

uniden®

SCANNING RECEIVER

MODEL: BC 100XLT

**SERVICE INFORMATION
MANUAL**

**UNIDEN CUSTOMER SERVICE
9900 Westpoint Dr.
P.O. Box 501368
Indianapolis, IN 46250
(317) 842-2483**

**UNIDEN PARTS DEPARTMENT
9900 Westpoint Dr.
P.O. Box 50463
Indianapolis, IN 46250
(317) 841-8618**

SCANNING RECEIVER

MODEL: BC 100XLT

TABLE OF CONTENTS

1.	PARTS LIST	1
2.	ALIGNMENT PROCEDURE	8
3.	TECHNICAL DRAWINGS	13
	BLOCK DIAGRAM	
	SCHEMATIC DIAGRAM	
	MAIN PCB	(E12-2799)
	MICOM PCB	(E13-2800)
	PLL PCB	(E13-2801)
	WINDOW PCB	(E14-2802)
	IF PCB	(E14-2803)
	REG PCB	(E14-2804)
	WIRING DIAGRAM	(E33-2853)
	TOP VIEW	MAIN PCB (E22-7396)
	TOP VIEW	PLL PCB (E23-7399)
	BOTTOM VIEW	MAIN PCB (E22-7397)
	BOTTOM VIEW	PLL PCB E23-7400
		WINDOW PCB E24-7401
		IF PCB E24-7402
		MICOM PCB E23-7398
		REG. PCB E24-7403

* Circuit design and specifications are subject to change without notice.

UAC PARTS LIST

UB109GP BC100XLT

(SYMBOL)	(DESCRIPTION)	(PARTS CODE)
10-00000	UB-109G(P) (E)	AB109GPBE
00000	UB-109G(P) MAIN PCB ASS'Y	AB109GPBEA
B001	PC BOARD MAIN	BPHY0068ACZ
C002	C CYLINDER-CERAMIC TAPE	3PF 50V C CJ C-161
C003	C CYLINDER-CERAMIC TAPE	3PF 50V C CJ C-161
C004	C CERAMIC M/L (2125) TAPE	56PF 50V J UJ
C005	C CYLINDER-CERAMIC TAPE	27PF 50V J UJ C-161
C006	C CYLINDER-CERAMIC TAPE	10PF 50V D CH C-161
C008	C CYLINDER-CERAMIC TAPE	100PF 50V K A C-161
C010	C CYLINDER-CERAMIC TAPE	100PF 50V K A C-161
C011	C CYLINDER-CERAMIC TAPE	1PF 50V C CK C-161
C012	C CERAMIC M/L (2125) TAPE	33PF 50V J CG
C013	C CYLINDER-CERAMIC TAPE	0.001UF 25V M Y C-161
C014	C CYLINDER-CERAMIC TAPE	0.0033UF 12V M Y C-161
C015	C CERAMIC M/L (2125) TAPE	0.01UF 50V K C(B)
C016	C CERAMIC M/L (2125) TAPE	0.01UF 50V K C(B)
C017	C CYLINDER-CERAMIC TAPE	15PF 50V J CH C-161
C018	C CYLINDER-CERAMIC TAPE	27PF 50V J SL C-161
C019	C CERAMIC M/L (2125) TAPE	0.01UF 50V K C(B)
C020	CAPACITOR ELECTROLYTIC	1UF 50V M C-158
C021	C CERAMIC M/L (2125) TAPE	0.1UF 50V Z F
C023	CAPACITOR ELECTROLYTIC	3.3UF 50V M C-095
C024	CAPACITOR ELECTROLYTIC	22UF 6.3V M C-095
C025	C CERAMIC M/L (2125) TAPE	0.047UF 50V Z F
C026	C CERAMIC M/L (2125) TAPE	0.047UF 50V Z F
C027	C CERAMIC M/L (2125) TAPE	0.033UF 25V K C(B)
C028	C CERAMIC M/L (2125) TAPE	0.0047UF 50V K C(B)
C029	C CERAMIC M/L (2125) TAPE	0.0082UF 50V K C(B)
C031	C CYLINDER-CERAMIC TAPE	100PF 50V K A C-161
C032	C CERAMIC M/L (2125) TAPE	0.0022UF 50V K C(B)
C034	C CERAMIC M/L (2125) TAPE	0.0047UF 50V K C(B)
C035	C CERAMIC M/L (2125) TAPE	0.022UF 50V K C(B)
C036	CAPACITOR ELECTROLYTIC	220UF 10V M C-156
C037	CAPACITOR ELECTROLYTIC	4.7UF 25V M C-095
C038	CAPACITOR ELECTROLYTIC	100UF 10V M C-095
C039	C CERAMIC M/L (2125) TAPE	0.068UF 50V Z F
C041	CAPACITOR ELECTROLYTIC	100UF 10V M C-095
C042	C CYLINDER-CERAMIC TAPE	47PF 50V J SL C-161
C044	C CYLINDER-CERAMIC TAPE	0.001UF 25V M Y C-161
C045	C CYLINDER-CERAMIC TAPE	33PF 50V J SL C-161
C046	C CYLINDER-CERAMIC TAPE	0.001UF 25V M Y C-161
C047	C CYLINDER-CERAMIC TAPE	0.001UF 25V M Y C-161
C048	C CYLINDER-CERAMIC TAPE	2P 50V C CK C-161
C049	C CYLINDER-CERAMIC TAPE	0.001UF 25V M Y C-161
C051	C CERAMIC M/L (2125) TAPE	47PF 50V J UJ
C052	C CYLINDER-CERAMIC TAPE	5PF 50V C CH C-161
C054	C CYLINDER-CERAMIC TAPE	220PF 50V K B C-161
C055	CAPACITOR ELECTROLYTIC	220UF 10V M C-156
C056	CAPACITOR ELECTROLYTIC	47UF 16V M C-158
C058	C CERAMIC M/L (2125) TAPE	0.01UF 50V K C(B)
C059	C CYLINDER-CERAMIC TAPE	0.001UF 25V M Y C-161
C060	C CYLINDER-CERAMIC TAPE	0.001UF 25V M Y C-161
C061	C CYLINDER-CERAMIC TAPE	9PF 50V D CH C-161
C062	C CYLINDER-CERAMIC TAPE	22PF 50V J UJ C-161
C063	C CERAMIC M/L (2125) TAPE	0.01UF 50V K C(B)
C064	C CYLINDER-CERAMIC TAPE	15PF 50V J CH C-161
C065	C CYLINDER-CERAMIC TAPE	0.001UF 25V M Y C-161
C066	C CERAMIC M/L (2125) TAPE	0.01UF 50V K C(B)
C067	C CYLINDER-CERAMIC TAPE	0.001UF 25V M Y C-161
C068	C CYLINDER-CERAMIC TAPE	39PF 50V J SL C-161
C069	C CYLINDER-CERAMIC TAPE	470PF 50V K B C-161
C071	CAPACITOR ELECTROLYTIC	4.7UF 25V M C-095
C072	C CERAMIC M/L (2125) TAPE	0.01UF 50V K C(B)
C073	C CYLINDER-CERAMIC TAPE	0.001UF 25V M Y C-161
C074	C CYLINDER-CERAMIC TAPE	0.001UF 25V M Y C-161
C075	C CERAMIC M/L (2125) TAPE	33PF 50V J CG
C076	C CYLINDER-CERAMIC TAPE	330PF 50V K B C-161
C077	CAPACITOR ELECTROLYTIC	47UF 6.3V M C-095
C078	C CERAMIC M/L (2125) TAPE	0.01UF 50V K C(B)
C079	C CERAMIC M/L (2125) TAPE	0.01UF 50V K C(B)
D001	DIODE	HSK120 TR TAPING
D003	DIODE	HSK110 TR
D004	DIODE VARICAP	1SV201-4 TRP
D005	DIODE VARICAP	1SV201-4 TRP

(SYMBOL)	(DESCRIPTION)	(PARTS CODE)
D006	DIODE HSK120 TR TAPING	BDAY0393001
D007	DIODE HSK120 TR TAPING	BDAY0393001
D008	DIODE HSK120 TR TAPING	BDAY0393001
D009	DIODE HSK120 TR TAPING	BDAY0393001
D011	DIODE HSK110 TR	BDAY0400001
D012	DIODE VARICAP 1SV201-4 TRP	BDAY0399001
D013	DIODE HSK110 TR	BDAY0400001
D014	DIODE VARICAP 1SV201-4 TRP	BDAY0399001
D015	DIODE HSK110 TR	BDAY0400001
D016	DIODE VARICAP 1SV201-4 TRP	BDAY0399001
D017	DIODE HSK110 TR	BDAY0400001
D018	DIODE HSK110 TR	BDAY0400001
D019	DIODE HSK110 TR	BDAY0400001
D021	DIODE 1SS184 TE85L	BDAY0256001
D023	DIODE HSK110 TR	BDAY0400001
D024	DIODE HSK110 TR	BDAY0400001
D025	DIODE VARICAP 1SV201-4 TRP	BDAY0399001
D026	DIODE VARICAP 1SV201-4 TRP	BDAY0399001
D027	DIODE HSK110 TR	BDAY0400001
D028	DIODE HSK110 TR	BDAY0400001
D029	DIODE HSK120 TR TAPING	BDAY0393001
D031	DIODE 1SS184 TE85L	BDAY0256001
D033	DIODE HSK120 TR TAPING	BDAY0393001
J001	JACK JK-367 HSK1045-01-010	BJKY0367001
J002	JACK JK-447 69308-016 16P	BJKY0447016
L001	COIL LE-366	BLEY0366001
L002	COIL LE-201 D2.4 3 1/2T	BLEY0201001
L003	COIL LE-353 D6.35 1/2T	BLEY0353001
L004	COIL LF-114 332PC-2592N	BLFY0114001
L005	INDUCTOR MOLDED LZ-051 SP0305-120K 12UH	BLZY0051120
L006	COIL LD-170 L6RH1.7*3.5*0.7	BLDY0170001
L007	COIL LB-607 291XN-4031X	BLBY0607001
L008	COIL LE-293 D6.96 1/2T	BLEY0293001
L009	COIL LF-149 5PNR-2736Z	BLFY0149001
L011	COIL LB-569 291XN-3504X	BLBY0569001
L012	COIL LB-643 291XN-4030IB	BLBY0643001
L013	COIL LC-209	BLCY0209001
L014	COIL LE-127 D2.5 2 1/2T	BLEY0127001
L016	COIL LE-127 D2.5 2 1/2T	BLEY0127001
Q001	TRANSISTOR DB-386 2SC3128	BDBC3128000
Q002	TRANSISTOR DB-717 2SC3704 TAPING	BDBC3704000
Q003	TRANSISTOR DB-724 2SC3121 TE85L	BDBC3121000
Q004	TRANSISTOR DB-718 2SC2714-O TE85L	BDBC2714114
Q005	TRANSISTOR DB-341 2SC2668-O	BDBC2668114
Q006	TRANSISTOR DB-743 2SC2812-L5 TA	BDBC2812642
Q007	TRANSISTOR DB-573 RT1N141C-T12-1 T1	BDBZ0573001
Q008	TRANSISTOR DB-743 2SC2812-L5 TA	BDBC2812642
Q009	TRANSISTOR DB-439 2SD1676	BDBD1676000
Q011	TRANSISTOR DB-566 RT1N441C-T12-1 T1	BDBZ0566001
R001	RESISTOR CARBON FIXED CHIP 560 1/10W J TAPING	BRFC015614Z
R003	RESISTOR CARBON FIXED CHIP 2.7K 1/10W J TAPING	BRFC012724Z
R004	RESISTOR CARBON FIXED CHIP 33K 1/10W J TAPING	BRFC013334Z
R005	RESISTOR CARBON FIXED CHIP 47K 1/10W J TAPING	BRFC014734Z
R006	RESISTOR CARBON FIXED CHIP 39 1/10W J TAPING	BRFC013904Z
R007	RESISTOR CARBON FIXED CHIP 100 1/10W J TAPING	BRFC011014Z
R008	RESISTOR CARBON FIXED CHIP 33K 1/10W J TAPING	BRFC013334Z
R009	RESISTOR CARBON FIXED CHIP 390K 1/10W J TAPING	BRFC013944Z
R011	RESISTOR CARBON FIXED CHIP 1K 1/10W J TAPING	BRFC011024Z
R012	RESISTOR CARBON FIXED CHIP 100 1/10W J TAPING	BRFC011014Z
R013	RESISTOR CARBON FIXED CHIP 3.3K 1/10W J TAPING	BRFC013324Z
R014	RESISTOR CARBON FIXED CHIP 120K 1/10W J TAPING	BRFC011244Z
R015	RESISTOR CARBON FIXED CHIP 220K 1/10W J TAPING	BRFC012244Z
R016	RESISTOR CARBON FIXED CHIP 4.7K 1/10W J TAPING	BRFC014724Z
R017	RESISTOR CARBON FIXED CHIP 2.2K 1/10W J TAPING	BRFC012224Z
R018	R CARBON AXIAL LEAD (TAPE) 15K 1/8W J	BRFT181534Z
R019	RESISTOR CARBON FIXED CHIP 1K 1/10W J TAPING	BRFC011024Z
R021	RESISTOR CARBON FIXED CHIP 10K 1/10W J TAPING	BRFC011034Z
R022	RESISTOR CARBON FIXED CHIP 22K 1/10W J TAPING	BRFC012234Z
R023	RESISTOR CARBON FIXED CHIP 820K 1/10W J TAPING	BRFC018244Z
R024	RESISTOR CARBON FIXED CHIP 10K 1/10W J TAPING	BRFC011034Z
R027	RESISTOR CARBON FIXED CHIP 4.7K 1/10W J TAPING	BRFC014724Z
R028	RESISTOR CARBON FIXED CHIP 12K 1/10W J TAPING	BRFC011234Z
R029	RESISTOR CARBON FIXED CHIP 4.7K 1/10W J TAPING	BRFC014724Z
R031	RESISTOR CARBON FIXED CHIP 22K 1/10W J TAPING	BRFC012234Z
R032	RESISTOR CARBON FIXED CHIP 22K 1/10W J TAPING	BRFC012234Z
R033	RESISTOR CARBON FIXED CHIP 56K 1/10W J TAPING	BRFC015634Z
R034	RESISTOR CARBON FIXED CHIP 47K 1/10W J TAPING	BRFC014734Z
R035	RESISTOR CARBON FIXED CHIP 27 1/10W J TAPING	BRFC012704Z
R036	RESISTOR CARBON FIXED CHIP 2.2 1/10W J TAPING	BRFC012294Z

(SYMBOL)	(DESCRIPTION)	(PARTS CODE)
R041	R CARBON AXIAL LEAD (TAPE)	2.7K 1/6W J BRFT612724Z
R042	R CARBON AXIAL LEAD (TAPE)	47K 1/8W J BRFT184734Z
R043	RESISTOR CARBON FIXED CHIP	2.7K 1/10W J TAPING BRFC012724Z
R044	RESISTOR CARBON FIXED CHIP	1.5K 1/10W J TAPING BRFC011524Z
R045	RESISTOR CARBON FORMED VERT	1K 1/6W J BRUB611024Z
R046	RESISTOR CARBON FIXED CHIP	390K 1/10W J TAPING BRFC013944Z
R047	RESISTOR CARBON FIXED CHIP	180 1/10W J TAPING BRFC011814Z
R049	RESISTOR CARBON FIXED CHIP	2.2 1/10W J TAPING BRFC012294Z
R050	R CARBON AXIAL LEAD (TAPE)	0.5 1/8W J BRFT185084Z
R051	RESISTOR CARBON FIXED CHIP	3.3K 1/10W J TAPING BRFC013324Z
R052	RESISTOR CARBON FIXED CHIP	39K 1/10W J TAPING BRFC013934Z
R053	RESISTOR CARBON FORMED VERT	2.7K 1/6W J BRUB612724Z
R054	RESISTOR CARBON FIXED CHIP	47K 1/10W J TAPING BRFC014734Z
R055	RESISTOR CARBON FIXED CHIP	2.7K 1/10W J TAPING BRFC012724Z
R056	RESISTOR CARBON FIXED CHIP	2.7K 1/10W J TAPING BRFC012724Z
R057	RESISTOR CARBON FIXED CHIP	1K 1/10W J TAPING BRFC011024Z
R058	RESISTOR CARBON FIXED CHIP	1K 1/10W J TAPING BRFC011024Z
R059	RESISTOR CARBON FIXED CHIP	100 1/10W J TAPING BRFC011014Z
R061	RESISTOR CARBON FIXED CHIP	3.3K 1/10W J TAPING BRFC013324Z
R062	RESISTOR CARBON FIXED CHIP	47K 1/10W J TAPING BRFC014734Z
R063	RESISTOR CARBON FIXED CHIP	100 1/10W J TAPING BRFC011014Z
R064	RESISTOR CARBON FIXED CHIP	100 1/10W J TAPING BRFC011014Z
R065	R CARBON AXIAL LEAD (TAPE)	15K 1/8W J BRFT181534Z
CT001	CAPACITOR TRIMMER	CT-064 ECR-GAO35M11 BCTY0064350
CT002	CAPACITOR TRIMMER	CT-064 ECR-GAO35M11 BCTY0064350
CT003	CAPACITOR TRIMMER	CT-064 ECR-GAO35M11 BCTY0064350
FT001	FILTER CRYSTAL	FL-195 BFLY0195001
IC001	INTEGRATED CIRCUIT	LA1600A BDEY1000001
IC002	INTEGRATED CIRCUIT	NJM386S-L BDEY0683001
IC003	INTEGRATED CIRCUIT	LA-1186N BDEY1051001
IC004	INTEGRATED CIRCUIT	IR3M03AN BDEY1154001
IC005	INTEGRATED CIRCUIT	TK11750 BDEY1268001
JP001	JUMPER WIRE	YY-052 10.0MM BYY0052003
VR001	RESISTOR VARIABLE	RV-605 RK9A10 100KA BRVY0605001
VR002	RESISTOR VARIABLE	RV-604 RK9A11 100KA W/SW BRVY0604001
VR003	RESISTOR SEMI-FIXED	RT-528 33KB BRTY0528333
05-00000	UB-109G(P) MICOM PCB ASS'Y	AB109GPBEB
B201	PC BOARD MICOM	PH-069AC BPHY0069ACZ
C201	C CERAMIC M/L (3216) TAPE	0.022UF 50V K C(B) BCXE812235Z
C203	C CERAMIC M/L (3216) TAPE	0.022UF 50V K C(B) BCXE812235Z
C204	C CERAMIC M/L (3216) TAPE	0.022UF 50V K C(B) BCXE812235Z
C205	C CERAMIC M/L (3216) TAPE	0.047UF 50V K C(B) BCXE814735Z
C208	C CERAMIC M/L (3216) TAPE	0.022UF 50V K C(B) BCXE812235Z
C209	C CERAMIC M/L (3216) TAPE	0.022UF 50V K C(B) BCXE812235Z
C211	C CERAMIC M/L (3216) TAPE	0.022UF 50V K C(B) BCXE812235Z
C212	C CERAMIC M/L (3216) TAPE	0.022UF 50V K C(B) BCXE812235Z
C213	C CERAMIC M/L (3216) TAPE	0.01UF 50V K C(B) BCXE811035Z
C214	CAPACITOR ELECTROLYTIC	47UF 6.3V M C-158 BCAJ904706Z
C215	C CERAMIC M/L (3216) TAPE	0.022UF 50V K C(B) BCXE812235Z
C216	CAPACITOR ELECTROLYTIC	100UF 6.3V M C-158 BCAJ901016Z
C217	C CERAMIC M/L (3216) TAPE	0.01UF 50V K C(B) BCXE811035Z
C218	C CYLINDER-CERAMIC TAPE	0.001UF 25V M Y C-161 BCWJ511026Z
C219	C CYLINDER-CERAMIC TAPE	0.001UF 25V M Y C-161 BCWJ511026Z
D201	DIODE LED	LT9315E BDAY0449001
D202	DIODE	HSK120 TR TAPING BDAY0393001
D203	DIODE ZENNER	HZK3CLL01 TR BDAY0441001
D204	DIODE	HSK120 TR TAPING BDAY0393001
P201	PLUG	PG-125 16P BPGY0125016
Q201	TRANSISTOR	DB-125 2SB815-B6-YDK TA BDBB0815724
Q202	TRANSISTOR	DB-573 RT1N141C-T12-1 T1 BDBZ0573001
Q204	TRANSISTOR	DB-565 RT1P144C-T12 T1 BDBZ0565001
Q205	TRANSISTOR	DB-743 2SC2812-L5 TA BDBC281264Z
Q206	TRANSISTOR	DB-565 RT1P144C-T12 T1 BDBZ0565001
Q207	TRANSISTOR	DB-441 2SD1777-CI TR BDBD1777549
Q209	TRANSISTOR	DB-573 RT1N141C-T12-1 T1 BDBZ0573001
R201	RESISTOR CARBON MELF CHIP	100K 1/8W J TAPING BRFD181044Z
R202	RESISTOR CARBON MELF CHIP	100K 1/8W J TAPING BRFD181044Z
R203	RESISTOR CARBON MELF CHIP	100K 1/8W J TAPING BRFD181044Z
R204	RESISTOR CARBON MELF CHIP	47K 1/8W J TAPING BRFD184734Z
R205	RESISTOR CARBON MELF CHIP	4.7K 1/8W J TAPING BRFD184724Z
R206	RESISTOR CARBON MELF CHIP	2.2K 1/8W J TAPING BRFD182224Z
R208	RESISTOR CARBON MELF CHIP	47K 1/8W J TAPING BRFD184734Z
R209	RESISTOR CARBON MELF CHIP	470K 1/8W J TAPING BRFD184744Z
R211	RESISTOR CARBON MELF CHIP	150K 1/8W J TAPING BRFD181544Z
R212	RESISTOR CARBON MELF CHIP	1M 1/8W J TAPING BRFD181054Z
R213	RESISTOR CARBON MELF CHIP	6.8K 1/8W J TAPING BRFD186824Z
R216	RESISTOR CARBON MELF CHIP	1M 1/8W J TAPING BRFD181054Z
R217	RESISTOR CARBON MELF CHIP	4.7 1/8W J TAPING BRFD184794Z
R218	RESISTOR CARBON MELF CHIP	4.7K 1/8W J TAPING BRFD184724Z

