

Service Manual

Portable CD Player



SL-SX418EB
SL-SX418EG
SL-SX418GN
SL-SX419CEB
SL-SX419CEG
SL-SX419CGN

Colour

(A).....Blue Type [SL-SX418EG only]

(S).....Silver Type

Subject : Change of the contents of a service manual

Please use this supplement manual together with the service manual for Model No.SL-SX418EBEGGN, Order No.AD0302061C8, Model No.SL-SX419CEBEGGNPC,SL-SX420GC, Order No.AD0303073C0.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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1 Purpose

■ Information about all models

- Change of the Schematic Diagram, Printed Circuit Board Diagram and Replacement Parts List accompanying the change for the improvement in a

performance.

■ Information about SL-SX418EG

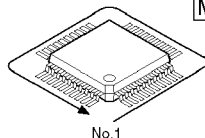
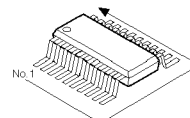
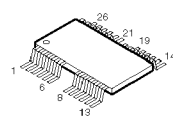
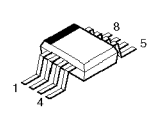
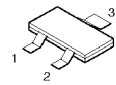
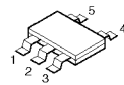
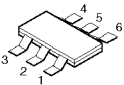
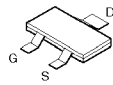
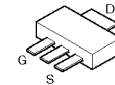
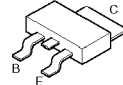
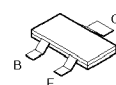
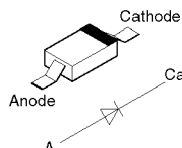
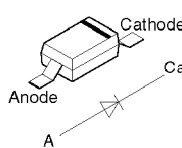
- Information of packaging.

Panasonic

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2 The change for the improvement in a performance

2.1. Type Illustration of IC's, Transistors and Diodes

C0DBFFB00004 48PIN C2BBGE000709 80PIN MN6627911AC1 80PIN 	AN22003A-NF 32PIN C1BB00000742 8PIN 		C3ABMB000027 	AK93C45BH-L 	
C0CBAA000018 	UMG6NTR 	B1GFGCAA00001 	B1CFHA000001 	B1ABMD00004 	2SB1182TLPQR 
2SB709A B1GDCFJN0011 	B1GDCFNN0007 DTC143EUA106 UN5215TX		MA2J11100L 	MAZ80560ML 	

2.2. Schematic Diagram Note

Note:

- S801: Play/pause (▶/||) switch.
- S802: Stop/operation off (■) switch.
- S803, 805: Skip/search (▶▶, ◀◀) switch.
- S804: Mode (MODE) switch.
- S201: Laser ON/OFF switch in "OFF" position.
(It turns "ON" with disc holder closed.)
- S202: Rest switch in "OFF" position.
(It turns "ON" when optical pickup comes to innermost periphery.)
- S301: Hold (HOLD) switch in "OFF" position.
- SY806, 807: Volume control (VOL+, VOL-) switch.
- SY808: Program / recall (MEMORY) switch.
- SY809: Tone selection (EQ) switch.

- Components identified by  mark have special characteristics important for safety.

- When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.

- The supply part number is described alone in the replacement parts.

- Signal line

-  : Positive voltage line.

-  : Playback signal line.

- The voltage value and waveforms are the reference voltage of this measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of GND terminal (DC IN Jack). Accordingly, there may arise some errors in the voltage values and waveforms depending upon the internal impedance of the tester or measuring unit.

Measurement conditions:

* ()CD playback mode (Test disc 1kHz, L+R, 0dB)

* []CD playback mode (MP3 recoded disc)

