

External Speaker and Audio Filter

FPS-9000H

Technical Supplement

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EH010H95B

VERTEX STANDARD CO., LTD.
4-8-8 Nakameguro, Meguro-Ku, Tokyo 153-8644, Japan

VERTEX STANDARD
US Headquarters
10900 Walker Street, Cypress, CA 90630, U.S.A.

YAESU UK LTD.
Unit 12, Sun Valley Business Park, Winnall Close
Winchester, Hampshire, SO23 0LB, U.K.

VERTEX STANDARD HK LTD.
Unit 5, 20/F., Seaview Centre, 139-141 Hoi Bun Road,
Kwun Tong, Kowloon, Hong Kong

VERTEX STANDARD (AUSTRALIA) PTY., LTD.
Normanby Business Park, Unit 14/45 Normanby Road
Notting Hill 3168, Victoria, Australia



Specifications

Power Supply Section

Input Voltage:	90 VAC - 264 VAC (Universal)
Output Voltage:	50 VDC , 13.8 VDC, 5 VDC
Power Consumption:	Rx (no signal) 100 VA
(@117 V Input)	Rx (signal present) 120 VA
	Tx (400 W) 1000 VA
Maximum Output Current:	50 V: 24 A, 13.8 V: 5 A, 5 V: 7 A
Ripple Voltage:	500 mV or less (50 V Line @ 6 A)
	150 mV or less (13.8 V Line @ 5 A)
	100 mV or less (5 V Line @ 7 A)

Filter Characteristics (Cutoff Frequencies: Independent Left and Right Filters are built in)

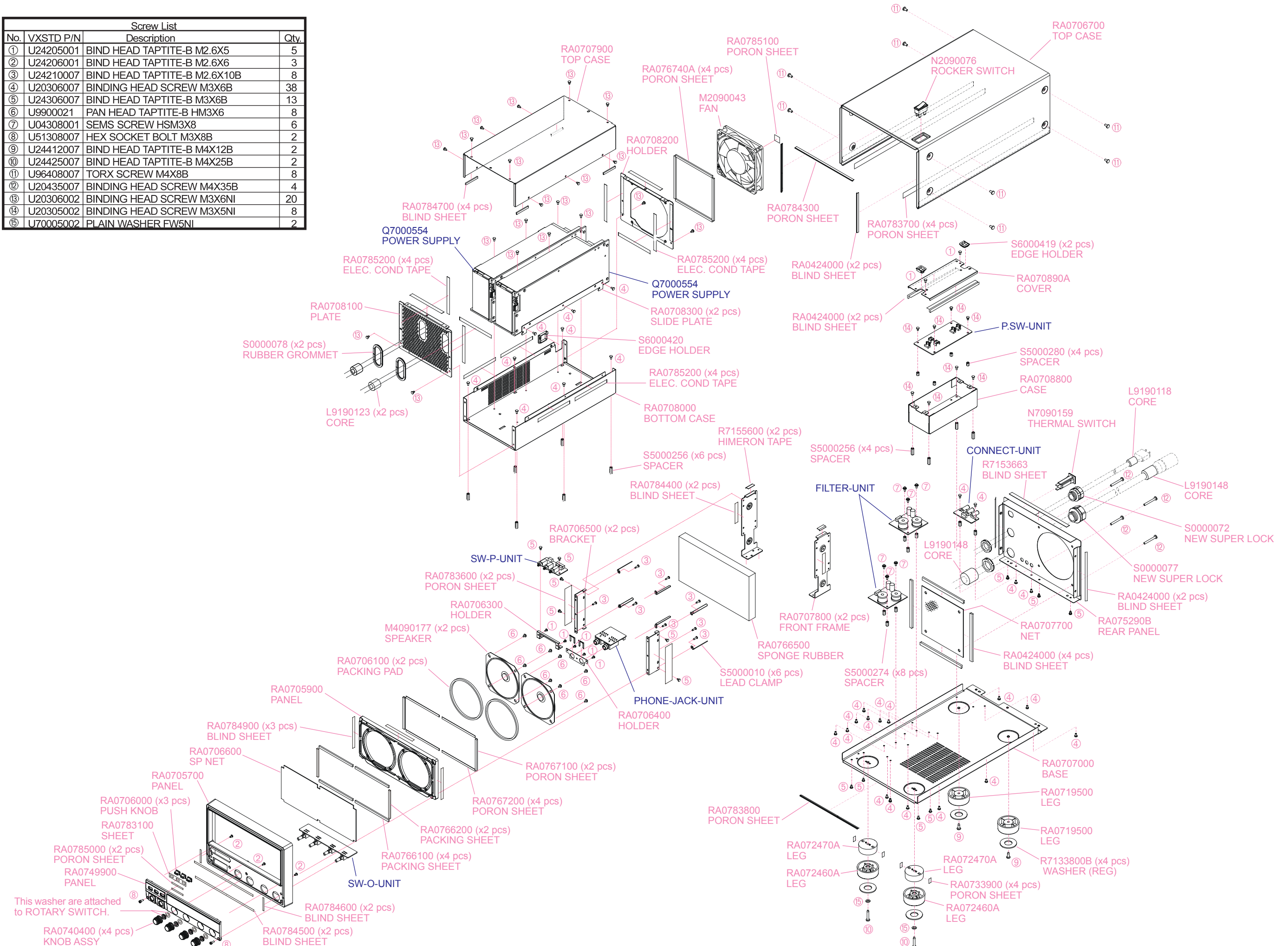
LOW1:	Approx. 300 Hz (-6 dB/Oct)
LOW2:	Approx. 500 Hz (-6 dB/Oct)
HIGH1:	Approx. 2.4 kHz (-6 dB/Oct)
HIGH2:	Approx. 1 kHz (-6 dB/Oct)
HIGH3:	Approx. 700 Hz (-6 dB/Oct)

Misc.

Case Size (WxHxD):	9.7" x 7.2" x 17.2" (246 x 182 x 438 mm) (without knobs/jacks)
Weight (approx.):	23.1 lb (10.5 kg)