(SYMBOL)	(DESCRIPTION)	(PARTS CODE)
R221	RESISTOR CARBON MELF CHIP 47K 1/8W J TAPING	BRFD184734Z
R223	RESISTOR CARBON MELF CHIP 10 1/8W J TAPING	BRFD181004Z
R225	RESISTOR CARBON MELF CHIP 100K 1/8W J TAPING	BRFD181044Z
R226	RESISTOR CARBON MELF CHIP 100K 1/8W J TAPING	BRFD181044Z
R227	RESISTOR CARBON MELF CHIP 100K 1/8W J TAPING	BRFD181044Z
R228	RESISTOR CARBON FIXED CHIP 220K 1/8W G TAPING	BRFC182247Z
R231	RESISTOR CARBON MELF CHIP 2.2K 1/8W J TAPING	BRFD182224Z
R232	RESISTOR CARBON MELF CHIP 2.2K 1/8W J TAPING	BRFD182224Z
R234	RESISTOR CARBON MELF CHIP 120K 1/8W J TAPING	BRFD181244Z
R235	RESISTOR CARBON MELF CHIP 10 1/8W J TAPING	BRFD181004Z
R236	RESISTOR CARBON MELF CHIP 10 1/8W J TAPING	BRFD181004Z
R237	RESISTOR CARBON MELF CHIP 10 1/8W J TAPING	BRFD181004Z
R241	RESISTOR CARBON MELF CHIP 2.2K 1/8W J TAPING	BRFD182224Z
R242	RESISTOR CARBON MELF CHIP 150 1/8W J TAPING	BRFD181514Z
R243	RESISTOR CARBON MELF CHIP 1.2K 1/8W J TAPING	BRFD181224Z
R244	RESISTOR CARBON MELF CHIP 10K 1/8W J TAPING	BRFD181034Z
R251	JUMPER CHIP RZ-021 JC2A TAPING	BRZY0021001
R253	RESISTOR CARBON MELF CHIP 47K 1/8W J TAPING	BRFD184734Z
R254	JUMPER CHIP RZ-021 JC2A TAPING	BRZY0021001
R255	RESISTOR CARBON MELF CHIP 47K 1/8W J TAPING	BRFD184734Z
R260	JUMPER CHIP RZ-021 JC2A TAPING	BRZY0021001
Y201	CERAMIC RESONATOR YY-665 CRK400	BYYY0665001
DP201	LIQUID CRYSTAL DISPLAY DL-026 IR621C-E	BDLY0026001
IC201	INTEGRATED CIRCUIT UC1147A (HD614081FB17)	BDEY1033002
IC202	INTEGRATED CIRCUIT TK11750	BDEY1268001
IC203	INTEGRATED CIRCUIT S-8054ALB-LM-T1	BDEY1161001
IC204	INTEGRATED CIRCUIT S-8054-HN-CB-T1	BDEY1035001
IC205	INTEGRATED CIRCUIT CKK1013P (CUT)	BDEY1127001
IC207	INTEGRATED CIRCUIT LH5008TP	BDEY1021001
IC208	INTEGRATED CIRCUIT S-81250HG-RD-T1	BDEY0940001
1C206	C CERAMIC MELF 330PF 50V K B C-140 TAPE	BCVP813315Z
1C207	C CERAMIC MELF 330PF 50V K B C-140 TAPE	BCVP813315Z
2C206	C CERAMIC MELF 180PF 50V K B C-140 TAPE	BCVP811815Z
2C207	C CERAMIC MELF 180PF 50V K B C-140 TAPE	BCVP811815Z
10-00000	UB-109G(P) WINDOW PCB ASS'Y	AB109GPBEC
B301	PC BOARD WINDOW PH-058AC	BPHY0058ACZ
C301	CAPACITOR TANTALUM CHIP 0.1UF 35V M C-122 TAPE	BCSH661086Z
C302	CAPACITOR TANTALUM CHIP 3.3UF 4V M C-122 TAPE	BCSH703396Z
D301	DIODE HSK120 TR TAPING	BDAY0393001
Q301	TRANSISTOR DB-573 RT1N141C-T12-1 T1	BDBZ0573001
Q302	TRANSISTOR DB-743 2SC2812-L5 TA	BDBC281264Z
R301	RESISTOR CARBON FIXED CHIP 100K 1/10W J TAPING	BRFC011044Z
R302	RESISTOR CARBON FIXED CHIP 39K 1/10W J TAPING	BRFC013934Z
R303	RESISTOR CARBON FIXED CHIP 680K 1/10W J TAPING	BRFC016844Z
R304	RESISTOR CARBON FIXED CHIP 120K 1/10W J TAPING	BRFC011244Z
R305	RESISTOR CARBON FIXED CHIP 220K 1/10W G TAPING	BRFC012247Z
R306	RESISTOR CARBON FIXED CHIP 330K 1/10W G TAPING	BRFC013347Z
R307	RESISTOR CARBON FIXED CHIP 100K 1/10W J TAPING	BRFC011044Z
R308	RESISTOR CARBON FIXED CHIP 82K 1/10W J TAPING	BRFC018234Z
R309	RESISTOR CARBON FIXED CHIP 3.3K 1/10W J TAPING	BRFC013324Z
R310	RESISTOR CARBON FIXED CHIP 100K 1/10W J TAPING	BRFC011044Z
R311	RESISTOR CARBON FIXED CHIP 100K 1/10W J TAPING	BRFC011044Z
IC301	INTEGRATED CIRCUIT NJM2904M	BDEY0703001
15-00000	UB-109G(P) IF PCB ASS'Y	AB109GPBED
B401	PC BOARD IF PH-057AC	BPHY0057ACZ
C401	CAPACITOR TANTALUM CHIP 0.22UF 35V M C-122 TAPE	BCSH662286Z
C402	C CERAMIC M/L (2125) TAPE 0.047UF 50V Z F	BCXK814730Z
C403	C CERAMIC M/L (2125) TAPE 0.1UF 50V Z F	BCXK811040Z
C404	C CERAMIC M/L (2125) TAPE 0.1UF 50V Z F	BCXK811040Z
C405	C CERAMIC M/L (2125) TAPE 33PF 50V J CG	BCXG813304Z
C406	C CERAMIC M/L (2125) TAPE 470PF 50V K C(B)	BCXJ814715Z
C407	C CERAMIC M/L (2125) TAPE 0.0047UF 50V K C(B)	BCXJ814725Z
C408	C CERAMIC M/L (2125) TAPE 470PF 50V K C(B)	BCXJ814715Z
C409	C CERAMIC M/L (2125) TAPE 0.0012UF 50V K C(B)	BCXJ811225Z
C411	C CERAMIC M/L (2125) TAPE 0.01UF 50V K C(B)	BCXJ811035Z
C412	C CERAMIC M/L (2125) TAPE 0.0047UF 50V K C(B)	BCXJ814725Z
C413	CAPACITOR TANTALUM CHIP 0.1UF 35V M C-122 TAPE	BCSH661086Z
C414	C CERAMIC M/L (2125) TAPE 100PF 50V J CG	BCXG811014Z
C415	C CERAMIC M/L (2125) TAPE 0.01UF 50V K C(B)	BCXJ811035Z
D401	DIODE HSM88AS TL	BDAY0346001
L401	COIL LF-107	BLFY0107001
R401	RESISTOR CARBON FIXED CHIP 47K 1/10W J TAPING	BRFC014734Z
R402	RESISTOR CARBON FIXED CHIP 680K 1/10W J TAPING	BRFC016844Z
R403	RESISTOR CARBON FIXED CHIP 1.8K 1/10W J TAPING	BRFC011824Z
R404	RESISTOR CARBON FIXED CHIP 1.8K 1/10W J TAPING	BRFC011824Z
R405	RESISTOR CARBON FIXED CHIP 47K 1/10W J TAPING	BRFC014734Z
R406	RESISTOR CARBON FIXED CHIP 1K 1/10W J TAPING	BRFC011024Z
R407	RESISTOR CARBON FIXED CHIP 4.7K 1/10W J TAPING	BRFC014724Z
R408	RESISTOR CARBON FIXED CHIP 8.2K 1/10W J TAPING	BRFC018224Z

(SYMBOL)	(DESCRIPTION)	(PARTS CODE)
R409	RESISTOR CARBON FIXED CHIP 18K 1/10W J TAPING	BRFC011834Z
R410	RESISTOR CARBON FIXED CHIP 1K 1/10W J TAPING	BRFC011024Z
R411	RESISTOR CARBON FIXED CHIP 22K 1/10W J TAPING	BRFC012234Z
R412	RESISTOR CARBON FIXED CHIP 330K 1/10W J TAPING	BRFC013344Z
R413	RESISTOR CARBON FIXED CHIP 33K 1/10W J TAPING	BRFC013334Z
FT401	FILTER CERAMIC FL-200 SFP450D	BFLY0200001
IC401	INTEGRATED CIRCUIT TK10421M-2	BDEY1052001
20-00000	UB-109G(P) REG PCB ASS'Y	AB109GPBEE
B601	PC BOARD REG PH-055AE	BPHY0055AEZ
C601	CAPACITOR CERAMIC 0.022UF 50V Z YF(F)	BCKG812230Z
C602	CAPACITOR ELECTROLYTIC 100UF 10V M C-095	BCER111016Z
D601	DIODE 1N4003	BDAY0133001
D602	DIODE LED SLP-135B	BDAY0430001
D603	DIODE HRP22	BDAY0409001
J601	JACK JK-234 DC JACK MA-13	BJKY0234001
R601	R CARBON AXIAL LEAD (TAPE) 1.5K 1/6W J	BRFT611524Z
R602	RESISTOR METAL OXIDE 27 1WS J	BRSJ002704Z
IC601	INTEGRATED CIRCUIT L4810CV	BDEY1036001
JP601	JUMPER WIRE YY-052 5.0MM	BYYY0052001
JP602	JUMPER WIRE YY-052 5.0MM	BYYY0052001
25-00000	UB-109G(P) PLL PCB ASS'Y	AB109GPBEF
B701	PC BOARD PLL PH-066AB	BPHY0066ABZ
C701	C CYLINDER-CERAMIC TAPE 0.0033UF 12V M Y C-161	BCWJ213326Z
C702	C CERAMIC M/L (2125) TAPE 0.033UF 50V Z F	BCXK813330Z
C703	C CYLINDER-CERAMIC TAPE 0.001UF 25V M Y C-161	BCWJ511026Z
C704	C CYLINDER-CERAMIC TAPE 1.5PF 50V C UK C-161	BCWL811591Z
C705	C CYLINDER-CERAMIC TAPE 0.001UF 25V M Y C-161	BCWJ511026Z
C706	C CERAMIC M/L (2125) TAPE 33PF 50V J CG	BCKG813304Z
C707	C CYLINDER-CERAMIC TAPE 0.001UF 25V M Y C-161	BCWJ511026Z
C708	C CYLINDER-CERAMIC TAPE 0.001UF 25V M Y C-161	BCWJ511026Z
C709	C CERAMIC M/L (2125) TAPE 0.022UF 50V K C(B)	BCXJ812235Z
C711	C CYLINDER-CERAMIC TAPE 47PF 50V J SL C-161	BCWE814704Z
C712	C CYLINDER-CERAMIC TAPE 0.0033UF 12V M Y C-161	BCWJ213326Z
C713	C CYLINDER-CERAMIC TAPE 0.001UF 25V M Y C-161	BCWJ511026Z
C714	CAPACITOR ELECTROLYTIC 100UF 6.3V M C-158	BCAJ901016Z
C716	C CERAMIC M/L (2125) TAPE 18PF 50V J CG	BCKG811804Z
C717	C CERAMIC M/L (2125) TAPE 39PF 50V J CG	BCKG813904Z
C718	C CYLINDER-CERAMIC TAPE 10PF 50V D SL C-161	BCWE811002Z
C719	C CYLINDER-CERAMIC TAPE 10PF 50V D SL C-161	BCWE811002Z
C721	CAPACITOR MYLAR (MKT) 0.1UF 63V J C-184	BCQX911044Z
C722	CAPACITOR MYLAR 0.0047UF 50V J C-114	BCQD814724Z
C723	CAPACITOR MYLAR 0.0047UF 50V J C-114	BCQD814724Z
C724	CAPACITOR ELECTROLYTIC 22UF 25V M C-158	BCAJ512206Z
C725	C CYLINDER-CERAMIC TAPE 0.001UF 25V M Y C-161	BCWJ511026Z
D701	DIODE VARICAP 1SV201-4 TRP	BDAY0399001
D702	DIODE HSK110 TR	BDAY0400001
D703	DIODE HSK110 TR	BDAY0400001
D704	DIODE VARICAP 1SV201-4 TRP	BDAY0399001
D708	DIODE 1SS184 TE85L	BDAY0256001
J701	JACK JK-039 3022-04A	BJKY0039004
J702	JACK JK-039 3022-3A	BJKY0039003
J703	JACK JK-039 3022-3A	BJKY0039003
J704	JACK JK-039 3022-3A	BJKY0039003
L701	COIL LB-568 VB363SN-099IB	BLBY0568001
L702	COIL LB-644 VB363SN-120IB	BLBY0644001
L703	INDUCTOR MOLDED LZ-052 SP0305-R22K 0.22UH	BLZY0052228
L704	INDUCTOR MOLDED LZ-052 SP0305-R56K 0.56UH	BLZY0052568
L705	COIL LD-087 BF04-3*5*1	BLDY0087001
Q701	TRANSISTOR DB-724 2SC3121 TE85L	BDBC3121000
Q702	TRANSISTOR DB-724 2SC3121 TE85L	BDBC3121000
Q703	TRANSISTOR DB-724 2SC3121 TE85L	BDBC3121000
Q704	TRANSISTOR DB-036 2SA1162-Y TE85L	BDBA1162124
Q705	TRANSISTOR DB-549 DTA143XS	BDB20549001
Q706	TRANSISTOR DB-724 2SC3121 TE85L	BDBC3121000
Q707	TRANSISTOR UNIDEN SELECT DB-777 2SC3121-T5L TE85L	BDBC3121814
Q708	TRANSISTOR DB-036 2SA1162-Y TE85L	BDBA1162124
Q709	TRANSISTOR UNIDEN SELECT DB-777 2SC3121-T5L TE85L	BDBC3121814
R701	RESISTOR CARBON FIXED CHIP 100 1/10W J TAPING	BRFC011014Z
R702	RESISTOR CARBON FIXED CHIP 33K 1/10W J TAPING	BRFC013334Z
R703	RESISTOR CARBON FIXED CHIP 330 1/10W J TAPING	BRFC013314Z
R704	RESISTOR CARBON FIXED CHIP 470 1/10W J TAPING	BRFC014714Z
R705	RESISTOR CARBON FIXED CHIP 560 1/10W J TAPING	BRFC015614Z
R706	RESISTOR CARBON FIXED CHIP 4.7K 1/10W J TAPING	BRFC014724Z
R707	RESISTOR CARBON FIXED CHIP 10K 1/10W J TAPING	BRFC011034Z
R708	RESISTOR CARBON FIXED CHIP 4.7K 1/10W J TAPING	BRFC014724Z
R709	RESISTOR CARBON FIXED CHIP 47K 1/10W J TAPING	BRFC014734Z
R711	RESISTOR CARBON FIXED CHIP 100 1/10W J TAPING	BRFC011014Z
R712	RESISTOR CARBON FIXED CHIP 1.8K 1/10W J TAPING	BRFC011824Z
R713	RESISTOR CARBON FIXED CHIP 100 1/10W J TAPING	BRFC011014Z

(SYMBOL)	(DESCRIPTION)	(PARTS CODE)
R714	RESISTOR CARBON FIXED CHIP	10K 1/10W J TAPING
R715	RESISTOR CARBON FIXED CHIP	100K 1/10W J TAPING
R716	RESISTOR CARBON FIXED CHIP	10K 1/10W J TAPING
R717	RESISTOR CARBON FIXED CHIP	100K 1/10W J TAPING
R718	RESISTOR CARBON FIXED CHIP	100 1/10W J TAPING
R719	RESISTOR CARBON FIXED CHIP	330 1/10W J TAPING
R722	RESISTOR CARBON FIXED CHIP	33K 1/10W J TAPING
R723	RESISTOR CARBON FIXED CHIP	10K 1/10W J TAPING
R725	RESISTOR CARBON FIXED CHIP	10K 1/10W J TAPING
R726	RESISTOR CARBON FIXED CHIP	220K 1/10W J TAPING
R727	RESISTOR CARBON FIXED CHIP	22K 1/10W J TAPING
R728	RESISTOR CARBON FIXED CHIP	18K 1/10W J TAPING
R729	RESISTOR CARBON FIXED CHIP	15K 1/10W J TAPING
R731	RESISTOR CARBON FIXED CHIP	18K 1/10W J TAPING
R732	RESISTOR CARBON FIXED CHIP	2.2M 1/10W J TAPING
R733	RESISTOR CARBON FIXED CHIP	100 1/10W J TAPING
X701	CRYSTAL	QX-145 10.400
CT701	CAPACITOR TRIMMER	CT-065 TZ03Z500E 50PF
IC701	INTEGRATED CIRCUIT	PLL2002A1
IC702	INTEGRATED CIRCUIT	TLC271CP
85-00000	UB-109G(P) (E) PARTS	
J501	JACK	JK-474 BNC-RB3-8D-01
Y501	KEY BOARD RUBBER	YY-573
AD951	AC ADAPTER	YY-450 AD-140U
AT951	ANTENNA	AT-094 SAV-012303-O-AO
BT501	BATTERY	BT-049 AA-877
EP951	EARPHONE	EP-006
SP501	SPEAKER	SP-159
90-00000	UB-109G(P) WIRE	
W001	WIRE W-004	UL 1571 #26 5- 50- 5 BLK
W002	WIRE W-004	UL 1571 #26 5- 50- 5 RED
W003	WIRE W-004	UL 1571 #26 10- 45- 3 RED
W004	WIRE W-004	UL 1571 #26 10- 45- 3 BLK
20-00000	UB-109G(P) (M)	
00000	CASE FRONT (COMP)	ABS DARK-GRAY
90-00000	UB-109G(P) (M) PARTS	
1	SCREW BIND HD +	M2.6X5 NI
1	SCREW BIND HD +	M2.6X20 BNI
1	SCREW BIND HD +	M3X5 NI
1	SCREW TAPTIGHT BIND HD +	M3X6 BNI
1	SCREW P TIGHT BIND HD+	D2X5 NI
1	SCREW P TIGHT BIND HD +	D2.6X8 NI
2	SCREW BIND HD +	M2.6X5 NI
00000	CASE REAR	ABS DARK-GRAY
00000	CASE TOP	ABS DARK-GRAY SILK
00000	BATT.CASE FRONT	ABS DARK-GRAY
00000	BATT.CASE REAR	ABS DARK-GRAY
00000	PLUG EARPHONE	P.P BLACK
00000	HOLDER TERMINAL	ABS DARK-GRAY
00000	KNOB	ABS BLACK
00000	CHASSIS	SPCC 0.8T NI
00000	HOLDER PCB	SPCC MF2N3,1T
00000	TERMINAL	BSP NI
00000	PLATE;SPRING	C5210R 0.3T NI
00000	SHIELD PLATE	COPPER 0.05T
00000	SHIELD PLATE	ALP 0.1T
00000	SHIELD PLATE	SPTE 0.3T NON OIL
00000	SHIELD PLATE	COPPER 0.1T
00000	TERMINAL ANT	SPTE 0.3T
00000	PLATE CONTROL	LEXAN 0.5T
00000	PLATE DISPLAY	POLYCARBO 0.5T
00000	PLATE BATT	POLYCARBO 0.5T
00000	BUSHING KNOB	NEOPRENE RUBBER
00000	HOLDER LED	EPT, BLACK
00000	GASKET	SILICON RUBBER BLACK
00000	NUT	B5BM NI
00000	TERMINAL	B5BM NI
00000	COIL SPRING	SUS304-WPB
00000	LABEL BATT	POLYESTER FILM 0.1T
00000	LABEL FCC	POLYESTER 0.1T
00000	LABEL BLIND	POLYESTER FILM 0.1T
00000	CUSHION	MOLTPRENE
00000	CUSHION	MOLTPRENE 40*45*3T
00000	CUSHION	NEO SP 1T
00000	CUSHION (B)	NEOPRENE SP 10*10*1T
00000	CUSHION	NEO SP 1T
00000	SPACER	PVC 0.2T
00000	SPACER	PVC 0.8T
00000	BLIND	NYLON GAUZE
		BRFC011034Z
		BRFC011044Z
		BRFC011034Z
		BRFC011044Z
		BRFC011014Z
		BRFC013314Z
		BRFC013334Z
		BRFC011034Z
		BRFC011034Z
		BRFC012244Z
		BRFC012234Z
		BRFC011834Z
		BRFC011534Z
		BRFC011834Z
		BRFC012254Z
		BRFC011014Z
		BQX0145001
		BCTY0065500
		BDEY0868001
		BDEY0826001
		AB109GPBEY
		BJKY0474001
		BYYY0573001
		BYYY0450001
		BATY0094001
		BBTY0049001
		BBPY0006001
		BSPY0159001
		AB109GPBEW
		CUPK005022Z
		CUPB005022Z
		CUPB004541Z
		CUPK004541Z
		AB109GPBM
		ECHF121159B
		AB109GPBMP
		SSCW192605N
		SSCW192620B
		SSCW193005N
		SSCW343006B
		SSCW802005N
		SSCW802608N
		SSCW192605N
		GCHR221160Z
		GCHT221161A
		GCHZ321162Z
		GCHZ321163A
		GETC417276Z
		GHDZ421068Z
		GNDY419908Z
		HCSY319909A
		HDDP419911A
		HPSP419918A
		HPSP421080Z
		HSDP421307Z
		HSDP421342Z
		HSDP422133A
		HSDP422397A
		HTML421169Z
		KDPT421164C
		KDPT421165A
		KDPT421166Z
		LBSG417277Z
		LHDL408855Z
		LPAK319917A
		MNUT419920Z
		MTML419921Z
		NSPC418765Z
		PLBC421170Z
		PLBF421069B
		PLBZ419932A
		RCUM417274Z
		RCUM417402Z
		RCUN421167Z
		RCUN421528Z
		RCUN422399A
		RETC416137Z
		RETC419930B
		RNTG420064Z

