

SHARP®**SERVICE MANUAL**

SE0021LF90R00

Issued:22nd April 2005**AK-44 CHASSIS**

PAL B/G / SECAM L/L', B/G, D/K SYSTEM COLOUR TELEVISION

**MODEL 21LF-90RU**

In the interests of user safety (required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

In order to service the model 21LF-90RU, refer to the AK-44 Chassis Service Manual (SE00AK44CHA00).

CONTENTS

ELECTRICAL SPECIFICATIONS	3
IMPORTANT SERVICING NOTES	4
CONTROLS & TERMINALS	5
PRINTED WIRING BOARD LAYOUT	6
PARTS LISTING	7
HOW TO UPDATE THE TECHNICAL INFORMATION	11

SHARP CORPORATION

This document has been published to be used for after sales service only.

ELECTRICAL SPECIFICATIONS

- Power Input 220V-240 Volts AC 50 Hz

- Power Consumption
 - Normal Operation (Method IEC60107) 62 W
 - Stand-by Operation < 3 W

- Audio Power Output Rating (MPO) / Impedance
 - Internal Left Speaker 4 W, 16 Ω
 - Internal Right Speaker 4 W, 16 Ω

- Speakers
 - Speaker elliptic (2 pcs) 50 x 120 mm

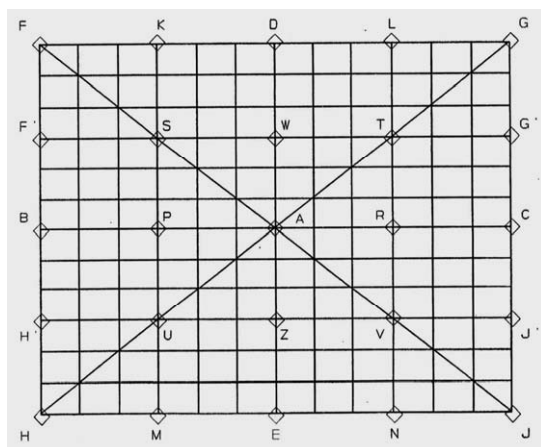
- Convergence (Maximum Misconvergence)

- Picture Intermediate frequency
 - L' 33.9MHz
 - L, B/G, D/K 38.9MHz

- Sound Carrier Trap
 - L' 40.4MHz
 - L, D/K 32.4MHz
 - B/G 33.4MHz

- Adjacent Sound Carrier Trap
 - L' 32.4MHz
 - L, D/K, B/G 40.4MHz

- Adjacent Picture Carrier Trap
 - L' 41.9MHz
 - L, D/K 30.9MHz
 - B/G 31.9MHz



AREA	mm
A	0.3
BC	1.0
DE	1.0
FGHJ	1.3
KLMN	1.2
F'G'H'J'	1.2
STUV	1.1

- Aerial Input Impedance
 - VHF/UHF 75 ohm Unbalanced

- Tuning Ranges 48.25MHz thru 855.25 MHz
 - VHF: S1 - S41 CH (Hyperband)
 - E2 - E12 / F2 - F10
 - UHF: E21 - E69

•White Level

Apply the rated voltage at the rated frequency to the TV set, while it is receiving full white pattern RF signal of 60 dB/μV from its RF input via the pattern generator. Turn all picture controls to maximum value. Measure the colour temperatures at the center of the screen by using the colour analyzer.

X=0.304 ± 0.015 Y=0.306 ± 0.015

Specifications are subject to change without prior notice.

WARNING

The chassis in this receiver is partially hot. Use an isolation transformer between the line cord plug and power receptacle, when servicing this chassis. To prevent electric shock, do not remove cover. No user-serviceable parts inside. Refer servicing to qualified service personnel.

IMPORTANT SERVICING NOTES

Only qualified service personnel are allowed to carry out maintenance and repair of this receiver.

Servicing of High Voltage System and CRT

It is important that the static charge is removed from the high voltage system when carrying out work on the receiver. This can be achieved by connecting a 10K resistor (with a suitably insulated lead) from the CRT cavity connector to the CRT ground tag. This must be carried out with the AC supply disconnected from the receiver.

Note the following:

- The CRT in this receiver employs Integral Implosion Protection.
- If the CRT has to be changed it **MUST** be replaced with the correct type for continued safe working.
- **DO NOT** lift the CRT by its neck.
- When handling the CRT, ensure that shatterproof goggles are worn.
- Ensure that the CRT is discharge before handling.

X-Ray

This receiver is designed to keep any x-ray emission to an absolute minimum. Some fault conditions and servicing procedures may produce potentially hazardous x-ray radiation levels. This is a problem when in close proximity to the receiver for long periods of time. To reduce any risks associated with this, please observe the following precautions:

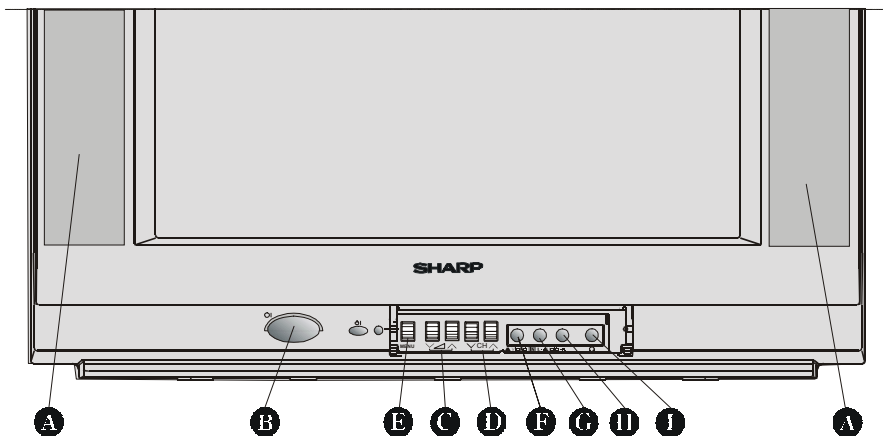
1. When undertaking any servicing on this chassis, **DO NOT** increase the EHT to more than 30.0 KV, (at a instantaneous beam current of 1300 μ A).
2. Ensure that during normal operation the EHT does not exceed 25.55 KV (at a beam current of 1000 μ A). This level has been preset in the factory. Always check that this level has not been exceeded after carrying out any repair on the receiver.
3. **DO NOT** replace the CRT with any other type than that specified in the parts listing as this may cause excessive x-ray radiation.

Before returning the receiver to the customer

In addition to the above checks, the following should also be carried out before returning the receiver to the customer.

1. Inspect all the leads to ensure that they are dressed correctly and that they are not obstructed or pinched by any other parts.
2. Ensure that all protective devices are in good condition. These will include nonmetallic control knobs, insulating fish papers, cabinets backs, compartment covers or shields, mechanical insulators, etc.

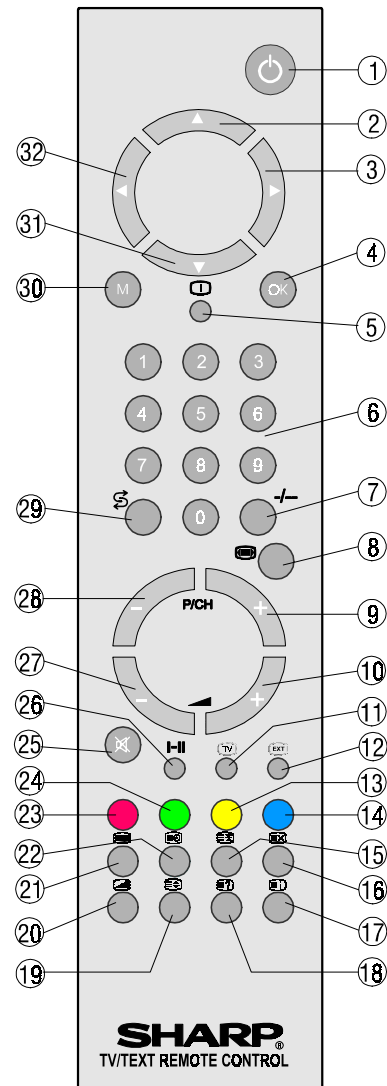
CONTROLS & TERMINALS



- A** Speakers (left + right)
- B** = Power On / Off
- C** = Volume +/-
- D** = Program +/-
- E** MENU = Menu
- F** VIDEO = VCR
- G** AUDIO L = Audio left
- H** AUDIO R = Audio right
- I** = Headphone 3,6 mm Ø