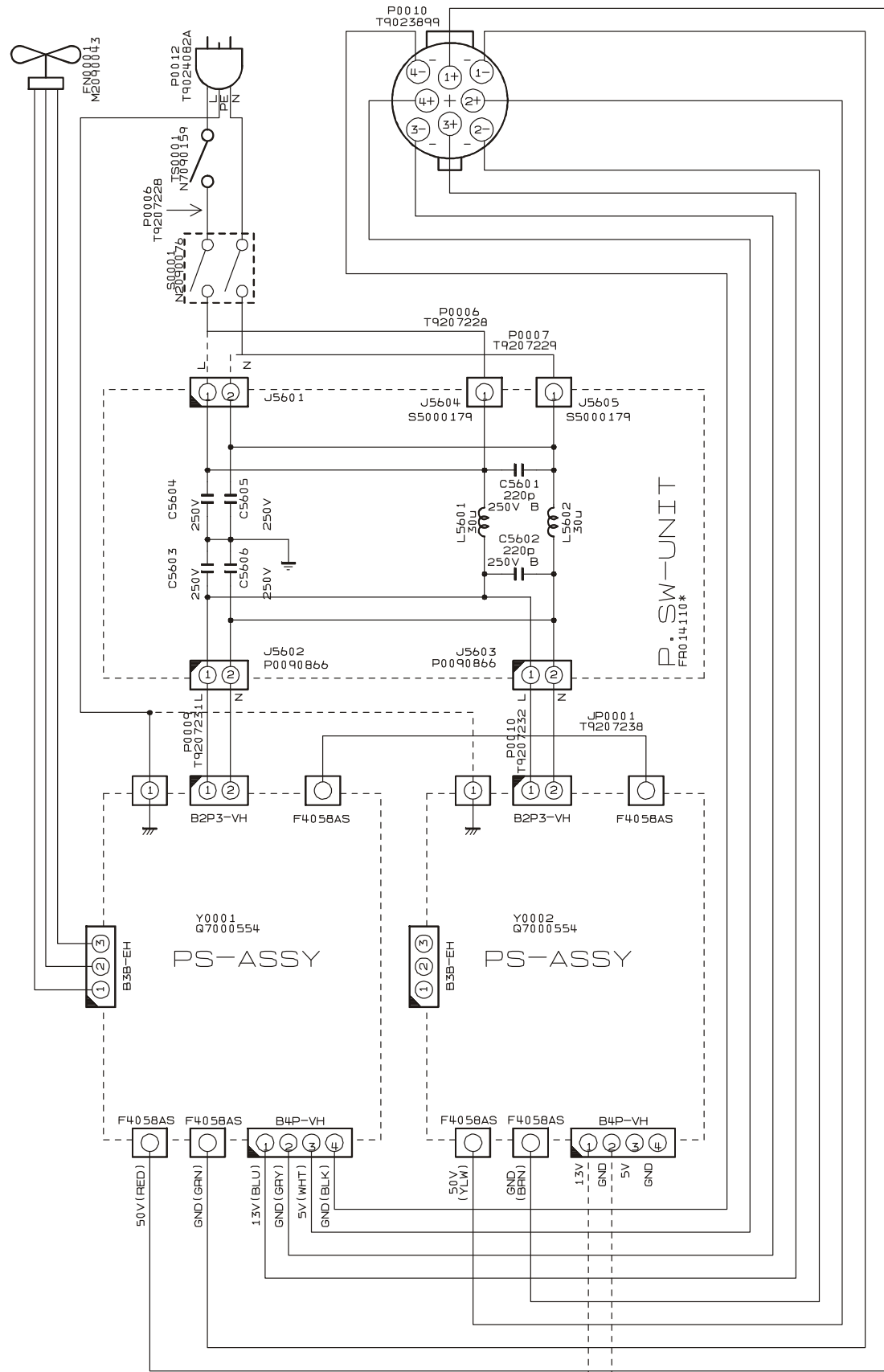
Exploded Views & Mechanical Parts

Screw List			
No.	VXSTD P/N	Description	Qty.
①	U24205001	BIND HEAD TAPTITE-B M2.6X5	5
②	U24206001	BIND HEAD TAPTITE-B M2.6X6	3
③	U24210007	BIND HEAD TAPTITE-B M2.6X10B	8
④	U20306007	BINDING HEAD SCREW M3X6B	38
⑤	U24306007	BIND HEAD TAPTITE-B M3X6B	13
⑥	U9900021	PAN HEAD TAPTITE-B HM3X6	8
⑦	U04308001	SEMS SCREW HSM3X8	6
⑧	U51308007	HEX SOCKET BOLT M3X8B	2
⑨	U24412007	BIND HEAD TAPTITE-B M4X12B	2
⑩	U24425007	BIND HEAD TAPTITE-B M4X25B	2
⑪	U96408007	TORX SCREW M4X8B	8
⑫	U20435007	BINDING HEAD SCREW M4X35B	4
⑬	U20306002	BINDING HEAD SCREW M3X6NI	20
⑭	U20305002	BINDING HEAD SCREW M3X5NI	8
⑮	U70005002	PLAIN WASHER FW5NI	2



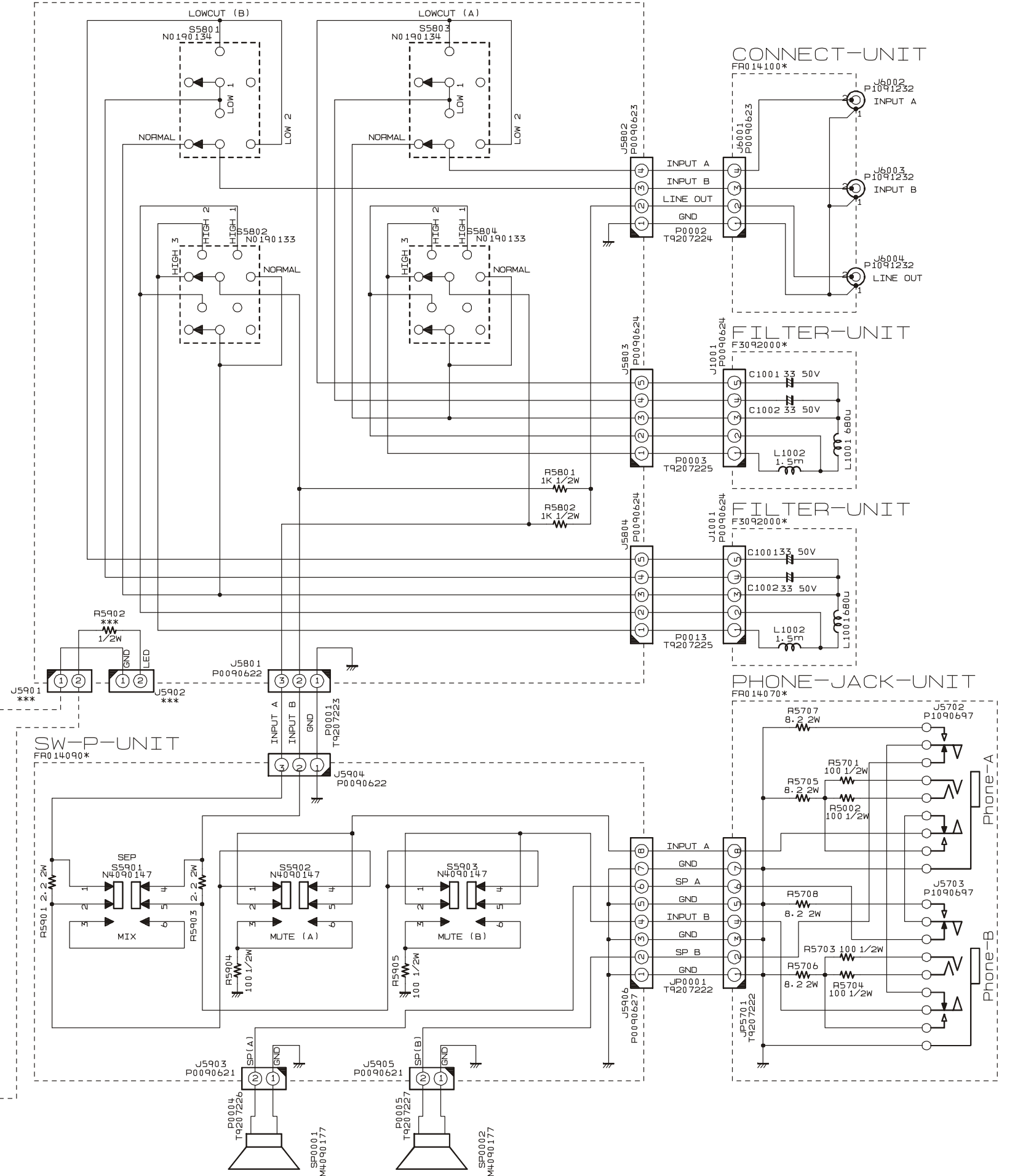
Connection Diagram

FP-ASSY CONNECTION-DIAGRAM



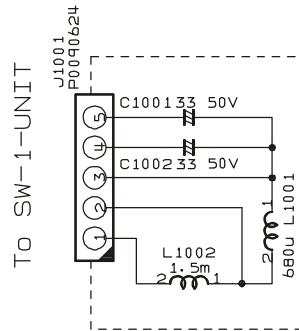
P0012 AC-CABLE			
JPN	T9023980A	UK	T9024285A
USA	T9024082A	AUS	T9024383A
EU	T9024184A		

SW-O-UNIT FR014080*

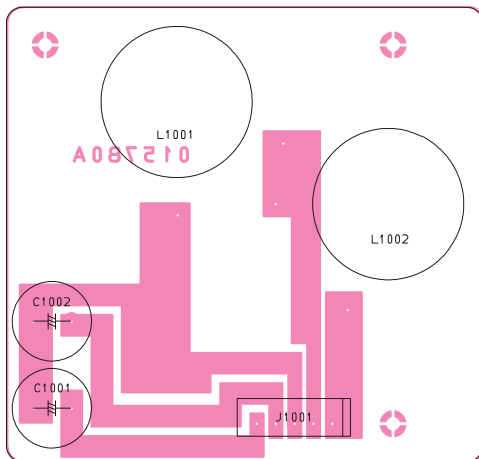


FILTER-UNIT Circuit Diagram

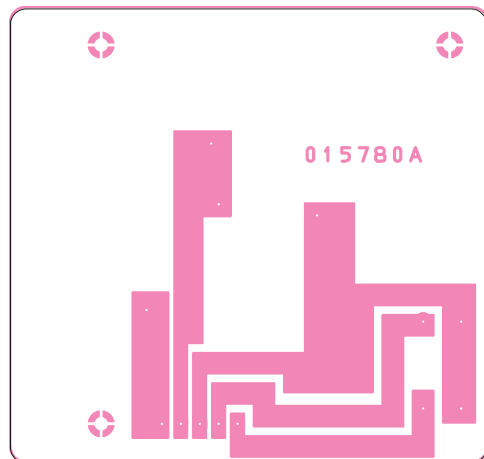
FILTER-UNIT
BP0209800 (1001-1099)



FILTER-UNIT Parts Layout



Component side



Solder side

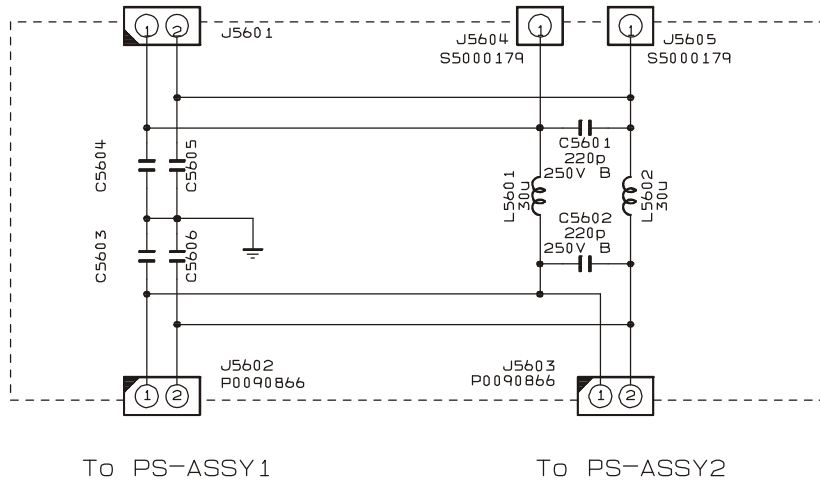
FILTER-UNIT Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
PCB with Components						CB3349001				
P.C.B. W/O COMP.						FR015780A		1-		
C 1001	AL.ELECTRO.CAP.	33uF	50V		RBP-50V330MH4#	K40179020		1-		
C 1002	AL.ELECTRO.CAP.	33uF	50V		RBP-50V330MH4#	K40179020		1-		
J 1001	CONNECTOR				SC25-05WS	P0090624		1-		
L 1001	AFC	1.5mH			LC-308A 1.5MH	L2030086A		1-		
L 1001	AFC	680uH			LC-307A 680UH	L2030085A		4-		
L 1002	AFC	680uH			LC-307A 680UH	L2030085A		1-		
L 1002	AFC	1.5mH			LC-308A 1.5MH	L2030086A		4-		