(SYMBOL)	(DESCRIPTION)	(PARTS CODE)
00000	LEATHER CASE	**
00000	INSULATION PLATE	PVC 0.3T
00000	INSULATION PLATE	PVC, 0.1T
00000	INSULATION PLATE	PVC 0.2T
00000	INSULATION PLATE	PVC 0.1T CLEAR
00000	INSULATION PLATE	PVC 0.2T
00000	SPRING PLATE KNOB	D6
00000	OWNER'S MANUAL	**
00000	ORDER FORM	**
00000	ORDER FORM	PAPER
00000	CAUTION BELT	PAPER BLUE
00000	ADDENDUM SHEET	PAPER PRINT
00000	VINYL BAG	120X280X0.05T
00000	VINYL BAG	170X320X0.05T
00000	VINYL BAG	300X500X600X0.07T
00000	DISPLAY BOX	**
00000	SHIPPING CARTON BOX	**
00000	STYROFOAM PAD (BOTTOM)	**
00000	STYROFOAM PAD (TOP)	**
C021	C CERAMIC M/L (2125) TAPE	0.1UF 25V Z F
L004	COIL	LF-182
L005	INDUCTOR MOLDED	LZ-041 12UH
L011	COIL	LB-704
L013	COIL	LC-226
Q008	TRANSISTOR	DB-743 2SC2812-L6 TA
FT001	FILTER	FL-246 MF10.8R2
C216	CAPACITOR ELECTROLYTIC	100UF 6.3V M C-107
Q205	TRANSISTOR	DB-743 2SC2812-L6 TA
Y201	CERAMIC RESONATOR	YY-665 CRK400
Y201	CERAMIC RESONATOR	YY-665 CRK400
Q302	TRANSISTOR	DB-743 2SC2812-L6 TA
C403	C CERAMIC M/L (2125) TAPE	0.1UF 25V Z F
C404	C CERAMIC M/L (2125) TAPE	0.1UF 25V Z F
IC401	INTEGRATED CIRCUIT	TK10421M-3
C714	CAPACITOR ELECTROLYTIC	100UF 6.3V M C-107
L703	INDUCTOR MOLDED	LZ-041 0.22UH
L704	INDUCTOR MOLDED	LZ-041 0.56UH
J501	JACK	JK-205 BNC-RM 105-M
AD951	AC ADAPTOR	YY-958
	SERVICE MANUAL	**
		RTLA221168Z
		RZEB419931Z
		RZEB420097Z
		RZEB422134A
		RZEB42223Z
		RZEB422398A
		TSTD0200006
		UBUD01109AD
		UBUD324548Z
		UBUD416547Z
		UBUD418964Z
		UBUD423066Z
		VNYL1122800
		VNYL1173200
		VNYL2305060
		WBXH321070A
		WCTZ421071C
		WSFH119928B
		WSFH119929A
		BCXK511040Z
		BLFY0182001
		BLZY0041120
		BLBY0704001
		BLCY0226001
		BDBC2812648
		BFLY0246001
		BCEX901016Z
		BDBC2812648
		BYYY0665002
		BYYY0665003
		BDBC2812648
		BCXK511040Z
		BCXK511040Z
		BDEY1126001
		BCEX901016Z
		BLZY0041228
		BLZY0041568
		BJKY0205001
		BYYY0958001
		SMBC100XLT

ALIGNMENT PROCEDURE

TEST EQUIPMENT REQUIRED

AC cord plug (with 0.5A fuse)
Digital voltmeter
Frequency counter
Watt meter

SINAD meter
Oscilloscope
Scope generator

1. PREPARATION FOR ALIGNMENT

Preset to

- Power supply
 - AC voltage : 120V (108 - 132V), 60 Hz (AD-140uV)
 - DC voltage : 13.8 V (BATT.PACK) or 7.8 V (BATT.NAL)
- Power switch : OFF
- Volume : Minimum (fully counterclockwise)
- Squelch : Fully clockwise
- Auto SQ switch : OFF

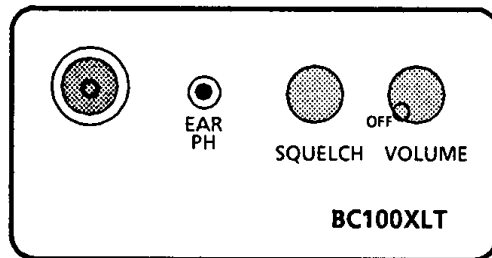


Figure.1 TOP VIEW OF THE UNIT

1-1 CHANGE TO THE TEST MODE

Press and hold 3 keys 2,9 and MAN simultaneously and turn the power switch on. Then, set the power switch to the off position. Re-press and re-hold 3 keys 2,9, and SCAN simultaneously and turn the power switch on. The test frequencies shown on the Table 1 will appear at each memory channel. The power supply cord to be used for this test should have a 0.5A fuse.

NOTE: If the power is supplied to the unit indicator and incorrect frequency may be displayed.

2. ALIGNMENT OF THE CIRCUIT

STEP	PRESET TO	ADJUSTMENT	REMARKS
1	CH : 1	CT701	<p>PLL adjustment</p> <ul style="list-style-type: none"> Connect a frequency counter to TP1 (R18). Adjust CT701 for 10.40000 ± 0.00001 MHz.
2	Ditto	No alignment.	<ul style="list-style-type: none"> Connect an oscilloscope to TP1. Check if the waveform makes a sinusoidal wave and the peak to peak voltage is 350 ± 100 mV.
3	CH : 9	L701	<p>VCO adjustment</p> <ul style="list-style-type: none"> Before alignment, soak the paraffin to L701 and L702. Connect the oscilloscope or a digital DC voltmeter to TP2 (R42). Adjust L701 for 12.5 ± 0.1 V.
4	CH : 7, 8	No alignment.	<ul style="list-style-type: none"> Check if VCO is at each channel voltage. (Refer to Table 2.)
5	CH : 4, 5, 6	Ditto	<ul style="list-style-type: none"> Ditto
6	CH : 1	L702	<ul style="list-style-type: none"> Adjust L702 for 1.2V at TP2.
7	CH : 2, 3	No alignment.	<ul style="list-style-type: none"> Check if VCO is at each channel voltage. (Refer to Table 2.) After alignment, paraffin lock to coils.
8	CH : 2 S.S.G. : 40.84 MHz 50 mV	L4	<p>IF adjustment</p> <ul style="list-style-type: none"> Connect a S.S.G. to ANT. terminal and an Oscilloscope to TP4 (C17). Adjust L4 to maximum level reading on Oscilloscope with "SWEEP TIME" where the waveform can be observed.
9	CH : 2 (40.84 MHz) S.S.G. : 1 mV No modulation	L401	<p>Discriminator adjustment</p> <ul style="list-style-type: none"> Connect the S.S.G. RF output to ANT. terminal and the digital voltmeter to TP3 (R65). Adjust L401 for 2.2 ± 0.05 V (DC).
10	CH: 24 (511.9125MHz) S.S.G. : 511.9125 MHz 1 mV No Mod.	CT 701	<ul style="list-style-type: none"> Adjust CT701 to obtain $2.2V \pm 0.05$ on voltage of TP3.

3. ALIGNMENT OF RECEIVING (REFER TO FIGURE 4.)

PRESET : SQUELCH ----- Minimum (clockwise)
 SIGNAL ----- FM : 1kHz, \pm 3kHz deviation
 AM : 1kHz, 60% modulation
 Audio Output Level : 50mW (0.63V at 8 Ω resistor)

Connect SG RF output to ANT. terminal.

STEP	PRESET TO	ADJUSTMENT	REMARKS
1	CH : 5 S.G. : 162.4MHz 0.4 μ V, FM	Volume Control	<p>Sensitivity alignment</p> <ul style="list-style-type: none"> Connect a wattmeter (or Voltmeter) to audio output terminal. Adjust volume control for 50mW (0.63V at 8Ω resistor).
2	Ditto	L4, L11, L13	<ul style="list-style-type: none"> Connect SINAD meter to audio output terminal. Adjust coils for the best SINAD. Then, adjust S.G. for 12dB SINAD and check if the output voltage of S.G. is less than 0.8μV.
3	CH : 2 S.G. : 40.84MHz, 0.3 μ V, FM	L7, L12	<ul style="list-style-type: none"> Ditto
4	CH : 7 S.G. : 406.875MHz 0.6 μ V	CT1, CT2, CT3	<ul style="list-style-type: none"> Same as step 2. Repeat this alignment for a few times. After alignment, check if 12dB SINAD sensitivity is less than 1.0μV.
5	CH : 2 S.G. : 40.84 MHz 0.45 μ V Squelch : CCW(Max.) (before AUTO SW)	VR3	<p>Squelch alignment</p> <ul style="list-style-type: none"> Turn VR3 fully clockwise. Then, adjust VR3 to the point where Audio output voltage will appear.

Table 1. TEST MODE FREQUENCIES.

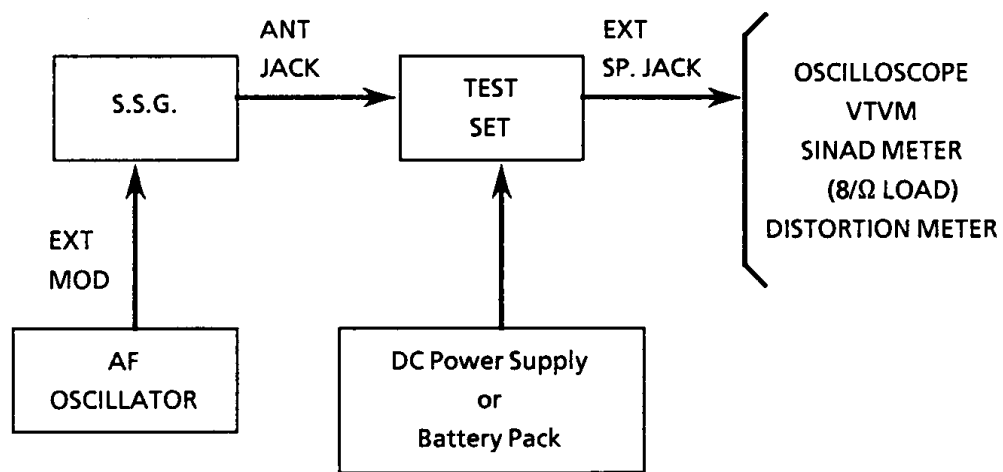
CH	Frequency	CH	Frequency	CH	Frequency
1	30.05 MHz	11	118.8 MHz	21 ✖	806.000 MHz
2	40.84 MHz	12	127.175 MHz	22 ✖	857.2 MHz
3	49.90 MHz	13	135.5 MHz	23 ✖	888.9875 MHz
4	138.15 MHz	14 ✖	66.45 MHz	24 ✖	911.5 MHz
5	162.40 MHz	15 ✖	76.825 MHz	25 ✖	954.9125 MHz
6	173.225 MHz	16 ✖	87.425 MHz	26	000.000 MHz
7	406.875 MHz	17	157.800 MHz	27	000.000 MHz
8	453.25 MHz	18	482.3625 MHz		
9	511.9125 MHz	19	29.000 MHz	99	000.000 MHz
10 ✖	108.5 MHz	20	54.000 MHz	100	000.000 MHz

✖ Note : These frequencies are not received.

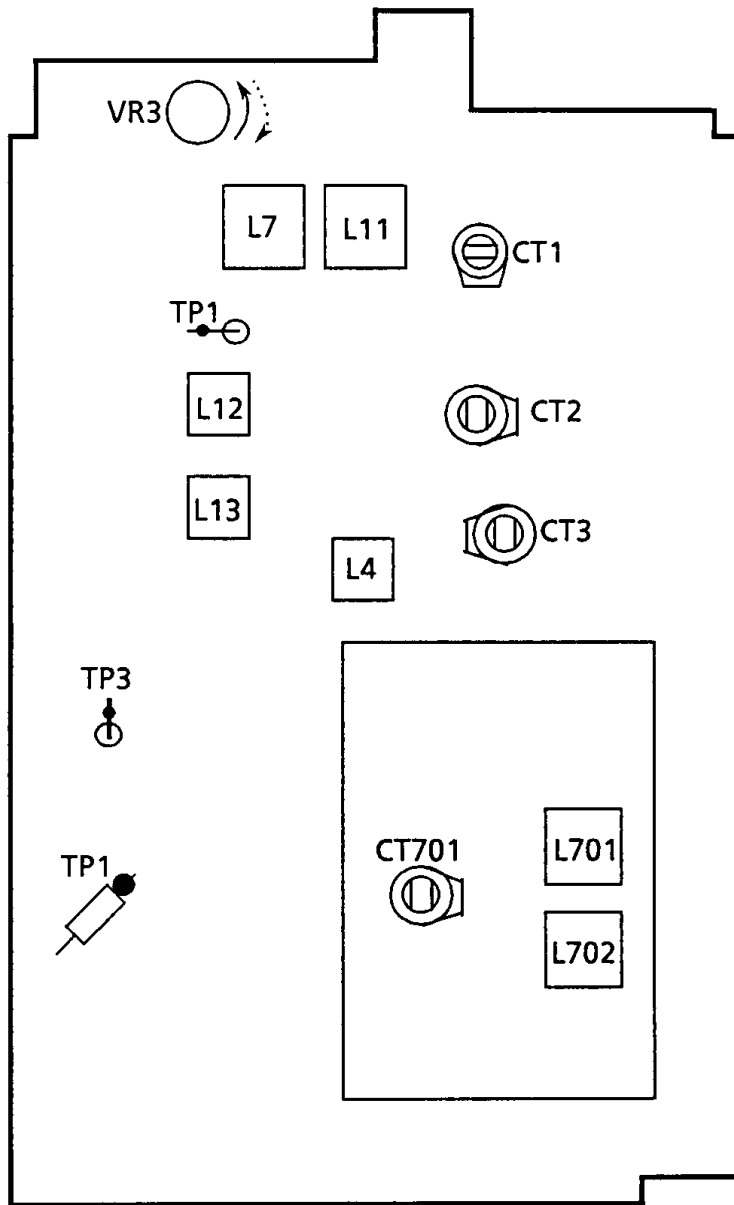
Table.2 VCO ALIGNMENT VOLTAGE (at TP2 ; R42).

	CH	FREQUENCY	DC VOLTAGE (volts)
VHF (Low) Adjust	1	30.05 MHz	1.2 ± 0.1
Confirm	2	40.84 MHz	5.6 ± 0.5
Confirm	3	49.9 MHz	9.2 ± 0.5
Confirm	4	138.15 MHz	3.2 ± 0.5
Confirm	5	162.4 MHz	9.5 ± 0.5
Confirm	6	173.225 MHz	11.5 ± 0.5
Confirm	7	406.875 MHz	4.8 ± 0.5
Confirm	8	453.25 MHz	8.7 ± 0.5
VHF (High) /UHF Adjust	9	511.9125MHz	12.5 ± 0.1

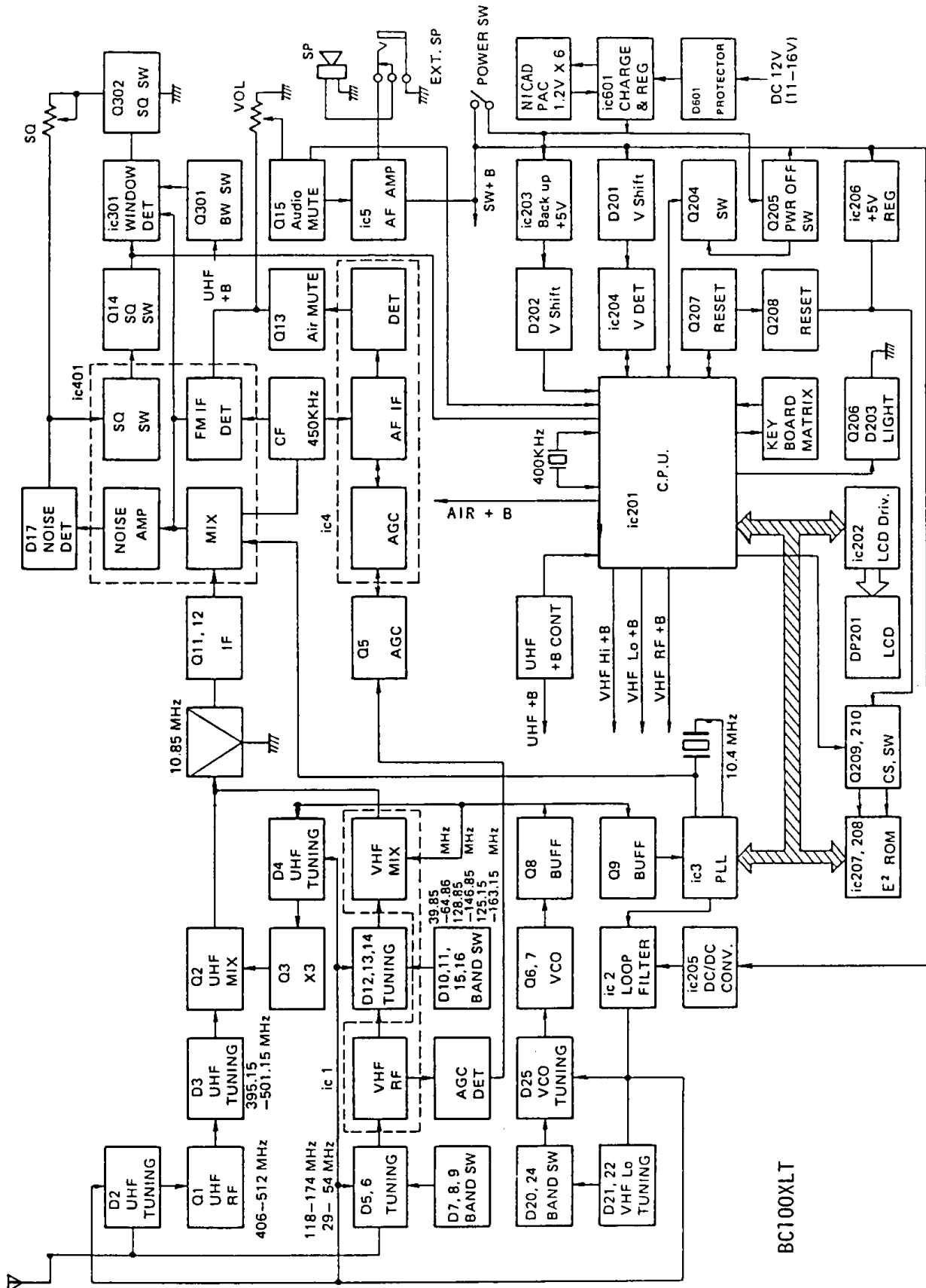
Figure 2. Connection for IF alignment



ALIGNMENT POINT

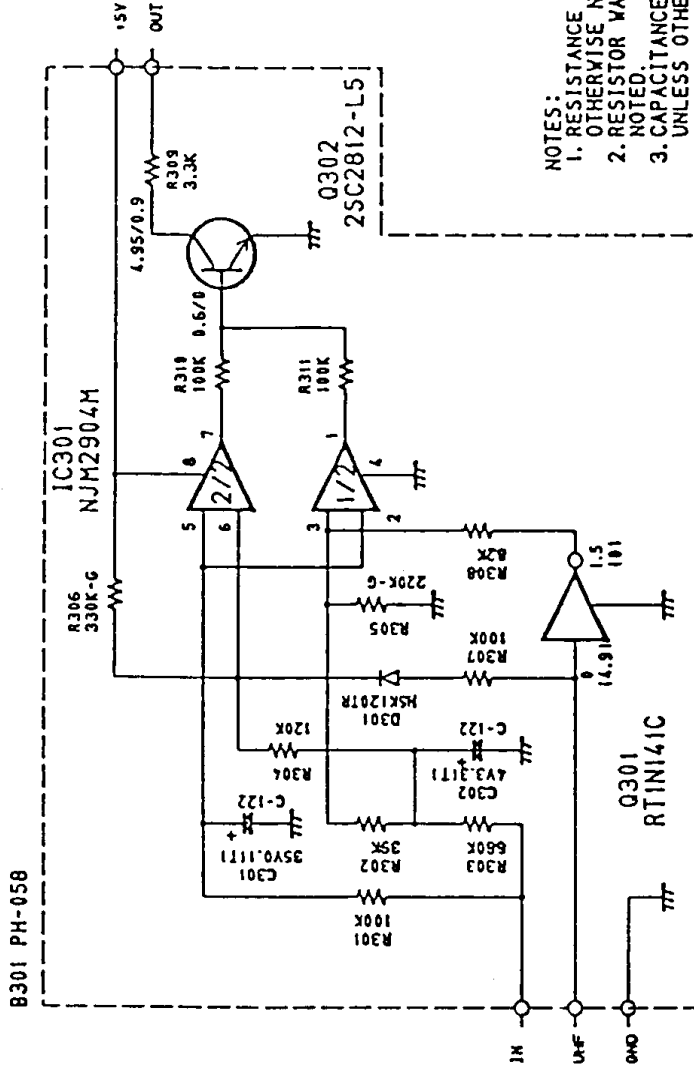


BLOCK DIAGRAM



BC100XLT

UB109 /WIN::50:2



NOTES:

1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. 1K-KILO OHM, M-MEG OHM
2. RESISTOR WATTAGES ARE 1/10W UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. (P-MICRO-MICRO FARAD)
4. CHIP PARTS ARE NOT SPECIFIED IN THIS SCHEMATIC DIAGRAM. PLEASE REFER TO THE PARTS LIST FOR THE CHIP PARTS.

