



Service Manual

ORDER NO.
RRV1032

COMPACT HI-FI SYSTEM

X-P30

STEREO RECEIVER

SX-P30

CASSETTE DECK MULTI CD

PDC-P30C

SPEAKER SYSTEM

S-P30

● Refer to the service manual ARP2821 for X-P30/KUXJ.

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model				Power Requirement	The voltage can be converted by the following method.
	X-P30	SX-P30	PDC-P30C	S-P30		
KCXJ	○	○	—	—	AC120V	—
HEXJC	○	○	—	—	AC220-230V	—
HEXJC/DK	○	—	—	—	AC220-230V	—
HEXJC/FR	○	—	—	—	AC220-230V	—
HBXJ	○	○	—	—	AC240V	—
YPWXJ	○	○	—	—	AC240V	—
SDXJ	○	○	—	—	AC110V/120-127V/220V/240V	With the voltage selector
ACXJ	—	—	○	—	AC power supplied from power transformer's secondary of other system component	—
AEXJC	—	—	○	—		
ABXJ	—	—	○	—		
APWXJ	—	—	○	—		
ADXJ	—	—	○	—		

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4277

X-P30, SX-P30, PDC-P30C, S-P30

(FOR EUROPEAN MODEL ONLY)

VARO!

AVATTAESSA JA SUOJALUKITUS
OHITETTAESSA OLET ALTTIINA
NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.
ÄLÄ KATSO SÄTEESEEN.



LASER
Kuva 1
Lasersäteilyn
varoituserkki

WARNING!

DEVICE INCLUDES LASER DIODE WHICH
EMITS INVISIBLE INFRARED RADIATION
WHICH IS DANGEROUS TO EYES. THERE IS
A WARNING SIGN ACCORDING TO PICTURE
1 INSIDE THE DEVICE CLOSE TO THE LASER
DIODE.



LASER
Picture 1
Warning sign for
laser radiation

ADVERSEL:

USYNLIG LASERSTRÅLING VED ÅBNING
NÅR SIKKERHEDSAFBRYDERE ER UDE AF
FUNKTION. UNDGÅ UDSÆTTELSE FOR
STRÅLING.

VARNING!

OSYNLIG LASERSTRÅLING NÅR DENNA
DEL ÄR ÖPPNAD OCH SPÄRREN
ÄR URKOPPLAD. BETRÄKTA EJ STRÅLEN.

IMPORTANT

THIS PIONEER APPARATUS CONTAINS
LASER OF CLASS 1.
SERVICING OPERATION OF THE APPARATUS
SHOULD BE DONE BY A SPECIALLY
INSTRUCTED PERSON.

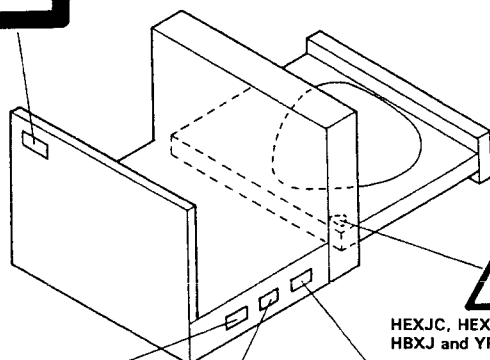
LASER DIODE CHARACTERISTICS

MAXIMUM OUTPUT POWER: 5 mw
WAVELENGTH: 790nm

LABEL CHECK

HEXJC, HEXJC/FR, HEXJC/DK,
HBXJ and YPWXJ types

CLASS 1
LASER PRODUCT



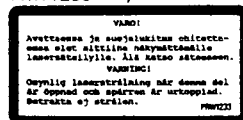
HEXJC, HEXJC/FR, HEXJC/DK,
HBXJ and YPWXJ types