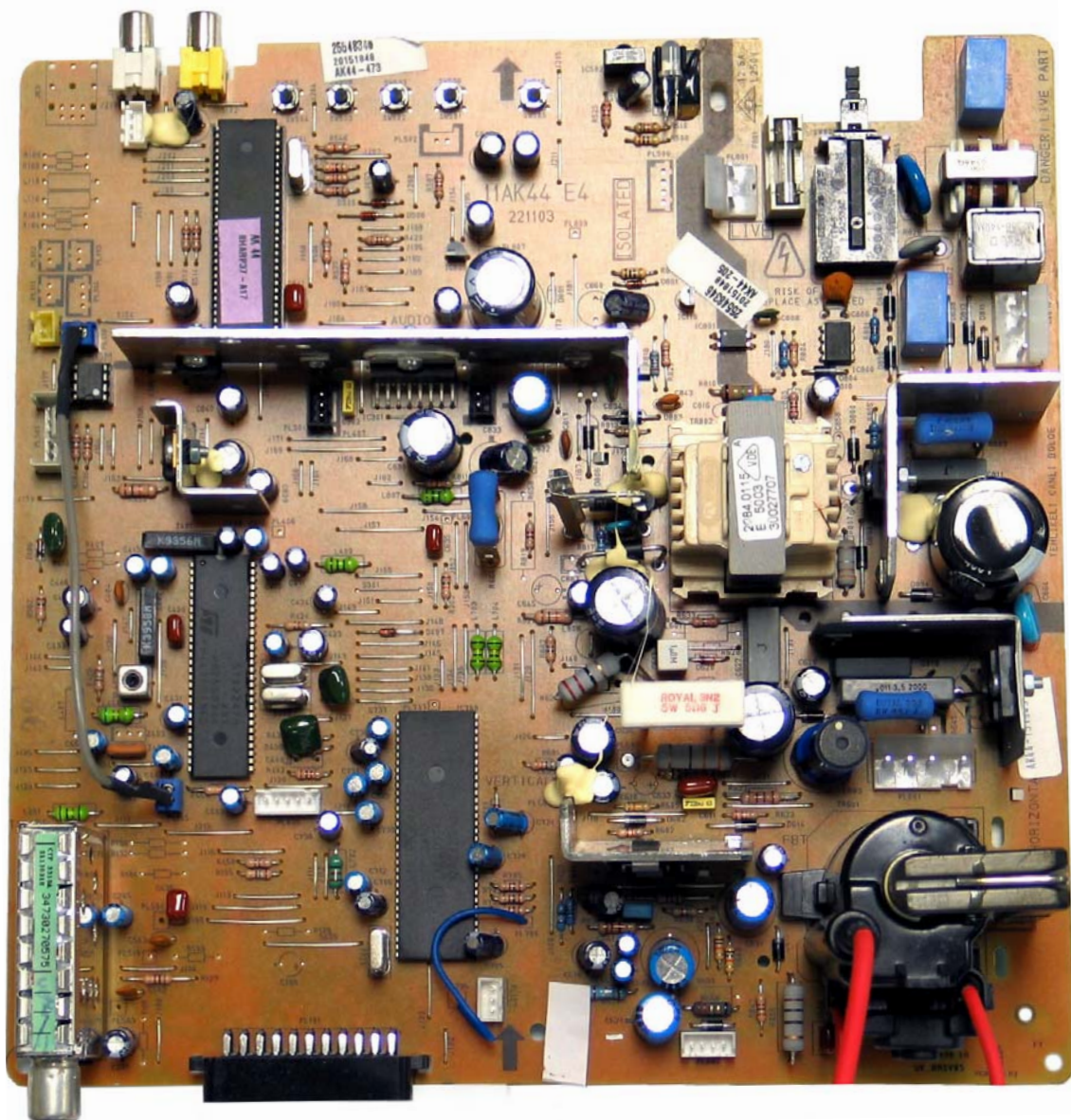
REMOTE CONTROL

- ① = Stand By
- ② = Cursor Up
- ③ = Cursor Right
- ④ OK = OK
- ⑤ = Info (Program Menu)
- ⑥ 0 - 9 = Direct Program
- ⑦ = Double Digit
- ⑧ = Wide mode button
- ⑨ P/CH+ = Program +
- ⑩ = Volume +
- ⑪ = TV / Quit Menu
- ⑫ = EXT button
(SCART, F- AV, RGB)
- ⑬ Yellow = Feature Menu
- ⑭ Blue = Installation Menu
- ⑮ = Hold
- ⑯ = Update
- ⑰ = Index Page
- ⑱ = Reveal
- ⑲ = Expand
- ⑳ = Mix
- ㉑ = Teletext
- ㉒ = Time
- ㉓ Red = Sound Menu
- ㉔ Green = Picture Menu
- ㉕ = Mute
- ㉖ I-II = Mono/Stereo - Dual I-II
- ㉗ = - Volume
- ㉘ - P/CH = -Program
- ㉙ = Flash back button
- ㉚ M = Menu
- ㉛ = Cursor Down
- ㉜ = Cursor Left

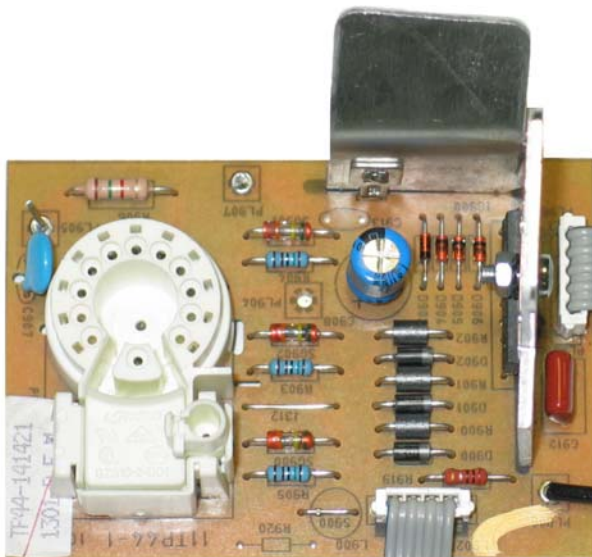


CHASSIS LAYOUT

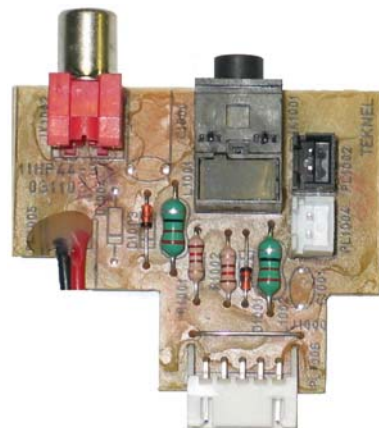
Mother Unit



CRT Unit



Headphone Unit



PARTS LISTING

REPLACEMENT PARTS

Replacement parts which have special safety characteristics are identified in this manual. Electrical components having such features are identified by in the Replacement Parts Listing.

The use of a substitute replacement part which does not have the same safety characteristics as the factory recommended is not permitted.

Replacement parts not shown in this service manual may create shock fire, or other hazards.

HOW TO ORDER REPLACEMENT PARTS

To have your order completed promptly and correctly please supply the following information.

1. MODEL NUMBER
2. REF. NO.
3. PART NO. (*)
4. DESCRIPTION
5. CODE
6. QUANTITY

(*) When ordering any part, a "V" should be added before the Part No.