5. VOLTAGE IN 1 SHOWS UHF BAND CONDITION.
6. VOLTAGE IN NO MARK SHOWS VHF-HI BAND CONDITION.
7. VOLTAGE IN / SHOWS UNSOUCELCHED /SOUELCHED CONDITION.

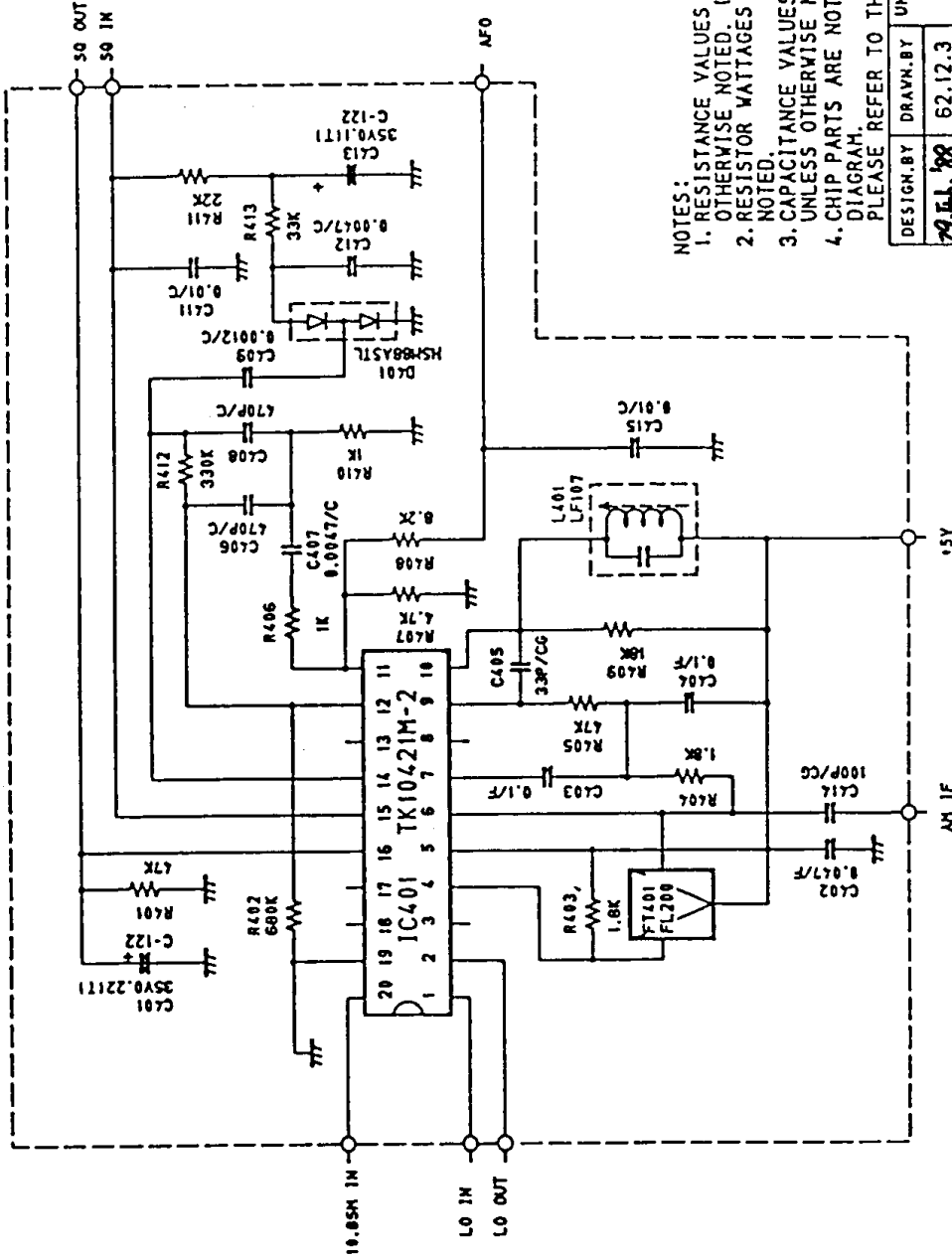
DESIGN BY	UNIDEN NO.	MODEL NO.
29 Feb. '88	UB-109F	BC100XLT
Y. Hoshino	TANA	TITLE WINDOW PCB
CHECK BY	APPRO. BY	SCHEMATIC DIAGRAM
7/20 '88	3.1. '88	DRAWING NO.
K. Yamada		REV. MARK
		E14-2802

共通 使用
UB-109 G.S.

UNIDEN CORP.

UB109. /IF::50:2

B401 PH-057



NOTES:

1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. (K-KILO OHM, M-MEG OHM)
2. RESISTOR WATTAGES ARE 1/10W UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. (P-MICRO-MICRO FARAD)
4. CHIP PARTS ARE NOT SPECIFIED IN THIS SCHEMATIC DIAGRAM.

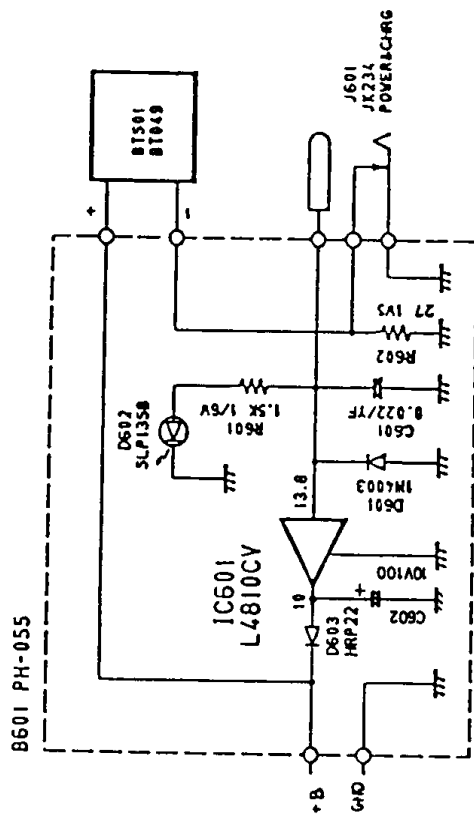
PLEASE REFER TO THE PARTS LIST FOR THE CHIP PARTS.

DESIGN BY	UNIDEN NO.	MODEL NO.
29 Feb. '88	UB-109F	BC100XLT
CHECK BY	TANA	TITLE IF PCB
7/2/88	3.1. '88	SCHEMATIC DIAGRAM
REV. MARK	DRAWING NO.	
	E14-2803	

共通 使用 UB-109G.S

UNIDEN CORP.

UB109 /REG::50:2



NOTES:

1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. (K-KILO OHM. M-MEG OHM)
2. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. (P-MICRO-MICRO FARAD)
3. CHIP PARTS ARE NOT SPECIFIED IN THIS SCHEMATIC DIAGRAM.
4. VOLTAGE IN NO MARK SHOWS VHF BAND CONDITION.

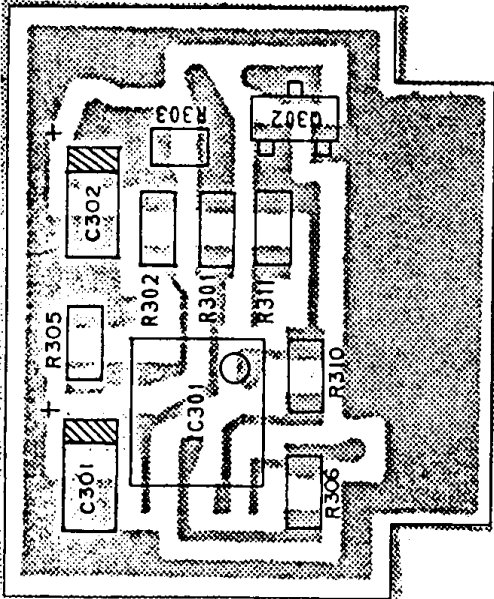
DESIGN BY	UNIDEN NO.	MODEL NO.
29 Feb 88	UB-109F	BC 100XLT
Y. Nakano	TANA	TITLE REG PCB
CHECK BY	APPRO BY	SCHEMATIC DIAGRAM
29 Feb 88	3.1. 7A	DRAWING NO.
Y. Nakano	K. G.	REV. MARK
		E14-2804
		UNIDEN CORP.

共通 使用 UB-109G.S.

HT 88 - 046

B301

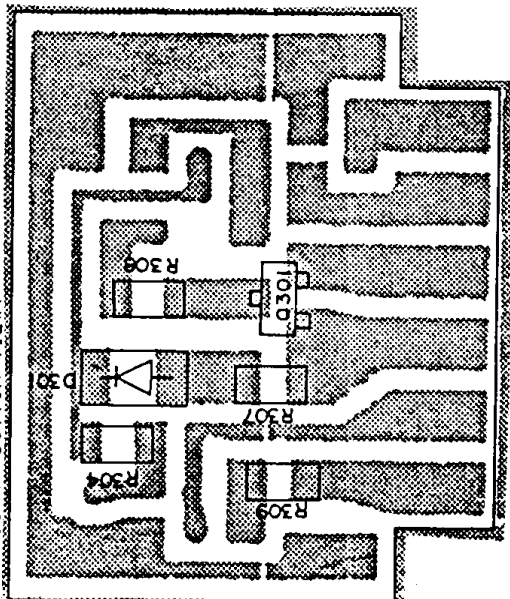
PH-058AC (TOP VIEW)



C302	4V3.3(1) C-122
C301	35V0(1) C-122
IC301	NJM2904M
Q302	25C2812-L5

R301	100K
R302	39K
R303	680K
R305	220K-G
R310	100K
R311	100K
R306	330K-G

PH-058AC (BOTTOM VIEW)



Q301	RT1N141C
D301	HSK120TR

R304	120K
R307	100K
R308	82K
R309	3.3K

NOTES:

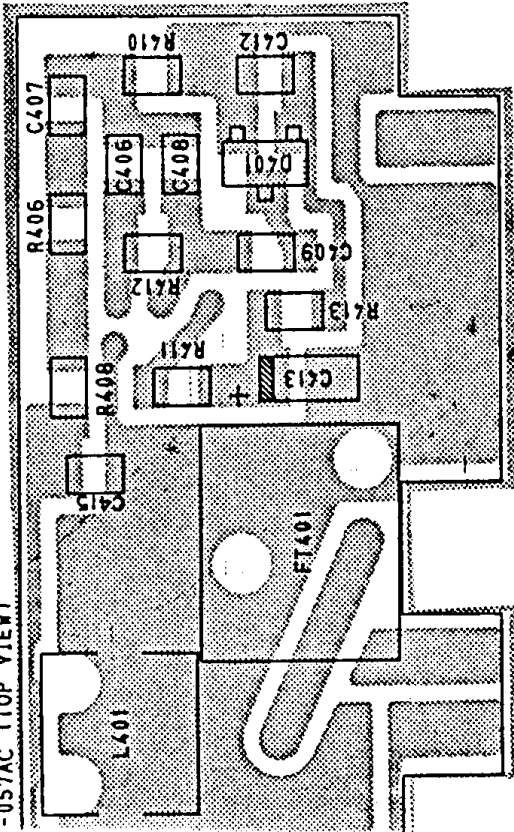
1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED, (K-KILO OHM, M-MEG OHM)
2. RESISTOR VATTAGES ARE 1/10W UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED, (P-MICRO-MICRO FARAD)

DESIGN BY	DRAWN BY	UNIDEN NO.	MODEL NO.
29 Feb '88	62.8.3	UB-109F	BC100XLT
CHECK BY	MINE	TITLE	WINDOW PCB
7/1/88	APPRO BY	PARTS ASSEMBLY	
7/29 '88	3.1. '88	DRAWING NO.	REV MARK
1st Kana	Y. Iijima	E24-7401	

共通
使用
UB-109G.S

UNIDEN CORP.

01 -057AC (TOP VIEW)



C406	470P/C
C407	0.0047/C
C408	470P/C
C409	0.0012/C
C412	0.0047/C
C413	35V0.1T1C-122
C415	0.01/C

R406	1K
R408	8.2K
R410	1K
R411	22K
R412	330K
R413	33K

D401	HSMBBASTL
------	-----------

L401	LF107
------	-------

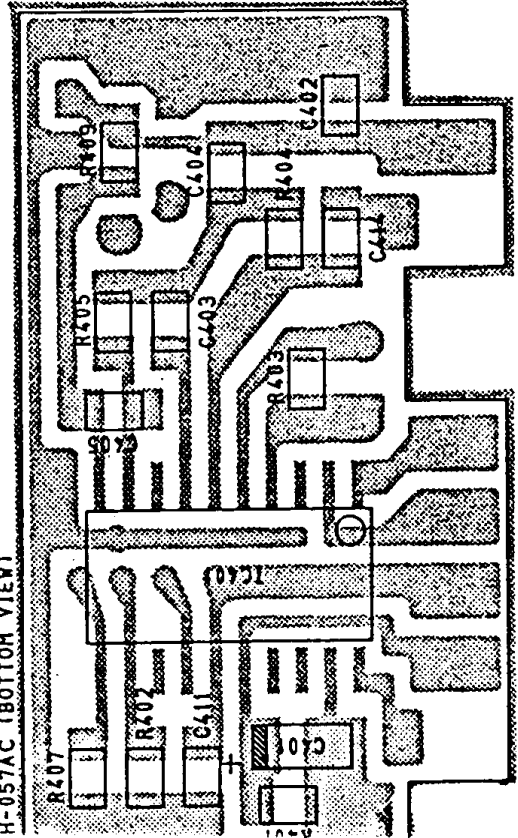
FT401	FL200
-------	-------

L401 (TOP VIEW)



(Three Bond NL or Equivalent)

H-057AC (BOTTOM VIEW)



IC401	IK10421M-2
-------	------------

C401	35V0.22T1C-122
C402	0.047/F
C403	0.1/F
C404	0.1/F
C405	33P/CG
C411	0.01/C
C414	100P/CG

R401	47K
R402	680K
R403	1.8K
R404	1.8K
R405	47K
R407	4.7K
R409	18K

共通
使用 UB-109GS

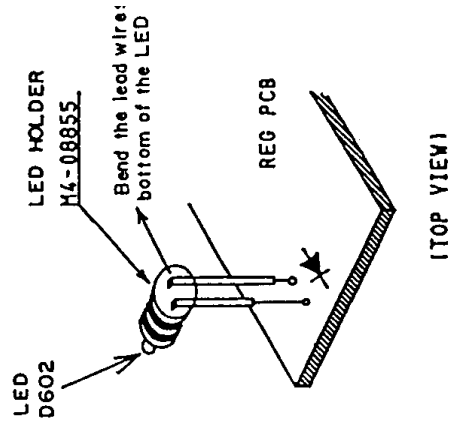
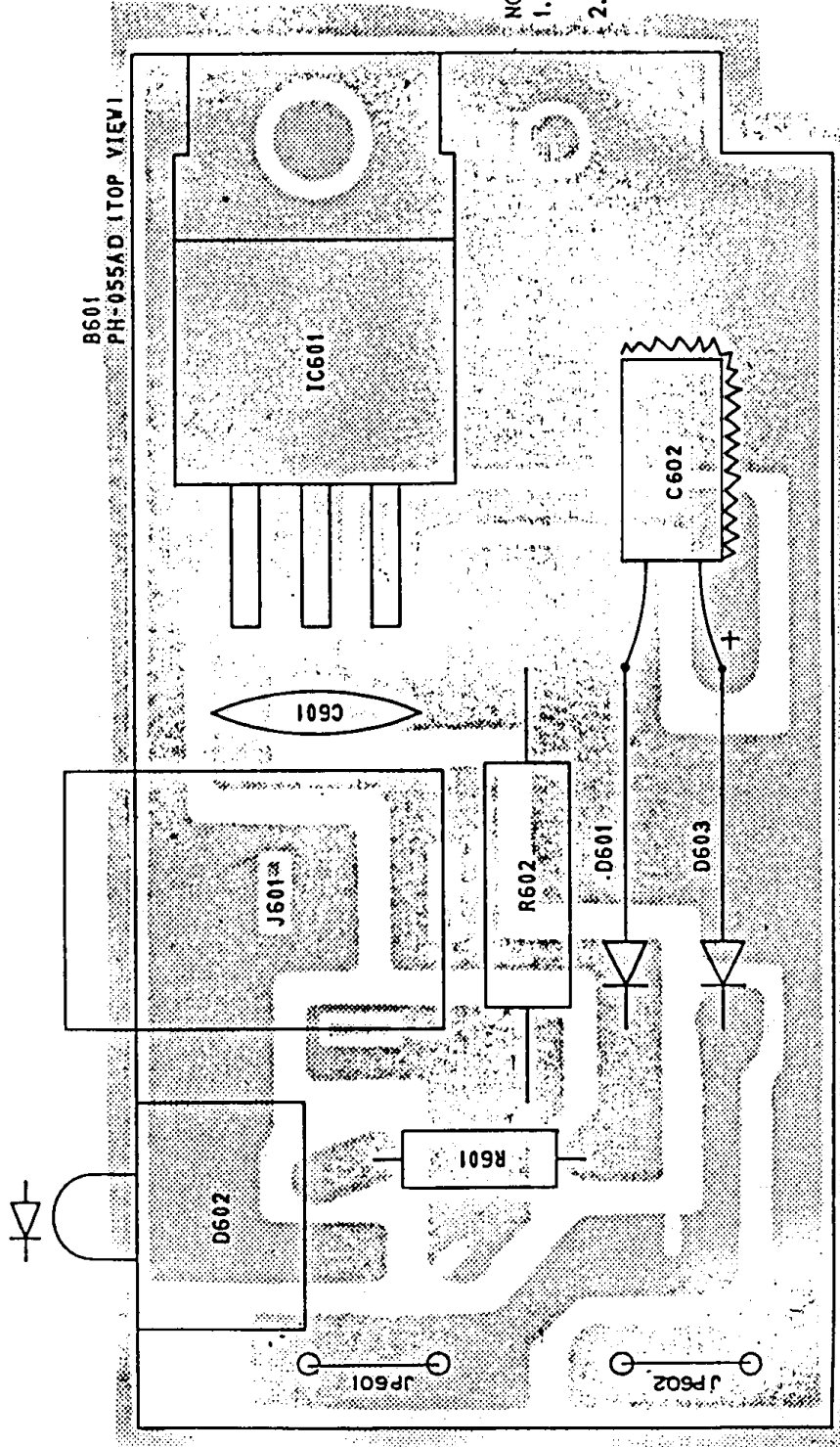
NOTES:

1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED, 1K-KILO OHM, M-MEG OHM
2. RESISTOR WATTAGES ARE 1/10W UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED, (P-MICRO-MICRO FARAD)

DESIGN BY	DRWN BY	UNIDEN NO.	MODEL NO.
Y. H. H.	MINE	UB-109F	BC100XLT
CHECK BY	APPRO BY	TITLE	IF PCB PARTS ASSEMBLY
3/1/88	3/1/88	DRAWING NO.	REV. MARK
A. H. H.		E24-7402	

UNIDEN CORP.
PRR-013

R601	1.5K	1/6W	D601	1N4003	C601	0.022/YF	J601	JK234
R602	27	1WS	D602	SLP135B	C602	10V100 C-095		
			D603	HRP22				
					IC601	L4810CY	JP601	5 mm PL
							JP602	5 mm PL



(TOP VIEW)

NOTES:

