15.0/39.5
C404	4030016930	S.CER C1005 JB 1A 104K-T	B	12.2/38.5
C405	4030018860	S.CER C1005 JB 0J 105K-T	B	19.3/33.7
C406	4030017460	S.CER C1005 JB 1H 102K-T	T	20.7/34.7
C412	4030017460	S.CER C1005 JB 1H 102K-T	T	6.5/42.8
C413	4030017460	S.CER C1005 JB 1H 102K-T	B	7.7/31.9
C423	4030016790	S.CER C1005 JB 1E 103K-T	B	67.8/14.3
C426	4030016790	S.CER C1005 JB 1E 103K-T	B	65.7/40.3
C428	4030017460	S.CER C1005 JB 1H 102K-T	T	16.4/32.2
C429	4030016790	S.CER C1005 JB 1E 103K-T	B	66.9/14.3
C431	4510009870	S.ELE 10 CE 100 LD	T	14.7/27.2
C433	4030017460	S.CER C1005 JB 1H 102K-T	T	17.3/32.2
C434	4030016790	S.CER C1005 JB 1E 103K-T	T	14.3/32.7
C435	4550007320	S.TAN F930J226MAABMA	T	19.4/30.8
C437	4030017460	S.CER C1005 JB 1H 102K-T	T	14.3/31.8
C448	4030019490	S.CER C2012 JB 1A 106K-T	B	28.3/46.0
C451	4030016930	S.CER C1005 JB 1A 104K-T	B	85.3/25.5
C452	4030016930	S.CER C1005 JB 1A 104K-T	B	86.2/25.5
C453	4030017640	S.CER C1005 CH 1H 150J-T	T	84.0/22.5
C454	4030017580	S.CER C1005 CH 1H 060C-T	T	85.2/21.3
C455	4030017640	S.CER C1005 CH 1H 150J-T	B	83.9/21.8
C456	4030016930	S.CER C1005 JB 1A 104K-T	T	86.5/14.2
C457	4030017030	S.CER C1005 JB 1A 273K-T	T	82.8/14.4
C458	4030018900	S.CER C1005 JB 0J 474K-T	T	84.3/19.8
C461	4030019990	S.CER C1005 JB 1C 104K-T	T	96.7/17.2
C462	4030020190	S.CER GRM32EB31C476KE15L	B	96.5/16.5
C463	4030019990	S.CER C1005 JB 1C 104K-T	T	96.7/15.4
C464	4030020190	S.CER GRM32EB31C476KE15L	B	96.3/8.3
C465	4050000240	S.FEE NFM18PC104R1C3D	T	92.7/8.9
C466	4030018860	S.CER C1005 JB 0J 105K-T	T	90.4/9.8
C467	4030016790	S.CER C1005 JB 1E 103K-T	T	89.5/11.2
C482	4030016930	S.CER C1005 JB 1A 104K-T	B	80.4/34.5
C483	4030018860	S.CER C1005 JB 0J 105K-T	B	78.6/26.8
C484	4030020120	S.CER C1005 JB 0J 225M-T	B	79.5/28.0
C485	4030018860	S.CER C1005 JB 0J 105K-T	B	80.1/32.9
C490	4030016930	S.CER C1005 JB 1A 104K-T	B	79.5/34.5
C492	4030017710	S.CER C1005 CH 1H 181J-T	B	80.0/31.3
C494	4030016780	S.CER C1005 JB 1E 153K-T	B	79.1/31.3
C501	4030016930	S.CER C1005 JB 1A 104K-T	B	74.4/16.1
C502	4030016930	S.CER C1005 JB 1A 104K-T	B	74.4/17.9
C503	4030016930	S.CER C1005 JB 1A 104K-T	B	74.4/15.2
C504	4030016930	S.CER C1005 JB 1A 104K-T	B	74.4/17.0
C505	4030016930	S.CER C1005 JB 1A 104K-T	B	74.4/14.3
C506	4030016930	S.CER C1005 JB 1A 104K-T	B	74.5/19.2
C507	4030018860	S.CER C1005 JB 0J 105K-T	T	83.4/12.2
C508	4030017460	S.CER C1005 JB 1H 102K-T	T	84.7/12.3
C509	4030018860	S.CER C1005 JB 0J 105K-T	T	86.5/20.1
C510	4030017460	S.CER C1005 JB 1H 102K-T	T	90.4/8.9
C511	4030018860	S.CER C1005 JB 0J 105K-T	T	90.5/21.3
C512	4030018860	S.CER C1005 JB 0J 105K-T	B	74.4/12.5
C513	4030016930	S.CER C1005 JB 1A 104K-T	T	76.8/8.4
C514	4030018860	S.CER C1005 JB 0J 105K-T	T	76.6/18.5
C515	4030017460	S.CER C1005 JB 1H 102K-T	T	90.5/22.2
C900	4030016930	S.CER C1005 JB 1A 104K-T	T	75.4/35.7
C901	4030018910	S.CER C1608 JB 0J 475K-T	T	76.4/36.0
C902	4050000240	S.FEE NFM18PC104R1C3D	B	71.6/41.8
C903	4050000240	S.FEE NFM18PC104R1C3D	B	72.3/40.3
C904	4050000240	S.FEE NFM18PC104R1C3D	B	74.1/41.3
C907	4030017460	S.CER C1005 JB 1H 102K-T	T	75.2/33.4
C908	4030018910	S.CER C1608 JB 0J 475K-T	T	79.3/35.7
C909	4030016930	S.CER C1005 JB 1A 104K-T	T	77.9/34.5
C910	4030016930	S.CER C1005 JB 1A 104K-T	B	73.5/43.3
C911	4550008380	S.TAN TMCJ0J106MTRF	B	75.4/42.3
C912	4030018910	S.CER C1608 JB 0J 475K-T	T	78.8/39.5
C913	4030016930	S.CER C1005 JB 1A 104K-T	T	80.1/40.2
C915	4030016930	S.CER C1005 JB 1A 104K-T	B	71.5/37.8
C916	4550008380	S.TAN TMCJ0J106MTRF	B	73.5/38.4
C917	4030016930	S.CER C1005 JB 1A 104K-T	B	72.4/37.8
C918	4030016790	S.CER C1005 JB 1E 103K-T	B	70.4/45.3
C919	4030018860	S.CER C1005 JB 0J 105K-T	T	81.2/44.5
C920	4030016790	S.CER C1005 JB 1E 103K-T	T	81.2/43.6
C921	4030018910	S.CER C1608 JB 0J 475K-T	B	79.7/38.9
C922	4030018910	S.CER C1608 JB 0J 475K-T	B	79.7/40.1
C923	4030016790	S.CER C1005 JB 1E 103K-T	B	90.0/30.9
C927	4030018860	S.CER C1005 JB 0J 105K-T	B	75.0/22.5
C928	4030018860	S.CER C1005 JB 0J 105K-T	B	79.0/29.7
C930	4030018860	S.CER C1005 JB 0J 105K-T	B	72.3/21.7
C931	4030018860	S.CER C1005 JB 0J 105K-T	B	86.7/41.3
C935	4030016790	S.CER C1005 JB 1E 103K-T	B	90.2/38.4
C936	4030018860	S.CER C1005 JB 0J 105K-T	B	90.3/39.3
C937	4030016790	S.CER C1005 JB 1E 103K-T	B	88.0/30.4
C940	4030018910	S.CER C1608 JB 0J 475K-T	B	83.2/43.6
C941	4030016930	S.CER C1005 JB 1A 104K-T	T	83.3/43.6
C942	4030016930	S.CER C1005 JB 1A 104K-T	B	92.3/41.2
C943	4030016790	S.CER C1005 JB 1E 103K-T	B	87.7/41.3
C944	4030016930	S.CER C1005 JB 1A 104K-T	B	76.6/43.1
C945	4030016930	S.CER C1005 JB 1A 104K-T	B	72.3/45.2
C946	4030016930	S.CER C1005 JB 1A 104K-T	B	75.5/48.4
C947	4030016930	S.CER C1005 JB 1A 104K-T	T	83.1/29.8
C948	4030016930	S.CER C1005 JB 1A 104K-T	B	75.1/44.0

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
C949	4030017420	S.CER	C1005 CH 1H 470J-T	B	72.3/44.3
C950	4030017620	S.CER	C1005 CH 1H 100C-T	B	77.8/48.6
C951	4030016930	S.CER	C1005 JB 1A 104K-T	B	78.0/46.9
C953	4030017460	S.CER	C1005 JB 1H 102K-T	B	80.5/48.6
C954	4030016790	S.CER	C1005 JB 1E 103K-T	B	82.3/48.6
C955	4030016930	S.CER	C1005 JB 1A 104K-T	B	78.7/43.8
C956	4030017380	S.CER	C1005 CH 1H 050B-T	B	79.9/42.9
C957	4030016930	S.CER	C1005 JB 1A 104K-T	B	78.7/42.6
C958	4030016930	S.CER	C1005 JB 1A 104K-T	T	68.5/38.2
J51	6450000131	CON	HSJ1102-018540		
J52	6450002250	CON	HSJ1456-010320		
J53	6510021901	S.CON	BM02B-ASRS-TF(LF)(SN)	T	27.2/34.5
F51	5210001160	S.FUS	ERBRE3R00V	T	10.7/37.6
DS51	5040003790	S.LED	SML-522MU8WT86	T	2.0/37.9
MC51	7700002950	MIC	EM9745P-33-G <HOR>		
S51	2260001900	SWI	SW-149 (SKHLLD)		
S52	2260002800	S.SWI	SW-167 (SKQTLAE010)	B	39.2/1.9
S53	2260002800	S.SWI	SW-167 (SKQTLAE010)	B	48.7/1.9
S54	2250000830	ENC	FSR08-0008A <SLVJ>		
EP2	6910018460	S.BEA	MMZ1005Y102C-T	B	32.8/15.5
EP3	6910018460	S.BEA	MMZ1005Y102C-T	B	63.5/21.3
EP4	6910018460	S.BEA	MMZ1005Y102C-T	T	45.2/28.7
EP5	6910018460	S.BEA	MMZ1005Y102C-T	T	41.0/11.0
EP6	6910014730	S.BEA	MPZ2012S331A-T	B	25.2/21.4
EP7	6910021240	S.BEA	MMZ1005A152ET	B	61.1/30.4
EP8	6910021240	S.BEA	MMZ1005A152ET	B	60.9/33.1
EP9	6910021630	S.BEA	BLM18RK102SN1D	B	57.1/29.6
EP51	6910018460	S.BEA	MMZ1005Y102C-T	B	19.1/46.2
EP52	6910021240	S.BEA	MMZ1005A152ET	T	96.7/16.3
EP54	6910016330	S.BEA	MMZ1005S 601CT-S	B	69.9/37.2
EP900	6910016330	S.BEA	MMZ1005S 601CT-S	B	71.1/43.9
EP901	6910016330	S.BEA	MMZ1005S 601CT-S	B	76.7/41.9
EP902	6910016330	S.BEA	MMZ1005S 601CT-S	B	74.5/38.1
EP903	6910016330	S.BEA	MMZ1005S 601CT-S	T	83.2/49.7
EP904	6910016330	S.BEA	MMZ1005S 601CT-S	T	94.4/47.0
EP905	6910016330	S.BEA	MMZ1005S 601CT-S	B	84.5/49.8
EP906	6910016330	S.BEA	MMZ1005S 601CT-S	B	93.2/46.9

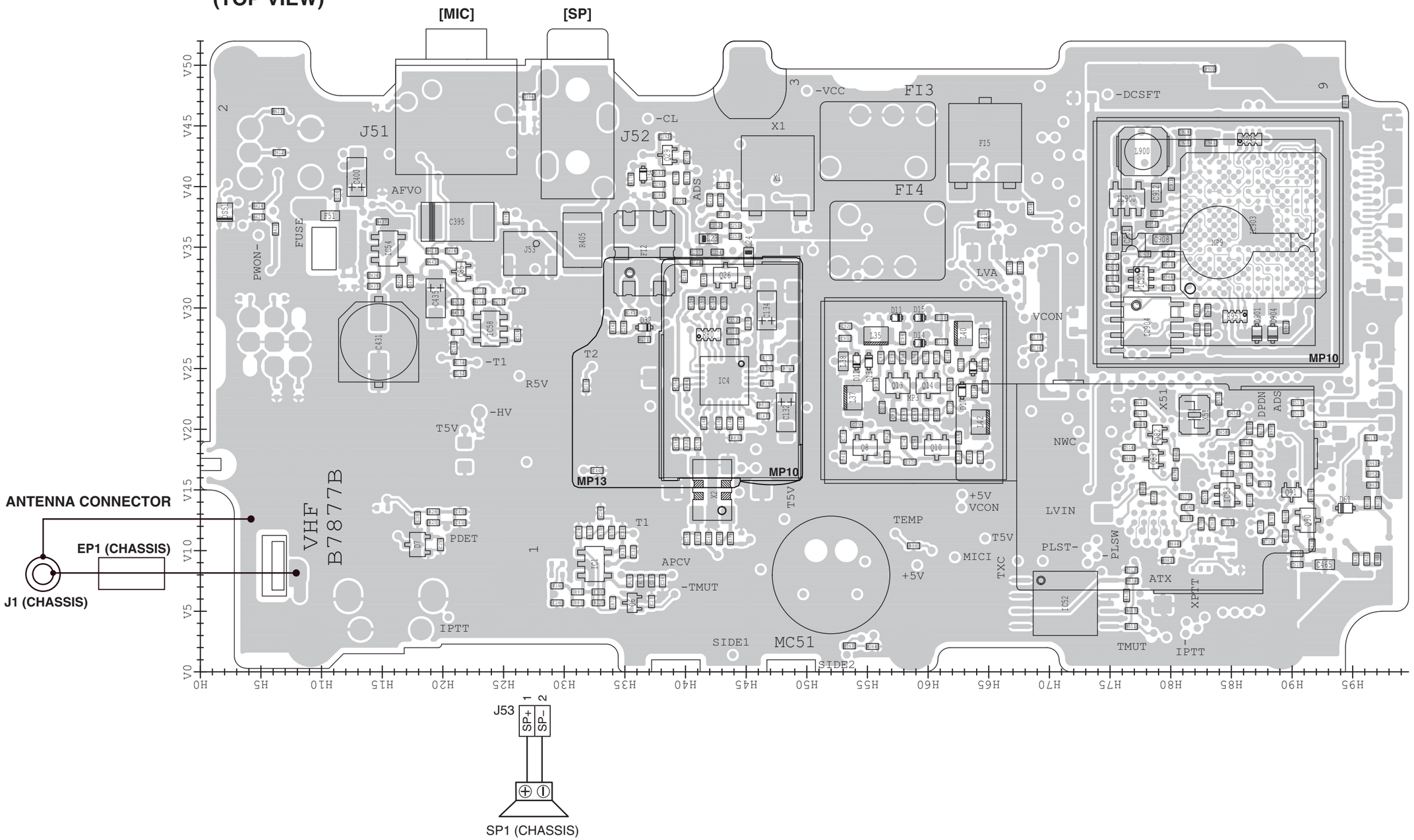
Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

BOARD LAYOUTS

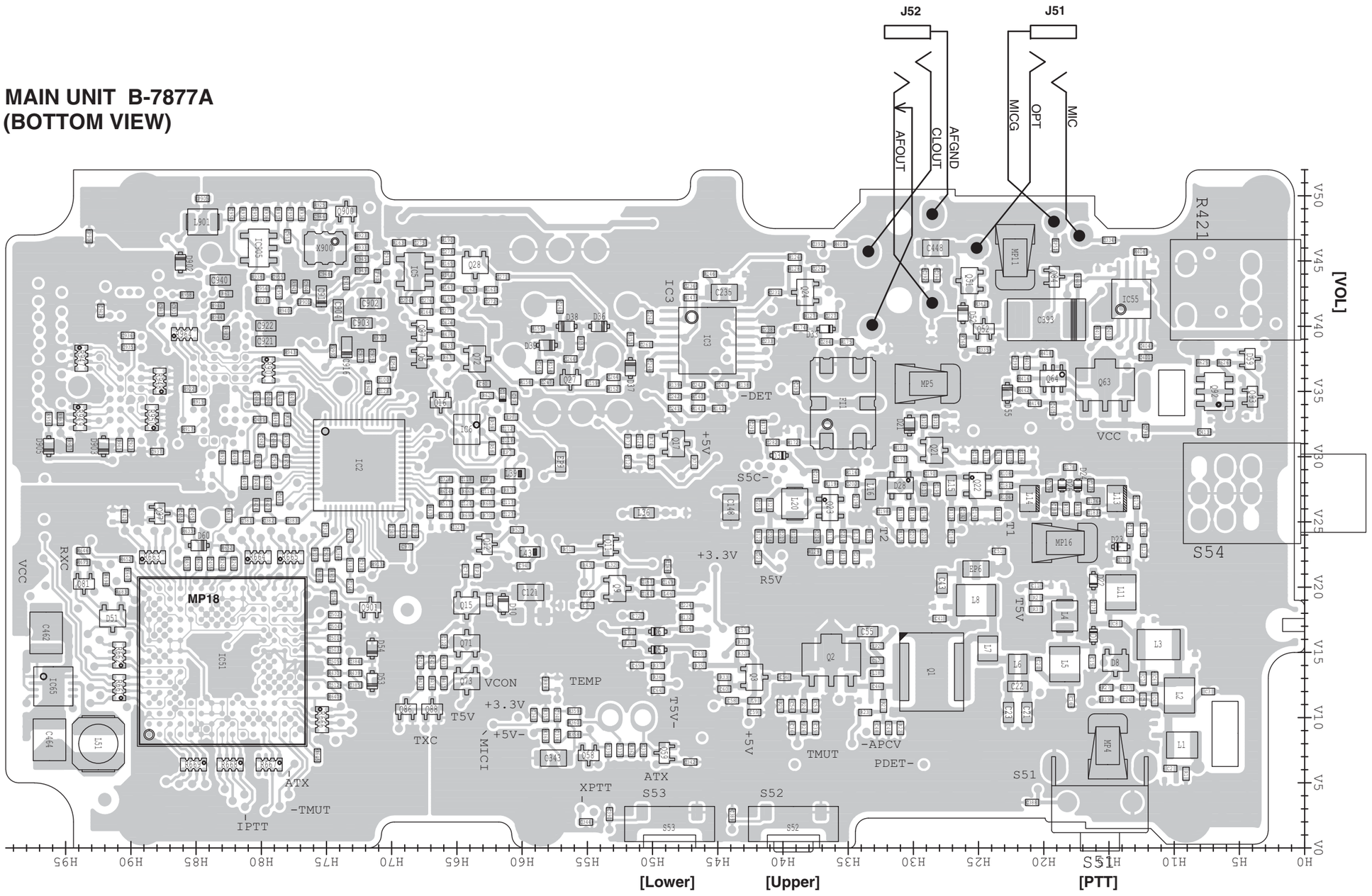
The actual configuration of the PC board can be seen by viewing the top and bottom BOARD LAYOUT pages together.

• MAIN UNIT B-7877A (TOP VIEW)



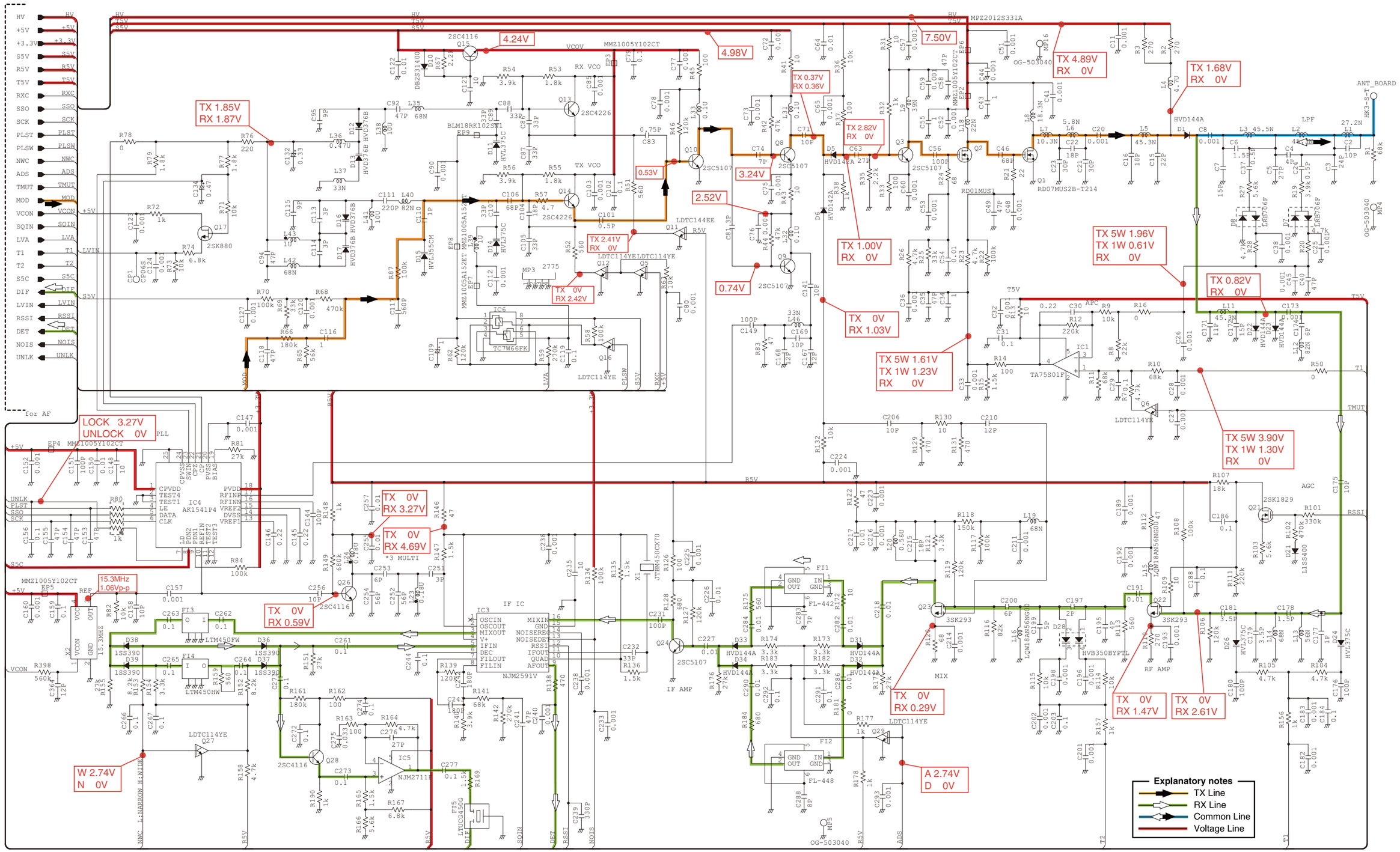
The actual configuration of the PC board can be seen by viewing the top and bottom BOARD LAYOUT pages together.