P.SW-UNIT Circuit Diagram

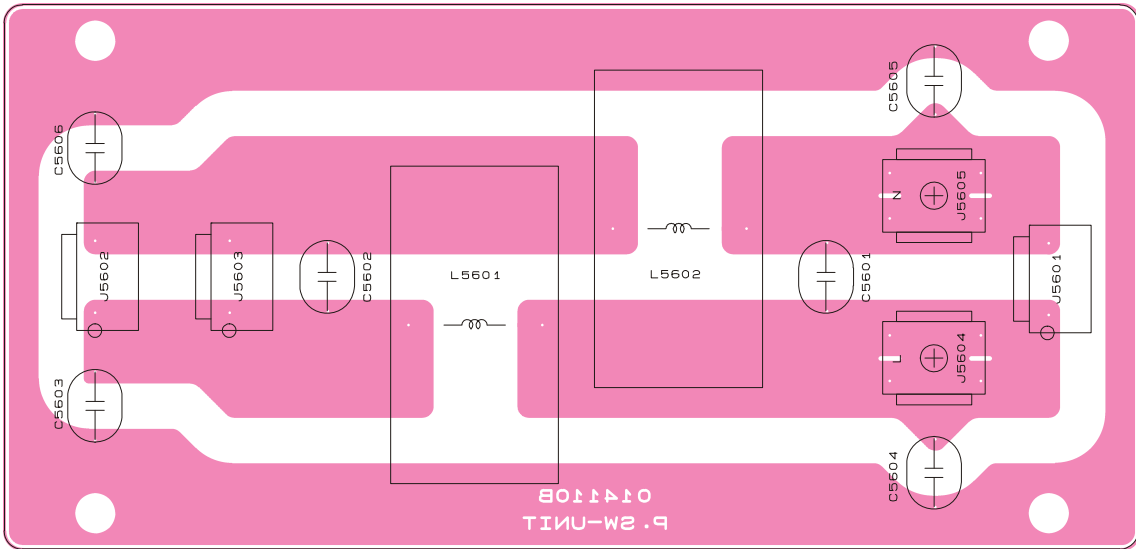
P. SW-UNIT
BR0 14 110B 1 (560 1-5699)

AC IN

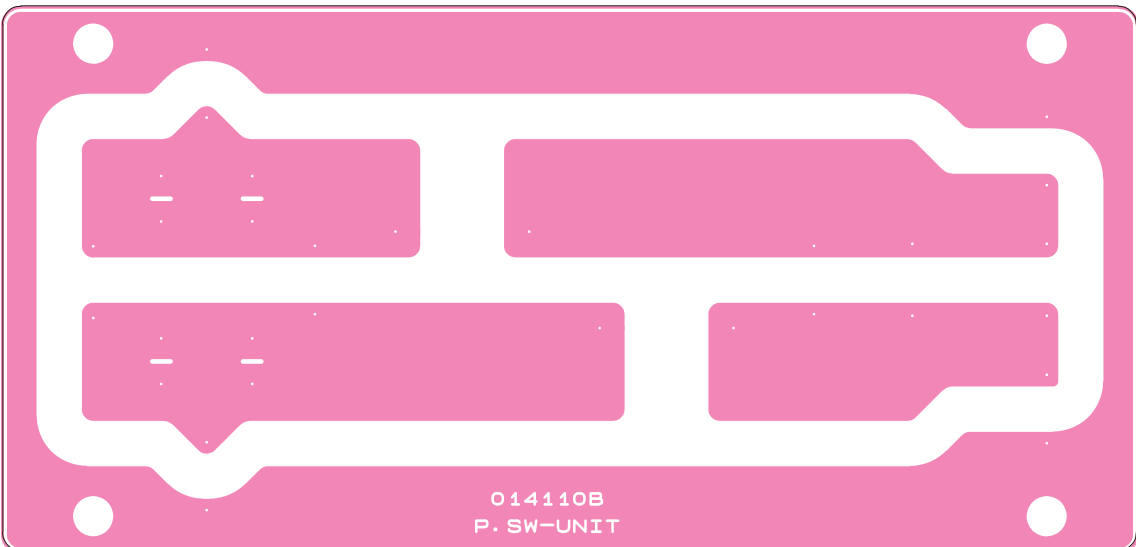


J5601, C5603, C5604, C5605, C5606
Not mounted in the tested Unit.

P.SW-UNIT Parts Layout



Component side



Solder side

P.SW-UNIT Parts List

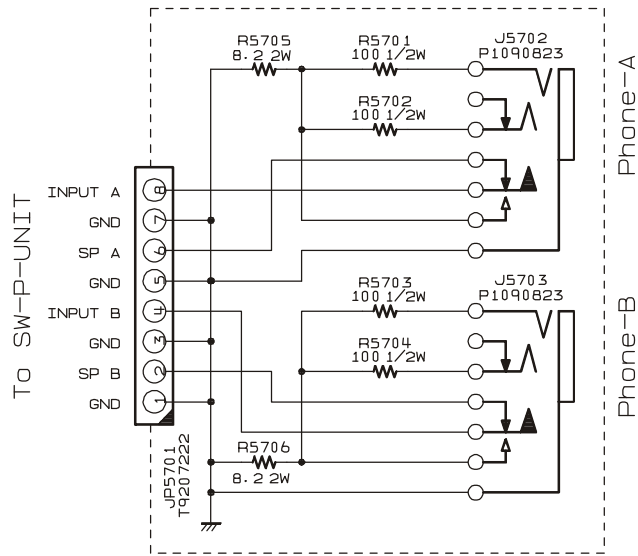
REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR	
PCB with Components						CB3351001					
Printed Circuit Board						FR014110B				1-	
C 5601	CERAMIC CAP.	220pF	250V	B	DE2B3KY221KA3B	K10249004		9-			
C 5602	CERAMIC CAP.	220pF	250V	B	DE2B3KY221KA3B	K10249004		9-			
J 5601	CONNECTOR				B2P3-VH(LF)(SN)	P0090866		1-3			
J 5602	CONNECTOR				B2P3-VH(LF)(SN)	P0090866		1-			
J 5603	CONNECTOR				B2P3-VH(LF)(SN)	P0090866		1-			
J 5604	TERMINAL				Y106	S5000181		1-			
J 5604	TERMINAL				Y106	S5000179		4-			
J 5605	TERMINAL				Y106	S5000181		1-			
J 5605	TERMINAL				Y106	S5000179		4-			
L 5601	TOROIDAL COIL	30uH			SF-T15-20L-01-PF	L0190277		9-			
L 5602	TOROIDAL COIL	30uH			SF-T15-20L-01-PF	L0190277		9-			

PHONE-JACK-UNIT Circuit Diagram (Lot. 1 ~ Lot.45)

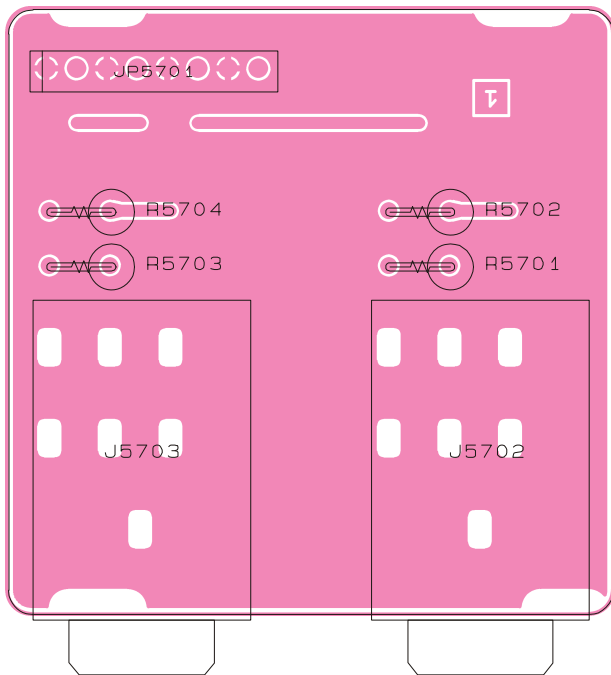
PHONE-JACK-UNIT

BP0 140 70B

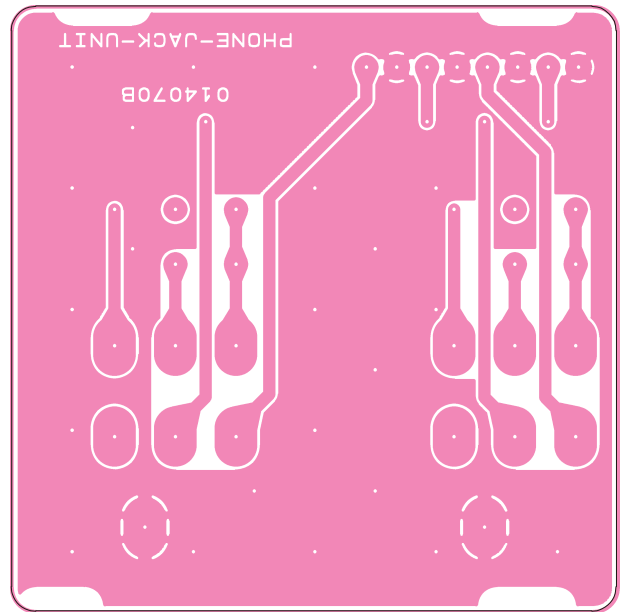
(570 1-5799)