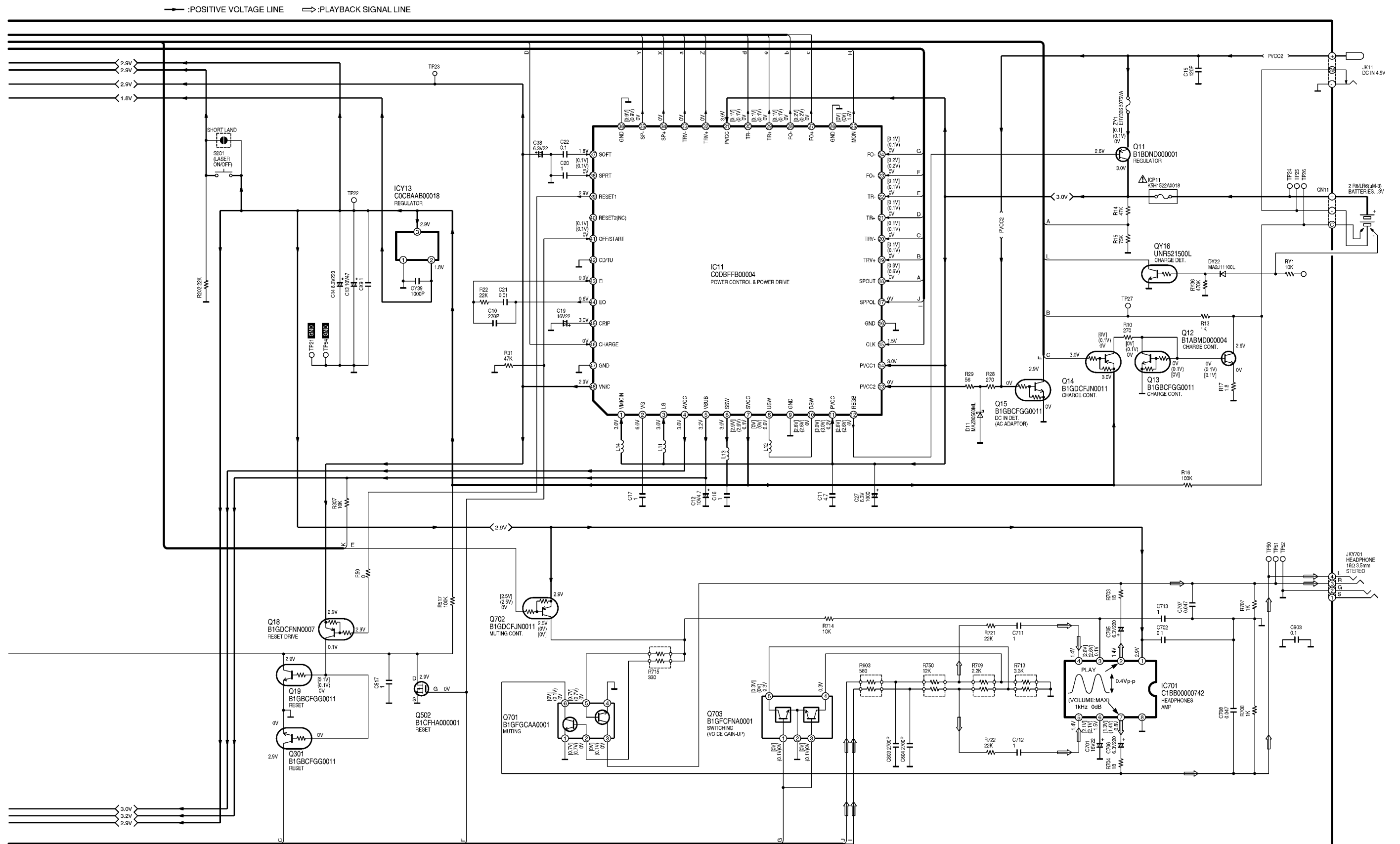
* No markCD stop mode

Caution!!

- IC and LSI are sensitive to static electricity.
- Secondary trouble can be prevented by taking care during repair.
- Cover the parts boxes made of plastics with aluminum foil.
- Ground the soldering iron.
- Put a conductive mat on the work table.
- Do not touch the pins of IC or LSI with fingers directly.