• MAIN UNIT B-7877A (BOTTOM VIEW)



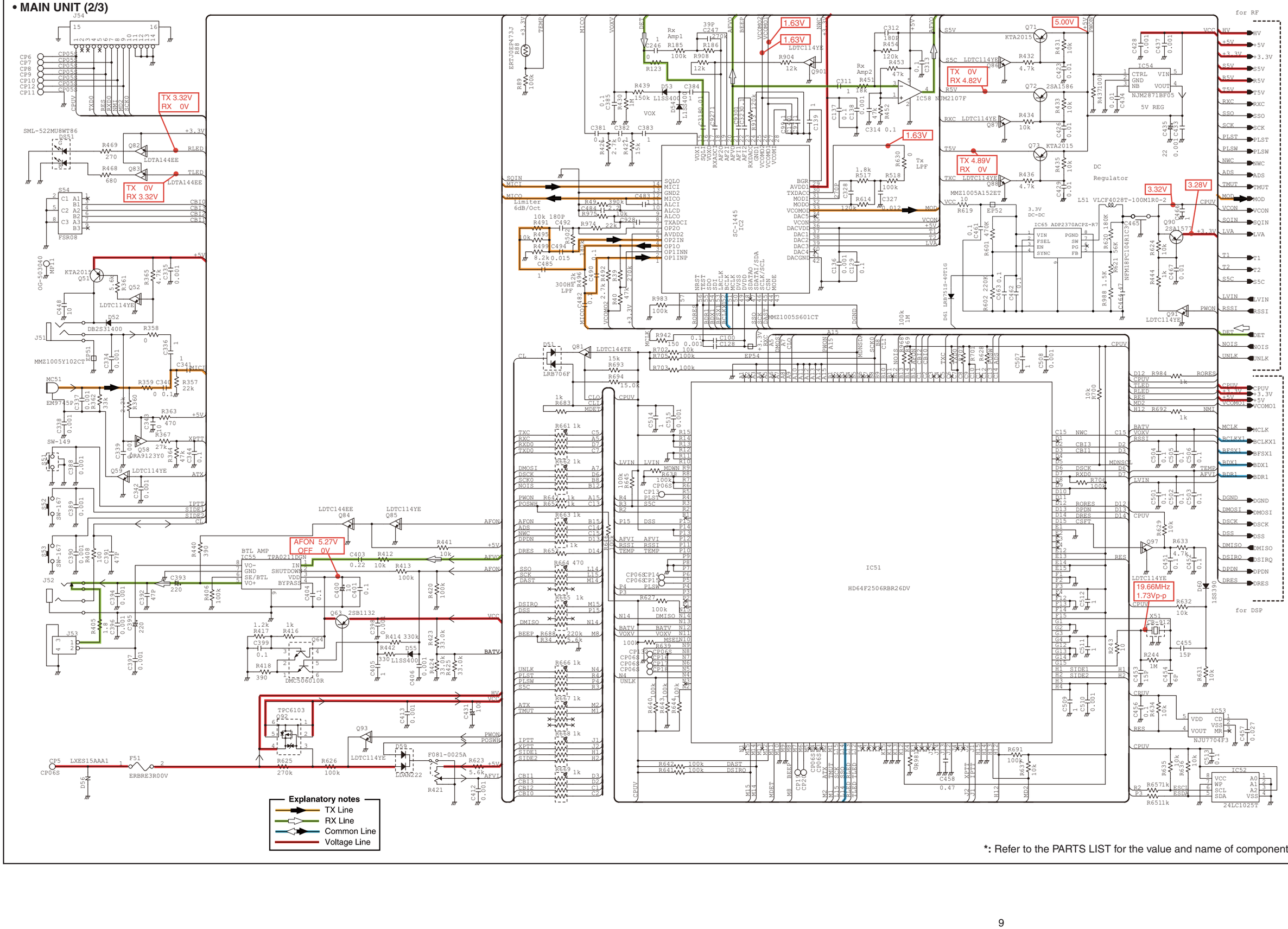
VOLTAGE DIAGRAM

• MAIN UNIT (1/3)



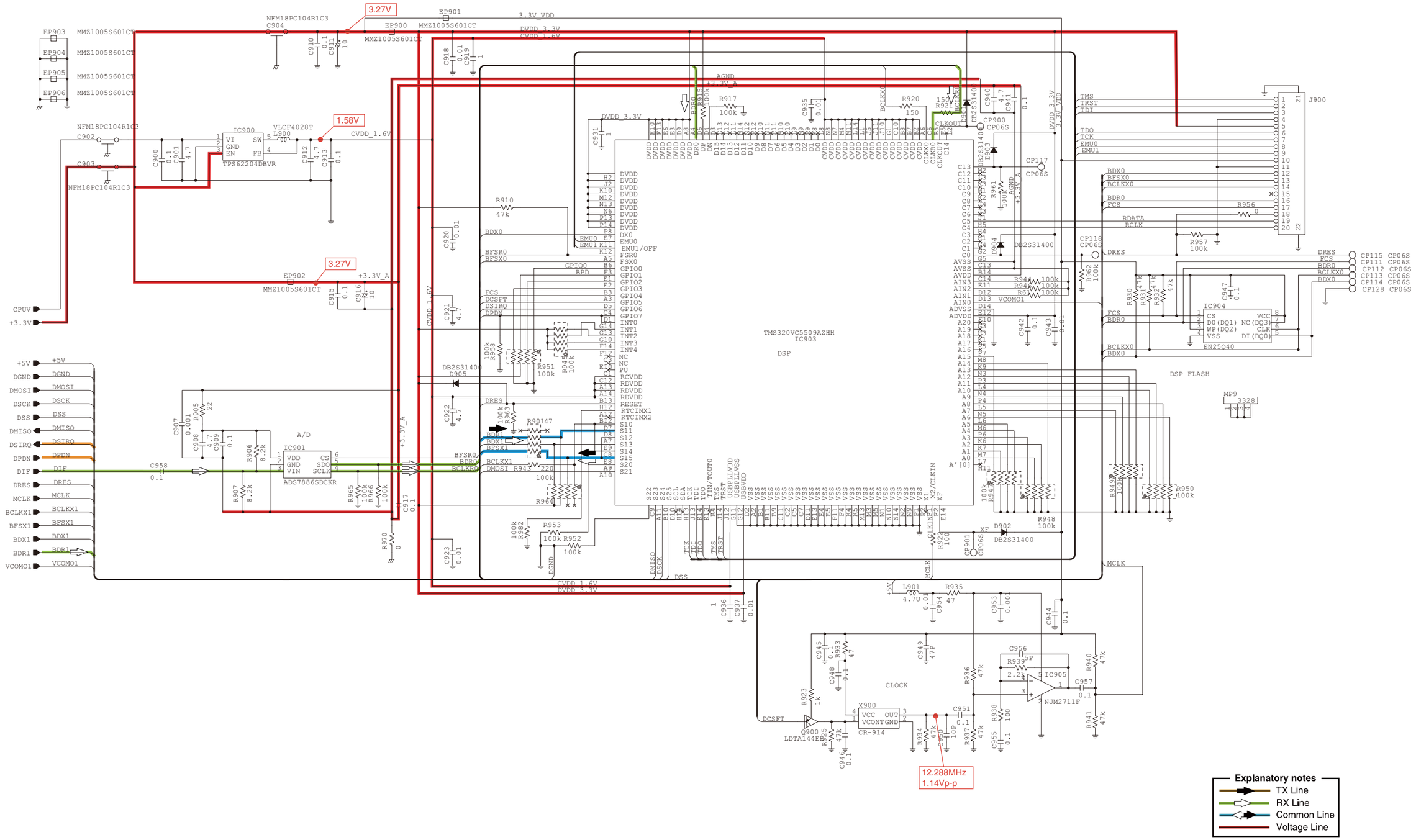
***:** Refer to the PARTS LIST for the value and name of component.

• MAIN UNIT (2/3)



***:** Refer to the PARTS LIST for the value and name of component.

• MAIN UNIT (3/3)



*: Refer to the PARTS LIST for the value and name of component.

ICOM

SERVICE MANUAL

VHF DIGITAL TRANSCEIVERS

IC-F3230DT
IC-F3230DS

S-15013XZ-C1
December 2013

Icom Inc.

INTRODUCTION

This service manual describes the latest technical information for the **IC-F3230DT/IC-F3230DS** VHF DIGITAL TRANSCEIVERS, at the time of publication.

MODEL	VERSION No.	VERSION	CHANNEL SPACING (kHz)	KEY TYPE
IC-F3230DT	#01	EXP-01	6.25/12.5/25	10-key
	#02	EXP-02		
	#03	CHN-01		
IC-F3230DS	#11	EXP-01		4-key
	#12	EXP-02		
	#13	USA-01	6.25/12.5	

To upgrade quality, any electrical or mechanical parts and internal circuits are subject to change without notice or obligation.

(IC-F3230DS)

CAUTION

NEVER connect the transceiver to an AC outlet or to a DC power supply that uses more than the specified voltage. This will ruin the transceiver.

DO NOT reverse the polarities of the power supply when connecting the transceiver.

DO NOT apply an RF signal of more than 20 dBm (100 mW) to the antenna connector. This could damage the transceiver's front-end.

ORDERING PARTS

Be sure to include the following four points when ordering replacement parts:

1. 10-digit Icom part number
2. Component name
3. Equipment model name and unit name
4. Quantity required

<ORDER EXAMPLE>

1110003491	S.IC	TA31136FNG	IC-F3230DT	MAIN UNIT	5 pieces
8820001210	Screw	2438 screw	IC-F3230DS	Top cover	10 pieces

Addresses are provided on the inside back cover for your convenience.

REPAIR NOTES

1. Make sure that the problem is internal before dis-assembling the transceiver.
2. **DO NOT** open the transceiver until the transceiver is disconnected from its power source.
3. **DO NOT** force any of the variable components. Turn them slowly and smoothly.
4. **DO NOT** short any circuits or electronic parts. An insulated tuning tool MUST be used for all adjustments.
5. **DO NOT** keep power ON for a long time when the transceiver is defective.
6. **DO NOT** transmit power into a Standard Signal Generator or a Sweep Generator, otherwise the RF power may damage them.
7. **ALWAYS** connect a 30 dB to 40 dB attenuator between the transceiver and a Deviation Meter or Spectrum Analyzer, when using such test equipment.
8. **READ** the instructions of the test equipment thoroughly before connecting it to the transceiver.

TABLE OF CONTENTS

SECTION 1 SPECIFICATIONS

■ GENERAL

Frequency range	136–174 MHz	
Number of conventional channels	128 (8 Zone)	
Type of emission	Wide*	16K0F3E (25.0 kHz)
	Narrow	11K0F3E (15.0 kHz) 8K50F3E (12.5 kHz)
	Digital	4K00F1E, D (6.25 kHz)
Antenna impedance	50 Ω (nominal)	
Operating temperature range	–30˚C to +60˚C (–22˚F to +140˚F)	
Power supply voltage	Specified Icom's battery packs only (7.5 V DC: negative ground)	
Current drain (approximately)	Receiving	100 mA (stand-by) 400 mA (maximum audio, with internal speaker)
	Transmitting	1.3 A (at 5 W)
Dimensions (with BP-265)	53.0(W)×120(H)×37(D) mm: 2.1(W) × 4.7(H) × 1.5(D) in	
Weight (approximately)	310 g: 10.9 oz (including BP-232WP)	

* : For all models except [USA].

■ TRANSMITTER

Output power	5 W	
Modulation	Variable reactance frequency modulation	
Maximum frequency deviation	Narrow	±2.5 kHz
	Wide*	±5.0 kHz
Frequency error	±1.0 ppm	
Spurious emissions	70 dB minimum, 75 dB typical	
Adjacent channel power	Narrow	60 dB minimum, 70 dB typical
	Wide*	70 dB minimum, 75 dB typical
	Digital	60 dB minimum, 66 dB typical
Audio harmonic distortion (at AF 1 kHz 40% deviation)	Narrow	0.8% typical
	Wide*	0.5% typical
FSK error	5% maximum	
FM hum and Noise (without CCITT Filter)	Narrow	34 dB minimum, 46 dB typical
	Wide*	40 dB minimum, 52 dB typical
Limiting charact of modulator	60–100% of maximum deviation	
Input impedance (MIC)	2.2 kΩ	

■ RECEIVER

Sensitivity	0.23 µV typical at 12 dB SINAD –8 dBµ (EMF) typical at 5% BER	
Squelch sensitivity (at threshold)	0.20 µV typical	
Intermediate frequency	1st IF: 46.35 MHz, 2nd IF: 450 kHz	
Adjacent channel selectivity	Narrow	60 dB minimum, 71 dB typical
	Wide*	70 dB minimum, 77 dB typical
	Digital	50 dB minimum, 58 dB typical
Spurious response	70 dB minimum, 90 dB typical	
Intermodulation	Narrow Wide*	70 dB minimum, 75 dB typical
	Digital	66 dB minimum, 70 dB typical
Hum and Noise (without CCITT Filter)	Narrow	34 dB minimum, 42 dB typical
	Wide*	40 dB minimum, 48 dB typical
Audio output power	0.8 W typical at 5% distortion with 8 Ω load (internal speaker) 0.4 W typical at 5% distortion with 8 Ω (external speaker)	
Audio output impedance	8 Ω	

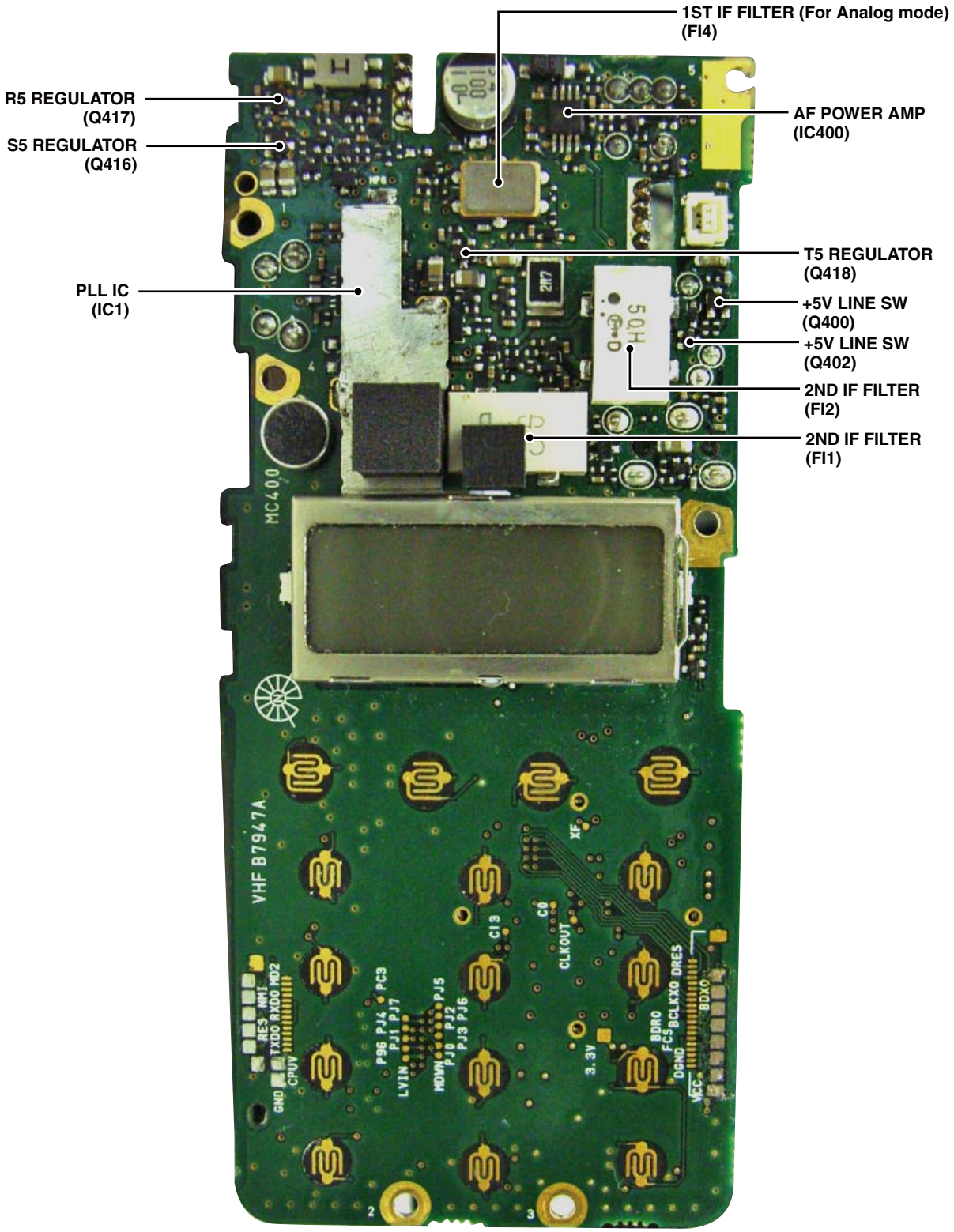
* : For all models except [USA].

Measurements made in accordance with TIA-603 and EN301 116.

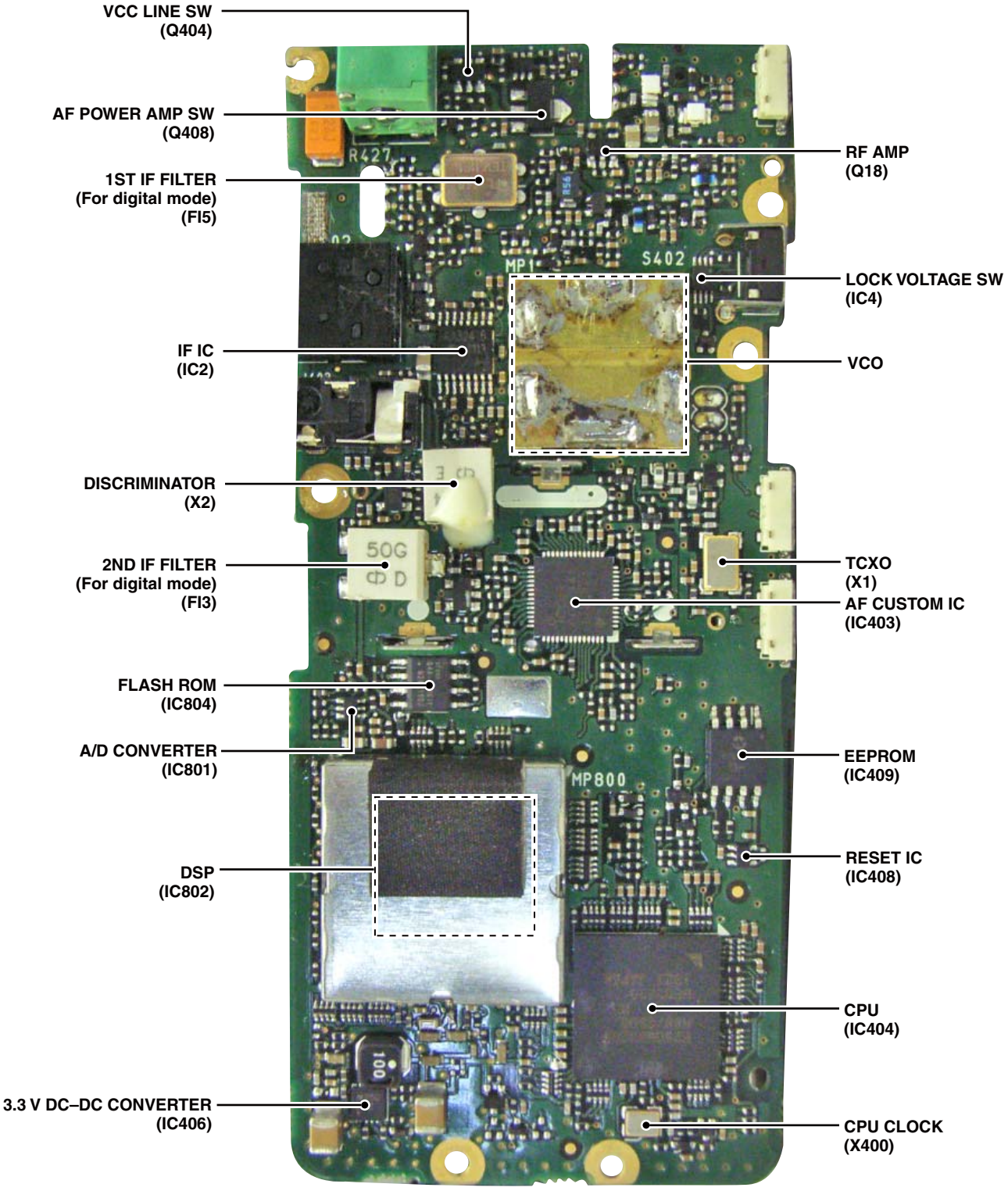
All stated specifications are subject to change without notice or obligation.

SECTION 2 INSIDE VIEWS

• MAIN UNIT (TOP VIEW)



• MAIN UNIT
(BOTTOM VIEW)

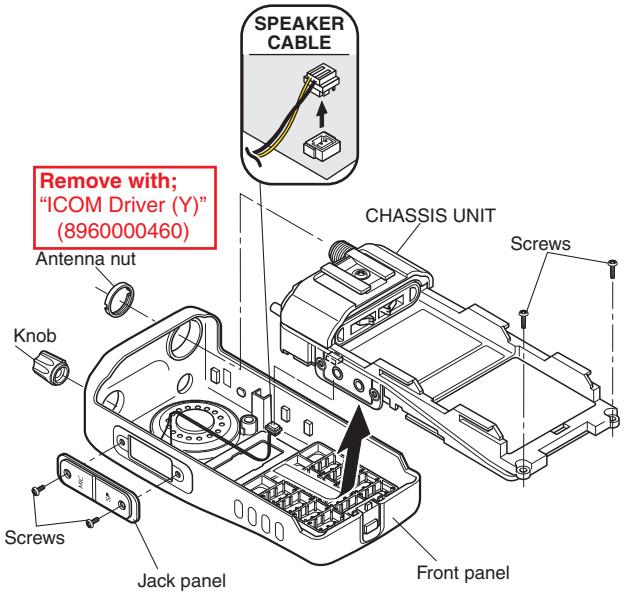


SECTION 3 DISASSEMBLY INSTRUCTION

1. REMOVING THE FRONT PAEL

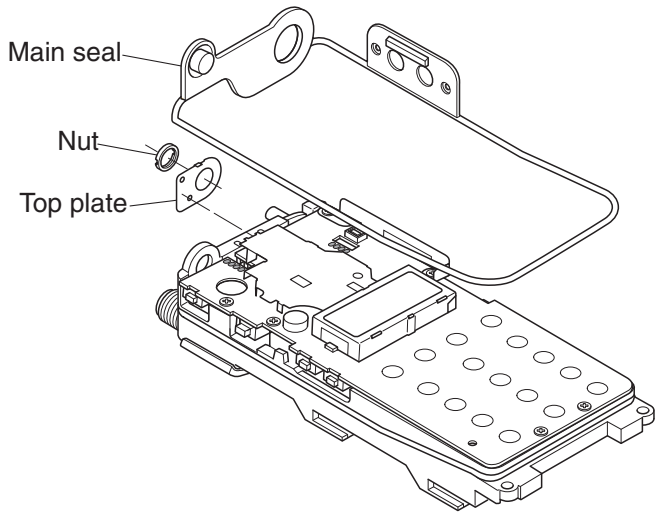
1) Remove the knob and antenna nut from the front panel.
2) Remove 2 screws from the CHASSIS.
3) Remove 2 screws and jack panel from the front panel.
4) Disconnect the speaker cable from the MAIN UNIT, and then remove the CHASSIS from the front panel.

BE CAREFUL to not damage the **speaker cable** and **connector** when separating the PCB from the front panel.

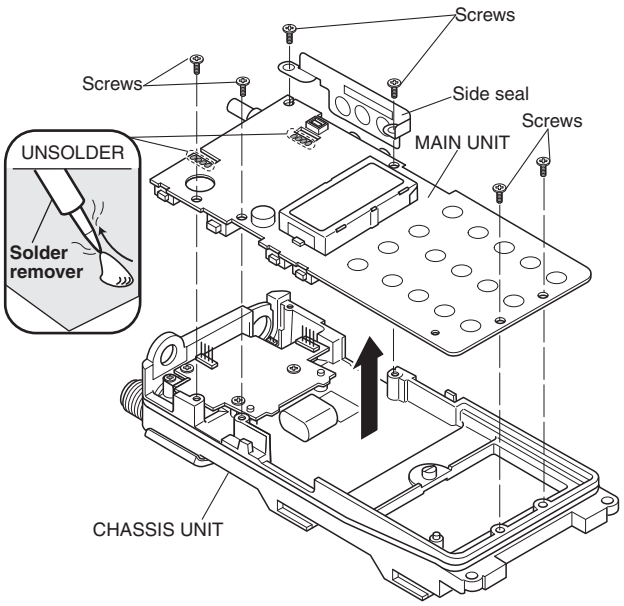


2. REMOVING THE MAIN UNIT

1) Remove the Main seal, VR nut and Top plate from the chassis.

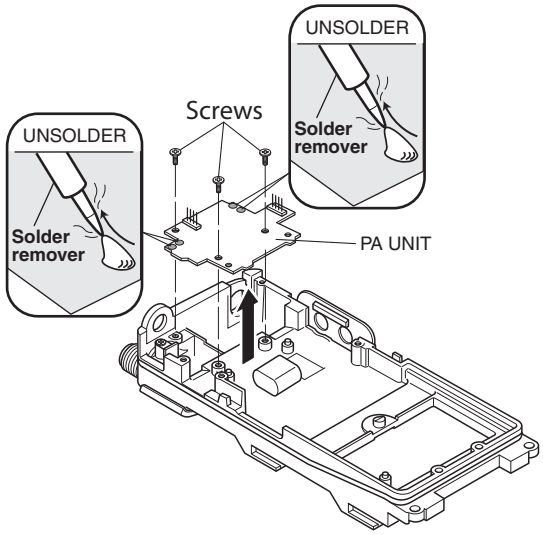


2) Remove 6 screws from the MAIN UNIT.
3) Unsolder 8 points as shown below, and then remove the MAIN UNIT from the chassis.



3. REMOVING THE PA UNIT

- Unsolder 4 points as shown below, and then remove the PA UNIT from the chassis.



(Continued on the right above.)

SECTION 4 CIRCUIT DESCRIPTION

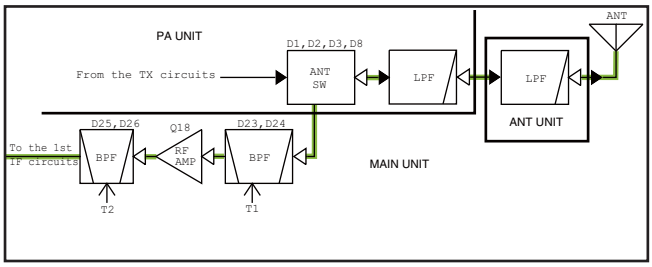
4-1 RECEIVER CIRCUITS

RF CIRCUITS (ANT, PA AND MAIN UNITS)

The RX signal from the antenna is passed through the LPF (ANT UNIT: L1, L11, C1, C3, C54 and C63), another LPF (PA UNIT: L9,C53, C56 and C71) and antenna SW (PA UNIT: D1 to D3 and D8), and then filtered by the 2-staged tuned BPF (D23 and D24) to eliminate unwanted out-of-band signals. The filtered RX signal is amplified by the RF AMP (Q18), and filtered by another 2-staged tuned BPF (D25 and D26) to obtain a good image response, and then applied to the 1st IF circuits.

The BPFs are tuned to the RX frequency by applying adequate tuning voltages: "T1" and "T2" to the variable capacitance diodes.

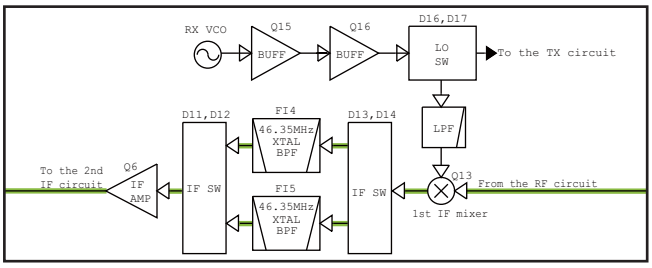
• RF CIRCUITS



1ST IF CIRCUITS (MAIN UNIT)

The RX signal from the RF circuits is applied to the 1st IF mixer (Q13) and mixed with the 1st LO signal from the RX VCO, resulting in the 46.35 MHz 1st IF signal. The 1st IF signal is passed through the IF SWs (D11–D14) and the crystal filter (FI4: analog mode, FI5: digital mode) to be filtered, amplified by the 1st IF AMP (Q6), then applied to the 2nd IF circuits.

• 1ST IF CIRCUITS



2ND IF AND DEMODULATOR CIRCUITS (MAIN UNIT)

The signal from the 1st IF circuits is applied to the IF demodulator IC (IC2) which contains the 2nd IF mixer, 2nd IF AMP, FM detector, squelch circuit and AF AMP in its package.

The 1st IF signal is applied to the 2nd IF mixer and mixed with the 2nd LO signal resulting in the 450 kHz 2nd IF signal.

The 2nd LO signal is generated by tripling the 15.3 MHz reference frequency signal, which is generated by the reference frequency oscillator (TCXO: X1).

• WHILE OPERATING IN THE ANALOG MODE

The 2nd IF signal is filtered by the 2nd IF filter (FI1: wide/middle mode) or filters (FI1 and FI2: narrow/digital mode) to eliminate unwanted signals. It is amplified by the 2nd IF AMP, and then demodulated by the detector circuit, which employs the discriminator (X2) as the phase shifter.

