

■ TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
NO AUDIO	LOW OR NO REMOTE TURN-ON VOLTAGE	CHECK REMOTE CONNECTIONS AT AMPLIFIER AND SOURCE UNIT.
	BLOWN AMPLIFIER FUSE	REPLACE WITH NEW FAST-BLOW FUSE (SAME RATING).
	POWER WIRES NOT CONNECTED	CHECK BATTERY AND GROUND WIRING AT AMPLIFIER; ALSO CHECK BATTERY CONNECTIONS.
	SPEAKER LEADS SHORTED	CHECK SPEAKER CONTINUITY TO GROUND, IT SHOULD NOT SHOW A COMMON GROUND.
	SPEAKERS NOT CONNECTED OR ARE BLOWN	CHECK SPEAKER CONNECTIONS AT AMPLIFIER, MEASURE COIL IMPEDANCE.
AUDIO CYCLES ON AND OFF	THERMAL PROTECTION CIRCUITS ARE SHUTTING AMPLIFIER OFF	CHECK LOCATION FOR ADEQUATE VENTILATION; CONSULT AN AUTHORIZED CLARION AUDIO DEALER.
DISTORTED AUDIO.	GAIN IS NOT SET PROPERLY, OR DAMAGED SPEAKER CONES	REVIEW SETTING GAIN; INSPECT EACH SPEAKER CONE FOR SIGNS OF DAMAGE (I.E., FROZEN CONE, BURNING SMELL, ETC.)
AMPLIFIER FUSE KEEPS BLOWING	INCORRECT WIRING OR SHORT CIRCUIT	REVIEW INSTALLATION AND CHECK ALL WIRING CONNECTION.
WHINING OR TICKING NOISE IN THE AUDIO WITH ENGINE ON.	AMPLIFIER IS PICKING UP ALTERNATION NOISE OR RADIATED NOISE	TURN DOWN INPUT GAIN AND MOVE AUDIO CABLES AWAY FROM POWER WIRES. CHECK POWER AND GROUND CONNECTIONS ON AMPLIFIER AND INSTALL AN IN-LINE NOISE FILTER ON SOURCE UNIT'S POWER WIRE. ALSO CHECK THE ALTERNATOR AND /OR VOLTAGE. TEST FOR WEAK BATTERY OR ADD WATER TO BATTERY.

■ EXPLODED VIEW / PARTS LIST

REF	PART NO	DESCRIPTION	UNIT	Q'TY
1	MG-APX2180-01	LOGO BADGE (ALUMI, 304.8MM)	PCS	1
2	MM-APX2180-01	LED BOARD COVER (ABS)	PCS	1
3	APX2180-02	LED PCB ASSEMBY	PCS	1
4	MG-APX2180-02	MODEL BADGE (ALUMI, 304.8MM)	PCS	1
5	29-3975-0100-PD	TINFOIL (39*7.5mm TAK 0.1mm, SILVER)	PCS	4
6	MM-APX2180	ACRYLIC BOARD (PC or PS)	PCS	1
7	93-DB30-0000-01	HEATSINK (AL6063 L=304.8mm BLACK)	PCS	1
8	29-1602-0500-PD	FIBER PAPER (16*2*0.5MM)	PCS	12
9	93-DB38-0000	SUB HEATSINK (AL6063 L=38mm BLACK)	PCS	12
10	MM-DPX2250-02	SIDE RING (RIGHT) BLACK	PCS	2
11	MG-APX2180-R	REAR PANNEL (BLACK)	PCS	1
12	MM-3264-7900	SPACE BAR (Φ 3.2*Φ 6.4*H7.9MM)	PCS	2
13	JJ-FB24-1001	CLIP (1*10.2*24.2MM BLACK)	PCS	16