1. RESISTANCE VALUES ARE SHOWN IN OHMS UNL
OTHERWISE NOTED, 1K-KILO OHM, M-MEG OHM!
2. CAPACITANCE VALUES ARE INDICATED IN MFC
UNLESS OTHERWISE NOTED. (P-MICRO-MICRO F

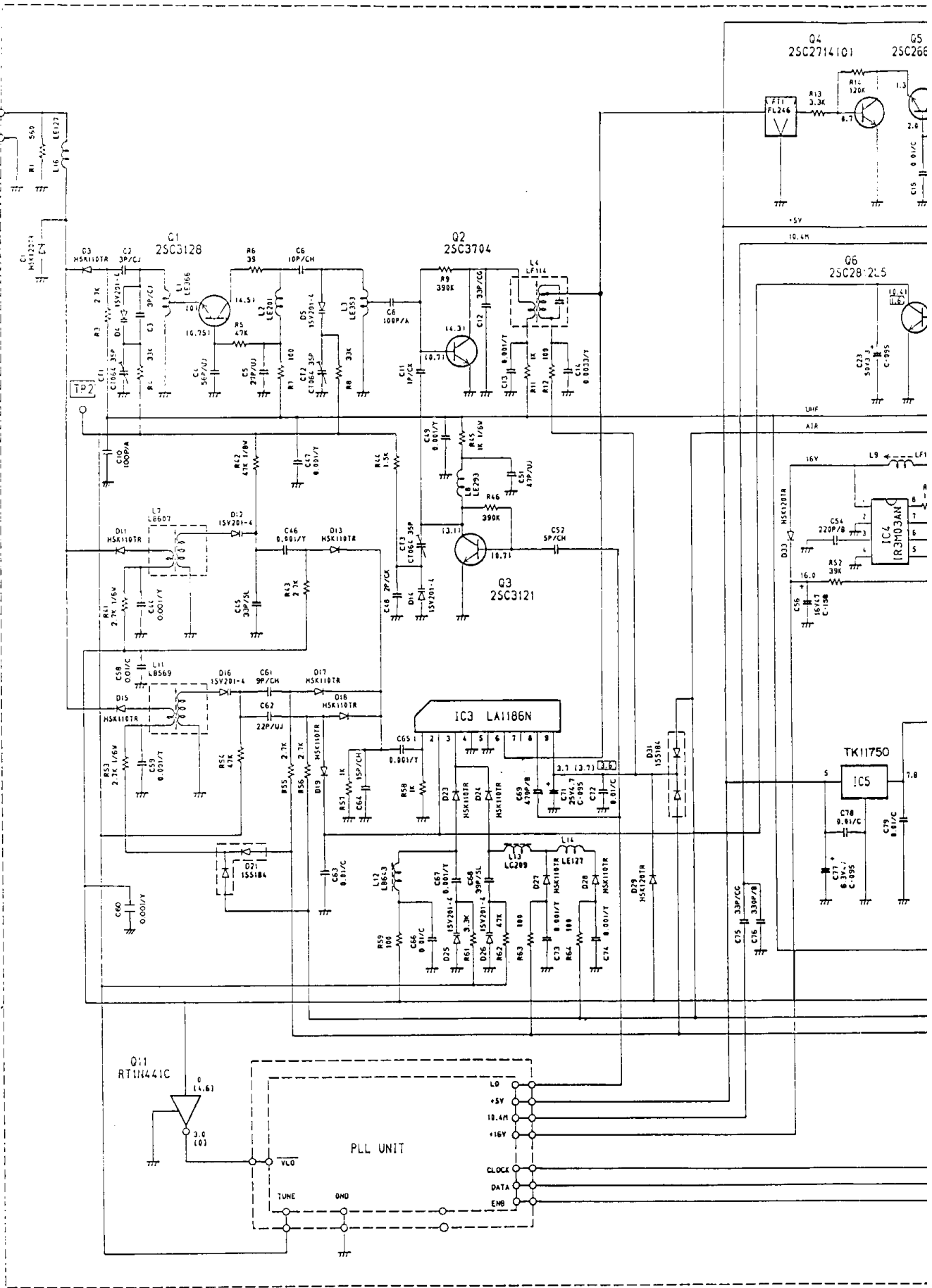
DESIGN BY	UNIDEN NO.	MODEL NO.
29.6.88	UB-109F	BC 10C
Y. Hoshino	MINE	TITLE
CHECK BY	APPRO. BY	REG PCB
29.8.88	2.1. 'M	PARTS ASSEMBL
DRAWING NO.		E24-7403

共通 使用 UB-109G.S

MM BOND LOCK

UNIDEN

J501
A10794



G4
25C2714101

G5
25C266

G6
25C2822.5

IC3
LA1186N

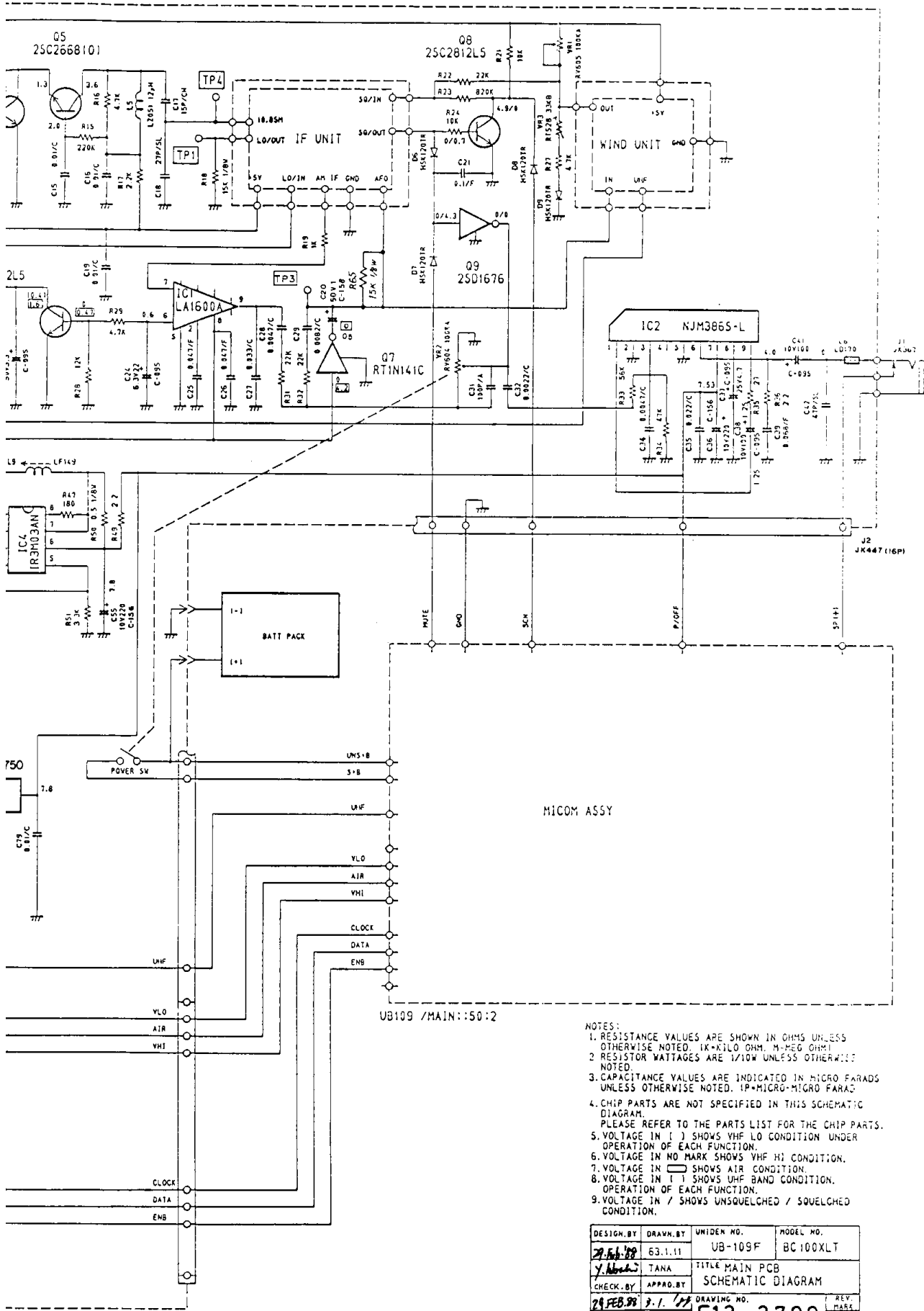
TK11750
ICS

PLL UNIT

G1
RT1H441C

+5V
10.4V
+16V
CLOCK
DATA
EMB

IC1
IR3HD3AN



UB109 / MAIN: :50:2

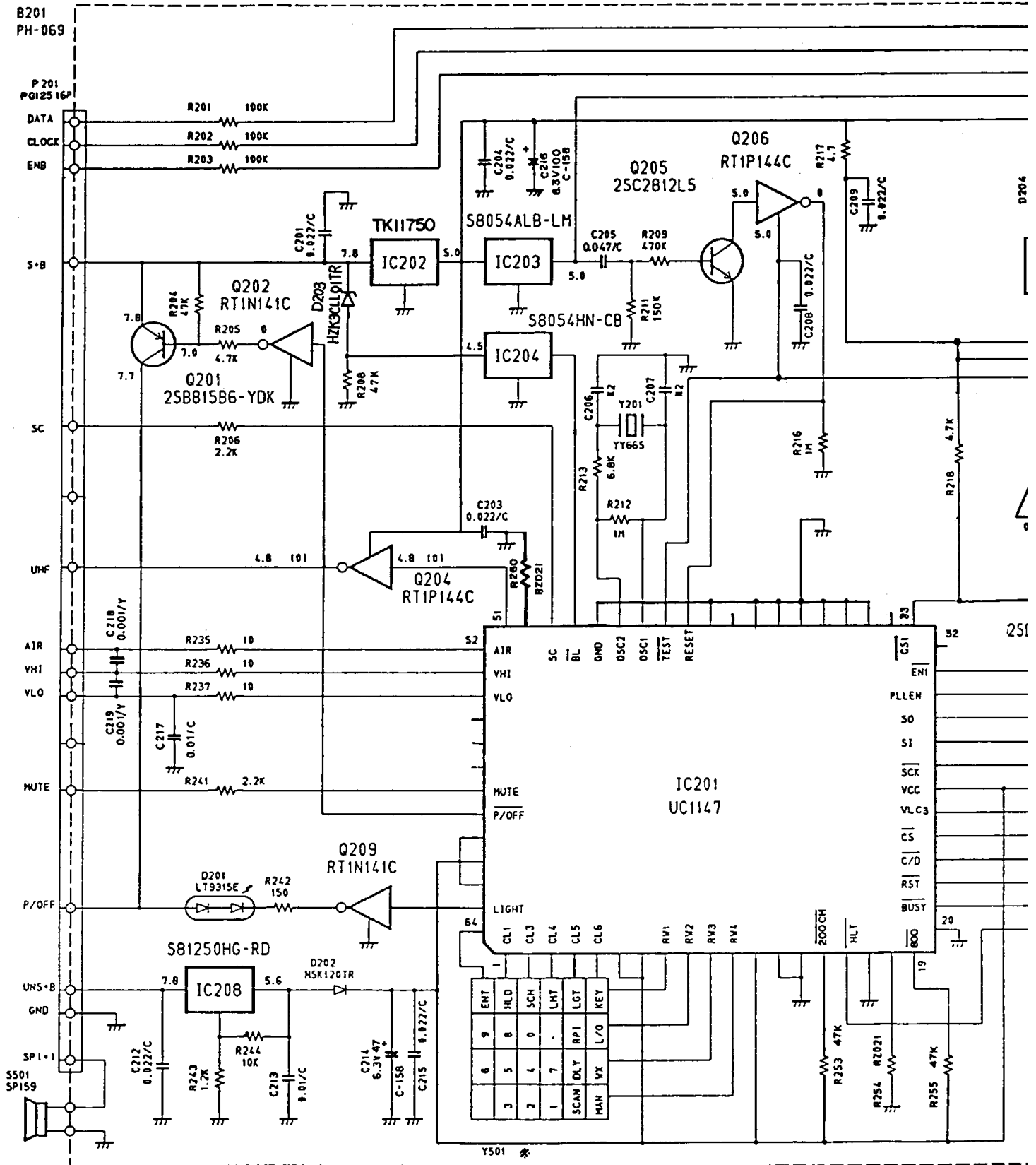
- NOTES:
1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. 1K=KILO OHM. M=MEG OHM
 2. RESISTOR WATTAGES ARE 1/10W UNLESS OTHERWISE NOTED.
 3. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. 1P=MICRO-MICRO FARAD
 4. CHIP PARTS ARE NOT SPECIFIED IN THIS SCHEMATIC DIAGRAM. PLEASE REFER TO THE PARTS LIST FOR THE CHIP PARTS.
 5. VOLTAGE IN [] SHOWS VHF LO CONDITION UNDER OPERATION OF EACH FUNCTION.
 6. VOLTAGE IN NO MARK SHOWS VHF HI CONDITION.
 7. VOLTAGE IN □ SHOWS AIR CONDITION.
 8. VOLTAGE IN [] SHOWS UHF BAND CONDITION. OPERATION OF EACH FUNCTION.
 9. VOLTAGE IN / SHOWS UNSQUELCHED / SQUELCHED CONDITION.

DESIGN BY	DRAWN BY	UNIDEN NO.	MODEL NO.
29 Feb 88	63.1.11	UB-109F	BC100XL
Y. Nishida	TANA	TITLE MAIN PCB	
		SCHEMATIC DIAGRAM	
CHECK BY	APPROD BY	DRAWING NO.	REV. MARK
29 FEB 88	3.1. 1/88	E12-2799	

UNIDEN CORP.

共通
使用 UB-109G.S

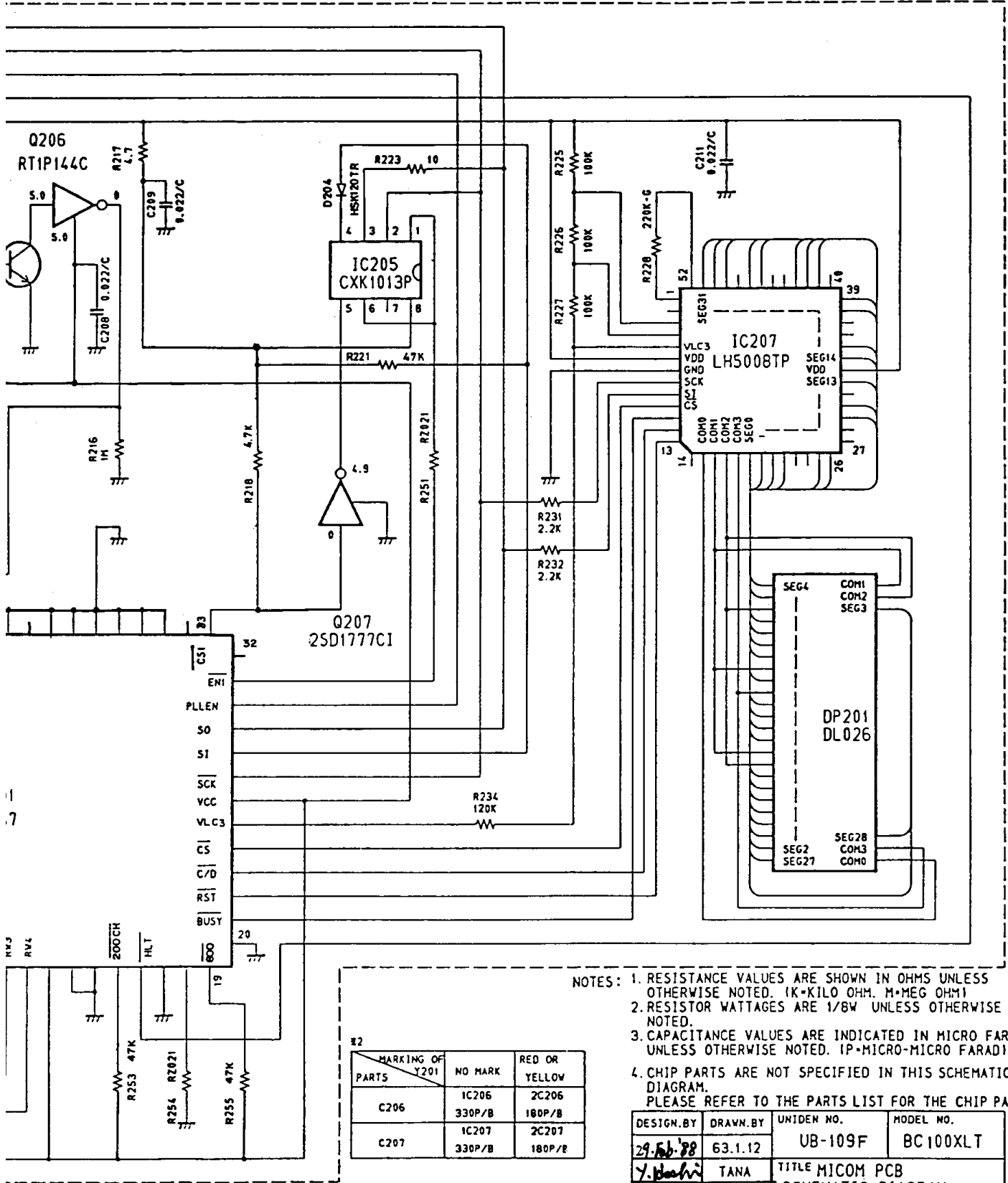
188-023



* UB-109F, G UB-109S
 Y501 YY-573 YY-769

UB109 /MICOM::50:2 5 . VOLT
 6 . VOLT
 COND

共通
 使用 UB-109G.S



MARKING OF PARTS	Y201	
	NO MARK	RED OR YELLOW
C206	1C206 330P/B	2C206 180P/B
C207	1C207 330P/B	2C207 180P/B

- NOTES:
1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. (K=KILLO OHM, M=MEG OHM)
 2. RESISTOR WATTAGES ARE 1/8W UNLESS OTHERWISE NOTED.
 3. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. (P=MICRO-MICRO FARAD)
 4. CHIP PARTS ARE NOT SPECIFIED IN THIS SCHEMATIC DIAGRAM. PLEASE REFER TO THE PARTS LIST FOR THE CHIP PARTS.

DESIGN BY	DRAWN BY	UNIDEN NO.	MODEL NO.
29 Feb '88	63.1.12	UB-109F	BC100XL
CHECK BY		APPRO BY	
TANA		TANA	
TITLE MICOM PCB SCHEMATIC DIAGRAM			
DRAWING NO.		REV. MARK	
E13-2800			

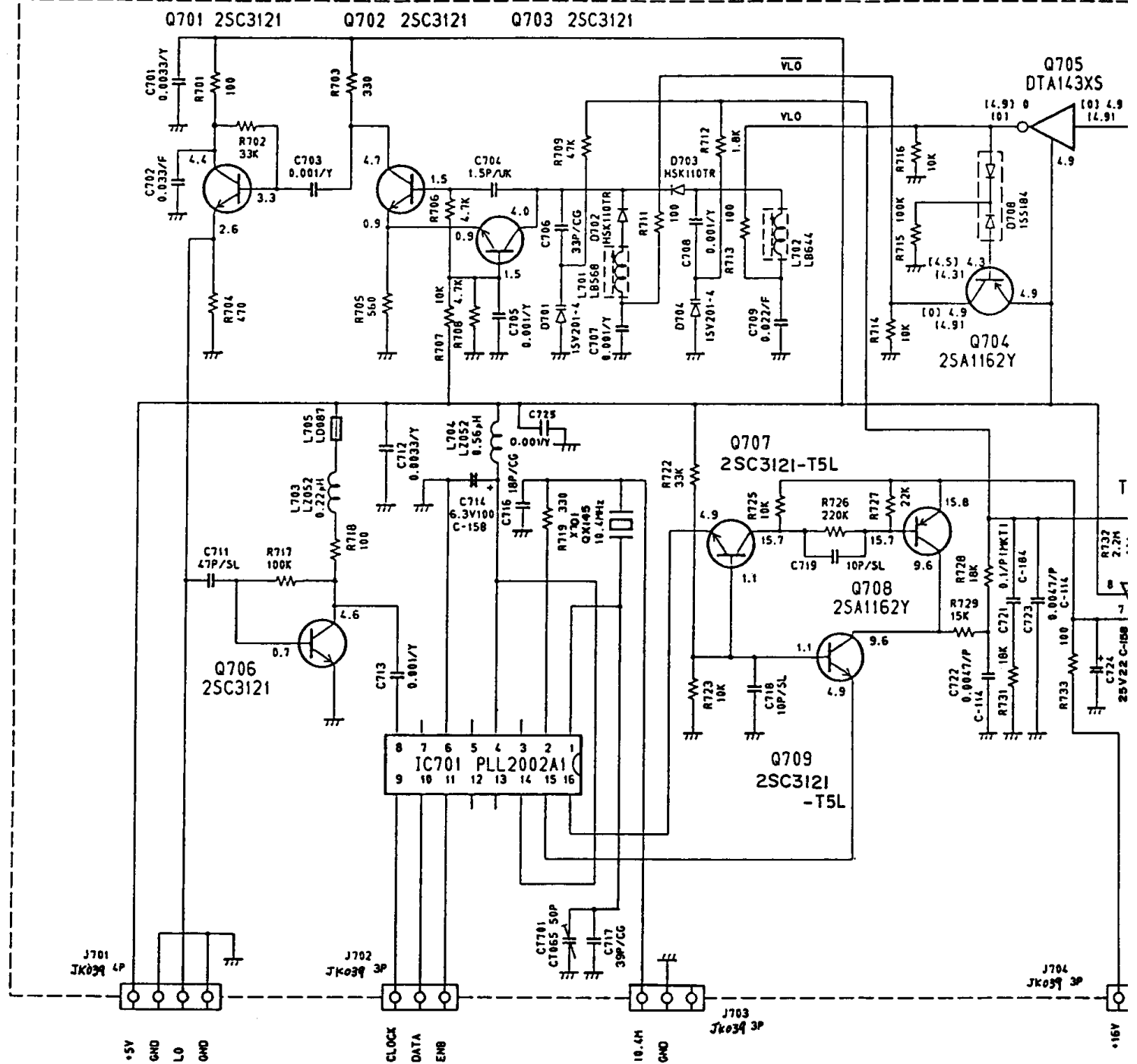
5. VOLTAGE IN () SHOWS UHF BAND CONDITION.
6. VOLTAGE IN NO MARK SHOWS VHF HI CONDITION.