VRW1094



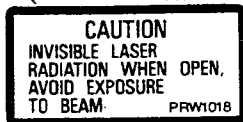
HEXJC, HEXJC/FR and
HEXJC/DK types

PRW1233



HEXJC, HEXJC/FR and
HEXJC/DK types

PRW1018



HBXJ and YPWXJ types

Additional Laser Caution

1. Laser Interlock Mechanism

This mechanism is equipped with a photo-coupler (PH001) that confirms the presence of an installed disc by receiving the infrared light reflected by the disc through an infrared diode (D013). The photo-coupler status is detected by the system microcomputer, and when the photo-coupler corrector side is OFF (disc signal level is Low), the laser diode does not oscillate. If a reflecting object is purposely placed above the infrared diode and photo-coupler (disc signal level becomes High), the interlock will not function.

When the 29 pin of CXA1081M (IC001) on CD DECODER PCB ASSY board is connected to a Low level (ON), or when the terminals of Q001 are shorted with each other (Fault Condition), the laser diode will oscillate continuously.

2. When the cover is opened and the objective lens is viewed at close range with the naked eye, exposure to a Class 1 laser beam may occur.

1. CONTRAST OF MISCELLANEOUS PARTS

NOTES :

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "☉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

X-P30/KCXJ, HEXJC, HEXJC/DK, HEXJC/FR, HBXJ, YPWXJ, SDXJ and X-P30/KUXJ have the same construction.

Mark	Symbol & Description	Part No.				
		X-P30/ KUXJ	X-P30/ KCXJ	X-P30/ HEXJC	X-P30/ HEXJC/DK	X-P30/ HEXJC/FR
NSP	STEREO RECEIVER section	SX-P30/ KUXJ	SX-P30/ KCXJ	SX-P30/ HEXJC	SX-P30/ HEXJC	SX-P30/ HEXJC
NSP	CASSETTE DECK MULTI CD section	PDC-P30C/ AUXJ	PDC-P30C/ ACXJ	PDC-P30C/ AEXJC	PDC-P30C/ AEXJC	PDC-P30C/ AEXJC
	Carton	AZH7006	AZH7019	AZH7008	AZH7008	AZH7008
	Speaker (S-P30-R)	AZP7001	AZP7001	AZP7001	AZP7003	AZP7001
	Speaker (S-P30-L)	AZP7002	AZP7002	AZP7002	AZP7004	AZP7002
	Operating instructions (English)	AZR7003	.....	.....	.....	.....
	Operating instructions (English, French)	.....	AZR7006	.....	.....	AZR7006
	Operating instructions (English, French, Dutch, Portuguese, Finnish, Danish)	.....	.....	AZR7004	AZR7004	.....
	Operating instructions (Spanish)	.....	.....	.....	.....	.....

STEREO RECEIVER SECTION

SX-P30/KCXJ, HEXJC, HEXJC/DK, HEXJC/FR, HBXJ, YPWXJ, SDXJ and SX-P30/KUXJ have the same construction.

Mark	Symbol & Description	Part No.				
		SX-P30/ KUXJ	SX-P30/ KCXJ	SX-P30/ HEXJC	SX-P30/ HBXJ	SX-P30/ YPWXJ
	MAIN PCB assy kits	AZW7001	AZW7037	AZW7039	AZW7043	AZW7044
	MAIN PCB assy	AZW7004	AZW7038	AZW7040	AZW7040	AZW7040
	FRONT PCB assy	AZW7005	AZW7005	AZW7041	AZW7041	AZW7045
	AC SUPPLY (A) PCB assy	AZW7006	AZW7006	AZW7057	AZW7042	AZW7042
	AC SUPPLY (B) PCB assy	.....	.....	.....	.....	.....
	VOL. SEL. PCB assy	.....	.....	.....	.....	.....
Δ	AC power cord	ADG1058	AZD7011	AZD7012	AZD7013	AZD7014
Δ	Power transformer (AC120V)	AZT7001	AZT7010	.....	.....	.....
Δ	Power transformer (AC220-230V)	.....	.....	AZT7009	.....	.....
Δ	Power transformer (AC240V)	.....	.....	.....	AZT7008	AZT7008
Δ	Power transformer (AC110V/120-127V/220V/240V)	.....	.....	.....	.....	.....
Δ	F401 Fuse (3A/125V)	AZE7004	.....	.....	.....	.....
Δ	F401 Fuse (T3A/125V)	.....	AZE7013	.....	.....	.....
Δ	F401 Fuse (T3.15A/250V)	.....	.....	AZE7014	.....	.....
Δ	F401 Fuse (T3.15A/250V)	.....	.....	.....	AZE7011	AZE7011
Δ	F402 Fuse (T800mA/250V)	.....	.....	.....	AZE7012	AZE7012
	Rear panel	AZN7002	AZN7075	AZN7076	AZN7077	AZN7077