The demodulated AF signal is applied to the custom audio IC (IC403), and amplified by the AF AMP, and then applied to the linear codec, through the filter SW (Q412). The filter SW toggles the frequency response of the AF filter (R500 and R551), according to the type of reception: Wide, Mid or Narrow.

The AF signal is converted into a digital audio signal by the linear codec, processed by the DSP (IC802), and then decoded into an analog audio signal.

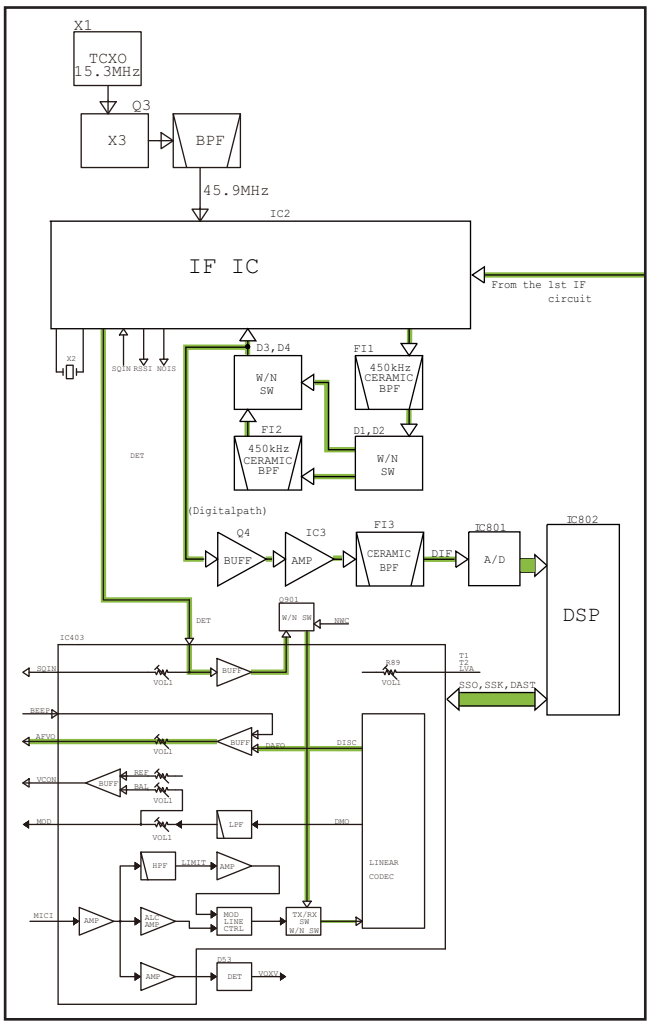
• WHILE OPERATING IN THE DIGITAL MODE

The 2nd IF signal is filtered by the 2nd IF filters (FI1 and FI2) to eliminate unwanted signals and applied to the IF AMP (IC3) through the buffer (Q4). The amplified 2nd IF signal is passed through the ceramic filter (FI3), and then applied to the DSP (IC802), through the A/D converter (IC801).

The 2nd IF signal is demodulated by the DSP (IC802), and then applied to the linear codec (IC403) to be decoded into an analog audio signal.

The AF signal is applied to the RX AF circuits.

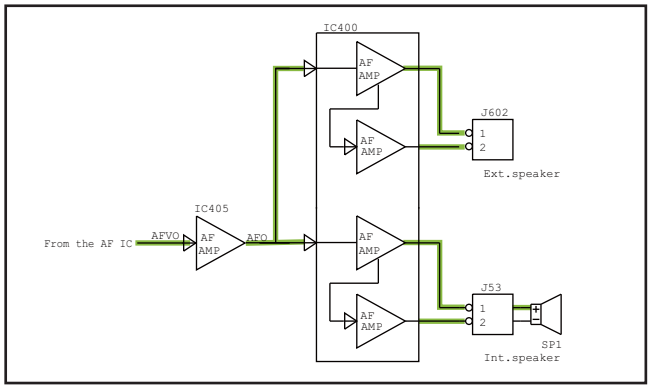
• 2ND IF AND DEMODULATOR CIRCUITS



RX AF CIRCUITS (MAIN UNIT)

The demodulated AF signal from the linear codec is passed through the LPF, and then adjusted in level by the D/A converter. The level-adjusted AF signal is output from the AF custom IC (IC403, pin 21), and amplified by AF AMP (IC405). The amplified AF signal is power amplified by the AF power AMP (IC401), and then applied to the internal or external speaker.

• RX AF CIRCUITS



4-2 TRANSMITTER CIRCUITS

TX AF CIRCUITS (MAIN UNIT)

The audio signal from the internal or external microphone (MIC signal) is applied to the custom audio IC (IC403).

• WHILE OPERATING IN THE ANALOG MODE

The amplified MIC signal is passed through the HPF, which attenuates frequencies 300 Hz and below, and then applied to the limiter AMP. The amplitude-limited MIC signal is applied to the linear codec, through the MIC line SW.

The MIC signal is converted into a digital audio signal by the linear codec, processed by the DSP (IC802), and then converted into an analog baseband signal (modulation signal).

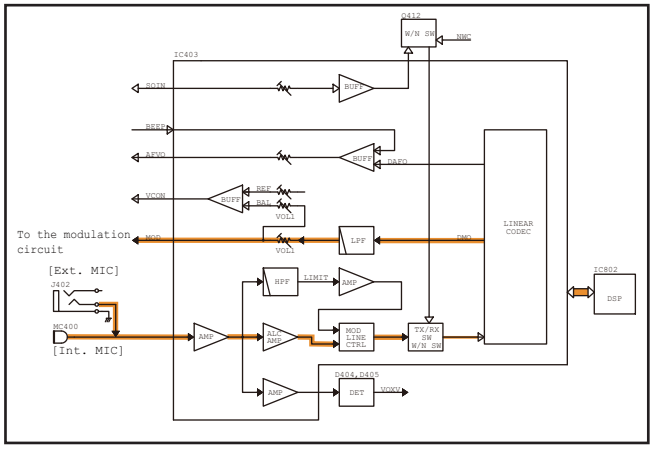
• WHILE OPERATING IN THE DIGITAL MODE

The amplified MIC signal is applied to the ALC, which keeps the signal level fixed.

The MIC signal is converted into a digital audio signal by the linear codec (IC403), processed by the DSP (IC802), and then converted into the digital baseband signal (modulation signal).

The signal from the linear codec (IC403) is passed through the LPF and the D/A converter, which adjusts its level (=deviation). The level-adjusted modulation signal is output from the AF custom IC (IC403), and then applied to the modulation circuit.

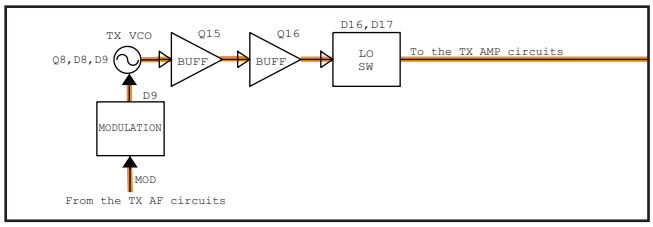
• TX AF CIRCUITS



MODULATION CIRCUIT (MAIN UNIT)

The modulation signal from the TX AF circuits is applied to D9 of the TX VCO (Q8, D8 and D9) to modulate it (FM for the analog mode, 4FSK for the digital mode). The modulated signal from the TX VCO is buffer-amplified by two buffers (Q15 and Q16) and applied to the TX AMP circuits, through the LO SW(D17).

• MODULATION CIRCUIT



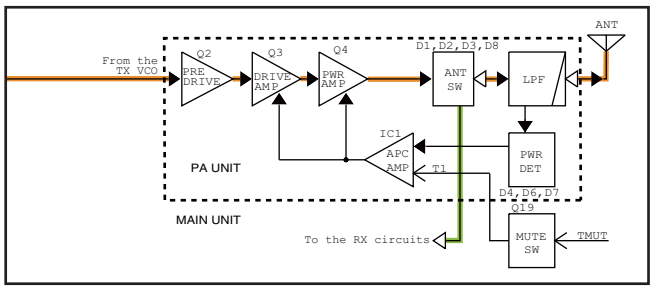
TX AMPLIFIERS (PA AND MAIN UNITS)

The buffer amplified signal from the LO SW (MAIN UNIT: D17) is sequentially amplified by the pre-drive AMP (PA UNIT: Q2), drive AMP (PA UNIT: Q3), and power AMP (PA UNIT: Q4), to obtain TX power. The amplified TX signal is passed through the antenna SW (PA UNIT: D1 to D3, D8) and the LPF, which eliminates harmonics, and then fed to the antenna, through the LPF UNIT.

APC CIRCUITS (ANT, PA AND MAIN UNITS)

D4, D6 and D7 rectify a portion of the TX signal to direct current, and the APC AMP (PA UNIT: IC1) compares the voltage and the TX power control reference voltage, "T1." The resulting voltage controls the gain of the power and drive AMPs to keep the TX power constant.

• TX AMPLIFIERS AND APC CIRCUITS



4-3 FREQUENCY SYNTHESIZER CIRCUITS (PA AND MAIN UNITS)

The RX VCO is composed of Q7, D6, D7 and D21. The VCO output signal is buffer-amplified by two buffers (Q15 and Q16) and applied to the 1st IF mixer, through the LO SW (D16) and the LPF.

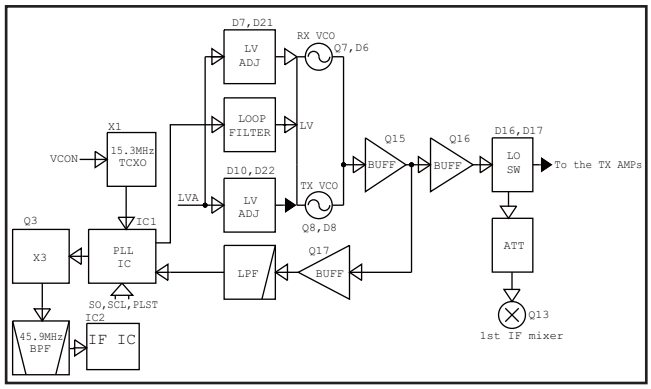
The TX VCO is composed of Q8, D8 to D10 and D22. The VCO output signal is buffer-amplified by two buffers (Q15 and Q16) and applied to the pre-driver (Q2), through the LO SW D17).

A portion of signal generated by each VCO is fed back to the PLL IC (IC1), through the buffer (Q17) and the LPF.

The applied VCO output signal is divided and phase-compared with a 15.3 MHz reference frequency signal from the TCXO (X1), which is also divided. The resulting signal is output from the PLL IC (IC1), and DC-converted by the loop filter, and then applied to the VCO as the lock voltage.

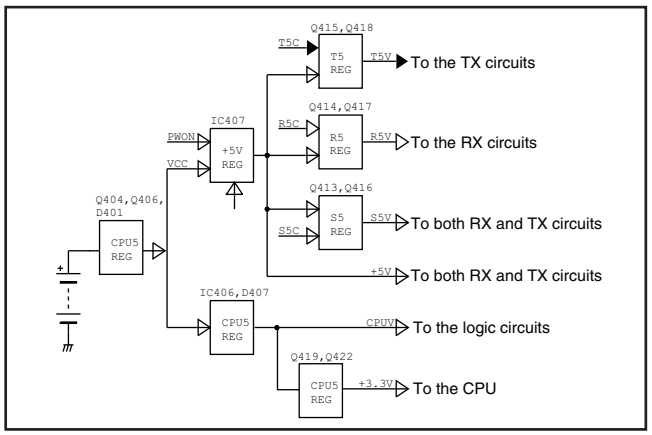
When the oscillation frequency drifts, its phase changes from that of the reference frequency, causing a lock voltage change to compensate for the drift in the VCO oscillating frequency.

• FREQUENCY SYNTHESIZER CIRCUITS



4-4 VOLTAGE DIAGRAMS

Voltage from the power supply is routed throughout the transceiver, through regulators and switches.



4-5 PORT ALLOCATION

BALL No.	LINE NAME	DESCRIPTION	I/O
A5	RXC	Power supply switching control. H= During receive or stand-by.	O
A7	DMOSI	Serial data to the DSP (IC802).	O
A15	PWON	Power supply switching control. H= The transceiver's power is ON.	O
B12	NOIS	Noise level detect. H= Squelch close	I
B15	AFON	AF power AMP control. H= AF power AMP (IC400) is activated.	O
C1, C2	CBI2, CBI0	**[ROTARY SELECTOR]** input.	I
C5	TXC	Power supply switching control. H= While transmitting.	O
C13	POSWH	Power switch. (R427)	I
C14	ADS	1st IF filters (FI4 and FI5) switching control. L= During digital mode.	O
C15	NWC	Receive mode (narrow/wide) switching. L= During narrow mode.	O
D2, D3	CBI3, CBI1	**[ROTARY SELECTOR]** input.	I
D6	DSCK	DSP (IC802) clock.	O
D13	DPDN	DSP (IC802) power control. H= DSP is inactivated	O
D14	DRES	DSP (IC802) reset. L= Reset	O
D15	CSFT	CPU clock frequency shift. H= Clock frequency is shifted.	O
E13	RES	CPU reset. L= Reset.	I
H1	SIDE1	**[UPPER]** key input. L= Pushed	I
H2	SIDE2	**[LOWER]** key input. L= Pushed	I
J1	IPTT	Internal **[PTT]** input. L= Pushed.	I
J2	XPTT	External PTT input. H= An external PTT is pushed.	I
L1, L2	MCG0, MCG1	MIC gain control.	O
L12	TLED	Busy LED (Red) control. L= LED lights (While transmitting)	O
L13	RLED	Busy LED (Green) control. L= LED lights. (While receiving a signal)	O
L14	SSO	Common serial data.	O
L15	SCK	Common clock.	O
M1	TMUT	Transmission mute. L= TX inhibit.	O
M2	ATX	Automatic TX control for VOX mode. H= While MIC audio from the connected headset is detected.	O
M8	BEEP	Beep audio. (Square waves)	O
M11	MDET	External connection detect.	I
M14	DAST	AF CUSTOM IC (IC403) strobe. H= Load enable.	O

BALL No.	LINE NAME	DESCRIPTION	I/O
N11	VOXV	Microphone input sensing voltage.	I
N12	BATV	Battery voltage sensing.	I
N14	DMISO	DSP (IC802) serial data.	O
P3	ESDA	EEPROM (IC409) serial data.	I/O
P4	PLSW	PLL lock up time control. L= Fast lock up	O
P10	TEMP	Temperature sensing voltage.	I
P11	RSSI	RSSI sensing voltage.	I
P12	AFVI	**[VOLUME CONTROL]** input.	I
P15	DSS	DSP (IC802) chip select.	O
R3	S5C	Power supply line "S5C" switching control. H= Supplying current to the TX/RX common circuits.	O
R4	PLST	PLL strobe.	O
R9	MDWN	Man down detect. L= While the transceiver is horizontal.	I
R10	LVIN	Lock voltage input.	I

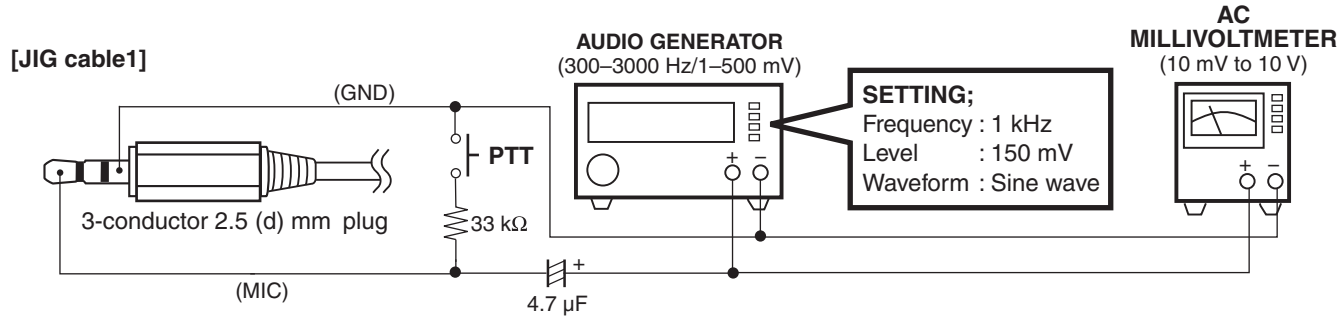
SECTION 5 ADJUSTMENT PROCEDURE

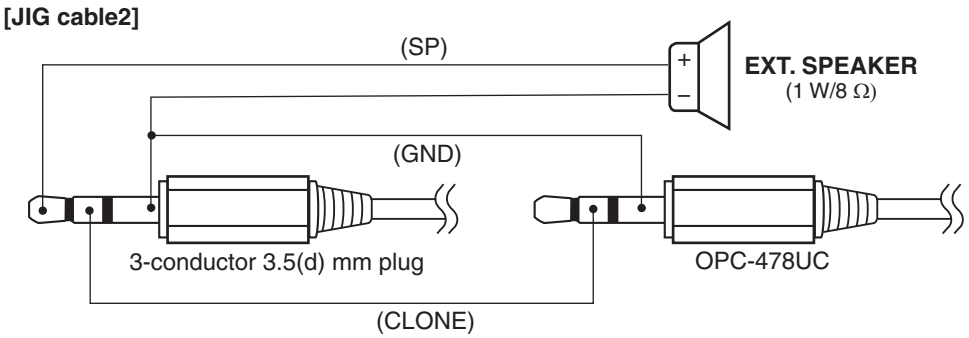
5-1 PREPARATION

■ REQUIRED EQUIPMENTS

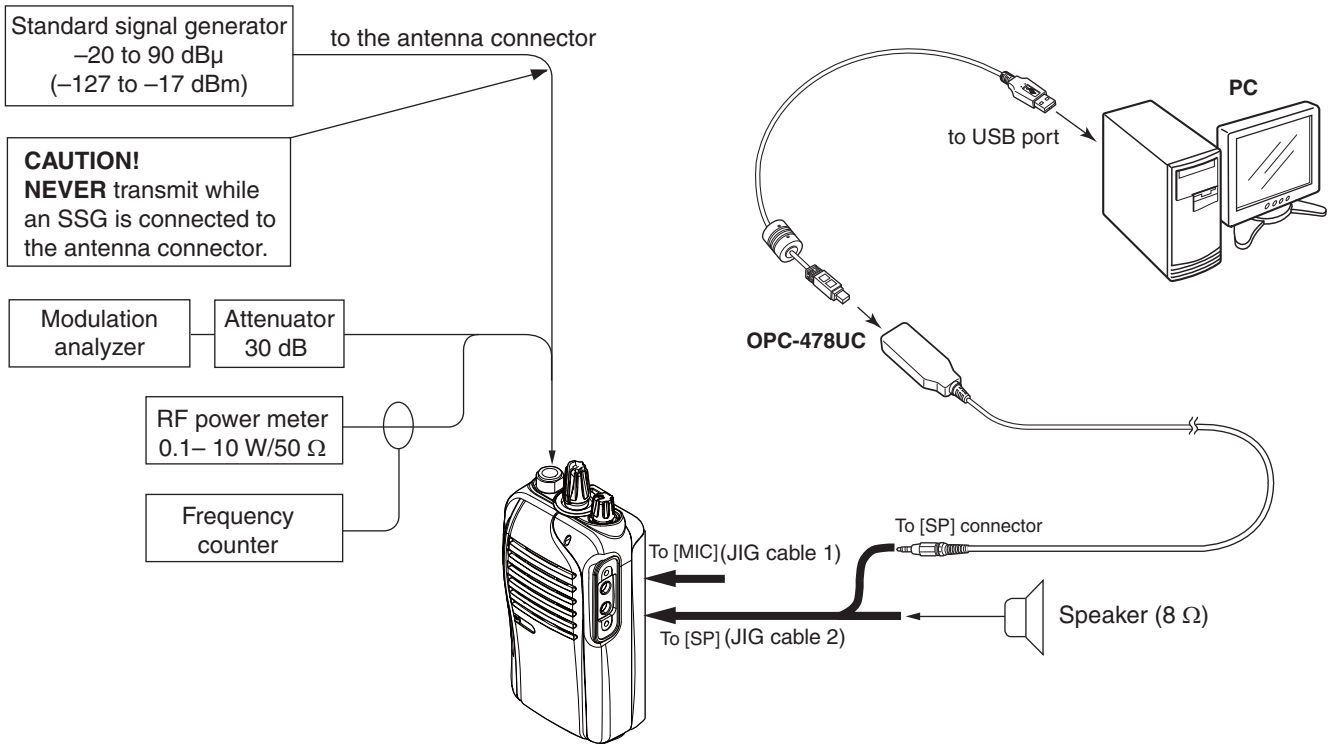
EQUIPMENT	GRADE AND RANGE	EQUIPMENT	GRADE AND RANGE
Cloning software	CS-F3230D CLONING SOFTWARE (Revision 1.0 or later)	JIG cable	Modified OPC-478UC (See the illustration below)
RF power meter (50 Ω terminated)	Measuring range : 0.1–10 W Frequency range : 100–300 MHz SWR : Less than 1.2 : 1	Frequency counter	Frequency range : 0.1–300 MHz Frequency accuracy : ±1 ppm or better Input level : Less than 1 mW
Modulation Analyzer	Frequency range : 30–300 MHz Measuring range : 0 to ±10 kHz	Standard signal generator (SSG)	Frequency range : 0.1–300 MHz Output level : –20 dBμ to 90 dBμ (–127 to –17 dBm)
AC millivoltmeter	Measuring range : 10 mV to 10 V		
Oscilloscope	Frequency range : DC–20 MHz Measuring range : 0.01–20 V	Attenuator	Power attenuation : 30 dB Capacity : More than 10 W
Audio generator (AG)	Frequency range : 300–3000 Hz Output level : 1–500 mV	External speaker	Input impedance : 8 Ω Capacity : More than 1 W

■ JIG CABLE





■ CONNECTION



■ ADJUSTMENT CHANNELS

IC-F3230DT_IC-F3230DS.icf - CS-F3210D/F3230D/F5220D

File View COM Port Clone Adjust Help

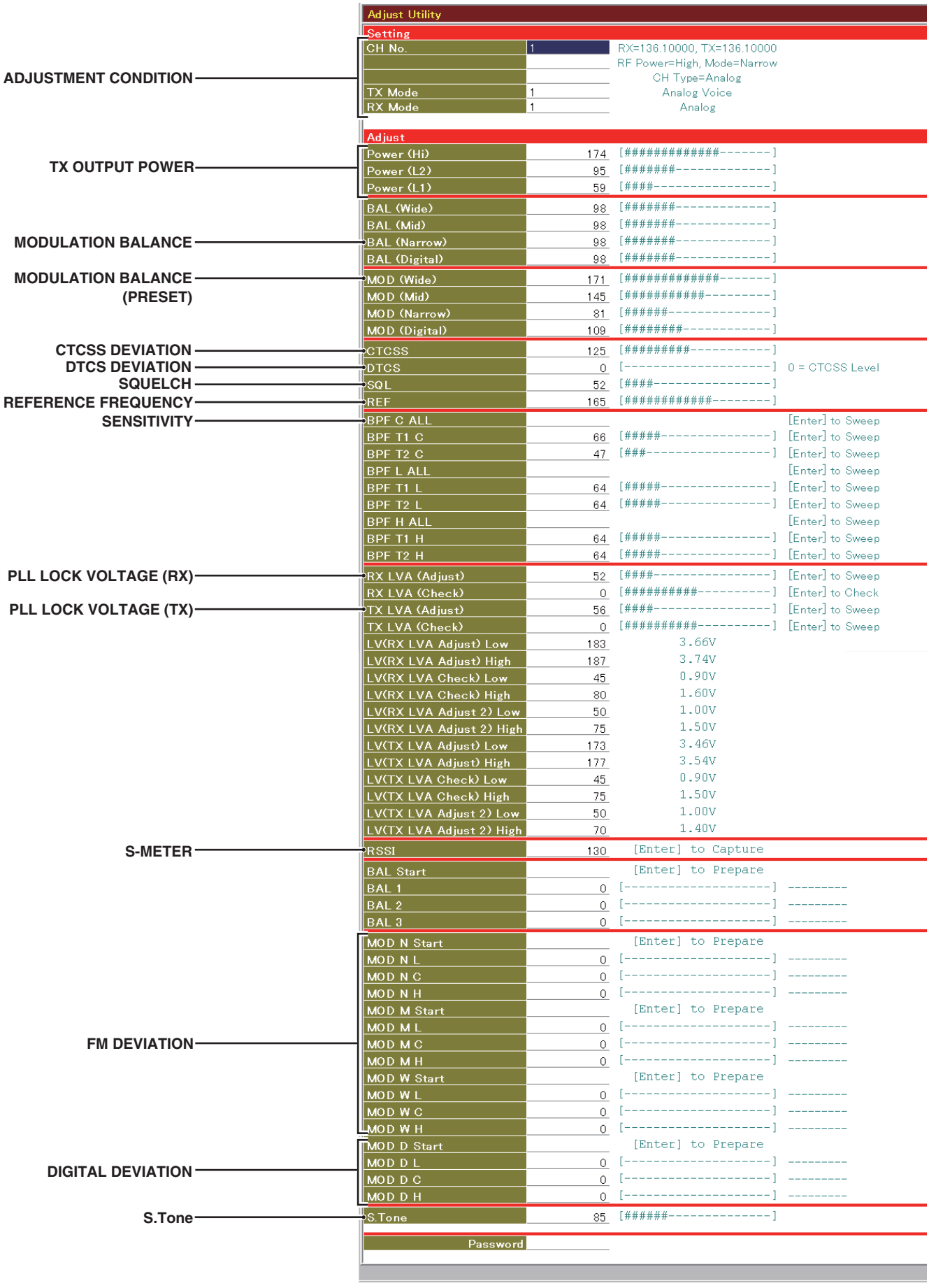
LMR
- Memory CH
  - Zone Operation
  - 1:
  - 2:
  - 3:
  - 4:
  - 5:
  - 6:
  - 7:
  - 8:
- Digital
- Continuous Tone
- SCAN
- Emergency
- GPS
- External I/O
- Channel Group
- Common

Zone 1: (Left CH – 103)

	Frequency (MHz)						C.Tone							Digital	
CH	RX	TX	TX Inh	Beat Cancel	W/N	SQL Tight	RX	TX	Text	TOT	RF PWR	PWR Save	CH Type	Auto Reset	RX RAN
1– 1	174.000000	<–		OFF	N				RX LVA		L1		Analog	Tim-B	1
1– 2	136.000000	<–		OFF	N				TX LVA		L1		Analog	Tim-B	1
1– 3	155.000000	<–		OFF	N				PowEr H1		H		Analog	Tim-B	1
1– 4	155.000000	<–		OFF	N				PowEr L2		L2		Analog	Tim-B	1
1– 5	155.000000	<–		OFF	W				PowEr L1		L1		Analog	Tim-B	1
1– 6	136.000000	<–		OFF	W				BAL 1		L1		Analog	Tim-B	1
1– 7	155.000000	<–		OFF	W				BAL 2		L1		Analog	Tim-B	1
1– 8	174.000000	<–		OFF	N				BAL 3		L1		Analog	Tim-B	1
1– 9	136.000000	<–		OFF	N				MOD N L		L1		Analog	Tim-B	1
1– 10	155.000000	<–		OFF	N				MOD N C		L1		Analog	Tim-B	1
1– 11	174.000000	<–		OFF	N				MOD N H		L1		Analog	Tim-B	1
1– 12	136.000000	<–		OFF	N				MOD W L		L1		Analog	Tim-B	1
1– 13	155.000000	<–		OFF	N				MOD W C		L1		Analog	Tim-B	1
1– 14	174.000000	<–		OFF	N				MOD W H		L1		Analog	Tim-B	1
1– 15	136.000000	<–		OFF	N				MOD D L		L1		Digital	Tim-B	1
1– 16	155.000000	<–		OFF	N				MOD D C		L1		Digital	Tim-B	1
1– 17	174.000000	<–		OFF	N				MOD D H		L1		Digital	Tim-B	1
1– 18	174.000000	<–		OFF	N				REF		L1		Analog	Tim-B	1
1– 19	155.000000	<–		OFF	N		151.4	<–	CTCSS		L1		Analog	Tim-B	1
1– 20	155.000000	<–		OFF	N		007N	<–	DTCSS		L1		Analog	Tim-B	1
1– 21	155.000000	<–		OFF	N				S.TonE		L1		Analog	Tim-B	1
1– 22	136.000000	<–		OFF	N				BPF C AL		L1		Analog	Tim-B	1
1– 23	136.000000	<–		OFF	N				RSSI S3		L1		Analog	Tim-B	1
1– 24	136.000000	<–		OFF	N				RSSI S1		L1		Analog	Tim-B	1
1– 25	136.000000	<–		OFF	N				SQL		L1		Analog	Tim-B	1

CONVENIENT: The same cloning file is available.
Right-click below, and select "Save Embeded File to Disk."