PHONE-JACK-UNIT Parts Layout (Lot. 1 ~ Lot.45)

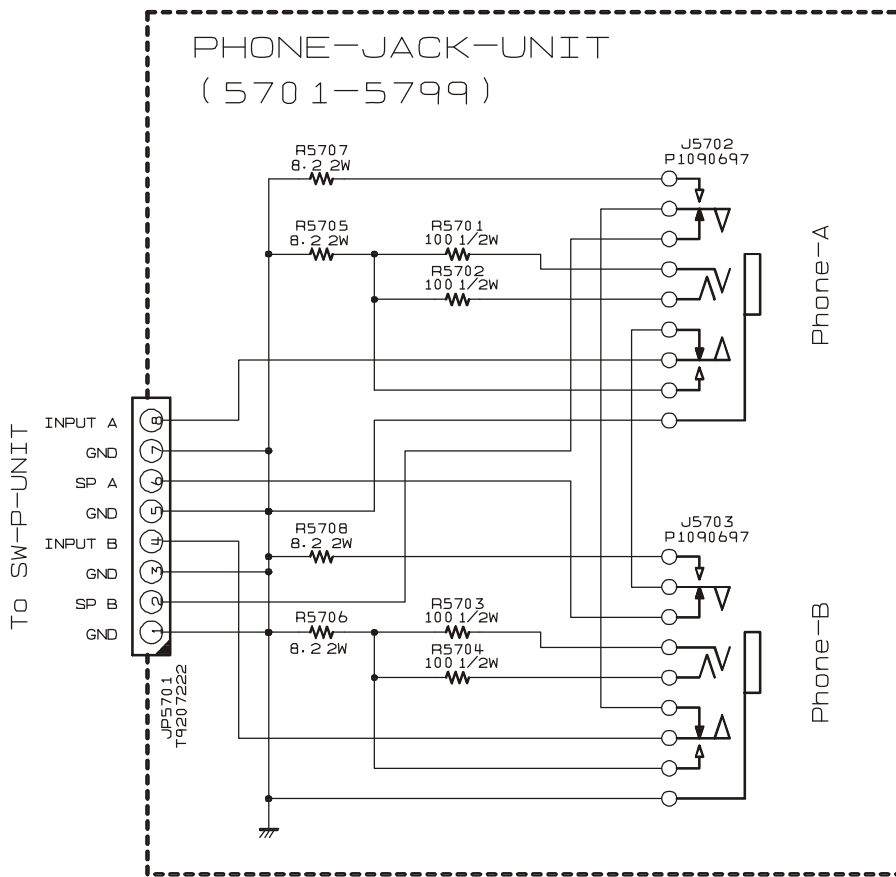


Component side

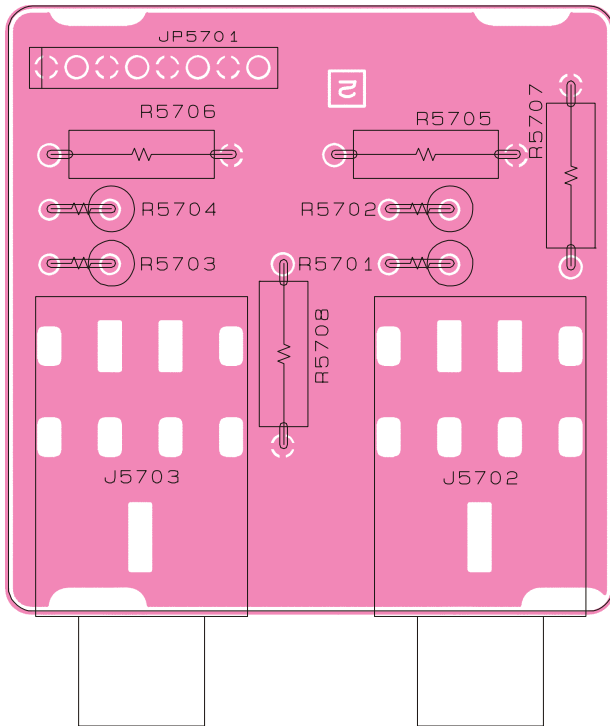


Solder side

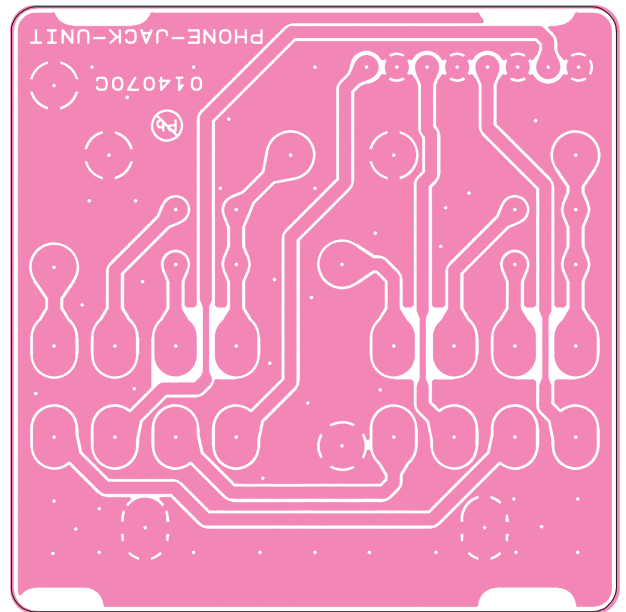
PHONE-JACK-UNIT Circuit Diagram (Lot. 46 ~)



PHONE-JACK-UNIT Parts Layout (Lot. 46 ~)



Component side



Solder side

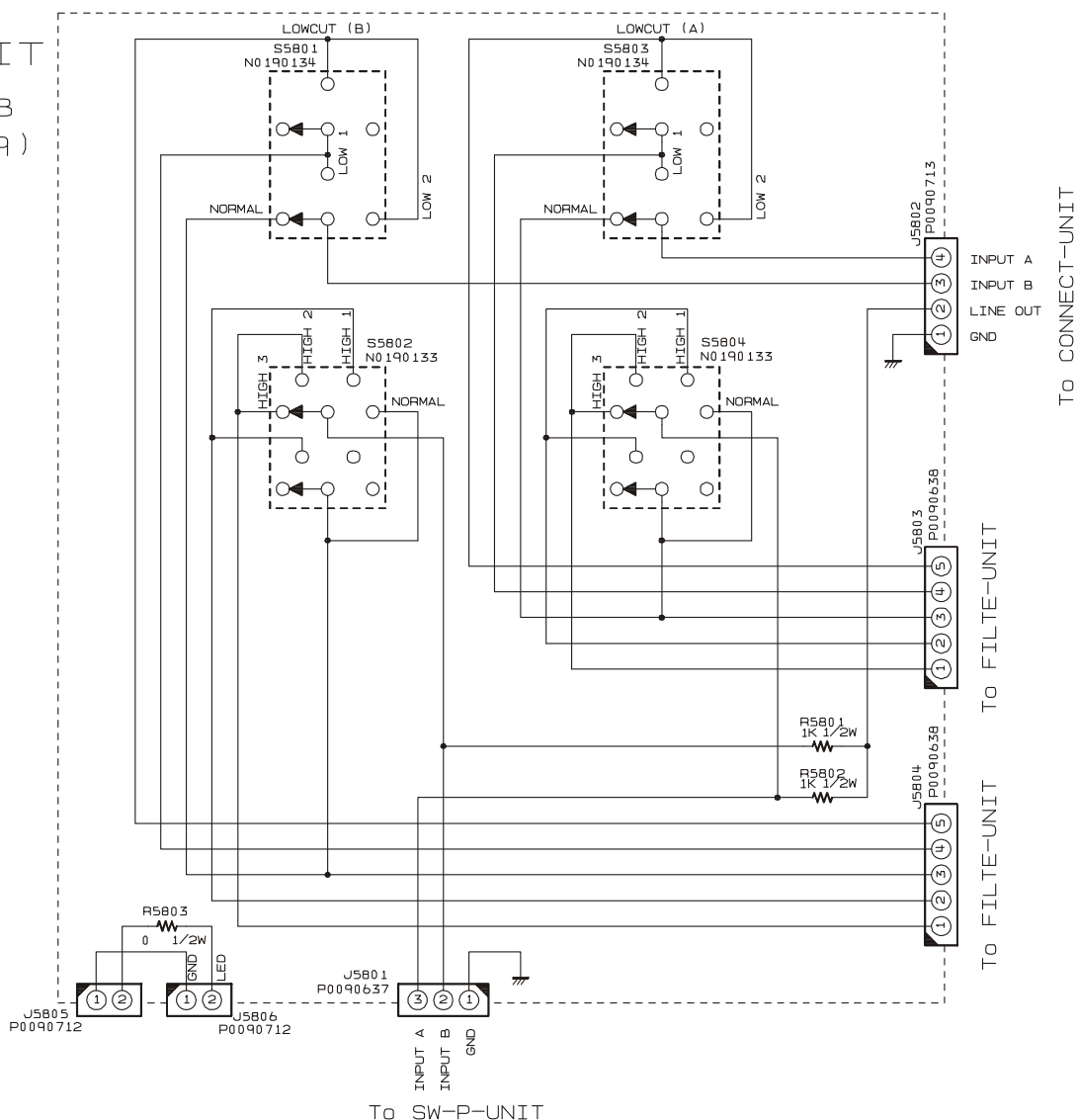
PHONE-JACK-UNIT Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
PCB with Components						CB3346001				
Printed Circuit Board						FR014070B		1-		
						FR014070C		46-		
J 5702	CONNECTOR				HLJ2305-0130609	P1090823		1-		
J 5702	CONNECTOR				S-G4617#02	P1090697		46-		
J 5702	CONNECTOR				YKB21-5077(G)	P1091404		49-		
J 5703	CONNECTOR				HLJ2305-0130609	P1090823		1-		
J 5703	CONNECTOR				S-G4617#02	P1090697		46-		
J 5703	CONNECTOR				YKB21-5077(G)	P1091404		49-		
JP5701	WIRE ASSY				AH010H #242504	T9207222		4-		
R 5701	CHIP RES.	100	1/2W	5%	RMC1/2 101JCTP	J24275101		1-		
R 5701	CARBON FILM RES.	100	1/2W	5%	RD12TJ101 100	J01275101		4-		
R 5702	CHIP RES.	100	1/2W	5%	RMC1/2 101JCTP	J24275101		1-		
R 5702	CARBON FILM RES.	100	1/2W	5%	RD12TJ101 100	J01275101		4-		
R 5703	CHIP RES.	100	1/2W	5%	RMC1/2 101JCTP	J24275101		1-		
R 5703	CARBON FILM RES.	100	1/2W	5%	RD12TJ101 100	J01275101		4-		
R 5704	CHIP RES.	100	1/2W	5%	RMC1/2 101JCTP	J24275101		1-		
R 5704	CARBON FILM RES.	100	1/2W	5%	RD12TJ101 100	J01275101		4-		
R 5705	METAL FILM RES.	8.2	2W	5%	ERX-2SJ8R2 8.2	J22339009		4-		
R 5706	METAL FILM RES.	8.2	2W	5%	ERX-2SJ8R2 8.2	J22339009		4-		
R 5707	METAL FILM RES.	8.2	2W	5%	ERX-2SJ8R2 8.2	J22339009		46-		
R 5708	METAL FILM RES.	8.2	2W	5%	ERX-2SJ8R2 8.2	J22339009		46-		