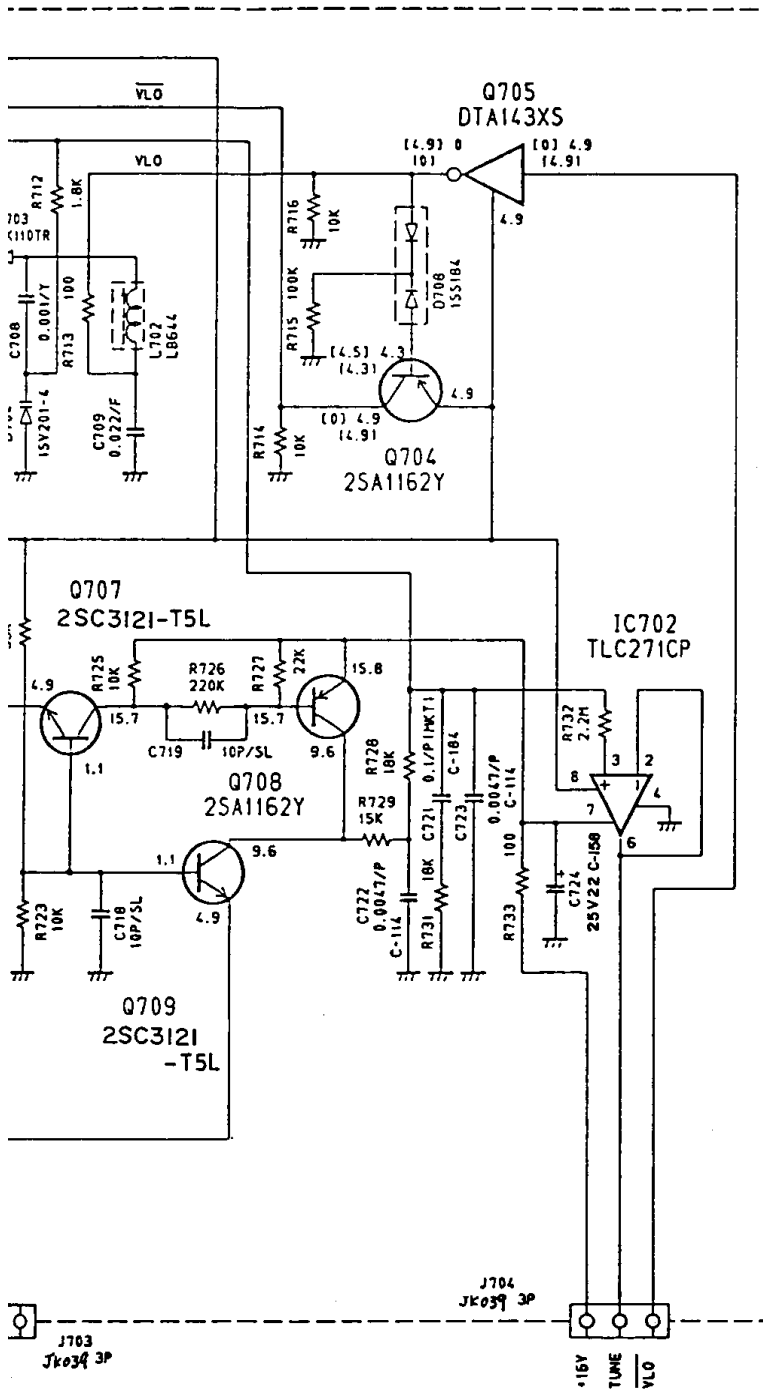
UB109 /MICOM::50:2

共通
使用 UB-109G.S

UNIDEN CORP.

MP88-009





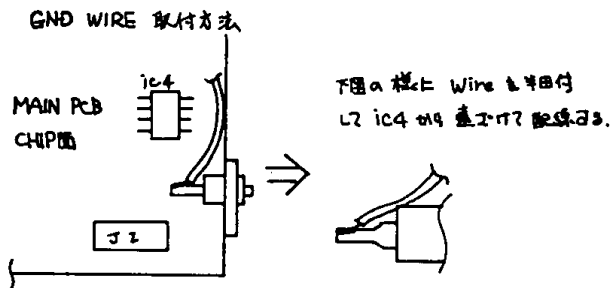
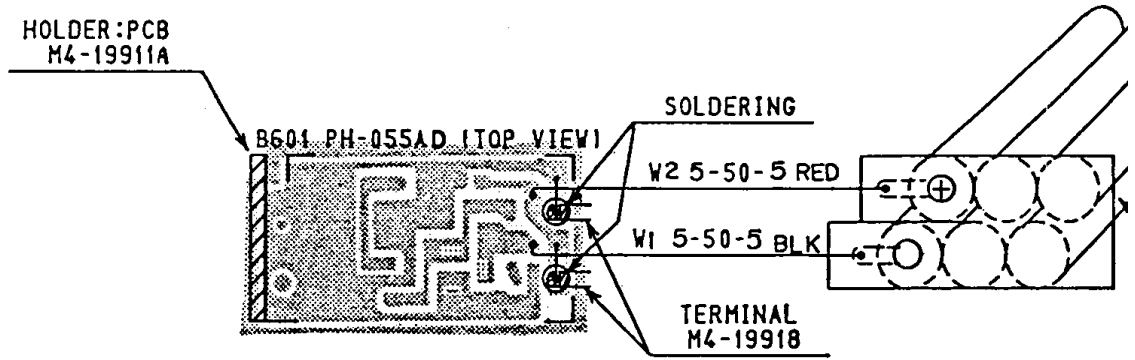
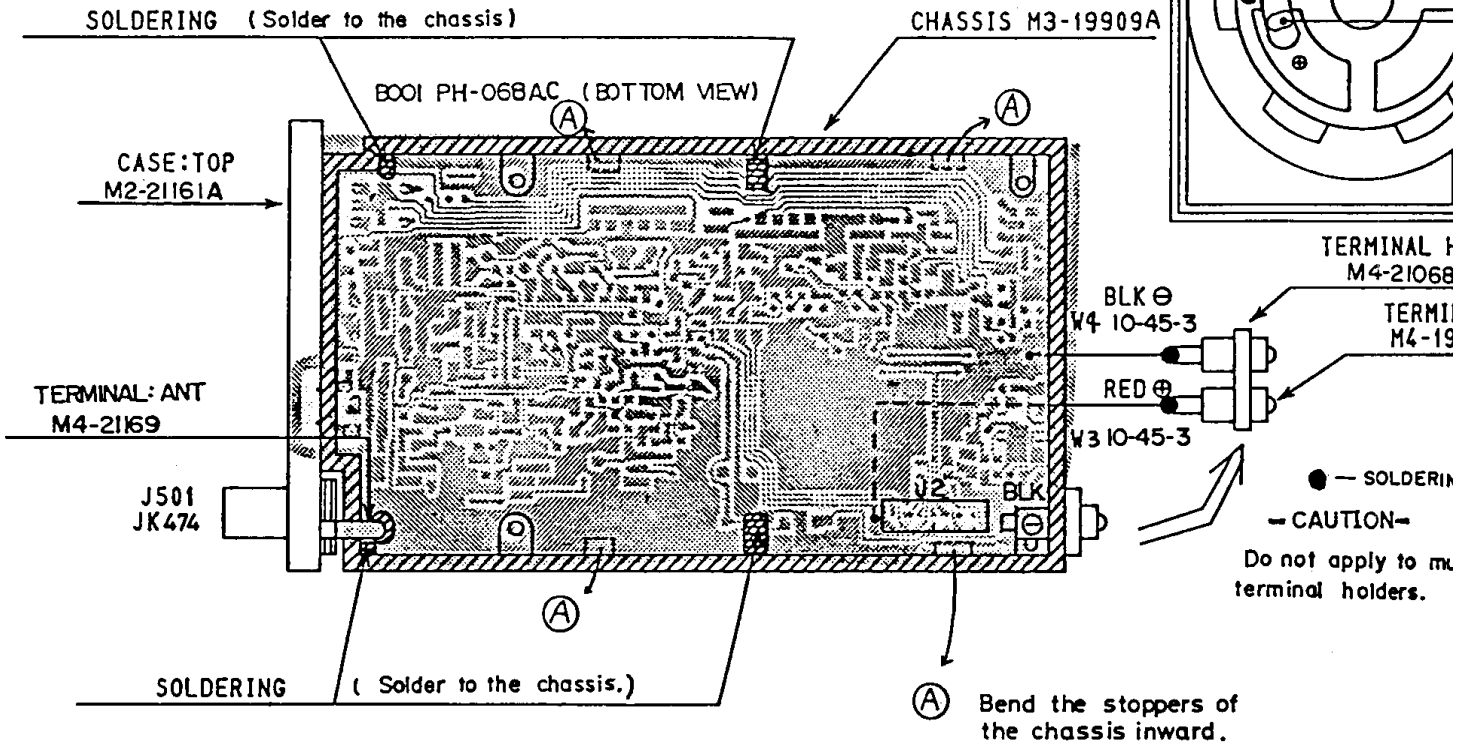
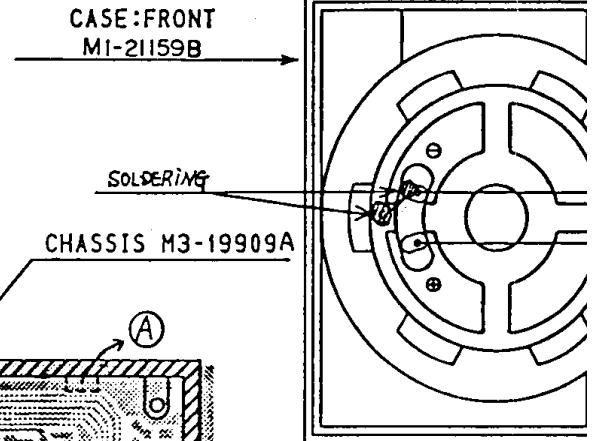
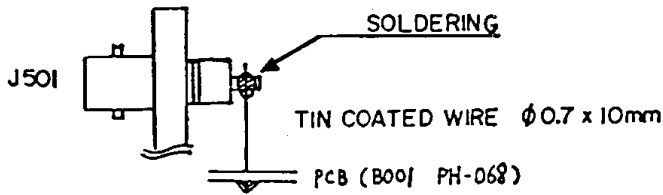
NOTES:

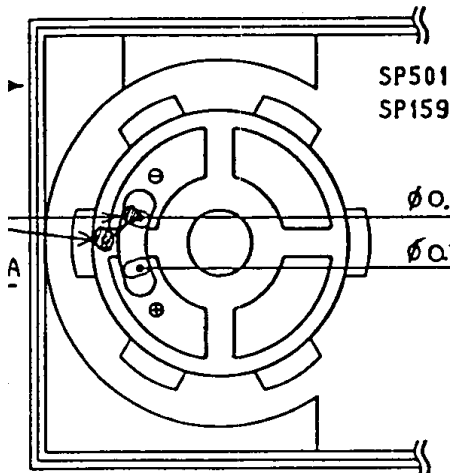
1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. (K=KILO OHM, M=MEG OHM)
2. RESISTOR WATTAGES ARE 1/10W UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. (P=MICRO-MICRO FARAD)
4. CHIP PARTS ARE NOT SPECIFIED IN THIS SCHEMATIC DIAGRAM. PLEASE REFER TO THE PARTS LIST FOR THE CHIP PARTS.
5. VOLTAGE IN [] SHOWS UHF CONDITION.
6. VOLTAGE IN () SHOWS VHF LO CODITION.
7. VOLTAGE IN NO MARK SHOWS VHF HI CONDITION.

DESIGN.BY	DRAWN.BY	UNIDEN NO.	MODEL NO.
29 Feb '88	63.1.14	UB-109F	BC100XLT
Y. Hoshi	TANA	TITLE PLL PCB SCHEMATIC DIAGRAM	
2/29 '88	3.1. '88	DRAWING NO.	REV. MARK
1st Kana	1st Kana	E13-2801	

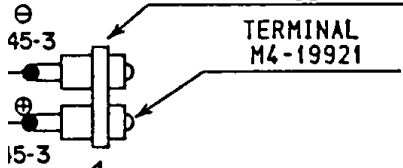
UNIDEN CORP.

共通
使用 UB-109G.S





TERMINAL HOLDER
M4-21068

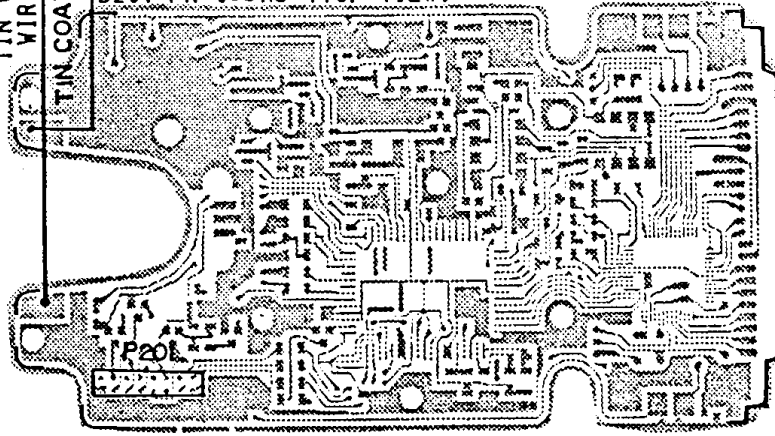


● - SOLDERING

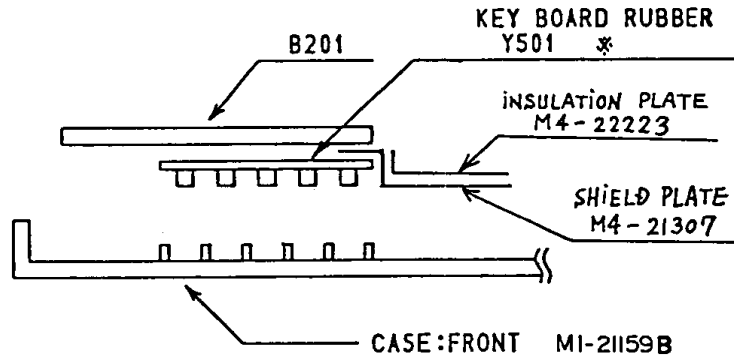
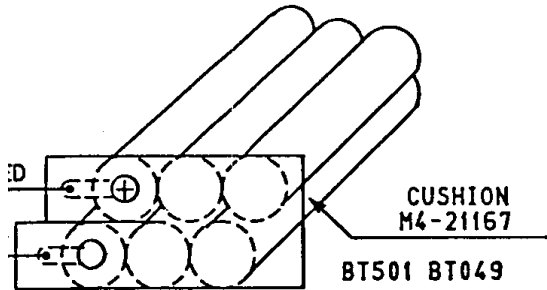
- CAUTION -

Do not apply too much heat on terminal holders.

B201 PH-069AC (TOP VIEW)



ppers of
nward.



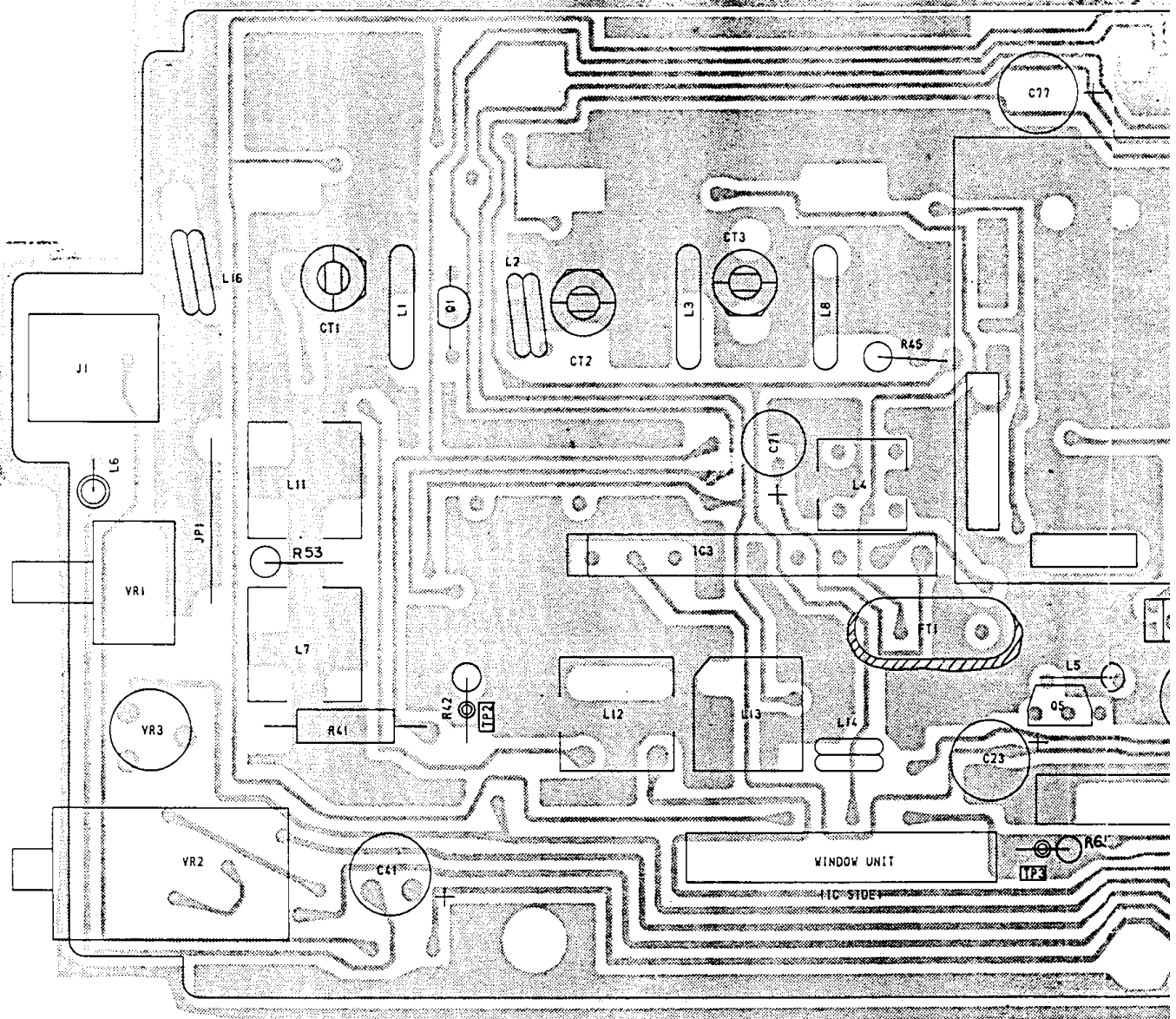
	UB-109F G	UB-109S
Y501	YY-573	YY-769

共通
使用 UB-109G.S

DESIGN BY	DRAWN BY	UNIDEN NO.	MODEL NO.
Z9 Feb 58	62.8.26	UB-109F	BC100XLT
Y. Morish	MINE	TITLE	
CHECK BY	APPRO BY	WIRING DIAGRAM	
2/9 '88	2/1 '88	DRAWING NO.	REV. MARK
K. Kana	K. V. / m	E33-2853	

UNIDEN CORP.