14	TIN-AMIT2-017	MIKA (18.5*13*0.1MM)	PCS	12
15	JJ-FS20-0706	BAR (4.2*7.7*20.4MM)	PCS	2
16	TIN-AMIT2-018	MIKA (25*20*0.1t/mm)	PCS	4
17	MM-DPX2250	BOTTOM COVER (BLACK)	PCS	1
18	29-3008-0500-DA	BOTTOM COVER PAD	PCS	2
19	MM-DPX2250-01	SIDE RING (LEFT)	PCS	2
20	MG-APX2180-L	FRONT PANNEL (BLACK)	PCS	1
21	APX2180-01	PCB	PCS	1
S1	LS-FBC0-0305	SCREW (3*5MM, BLACK, PHILIPPS)	PCS	4
S2	LS-FBD0-0308	SCREW (3*8MM, BLACK, PHILIPPS)	PCS	6
S3	LS-FBDG-0210-01	SCREW (2*10MM BLACK, PHILIPPS)	PCS	6
S4	LS-FBLO-0308	SCREW (3*8MM, HEX, BLACK)	PCS	3
S5	LS-FBLO-0406	SCREW (4*6MM, BLACK, HEX)	PCS	8
S6	LS-FBDO-0314	SCREW (3*14, BLACK PHILIPPS)	PCS	2
S7	LS-FBCG-0306	SCREW (3*6MM BLACK, PHILIPPS)	PCS	6
S8	LS-FSDO-0306-01	SCREW (3*6MM BLACK, PHILIPPS)	PCS	1
S9	LS-FBDO-0317	SCREW (M3*17MM BLACK, PHILIPPS W/PAD)	PCS	12

ELECTRICAL PART LIST

DESCRIPTION	SPEC	UNIT	Q'TY	LOCATION NO
CAPACITOR	0.1uF/50V 5% 5mm LS	PCS	29	C1 C3 C4 C5 C11 C12 C13 C14 C20 C21 C22 C25 C29 C49 C50 C51 C52 C53 C58 C67 C70 C73 C74 C75 C80 C82 C88
CAPACITOR	150pF/50V 5% 5mm LS	PCS	2	C10 C83
CAPACITOR	10pF/50V 5mm LS	PCS	2	C15 C85
CAPACITOR	0.0056uF/50V 5% 5mm LS	PCS	2	C16 C17
CAPACITOR	0.0056uF/50V 5% 5mm LS	PCS	2	C18 C19
E/CAPACITOR	47UF/16V 105°C 20% 6.3*7*2.5mmLS	PCS	3	C2 C71 C94
E/CAPACITOR	100uF/16V 85°C 8*11.5H*3.5mm	PCS	2	C30 C54
CAPACITOR	0.0047uF/50V 5% 5mm LS	PCS	1	C31
E/CAPACITOR	10UF/50V 105°C 5*11*2mm LS	PCS	8	C34 C35 C55 C64 C65 C87 C89 C92
CAPACITOR	0.0068uF/50V 5% 5mm LS	PCS	2	C36 C46
CAPACITOR	0.47uF/50V 5% 5mm LS	PCS	4	C37 C61 C62 C63
CAPACITOR	0.047uF/50V 5% 5mm LS	PCS	1	C38
CAPACITOR	0.001uF/50V 5% 5mm	PCS	2	C39 C48
E/CAPACITOR	470UF/25V105°C 10*16*5mmLS	PCS	2	C40 C41
CAPACITOR	33pF/50V 5mm LS	PCS	6	C42 C43 C56 C57 C86 C91
E/CAPACITOR	1000UF/25V 105°C 20% 10*20*5mmLS	PCS	2	C44 C45
E/CAPACITOR	6800UF/16V 20% 105°C 18*31.5*7.5	PCS	2	C47 C59
E/CAPACITOR	1000uF/50V 105°C 16*26*7.5mmLS	PCS	2	C6 C28
CAPACITOR	0.47uF/50V 5% 5mm LS	PCS	1	C60
CAPACITOR	0.0027uF/50V 5% 5mm LS	PCS	2	C66 C90
CAPACITOR	0.1uF/50V 5% 5mm LS	PCS	3	C68 C84 C93
CAPACITOR	0.01uF/50V 5% 5mm	PCS	3	C69 C78 C79