■ ADJUSTMENT UTILITY

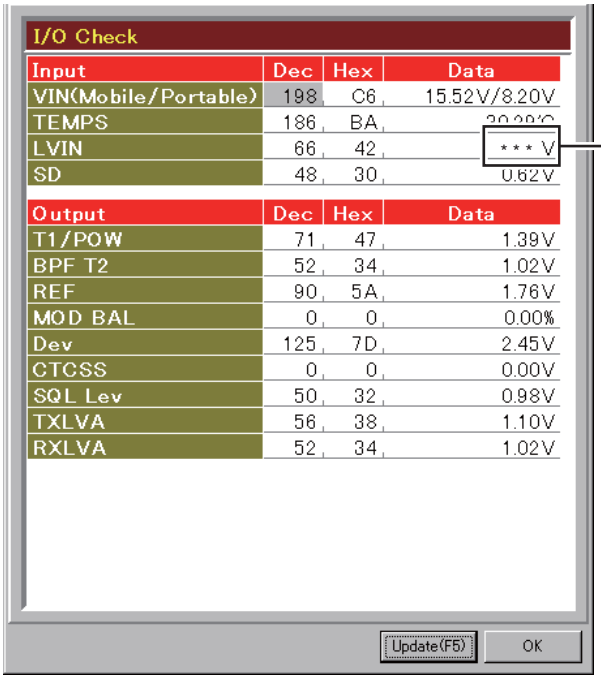


5-2 FREQUENCY ADJUSTMENTS

1) Select an adjustment item using [↑]/[↓] on the PC's keyboard.
2) Set or modify the adjustment value as specified using [←]/[→] on the PC's keyboard, then push [ENTER].

ADJUSTMENT		TRANSCEIVER'S CONDITION	OPERATION	ADJUSTMENT ITEM	VALUE
PLL LOCK VOLTAGE (RX)	1	• Channel : 1-1 • Receiving	1) Connect an RF power meter to the antenna connector. 2) Set the preset adjustment value on the adjustment utility window.	**[RX LVA(Adjust)]**	4.0V
(TX)	2	• Channel : 1-1 • Transmitting		**[TX LVA(Adjust)]**	3.9 V
(RX)	3	• Channel : 1-2 • Receiving	• Click the [Update (F5)] button to check on the "I/O Check window" as below.	**[LVIN]** (On the "I/O Check window")	0.7–1.5 V (Verify)
(TX)	4	• Channel : 1-2 • Transmitting			
REFERENCE FREQUENCY	1	• Channel : 1-1 • Transmitting	• Loosely couple a frequency counter to the antenna connector.	**[REF]**	174.000000 MHz (±50 Hz)

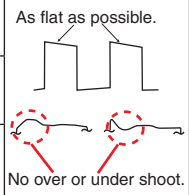
■ CONNECTION



(The values shown above are an example only. Each transceiver has own values.)

5-3 TRANSMIT ADJUSTMENTS

1) Select an adjustment item using [↑]/[↓] on the PC's keyboard.
2) Set or modify the adjustment value as specified using [←]/[→] on the PC's keyboard, then push [ENTER].

ADJUSTMENT		TRANSCEIVER'S CONDITION	OPERATION	ADJUSTMENT ITEM	VALUE
TX OUTPUT POWER (High power)	1	• Channel : 1-3 • Transmitting	• Connect an RF power meter to the antenna connector.	**[Power (Hi)]**	5.0 W
(L2 power)	2	• Channel : 1-4 • Transmitting		**[Power (L2)]**	2.0 W
(L1 power)	3	• Channel : 1-5 • Transmitting		**[Power (L1)]**	1.0 W
MODULATION BALANCE -Band low-	1	1) Set the preset value on the "ADJUSTMENT UTILITY" screen. 2) Push [ENTER] on the PC's keyboard to enter the modulation balance adjustment mode.		**MOD (Narrow)** **TX mode** **[BAL Start]**	90 2 –
	2	• Channel : 1-6 • Transmitting	• Connect a modulation analyzer with an oscilloscope to the antenna connector through an attenuator, and set it as; HPF : OFF LPF : 15 kHz De-emphasis : OFF Detector : (P–P)/2	**[BAL 1]**	
-Band center-	3	• Channel : 1-7 • Transmitting		**[BAL 2]**	
-Band high-	4	• Channel : 1-8 • Transmitting		**[BAL 3]**	
	5	• Push [ENTER] on the PC's keyboard, to store the value and quit the modulation balance adjustment mode.		**[BAL Start]**	–
FM DEVIATION (Narrow mode) -Band low-	1	• Push [ENTER] on the PC's keyboard, to enter the FM deviation (For narrow mode) adjustment mode.		**[MOD N Start]**	–
	2	• Channel : 1-9 • Transmitting	• Connect a modulation analyzer to the antenna connector, through an attenuator, and set it as described in the "MODULATION BALANCE" above. • Connect as audio generator to the [MIC] jack, and set it as; Frequency : 1 kHz (Sine wave) Level : 150 mVrms	**[MOD N L]**	±2.15 ±0.05 kHz
-Band center-	3	• Channel : 1-10 • Transmitting		**[MOD N C]**	
-Band high-	4	• Channel : 1-11 • Transmitting		**[MOD N H]**	
	5	• Push [ENTER] on the PC's keyboard, to store the value and quit the FM deviation (For narrow mode) adjustment mode.		**[MOD N Start]**	–
(Wide mode)† -Band low-	6	• Push [ENTER] on the PC's keyboard, to enter the FM deviation (For wide mode) adjustment mode.		**[MOD W Start]**	–
	7	• Channel : 1-12 • Transmitting	• Connect a modulation analyzer to the antenna connector, through an attenuator, and set it as described in the "MODULATION BALANCE" above. • Connect as audio generator to the [MIC] jack, and set it as; Frequency : 1 kHz (Sine wave) Level : 150 mVrms	**[MOD W L]**	±4.25 ±0.05 kHz
-Band center-	8	• Channel : 1-13 • Transmitting		**[MOD W C]**	
-Band high-	9	• Channel : 1-14 • Transmitting		**[MOD W H]**	
	10	• Push [ENTER] on the PC's keyboard, to store the value and quit the FM deviation (For wide mode) adjustment mode.		**[MOD W Start]**	–

†; For all models except [USA].

5-3 TRANSMIT ADJUSTMENTS (continued)

1) Select an adjustment item using [↑]/[↓] on the PC's keyboard.
2) Set or modify the adjustment value as specified using [←]/[→] on the PC's keyboard, then push [ENTER].

ADJUSTMENT		TRANSCEIVER'S CONDITION	OPERATION	ADJUSTMENT ITEM	VALUE
DIGITAL DEVIATION (Narrow)	1	• Set the preset value on the "ADJUSTMENT UTILITY" screen.		**TX Mode**	16
	2	• Channel : 1-15 • Transmitting	• Push [ENTER] on the PC's keyboard, to enter the digital deviation adjustment mode.	**[MOD D Start]**	–
	3		• Connect a modulation analyzer to the antenna connector through an attenuator, and set it as the "MODULATION BALANCE." • Connect as audio generator to the MIC jack, and set it as; Frequency : 1 kHz Waveform : Sine wave Level : 150 mVrms	**[MOD D L]**	±1.38 ±0.02 kHz
(Band center)	3	• Channel : 1-16 • Transmitting		**[MOD D C]**	
(Band high)	4	• Channel : 1-17 • Transmitting		**[MOD D H]**	
	5		• Push [ENTER] on the PC's keyboard, to store the value and quit the digital deviation adjustment mode.	**[MOD D Start]**	–
DIGITAL REFERENCE FREQUENCY	1	• Channel : 1-18 • Transmitting	1) Loosely couple a frequency counter to the antenna connector. 2) Set the TX mode to "10" on the "ADJUSTMENT UTILITY" screen. 3) Push [ENTER] on the PC's keyboard, to enter the digital reference frequency adjustment mode.	**[REF]**	174.000000 MHz (±50 Hz)
CTCSS DEVIATION	1	• Channel : 1-19 • Transmitting	1) Set the TX Mode to "3" on the "Adjust Utility" screen. 2) Connect a modulation analyzer to the antenna connector through an attenuator, and set it as described in the "DIGITAL DEVIATION" above.	**[CTCSS]**	±0.35 ±0.05 kHz
DTCS DEVIATION	1	• Channel : 1-20 • Transmitting	1) Set the TX Mode to "4" on the "Adjust Utility" screen. 2) Connect a modulation analyzer to the antenna connector through an attenuator, and set it as described in the "DIGITAL DEVIATION" above.	**[DTCS]**	
DTMF DEVIATION	1	• Channel : 1-21 • Transmitting	1) Set the TX Mode to "5" on the "Adjust Utility" screen. 2) Connect a modulation analyzer to the antenna connector through an attenuator, and set it as described in the "DIGITAL DEVIATION" above.	**[S.Tone]**	±1.50 ±0.05 kHz

5-4 RECEIVE ADJUSTMENTS

1) Select an adjustment item using [↑]/[↓] on the PC's keyboard.
2) Set or modify the adjustment value as specified using [←]/[→] on the PC's keyboard, then push [ENTER].

ADJUSTMENT		TRANSCEIVER'S CONDITION	OPERATION	ADJUSTMENT ITEM	VALUE
SENSITIVITY	**NOTE:** "RECEIVE SENSITIVITY" must be adjusted before "S-METER." Otherwise, "S-METER" will not be adjusted properly. When "RECEIVE SENSITIVITY" is re-adjusted, "S-METER" must be also re-adjusted.				
	1	• Channel : 1-21 • Receiving	• Connect an SSG to the antenna connector and set it as; Frequency : 136 MHz Level† : +20 dBμ (–87 dBm) Modulation : 1 kHz Deviation : ±1.5 kHz	**[BPF C ALL]**	Push [ENTER] (Automatic adjustment)
S-METER	1	• Channel : 1-22 • Receiving	• Connect an SSG to the antenna connector and set it as; Frequency : 136 MHz Level† : +23 dBμ (–84 dBm) Modulation : 1 kHz Deviation : ±1.5 kHz	**[RSSI S3 Level]**	Push [ENTER] (Automatic adjustment)
	2	• Channel : 1-23 • Receiving	• Set the SSG as; Level† : –7 dBμ (–114 dBm)	**[RSSI S1 Level]**	
SQUELCH	1	• Channel : 1-24 • Receiving	1) Connect an SSG to the antenna connector and set it as; Frequency : 136 MHz Level† : –14 dBμ (–121 dBm) Modulation : 1 kHz Deviation : ±1.5 k Hz 2) Once close the squelch by increasing **[SQL]** value, and then decrease the value to open the squelch.	**[SQL]**	Squelch opens (Push **[ENTER]** to store the value)

†; The output level of the standard signal generator (SSG) is indicated as the SSG's open circuit (emf).

SECTION 6 PARTS LIST

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
IC1	1130015271	S.IC AK1541P4-L	T	18.3/15.9
IC2	1110007720	S.IC AA32416A <SLVJ>	B	75.6/16.6
IC3	1110006230	S.IC NJM2711F-TE1-#ZZZB	B	62.7/10.3
IC4	1130011741	S.IC TC7W66FK(TE85LF)	B	82.1/38.0
IC400	1110007610	S.IC TPA0211DGNR	T	98.3/16.6
IC401	1130015530	S.IC BU9795AKV-E2	T	57.3/21.3
IC403	1110007920	S.IC SC-1445-E2	B	53.7/26.3
IC404	1140015010	S.IC HD64F2506RBR26DV(EMPTY)	B	17.1/33.0
IC405	1110002400	S.IC NJM2107F-TE1-#ZZZB	B	53.8/16.4
IC406	6910024090	S.DC ADP2370ACPZ-R7 <FE>	B	7.8/8.1
IC407	1180003600	S.REG NJM2871BF05-TE1-#ZZZB	B	94.0/29.0
IC408	1110007780	S.IC NJU7704F3-28A-TE1-#ZZZH	B	30.7/41.5
IC409	1140014160	S.IC 24LC1025T-I/SM <SEI>	B	39.5/40.8
IC800	1180003680	S.REG TPS62204DBVR	B	22.2/17.1
IC801	1190002900	S.IC ADS7886SDCKR	B	43.6/6.4
IC802	1140013290	S.IC TMS320VC5509AZHH	B	30.6/17.1
IC803	1110006230	S.IC NJM2711F-TE1-#ZZZB	B	29.6/7.6
IC804	1130015620	S.IC EN25Q40-100GIP <MSK>	B	45.9/13.5
Q1	1590004090	S.TRA LDTC114YET1G <SLVJ>	T	82.6/21.8
Q2	1560000541	S.FET 2SK880-Y(T5RICOMF)	T	60.3/31.4
Q3	1530002851	S.TRA 2SC4116-BL(TE85RF)	B	64.5/38.4
Q4	1530002851	S.TRA 2SC4116-BL(TE85RF)	T	69.5/13.0
Q5	1530002851	S.TRA 2SC4116-BL(TE85RF)	T	79.6/25.9
Q6	1530002921	S.TRA 2SC4226-T1 Y25 (R25)	B	85.2/12.5
Q7	1530002921	S.TRA 2SC4226-T1 Y25 (R25)	B	76.3/32.1
Q8	1530002921	S.TRA 2SC4226-T1 Y25 (R25)	B	75.7/24.9
Q9	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	76.5/38.2
Q10	1590004090	S.TRA LDTC114YET1G <SLVJ>	T	76.7/31.6
Q11	1590004090	S.TRA LDTC114YET1G <SLVJ>	T	76.2/28.6
Q12	1590004090	S.TRA LDTC114YET1G <SLVJ>	T	56.1/33.1
Q13	1580000731	S.FET 3SK293(TE85LF)	B	88.9/28.6
Q14	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	86.2/21.6
Q15	1530002921	S.TRA 2SC4226-T1 Y25 (R25)	B	73.7/28.5
Q16	1530002921	S.TRA 2SC4226-T1 Y25 (R25)	B	79.5/25.9
Q17	1530002921	S.TRA 2SC4226-T1 Y25 (R25)	B	79.8/31.8
Q18	1580000731	S.FET 3SK293(TE85LF)	B	93.0/38.2
Q19	1590004090	S.TRA LDTC114YET1G <SLVJ>	T	98.8/35.1
Q20	1560000841	S.FET 2SK1829(TE85RF)	T	92.7/35.8
Q21	1560001360	S.FET 2SK3019 TL	B	68.4/19.0
Q22	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	60.7/33.3
Q400	1510001090	S.TRA KTA2015Y-RTK/P	T	82.3/3.2
Q401	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	66.8/41.3
Q402	1590004090	S.TRA LDTC114YET1G <SLVJ>	T	79.0/5.8
Q403	1590004220	S.TRA DRA9123Y0L	T	67.9/6.3
Q404	1590003321	S.FET TPC6103(TE85LF)	B	101.1/16.9
Q405	1590004590	S.TRA DMC506010R	B	101.9/21.8
Q406	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	98.0/17.5
Q407	1590004070	S.TRA LDTC144EET1G <SLVJ>	T	98.5/7.7
Q408	1520000910	S.TRA 2SB1132L-R-AB3-R <SLVJ>	B	97.7/23.2
Q409	1590004090	S.TRA LDTC114YET1G <SLVJ>	T	98.1/10.8
Q410	1590004050	S.TRA LDTA144EET1G <SLVJ>	T	53.9/4.8
Q411	1590004100	S.TRA LDTC144TET1G <SLVJ>	B	33.4/36.4
Q412	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	64.2/30.9
Q413	1590004090	S.TRA LDTC114YET1G <SLVJ>	T	93.8/38.7
Q414	1590004090	S.TRA LDTC114YET1G <SLVJ>	T	96.2/37.7
Q415	1590004090	S.TRA LDTC114YET1G <SLVJ>	T	94.1/7.1
Q416	1510001090	S.TRA KTA2015Y-RTK/P	T	95.9/41.5
Q417	1510000771	S.TRA 2SA1586-GR(TE85LF)	T	99.7/41.6
Q418	1510001090	S.TRA KTA2015Y-RTK/P	T	86.4/25.3
Q419	1510000920	S.TRA 2SA1577 T106 Q	B	8.2/19.4
Q421	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	5.6/38.6
Q422	1590004090	S.TRA LDTC114YET1G <SLVJ>	B	5.5/21.5
Q423	1590004090	S.TRA LDTC114YET1G <SLVJ>	T	50.4/5.1
Q801	1590004050	S.TRA LDTA144EET1G <SLVJ>	B	21.3/10.0
D1	1750001790	S.DIO 1SS390 TE61	T	76.6/21.1
D2	1750001790	S.DIO 1SS390 TE61	T	78.1/22.8
D3	1750001790	S.DIO 1SS390 TE61	T	76.4/17.8
D4	1750001790	S.DIO 1SS390 TE61	T	78.1/17.5
D5	1750002170	S.DIO DB2S31400L	T	82.5/25.0
D6	1750001770	S.VAR 1SV323(TPH3F)	B	68.4/34.0
D7	1750001770	S.VAR 1SV323(TPH3F)	B	69.1/30.0
D8	1750001770	S.VAR 1SV323(TPH3F)	B	69.4/26.5
D9	1720000631	S.VAR 1SV285(TPH3F)	B	68.2/26.5
D10	1750001770	S.VAR 1SV323(TPH3F)	B	70.8/25.1
D11	1750001790	S.DIO 1SS390 TE61	T	87.9/17.8
D12	1750001790	S.DIO 1SS390 TE61	B	87.6/14.4
D13	1750001790	S.DIO 1SS390 TE61	T	93.7/28.3
D14	1750001790	S.DIO 1SS390 TE61	B	93.3/25.5
D16	1790001621	S.DIO 1SV308(TPL3F)	B	85.7/24.6
D17	1790001621	S.DIO 1SV308(TPL3F)	B	83.6/24.2
D18	1750001810	S.DIO L1SS400T1G <SLVJ>	T	95.5/35.6
D21	1750001770	S.VAR 1SV323(TPH3F)	B	71.4/31.5
D22	1750001770	S.VAR 1SV323(TPH3F)	B	69.9/23.2
D23	1750002860	S.VAR BBY57-02V H6327 <RYOYO>	B	100.6/37.2
D24	1750002860	S.VAR BBY57-02V H6327 <RYOYO>	B	98.9/36.6
D25	1750002860	S.VAR BBY57-02V H6327 <RYOYO>	B	88.1/36.4
D26	1750002860	S.VAR BBY57-02V H6327 <RYOYO>	B	87.8/33.4
D27	1750001820	S.DIO LRB706F-40T1G <SLVJ>	B	79.5/12.5
D400	1750002230	S.DIO LRB751S-40T1G <SLVJ>	T	81.2/5.4
D401	1750001850	S.DIO LDAN222T1G <SLVJ>	B	96.7/15.4
D402	1750001810	S.DIO L1SS400T1G <SLVJ>	B	102.0/26.5
D403	1750001820	S.DIO LRB706F-40T1G <SLVJ>	B	36.0/35.7
D404	1750001810	S.DIO L1SS400T1G <SLVJ>	B	34.5/31.5
D405	1750001810	S.DIO L1SS400T1G <SLVJ>	B	35.7/31.5

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
D406	1750001790	S.DIO 1SS390 TE61	B	4.2/36.6
D407	1750002230	S.DIO LRB751S-40T1G <SLVJ>	B	5.1/11.0
D800	1750002230	S.DIO LRB751S-40T1G <SLVJ>	B	37.5/19.1
D801	1750002230	S.DIO LRB751S-40T1G <SLVJ>	B	37.5/16.6
D803	1750002230	S.DIO LRB751S-40T1G <SLVJ>	B	42.3/10.9
FI1	2020002630	S.CER LTWC450F <JJE>	T	70.5/20.6
FI2	2020002180	S.CER CFWKA450KHFA-R0	T	79.1/10.9
FI3	2020002610	S.CER LTUCG450G <JJE>	B	56.5/10.1
FI4	2030000870	S.MON MFT46.3P3 46.350 MHz (FL-442)	T	91.8/22.2
FI5	2010002760	S.XTA MFT46.3J 46.350 MHz (FL-448)	B	91.0/17.9
X1	6050012380	S.XTA CR-826 DSA535SD 15.3 MHz	B	56.7/39.5
X2	6070000300	S.DIS JTBM450CX24 <JJE>	B	63.4/16.2
X400	6050013160	S.XTA CR-912 TSS3225A 19.6608 MHz	B	6.3/32.8
X800	6050013170	S.XTA CR-914 TTS18VSE-A11 12.288 MHz	B	22.2/7.3
L1	6200012170	S.COI MLG1608S R18J-T	T	4.2/12.3
L2	6200012170	S.COI MLG1608S R18J-T	B	24.1/3.4
L3	6200009250	S.COI LQW18ANR22G00D (LQW1608AR22G00)	T	69.8/28.0
L4	6200011860	S.COI LQW18ANR47G00D	T	69.7/31.5
L5	6200011860	S.COI LQW18ANR47G00D	T	72.4/30.5
L6	6200007700	S.COI LQW2BHN22NJ03L	B	71.2/33.8
L7	6200015040	S.COI MLG1608S R22J-T	T	71.9/27.3
L8	6200007730	S.COI LQW2BHN39NJ03L	B	72.5/23.4
L9	6200004770	S.COI ELJNC R56J-F	B	90.3/25.9
L10	6200011031	S.COI ELJRF R10JFB	B	75.6/29.0
L11	6200011031	S.COI ELJRF R10JFB	B	78.6/23.9
L12	6200007881	S.COI ELJRF 33NJFB	B	79.0/33.8
L13	6200011031	S.COI ELJRF R10JFB	B	80.7/29.8
L14	6200011031	S.COI ELJRF R10JFB	B	87.1/29.9
L15	6200010910	S.COI LQW18AN56NG00D	B	87.6/32.2
L17	6200010910	S.COI LQW18AN56NG00D	B	91.1/38.2
L18	6200008090	S.COI LQW2BHN68NJ03L	B	97.2/37.4
L19	6200007750	S.COI LQW2BHN56NJ03L	B	99.6/33.3
L20	6200004480	S.COI MLF1608D R82K-T	B	81.4/12.5
L400	6200014160	S.COI VLCF4028T-100M1R0-2	B	11.9/9.3
L800	6200014160	S.COI VLCF4028T-100M1R0-2	B	21.9/21.1
L801	6200002851	S.COI NLV25T-R82J	B	35.4/8.9
R1	7030005600	S.RES ERJ2GEJ 273 X (27K)	T	75.5/21.4
R2	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	59.7/36.1
R3	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	53.6/41.9
R4	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	T	77.7/19.4
R5	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	T	77.7/21.1
R6	7030005720	S.RES ERJ2GEJ 563 X (56K)	B	55.2/41.9
R7	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	81.1/21.4
R8	7030004980	S.RES ERJ2GEJ 101 X (100)	T	59.1/33.2
R9	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	75.5/33.1
R10	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	61.2/34.6
R11	7030005290	S.RES ERJ2GEJ 682 X (6.8K)	T	60.7/33.2
R12	7410001130	S.ARR EXB28V102JX	T	86.8/32.3
R13	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	61.9/35.5
R14	7030005230	S.RES ERJ2GEJ 334 X (330K)	B	61.9/38.5
R15	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	T	78.6/18.8
R16	7030008300	S.RES ERJ2GEJ 184 X (180K)	T	71.8/13.7
R17	7030005600	S.RES ERJ2GEJ 273 X (27K)	T	75.4/18.1
R18	7030004980	S.RES ERJ2GEJ 101 X (100)	T	67.2/12.2
R19	7030004980	S.RES ERJ2GEJ 101 X (100)	B	65.2/8.8
R20	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	67.7/13.6
R21	7030005600	S.RES ERJ2GEJ 273 X (27K)	T	80.6/37.1
R22	7030010040	S.RES ERJ2GEJ-JPW	T	79.2/35.2
R23	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	T	79.1/32.4
R24	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	86.6/34.6
R25	7030004970	S.RES ERJ2GEJ 470 X (47)	B	73.7/11.3
R26	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	70.8/14.3
R27	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	61.4/7.2
R28	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	71.3/18.6
R29	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	B	69.5/16.8
R30	7030005080	S.RES ERJ2GEJ 823 X (82K)	B	68.3/17.3
R31	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	68.9/15.2
R32	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	64.4/12.4
R33	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	62.8/12.4
R34	7030005290	S.RES ERJ2GEJ 682 X (6.8K)	B	61.1/12.4
R35	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	60.3/6.1
R36	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	81.4/24.6
R37	7030008400	S.RES ERJ2GEJ 182 X (1.8K)	T	78.5/33.7
R38	7030004990	S.RES ERJ2GEJ 221 X (220)	T	75.5/34.0
R39	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	57.0/30.4
R40	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	58.3/30.9
R41	7030005170	S.RES ERJ2GEJ 474 X (470K)	T	68.4/32.1
R42	7030005080	S.RES ERJ2GEJ 823 X (82K)	T	66.8/32.1
R43	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	76.5/19.5
R44	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	14.0/18.5
R45	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	79.8/18.6
R47	7030005000	S.RES ERJ2GEJ 471 X (470)	B	80.0/19.8
R49	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	68.5/27.5
R50	7030010040	S.RES ERJ2GEJ-JPW	B	68.0/23.6
R51	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	84.0/40.0
R52	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	79.2/37.7
R53	7030004980	S.RES ERJ2GEJ 101 X (100)	B	83.7/15.7
R54	7030005010	S.RES ERJ2GEJ 681 X (680)	B	82.5/11.9