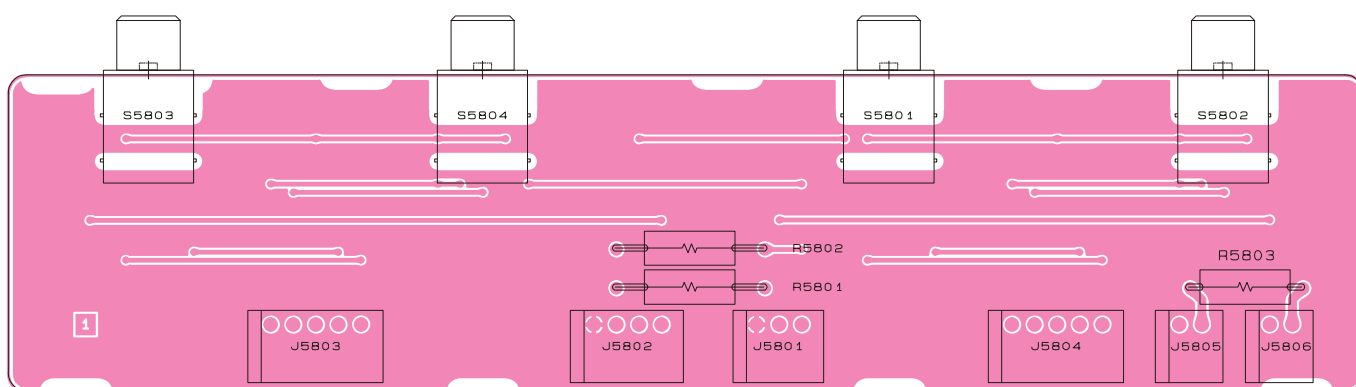
SW-O-UNIT Circuit Diagram (Lot. 1 ~ Lot.45)

SW-O-UNIT

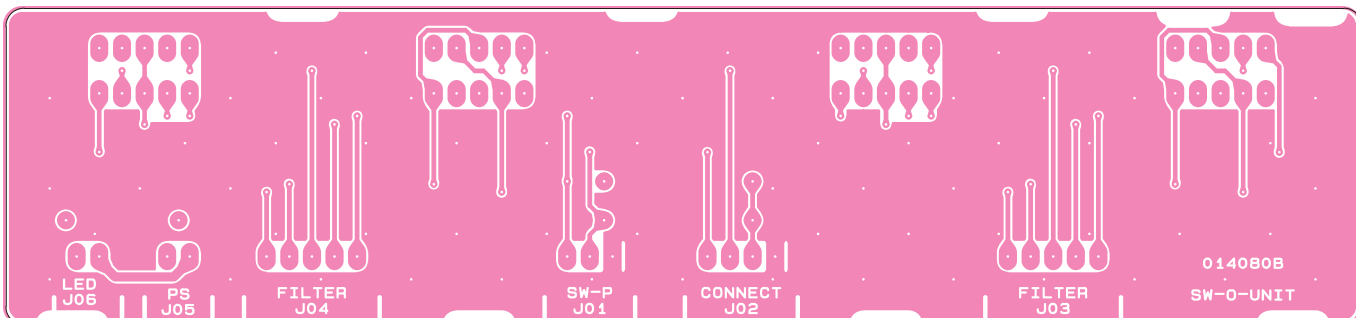
BR0 14080B
(5801-5899)



SW-O-UNIT Parts Layout (Lot. 1 ~ Lot.45)