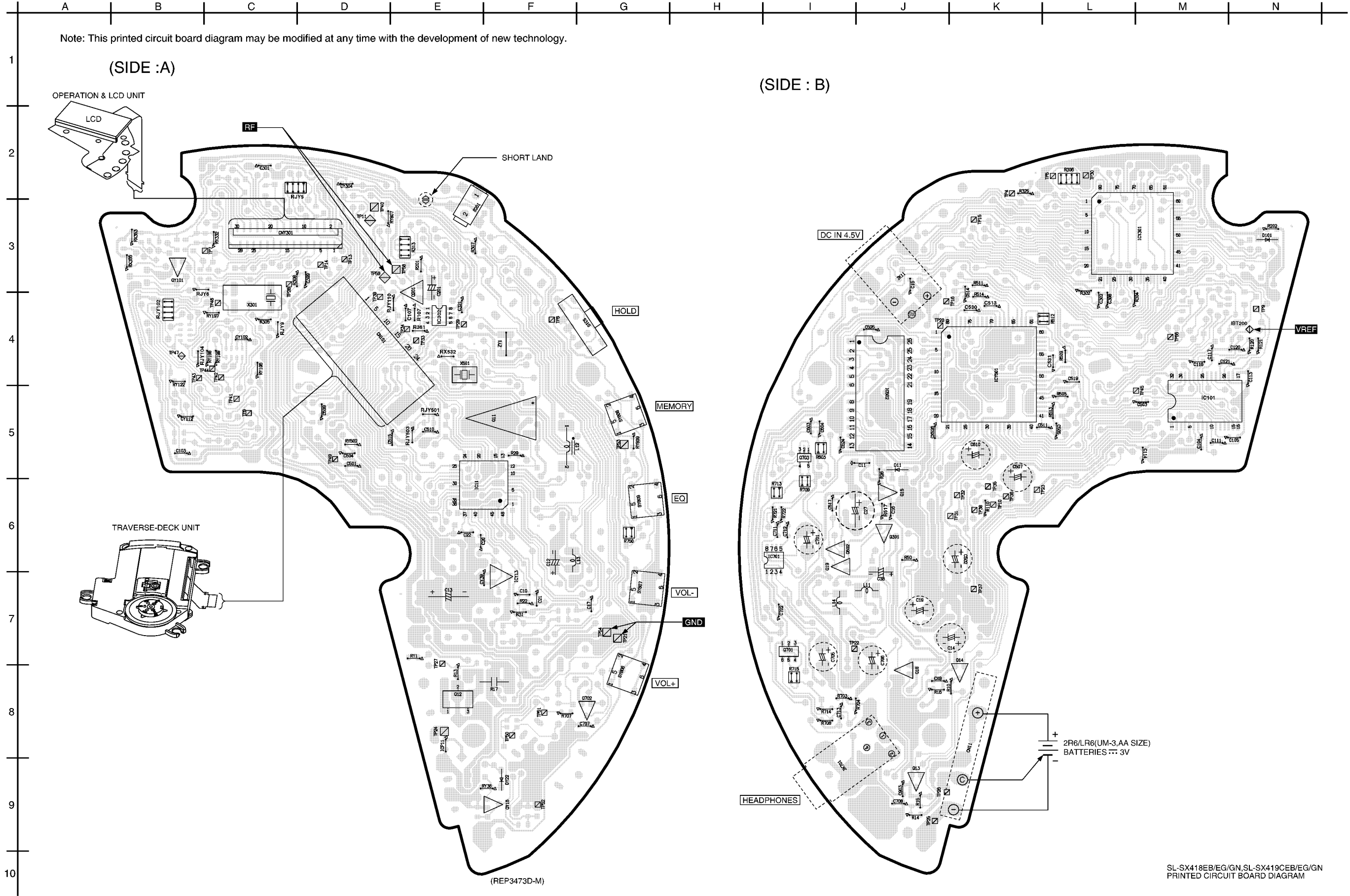






SL-SX418EB/EG/GN, SL-SX419CEB/EG/GN SCHEMATIC DIAGRAM

2.4. Printed Circuit Board Diagram



2.5. Replacement Parts List

*Mentioned in this parts list is only those different from original service manual.

All other parts are the same as original service manual.

Notes:

*Important safety notice:

Components identified by $\triangle$ mark have special characteristics important for safety.

*Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

*When replacing any of components, be sure to use only manufactures specified parts shown in the parts list.

*The parenthesized indications in the Remarks columns specify the areas.

Parts without these indications can be used for all areas.