BOO1
PH-068AC (TOP VIEW)



R18	15K
R41	2.7K 1/6W
R42	47K
R45	1K 1/6W
R50	0.5
R53	2.7K 1/6W
R65	15K

VR1	RV605 100KA
VR2	RV604 100KA
VR3	RT520 33KB

J1	JK367
----	-------

L1	LE366
L2	LE201
L3	LE353
L4	LF114
L5	LZ051 12μH
L6	LD170
L7	LB607
L8	LE293
L9	LF149
L11	LB569
L12	LB643
L13	LC209
L14	LE127
L16	LE127

C23	50V3.3 C-095
C24	6.3V22 C-095
C36	10V220 C-156
C37	25V4.7 C-095
C38	10V100 C-095
C41	10V100 C-095
C55	10V220 C-156
C56	16V47 C-156
C71	25V4.7 C-095
C77	6.3V47 C-095
C20	50V1 C-156

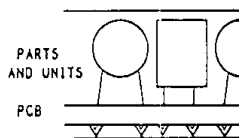
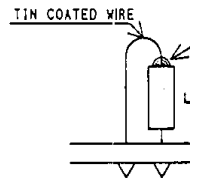
JPI	10aa
-----	------

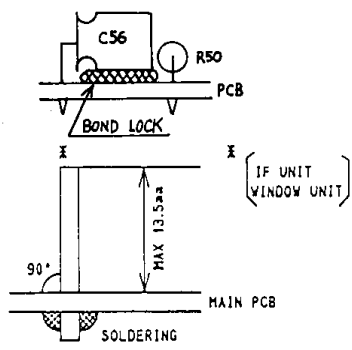
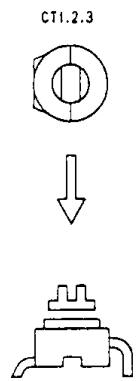
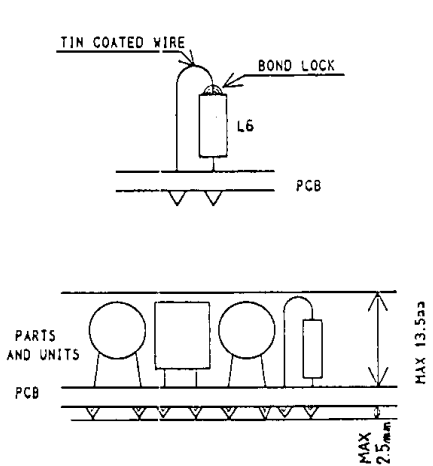
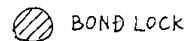
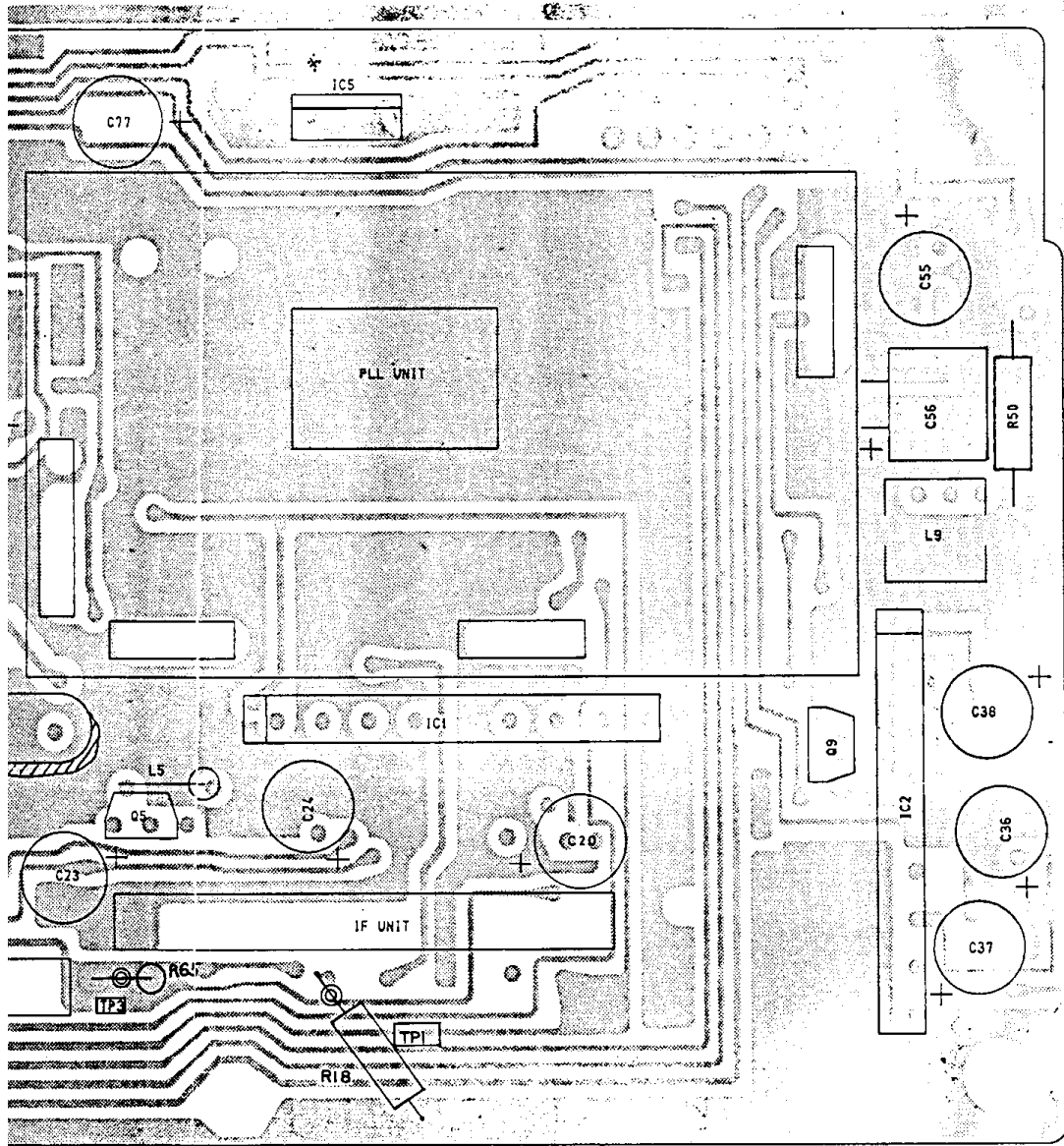
CT1	CT064 35P
CT2	CT064 35P
CT3	CT064 35P

01	25C3128
05	25C2668101
09	25D1676

IC1	LA1600A
IC2	NJM3865-L
IC3	LA1186N
IC5	TK11750

FT1	FL246
-----	-------



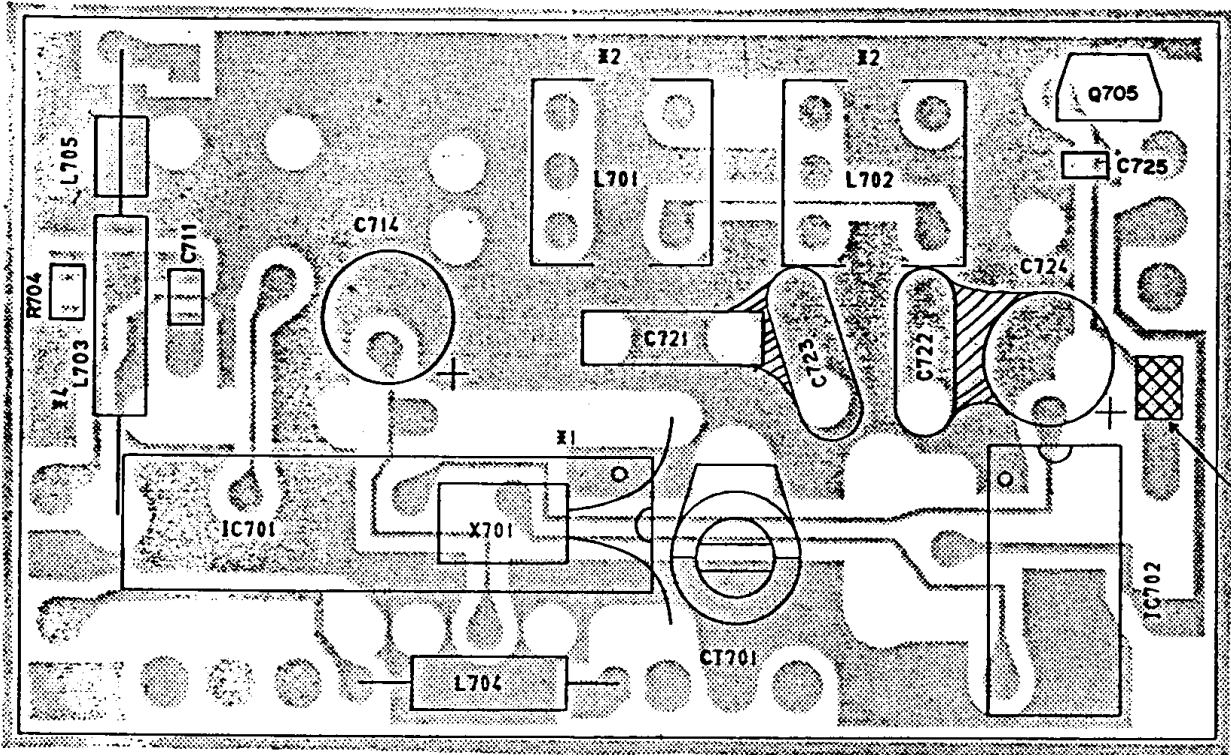


- NOTES:
1. RESISTANCE-VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. (K-KILO OHM, M-MEG OHM)
 2. RESISTOR WATTAGES ARE 1/8W UNLESS OTHERWISE NOTED.
 3. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. (P-MICRO-MICRO FARAD)

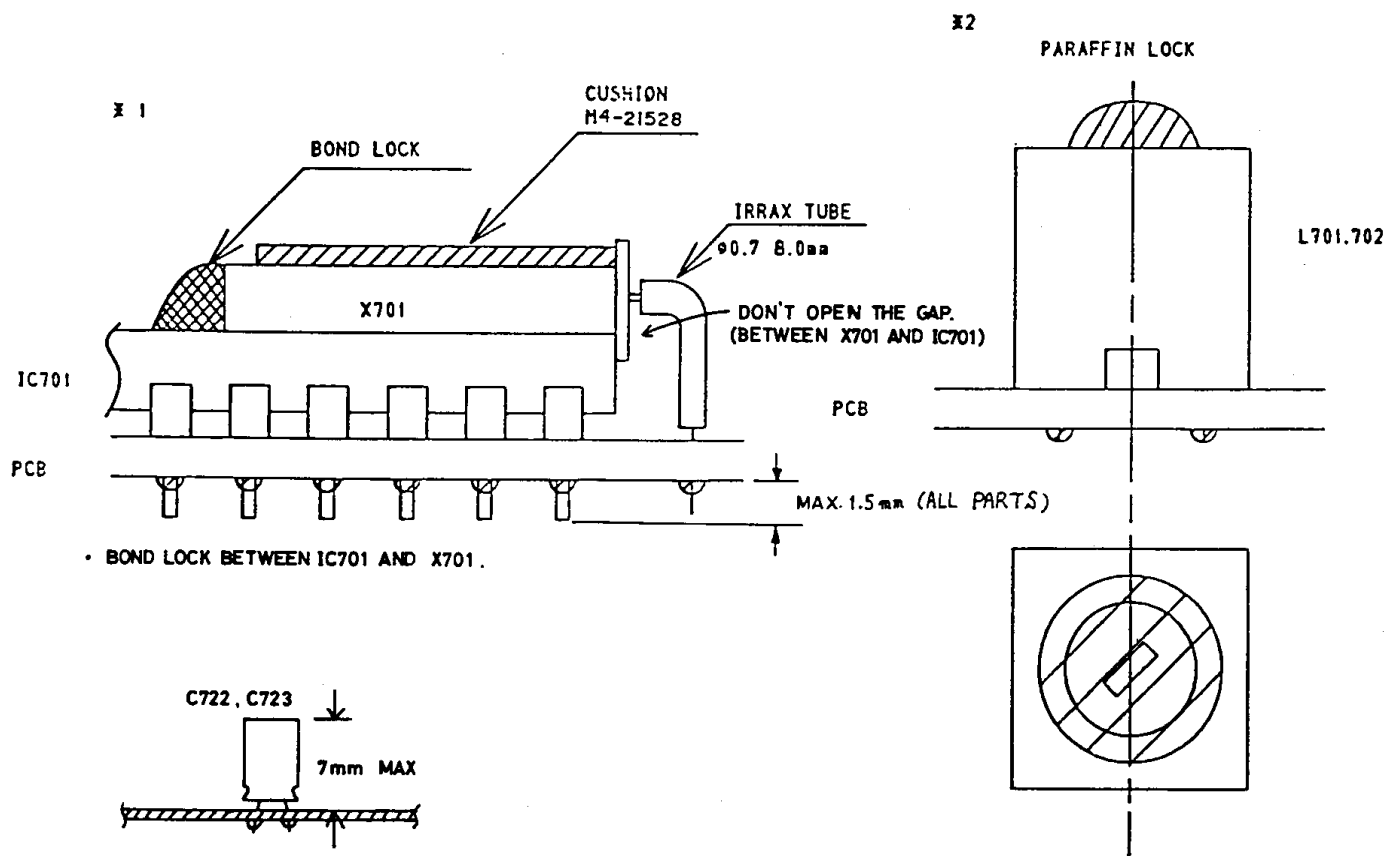
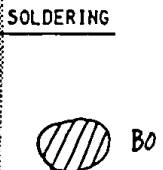
DESIGN BY	DRAWN BY	UNIDEM NO.	MODEL NO.
29 Feb 88	63.1.25	UB-109F	BC100XLT
Y. Ito	TANA	TITLE	MAIN PCB
CHECK BY	APPRO BY	PARTS ASSEMBLY TOP VIEW	
2/28/88	3-1-88	DRAWING NO.	REV. MARK
E. KAWA	K. Yama	E22-7396	

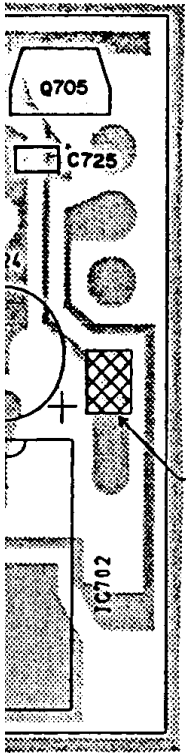
共 通 用
UB-109G.S

UNIDEN CORP.
PP88-013
MP88-006



C714
C721
C722
C723
C724
C725
C711
CT701
R704
Q705





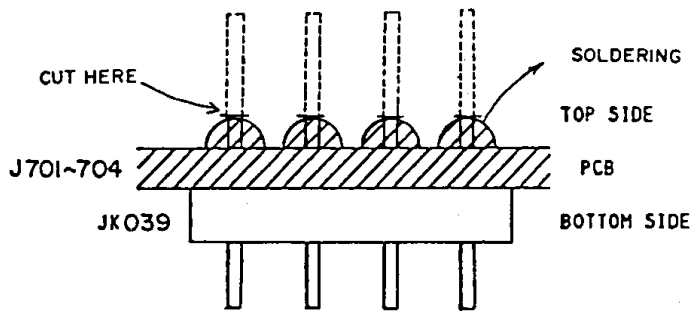
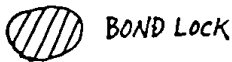
C714	6.3V100 C-158
C721	0.1/P1MKT1 C-184
C722	0.0047/P C-114
C723	0.0047/P C-114
C724	25V22 C-158
C725	0.001/ Y
C711	47P/SL
CT701	CT065 50pF
R704	470

Q705	DTA143XS
------	----------

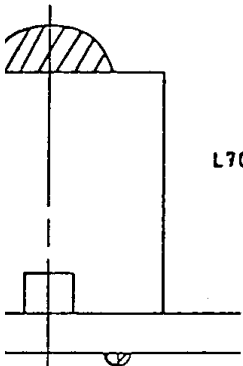
L701	LB568
L702	LB644
L703	LZ052 0.22μH
L704	LZ052 0.56μH
L705	LD087

IC701	PLL2002A1
IC702	TLC271CP

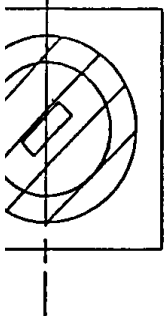
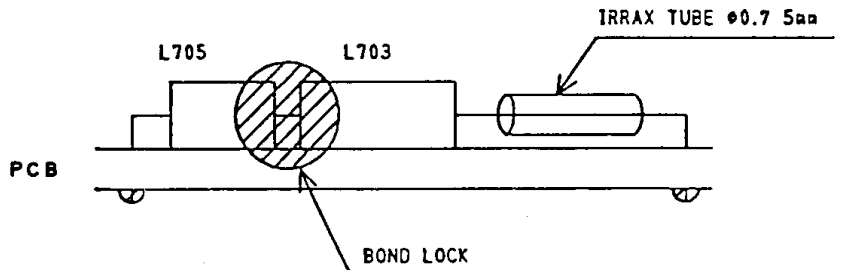
X701	OX145
------	-------



FFIN LOCK



X4



NOTES:

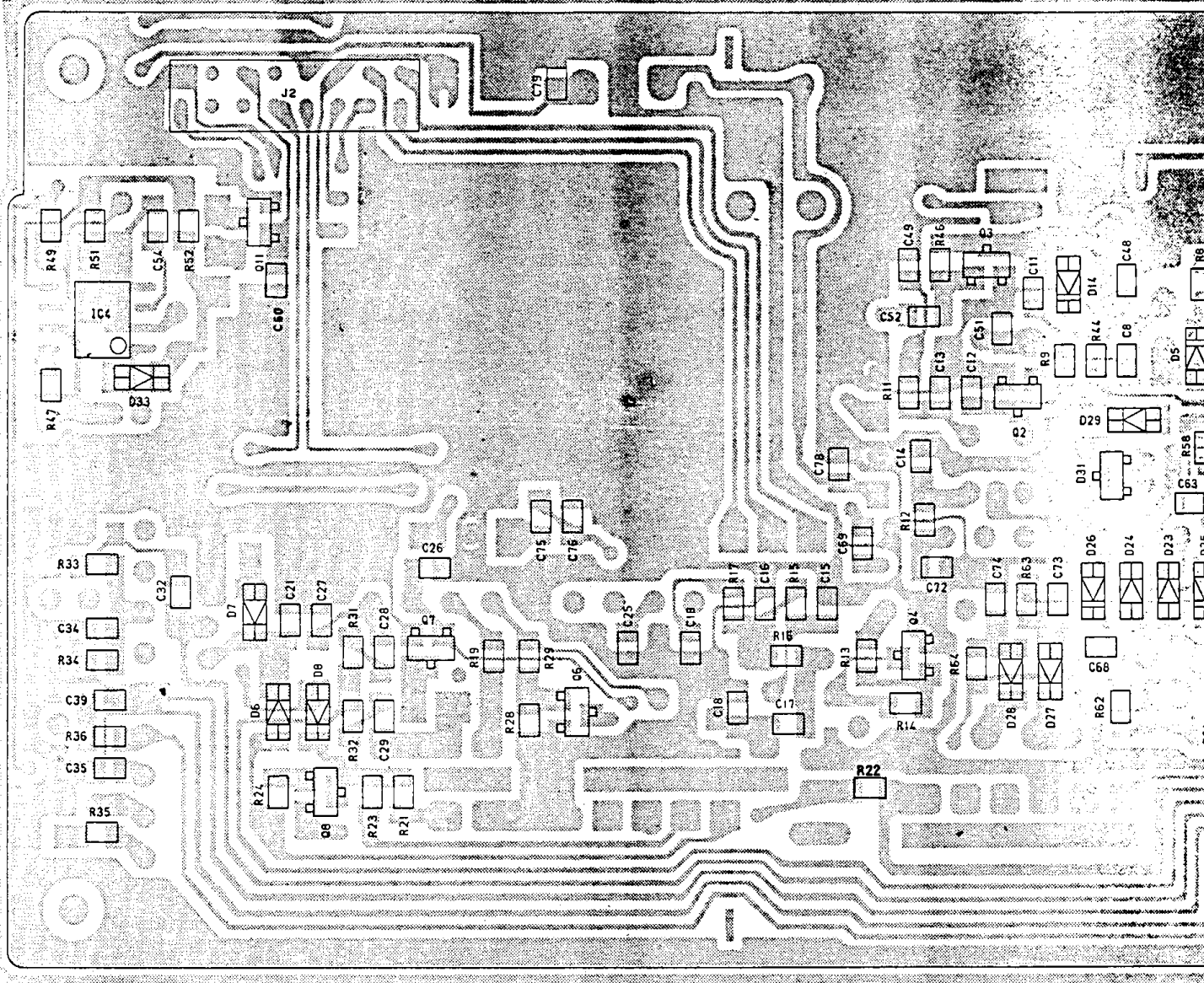
1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. (K=KILO OHM. M=MEG OHM)
2. RESISTOR WATTAGES ARE 1/10W UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. (P=MICRO-MICRO FARAD)

DESIGN.BY 29 Feb 88	DRAWN.BY 63.1.26	UNIDEN NO. UB-109F	MODEL NO. BC100XLT
CHECK.BY Y. HAGA	APPRO.BY R. HAGA	TITLE PLL PCB	
DRAWING NO. E23-7399		REV. MARK	

共通
使用 UB-109G.S

UNIDEN CORP.