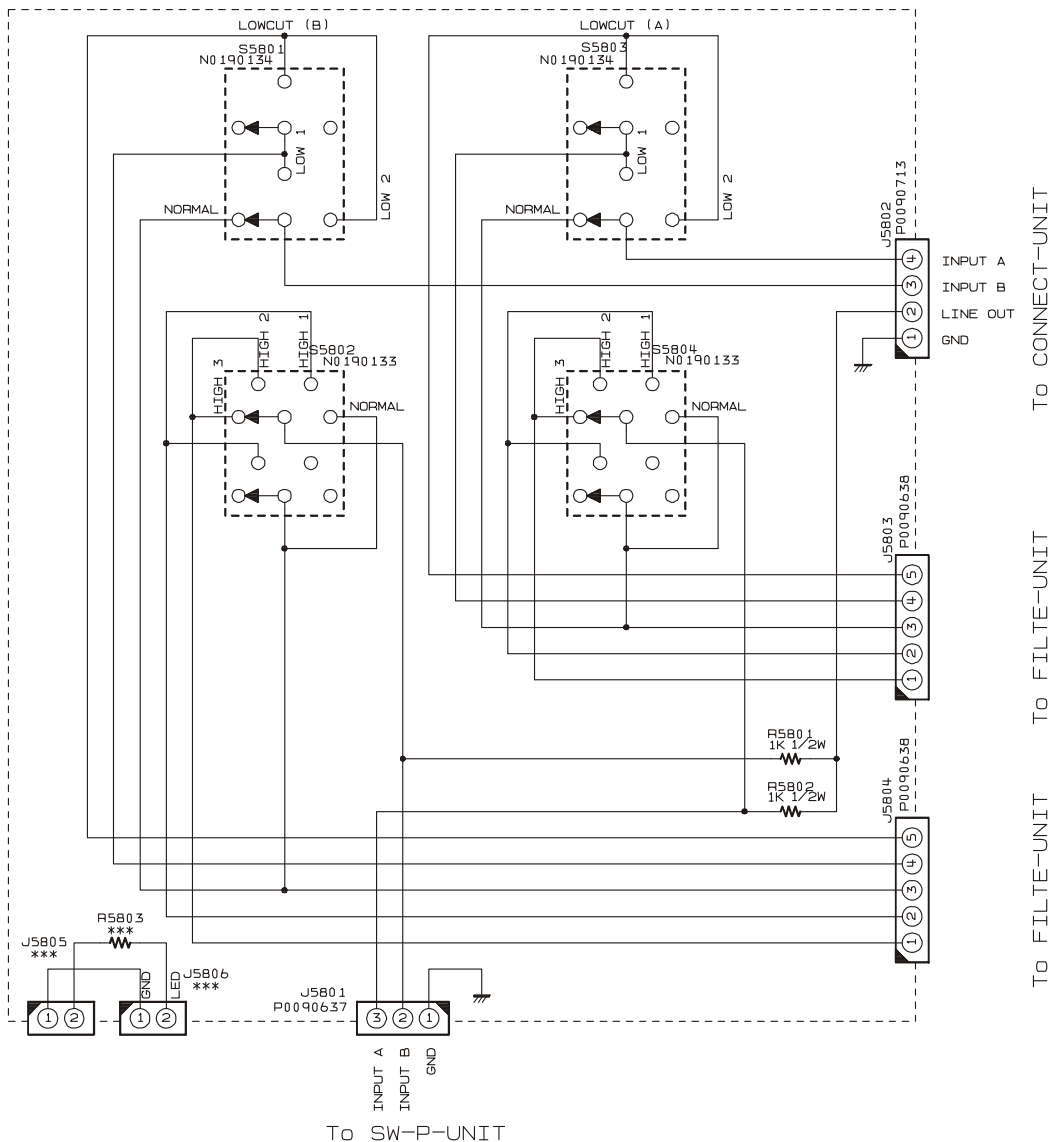
Component side



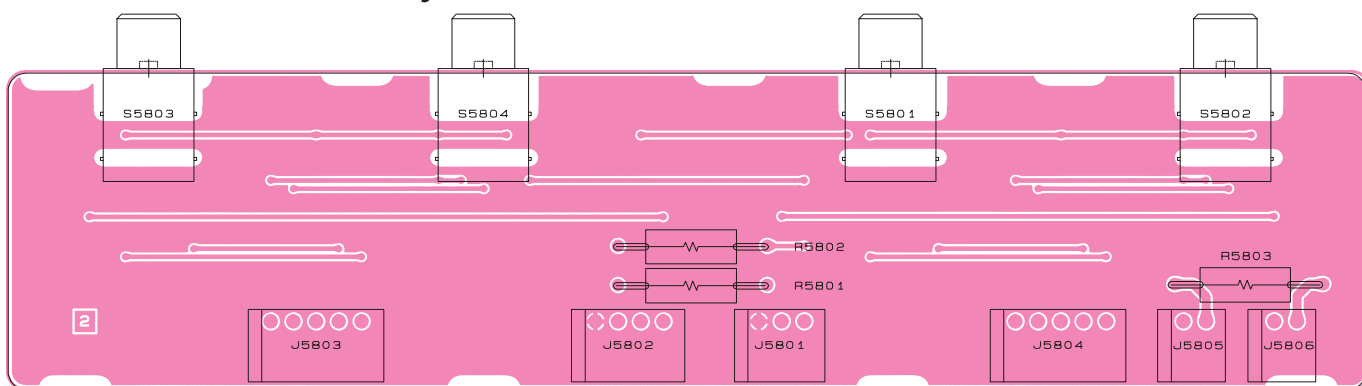
Solder side

SW-O-UNIT Circuit Diagram (Lot. 46 ~)

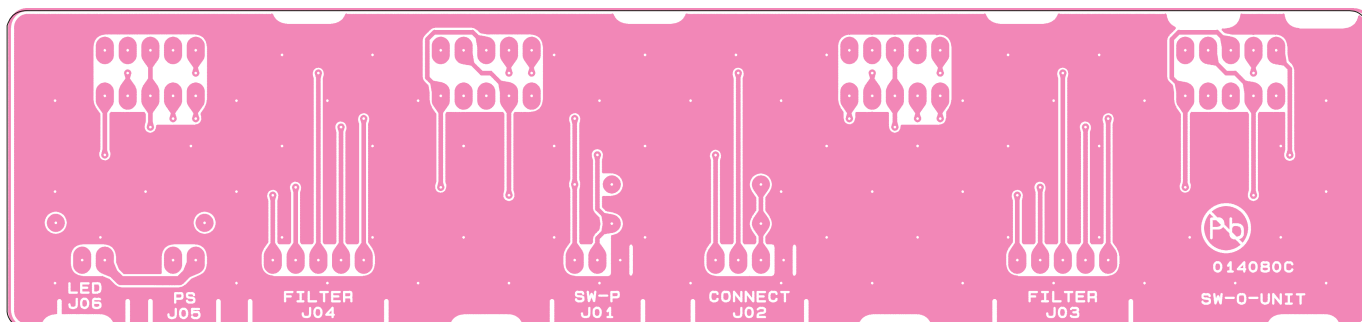
SW-O-UNIT
(5801-5899)



SW-O-UNIT Parts Layout (Lot. 46 ~)



Component side



Solder side

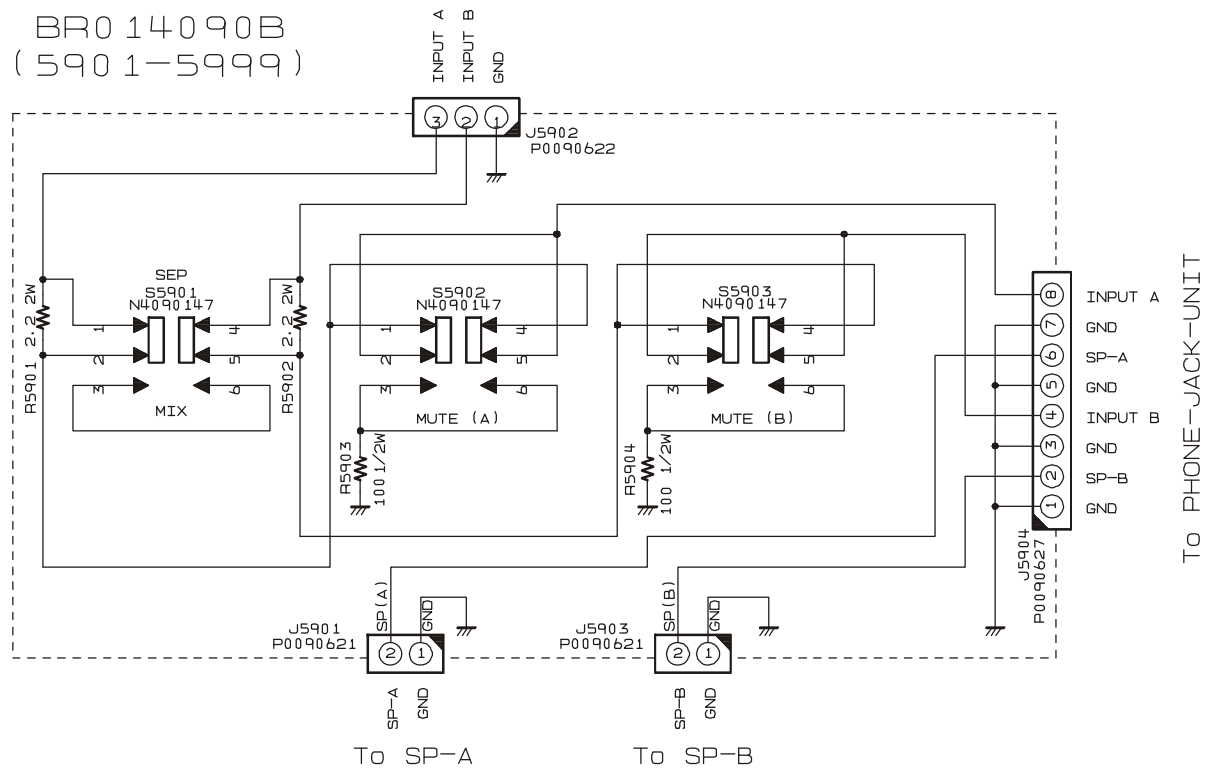
SW-O-UNIT Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
Printed Circuit Board						CB3347001				
PCB with Components						FR014080B		1-		
						FR014080C		46-		
J 5801	CONNECTOR				SC25-03WL	P0090637		1-		
J 5802	CONNECTOR				SC25-04WL	P0090713		1-		
J 5803	CONNECTOR				SC25-05WL	P0090638		1-		
J 5804	CONNECTOR				SC25-05WL	P0090638		1-		
J 5805	CONNECTOR				SC25-02WL	P0090712		1-4		
J 5806	CONNECTOR				SC25-02WL	P0090712		1-4		
R 5801	CHIP RES.	1k	1/2W	5%	RMC1/2 102JCTP	J24275102		1-		
R 5801	CARBON FILM RES.	1k	1/2W	5%	RD12TJ102 1K	J01275102		4-		
R 5802	CHIP RES.	1k	1/2W	5%	RMC1/2 102JCTP	J24275102		1-		
R 5802	CARBON FILM RES.	1k	1/2W	5%	RD12TJ102 1K	J01275102		4-		
S 5801	ROTARY SWITCH				SRBM131400	N0190134		1-		
S 5802	ROTARY SWITCH				SRBM140800	N0190133		1-		
S 5803	ROTARY SWITCH				SRBM131400	N0190134		1-		
S 5804	ROTARY SWITCH				SRBM140800	N0190133		1-		