*The parenthesized indications in the Remarks columns specify the colours. (Refer to the cover page for colour.)

Parts without these indications can be used for all colours.

*Warning: This product uses a laser diode. Refer to caution statements.

*Capacity values are in microfarads (μF) unless specified otherwise, P=Pico-farads (pF), F=Farads (F).

*Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000k (OHM).

*The marking (RTL) indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

*All parts are supplied by SPC.

2.5.1. Electric Parts

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C10	ECUV1H271KBV	50V 270P	1	F1H1H271A009
C11	ECUVNJ475MBN	6.3V 4.7U	1	F1J0J4750002
C12	RCST1AY475RG	10V 4.7U	1	F3F1A4750003
C13	F3H1A476A001	10V 47U	1	
C14	RCE0JKA221IG	6.3V 220U	1	F2A0J2210012
C15	ECJ1VC1H121J	50V 120P	1	
C16	F1H1A105A028	10V 1U	1	
C17	ECJ1VF1A105Z	10V 1U	1	F1H1A105A030
C19	ECA1CAK220XH	16V 22U	1	
C20	F1H1A105A028	10V 1U	1	
C21	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C22	ECUZNC104ZPV	16V 0.1U	1	F1H1C1040008
C27	F2A0J102A130	6.3V 1000U	1	
C38	RCST0JY226RG	6.3V 22U	1	F3F0J2260002
C103	ECJ1VB1E223K	25V 0.022U	1	
C104,05	ECJ1VB1C104K	16V 0.1U	2	
C107	ECJ1VF1A105Z	10V 1U	1	F1H1A105A030
C111	ECJ1VB1E223K	25V 0.022U	1	
C113,14	ECJ1VB1H102K	50V 1000P	2	
C116,17	ECJ1VB1E223K	25V 0.022U	2	
C120	ECJ1VB1H332K	50V 3300P	1	
C121	ECJ1VB1H561K	50V 560P	1	
C201	RCST0JY226RG	6.3V 22U	1	F3F0J2260002
C301,02	ECJ1VF1A105Z	10V 1U	2	F1H1A105A030
C321	ECJ1VF1A105Z	10V 1U	1	F1H1A105A030
C398,99	ECUV1H090DCV	50V 9P	2	F1H1H9R0A244
C501	ECJ1VB1H102K	50V 1000P	1	
C502	ECEA1CKS101	16V 100U	1	
C503	ECJ1VB1H391K	50V 390P	1	
C504	ECUZNC104ZPV	16V 0.1U	1	F1H1C1040008
C505	ECJ1VB1H153K	50V 0.015U	1	
C507	ECEA0JKS331	6.3V 330U	1	
C509	ECJ1VB1C104K	16V 0.1U	1	
C510	ECJ1VB1H102K	50V 1000P	1	
C511	ECUZNC104ZPV	16V 0.1U	1	F1H1C1040008
C513	ECUV1H330GCV	50V 33P	1	ECJ1VC1H330G
C514,15	ECJ1VB1H102K	50V 1000P	2	
C517	ECJ1VF1A105Z	10V 1U	1	F1H1A105A030
C519	F1H1A105A028	10V 1U	1	
C524,25	ECJ1VB1H102K	50V 1000P	2	
C530,31	ECJ1VB1C104K	16V 0.1U	2	
C603,04	ECJ1VB1H272K	50V 2700P	2	
C610	ECA0JAK470XH	6.3V 47U	1	
C701	ECA1CAK220XH	16V 22U	1	
C702	ECUZNC104ZPV	16V 0.1U	1	F1H1C1040008
C705,06	ECA0JAK221XH	6.3V 220U	2	
C707,08	ECUVNC473KBV	16V 0.047U	2	F1H1C473A071
C711-13	F1H1A105A028	10V 1U	3	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C903	ECUZNC104ZPV	16V 0.1U	1	F1H1C1040008
CN11	K4BC03B00014	BATTERY TERMINAL	1	
CN101	K1MN24B00109	CONNECTOR (24P)	1	
CNY301	K1MN30A00061	CONNECTOR (30P)	1	
CX9	F1H1A105A028	10V 1U	1	
CX526	ECUV1H390KUV	50V 39P	1	ECJ1VU1H390K
CY39	ECJ1VB1H102K	50V 1000P	1	
CY102	ECJ1VB1H332K	50V 3300P	1	
CY112	ECJ1VB1H561K	50V 560P	1	
CY304	ERJ3GEY0R00V	1/10W 0	1	
D11	MAZ80560ML	DIODE	1	
D101	MA2J11100L	DIODE	1	
DY22	MA2J11100L	DIODE	1	
IC11	C0DBFFB00004	IC	1	
IC101	AN22003A-NF	IC	1	
IC302	AK93C45BH-L	IC	1	C3EBCG000028
IC502	C3ABMB000027	IC	1	
IC701	C1BB00000742	IC	1	
ICP11	K5H1522A0018	IC PROTECTOR	1	$\triangle$
ICY13	C0CBAAB00018	IC	1	
ICY301	C2BBGE000709	IC	1	
ICY501	MN6627911AC1	IC	1	
JK11	RJJ43K09-C	JK,DC IN	1	K2EB2B000006
JK701	K2HC104B0013	JK,HEADPHONE	1	
L11	RLQU331KT-W	COIL	1	G1C331K00004
L12	G1A101D00009	COIL	1	
L13	RLQU101KT-W	COIL	1	G1C101K00008
L14	RLQU331KT-W	COIL	1	G1C331K00004
PCB1	REP3473D-M	P.C.B. ASS'Y	1	
Q11	2SB1182TLPQR	TRANSISTOR	1	B1BDND000001
Q12	B1ABMD000004	TRANSISTOR	1	
Q13	DTC143EUA106	TRANSISTOR	1	B1GBCFGG0011
Q14	B1GDCFN00011	TRANSISTOR	1	
Q15	DTC143EUA106	TRANSISTOR	1	B1GBCFGG0011
Q18	B1GDCFN00007	TRANSISTOR	1	
Q19	DTC143EUA106	TRANSISTOR	1	B1GBCFGG0011