CAPACITOR	0.056uF/50V 5% 5mm LS	PCS	4	C7 C8 C23 C24
E/CAPACITOR	200uF32.5V 50% 5mmLS	PCS	1	C72
CAPACITOR	68pF/50V 5mm LS	PCS	8	C9 C26 C27 C32 C33 C76 C77 C81
ULTRA-FAST RECO	MUE8208A100V35ns	PCS	4	D1 D2 D3 D4
ULTRA-FAST RECO	IN4934 DO-41 1A 200V	PCS	2	D10 D12
RECTIFIER DIODE	3A 200V DO-201AD IN5402	PCS	1	D15
DIODE	DO-35 IN4148 500mA 100V DIP	PCS	10	D5 D6 D7 D8 D13 D14 D16 D17 D18 D19
RECTIFIER DIODE	IN4001 1A 50V	PCS	2	D9 D11
ZENER DIODE	IN5240B 10V DO-35 500mW	PCS	1	DZ1
ZENER DIODE	IN5231B 5.1V DO-35 500mW	PCS	1	DZ2
ZENER DIODE	IN5233B 6V DO-35 500mW	PCS	1	DZ3
ZENER DIODE	IN5266B 68V DO-35 500mW	PCS	2	DZ4 DZ5
FUSE	35A 32V (UL)	PCS	1	F1
FUSE HOLDER	JEF-703E BLACK	PCS	1	FH1
HI-LEVEL INPUT	5P L=120MM	PCS	1	HI-LEVEL INPUT
TERMINAL BLOCK	3P(JSE3A-25PC) BLACK	PCS	1	J1
TERMINAL BLOCK	4P(JSE4A-23PC) BLACK	PCS	1	J1
TERMINAL BLOCK	RJ41 6P BLACK	PCS	1	J2
RCA	2P WHITE / RED	PCS	1	J4
TERMINAL BLOCK	3P 2.54MM WHITE	PCS	1	J5
INDUCTOR	17-1/2, 1uH@0.8	PCS	2	L1 L2
INDUCTOR	Φ40 Φ1.2*2*24Ts	PCS	1	L3
JUMMPER	ψ2*18mm H=10mm	PCS	1	L4
LED	ψ3*4.8mm BLUE	PCS	1	LED1
LED HOLDER	10*8.2*4.3MM	PCS	1	LED1 LED2
LED	ψ3*4.8mm RED	PCS	1	LED2
TRANSISTER	IRF2807	PCS	2	M1 M2
GND	BLACK Φ6.5mm 1007 20#L=100mm	PCS	1	P9
TRANSISTER	TIP35CTO-218*ST*	PCS	2	Q1 Q26
SILICON TUBE	Φ2.0*6MM	PCS	8	Q1 Q9 Q26 Q33
TRIODO	MPSA56	PCS	6	Q10 Q12 Q13 Q16 Q17 Q22
TRIODO	MPSA06	PCS	7	Q11 Q14 Q15 Q18 Q19 Q21 Q24
TRIODO	MPSA06	PCS	6	Q2 Q6 Q7Q25 Q30 Q31
TRANSISTER	Semi 2N6715 NPN 2A TO-237	PCS	1	Q20
TRANSISTER	Semi 2N6726 PNP 2A TO-237	PCS	1	Q23
TRANSISTER	TIP31C	PCS	2	Q3 Q27
TRIODO	MPSA56	PCS	4	Q4 Q5 Q28 Q29
TRANSISTER	TIP32C	PCS	2	Q8 Q32
TRANSISTER	TIP36CTO-218*ST*	PCS	2	Q9 Q33
RESISTOR	475Ω 1/8W 1%	PCS	7	R1 R2 R22 R26 R105 R151 R155
RESISTOR	3.01K 1/8W 1%	PCS	2	R107 R117
RESISTOR	243K 1/8W 1%	PCS	2	R112 R144
RESISTOR	30.1K 1/8W 1%	PCS	1	R116
RESISTOR	6.81K 1/8W 1%	PCS	2	R118 R122
RESISTOR	5.62K 1/8W 1%	PCS	2	R119 R123
RESISTOR	5.1Ω 1/4W 1%	PCS	6	R12 R16 R27 R32 R84 R94
RESISTOR	21K 1/8W 1%	PCS	2	R126 R127
RESISTOR	590Ω 1/8W 1%	PCS	2	R141 R142
RESISTOR	475K 1/8W 1%	PCS	2	R143 R147