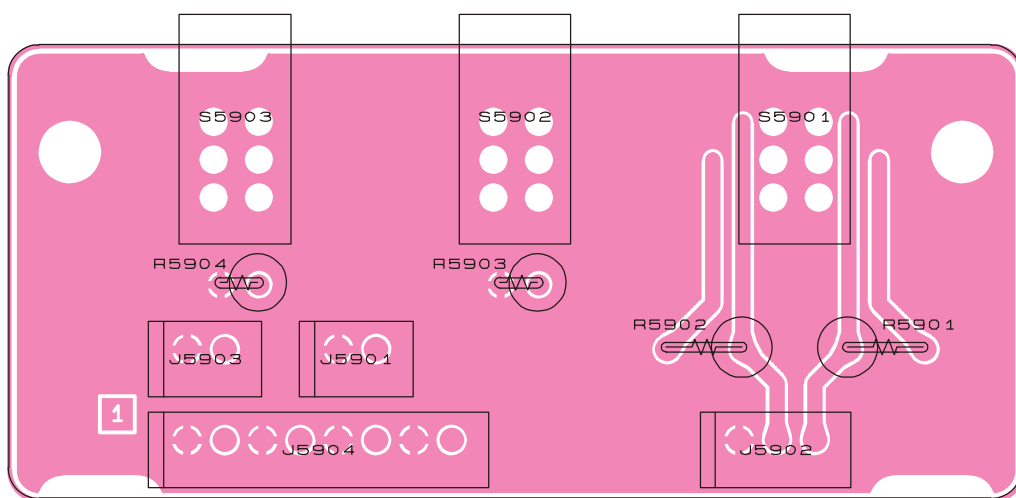
SW-P-UNIT Circuit Diagram (Lot. 1 ~ Lot.45)

SW-P-UNIT To SW-O-UNIT

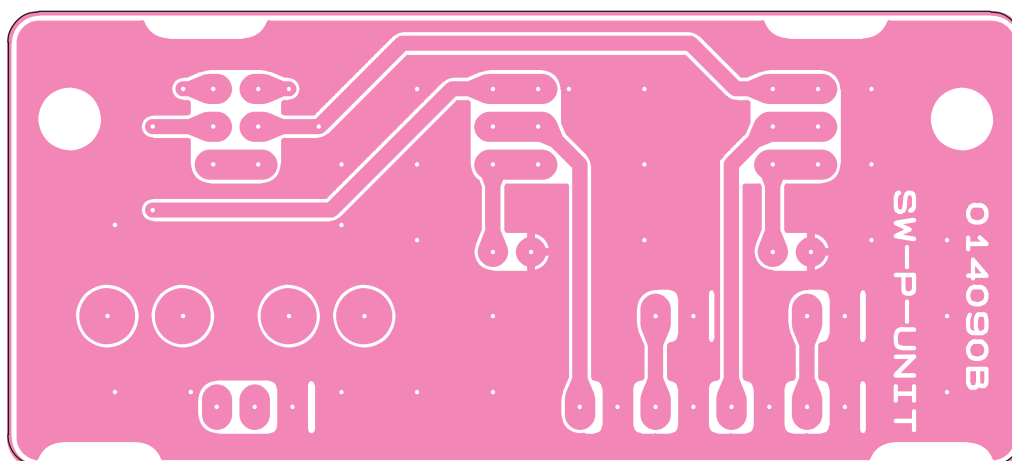
BR0 140 90B
(590 1-5999)



SW-P-UNIT Parts Layout (Lot. 1 ~ Lot.45)



Component side

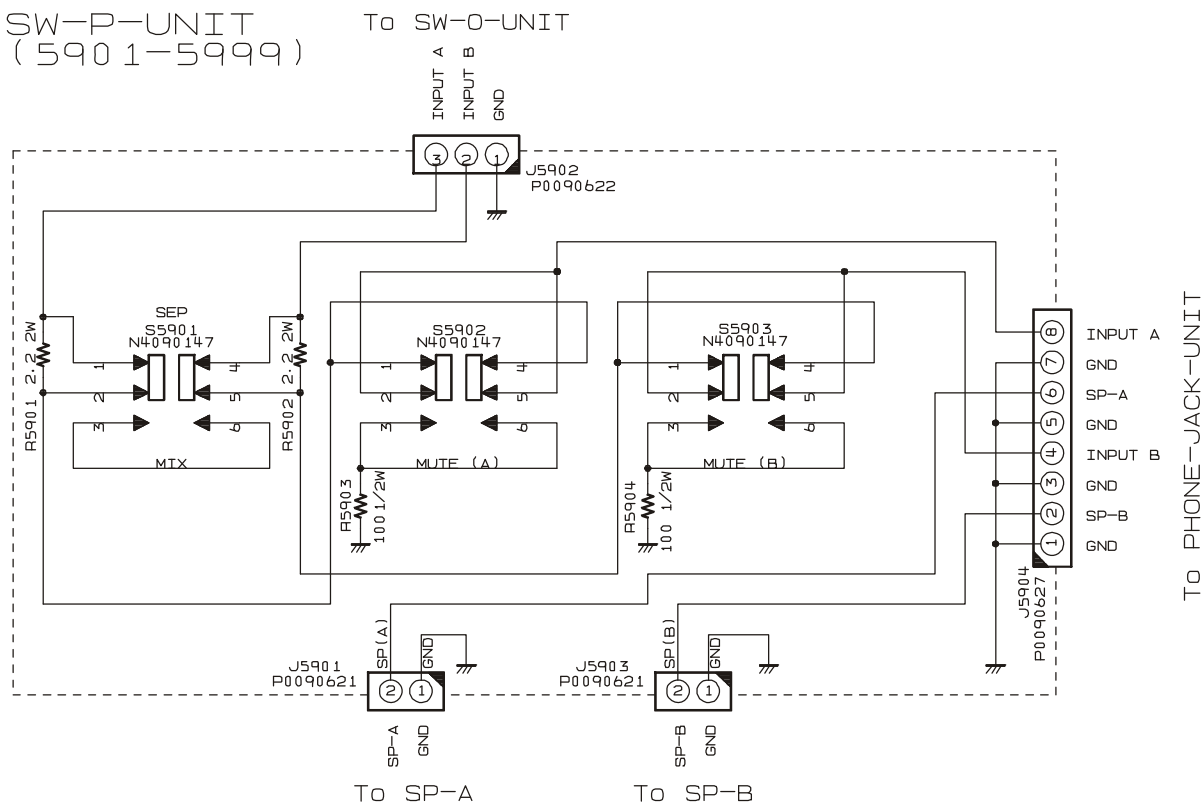


Solder side

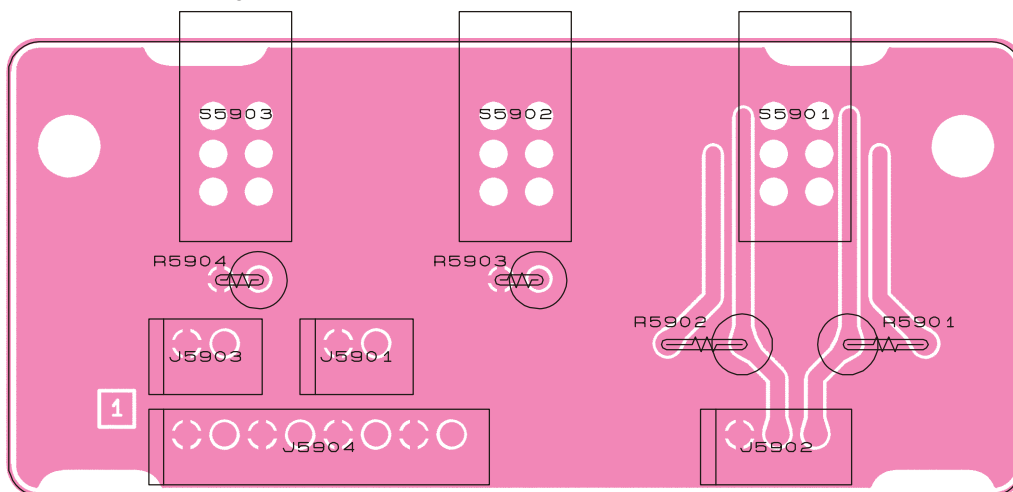
SW-P-UNIT Circuit Diagram (Lot. 46 ~)

SW-P-UNIT
(5901-5999)

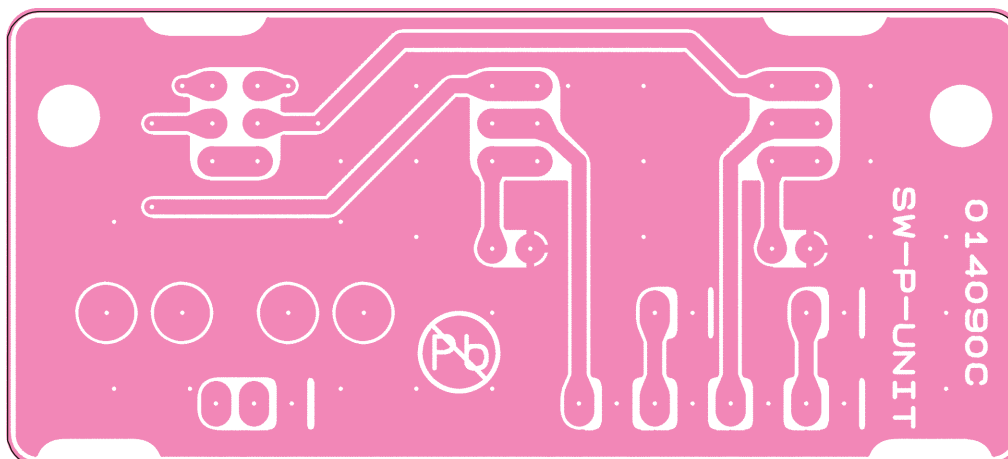
To SW-O-UNIT



SW-P-UNIT Parts Layout (Lot. 46 ~)