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q201	2SB709A	TRANSISTOR	1	2SB0709A
Q301	DTC143EUA106	TRANSISTOR	1	B1GBCFGG0011
Q502	B1CFHA000001	TRANSISTOR	1	
Q701	B1GFGCAA0001	TRANSISTOR	1	
Q702	B1GDCFJN0011	TRANSISTOR	1	
Q703	UMG6NTR	TRANSISTOR	1	B1GFCFNA0001
QY16	UN5215TX	TRANSISTOR	1	UNR521500L
QY101	B1GDCFJN0011	TRANSISTOR	1	
R10	ERJ3GEYJ271V	1/10W 270	1	
R13	ERJ3GEYJ102V	1/10W 1K	1	
R14	ERJ3RBD473	1/16W 47K	1	
R15	ERJ3RBD753	1/16W 75K	1	
R16	ERJ3GEYJ104	1/10W 100K	1	
R17	ERJ12YJ1R8U	1/2W 1.8	1	
R22	ERJ3GEYJ223V	1/10W 22K	1	D0GB223JA002
R28	ERJ3GEYJ271V	1/10W 270	1	
R29	ERJ3GEYJ560V	1/10W 56	1	
R31	ERJ3GEYJ473V	1/10W 47K	1	D0GB473JA002
R50	ERJ3GEY0R00V	1/10W 0	1	
R107	ERJ3GEYJ104	1/10W 100K	1	
R110	ERJ3GEYJ100	1/10W 10	1	
R120	ERJ3GEYJ332V	1/10W 3.3K	1	D0GB332JA002
R121	ERJ3GEYJ393V	1/10W 39K	1	D0GB393JA002
R201	ERJ3GEYJ2R2V	1/10W 2.2	1	D0GB2R2JA002
R202	ERJ3GEYJ223V	1/10W 22K	1	D0GB223JA002
R302	ERJ3GEYJ104	1/10W 100K	1	
R304	ERJ3GEYJ105V	1/10W 1M	1	
R305	ERJ3GEYJ335V	1/10W 3.3M	1	
R306	EXBV8V473JV	1/16W 47K	1	
R307	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R308	ERJ3GEYJ104	1/10W 100K	1	
R313	EXBV8V104JV	1/16W 100K	1	
R325	ERJ3GEYJ333V	1/10W 33K	1	D0GB333JA002
R361	ERJ3GEYJ102V	1/10W 1K	1	
R505	MCR03PZHJ561	1/16W 560	1	
R509	ERJ3GEYJ331V	1/10W 330	1	
R511	ERJ3GEYJ222V	1/10W 2.2K	1	
R512	EXBV4V222JV	1/16W 2.2K	1	
R513	ERJ3GEYJ154V	1/10W 150K	1	
R514	ERJ3GEYJ681V	1/10W 680	1	D0GB681JA002
R517	ERJ3GEYJ104	1/10W 100K	1	
R603	EXBV4V561JV	1/32W 560	1	
R703,04	ERJ3GEYJ180V	1/10W 18	2	
R707,08	ERJ3GEYJ102V	1/10W 1K	2	
R709	EXBV4V222JV	1/16W 2.2K	1	
R713	EXBV4V332JV	1/32W 3.3K	1	
R714	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R715	EXBV4V331JV	1/32W 330	1	
R721,22	ERJ3GEYJ223V	1/10W 22K	2	D0GB223JA002
R750	EXBV4V123J	1/32W 12K	1	D1H412320001
RJY5	EXBV8VR000V	1/8W 0	1	
RJY9	ERJ3GEY0R00V	1/10W 0	1	