Note :

*2 : AZW7033, AZW7034, AZW7035, AZW7036 and AZW7031 are the same as those of SX-P30/SDXJC/NC which is shown in the section 2.

X-P30,SX-P30,PDC-P30C,S-P30

have the same construction except for the following :

t No.				Remarks
X-P30/ HEXJC/FR	X-P30/ HBXJ	X-P30/ YPWXJ	X-P30/ SDXJ	
SX-P30/ HEXJC PDC-P30C/ AEXJC	SX-P30/ HBXJ PDC-P30C/ ABXJ	SX-P30/ YPWXJ PDC-P30C/ APWXJ	SX-P30/ SDXJ PDC-P30C/ ADXJ	
AZH7008	AZH7009	AZH7009	AZH7010	
AZP7001	AZP7001	AZP7001	AZP7001	
AZP7002	AZP7002	AZP7002	AZP7002	
.....	AZR7003	AZR7003	AZR7003	
AZR7006	.....	.....	.....	
.....				
.....	.....	.....	AZR7005	

construction except for the following :

		Remarks
SX-P30/ YPWXJ	SX-P30/ SDXJ	
AZW7044	AZW7033 *2	
AZW7040	AZW7034 *2	
AZW7045	AZW7035 *2	
AZW7042	.....	
.....	AZW7036 *2	
.....	AZW7031 *2	
AZD7014	AZD7051	
.....		
AZT7008	.....	
.....	AZT7006	
.....		
.....		
AZE7011	AEK-513	
AZE7012	.....	
AZN7077	AZN7079	

known in the service manual ARP2821 for X-P30.

-P30,SX-P30,PDC-P30C,S-P30

2. S

MAIN PCB ASSY

AZW7038, AZW7040 and AZW7004 have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		AZW7004	AZW7038	AZW7040	
	C156L, C156R	CKDYX103M25	CKDYX103M25	CKDYX682M25	

FRONT PCB ASSY

Although AZW7041, AZW7045 and AZW7005 are different in part number, they have the same service parts.

DC SUPPLY (A) PCB ASSY

AZW7042, AZW7057 and AZW7006 have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		AZW7006	AZW7042	AZW7057	
	R421(33M)	AZC7023	.....	.....	
	C421A (470p/250V)	ACG-508	.....	.....	
	C421A, C421B (1000p/400V)	.....	AZC7014	.....	
	C421A, C421B, C421C (1500p/400V)	.....	.....	AZC1047	

CASSETTE DECK MULTI CD SECTION

PDC-P30C/ACXJ, AEXJC, ABXJ, APWXJ, ADXJ and PDC-P30C/AUXJ have the same construction except for the following :

Mark	Symbol & Description	Part No.						Remarks
		PDC-P30C/ AUXJ	PDC-P30C/ ACXJ	PDC-P30C/ AEXJC	PDC-P30C/ ABXJ	PDC-P30C/ APWXJ	PDC-P30C/ ADXJ	
	Bottom chassis assy	AZW7020	AZW7051	AZW7052	AZW7053	AZW7054	AZW7032	
	Rear panel	AZN7025	AZN7070	AZN7071	AZN7073	AZN7073	AZN7072	