Component side

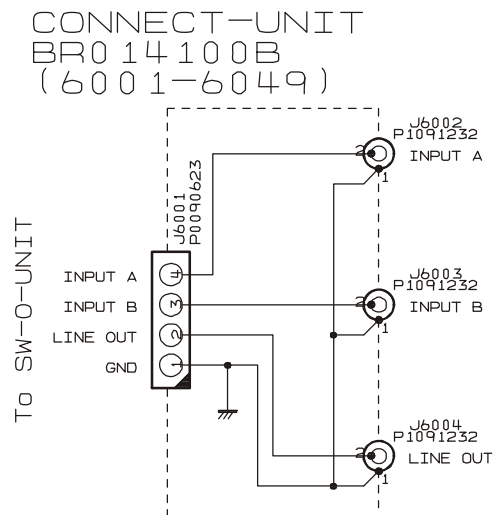


Solder side

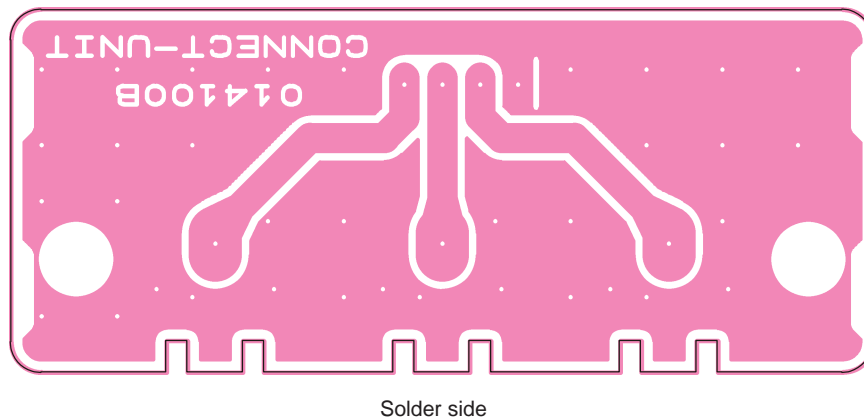
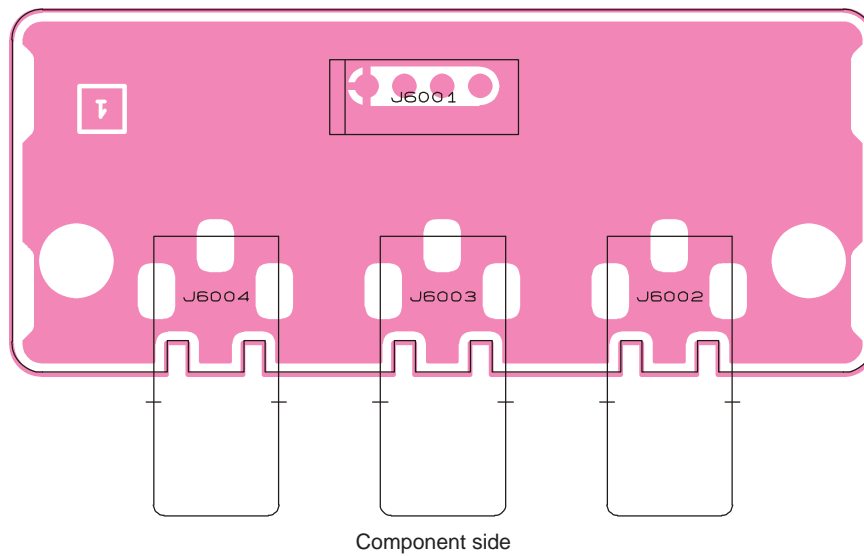
SW-P-UNIT Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
Printed Circuit Board						CB3348001				
PCB with Components						FR014090B		1-		
						FR014090C		46-		
J 5901	CONNECTOR				SC25-02WS	P0090621		1-		
J 5902	CONNECTOR				SC25-03WS	P0090622		1-		
J 5903	CONNECTOR				SC25-02WS	P0090621		1-		
J 5904	CONNECTOR				SC25-08WS	P0090627		1-		
R 5901	CHIP RES.	2.2	2W	5%	CMT2TTE2R2J	J24339009		1-		
R 5901	METAL FILM RES.	2.2	2W	5%	ERX-2SJ2R2 2.2	J22339038		4-		
R 5902	CHIP RES.	2.2	2W	5%	CMT2TTE2R2J	J24339009		1-		
R 5902	METAL FILM RES.	2.2	2W	5%	ERX-2SJ2R2 2.2	J22339038		4-		
R 5903	CHIP RES.	100	1/2W	5%	RMC1/2 101JCTP	J24275101		1-		
R 5903	CARBON FILM RES.	100	1/2W	5%	RD12TJ101 100	J01275101		4-		
R 5904	CHIP RES.	100	1/2W	5%	RMC1/2 101JCTP	J24275101		1-		
R 5904	CARBON FILM RES.	100	1/2W	5%	RD12TJ101 100	J01275101		4-		
S 5901	PUSH SWITCH				SPUP190700	N4090157		1-		
S 5902	PUSH SWITCH				SPUP190700	N4090157		1-		
S 5903	PUSH SWITCH				SPUP190700	N4090157		1-		

CONNECT-UNIT Circuit Diagram (Lot. 1 ~ Lot. 45)

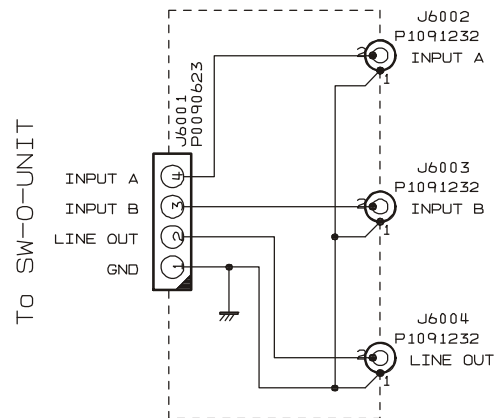


CONNECT-UNIT Parts Layout (Lot. 1 ~ Lot. 45)

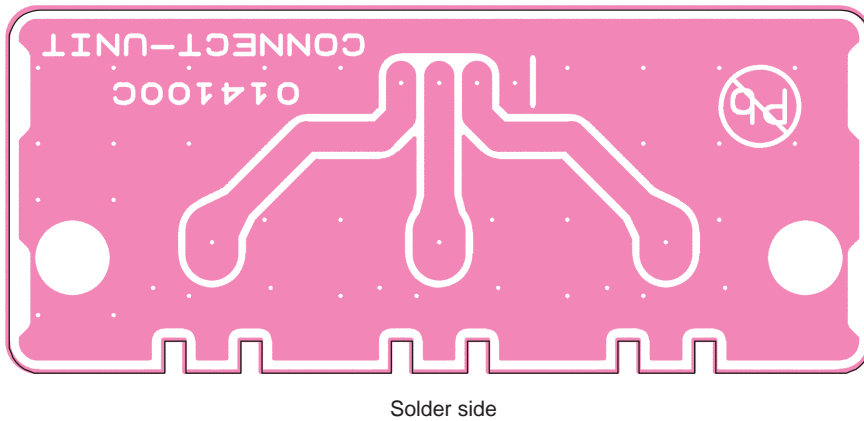
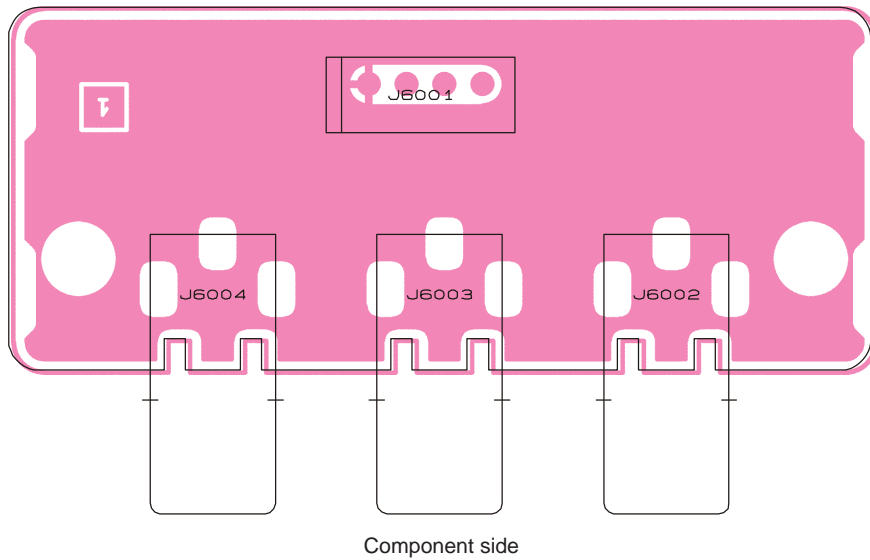


CONNECT-UNIT Circuit Diagram (Lot. 46 ~)

CONNECT-UNIT
(6001-6049)



CONNECT-UNIT Parts Layout (Lot. 46 ~)



CONNECT-UNIT Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
Printed Circuit Board						CB3350001				
PCB with Components						FR014100B		1-		
						FR014100C		46-		
J 6001	CONNECTOR				SC25-04WS	P0090623		1-		
J 6002	CONNECTOR				JPJ2548-01-010	P1091232		1-		
J 6003	CONNECTOR				JPJ2548-01-010	P1091232		1-		
J 6004	CONNECTOR				JPJ2548-01-010	P1091232		1-		