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R55	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	84.1/14.5
R57	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	86.6/14.8
R58	7030008410	S.RES ERJ2GEJ 392 X (3.9K)	B	74.5/34.0
R59	7030008400	S.RES ERJ2GEJ 182 X (1.8K)	B	75.9/33.9
R60	7030008410	S.RES ERJ2GEJ 392 X (3.9K)	B	72.7/25.5
R61	7030011920	S.RES RR0510P-561-D (560)	T	74.2/32.2
R62	7030008400	S.RES ERJ2GEJ 182 X (1.8K)	B	76.1/22.3
R64	7030012340	S.RES RR0510P-821-D	T	74.2/28.6
R65	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	81.3/40.0
R66	7030008370	S.RES ERJ2GEJ 561 X (560)	T	89.5/17.6
R67	7030005000	S.RES ERJ2GEJ 471 X (470)	B	91.5/12.5
R68	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	T	87.9/20.7
R69	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	88.7/13.3
R70	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	T	91.7/28.9
R71	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	91.1/23.6
R72	7030004980	S.RES ERJ2GEJ 101 X (100)	B	76.6/30.1
R73	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	75.4/30.4
R74	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	77.0/27.2
R75	7030005530	S.RES ERJ2GEJ 100 X (10)	T	92.6/27.3
R76	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	89.6/23.2
R77	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	90.1/31.3
R78	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	84.8/28.7
R79	7030010040	S.RES ERJ2GEJ-JPW	B	92.5/23.6
R80	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	86.0/20.1
R81	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	93.7/24.0
R82	7030005590	S.RES ERJ2GEJ 680 X (68)	B	87.8/25.0
R83	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	86.6/16.9
R84	7030005530	S.RES ERJ2GEJ 100 X (10)	B	80.1/22.3
R85	7030004990	S.RES ERJ2GEJ 221 X (220)	B	79.7/28.5
R86	7030005720	S.RES ERJ2GEJ 563 X (56K)	B	79.5/23.9
R87	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	78.8/29.8
R88	7030005580	S.RES ERJ2GEJ 560 X (56)	B	80.4/35.0
R89	7030004970	S.RES ERJ2GEJ 470 X (47)	B	91.6/32.3
R90	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	86.2/29.9
R91	7030005080	S.RES ERJ2GEJ 823 X (82K)	B	90.1/30.4
R92	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	87.8/34.4
R93	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	84.7/23.4
R94	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	84.1/25.8
R96	7030004970	S.RES ERJ2GEJ 470 X (47)	B	89.8/39.2
R97	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	94.8/38.3
R98	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	87.8/35.3
R99	7030008280	S.RES ERJ2GEJ 271 X (270)	B	92.1/40.4
R101	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	87.7/36.5
R102	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	88.8/11.3
R103	7030004980	S.RES ERJ2GEJ 101 X (100)	B	86.9/11.3
R104	7030010040	S.RES ERJ2GEJ-JPW	T	97.3/34.7
R106	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	98.9/33.3
R107	7030004980	S.RES ERJ2GEJ 101 X (100)	T	99.8/33.3
R108	7030005600	S.RES ERJ2GEJ 273 X (27K)	B	92.0/35.5
R109	7030005530	S.RES ERJ2GEJ 100 X (10)	B	92.6/36.4
R110	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	T	94.6/36.9
R111	7030006610	S.RES ERJ2GEJ 394 X (390K)	T	94.6/34.3
R112	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	94.3/36.4
R113	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	99.2/39.1
R114	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	97.9/37.7
R115	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	95.4/32.9
R116	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	100.5/38.5
R117	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	68.4/31.1
R118	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	70.7/27.7
R119	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	62.3/33.0
R123	7030008370	S.RES ERJ2GEJ 561 X (560)	T	78.7/21.1
R124	7030005000	S.RES ERJ2GEJ 471 X (470)	B	86.3/25.9
R125	7030005530	S.RES ERJ2GEJ 100 X (10)	B	85.4/27.5
R126	7030005000	S.RES ERJ2GEJ 471 X (470)	B	86.3/27.5
R127	7030007280	S.RES ERJ2GEJ 331 X (330)	B	87.2/37.7
R128	7030009320	S.RES ERJ2GEJ 4R7 X (4.7)	B	74.3/23.2
R129	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	66.8/31.2
R130	7030010040	S.RES ERJ2GEJ-JPW	T	78.4/30.2
R132	7030009320	S.RES ERJ2GEJ 4R7 X (4.7)	B	79.4/27.6
R400	7030004980	S.RES ERJ2GEJ 101 X (100)	B	39.1/35.6
R401	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	70.5/41.1
R402	7030006200	S.RES ERJ12YJ2R7U (2.7)	T	83.8/18.2
R403	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	69.2/40.6
R404	7030010040	S.RES ERJ2GEJ-JPW	T	73.7/4.3
R405	7030010040	S.RES ERJ2GEJ-JPW	B	67.9/39.8
R406	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	T	80.1/4.3
R407	7030005600	S.RES ERJ2GEJ 273 X (27K)	T	66.8/7.6
R408	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	80.1/3.4
R409	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	67.0/38.2
R410	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	46.0/34.9
R411	7030005000	S.RES ERJ2GEJ 471 X (470)	T	68.0/7.9
R412	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	95.6/19.5
R413	7030009280	S.RES ERJ2GEJ 391 X	T	98.6/5.6
R414	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	101.3/14.7
R415	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	B	102.3/19.5
R416	7030009280	S.RES ERJ2GEJ 391 X	B	103.0/23.9
R417	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	101.0/19.9
R418	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	98.5/14.9
R419	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	28.8/31.8
R422	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	98.1/14.3
R423	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	27.5/29.1
R425	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	96.6/10.1
R426	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	100.9/14.3
R427	7210003610	VAR F081-0025A <SLVJ>		
R428	7030007280	S.RES ERJ2GEJ 331 X (330)	B	102.9/25.4
R429	7030004980	S.RES ERJ2GEJ 101 X (100)	T	55.9/4.4
R430	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	T	100.8/6.5
R431	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	98.4/13.1
R432	7030005230	S.RES ERJ2GEJ 334 X (330K)	B	101.3/25.4
R435	7030012530	S.RES ERJ2RHD 3302X (33.0K)	B	13.0/3.7
R436	7030012530	S.RES ERJ2RHD 3302X (33.0K)	B	13.9/5.3
R437	7030012530	S.RES ERJ2RHD 3302X (33.0K)	B	13.0/5.3
R439	7510001730	S.THE ERTJOEP 473J	B	15.5/17.0
R440	7030010080	S.RES ERJ2RHD 1003X (100K)	B	15.5/17.9
R441	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	43.0/31.2

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R442	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	43.9/31.2
R443	7030005210	S.RES ERJ2GEJ 822 X (8.2K)	B	42.0/29.4
R444	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	32.6/34.0
R445	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	9.3/39.6
R446	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	30.0/34.6
R447	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	30.9/34.6
R448	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	5.9/27.4
R449	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	9.7/35.8
R450	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	10.9/22.2
R451	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	9.6/22.2
R452	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	30.6/30.1
R453	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	B	30.6/31.8
R454	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	12.7/22.2
R455	7030008300	S.RES ERJ2GEJ 184 X (180K)	B	44.5/29.3
R456	7410001130	S.ARR EXB28V102JX	B	18.6/40.9
R457	7410001130	S.ARR EXB28V102JX	B	13.9/40.9
R458	7410001130	S.ARR EXB28V102JX	B	9.2/37.9
R459	7410001150	S.ARR EXB28V471JX	B	8.9/28.8
R460	7410001130	S.ARR EXB28V102JX	B	9.9/24.6
R461	7410001130	S.ARR EXB28V102JX	B	15.8/23.1
R462	7410001130	S.ARR EXB28V102JX	B	25.1/30.8
R463	7410001130	S.ARR EXB28V102JX	B	25.1/33.3
R465	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	53.5/32.8
R466	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	45.8/31.2
R467	7030006610	S.RES ERJ2GEJ 394 X (390K)	B	56.1/33.7
R468	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	54.9/34.2
R469	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	31.8/36.5
R470	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	32.6/34.9
R471	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	B	58.9/32.0
R472	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	B	47.6/29.4
R473	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	47.6/31.2
R474	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	46.7/31.2
R475	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	31.5/31.8
R476	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	54.0/34.2
R477	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	59.1/30.8
R478	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	9.2/27.1
R479	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	45.0/27.5
R480	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	16.7/21.1
R481	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	9.2/26.2
R482	7030010040	S.RES ERJ2GEJ-JPW	B	60.7/30.1
R483	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	33.3/31.8
R485	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	13.6/22.2
R486	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	61.6/30.1
R488	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	43.8/27.9
R489	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	15.8/21.1
R490	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	25.1/26.5
R492	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	30.0/36.5
R493	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	15.7/40.7
R494	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	16.6/40.7
R495	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	60.8/27.8
R496	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	60.6/26.5
R499	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	60.0/24.4
R500	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	64.1/29.2
R501	7030005170	S.RES ERJ2GEJ 474 X (470K)	B	4.9/9.4
R502	7030008400	S.RES ERJ2GEJ 182 X (1.8K)	B	53.8/19.2
R503	7030010040	S.RES ERJ2GEJ-JPW	B	50.2/19.4
R504	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	56.5/17.1
R505	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	52.9/19.4
R506	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	51.6/17.2
R507	7030010040	S.RES ERJ2GEJ-JPW	B	4.9/7.7
R508	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	57.0/15.8
R509	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	51.6/15.6
R510	7030010040	S.RES ERJ2GEJ-JPW	B	55.3/20.7
R511	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	55.0/19.5
R512	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	6.3/10.6
R513	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	7.6/27.0
R514	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	18.9/43.2
R515	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	95.6/39.5
R516	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	98.7/39.5
R517	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	93.9/9.3
R518	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	7.4/42.5
R519	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	10.4/40.7
R520	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	16.1/42.0
R521	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	6.5/42.5
R522	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	5.6/42.5
R523	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	97.7/42.8
R524	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	98.9/43.5
R525	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	88.5/26.1
R526	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	30.9/36.5
R527	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	20.4/40.8
R528	7030008300	S.RES ERJ2GEJ 184 X (180K)	B	9.2/11.5
R529	7030005720	S.RES ERJ2GEJ 563 X (56K)	B	8.7/10.3
R530	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	91.8/28.7
R531	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	10.2/19.4
R533	7030005530	S.RES ERJ2GEJ 100 X (10)	B	9.5/32.8
R534	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	33.2/40.4
R535	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	33.2/39.1
R536	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	8.3/11.5
R537	7030010040	S.RES ERJ2GEJ-JPW	B	11.7/16.1
R538	7410001130	S.ARR EXB28V102JX	B	25.1/28.3
R539	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	29.7/31.8
R540	7410001130	S.ARR EXB28V102JX	B	25.0/37.8
R541	7410001130	S.ARR EXB28V102JX	B	22.1/40.9
R542	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	7.6/21.2
R543	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	36.0/37.7
R544	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	30.7/43.4
R545	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	5.7/37.2
R546	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	8.3/33.2
R547	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	4.0/38.7
R548	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	34.6/37.7
R549	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	5.7/36.3
R550	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	4.0/34.5
R551	7030005720	S.RES ERJ2GEJ 563 X (56K)	B	62.9/29.8
R800	7030007250	S.RES ERJ2GEJ 220 X (22)	B	41.9/9.9
R801	7030005210	S.RES ERJ2GEJ 822 X (8.2K)	B	45.4/7.3

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R802	7030005210	S.RES ERJ2GEJ 822 X (8.2K)	B	44.2/8.4
R803	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	44.1/3.6
R804	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	43.2/3.6
R805	7030010040	S.RES ERJ2GEJ-JPW	B	47.1/6.3
R806	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	24.7/3.2
R807	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	41.1/18.0
R808	7030005710	S.RES ERJ2GEJ 121 X (120)	B	41.1/15.5
R809	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	19.9/3.2
R810	7410001140	S.ARR EXB28V104JX	B	16.1/4.0
R811	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	32.1/10.1
R812	7410001170	S.ARR EXB28V470JX	B	41.1/12.8
R813	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	31.2/10.1
R814	7410001140	S.ARR EXB28V104JX	B	16.1/9.0
R815	7410001140	S.ARR EXB28V104JX	B	16.1/6.5
R816	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	32.3/23.9
R817	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	27.3/23.9
R818	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	22.7/3.2
R819	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	21.0/12.5
R820	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	21.0/11.6
R821	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	23.7/9.8
R822	7030004970	S.RES ERJ2GEJ 470 X (47)	B	19.7/8.6
R823	7030005710	S.RES ERJ2GEJ 121 X (120)	B	29.3/3.2
R824	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	24.6/7.4
R825	7030005710	S.RES ERJ2GEJ 121 X (120)	B	45.4/5.7
R826	7030004970	S.RES ERJ2GEJ 470 X (47)	B	33.6/8.0
R827	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	27.4/6.6
R828	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	26.5/6.6
R829	7410001140	S.ARR EXB28V104JX	B	34.5/27.6
R831	7030004980	S.RES ERJ2GEJ 101 X (100)	B	25.1/8.6
R832	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	26.5/8.5
R833	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	41.6/4.2
R834	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	41.6/5.1
R835	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	41.6/3.3
R836	7410001140	S.ARR EXB28V104JX	B	41.1/19.8
R838	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	34.0/6.8
R839	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	32.3/5.9
R840	7410001140	S.ARR EXB28V104JX	B	29.5/27.6
R841	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	45.9/17.6
R842	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	45.9/9.0
R843	7410001140	S.ARR EXB28V104JX	B	32.0/27.6
R844	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	47.2/9.0
R845	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	36.0/3.2
R846	7030010040	S.RES ERJ2GEJ-JPW	B	33.5/3.2
R847	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	33.3/10.3
R848	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	30.5/23.9
R849	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	28.5/10.1
C1	4030017460	S.CER C1005 JB 1H 102K-T	B	52.4/37.6
C2	4030017460	S.CER C1005 JB 1H 102K-T	T	85.2/29.1
C3	4030017460	S.CER C1005 JB 1H 102K-T	T	81.0/30.8
C4	4030016930	S.CER C1005 JB 1A 104K-T	T	88.1/34.1
C5	4030017420	S.CER C1005 CH 1H 470J-T	T	89.0/33.0
C6	4030017420	S.CER C1005 CH 1H 470J-T	T	89.0/31.4
C8	4030016930	S.CER C1005 JB 1A 104K-T	B	56.4/37.0
C9	4030017460	S.CER C1005 JB 1H 102K-T	B	55.2/36.6
C11	4030016930	S.CER C1005 JB 1A 104K-T	T	76.0/22.9
C12	4030016930	S.CER C1005 JB 1A 104K-T	B	70.9/15.6
C13	4030017620	S.CER C1005 CH 1H 100C-T	B	60.1/38.5
C14	4030016930	S.CER C1005 JB 1A 104K-T	T	84.0/21.5
C15	4030016930	S.CER C1005 JB 1A 104K-T	T	80.2/21.4
C16	4030016930	S.CER C1005 JB 1A 104K-T	T	80.2/19.2
C17	4030017460	S.CER C1005 JB 1H 102K-T	T	58.2/35.0
C19	4030017460	S.CER C1005 JB 1H 102K-T	T	60.3/34.6
C20	4030016790	S.CER C1005 JB 1E 103K-T	T	81.9/30.8
C21	4030019560	S.CER GRM21BB31C106KE15L	T	84.6/27.7
C22	4030017420	S.CER C1005 CH 1H 470J-T	T	86.9/30.5
C23	4030017460	S.CER C1005 JB 1H 102K-T	B	60.6/37.3
C24	4030017620	S.CER C1005 CH 1H 100C-T	B	61.0/38.5
C25	4030016790	S.CER C1005 JB 1E 103K-T	B	61.0/35.5
C26	4030016790	S.CER C1005 JB 1E 103K-T	B	62.8/38.5
C27	4030017500	S.CER C1005 CH 1H 560J-T	B	64.3/35.9
C28	4030017580	S.CER C1005 CH 1H 060C-T	B	63.1/35.5
C29	4030017500	S.CER C1005 CH 1H 560J-T	B	64.3/35.0
C30	4030016930	S.CER C1005 JB 1A 104K-T	T	78.2/16.3
C31	4030016930	S.CER C1005 JB 1A 104K-T	T	75.2/16.3
C32	4030016930	S.CER C1005 JB 1A 104K-T	T	66.8/13.6
C33	4030016930	S.CER C1005 JB 1A 104K-T	B	70.9/17.1
C35	4030017040	S.CER C1005 JB 1A 333K-T	B	65.2/9.7
C36	4030016930	S.CER C1005 JB 1A 104K-T	B	65.2/11.5
C39	4030017460	S.CER C1005 JB 1H 102K-T	T	80.6/38.0
C41	4030018890	S.CER C1005 JB 0J 224K-T	T	85.4/37.6
C42	4030018890	S.CER C1005 JB 0J 224K-T	T	84.1/38.1
C43	4030017430	S.CER C1005 CH 1H 101J-T	T	83.2/38.1
C44	4030017620	S.CER C1005 CH 1H 100C-T	B	64.0/32.7
C45	4030016930	S.CER C1005 JB 1A 104K-T	B	73.7/9.5
C46	4030018860	S.CER C1005 JB 0J 105K-T	B	80.7/17.8
C47	4030016930	S.CER C1005 JB 1A 104K-T	B	60.5/9.4
C48	4030016930	S.CER C1005 JB 1A 104K-T	B	73.3/19.9
C49	4030017620	S.CER C1005 CH 1H 100C-T	B	61.4/8.1
C50	4030017700	S.CER C1005 CH 1H 151J-T	B	70.1/18.0
C51	4030017700	S.CER C1005 CH 1H 151J-T	B	70.1/18.9
C52	4030016930	S.CER C1005 JB 1A 104K-T	B	60.2/7.7
C53	4030019560	S.CER GRM21BB31C106KE15L	T	84.0/25.0
C55	4030012610	S.CER C2012 JB 1C 474K-T	T	77.1/34.2
C56	4550007550	S.TAN F931V334MAABMA	T	71.5/33.8
C57	4030017460	S.CER C1005 JB 1H 102K-T	T	71.2/28.7
C58	4030017460	S.CER C1005 JB 1H 102K-T	T	58.3/29.0
C59	4030016930	S.CER C1005 JB 1A 104K-T	T	58.3/29.9
C60	4030017460	S.CER C1005 JB 1H 102K-T	T	71.2/31.9
C61	4030020990	S.CER C1005 CH 1H 561JT	T	67.3/27.2
C62	4030017420	S.CER C1005 CH 1H 470J-T	T	66.7/33.5
C63	4030018860	S.CER C1005 JB 0J 105K-T	T	68.4/31.2
C64	4030017460	S.CER C1005 JB 1H 102K-T	B	81.9/18.8
C65	4030019560	S.CER GRM21BB31C106KE15L	B	74.6/12.9

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C66	4030017660	S.CER C1005 CH 1H 330J-T	B	68.3/16.4
C67	4030017460	S.CER C1005 JB 1H 102K-T	B	79.8/15.3
C68	4030017420	S.CER C1005 CH 1H 470J-T	B	12.2/40.7
C69	4030017460	S.CER C1005 JB 1H 102K-T	B	81.9/19.8
C70	4030017460	S.CER C1005 JB 1H 102K-T	B	79.8/17.0
C71	4030017700	S.CER C1005 CH 1H 151J-T	B	69.7/31.3
C72	4030017700	S.CER C1005 CH 1H 151J-T	B	69.4/24.9
C73	4030017620	S.CER C1005 CH 1H 100C-T	B	68.4/32.0
C74	4030017460	S.CER C1005 JB 1H 102K-T	T	74.2/31.0
C75	4030017570	S.CER C1005 CH 1H 040B-T	B	69.7/34.5
C76	4030017530	S.CER C1005 CH 1H 0R5B-T	B	68.4/22.4
C77	4030017630	S.CER C1005 CH 1H 120J-T	B	70.7/26.8
C78	4030017460	S.CER C1005 JB 1H 102K-T	T	72.5/28.7
C80	4030018860	S.CER C1005 JB 0J 105K-T	T	74.6/25.8
C81	4030017680	S.CER C1005 CH 1H 820J-T	B	75.6/19.9
C82	4030017430	S.CER C1005 CH 1H 101J-T	B	77.8/12.9
C83	4030016790	S.CER C1005 JB 1E 103K-T	B	84.8/17.6
C84	4030016790	S.CER C1005 JB 1E 103K-T	B	83.2/13.3
C85	4030016790	S.CER C1005 JB 1E 103K-T	B	85.7/14.8
C86	4030017400	S.CER C1005 CH 1H 220J-T	B	72.7/33.9
C87	4030018010	S.CER C1005 CH 1H 360J-T	B	74.3/22.3
C88	4030017400	S.CER C1005 CH 1H 220J-T	B	74.5/32.4
C89	4030017650	S.CER C1005 CH 1H 270J-T	B	73.6/33.9
C90	4030017660	S.CER C1005 CH 1H 330J-T	B	73.9/25.2
C91	4030017660	S.CER C1005 CH 1H 330J-T	B	72.7/26.4
C92	4030017460	S.CER C1005 JB 1H 102K-T	T	76.4/30.1
C93	4030018860	S.CER C1005 JB 0J 105K-T	T	74.2/29.6
C94	4030016790	S.CER C1005 JB 1E 103K-T	T	88.3/19.5
C96	4030017350	S.CER C1005 CH 1H 020B-T	T	88.6/23.7
C97	4030016790	S.CER C1005 JB 1E 103K-T	B	89.9/12.5
C98	4030016930	S.CER C1005 JB 1A 104K-T	B	86.2/17.8
C99	4030016930	S.CER C1005 JB 1A 104K-T	T	90.5/28.6
C101	4030017610	S.CER C1005 CH 1H 090C-T	B	94.3/19.7
C102	4030017460	S.CER C1005 JB 1H 102K-T	B	75.9/34.8
C103	4030017420	S.CER C1005 CH 1H 470J-T	B	77.1/34.3
C104	4030017460	S.CER C1005 JB 1H 102K-T	B	76.1/23.2
C105	4030017420	S.CER C1005 CH 1H 470J-T	B	76.7/26.9
C106	4030017530	S.CER C1005 CH 1H 0R5B-T	B	73.8/31.2
C108	4030017520	S.CER C1005 CH 1H 0R3B-T	B	74.4/26.7
C109	4030017460	S.CER C1005 JB 1H 102K-T	T	77.1/25.8
C111	4030016790	S.CER C1005 JB 1E 103K-T	T	92.6/28.9
C112	4030016790	S.CER C1005 JB 1E 103K-T	B	92.8/26.6
C113	4030016790	S.CER C1005 JB 1E 103K-T	B	87.8/24.1
C114	4030017390	S.CER C1005 CH 1H 180J-T	B	89.6/24.1
C115	4030017460	S.CER C1005 JB 1H 102K-T	B	83.4/29.9
C117	4030016790	S.CER C1005 JB 1E 103K-T	B	92.5/24.5
C118	4030017460	S.CER C1005 JB 1H 102K-T	B	87.8/25.9
C120	4030017460	S.CER C1005 JB 1H 102K-T	B	84.7/21.2
C121	4030017460	S.CER C1005 JB 1H 102K-T	T	79.4/27.8
C122	4030016930	S.CER C1005 JB 1A 104K-T	T	79.4/28.8
C123	4030017460	S.CER C1005 JB 1H 102K-T	B	78.2/22.3
C125	4030017360	S.CER C1005 CH 1H 030B-T	B	77.9/29.8
C126	4030017460	S.CER C1005 JB 1H 102K-T	B	73.8/30.3
C127	4030017570	S.CER C1005 CH 1H 040B-T	B	78.1/28.5
C128	4030017430	S.CER C1005 CH 1H 101J-T	T	82.2/38.1
C129	4030017620	S.CER C1005 CH 1H 100C-T	B	79.9/33.8
C130	4030017460	S.CER C1005 JB 1H 102K-T	B	79.7/29.8
C131	4030017630	S.CER C1005 CH 1H 120J-T	B	80.8/33.8
C132	4030017630	S.CER C1005 CH 1H 120J-T	B	78.6/35.0
C133	4030017630	S.CER C1005 CH 1H 120J-T	B	78.1/33.8
C134	4030017630	S.CER C1005 CH 1H 120J-T	B	86.7/28.7
C135	4030017460	S.CER C1005 JB 1H 102K-T	B	91.6/33.2
C137	4030017580	S.CER C1005 CH 1H 060C-T	B	89.5/32.9
C138	4030017460	S.CER C1005 JB 1H 102K-T	B	85.2/29.9
C139	4030017560	S.CER C1005 CH 1H 2R5B-T	B	89.5/35.1
C140	4030016790	S.CER C1005 JB 1E 103K-T	B	87.8/26.8
C141	4030017380	S.CER C1005 CH 1H 050B-T	B	87.5/31.1
C142	4030017460	S.CER C1005 JB 1H 102K-T	B	86.1/34.4
C143	4030017460	S.CER C1005 JB 1H 102K-T	T	88.6/38.1
C144	4030016930	S.CER C1005 JB 1A 104K-T	T	87.7/38.1
C145	4030017460	S.CER C1005 JB 1H 102K-T	B	90.6/11.3
C147	4030017460	S.CER C1005 JB 1H 102K-T	B	80.5/23.9
C148	4030017640	S.CER C1005 CH 1H 150J-T	B	77.6/26.1
C150	4030017460	S.CER C1005 JB 1H 102K-T	B	87.8/11.3
C151	4030017620	S.CER C1005 CH 1H 100C-T	B	85.4/25.9
C154	4030017460	S.CER C1005 JB 1H 102K-T	B	83.8/27.0
C155	4030017460	S.CER C1005 JB 1H 102K-T	B	91.0/40.4
C156	4030017460	S.CER C1005 JB 1H 102K-T	B	95.1/39.7
C157	4030017460	S.CER C1005 JB 1H 102K-T	B	86.1/35.3
C158	4030017360	S.CER C1005 CH 1H 030B-T	B	88.1/37.7
C159	4030017460	S.CER C1005 JB 1H 102K-T	B	93.0/40.4
C161	4030017460	S.CER C1005 JB 1H 102K-T	T	88.6/36.5
C162	4030017460	S.CER C1005 JB 1H 102K-T	T	98.0/33.3
C163	4030017460	S.CER C1005 JB 1H 102K-T	T	99.2/36.5
C164	4030016930	S.CER C1005 JB 1A 104K-T	B	91.6/34.1
C165	4030017440	S.CER C1005 CH 1H 221J-T	B	93.6/35.5
C166	4030017460	S.CER C1005 JB 1H 102K-T	B	93.8/34.6
C168	4030017380	S.CER C1005 CH 1H 050B-T	B	95.7/35.2
C169	4030017430	S.CER C1005 CH 1H 101J-T	B	97.9/40.3
C170	4030017520	S.CER C1005 CH 1H 0R3B-T	B	95.7/36.5
C171	4030017350	S.CER C1005 CH 1H 020B-T	B	97.5/35.2
C173	4030017460	S.CER C1005 JB 1H 102K-T	B	98.8/40.3
C174	4030017460	S.CER C1005 JB 1H 102K-T	T	99.2/37.4
C175	4030017620	S.CER C1005 CH 1H 100C-T	B	98.7/31.8
C176	4030017460	S.CER C1005 JB 1H 102K-T	T	96.4/34.3
C177	4030017430	S.CER C1005 CH 1H 101J-T	B	101.3/34.8
C178	4030016930	S.CER C1005 JB 1A 104K-T	B	99.7/40.3
C179	4030017670	S.CER C1005 CH 1H 390J-T	B	69.7/32.9
C180	4030017430	S.CER C1005 CH 1H 101J-T	B	68.9/23.6
C181	4030020990	S.CER C1005 CH 1H 561JT	B	70.1/19.8
C184	4030016790	S.CER C1005 JB 1E 103K-T	B	89.1/37.7
C191	4030018860	S.CER C1005 JB 0J 105K-T	T	78.6/31.1
C400	4030017460	S.CER C1005 JB 1H 102K-T	B	72.3/41.1
C403	4030017460	S.CER C1005 JB 1H 102K-T	B	71.4/41.1
C404	4030019560	S.CER GRM21BB31C106KE15L	T	86.1/3.8