RJY102	EXBV8VR000V	1/8W 0	1	
RJY104	ERJ3GEY0R00V	1/10W 0	1	
RJY106	ERJ3GEY0R00V	1/10W 0	1	
RJY110	ERJ3GEY0R00V	1/10W 0	1	
RJY501	ERJ3GEY0R00V	1/10W 0	1	
RJY503	ERJ3GEY0R00V	1/10W 0	1	
RX353	ERJ3GEYJ102V	1/10W 1K	1	
RX355	ERJ3GEYJ102V	1/10W 1K	1	
RX532	ERJ3GEYJ474V	1/10W 470K	1	
RY1	D0YBR0000010	10K	1	
RY36	ERJ3GEYJ474V	1/10W 470K	1	
RY122	ERJ3GEYJ473V	1/10W 47K	1	D0GB473JA002
RY196,97	ERJ3GEYJ103V	1/10W 10K	2	D0GB103JA002
RY198,99	ERJ3GEYJ222V	1/10W 2.2K	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
RY332	ERJ3GEYJ102V	1/10W 1K	1	
RY502	ERJ3GEYJ683V	1/10W 68K	1	D0GB683JA002
RY807	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
RY809	ERJ3GEYJ123V	1/10W 12K	1	
S201	ESE11MV9T	SW,OPEN	1	
S202	K0L1BB000025	SW,REST DET.	1	
S310	RSS2A010-1A	SW,HOLD	1	K0D112B00071
SY806-09	EVQPLMA15	SW,OPERATION	4	
X301	H0J327200097	OSCILLATOR	1	
X501	H2D169500026	OSCILLATOR	1	
ZY1	ERY32SB075VA	IC PROTECTOR	1	

3 Information of packaging for SL-SX418EG

- Information of a new packing form and a new O/I book having been added to SL-SX418EG. Therefore, two kinds

of packing forms exist.

3.1. Replacement Parts List

*Mentioned in this parts list is only those different from original service manual.

All other parts are the same as original service manual.

Notes:

- Important safety notice:
Components identified by $\triangle$ mark have special characteristics important for safety.
- The parenthesized indications in Remarks columns specify areas and colours.
(EGA): Blue Type [SL-SX418EGA]
(EGS): Silver Type [SL-SX418EGS]
- All parts are supplied by SPC.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
A1	L0BAB0000123	STEREO EARPHONES	1	
A5	RFEA419E-M	AC ADAPTOR	1	$\triangle$
A7	RQT7511-E	O/I BOOK	1	Spanish
P1	RPN1584-1	TRAY 1	1	
P2	RPN1585	TRAY 2	1	
P8	RPQ1703	SHEET	1	(EGS)
P8	RPQ1704	SHEET	1	(EGA)

3.2. Packaging