REF No.	(*) PARTS	DESCRIPTION	SN CODE	EX CODE
PICTURE TUBE				
△	30017634	21" CRT TUBE SAFE EW FREE REALFLA	BW	CQ
△	30028644	21DEGCOIL&EARTH SAFE CB.WO/UL FLAT SHARP	AG	AR
TUNER				
TU201	30009637	TUNER WSP (PLL) CTF5510A	AR	BC
INTEGRATED CIRCUITS				
IC101	30018063	IC HT48RA0A OTP	AF	AR
IC118	30001506	IC TL431	AC	AH
IC301	30011824	IC TDA7266 ROHS	AF	AR
IC403	30026922	IC STV2248H (SHRINK56) ROHS	AR	BC
IC500	20187664	IC 24C08 U01425110310121201	AB	AF
IC501	20170086	PR.IC.36/44-SHARP 36 44 B31	AS	BD
IC502	30001669	PREAMPLIFIER TFMS1380	AD	AM
IC600	30015306	IC TDA8174AW	AD	AN
IC700	30013658	IC MSP3410G SDIP64 ROHS	AS	BD
IC800	30011968	IC SMPS MC44608 DIP8	AF	AQ
△ IC801	30015087	IC SAFE OPTOCOUPLER TCET1102G	AA	AE
IC803	30001500	IC LM7808.	AC	AH
IC804	30001622	IC 7805 (1A)	AB	AF
IC806	30014346	IC 78L05 TO-92 (100mA)	AA	AE
IC900	30025172	IC TDA6107JF/N3 ROHS	AF	AQ
TRANSISTORS				
Q100	30001453	TR BC337	AA	AC
Q104	30001457	TR BC848B SMD	AA	AC
Q301	30001458	TR BC858B SMD	AA	AB
Q302	30001457	TR BC848B SMD	AA	AC
Q402	30001457	TR BC848B SMD	AA	AC
Q405	30001457	TR BC848B SMD	AA	AC
Q406	30001457	TR BC848B SMD	AA	AC
Q503	30001457	TR BC848B SMD	AA	AC
Q504	30001458	TR BC858B SMD	AA	AB
Q505	30001457	TR BC848B SMD	AA	AC
Q601	30013656	TR POWER STX112-AP	AA	AE
Q603	30001448	TR BU808DFI ROHS	AF	AQ
Q604	30001457	TR BC848B SMD	AA	AC
Q606	30001457	TR BC848B SMD	AA	AC
Q607	30001458	TR BC858B SMD	AA	AB
Q700	30001458	TR BC858B SMD	AA	AB
Q801	30001386	TR MTP6N60E (PLASTIK)	AE	AP
Q802	30001457	TR BC848B SMD	AA	AC
Q804	30001454	TR BC548B	AA	AC
DIODES				
D100	30002733	LED INFRARED IR333	AA	AC
D1001	30003722	DIODE ZENER ZPD15V	AA	AA
D1003	30003722	DIODE ZENER ZPD15V	AA	AA
D101	30025773	DIODE ZENER SMD BZT55B5V1	AA	AA
D102	30025773	DIODE ZENER SMD BZT55B5V2	AA	AA
D103	30025773	DIODE ZENER SMD BZT55B5V3	AA	AA
D104	30009699	DIODE ZENER BZT55C12 12V SMD	AA	AB
D105	30025773	DIODE ZENER SMD BZT55B5V4	AA	AA
D106	30001377	DIODE ZENER 33V UZT 33B	AB	AF
D107	30025773	DIODE ZENER SMD BZT55B5V5	AA	AA
D108	30003720	DIODE ZENER BZT55C5V6 5.6V SMD	AA	AB
D109	30003720	DIODE ZENER BZT55C5V6 5.6V SMD	AA	AB
D110	30009699	DIODE ZENER BZT55C12 12V SMD	AA	AB

REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE
D111	30009699	DIODE ZENER BZT55C12 12V SMD	AA	AB
D112	30003720	DIODE ZENER BZT55C5V6 5.6V SMD	AA	AB
D113	30009699	DIODE ZENER BZT55C12 12V SMD	AA	AB
D115	30009699	DIODE ZENER BZT55C12 12V SMD	AA	AB
D300	30001285	DIODE 1N4148 SMD	AA	AB
D301	30001285	DIODE 1N4148 SMD	AA	AB
D402	30012411	DIODE BA782 SMD ROHS	AA	AD
D405	30007763	DIODE ZENER SMD BZT55C5V1	AA	AB
D407	30001284	DIODE 1N4148 0.15A/100V 0.5A	AA	AB
D408	30001285	DIODE 1N4148 SMD	AA	AB
D409	30030809	DIODE ZENER SMD BZT55B10V	AA	AA
D410	30030809	DIODE ZENER SMD BZT55B10V	AA	AA
D411	30030809	DIODE ZENER SMD BZT55B10V	AA	AA
D501	30001285	DIODE 1N4148 SMD	AA	AB
D505	30001284	DIODE 1N4148 0.15A/100V 0.5A	AA	AB
D506	30001284	DIODE 1N4148 0.15A/100V 0.5A	AA	AB
D509	30001279	LED RED/GREEN LTL293SJ	AC	AH
D512	30001285	DIODE 1N4148 SMD	AA	AB
D513	30007761	DIODE ZENER SMD BZT55C3V6	AA	AB
D602	30001329	DIODE 1N4007 1A/1000V 30A	AA	AB
D603	30001285	DIODE 1N4148 SMD	AA	AB
D608	30001318	DIODE BA159 1A/800V 20A	AA	AB
D609	30001318	DIODE BA159 1A/800V 20A	AA	AB
D610	30001318	DIODE BA159 1A/800V 20A	AA	AB
D611	30001285	DIODE 1N4148 SMD	AA	AB
D614	30001318	DIODE BA159 1A/800V 20A	AA	AB
D615	30001285	DIODE 1N4148 SMD	AA	AB
D616	30009699	DIODE ZENER BZT55C12 12V SMD	AA	AB
D617	30001285	DIODE 1N4148 SMD	AA	AB
D618	30001285	DIODE 1N4148 SMD	AA	AB
D619	30009699	DIODE ZENER BZT55C12 12V SMD	AA	AB
D620	30001349	DIODE ZENER 11V	AA	AB
D621	30001285	DIODE 1N4148 SMD	AA	AB
D622	30001285	DIODE 1N4148 SMD	AA	AB
D623	30001285	DIODE 1N4148 SMD	AA	AB
D700	30001285	DIODE 1N4148 SMD	AA	AB
D701	30001369	DIODE ZENER 3.6V ZPD	AA	AB
D800	30001318	DIODE BA159 1A/800V 20A	AA	AB
D801	30001347	DIODE ZENER 8.2V.	AA	AB
D802	30001318	DIODE BA159 1A/800V 20A	AA	AB
D803	30001315	DIODE BYD33D 1A/200V 20A	AA	AE
D804	30001318	DIODE BA159 1A/800V 20A	AA	AB
D805	30009366	DIODE UF5402 3A/200V 150A	AB	AF
D806	30001315	DIODE BYD33D 1A/200V 20A	AA	AE
D808	30007681	DIODE UF5407 3A/800V 150A	AB	AF
D809	30001329	DIODE 1N4007 1A/1000V 30A	AA	AB
D810	20128663	HE.ASY.45-DIODE UF5402(U)(AK30A10)	AA	AE
D811	30001329	DIODE 1N4007 1A/1000V 30A	AA	AB
D813	30001329	DIODE 1N4007 1A/1000V 30A	AA	AB
D837	30001329	DIODE 1N4007 1A/1000V 30A	AA	AB
D838	30001329	DIODE 1N4007 1A/1000V 30A	AA	AB
D889	30001384	TR MCR22-6	AB	AG
D890	30001329	DIODE 1N4007 1A/1000V 30A	AA	AB
D891	30002583	JUMPER 0.6MM ROHS	AA	AB
D893	30001318	DIODE BA159 1A/800V 20A	AA	AB
D894	30001318	DIODE BA159 1A/800V 20A	AA	AB
D900	30001318	DIODE BA159 1A/800V 20A	AA	AB
D901	30001318	DIODE BA159 1A/800V 20A	AA	AB
D902	30001318	DIODE BA159 1A/800V 20A	AA	AB
D903	30001344	DIODE ZENER 6.2V 1/2W	AA	AB
D904	30001349	DIODE ZENER 11V	AA	AB
D905	30001349	DIODE ZENER 11V	AA	AB
D906	30001349	DIODE ZENER 11V	AA	AB
PACKAGED CIRCUITS				
X100	30002852	XTAL REZ 455KHZ ROHS	AA	AD
X401	30001749	XTAL 4.433619 Series HC49U	AC	AK
X402	30015592	XTAL 3.579545 (WO/LOAD CAP)	AB	AG
X403	30000074	CAP MKT 100NF 63V J	AA	AC
X501	30002851	XTAL 4.000 30p HC49U	AC	AH
X700	30001756	XTAL 18.432 12p HC49U	AE	AP
COILS				
L1001	30001996	FIXED COIL 22UH Q40 K	AA	AB
L1002	30001996	FIXED COIL 22UH Q40 K	AA	AB
L101	30013412	FERRITE SMD 1.5K/100MHz 500 mA(0805)	AA	AA

REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE	REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE
L110	30013412	FERRITE SMD 1.5K/100MHz 500 mA(0805)	AA	AA	C426	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
L111	30013412	FERRITE SMD 1.5K/100MHz 500 mA(0805)	AA	AA	C427	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
L112	30013412	FERRITE SMD 1.5K/100MHz 500 mA(0805)	AA	AA	C429	30012589	CAP SMD 4.7NF 50V K (0603)	AA	AB
L113	30013412	FERRITE SMD 1.5K/100MHz 500 mA(0805)	AA	AA	C431	30000362	CAP EL 1UF 50V M.	AA	AB
L114	30013412	FERRITE SMD 1.5K/100MHz 500 mA(0805)	AA	AA	C432	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
L117	30001734	JUMPER SMD (0805)	AA	AB	C433	30000345	CAP EL 10UF 50V M	AA	AB
L201	30001979	FIXED COIL 1UH Q45 M-A	AA	AB	C434	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
L210	30001971	FERRITE SMD 600R/100MHz 200mA (805)	AA	AD	C435	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
L211	30001971	FERRITE SMD 600R/100MHz 200mA (805)	AA	AD	C436	30000109	CAP MKT 470NF 63V J	AA	AD
L401	30001971	FERRITE SMD 600R/100MHz 200mA (805)	AA	AD	C437	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
L402	30001992	FIXED COIL 10UH Q65 K-A	AA	AB	C438	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
L403	30001971	FERRITE SMD 600R/100MHz 200mA (805)	AA	AD	C439	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
L404	30001990	FIXED COIL 6.8UH Q75 K	AA	AB	C440	30000074	CAP MKT 100NF 63V J	AA	AC
L405	30026042	ADJ.COIL VIF 44MHZ Q=64 C=39pF (AK36)	AA	AD	C442	30000362	CAP EL 1UF 50V M.	AA	AB
L406	30001971	FERRITE SMD 600R/100MHz 200mA (805)	AA	AD	C443	30000362	CAP EL 1UF 50V M.	AA	AB
L407	30002002	FIXED COIL 47UH Q60 K	AA	AB	C444	30000384	CAP EL 2.2UF 50V M	AA	AB
L603	30018501	LINEARITY COIL 100UH	AB	AG	C446	30000345	CAP EL 10UF 50V M	AA	AB
L700	30001971	FERRITE SMD 600R/100MHz 200mA (805)	AA	AD	C448	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
L701	30001971	FERRITE SMD 600R/100MHz 200mA (805)	AA	AD	C449	30012567	CAP SMD 220PF 50V J (0603)	AA	AB
L702	30001996	FIXED COIL 22UH Q40 K	AA	AB	C451	30012585	CAP SMD 2.2NF 50V K R (0603)	AA	AB
L703	30001979	FIXED COIL 1UH Q45 M-A	AA	AB	C452	30012585	CAP SMD 2.2NF 50V K R (0603)	AA	AB
L704	30001979	FIXED COIL 1UH Q45 M-A	AA	AB	C453	30012581	CAP SMD 1NF 50V K R (0603)	AA	AB
L802	30001971	FERRITE SMD 600R/100MHz 200mA (805)	AA	AD	C454	30012573	CAP SMD 47PF 50V J (0603)	AA	AB
L803	30000607	RES CF 1/4W 2.2R J.	AA	AB	C455	30012573	CAP SMD 47PF 50V J (0603)	AA	AB
L805	30001971	FERRITE SMD 600R/100MHz 200mA (805)	AA	AD	C456	30012573	CAP SMD 47PF 50V J (0603)	AA	AB
L806	30001971	FERRITE SMD 600R/100MHz 200mA (805)	AA	AD	C459	30012575	CAP SMD 4.7PF 50V C CH (0603)	AA	AA
L807	30001992	FIXED COIL 10UH Q65 K-A	AA	AB	C460	30000345	CAP EL 10UF 50V M	AA	AB
L808	30002583	JUMPER 0.6MM ROHS	AA	AB	C502	30000396	CAP EL 47UF 16V M.	AA	AB
L809	30001734	JUMPER SMD (0805)	AA	AB	C504	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
L811	30001734	JUMPER SMD (0805)	AA	AB	C505	30012589	CAP SMD 4.7NF 50V K (0603)	AA	AB
		CERAMIC FILTERS			C510	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
Z401	30012545	FILTER SAW K9656M ROHS	AG	AR	C511	30012566	CAP SMD 22PF 50V J (0603)	AA	AB
Z402	30014261	FILTER SAW K3958M ROHS	AF	AR	C513	30000371	CAP EL 22UF 50V M	AA	AB
Z404	30001724	FILTER SER TRAP TPS 5.5MHZ	AB	AF	C514	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
		TRANSFORMERS			C515	30012579	CAP SMD 82PF 50V J (0603)	AA	AB
△ TR601	30017788	TRF FBT SAFE 90a (AK30,AK36 LAYER TYPE)	AT	BE	C517	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
△ TR801	30002100	LINE FILTER SAFE 2*27MH	AC	AH	C518	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
△ TR802	30027707	TRF SMPS SAFE AK44 RF 170-270V Audio=14V	AF	AQ	C519	30000352	CAP EL 100UF 16V M	AA	AB
		CAPACITORS			C520	30012560	CAP SMD 100PF 50V J (0603)	AA	AB
C100	30000352	CAP EL 100UF 16V M	AA	AB	C521	30012562	CAP SMD 15PF 50V J (0603)	AA	AA
C101	30012560	CAP SMD 100PF 50V J (0603)	AA	AB	C522	30012562	CAP SMD 15PF 50V J (0603)	AA	AA
C102	30012560	CAP SMD 100PF 50V J (0603)	AA	AB	C523	30012585	CAP SMD 2.2NF 50V K R (0603)	AA	AB
C103	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB	C524	30012985	JUMPER SMD 0604	AA	AB
C104	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB	C525	30012566	CAP SMD 22PF 50V J (0603)	AA	AB
C143	30012583	CAP SMD 1.5NF 50V K (0603)	AA	AA	C530	30012589	CAP SMD 4.7NF 50V K (0603)	AA	AB
C144	30012583	CAP SMD 1.5NF 50V K (0603)	AA	AA	C531	30000384	CAP EL 2.2UF 50V M	AA	AB
C155	30012560	CAP SMD 100PF 50V J (0603)	AA	AB	C532	30012586	CAP SMD 22NF 50V K (0603)	AA	AB
C157	30012560	CAP SMD 100PF 50V J (0603)	AA	AB	C536	30000074	CAP MKT 100NF 63V J	AA	AC
C201	30000400	CAP EL 47UF 50V M	AA	AB	C541	30000109	CAP MKT 470NF 63V J	AA	AD
C202	30012985	JUMPER SMD 0606	AA	AB	C542	30000205	CAP CER 150PF 50V J SL ROHS	AA	AB
C205	30000371	CAP EL 22UF 50V M	AA	AB	C543	30000205	CAP CER 150PF 50V J SL ROHS	AA	AB
C206	30012610	CAP SMD 10NF 50V J (0603)	AA	AB	C545	30012607	CAP SMD 150PF 50V J (0603)	AA	AA
C207	30012610	CAP SMD 10NF 50V J (0603)	AA	AB	C546	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB
C300	30000400	CAP EL 47UF 50V M	AA	AB	C548	30012603	CAP SMD 100NF 25V K R (0603)	AA	AB
C302	30000092	CAP MKT 220NF 63V J	AA	AD	C603	30000384	CAP EL 2.2UF 50V M	AA	AB
C305	30000092	CAP MKT 220NF 63V J	AA	AD	C604	30000400	CAP EL 47UF 50V M	AA	AB
C404	30000225	CAP CER 220PF 50V J SL ROHS	AA	AB	C608	30000107	CAP MKT 47NF 250V J	AA	AD
C408	30012586	CAP SMD 22NF 50V K (0603)	AA	AB	C610	30018901	CAP EL 100UF 50V M 105°	AA	AB
C409	30000345	CAP EL 10UF 50V M	AA	AB	C611	30000092	CAP MKT 220NF 63V J	AA	AD
C410	30000384	CAP EL 2.2UF 50V M	AA	AB	C613	30000078	CAP MKT 1UF 100V M	AB	AF
C411	30000345	CAP EL 10UF 50V M	AA	AB	C615	30000359	CAP EL 1000UF 16V M.	AA	AC
C412	30012586	CAP SMD 22NF 50V K (0603)	AA	AB	C616	30000400	CAP EL 47UF 50V M	AA	AB
C413	30000362	CAP EL 1UF 50V M.	AA	AB	△ C618	30007100	CAP MKP SAFE 10NF 1600Vdc / 1250Vpp %3.5	AA	AE
C414	30012585	CAP SMD 2.2NF 50V K R (0603)	AA	AB	C619	30000131	CAP MKP SAFE 100NF 250V J	AA	AB
C415	30012581	CAP SMD 1NF 50V K R (0603)	AA	AB	C623	30029182	CAP EL 100UF 250V M W LONG LEAD	AB	AF
C416	30000362	CAP EL 1UF 50V M.	AA	AB	C624	30000350	CAP EL 10UF 250V M.	AA	AD
C417	30000362	CAP EL 1UF 50V M.	AA	AB	△ C627	30006750	CAP MKP 220NF 400V J	AA	AD
C418	30012586	CAP SMD 22NF 50V K (0603)	AA	AB	C628	30018380	CAP EL 3.3UF 160V M 105°	AA	AB
C419	30000413	CAP EL 4.7UF 50V M	AA	AB	C631	30000410	CAP EL 470UF 50V M.	AB	AF
C420	30000100	CAP MKT 330NF 63V J	AA	AD	C632	30000100	CAP MKT 330NF 63V J	AA	AD
C422	30000400	CAP EL 47UF 50V M	AA	AB	C634	30000409	CAP EL 470UF 25V M.	AA	AD
C423	30000400	CAP EL 47UF 50V M	AA	AB	C635	30000100	CAP MKT 330NF 63V J	AA	AD
C424	30000345	CAP EL 10UF 50V M	AA	AB	C636	30000400	CAP EL 47UF 50V M	AA	AB
C425	30012586	CAP SMD 22NF 50V K (0603)	AA	AB	C638	30012581	CAP SMD 1NF 50V K R (0603)	AA	AB
					C641	30000345	CAP EL 10UF 50V M	AA	AB
					C642	30012609	CAP SMD 68NF 50V K (0603)	AA	AB

REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE	REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE
C643	30000116	CAP MKT 68NF 63V J	AA	AC	R1002	30000492	RES CF 1/4W 120R J.	AA	AA
C644	30000362	CAP EL 1UF 50V M.	AA	AB	R101	30000489	RES SMD 1/10W 1R J (0605)	AA	AB
C700	30012565	CAP SMD 1.8PF 50V J CH (0603)	AA	AA	R103	30012509	RES SMD 1/16W 100K J (0603)	AA	AB
C701	30012565	CAP SMD 1.8PF 50V J CH (0603)	AA	AA	R105	30000792	RES CF 1/4W 75R J	AA	AB
C702	30012573	CAP SMD 47PF 50V J (0603)	AA	AB	R109	30012713	RES SMD 1/16W 75R J (0603)	AA	AB
C703	30012573	CAP SMD 47PF 50V J (0603)	AA	AB	R110	30012713	RES SMD 1/16W 75R J (0603)	AA	AB
C704	30012576	CAP SMD 56PF 50V J CH (0603)	AA	AA	R113	30012713	RES SMD 1/16W 75R J (0603)	AA	AB
C705	30000345	CAP EL 10UF 50V M	AA	AB	R114	30012713	RES SMD 1/16W 75R J (0603)	AA	AB
C706	30000345	CAP EL 10UF 50V M	AA	AB	R115	30012713	RES SMD 1/16W 75R J (0603)	AA	AB
C707	30012573	CAP SMD 47PF 50V J (0603)	AA	AB	R116	30012713	RES SMD 1/16W 75R J (0603)	AA	AB
C708	30012586	CAP SMD 22NF 50V K (0603)	AA	AB	R117	30012713	RES SMD 1/16W 75R J (0603)	AA	AB
C710	30012573	CAP SMD 47PF 50V J (0603)	AA	AB	R118	30012713	RES SMD 1/16W 75R J (0603)	AA	AB
C712	30000345	CAP EL 10UF 50V M	AA	AB	R123	30000459	RES CF 1/4W 100R J.	AA	AB
C713	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB	R129	30012713	RES SMD 1/16W 75R J (0603)	AA	AB
C714	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB	R135	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
C716	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB	R153	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
C719	30012586	CAP SMD 22NF 50V K (0603)	AA	AB	R201	30012674	RES SMD 1/16W 27K J (0603)	AA	AB
C720	30000345	CAP EL 10UF 50V M	AA	AB	R202	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB
C721	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB	R204	30000459	RES CF 1/4W 100R J.	AA	AB
C723	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB	R206	30000459	RES CF 1/4W 100R J.	AA	AB
C724	30000345	CAP EL 10UF 50V M	AA	AB	R301	30000471	RES CF 1/4W 10K J.	AA	AB
C729	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB	R302	30000471	RES CF 1/4W 10K J.	AA	AB
C730	30000393	CAP EL 3.3UF 50V M	AA	AB	R303	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
C733	30000345	CAP EL 10UF 50V M	AA	AB	R305	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
C734	30000345	CAP EL 10UF 50V M	AA	AB	R306	30012509	RES SMD 1/16W 100K J (0603)	AA	AB
C735	30012586	CAP SMD 22NF 50V K (0603)	AA	AB	R407	30000590	RES CF 1/4W 2.2K J.	AA	AB
C736	30000345	CAP EL 10UF 50V M	AA	AB	R410	30000590	RES CF 1/4W 2.2K J.	AA	AB
C737	30000371	CAP EL 22UF 50V M	AA	AB	R412	30012696	RES SMD 1/16W 47K J (0603)	AA	AB
C738	30000371	CAP EL 22UF 50V M	AA	AB	R417	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
C741	30012581	CAP SMD 1NF 50V K R (0603)	AA	AB	R418	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
C742	30012581	CAP SMD 1NF 50V K R (0603)	AA	AB	R419	30012649	RES SMD 1/16W 150R J (0603)	AA	AB
C748	30012560	CAP SMD 100PF 50V J (0603)	AA	AB	R420	30000466	RES CF 1/4W 1K J.	AA	AB
△ C801	30000094	CAP MKT SAFE 220NF 275V M AC	AA	AB	R421	30012650	RES SMD 1/16W 15K J (0603)	AA	AB
△ C802	30000094	CAP MKT SAFE 220NF 275V M AC	AA	AB	R422	30012659	RES SMD 1/16W 2.2K J (0603)	AA	AB
C803	30000433	CAP CER 1NF 1KV M B ROHS	AA	AB	R423	30012712	RES SMD 1/16W 8.2K J (0603)	AA	AB
C805	30018085	CAP VAR SAFE 510V K MFCN14D511	AA	AD	R424	30000712	RES CF 1/4W 470R J	AA	AB
C806	30000433	CAP CER 1NF 1KV M B ROHS	AA	AB	R425	30012668	RES SMD 1/16W 220R J (0603)	AA	AA
C808	30000295	CAP CER 100NF 50V Z F	AA	AB	R426	30012659	RES SMD 1/16W 2.2K J (0603)	AA	AB
C809	30000420	CAP EL 150UF 400V M.	AF	AQ	R427	30012674	RES SMD 1/16W 27K J (0603)	AA	AB
C810	30000387	CAP EL 33UF 50V M	AA	AB	R428	30000792	RES CF 1/4W 75R J	AA	AB
△ C811	30000161	CAP MKP SAFE 47NF 630Vdc / 622Vpp J	AB	AE	R431	30012674	RES SMD 1/16W 27K J (0603)	AA	AB
C813	30000295	CAP CER 100NF 50V Z F	AA	AB	R432	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
△ C816	30000440	CAP CER SAFE 2.2NF 4KV M ROHS	AA	AC	R433	30012667	RES SMD 1/16W 220K J (0603)	AA	AB
C817	30000198	CAP CER 120PF 500V J SL ROHS	AA	AB	R437	30000466	RES CF 1/4W 1K J.	AA	AB
C818	30016654	CAP SMD 100NF 16V K R (0603)	AA	AB	R438	30000466	RES CF 1/4W 1K J.	AA	AB
C819	30012609	CAP SMD 68NF 50V K (0603)	AA	AB	R439	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
C822	30007308	CAP CER 220PF 1KV K (PULSE) ROHS	AA	AD	R440	30012714	RES SMD 1/16W 820R J (0603)	AA	AA
C824	30009208	CAP CER 470PF 1KV K (PULSE) ROHS	AA	AC	R441	30012656	RES SMD 1/16W 18K J (0603)	AA	AB
C826	30029182	CAP EL 100UF 250V M W LONG LEAD	AB	AF	R442	30000466	RES CF 1/4W 1K J.	AA	AB
C827	30000411	CAP EL 4700UF 16V M	AC	AH	R446	30012714	RES SMD 1/16W 820R J (0603)	AA	AA
C828	30000295	CAP CER 100NF 50V Z F	AA	AB	R447	30012714	RES SMD 1/16W 820R J (0603)	AA	AA
C829	30000359	CAP EL 1000UF 16V M.	AA	AC	R448	30012683	RES SMD 1/16W 330K J (0603)	AA	AB
C830	30000382	CAP EL 2200UF 16V M	AB	AF	R449	30012662	RES SMD 1/16W 2.7K J (0603)	AA	AB
C832	30000295	CAP CER 100NF 50V Z F	AA	AB	R450	30000712	RES CF 1/4W 470R J	AA	AB
C833	30000407	CAP EL 470UF 16V M.	AA	AC	R455	30012665	RES SMD 1/16W 20K J (0603)	AA	AB
C834	30000295	CAP CER 100NF 50V Z F	AA	AB	R458	30012662	RES SMD 1/16W 2.7K J (0603)	AA	AB
C836	30000431	CAP CER 100PF 1KV M	AA	AC	R459	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
C838	30000352	CAP EL 100UF 16V M	AA	AB	R460	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
C839	30000352	CAP EL 100UF 16V M	AA	AB	R461	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
C840	30000352	CAP EL 100UF 16V M	AA	AB	R463	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB
C843	30000431	CAP CER 100PF 1KV M	AA	AC	R464	30012665	RES SMD 1/16W 20K J (0603)	AA	AB
C848	30000352	CAP EL 100UF 16V M	AA	AB	R465	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB
C849	30000352	CAP EL 100UF 16V M	AA	AB	R467	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
C850	30000352	CAP EL 100UF 16V M	AA	AB	R468	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
C855	30000407	CAP EL 470UF 16V M.	AA	AC	R469	30000670	RES CF 1/4W 330K J.	AA	AB
C857	30012573	CAP SMD 47PF 50V J (0603)	AA	AB	R470	30012683	RES SMD 1/16W 330K J (0603)	AA	AB
C859	30013533	CAP CER 100PF 1KV K (PULSE) ROHS	AA	AC	R474	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB
C862	30000367	CAP EL 1UF 250V M	AA	AB	R475	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
△ C864	30000440	CAP CER SAFE 2.2NF 4KV M ROHS	AA	AC	R476	30012707	RES SMD 1/16W 680R J (0603)	AA	AB
C907	30000434	CAP CER 1NF 2KV K B ROHS	AA	AB	R477	30014022	RES SMD 1/16W 47R J (0603)	AA	AA
C908	30000415	CAP EL 4.7UF 250V M	AA	AC	R502	30012695	RES SMD 1/16W 470R J (0603)	AA	AB
C912	30000075	CAP MKT 100NF 250V K (DC)	AA	AD	R503	30012707	RES SMD 1/16W 680R J (0603)	AA	AB
		RESISTORS			R504	30012679	RES SMD 1/16W 3.9K J (0603)	AA	AB
R100	30012510	RES SMD 1/16W 100R J (0603)	AA	AB	R505	30012673	RES SMD 1/16W 270R J (0603)	AA	AB
R1001	30000492	RES CF 1/4W 120R J.	AA	AA	R506	30012506	RES SMD 1/16W 1.5K J (0603)	AA	AB

REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE	REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE
R507	30000466	RES CF 1/4W 1K J.	AA	AB	R668	30012641	RES SMD 1/16W 10K J (0603)	AA	AB
R508	30000622	RES CF 1/4W 270R J	AA	AB	R669	30012659	RES SMD 1/16W 2.2K J (0603)	AA	AB
R509	30012641	RES SMD 1/16W 10K J (0603)	AA	AB	R701	30000459	RES CF 1/4W 100R J.	AA	AB
R510	30000737	RES CF 1/4W 5.1K J	AA	AB	R703	30000459	RES CF 1/4W 100R J.	AA	AB
R511	30012657	RES SMD 1/16W 1K J (0603)	AA	AB	R705	30000459	RES CF 1/4W 100R J.	AA	AB
R512	30012504	RES SMD 1/16W 1.2K J (0603)	AA	AB	R715	30012695	RES SMD 1/16W 470R J (0603)	AA	AB
R513	30000459	RES CF 1/4W 100R J.	AA	AB	R717	30012695	RES SMD 1/16W 470R J (0603)	AA	AB
R514	30000459	RES CF 1/4W 100R J.	AA	AB	R719	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
R515	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB	R721	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
R516	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB	R722	30012510	RES SMD 1/16W 100R J (0603)	AA	AB
R517	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB	R725	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
R518	30000471	RES CF 1/4W 10K J.	AA	AB	R726	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
R519	30012698	RES SMD 1/16W 5.6K J (0603)	AA	AB	R727	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
R525	30000583	RES CF 1/4W 220R	AA	AB	R730	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
R526	30012641	RES SMD 1/16W 10K J (0603)	AA	AB	R731	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
R527	30000718	RES CF 1/4W 4.7K J.	AA	AB	R801	30000982	RES MF 1/4W 4.7K J	AA	AA
R528	30012698	RES SMD 1/16W 5.6K J (0603)	AA	AB	R803	30012659	RES SMD 1/16W 2.2K J (0603)	AA	AB
R530	30012698	RES SMD 1/16W 5.6K J (0603)	AA	AB	R804	30000504	RES CF 1/4W 120K J	AA	AB
R532	30012659	RES SMD 1/16W 2.2K J (0603)	AA	AB	R805	30000843	RES MF 1/4W 10R J	AA	AB
R533	30012644	RES SMD 1/16W 12K J (0603)	AA	AB	R806	30000982	RES MF 1/4W 4.7K J	AA	AA
R534	30000526	RES CF 1/4W 1.5K J	AA	AB	R807	30001159	RES MO 1W 0.33R J	AA	AB
R535	30000718	RES CF 1/4W 4.7K J.	AA	AB	R809	30007784	RES MO 5W 33K J(RADIAL)	AA	AD
R536	30000471	RES CF 1/4W 10K J.	AA	AB	△ R810	30001257	RES MG SAFE 1/2W 4.7M J ROHS	AA	AD
R537	30012641	RES SMD 1/16W 10K J (0603)	AA	AB	R811	30000594	RES CF 1/4W 22K J.	AA	AB
R545	30012644	RES SMD 1/16W 12K J (0603)	AA	AB	R813	30000718	RES CF 1/4W 4.7K J.	AA	AB
R546	30000560	RES CF 1/4W 1.8K J	AA	AB	R814	30000588	RES SMD 1/10W 220R J 0805	AA	AB
R547	30012659	RES SMD 1/16W 2.2K J (0603)	AA	AB	R815	30000452	RES CF 1/4W 10R J.	AA	AB
R548	30012641	RES SMD 1/16W 10K J (0603)	AA	AB	R817	30001037	RES MF 1/4W 99K F	AA	AB
R552	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB	R818	30006463	RES MF 1/4W 2K F	AA	AA
R555	30012659	RES SMD 1/16W 2.2K J (0603)	AA	AB	R819	30000809	RES CF 1/2W 820R J	AA	AA
R556	30012657	RES SMD 1/16W 1K J (0603)	AA	AB	R821	30000470	RES CF 1/2W 10K J	AA	AA
R559	30000470	RES CF 1/2W 10K J	AA	AA	R828	30001265	NTC SAFE MONITOR 10R/3A SCK-103	AA	AB
R560	30012669	RES SMD 1/16W 22K J (0603)	AA	AB	R829	30000718	RES CF 1/4W 4.7K J.	AA	AB
R561	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB	R830	30012657	RES SMD 1/16W 1K J (0603)	AA	AB
R562	30000471	RES CF 1/4W 10K J.	AA	AB	R831	30012669	RES SMD 1/16W 22K J (0603)	AA	AB