A

●The di
between

MAIN PCB a

B

KCXJ,
HEXJC
TYPES

C

Q403
DTA144ES

R409
10K

Q404
2SB826A

R408
10K

D

C310L
470P
(T)

C310R
470P
(T)

C303R
100U
16V

R407
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R406
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R405
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R404
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R403
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R402
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R194
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2. SCHEMATIC AND PCB DIAGRAMS

- The differences in the schematic diagram between AZW7038 and AZW7040 are as follows.

SCHEMATIC NOTES:

1. THE DC VOLTAGES WERE TAKEN WITH NO SIGNAL INPUT.
2. ALL VOLTAGES MEASURED FROM GROUND WITH A HIGH IMPEDANCE METER (10 MEGOHMS MIN).
3. RESISTANCE VALUES ARE IN OHMS (K-1000, M-MEGOHM).
4. UNLESS OTHERWISE NOTED, ALL RESISTORS ARE 1/6 WATT CARBON FILM, $\pm 5\%$ TOLERANCE.
5. REFER TO PARTS LIST FOR VOLTAGE RATINGS OF CAPACITORS.
6. $\oplus$ = COMMON GROUND SYMBOL.
7. TO LOCATE CONNECTOR HOOKUPS MATCH THE ALPHA (OR NUMERIC) DESIGNATION TO THE CORRESPONDING ALPHA (OR NUMERIC) DESIGNATION (EXAMPLE: CONNECTOR A CONNECTS TO CONNECTOR A).
8. — INDICATES SIGNAL PATH OF CIRCUIT

MAIN PCB assy (AZW7038: KCXJ)
(AZW7040: HEXJC, HEXJC/DK,
HEXJC/FR, HBXJ, YPWXJ)

To FRONT PCB assy F7

SCH-1F B

AC SUPPLY (A) PCB assy
(AZW7057: HEXJC)
(AZW7042: HBXJ, YPWXJ)

To MAIN PCB assy F2

To S-P30

To H/P PCB assy F9

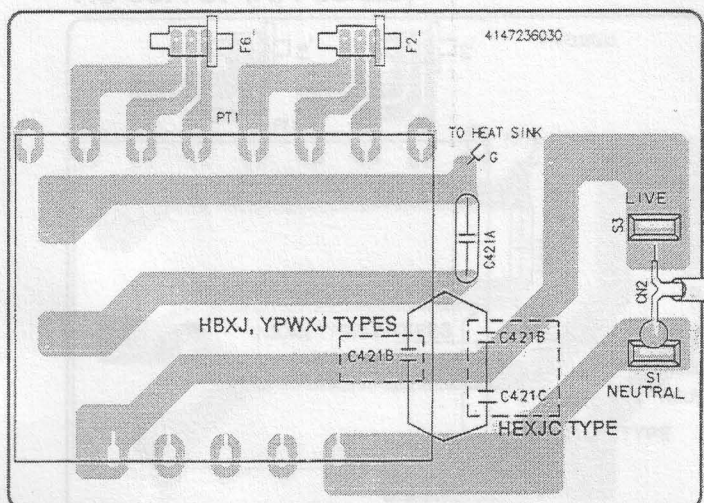
	AC POWER CORD	POWER TRANS.
KCXJ	AZD7011	AZT7010
HEXJC HEXJC/DK HEXJC/FR	AZD7012	AZT7009
HBXJ	AZD7013	AZT7008
YPWXJ	AZD7014	AZT7008
SDXJ	AZD7051	AZT7006

F401 : AZE7013 T3A/125V (KCXJ)
AZE7014 T3.15A/250V (HEXJC, HEXJC/DK, HEXJC/FR)
AZE7011 T3.15A/250V (HBXJ, YPWXJ)
AEK-513 T3.15A/250V (SDXJ)