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C406	4030017430	S.CER C1005 CH 1H 101J-T	T	84.4/2.5
C407	4030017460	S.CER C1005 JB 1H 102K-T	T	73.8/3.1
C409	4030017420	S.CER C1005 CH 1H 470J-T	B	39.1/36.5
C410	4030017460	S.CER C1005 JB 1H 102K-T	B	65.7/7.0
C412	4030017460	S.CER C1005 JB 1H 102K-T	T	74.4/6.2
C415	4030017460	S.CER C1005 JB 1H 102K-T	T	92.5/3.0
C416	4030017420	S.CER C1005 CH 1H 470J-T	B	65.7/7.9
C417	4030017460	S.CER C1005 JB 1H 102K-T	B	65.2/41.2
C418	4030017430	S.CER C1005 CH 1H 101J-T	T	66.5/5.3
C419	4030018860	S.CER C1005 JB 0J 105K-T	T	71.4/3.1
C420	4030016930	S.CER C1005 JB 1A 104K-T	B	67.9/38.2
C421	4030017430	S.CER C1005 CH 1H 101J-T	B	65.7/6.1
C422	4030019560	S.CER GRM21BB31C106KE15L	T	69.8/6.9
C424	4520000020	S.NIO NOJC227M006RWJV	B	96.0/4.1
C425	4030018860	S.CER C1005 JB 0J 105K-T	B	57.3/30.8
C427	4030017460	S.CER C1005 JB 1H 102K-T	T	88.0/27.3
C428	4030016930	S.CER C1005 JB 1A 104K-T	B	46.0/34.0
C429	4030017430	S.CER C1005 CH 1H 101J-T	T	96.6/19.5
C430	4030016930	S.CER C1005 JB 1A 104K-T	B	27.5/31.5
C431	4030016930	S.CER C1005 JB 1A 104K-T	B	103.2/19.5
C432	4030017460	S.CER C1005 JB 1H 102K-T	B	27.5/33.5
C433	4030017460	S.CER C1005 JB 1H 102K-T	B	27.5/32.6
C434	4030017460	S.CER C1005 JB 1H 102K-T	B	27.5/34.4
C435	4030017460	S.CER C1005 JB 1H 102K-T	B	27.5/30.6
C436	4030016930	S.CER C1005 JB 1A 104K-T	T	61.3/16.9
C438	4030016930	S.CER C1005 JB 1A 104K-T	T	100.2/19.1
C439	4030018890	S.CER C1005 JB 0J 224K-T	T	99.7/14.3
C440	4550008220	S.TAN F931C106MAA	T	102.5/18.3
C441	4030017460	S.CER C1005 JB 1H 102K-T	T	98.6/19.9
C442	4030016930	S.CER C1005 JB 1A 104K-T	T	102.7/14.9
C443	4030017420	S.CER C1005 CH 1H 470J-T	T	95.6/26.2
C444	4030017460	S.CER C1005 JB 1H 102K-T	B	96.0/20.1
C446	4030018860	S.CER C1005 JB 0J 105K-T	B	101.3/23.6
C447	4030017420	S.CER C1005 CH 1H 470J-T	B	9.9/3.3
C448	4030017460	S.CER C1005 JB 1H 102K-T	T	99.2/9.5
C450	4030017460	S.CER C1005 JB 1H 102K-T	T	52.2/4.7
C451	4030017460	S.CER C1005 JB 1H 102K-T	T	99.3/13.1
C453	4510009870	S.ELE 10 CE 100 LD	T	99.6/24.2
C457	4030018860	S.CER C1005 JB 0J 105K-T	B	44.8/31.2
C458	4030016930	S.CER C1005 JB 1A 104K-T	B	16.7/17.4
C459	4030017710	S.CER C1005 CH 1H 181J-T	B	43.3/29.9
C460	4030016780	S.CER C1005 JB 1E 153K-T	B	43.3/28.8
C462	4030016930	S.CER C1005 JB 1A 104K-T	B	45.8/29.4
C463	4030016930	S.CER C1005 JB 1A 104K-T	B	57.3/32.0
C464	4030016930	S.CER C1005 JB 1A 104K-T	B	46.7/29.4
C465	4030016930	S.CER C1005 JB 1A 104K-T	B	32.4/31.8
C466	4030016930	S.CER C1005 JB 1A 104K-T	B	58.2/30.8
C467	4030020120	S.CER C1005 JB 0J 225M-T	B	55.4/32.8
C468	4030018860	S.CER C1005 JB 0J 105K-T	B	58.7/29.6
C469	4030018860	S.CER C1005 JB 0J 105K-T	B	61.2/31.4
C470	4030018860	S.CER C1005 JB 0J 105K-T	B	55.4/31.9
C471	4030018860	S.CER C1005 JB 0J 105K-T	B	11.3/40.7
C472	4030017460	S.CER C1005 JB 1H 102K-T	B	11.8/22.2
C473	4030018860	S.CER C1005 JB 0J 105K-T	B	34.7/29.9
C475	4030017670	S.CER C1005 CH 1H 390J-T	B	59.7/26.5
C476	4030016790	S.CER C1005 JB 1E 103K-T	B	59.2/28.7
C477	4030018860	S.CER C1005 JB 0J 105K-T	B	59.2/27.8
C478	4030018080	S.CER C1005 JB 1H 182K-T	B	60.0/25.3
C479	4030016930	S.CER C1005 JB 1A 104K-T	B	31.5/30.1
C480	4030018860	S.CER C1005 JB 0J 105K-T	B	53.5/31.9
C481	4030018860	S.CER C1005 JB 0J 105K-T	B	57.7/21.9
C482	4030018860	S.CER C1005 JB 0J 105K-T	B	58.6/21.9
C483	4030018860	S.CER C1005 JB 0J 105K-T	B	60.0/23.3
C484	4030018860	S.CER C1005 JB 0J 105K-T	B	57.1/19.8
C486	4030017460	S.CER C1005 JB 1H 102K-T	B	50.6/20.6
C487	4030018860	S.CER C1005 JB 0J 105K-T	B	56.5/18.0
C488	4030020010	S.CER C1005 CH 1H 271J-T	B	54.0/20.4
C489	4030017460	S.CER C1005 JB 1H 102K-T	B	48.3/25.0
C491	4030016930	S.CER C1005 JB 1A 104K-T	B	49.7/20.6
C492	4030016930	S.CER C1005 JB 1A 104K-T	B	47.9/23.3
C493	4030017900	S.CER C1005 JB 1E 123K-T	B	52.0/19.2
C494	4030017700	S.CER C1005 CH 1H 151J-T	B	56.1/15.8
C496	4030016930	S.CER C1005 JB 1A 104K-T	B	52.8/14.3
C497	4030018860	S.CER C1005 JB 0J 105K-T	B	9.5/31.0
C498	4030020190	S.CER GRM32EB31C476KE15L	B	5.4/4.3
C501	4030019560	S.CER GRM21BB31C106KE15L	T	93.0/40.6
C502	4030019560	S.CER GRM21BB31C106KE15L	T	101.8/41.5
C503	4030019560	S.CER GRM21BB31C106KE15L	T	85.9/21.8
C504	4030016790	S.CER C1005 JB 1E 103K-T	T	97.7/40.9
C505	4030016790	S.CER C1005 JB 1E 103K-T	T	100.5/43.5
C506	4030016790	S.CER C1005 JB 1E 103K-T	T	95.2/9.9
C507	4030018860	S.CER C1005 JB 0J 105K-T	B	7.9/35.8
C508	4030018860	S.CER C1005 JB 0J 105K-T	B	25.5/35.5
C509	4030019560	S.CER GRM21BB31C106KE15L	T	93.0/42.4
C510	4030018860	S.CER C1005 JB 0J 105K-T	B	7.6/26.1
C511	4030018860	S.CER C1005 JB 0J 105K-T	B	14.8/21.1
C512	4030017460	S.CER C1005 JB 1H 102K-T	B	24.6/35.5
C513	4030017460	S.CER C1005 JB 1H 102K-T	B	8.8/35.8
C514	4030020190	S.CER GRM32EB31C476KE15L	B	7.4/13.8
C517	4030016930	S.CER C1005 JB 1A 104K-T	B	9.6/4.6
C518	4050000240	S.FEE NFM18PC104R1C3D	B	11.8/13.7
C519	4030016790	S.CER C1005 JB 1E 103K-T	B	7.6/22.1
C520	4030016790	S.CER C1005 JB 1E 103K-T	B	91.8/30.3
C521	4030017620	S.CER C1005 CH 1H 100C-T	B	10.5/4.6
C522	4030016930	S.CER C1005 JB 1A 104K-T	B	16.6/25.5
C523	4030017460	S.CER C1005 JB 1H 102K-T	B	96.2/28.4
C524	4030016930	S.CER C1005 JB 1A 104K-T	B	32.4/42.2
C525	4030016930	S.CER C1005 JB 1A 104K-T	B	12.5/25.5
C526	4030019560	S.CER GRM21BB31C106KE15L	B	96.3/33.4
C527	4030017460	S.CER C1005 JB 1H 102K-T	B	15.7/25.5
C528	4030016930	S.CER C1005 JB 1A 104K-T	B	5.3/40.1
C529	4030017640	S.CER C1005 CH 1H 150J-T	B	9.5/31.9
C530	4030017460	S.CER C1005 JB 1H 102K-T	B	95.9/27.1
C531	4030019560	S.CER GRM21BB31C106KE15L	B	94.8/31.7
C532	4030016930	S.CER C1005 JB 1A 104K-T	B	14.5/25.5

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C533	4050000240	S.FEE NFM18PC104R1C3D	B	11.9/5.1
C534	4030017460	S.CER C1005 JB 1H 102K-T	B	13.4/25.5
C535	4030017460	S.CER C1005 JB 1H 102K-T	B	96.2/30.0
C536	4030018860	S.CER C1005 JB 0J 105K-T	B	12.9/17.6
C537	4030016930	S.CER C1005 JB 1A 104K-T	B	11.6/25.5
C538	4030016930	S.CER C1005 JB 1A 104K-T	B	3.1/36.9
C539	4030016930	S.CER C1005 JB 1A 104K-T	B	34.4/42.2
C540	4030017580	S.CER C1005 CH 1H 060C-T	B	7.0/35.8
C541	4030017640	S.CER C1005 CH 1H 150J-T	B	5.7/35.4
C542	4030017030	S.CER C1005 JB 1A 273K-T	B	30.9/39.6
C543	4030017460	S.CER C1005 JB 1H 102K-T	B	28.6/38.4
C544	4030017460	S.CER C1005 JB 1H 102K-T	B	28.6/39.3
C545	4030017460	S.CER C1005 JB 1H 102K-T	B	28.6/36.6
C546	4030017460	S.CER C1005 JB 1H 102K-T	B	28.6/37.5
C547	4030017460	S.CER C1005 JB 1H 102K-T #01	B	20.8/43.2
	4030017460	S.CER C1005 JB 1H 102K-T #02		
	4030017460	S.CER C1005 JB 1H 102K-T #03		
C548	4030017460	S.CER C1005 JB 1H 102K-T	B	24.1/41.8
C549	4030017460	S.CER C1005 JB 1H 102K-T	B	23.9/42.7
C550	4030017460	S.CER C1005 JB 1H 102K-T	B	22.4/43.2
C551	4030016930	S.CER C1005 JB 1A 104K-T	B	50.7/17.2
C800	4050000240	S.FEE NFM18PC104R1C3D	B	12.6/20.1
C801	4050000240	S.FEE NFM18PC104R1C3D	B	14.1/16.1
C802	4030016930	S.CER C1005 JB 1A 104K-T	B	47.1/7.3
C803	4030018860	S.CER C1005 JB 0J 105K-T	B	21.7/14.7
C804	4030019460	S.CER C1608 JB 0J 106M-T	B	20.5/13.6
C805	4030017460	S.CER C1005 JB 1H 102K-T	B	37.4/10.9
C806	4030018910	S.CER C1608 JB 0J 475K-T	B	40.6/6.8
C807	4030016930	S.CER C1005 JB 1A 104K-T	B	41.8/7.1
C808	4050000240	S.FEE NFM18PC104R1C3D	B	14.0/13.5
C809	4030019460	S.CER C1608 JB 0J 106M-T	B	19.8/17.4
C811	4030016930	S.CER C1005 JB 1A 104K-T	B	20.3/23.9
C812	4030016930	S.CER C1005 JB 1A 104K-T	B	41.6/8.7
C813	4030019460	S.CER C1608 JB 0J 106M-T	B	15.3/13.5
C814	4030019460	S.CER C1608 JB 0J 106M-T	B	40.6/9.4
C815	4030016930	S.CER C1005 JB 1A 104K-T	B	42.5/8.7
C816	4030018860	S.CER C1005 JB 0J 105K-T	B	29.4/10.1
C817	4030016790	S.CER C1005 JB 1E 103K-T	B	22.6/11.5
C818	4030016790	S.CER C1005 JB 1E 103K-T	B	33.9/23.9
C819	4030016790	S.CER C1005 JB 1E 103K-T	B	25.6/10.1
C820	4030018910	S.CER C1608 JB 0J 475K-T	B	23.7/13.6
C821	4030018910	S.CER C1608 JB 0J 475K-T	B	37.5/21.9
C822	4030018860	S.CER C1005 JB 0J 105K-T	B	33.3/9.4
C823	4030018860	S.CER C1005 JB 0J 105K-T	B	27.6/10.1
C824	4030018860	S.CER C1005 JB 0J 105K-T	B	22.7/13.6
C825	4030016790	S.CER C1005 JB 1E 103K-T	B	26.7/10.1
C826	4030016790	S.CER C1005 JB 1E 103K-T	B	23.5/11.5
C827	4030016930	S.CER C1005 JB 1A 104K-T	B	19.7/11.4
C828	4030016930	S.CER C1005 JB 1A 104K-T	B	19.7/6.8
C829	4030016930	S.CER C1005 JB 1A 104K-T	B	22.8/9.8
C830	4030017420	S.CER C1005 CH 1H 470J-T	B	37.0/6.4
C831	4030016930	S.CER C1005 JB 1A 104K-T	B	32.7/8.0
C832	4030017620	S.CER C1005 CH 1H 100C-T	B	25.5/7.4
C833	4030016930	S.CER C1005 JB 1A 104K-T	B	25.1/6.2
C834	4030018910	S.CER C1608 JB 0J 475K-T	B	37.5/8.2
C835	4030017460	S.CER C1005 JB 1H 102K-T	B	31.8/8.0
C836	4030016930	S.CER C1005 JB 1A 104K-T	B	24.7/9.8
C837	4030018860	S.CER C1005 JB 0J 105K-T	B	37.1/23.9
C838	4030017380	S.CER C1005 CH 1H 050B-T	B	27.4/8.5
C839	4030016930	S.CER C1005 JB 1A 104K-T	B	37.4/9.9
C840	4030016930	S.CER C1005 JB 1A 104K-T	B	35.5/23.9
C841	4030016790	S.CER C1005 JB 1E 103K-T	B	30.3/10.1
C842	4030016930	S.CER C1005 JB 1A 104K-T	B	16.4/12.8
C843	4030016930	S.CER C1005 JB 1A 104K-T	B	32.3/6.8
C844	4030018860	S.CER C1005 JB 0J 105K-T	B	24.8/23.9
C845	4030016930	S.CER C1005 JB 1A 104K-T	B	44.5/9.3
J401	6510021901	S.CON BM02B-ASRS-TF(LF)(SN)	T	89.4/4.5
J402	6450000131	CON HSJ1102-018540		
J403	6450002250	CON HSJ1456-010320		
DS400	5030003740	LCD L2-1582TVF <TES>		
DS401	5040003800	S.LED KA-2810ACGSK <TM>	T	57.3/5.9
DS402	5040003800	S.LED KA-2810ACGSK <TM>	T	57.3/40.3
MC400	7700002970	MIC EM6027P-30BC33-G <HOR>		
S400	2230001060	S.SWI EVQ-PUL 02K	T	102.3/36.1
S401	2260002800	S.SWI SW-167 (SKQTLAE010)	B	61.1/44.3
S402	2260001900	SWI SW-149 (SKHLLD)		
S403	2260002800	S.SWI SW-167 (SKQTLAE010)	B	51.6/44.3
S404	2260002800	S.SWI SW-167 (SKQTLAE010)	B	99.6/44.3
EP1	6910021240	S.BEA MMZ1005A152ET	T	58.2/34.1
EP2	6910021240	S.BEA MMZ1005A152ET	T	83.5/29.8
EP3	6910021240	S.BEA MMZ1005A152ET	B	53.9/37.0
EP4	6910021240	S.BEA MMZ1005A152ET	T	74.0/27.2
EP5	6910021240	S.BEA MMZ1005A152ET	B	73.1/32.7
EP6	6910021240	S.BEA MMZ1005A152ET	B	75.4/27.6
EP7	6910021240	S.BEA MMZ1005A152ET	T	75.1/31.0
EP8	6910021240	S.BEA MMZ1005A152ET	T	78.1/28.5
EP9	6910021240	S.BEA MMZ1005A152ET	B	91.5/11.3
EP20	8930063020	LCD SRCN-2721-SP-N-W (SHJ)		
EP400	6910021240	S.BEA MMZ1005A152ET	T	74.7/3.1
EP401	6910021770	S.BEA MMZ1005F560CT	B	47.6/26.2
EP402	6910021240	S.BEA MMZ1005A152ET	B	59.5/21.9
EP403	6910021240	S.BEA MMZ1005A152ET	B	51.8/20.4
EP404	6910021240	S.BEA MMZ1005A152ET	B	47.4/25.0
EP405	6910021240	S.BEA MMZ1005A152ET	B	8.7/5.8
EP406	6910021240	S.BEA MMZ1005A152ET	B	10.3/5.8

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
EP801	6910021240	S.BEA MMZ1005A152ET	B	38.2/3.3
EP804	6910021240	S.BEA MMZ1005A152ET	B	15.8/15.6
EP805	6910021240	S.BEA MMZ1005A152ET	B	15.7/10.8
EP806	6910021240	S.BEA MMZ1005A152ET	B	15.3/11.7
EP807	6910016330	S.BEA MMZ1005S 601CT-S	B	41.1/14.6
EP808	6910021770	S.BEA MMZ1005F560CT	B	27.7/3.2
EP809	6910021770	S.BEA MMZ1005F560CT	B	34.5/5.9
EP810	6910021770	S.BEA MMZ1005F560CT	B	45.0/3.6