R564	30012641	RES SMD 1/16W 10K J (0603)	AA	AB	R833	30012985	JUMPER SMD 0607	AA	AB
R565	30012641	RES SMD 1/16W 10K J (0603)	AA	AB	R835	20153236	CN.ASY.44-RES VVW 5W 5.6R J RAD+35006011	AB	AF
R601	30000752	RES CF 1/4W 56K J	AA	AB	△ R836	30001224	RES FUSE SAFE 1/2W 0.22R J	AA	AB
R602	30000477	RES CF 1/4W 100K J.	AA	AB	R838	30000631	RES SMD 1/10W 2.7K J 0805	AA	AB
R605	30000805	RES CF 1/4W 75K J	AA	AB	R900	30006712	FERRITE BEAD 3.5X4.7X0.8	AA	AB
R612	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB	R901	30006712	FERRITE BEAD 3.5X4.7X0.9	AA	AB
R613	30012692	RES SMD 1/16W 4.7K J (0603)	AA	AB	R902	30006712	FERRITE BEAD 3.5X4.7X0.10	AA	AB
R618	30012508	RES SMD 1/16W 1.8K J (0603)	AA	AB	R903	30000885	RES MF 1/4W 1.5K J	AA	AB
R619	30012705	RES SMD 1/16W 6.8K J (0603)	AA	AB	R904	30000885	RES MF 1/4W 1.5K J	AA	AB
R623	30000607	RES CF 1/4W 2.2R J.	AA	AB	R905	30000885	RES MF 1/4W 1.5K J	AA	AB
R624	30001120	RES MO 2W 22R J	AA	AB	R906	30000525	RES CF 1/2W 1.5K J	AA	AB
R625	30000900	RES MF 1/4W 1.8K J	AA	AB	R919	30001212	RES FUSE SAFE 1/2W 1R J	AA	AA
R627	30015173	RES MF 1/2W 2.7R F	AA	AA					
R628	30002583	JUMPER 0.6MM ROHS	AA	AB			MISCELLANEOUS PARTS		
R630	30000828	RES CF 1/4W 8.2M J	AA	AB	△ F801	30001731	FUSE SAFE 2.5A 250V 5*20MM	AA	AC
R631	30000885	RES MF 1/4W 1.5K J	AA	AB	J100	30002583	JUMPER 0.6MM ROHS	AA	AB
R633	30000650	RES CF 1/4W 33R J.	AA	AB	J1000	30002583	JUMPER 0.6MM ROHS	AA	AB
R634	30012641	RES SMD 1/16W 10K J (0603)	AA	AB	J101	30002583	JUMPER 0.6MM ROHS	AA	AB
R637	30000621	RES CF 1/2W 270R J	AA	AB	J102	30002583	JUMPER 0.6MM ROHS	AA	AB
R638	30000589	RES CF 1/2W 2.2K J	AA	AA	J103	30002583	JUMPER 0.6MM ROHS	AA	AB
R639	30000718	RES CF 1/4W 4.7K J.	AA	AB	J104	30002583	JUMPER 0.6MM ROHS	AA	AB
R640	30012662	RES SMD 1/16W 2.7K J (0603)	AA	AB	J105	30002583	JUMPER 0.6MM ROHS	AA	AB
R641	30012649	RES SMD 1/16W 150R J (0603)	AA	AB	J106	30002583	JUMPER 0.6MM ROHS	AA	AB
R645	30018904	RES MO 5W 4.7K J (RADIAL)	AA	AD	J108	30002583	JUMPER 0.6MM ROHS	AA	AB
R646	30014941	RES CF 1/4W 16K J	AA	AA	J109	30002583	JUMPER 0.6MM ROHS	AA	AB
R647	30000466	RES CF 1/4W 1K J.	AA	AB	J110	30002583	JUMPER 0.6MM ROHS	AA	AB
△ R648	30014475	RES FUSE SAFE 1W 3.9R J	AA	AB	J111	30002583	JUMPER 0.6MM ROHS	AA	AB
R649	30014941	RES CF 1/4W 16K J	AA	AA	J112	30002583	JUMPER 0.6MM ROHS	AA	AB
R650	30000744	RES CF 1/4W 560R J	AA	AB	J113	30002583	JUMPER 0.6MM ROHS	AA	AB
R654	30000458	RES CF 1/2W 100R J	AA	AB	J115	30002583	JUMPER 0.6MM ROHS	AA	AB
R655	30000705	RES CF 1/2W 47R J.	AA	AB	J116	30002583	JUMPER 0.6MM ROHS	AA	AB
R657	30012656	RES SMD 1/16W 18K J (0603)	AA	AB	J117	30002583	JUMPER 0.6MM ROHS	AA	AB
R659	30001150	RES MO 2W 330R J	AA	AB	J118	30002583	JUMPER 0.6MM ROHS	AA	AB
R660	30012669	RES SMD 1/16W 22K J (0603)	AA	AB	J119	30002583	JUMPER 0.6MM ROHS	AA	AB
R661	30012674	RES SMD 1/16W 27K J (0603)	AA	AB	J120	30002583	JUMPER 0.6MM ROHS	AA	AB
R662	30000712	RES CF 1/4W 470R J	AA	AB	J121	30002583	JUMPER 0.6MM ROHS	AA	AB
R663	30000459	RES CF 1/4W 100R J.	AA	AB	J122	30002583	JUMPER 0.6MM ROHS	AA	AB
R664	30007779	RES MO 5W 47R J(RADIAL)	AA	AC	J123	30002583	JUMPER 0.6MM ROHS	AA	AB
R665	30012708	RES SMD 1/16W 68K J (0603)	AA	AA	J124	30002583	JUMPER 0.6MM ROHS	AA	AB
R666	30001077	RES MO 2W 10R J	AA	AC	J125	30002583	JUMPER 0.6MM ROHS	AA	AB
R667	30012659	RES SMD 1/16W 2.2K J (0603)	AA	AB	J126	30002583	JUMPER 0.6MM ROHS	AA	AB

REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE	REF No.	PARTS	DESCRIPTION	SN CODE	EX CODE
J127	30002583	JUMPER 0.6MM ROHS	AA	AB	S900	30002583	JUMPER 0.6MM ROHS	AA	AB
J128	30002583	JUMPER 0.6MM ROHS	AA	AB	SG900	30000428	SPARK GAP 300V	AB	AG
J129	30002583	JUMPER 0.6MM ROHS	AA	AB	SG901	30000428	SPARK GAP 300V	AB	AG
J130	30002583	JUMPER 0.6MM ROHS	AA	AB	SG902	30000428	SPARK GAP 300V	AB	AG
J131	30002583	JUMPER 0.6MM ROHS	AA	AB	SW506	30016022	SWITCH TACT VERTICAL T&R ROHS	AA	AB
J132	30002583	JUMPER 0.6MM ROHS	AA	AB	SW507	30016022	SWITCH TACT VERTICAL T&R ROHS	AA	AB
J133	30002583	JUMPER 0.6MM ROHS	AA	AB	SW508	30016022	SWITCH TACT VERTICAL T&R ROHS	AA	AB
J134	30002583	JUMPER 0.6MM ROHS	AA	AB	SW509	30016022	SWITCH TACT VERTICAL T&R ROHS	AA	AB
J135	30002583	JUMPER 0.6MM ROHS	AA	AB	SW510	30016022	SWITCH TACT VERTICAL T&R ROHS	AA	AB
J136	30002583	JUMPER 0.6MM ROHS	AA	AB	△ SW801	30017848	SWITCH SAFE ON/OFF 4A/128A JVC(PANASONI)	AC	AH
J137	30002583	JUMPER 0.6MM ROHS	AA	AB	△ TH800	30001268	THERMISTOR SAFE 3P	AD	AM
J138	30002583	JUMPER 0.6MM ROHS	AA	AB		20013018	LBL.BCK.CVR.ASSY (TV) (WO/UL)	AA	AB
J139	30002583	JUMPER 0.6MM ROHS	AA	AB	△	20069673	FIRE BARRIER (I)(NATURAL-V.0) (AK30)	AA	AC
J140	30002583	JUMPER 0.6MM ROHS	AA	AB	△	20140383	BACK CVR.2163RF EKO2GRAY (AK44)	AQ	BA
J141	30002583	JUMPER 0.6MM ROHS	AA	AB		20141200	SNOW BOX ASSY 2163	AN	AZ
J142	30002583	JUMPER 0.6MM ROHS	AA	AB		20141421	CRT B.ASSY.TP44-RF/SF (AK44)	AQ	BA
J143	30002583	JUMPER 0.6MM ROHS	AA	AB		20143026	R/C 1548 SHARP (EKO2GRAY/I) (GRAY/S)	AM	AY
J144	30002583	JUMPER 0.6MM ROHS	AA	AB		20146661	MD.ASY.HP44-STEREO (HP+FAV) (AK44)	AE	AP
J145	30002583	JUMPER 0.6MM ROHS	AA	AB		20146997	CONTROL PAN.DOOR 2163RF SHARP SLV285S(P)	AD	AM
J146	30002583	JUMPER 0.6MM ROHS	AA	AB		20151168	SPK.AS.2163 SHARP (R) (AK44)	AM	AX
J147	30002583	JUMPER 0.6MM ROHS	AA	AB		20151169	SPK.AS.2163 SHARP (L) (AK44)	AM	AX
J148	30002583	JUMPER 0.6MM ROHS	AA	AB		20151304	POWER CORD ASSY.(2.2MT W/FTZ)(LONGWELL)	AD	AM
J149	30002583	JUMPER 0.6MM ROHS	AA	AB		20161431	FRONT2163AV3H W/H&J SLV285S/P/PW/S/2S/Mi	AT	BD
J150	30002583	JUMPER 0.6MM ROHS	AA	AB		20188958	CHS.ASSY.44-512D315132231H	BG	BZ
J209	30002583	JUMPER 0.6MM ROHS	AA	AB		20188959	LBL.BCK.CVR.SHARP 21LF90RU"AK44"	AA	AC
J210	30002583	JUMPER 0.6MM ROHS	AA	AB		20188960	LBL.CART.BOX SHARP 21LF90RU AK44(SILV)	AA	AC
J300	30012985	JUMPER SMD 0613	AA	AB		30016802	RES WW 5W 5.6R J RAD	AA	AD
J301	30012985	JUMPER SMD 0608	AA	AB		30027134	SPEAKER 16R 4W F/R 50x120MM-21" SHARP	AF	AR
J302	30012985	JUMPER SMD 0609	AA	AB		30027688	CNAS 2P/500 90° SPK DIS W/C+FER AWG24	AB	AE
J303	30012985	JUMPER SMD 0610	AA	AB		30027691	CNAS 2P/690 90° DIS W/BLK C+FER AWG24	AB	AE
J304	30012985	JUMPER SMD 0611	AA	AB	△	30028208	POWER CORD SAFE EURO 2.2M SHARP W/F ROHS	AG	AT
J305	30012985	JUMPER SMD 0612	AA	AB		35000013	SPRING ON/OFF SWITCH	AA	AB
J306	30001734	JUMPER SMD (0805)	AA	AB		35000180	SCREW C ZN YSMB M3*6	AA	AA
J307	30012985	JUMPER SMD 0615	AA	AB		35000181	SCREW C ZN YSMB M3*8	AA	AB
J308	30012985	JUMPER SMD 0614	AA	AB		35000182	SCREW C ZN YSMB M3*10	AA	AA
J312	30002583	JUMPER 0.6MM ROHS	AA	AB		35005084	SCREW C ZN RYAKB 6x30	AA	AB
JK1	30027655	JACK RCA 1P WHITE SHARP (AK44) ROHS	AA	AC		35005418	SCREW P C ZN YSB 3.5x10 (KN1031 T35X10)	AA	AA
JK100	30001900	JACK HEADPHONE HP012/3/4/5/6	AD	AM		35008081	SCREW P C ZN YFMB 3*9.5	AA	AA
JK100	30027656	JACK RCA 1P RED SHARP (AK44) ROHS	AA	AC		35008812	SCREW P C ZN RYSB 3x10	AA	AB
JK2	30027654	JACK RCA 1P YELLOW SHARP (AK44) ROHS	AA	AC		35008844	DOOR METAL SPRING (41x22.5) SHARP	AA	AC
NOT1	30009849	CABL 1P/70 SIS	AA	AB		35009300	SCREW P C ZN FYSB 4X16 (D:11)	AA	AB
PL100	30000283	CAP CER 1NF 50V K B ROHS	AA	AB		35010702	SCREW P C ZN YSB SK 4x18.5 (BEYAZ)	AA	AA
PL100	30001829	CONN HEADER 2P 2.5MM TOP WHT SD	AA	AB		40012331	RUBBER PAD (RC 1542)	AD	AL
PL100	30017953	CONN MALE 5P SIDE WHITE	AA	AA		40016817	LOGO SHARP (D.C.-SILVER)21"RF	AC	AH
PL100	30018405	CNAS 2P/250 SHL W/DC UL1533AWG24	AB	AF		40016859	RUBBER WASHER 2163RF (I) SHARP	AA	AB
PL100	30018454	CONN HEADER 2P 2.5MM TOP BLACK	AA	AA		40016871	DOOR SPACER (M10)	AA	AB
PL100	30027418	CONN HEADER 2P 2.5MM SIDE YELLOW SD ROHS	AA	AA		50043894	CONTROL STICKER STREO 2163RF SHARP	AD	AN
PL100	30027658	CNAS 2P+3P/300 W/C BLK&WHT UL1007AWG24	AB	AF		50048335	CARTON BOX SHARP SHARP (2163)	AL	AX
PL101	30015053	SOCKET SCART NEW TYPE	AB	AF		50060540	I/B SHARP 21LF90RU P/AK44/1548/E/RU	AC	AK
PL105	30001830	CONN HEADER 2P 2.5MM TOP BLUE SD	AA	AB					
PL107	30001835	CONN HEADER 3P 2.5MM TOP WHT SD	AA	AB					
PL109	30015192	CONN HEADER 2P 2.5MM TOP YELLOW SD	AA	AA					
PL110	30001830	CONN HEADER 2P 2.5MM TOP BLUE SD	AA	AB					
PL110	30027659	CNAS 2P/150 W/DC SHL BLUE ROHS	AC	AH					
PL115	30001835	CONN HEADER 3P 2.5MM TOP WHT SD	AA	AB					
PL115	30002251	CNAS 3P/280 SHL W/DC UL2547AWG24	AB	AF					
PL301	30001829	CONN HEADER 2P 2.5MM TOP WHT SD	AA	AB					
PL302	30018454	CONN HEADER 2P 2.5MM TOP BLACK	AA	AA					
PL405	30006709	CONN HEADER 5P 2.5MM TOP WHT SD	AA	AB					
PL407	30001836	CONN HEADER 3P 2.5MM TOP BLACK SD	AA	AB					
PL501	30001783	CONN HEADER 5P 2.5MM TOP BD	AA	AC					
PL503	30009085	CNAS 1P/350 DIS W/CLIPS	AA	AC					
PL504	30019101	CABL 1P/350 DIS UL1672AWG22	AA	AB					
PL601	30001827	CONN HEADER 4P 5/7.5MM TOP WHT	AA	AD					
PL602	30006660	CONN HEADER 4P 2.5MM TOP WHT SD	AA	AB					
PL801	30001792	CONN HEADER 2P 7.5MM TOP WHT SAFE	AA	AC					
PL802	30001795	CONN HEADER 3P 5/7.5MM TOP WHT	AA	AC					
PL900	30016695	CNAS 5P/450 FLT W/C+CBLL UL2468AWG24	AB	AE					
PL902	30016694	CNAS 4P/450 FLT W/C+ BLH UL2468AWG24	AA	AE					
△ PL903	30001855	SOCKET CRT SAFE NARROWNECK W/GND	AD	AM					
S105	30012985	JUMPER SMD 0616	AA	AB					
S106	30012985	JUMPER SMD 0617	AA	AB					
S107	30012985	JUMPER SMD 0618	AA	AB					
S405	30002583	JUMPER 0.6MM ROHS	AA	AB					
S410	30012985	JUMPER SMD 0605	AA	AB					
S412	30012985	JUMPER SMD 0603	AA	AB					

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