8001 PH-068AC (BOTTOM VIEW)



C2	3P/CJ
C3	3P/CJ
C4	56P/UJ
C5	27P/UJ
C6	10P/CH
C8	100P/A
C11	1P/CK
C12	33P/CG
C13	0.001/Y
C14	0.0033/Y
C15	0.01/C
C16	0.01/C
C17	15P/CH
C18	27P/SL
C19	0.01/C
C21	0.1/F
C25	0.047/F
C26	0.047/F
C27	0.033/C
C28	0.0047/C
C29	0.0082/C
C31	100P/A
C32	0.0022/C
C34	0.0047/C
C35	0.022/C

C39	0.068/F
C42	47P/SL
C44	0.001/Y
C45	33P/SL
C46	0.001/Y
C47	0.001/Y
C48	2P/CK
C49	0.001/Y
C51	47P/UJ
C52	5P/CH
C54	220P/B
C58	0.001/Y
C59	0.001/Y
C61	9P/CH
C62	22P/UJ
C63	0.01/C
C64	15P/CH
C65	0.001/Y
C66	0.01/C
C67	0.001/Y
C68	39P/SL
C69	470P/B
C72	0.01/C
C73	0.001/Y
C74	0.001/Y
C75	33P/CG
C76	330P/B
C78	0.01/C
C79	0.01/C

Q2	25C3704
Q3	25C3121
Q4	25C2714101
Q6	25C2812L5
Q7	RTIN141C
Q8	25C2812L5
Q11	RTIN441C
IC4	IR3M03AN
J2	JK447 16P
IC10	100P/A
C60	0.001/YC-161

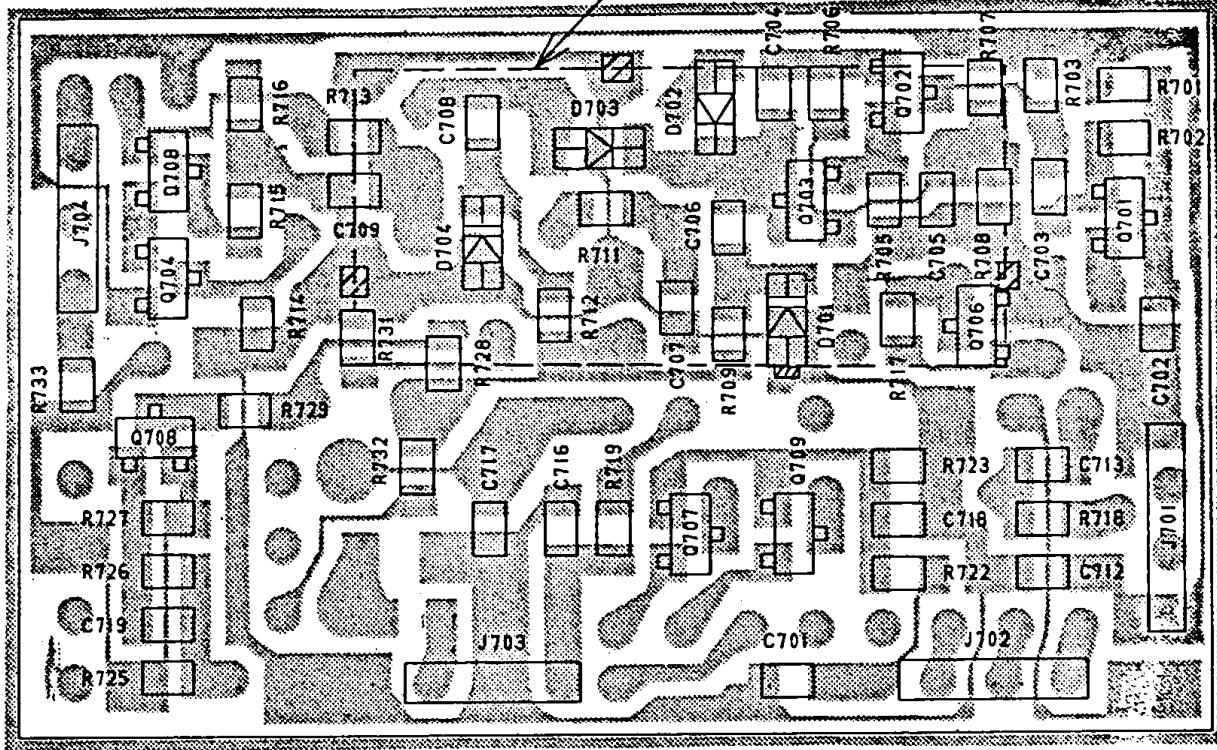
R1	560
R3	2.7K
R4	33K
R5	47K
R6	39
R7	100
R8	33K
R9	390K
R11	1K
R12	100
R13	3.3K
R14	120K
R15	220K
R16	4.7K
R17	2.2K
R19	1K
R21	10K
R22	22K
R23	820K
R24	10K
R27	4.7K
R28	12K
R29	4.7K
R31	22K
R32	22K
R33	56K
R34	47K
R35	27

R36	2.2
R43	2.7K
R44	1.5K
R46	390K
R47	180
R49	2.2
R51	3.3K
R52	39K
R54	47K
R55	2.7K
R56	2.7K
R57	1K
R58	1K
R59	100
R61	3.3K
R62	47K
R63	100
R64	100


D1	HSK120TR
D3	HSK110TR
D4	15V201-4
D5	15V201-4
D6	HSK120TR
D7	HSK120TR
D8	HSK120TR
D9	HSK120TR
D11	HSK110TR
D12	15V201-4
D13	HSK110TR
D14	15V201-4
D15	HSK110TR
D16	15V201-4
D17	HSK110TR
D18	HSK110TR
D19	HSK110TR
D21	15S184
D23	HSK110TR
D24	HSK110TR
D25	15V201-4
D26	15V201-4
D27	HSK110TR
D28	HSK110TR
D29	HSK120TR
D31	15S184
D33	HSK120TR

B701 PH-066AB(BOTTOM VIEW)

SHIELD PLATE M4-22133



C701	0.0
C702	0.0
C703	0.0
C704	1.5
C705	0.0
C706	33F
C707	0.0
C708	0.0
C709	0.0
C712	0.0
C713	0.0
C716	18F
C717	39F
C718	10F
C719	10F
D701	15I
D702	HS
D703	HS
D704	15I
D708	15I

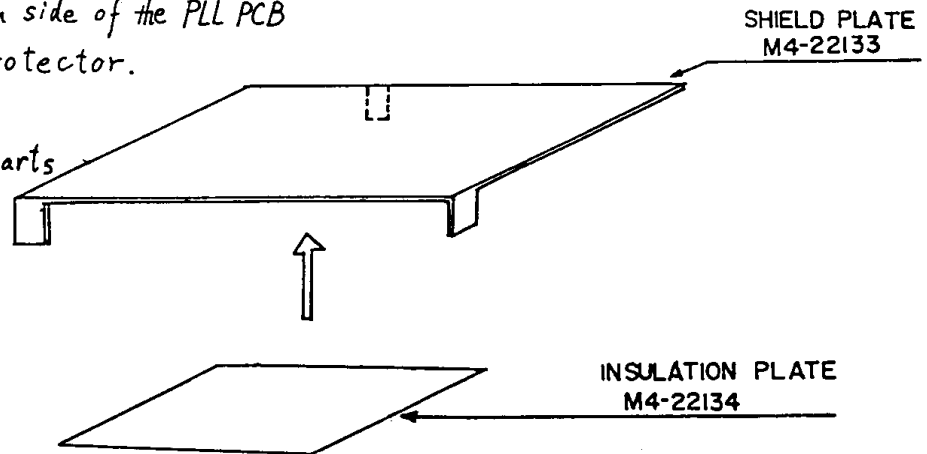
 SOLDERING

* Spray the surface of the bottom side of the PLL PCB with the electrical parts protector.

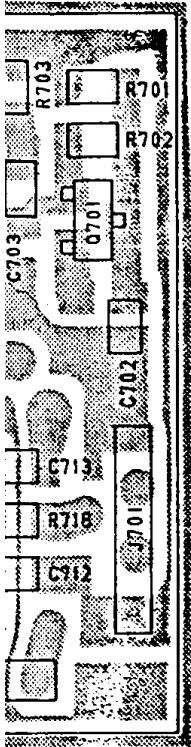
(#2901 Three - Bond)

電子部品保護剤 (Electrical Parts Protector #2901 (株) シーボンド)

を PLL PCB CHIP 面 全面に
スプレーすること。



INSULATION PLATE
M4-22134



C701	0.0033/Y
C702	0.033/F
C703	0.001/Y
C704	1.5P/UK
C705	0.001/Y
C706	39P/CG
C707	0.001/Y
C708	0.001/Y
C709	0.022/F
C712	0.0033/Y
C713	0.001/Y
C716	18P/CG
C717	39P/CG
C718	10P/SL
C719	10P/SL

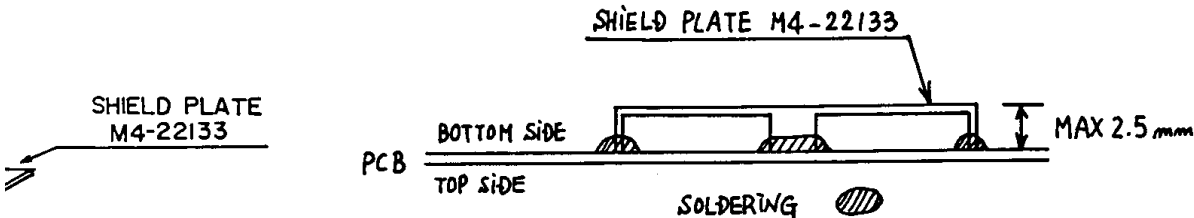
D701	15V201-4
D702	HSK110TR
D703	HSK110TR
D704	15V201-4
D708	15S184

R701	100
R702	33K
R703	330
R705	560
R706	4.7K
R707	10K
R708	4.7K
R709	47K
R711	100
R712	1.8K
R713	100
R714	10K
R715	100K
R716	10K
R717	100K
R718	100
R719	330
R722	33K
R723	10K
R725	10K
R726	220K
R727	22K
R728	18K
R729	15K
R731	16K

R732	2.2M
R733	100

J701	JK 039 14P1
J702	JK 039 13P1
J703	JK 039 13P1
J704	JK 039 13P1

Q701	25C3121
Q702	25C3121
Q703	25C3121
Q704	25A1162Y
Q706	25C3121
Q707	25C3121-T5L
Q708	25A1162Y
Q709	25C3121-T5L



LATION PLATE
-22134

NOTES:

1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. (K-KILO OHM, M-MEG OHM)
2. RESISTOR WATTAGES ARE 1/10W UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. (P-MICRO-MICRO FARADI)

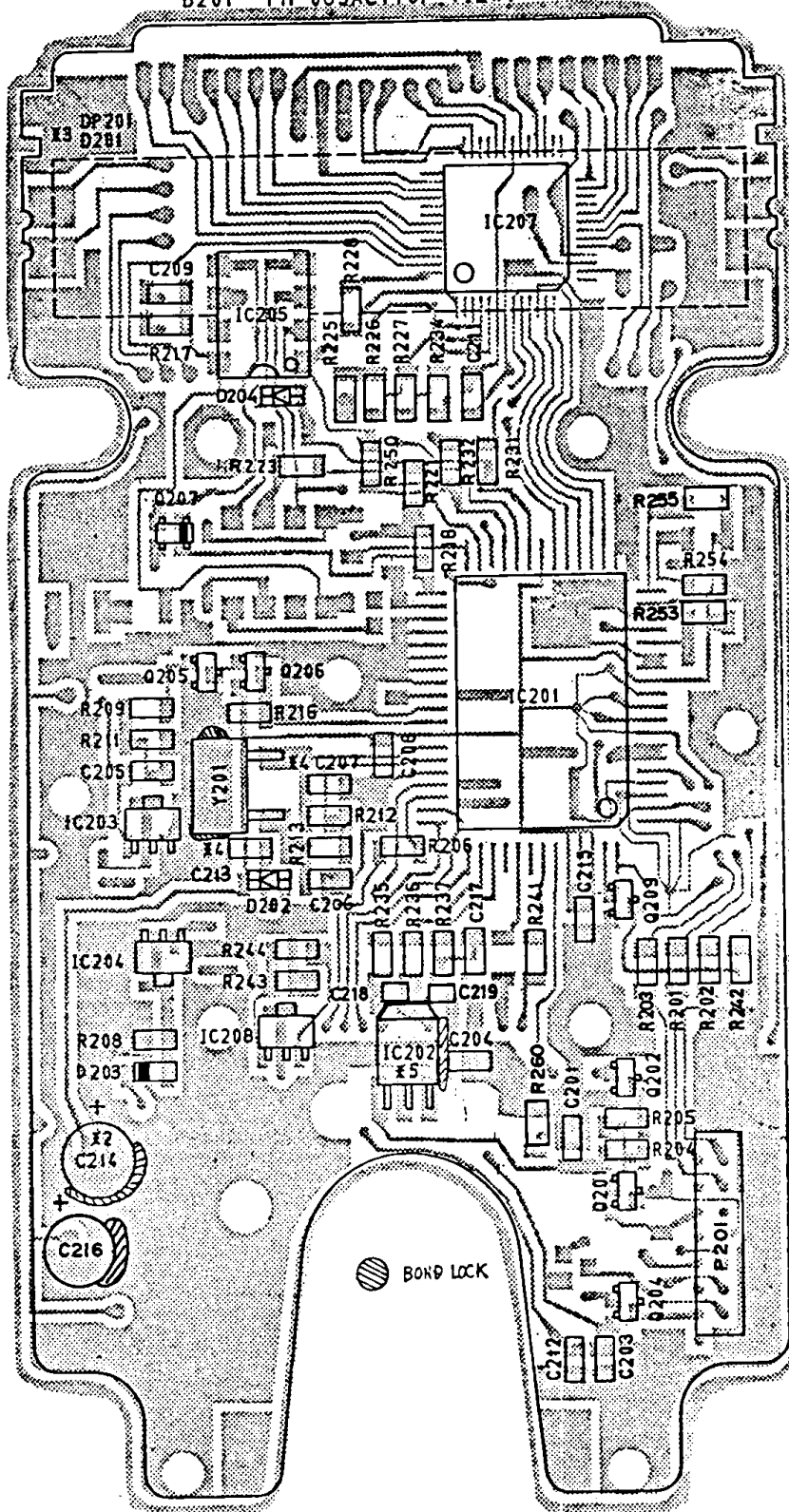
DESIGN.BY 29. Feb '88	DRAWN BY 63.1.26	UNIDEN NO. UB-109F	MODEL NO. BC100XLT
CHECK BY Y. Kana	APPRO. BY R. HAGA	TITLE PLL PCB	
DRAWING NO. E23-7400		REV. MARK	

共通
使用 UB-109G.S

UNIDEN CORP.

HT80-044

B201 PH-069AC (TOP VIEW)



R201	100K
R202	100K
R203	100K
R204	47K
R205	4.7K
R206	2.2K
R208	47K
R209	470K
R211	150K
R212	1M
R213	6.8K
R216	1M
R217	4.7
R218	4.7K
R221	47K
R223	10
R225	100K
R226	100K
R227	100K
R228	220K-G
R231	2.2K
R232	2.2K
R234	120K
R235	10
R236	10
R237	10
R241	2.2K
R242	150
R243	1.2K
R244	10K
R251	RZ021
R253	47K
R254	RZ021
R255	47K
R260	RZ021

C201	0.022/
C203	0.022/
C204	0.022/
C205	0.047/
C206	14
C207	14
C208	0.022/
C209	0.022/
C211	0.022/
C212	0.022/
C213	0.01/C
C214	6.3V47
C215	0.022/
C216	6.3V100
C217	0.01/
C218	0.001
C219	0.001

Q201	25881/
Q202	RT1N1/
Q204	RT1P1/
Q205	25C28
Q206	RT1P1/
Q207	25D17
Q209	RT1N1/

D201	LT931
D202	HSK12
D203	HZK3CL
D204	HSK12

DP201	DL021
-------	-------

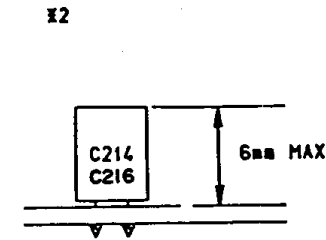
11	100K
12	100K
13	100K
14	47K
15	4.7K
16	2.2K
18	47K
19	470K
11	150K
12	1M
13	6.8K
16	1M
17	4.7
18	4.7K
21	47K Y
23	10
25	100K
26	100K
27	100K
28	220K-G
31	2.2K
32	2.2K
34	120K
35	10
36	10
37	10
41	2.2K
42	150
43	1.2K
44	10K
51	RZ021
53	47K
54	RZ021
55	47K
60	RZ021

C201	0.022/C
C203	0.022/C
C204	0.022/C
C205	0.047/C
C206	14
C207	14
C208	0.022/C
C209	0.022/C
C211	0.022/C
C212	0.022/C
C213	0.01/C
C214	6.3V47 C-158
C215	0.022/C
C216	6.3V100 C-158
C217	0.01/C
C218	0.001/Y
C219	0.001/Y

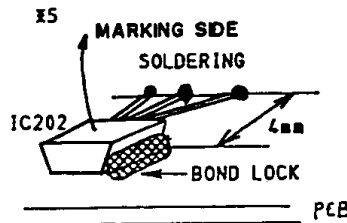
Q201	2SB815B6YDK
Q202	RT1N141C
Q204	RT1P144C
Q205	2SC2812L5
Q206	RT1P144C
Q207	2SD1777C1
Q209	RT1N141C

D201	LT9315E
D202	HSK120TR
D203	HZK3C1101TR
D204	HSK120TR

DP201	DL026
-------	-------



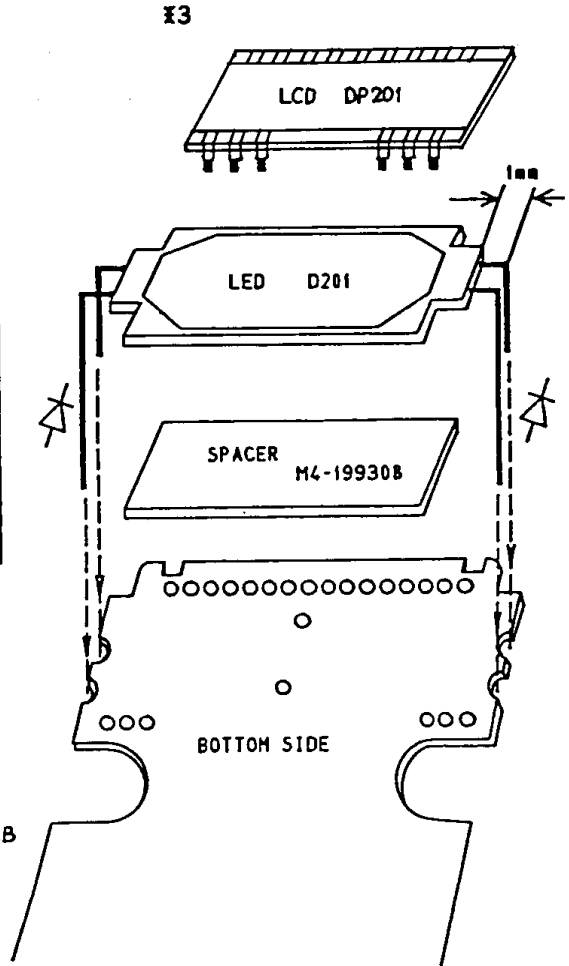
MARKING OF Y201		
	NO MARK	RED OR YELLOW
C206	1C206	2C206
	330P/B	180P/B
C207	1C207	2C207
	330P/B	180P/B



P201	PG125 (16P)
------	-------------

IC201	UC1147
IC202	TK11750
IC203	S8054ALB-LM
IC204	S8054HN-CB
IC205	CXK1013P (CUT)
IC207	LH5008TP
IC208	S81250HG-RD

Y201	YY665
------	-------



共通
使用 UB-109G.S

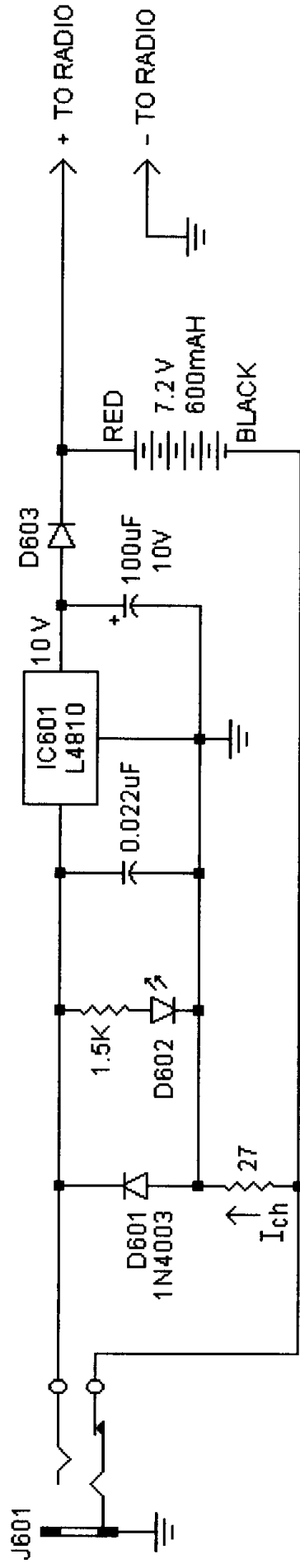
- NOTES:
1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. (K-KILO OHM, M-MEG OHM)
 2. RESISTOR WATTAGES ARE 1/8W UNLESS OTHERWISE NOTED.
 3. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. (P-MICRO-MICRO FARAD)

DESIGN BY	DRAWN BY	UNIDEN NO.	MODEL NO.
29 Feb '88	63.1.20	UB-109F	BC100XLT
Y. Hoshino	FUJIKO.E	TITLE MICOM PCB PARTS ASSEMBLY	
CHECK BY	APPRO BY	E23-7398	REV. MARK
25 '88	3.1. '88		
Id. Kane	K. I. Iwano		

UNIDEN CORP.

4P88-008

BP205 BATTERY PACK FOR UNIDEN BC100XLT



$I_{ch} = 180 \text{ mA}$ initial charging current, decaying to 62.5 mA