[PA UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
IC1	1110002751	S.IC TA75S01F(TE85RF)	T	83.0/34.3
Q2	1530002921	S.TRA 2SC4226-T1 Y25 (R25)	B	26.9/3.9
Q3	1560001910	S.FET RD01MUS2B-T113	B	20.7/6.7
Q4	1560001701	S.FET RD07MUS2B-T214	B	14.8/7.2
Q5	1590004090	S.TRA LDTC114YET1G <SLVJ>	T	21.0/13.7
D1	1790001621	S.DIO 1SV308(TPL3F)	B	4.5/14.3
D2	1790001621	S.DIO 1SV308(TPL3F)	B	10.0/17.4
D3	1790001621	S.DIO 1SV308(TPL3F)	B	8.8/17.4
D4	1790001670	S.DIO RB706F-40T106	T	1.5/14.8
D5	1750002170	S.DIO DB2S31400L	B	11.2/17.4
D6	1790001670	S.DIO RB706F-40T106	T	9.4/10.8
D7	1790001670	S.DIO RB706F-40T106	T	9.4/13.3
D8	1790001621	S.DIO 1SV308(TPL3F)	T	4.5/14.3
L3	6200007901	S.COI ELJRF 22NJFB	B	19.5/2.8
L4	6200012720	S.COI 0.30-0.9-9TR 22.3N <COMO>	B	16.2/13.7
L5	6200012390	S.COI 0.30-0.92-3TR 5.8N <COMO>	B	9.2/13.7
L6	6200012470	S.COI 0.30-1.7-7TL 45.3N <COMO>	B	4.0/12.2
L7	6200002861	S.COI NLV25T-4R7J	T	6.3/16.3
L8	6200009290	S.COI LQW18AN47NG00D (LQW1608A47NG00)	B	6.7/15.8
L9	6200012910	S.COI 0.35-1.6-8TL 45.5N <COMO>	B	3.7/17.0
L10	6200011021	S.COI ELJRF 82NJFB	B	12.3/16.6
L12	6200012970	S.COI 0.30-0.91-4TR 8.6N <COMO>	B	13.0/13.9
R1	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	26.0/3.2
R2	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	27.2/3.5
R3	7030005530	S.RES ERJ2GEJ 100 X (10)	T	28.1/3.5
R5	7030005060	S.RES ERJ2GEJ 333 X (33K)	T	22.6/2.2
R6	7030005590	S.RES ERJ2GEJ 680 X (68)	B	23.2/2.5
R7	7030005600	S.RES ERJ2GEJ 273 X (27K)	T	21.5/1.3
R8	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	15.5/1.8
R9	7030007250	S.RES ERJ2GEJ 220 X (22)	B	16.7/3.0
R10	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	17.1/1.8
R11	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	T	19.9/10.4
R12	7030004980	S.RES ERJ2GEJ 101 X (100)	T	19.3/11.6
R13	7030005530	S.RES ERJ2GEJ 100 X (10)	T	19.0/18.1
R14	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	19.0/13.7
R15	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	16.7/18.1
R16	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	15.1/15.6
R17	7030005060	S.RES ERJ2GEJ 333 X (33K)	T	15.1/16.5
R19	7030010040	S.RES ERJ2GEJ-JPW	T	13.5/15.6
R20	7030008280	S.RES ERJ2GEJ 271 X (270)	T	9.6/16.0
R22	7030008280	S.RES ERJ2GEJ 271 X (270)	T	10.5/16.0
R23	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	T	3.2/16.2
R24	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	11.0/14.8
R25	7030008410	S.RES ERJ2GEJ 392 X (3.9K)	T	7.6/11.2
R26	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	13.1/14.4
R27	7510001730	S.THE ERTJOEP 473J	T	13.9/17.7
R28	7030005720	S.RES ERJ2GEJ 563 X (56K)	T	15.1/18.1
R29	7030005700	S.RES ERJ2GEJ 274 X (270K)	T	16.7/20.3
R30	7030004980	S.RES ERJ2GEJ 101 X (100)	T	20.2/11.6
R32	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	T	7.6/13.7
R33	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	12.2/14.4
R35	7030005710	S.RES ERJ2GEJ 121 X (120)	B	25.9/1.8
C6	4030017600	S.CER C1005 CH 1H 080C-T	B	29.0/7.4
C9	4030017460	S.CER C1005 JB 1H 102K-T	T	29.4/4.4
C11	4030017460	S.CER C1005 JB 1H 102K-T	B	24.1/1.8
C12	4030017420	S.CER C1005 CH 1H 470J-T	B	23.9/4.6
C13	4030017460	S.CER C1005 JB 1H 102K-T	B	29.4/4.3
C14	4030017460	S.CER C1005 JB 1H 102K-T	B	22.3/2.5
C15	4030017420	S.CER C1005 CH 1H 470J-T	B	25.0/1.8
C16	4030017460	S.CER C1005 JB 1H 102K-T	T	20.5/2.2
C17	4030018910	S.CER C1608 JB 0J 475K-T	T	20.8/4.8
C19	4030017460	S.CER C1005 JB 1H 102K-T	B	21.1/3.7
C20	4030020000	S.CER C1005 JB 1A 105K-T	B	21.1/2.8
C21	4030017600	S.CER C1005 CH 1H 080C-T	B	19.5/3.7
C23	4030017680	S.CER C1005 CH 1H 820J-T	B	17.9/3.0
C24	4030017460	S.CER C1005 JB 1H 102K-T	B	15.5/2.7
C25	4030017460	S.CER C1005 JB 1H 102K-T	T	19.9/9.5
C26	4030020000	S.CER C1005 JB 1A 105K-T	B	19.8/13.1
C27	4030017460	S.CER C1005 JB 1H 102K-T	T	18.0/19.3
C28	4030017420	S.CER C1005 CH 1H 470J-T	B	20.6/16.2
C31	4030017460	S.CER C1005 JB 1H 102K-T	B	21.5/16.2
C32	4030016930	S.CER C1005 JB 1A 104K-T	T	20.6/16.5
C33	4030017420	S.CER C1005 CH 1H 470J-T	B	25.5/13.4
C34	4030017460	S.CER C1005 JB 1H 102K-T	T	25.1/14.0
C35	4030017460	S.CER C1005 JB 1H 102K-T	B	17.7/11.6
C36	4030017400	S.CER C1005 CH 1H 220J-T	T	20.5/3.1
C37	4030016950	S.CER C1005 JB 1A 473K-T	T	19.0/12.8
C39	4030020000	S.CER C1005 JB 1A 105K-T	B	18.6/11.6
C42	4030007100	S.CER C1608 CH 1H 560J-T	B	11.3/14.0
C43	4030018890	S.CER C1005 JB 0J 224K-T	T	16.7/19.0
C44	4030007040	S.CER C1608 CH 1H 180J-T	B	6.4/10.8
C45	4030017460	S.CER C1005 JB 1H 102K-T	T	9.1/17.2
C46	4030017640	S.CER C1005 CH 1H 150J-T	B	3.3/10.1
C48	4030017460	S.CER C1005 JB 1H 102K-T	B	1.7/13.9
C49	4030017460	S.CER C1005 JB 1H 102K-T	T	11.4/16.0
C50	4030017460	S.CER C1005 JB 1H 102K-T	B	5.6/15.6
C52	4030017640	S.CER C1005 CH 1H 150J-T	B	7.8/15.3
C53	4030017640	S.CER C1005 CH 1H 150J-T	B	5.6/17.2
C54	4030017460	S.CER C1005 JB 1H 102K-T	T	23.8/19.9
C55	4030017390	S.CER C1005 CH 1H 180J-T	B	7.8/16.9
C56	4030017560	S.CER C1005 CH 1H 2R5B-T	B	1.7/16.5
C57	4030017420	S.CER C1005 CH 1H 470J-T	T	23.8/21.4
C58	4030017530	S.CER C1005 CH 1H 0R5B-T	T	2.0/16.6
C60	4030017460	S.CER C1005 JB 1H 102K-T	B	10.5/19.1

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[PA UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C61	4030017460	S.CER C1005 JB 1H 102K-T	T	3.7/12.9
C62	4030017580	S.CER C1005 CH 1H 060C-T	B	12.3/18.3
C64	4030017530	S.CER C1005 CH 1H 0R5B-T	T	7.5/12.4
C65	4030017420	S.CER C1005 CH 1H 470J-T	T	12.3/16.0
C66	4030017460	S.CER C1005 JB 1H 102K-T	T	11.3/11.0
C68	4030007120	S.CER C1608 CH 1H 820J-T	B	9.5/15.4
C69	4030009650	S.CER C1608 CH 1H 240J-T	B	7.5/13.0
C70	4030017460	S.CER C1005 JB 1H 102K-T	T	13.5/16.5
C71	4030017630	S.CER C1005 CH 1H 120J-T	B	5.9/18.7
C72	4030017530	S.CER C1005 CH 1H 0R5B-T	T	6.7/13.7
C73	4030017460	S.CER C1005 JB 1H 102K-T	T	11.3/13.5
C80	4030017530	S.CER C1005 CH 1H 0R5B-T	B	25.0/3.4
C81	4030017460	S.CER C1005 JB 1H 102K-T	B	26.8/1.8
J1	6910017680	CON IMSA-9230B-1-04Z140-PT1		
J2	6910017680	CON IMSA-9230B-1-04Z140-PT1		
F1	5210000901	S.FUS 0467003.NR (0434003)	T	25.1/17.6
EP1	6910014730	S.BEA MPZ2012S331A-T	B	20.3/14.5
EP2	6910012350	S.BEA MMZ1608Y 102BT	B	19.6/11.4

[ANT UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
L1	6200012780	S.COI 0.30-1.4-6TL 27.2N <COMO>	B	62.7/36.9
L11	6200012470	S.COI 0.30-1.7-7TL 45.3N <COMO>	T	3.6/8.6
R1	7030005080	S.RES ERJ2GEJ 823 X (82K)	T	9.0/13.5
C1	4030017400	S.CER C1005 CH 1H 220J-T	T	1.8/14.1
C3	4030017630	S.CER C1005 CH 1H 120J-T	T	3.4/14.1
C54	4030017620	S.CER C1005 CH 1H 100C-T	T	2.1/6.3
C63	4030017380	S.CER C1005 CH 1H 050B-T	T	5.5/8.6

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[CONNECT UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
D1	1790002030	S.VAR LXES15AAA1-100	B	6.1/6.0
C1	4030017460	S.CER C1005 JB 1H 102K-T	B	6.6/8.4
C2	4030017420	S.CER C1005 CH 1H 470J-T	B	6.1/7.0
C5	4030017420	S.CER C1005 CH 1H 470J-T	T	9.4/7.3
C6	4030017460	S.CER C1005 JB 1H 102K-T	T	9.4/6.3
J1	6910015881	CON 9230B-1-02Z141-PT1		
EP1	6910019100	S.BEA MPZ1608S101AT	B	8.1/7.2
EP2	6910019100	S.BEA MPZ1608S101AT	B	7.1/4.6
EP3	6910019100	S.BEA MPZ1608S101AT	T	3.7/5.4

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

SECTION 7 MECHANICAL PARTS

[CHASSIS PARTS]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1	6910021491	ANT CONNECTOR 106-1 <SSC>	1
J2	6910015860	IMSA-6277S-02A-G	1
SP1	2510001810	36N-A3920 <PRI>	1
W1	8900009640	OPC-963	1
MP1	8010022830	3521 CHASSIS	1
MP2	8210028450	2926 T-FRONT PANEL ASSEMBLY [10-key version]	1
	8210027340	2926 S-FRONT PANEL ASSEMBLY [4-key version]	1
MP8	8210020551	2721 REAR PANEL-1	1
MP9	8310079210	2926 WINDOW PLATE	1
MP10	8930084340	2926 WINDOW SHEET	1
MP12	8930086740	2926 KEYBOARD (SC) [10-key version]	1
	8930084020	2926 4-KEY (SC) [4-key version]	1
MP13	8930084060	2926 MAIN SEAL TOP	1
MP14	8930063061	2721 T-RUBBER-1 (TOT)	1
MP16	8930084090	2926 SIDE PLATE Y1253	1
MP17	8930084100	2926 TOP PLATE Y1254	1
MP20	8930084260	2926 MIC SEAL TOP	1
MP21	8930084230	2926 RELEASE BUTTON	1
MP22	8930084250	2926 RELEASE PLATE Y1255	1
MP24	8610014460	KNOB N-350 (A)	1
MP25	8830003440	3285 ANT NUT	1
MP26	8810010750	PHBT M2 X 6 SUS SSBC	2
MP27	8810010850	PHBT B0 M2X8 SUS SSBC	2
MP28	8810008641	BT M2 X 4 NI-ZC3	11
MP29	8810008971	BT M2 X3.5 NI-ZC3	1
MP31	8810010430	TRUSS M3 X 5 SUS SSBC	1
MP33	8930088670	3521 VENT SHEET	1
MP34	8930056540	PUSH SPRING (AH)	2
MP35	8830001701	VR NUT (Q)-1	1
MP37	8930070010	2893 VOL RUBBER (TOT)	1
MP39	8930084870	3384 REAR SHEET	1
MP42	8930084040	2926 SIDE SEAL TOP	1
MP43	8930084240	2926 TOP KEY TOP	1
MP44	8930085330	O-RING (CQ) (TOP)	1
MP46	8810007391	PH M2 X 6 SUS SSBC	2
MP47	8210027310	2926 JACK PANEL	1
MP48	8930088670	3521 VENT SHEET	1
MP49	8930088480	THERMAL SHEET (CH)TC150CAT20 (7.3X7.3)	1

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J401*	6510021901	BM02B-ASRS-TF (LF) (SN)	1
J402	6450000131	HSJ1102-018540	1
J403	6450002250	HSJ1456-010320	1
DS400	5030003740	L2-1582TVF <TES>	1
MC400	7700002970	EM6027P-30BC33-G <HOR>	1
S400*	2230001060	EVQ-PUL 02K	1
S401*	2260002800	SW-167 (SKQTLAE010)	1
S402*	2260001900	SW-149 (SKHLLD)	1
S403*	2260002800	SW-167 (SKQTLAE010)	1
S404*	2260002800	SW-167 (SKQTLAE010)	1
EP20	8930063020	SRCN-2721-SP-N-W (SHJ)	2
MP1*	8510016130	2721 VCO CASE Y709	1
MP2*	8510016120	2721 VCO COVER Y710	1
MP3	8930069481	2927 LCD HOLDER-1 Y854A	1
MP4	8210020571	2721 REFLECTOR-1	1
MP5	8930070080	WHITE SHEET (V)	1
MP6*	8510021060	3521 SHIELD PLATE Y1301	1
MP7*	8930066240	SPONGE (IM)	1
MP9*	8930088660	SPONGE (MO)	1
MP10*	8930070590	SHIELD TAPE (S)	1
MP800*	8510019920	3328 DSP CASE Y1212	1
MP801*	8510019930	3328 DSP COVER Y1213	1
MP802*	8930048871	2056 A-SPONGE-1	1

[PA UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1	6910017680	IMSA-9230B-1-04Z140-PT1	1
J2	6910017680	IMSA-9230B-1-04Z140-PT1	1
F1*	5210000901	0467003.NR (0434003)	1
MP1*	8510021100	OG-321022	1

[ANT UNIT]

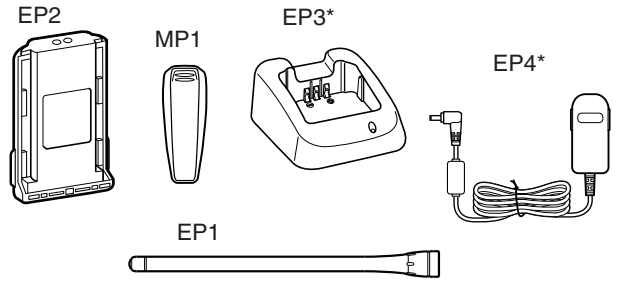
REF NO.	ORDER NO.	DESCRIPTION	QTY.
MP801*	8510017640	2927 ANT PLATE Y851	1

[CONNECT UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1	6910015881	9230B-1-02Z141-PT1	1

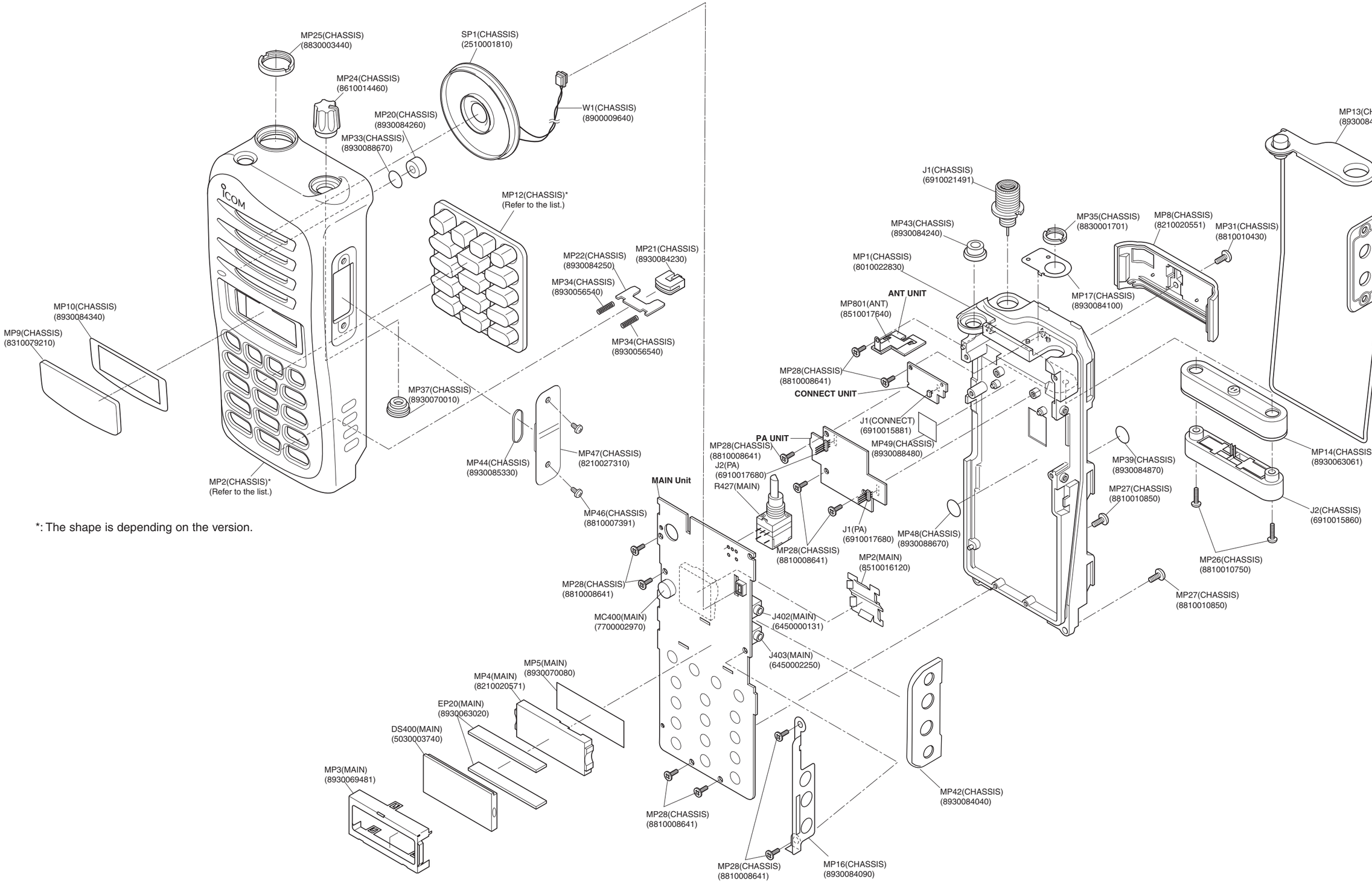
[ACCESSORIES]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
EP1	(Optional)	FA-SC55V	1
EP2	(Optional)	BP-232WP	1
EP3	(Optional)	BC-160 [#01]	1
	(Optional)	BC-160 [#11]	1
	(Optional)	BC-160 [#13]	1
EP4	(Optional)	BC-123SE [#01]	1
	(Optional)	BC-123SE [#11]	1
	(Optional)	BC-123SA [#13]	1
MP1	(Optional)	MB-94R	1



*Not supplied, or the shape is different, depending on the transceiver version.

*: Refer to "**BOARD LAYOUTS**" for the location.
Screw abbreviations A, B0, BT: Self-tapping PH: Pan head ZK: Black NI-ZU: Nickel-Zinc SUS: Stainless

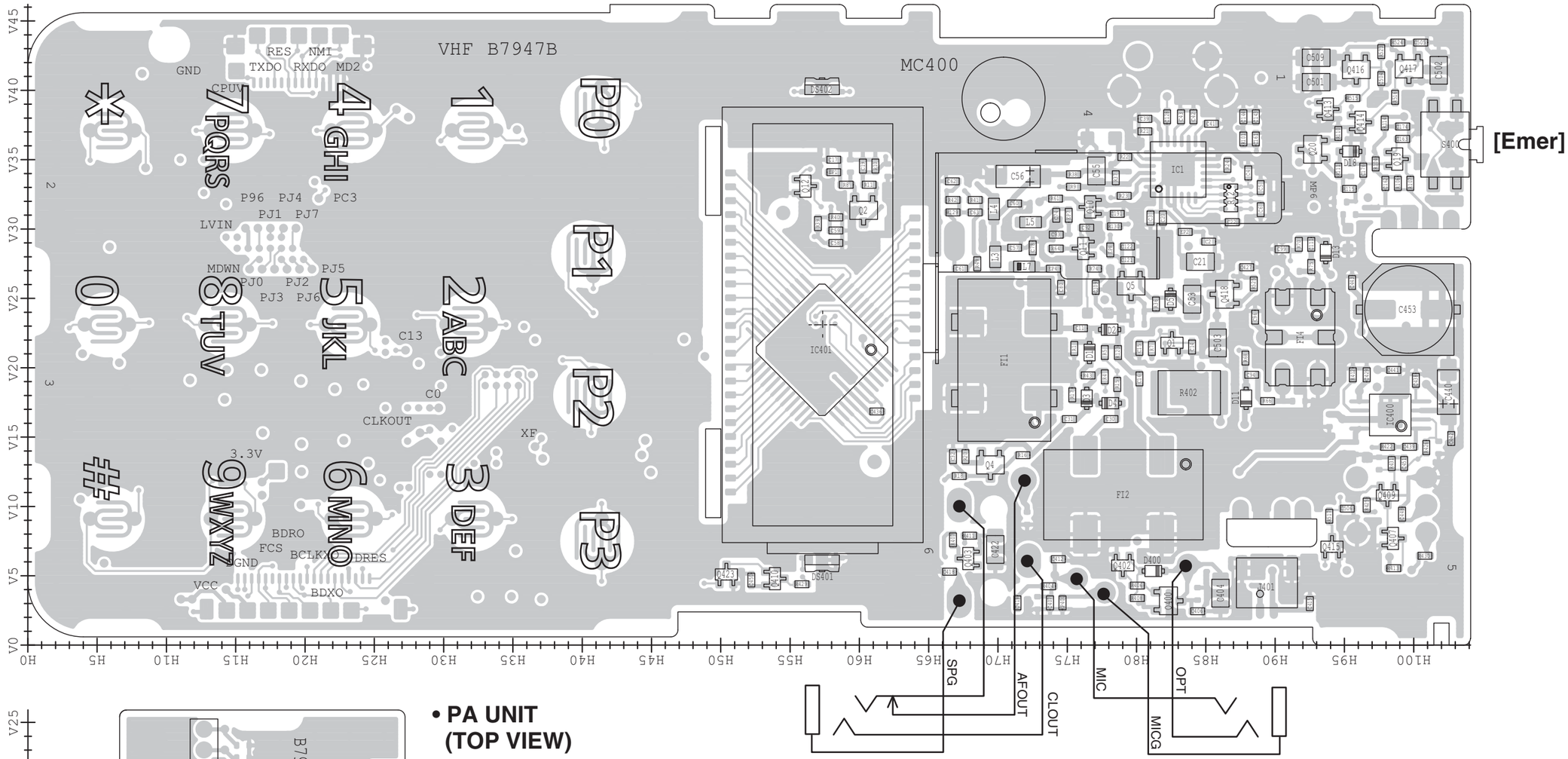


*: The shape is depending on the version.

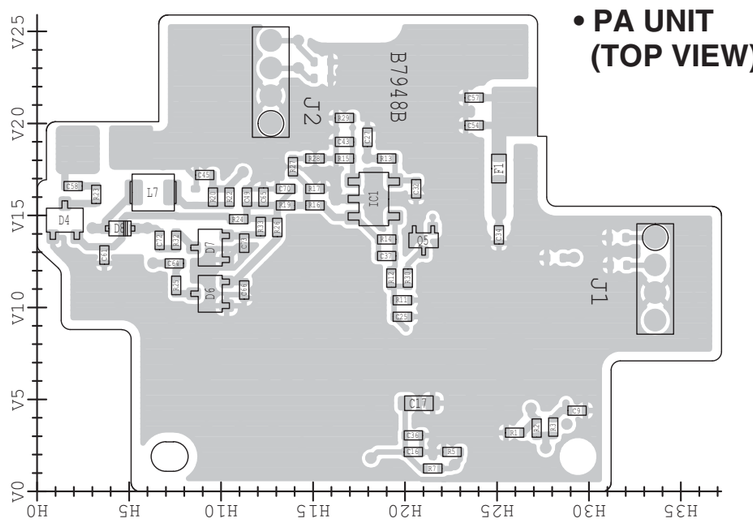
SECTION 8 BOARD LAYOUTS

The actual configuration of the PC board can be seen by viewing the top and bottom BOARD LAYOUT pages together.

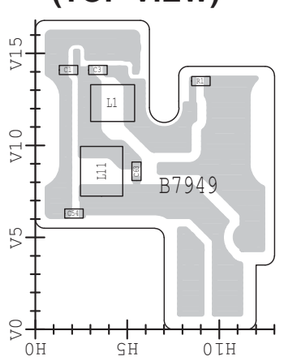
• MAIN UNIT (TOP VIEW)



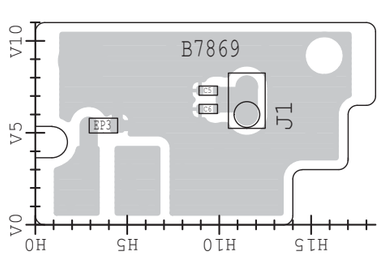
• PA UNIT (TOP VIEW)



• ANT UNIT (TOP VIEW)

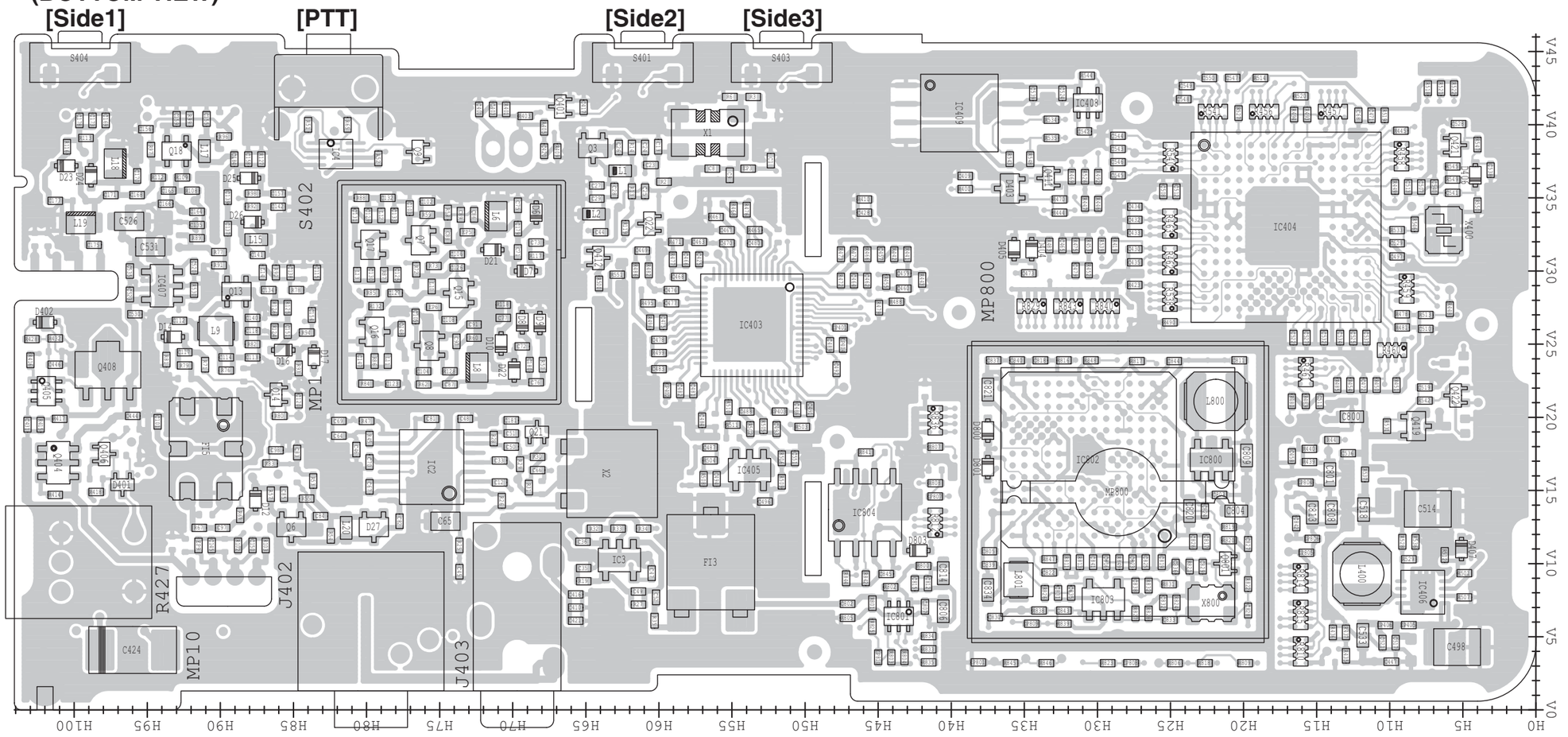


• CONNECT UNIT (TOP VIEW)

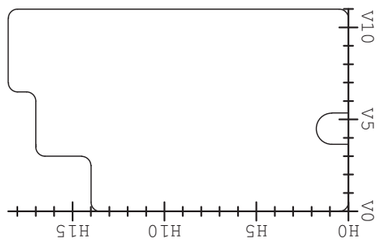


The actual configuration of the PC board can be seen by viewing the top and bottom BOARD LAYOUT pages together.