SCH-1F

MAIN PCB ASSY
AC SUPPLY (A) PCB ASSY

AC SUPPLY (A) PCB assy



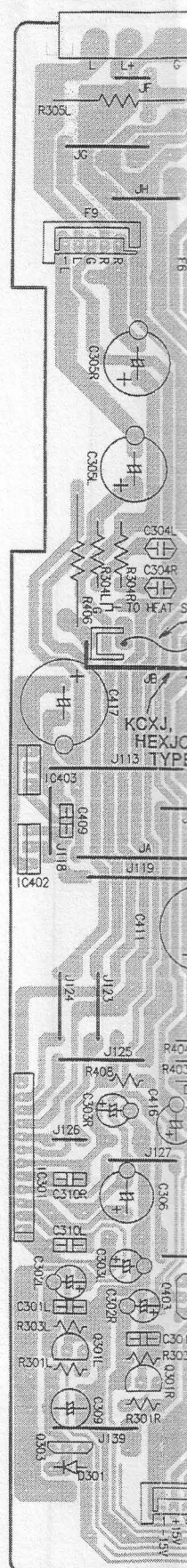
Note: The parts which have been mounted on the PCB can be replaced with those shown with the corresponding wiring symbols listed in the following table.

PCB Pattern Diagram Indication	Corresponding Part Symbol	Part Name
		Transistor
		FET
		Diode
		Resistor
		Capacitor (Polarized)
		Capacitor (Non-Polarized)

Others

PCB Pattern Diagram Indication	Part Name
IC	IC
S	Switch
L	Coil
CF	Filter
VR or SFR	Variable Resistor or Semi-Fixed Resistor

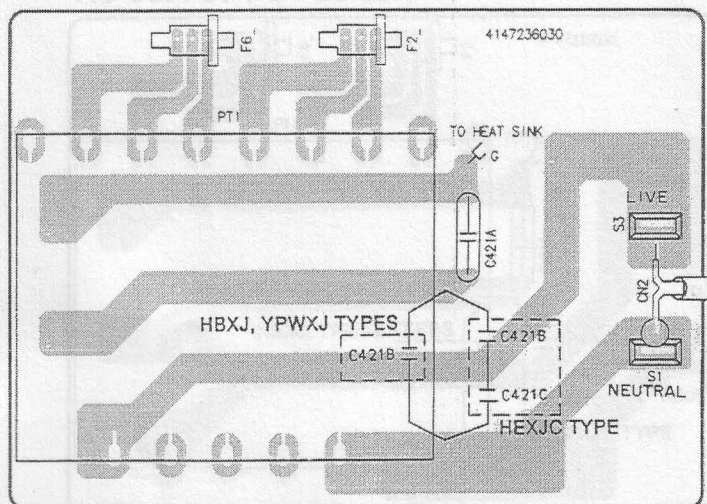
MAIN PCB assy

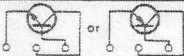
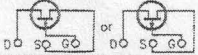


• This diagram is viewed from the mounted parts side.

D

MAIN PCB assy



PCB Pattern Diagram Indication	Corresponding Part Symbol	Part Name
 Q504		Transistor
 Q215		FET
 D203		Diode
 R237		Resistor
 C513		Capacitor (Polarized)
 C518		Capacitor (Non-Polarized)

Others

PCB Pattern Diagram Indication	Part Name
IC	IC
S	Switch
L	Coil
CF	Filter
VR or SFR	Variable Resistor or Semi-Fixed Resistor

- This diagram is viewed from the mounted parts side.

Q103

IC101

Q401

Q102

B

Q109

IC102

Q404 Q106

IC403
Q405 IC201
IC402
Q406

C

SFR101

Q110

IC202

Q111

IC301

Q403		Q104
IC401		Q107
		Q105
Q301L	Q201R	
	Q201L	
Q301R	IC203	Q108
Q303		

D