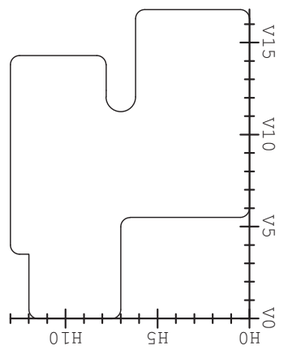
• MAIN UNIT (BOTTOM VIEW)



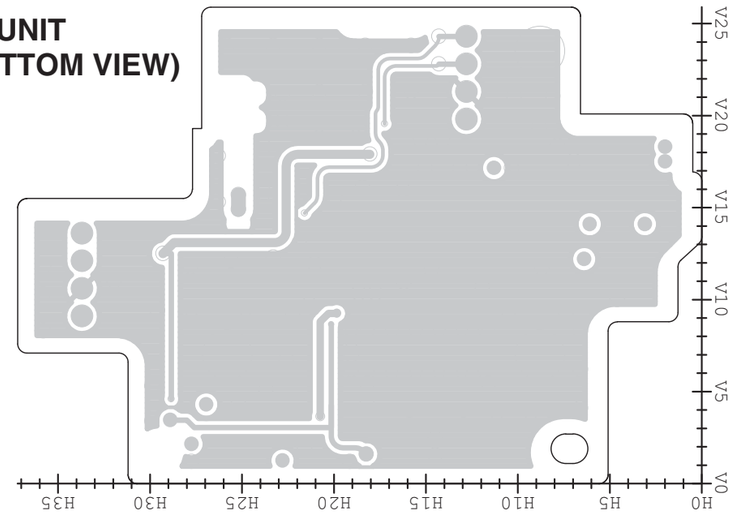
• CONNECT UNIT (BOTTOM VIEW)



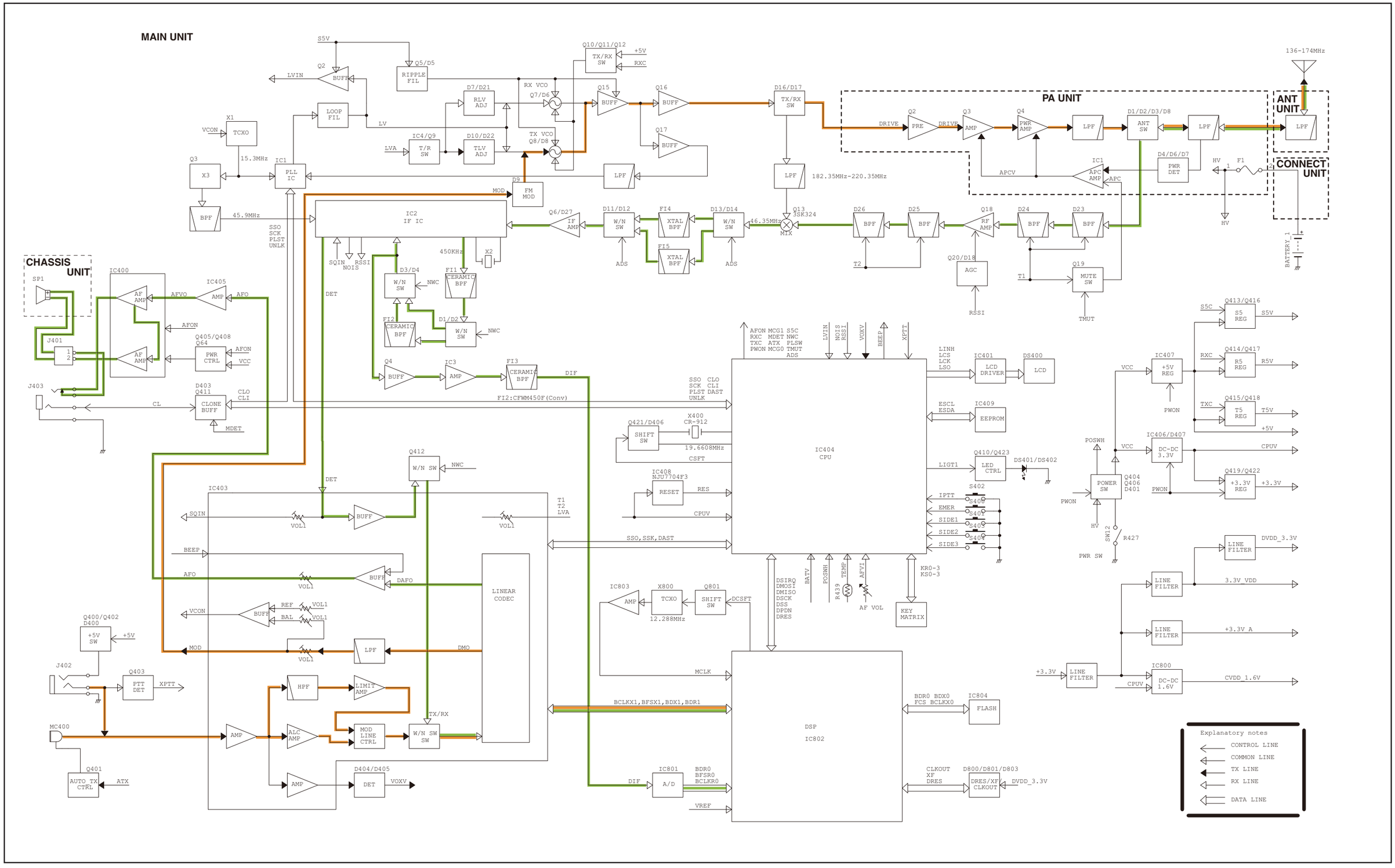
• ANT UNIT (BOTTOM VIEW)



• PA UNIT (BOTTOM VIEW)

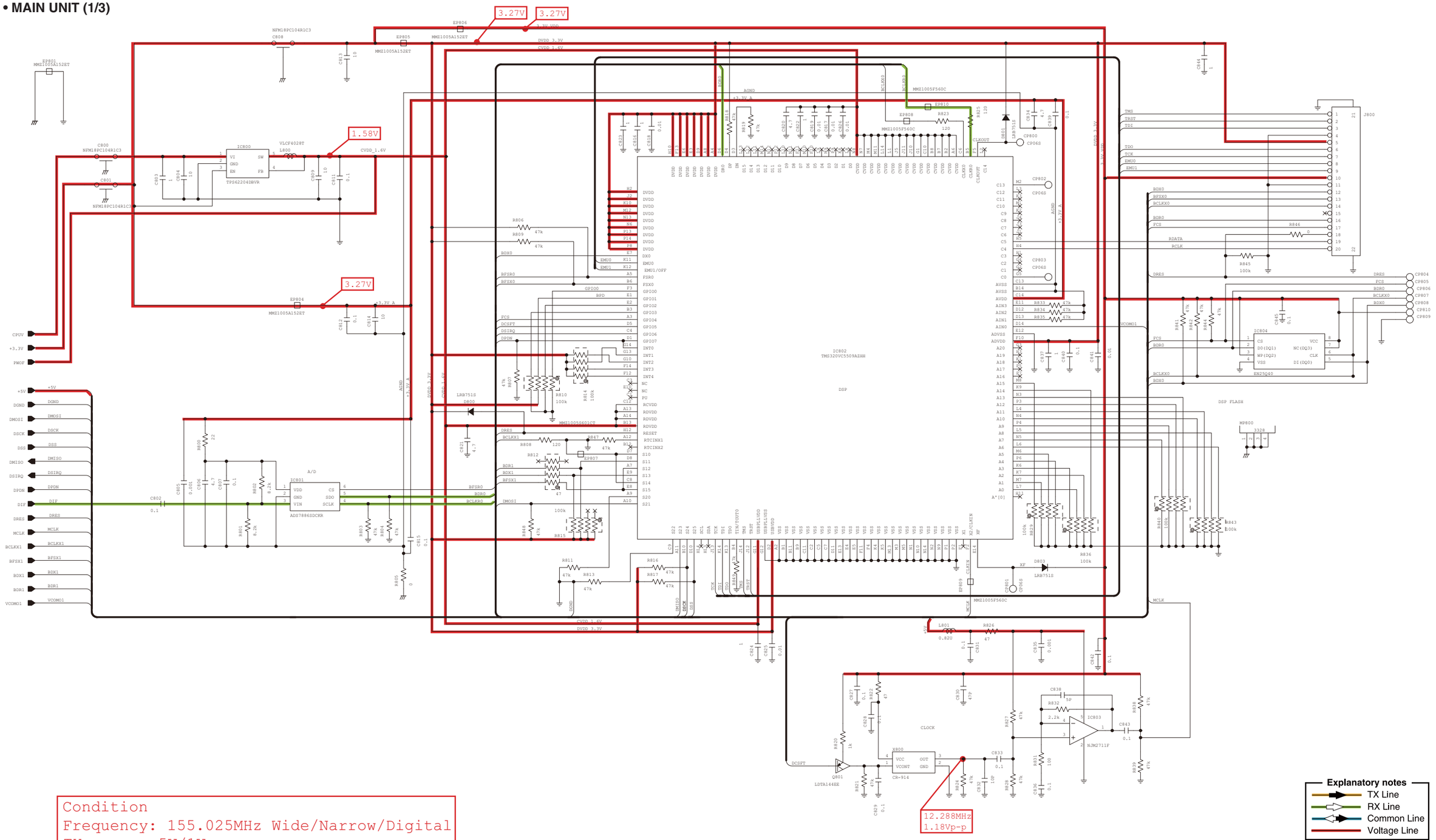


SECTION 9 BLOCK DIAGRAM



SECTION 10 VOLTAGE DIAGRAM

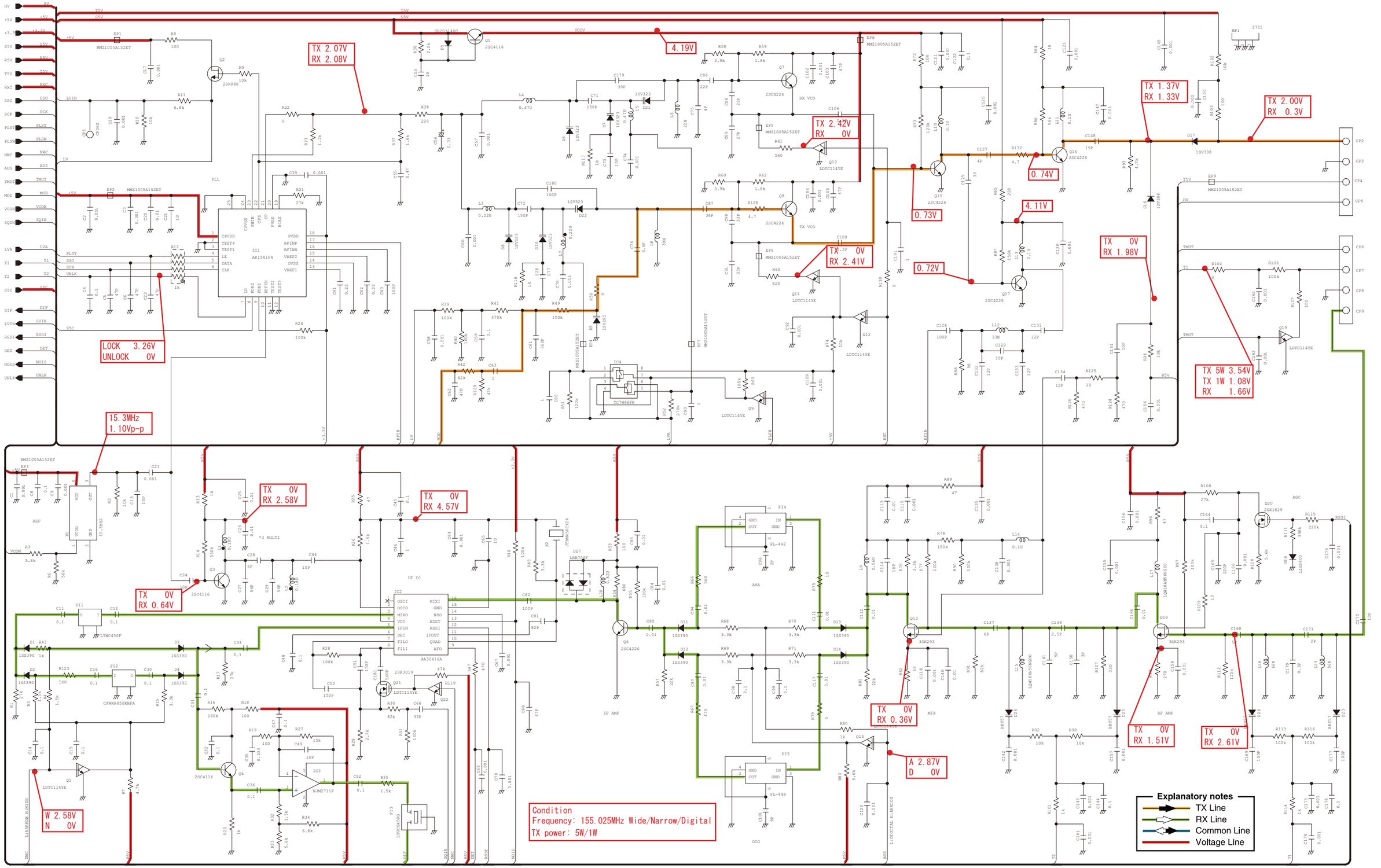
• MAIN UNIT (1/3)



Condition
Frequency: 155.025MHz Wide/Narrow/Digital
TX power: 5W/1W

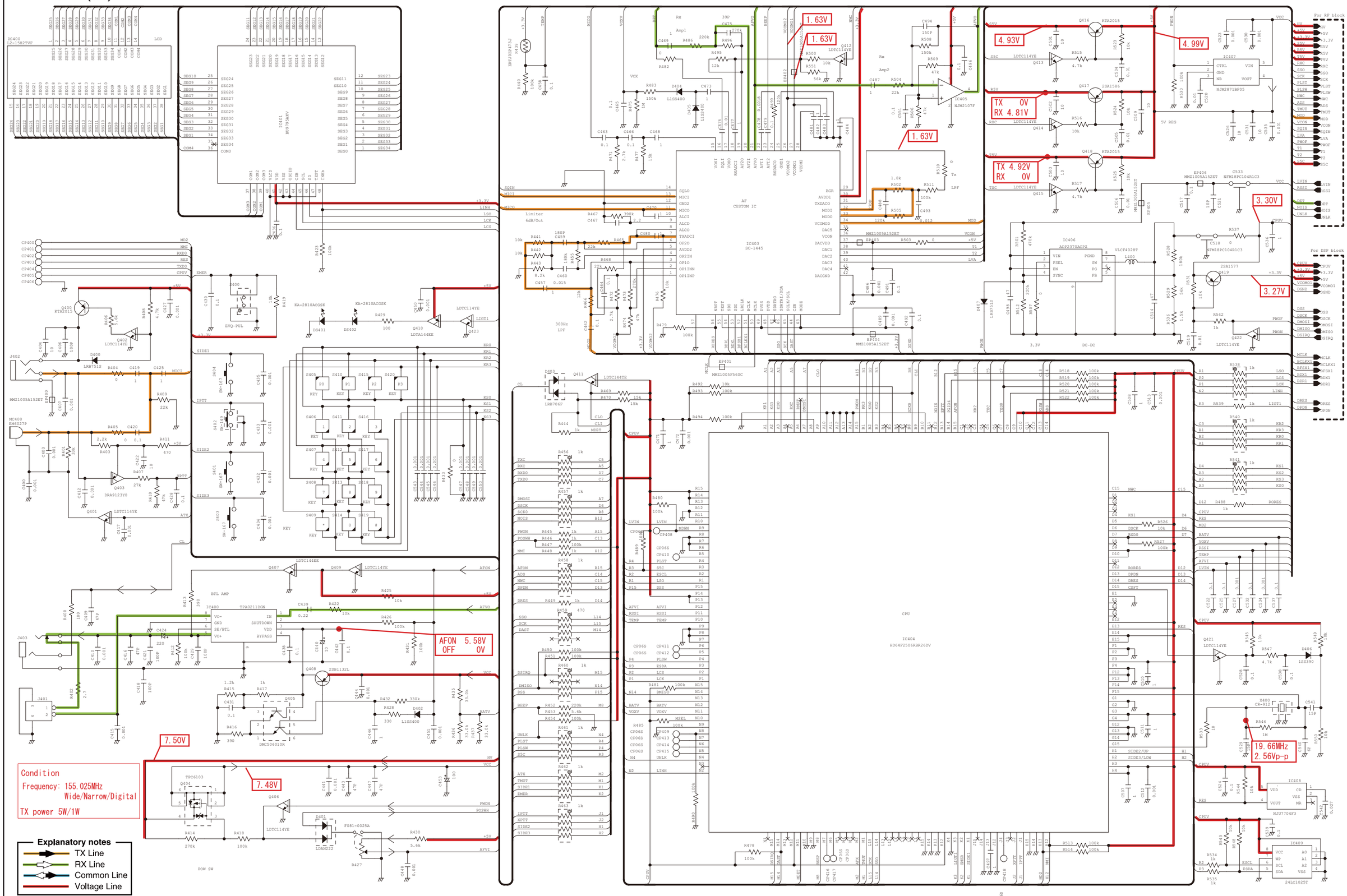
***:** Refer to the PARTS LIST for the value and name of component.

• MAIN UNIT (2/3)

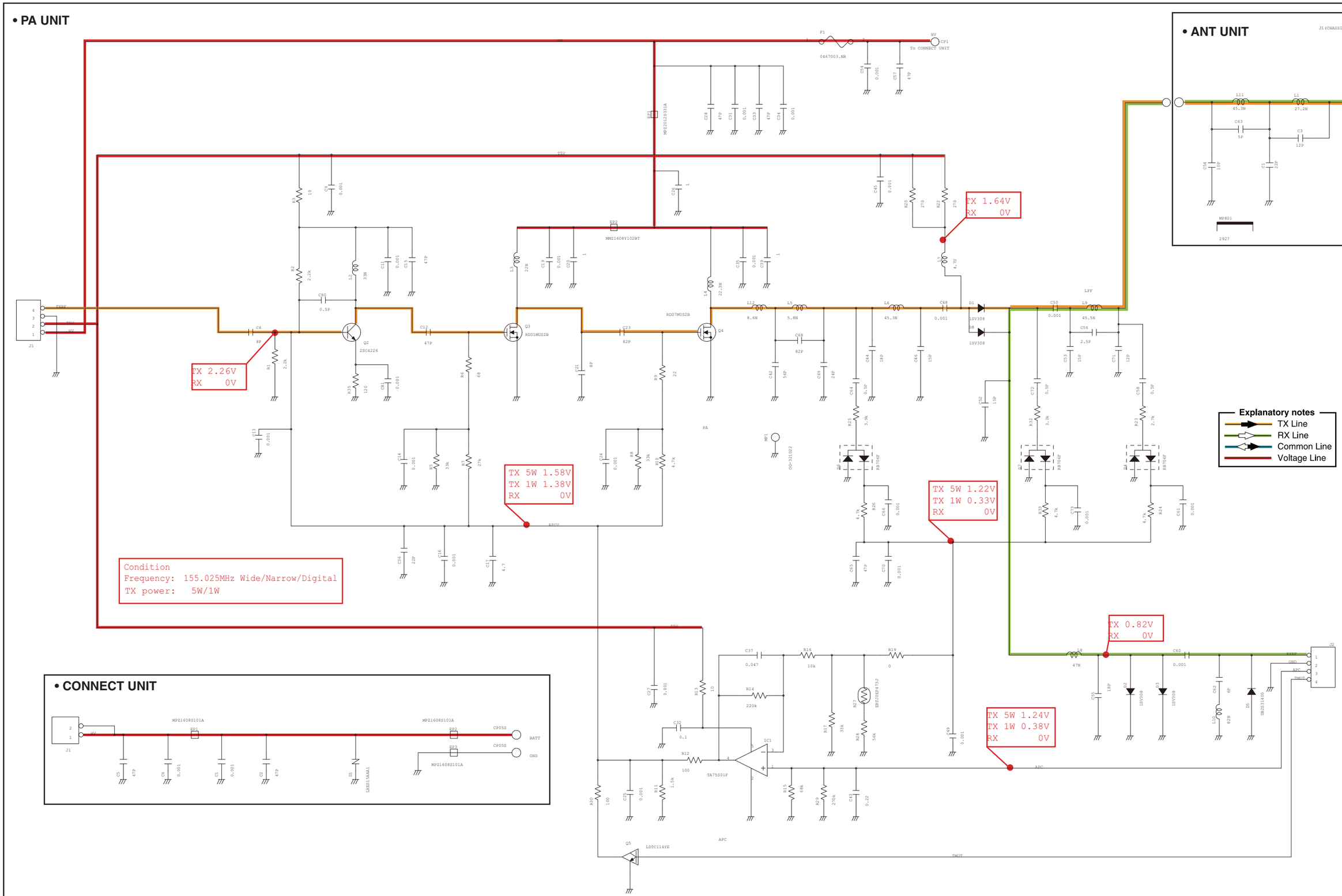


*: Refer to the PARTS LIST for the value and name of component.

• MAIN UNIT (3/3)


1.63V
1.63V
1.63V
4.93V
4.99V
TX 0V
RX 4.81V
TX 4.92V
RX 0V
3.30V
3.27V
AFON 5.58V
OFF 0V
7.50V
7.48V
19.66MHz
2.56Vp-p
Condition
Frequency: 155.025MHz
Wide/Narrow/Digital
TX power 5W/1W
Explanatory notes
TX Line
RX Line
Common Line
Voltage Line
*: Refer to the PARTS LIST for the value and name of component.

• PA UNIT



• ANT UNIT

• CONNECT UNIT

*: Refer to the PARTS LIST for the value and name of component.

Icom Inc.

1-1-32, Kamiminami, Hirano-ku, Osaka 547-0003, Japan
Phone : +81 (06) 6793 5302
Fax : +81 (06) 6793 0013
URL : http://www.icom.co.jp/world/index.html

Icom America Inc.

<Corporate Headquarters>
12421 Willows Road NE, Kirkland, WA 98034, U.S.A.
Phone : +1 (425) 454-8155 Fax : +1 (425) 454-1509
URL : http://www.icomamerica.com
E-mail : sales@icomamerica.com
<Customer Service>
Phone : +1 (425) 454-7619

Icom Canada

Glenwood Centre #150-6165
Highway 17A Delta,B.C., V4K 5B8, Canada
Phone : +1 (604) 952-4266 Fax : +1 (604) 952-0090
URL : http://www.icomcanada.com
E-mail : info@icomcanada.com

Icom (Australia) Pty. Ltd.

Unit 1 / 103 Garden Road, Clayton VIC 3168 Australia
Phone : +61 (03) 9549-7500 Fax : +61 (03) 9549-7505
URL : http://www.icom.net.au
E-mail : sales@icom.net.au

Icom New Zealand

146A Harris Road, East Tamaki,
Auckland, New Zealand
Phone : +64 (09) 274 4062 Fax : +64 (09) 274 4708
URL : http://www.icom.co.nz
E-mail : inquiries@icom.co.nz

Shanghai Icom Ltd.

No.101, Building 9, Caifuxingyuan Park, No.188 Maoting Road,
Chedun Town, Songjiang District, Shanghai, 201611, China
Phone : +86 (021) 6153 2768
Fax : +86 (021) 5765 9987

Icom Brazil

Rua Itororó, 444 Padre Eustáquio Belo Horizonte MG,
CEP: 30130-150 Brazil
Phone : +55 (31) 3582 8847 Fax : +55 (31) 3582 8987
E-mail : sales@icombrazil.com

Icom (Europe) GmbH

Communication Equipment
Auf der Krautweide 24
65812 Bad Soden am Taunus, Germany
Phone : +49 (6196) 76685-0 Fax : +49 (6196) 76685-50
URL : http://www.icomeurope.com
E-mail : info@icomeurope.com

Icom Spain S.L

Ctra. Rubi, No. 88 Bajos A 08174, Sant Cugat del Valles, Barcelona, Spain
Phone : +34 (93) 590 26 70 Fax : +34 (93) 589 04 46
URL : http://www.icomspain.com
E-mail : icom@icomspain.com

Icom (UK) Ltd.

Blacksole House, Altira Park, Herne Bay, Kent CT6 6GZ, UK
Phone : +44 (0) 1227 741741 Fax : +44 (0) 1227 741742
URL : http://www.icomuk.co.uk
E-mail : info@icomuk.co.uk

Icom France s.a.s.

Zac de la Plaine
1 Rue Brindejonc des Moulinais BP 5804
31505 Toulouse Cedex, France
Phone : +33 (5) 61 36 03 03 Fax : +33 (5) 61 36 03 00
URL : http://www.icom-france.com
E-mail : icom@icom-france.com

Asia Icom Inc.

6F No.68, Sec. 1 Cheng-Teh Road, Taipei, Taiwan, R.O.C.
Phone : +886 (02) 2559 1899 Fax : +886 (02) 2559 1874
URL : http://www.asia-icom.com
E-mail : sales@asia-icom.com

Icom Polska Sp. Z o.o.

80-286 Gdansk, Jaskowa Dolina St. 75, Poland
Phone : +48 (58) 551 0484 Fax : +48 (58) 551 4720
E-mail : icompolska@icompolska.pl
URL : http://www.icompolska.pl

Count on us!

Icom Inc.
1-1-32, Kamiminami, Hirano-ku, Osaka 547-0003, Japan

S-15013XZ-C1