RESISTOR	390Ω 1/8W 1%	PCS	1	R160
RESISTOR	22.1K 1/8W 1%	PCS	2	R161 R173
RESISTOR	33.2K 1/8W 1%	PCS	2	R162 R167
RESISTOR	20Ω 1/8W 1%	PCS	1	R166
RESISTOR	9.31K 1/8W 1%	PCS	1	R169
RESISTOR	820Ω 1/4W 1%	PCS	2	R171 R175
RESISTOR	2.15K 1/8W 1%	PCS	2	R19 R148
RESISTOR	909Ω 1/8W 1%	PCS	2	R20 R149
RESISTOR	22.1Ω 1/8W 1%	PCS	17	R21 R23 R25 R41 R44 R46 R49 R66 R129 R131 R134 R136 R150 R152 R154 R183 R184
RESISTOR	6.34K 1/8W 1%	PCS	4	R24 R29 R153 R158
RESISTOR	100Ω 1/8W 1%	PCS	11	R3 R4 R5 R6 R73 R82 R83 R176 R177 R178 R179
RESISTOR	82.5Ω 1/8W 1%	PCS	2	R30 R157
RESISTOR	56.2Ω 1/8W 1%	PCS	3	R31 R140 R159
RESISTOR	2K 1/8W 1%	PCS	17	R33 R34 R35 R37 R43 R48 R50 R54 R55 R60 R64 R88 R114 R432 R137 R164 R172
RESISTOR	3.48K 1/8W 1%	PCS	2	R36 R63
RESISTOR	1.43K 1/8W 1%	PCS	2	R38 R77
RESISTOR	681Ω 1/8W 1%	PCS	5	R40 R45 R109 R130 R135
RESISTOR	1K 1/8W 1%	PCS	11	R42 R47 R62 R92 R108 R111 R133 R138 R163 R165 R170
RESISTOR	15.8K 1/8W 1%	PCS	1	R52

DESCRIPTION	SPEC	UNIT	Q'TY	LOCATION NO
RESISTOR	10K 1/8W 1%	PCS	4	R53 R65 R81 R124
RESISTOR	30ohm1/2W	PCS	1	R57
RESISTOR	392Ω 1/4W 1%	PCS	2	R61 R120
RESISTOR	475Ω 1/4W 1%	PCS	1	R67
RESISTOR	20K 1/8W 1%	PCS	8	R68 R69 R103 R104 R125 R180 R181 R182
RESISTOR	4.75K 1/8W 1%	PCS	19	R7 R11 R13 R14 R17 R18 R51 R56 R58 R59 R70 R72 R75 R76 R106 R110 R110 R113 R139
RESISTOR	47.5K 1/8W 1%	PCS	4	R74 R80 R115 R121
RESISTOR	18.2K 1/8W 1%	PCS	6	R78 R79 R96 R97 R145 R146
RESISTOR	8.25K 1/8W 1%	PCS	5	R8 R28 R39 R128 R156
RESISTOR	1.1K 1/8W 1%	PCS	2	R85 R102
RESISTOR	39.2K 1/8W 1%	PCS	1	R86
RESISTOR	93.1Ω 1/8W 1%	PCS	2	R87 R91
RESISTOR	18.2K 1/4W 1%	PCS	1	R89
RESISTOR	0.1Ω 1/2W 1%	PCS	4	R9 R15 R168 R174
RESISTOR	7.87K 1/4W 1%	PCS	2	R90 R100
RESISTOR	200Ω 1/8W 1%	PCS	1	R93
RESISTOR	750Ω 1/8W 1%	PCS	2	R95 99
RESISTOR	715Ω 1/8W 1%	PCS	2	R98 R101
SWITCH	4P2T	PCS	1	S1
SWITCH	3 SECTION	PCS	3	SW1 SW2 SW3
THERMISTOR	100K	PCS	2	TH1 TH2
TRANSISTER	ST L7915CV 15V 1A TO-220	PCS	1	U1
SILICON TUBE	Φ1.0*10MM WHITE	PCS	38	U1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 D1 D2 D3 D4 U17 Q27 Q28 Q29 Q30 Q31 Q32 M1 M2 TH1 TH2
IC	FAIRCHILDKA431	PCS	1	U12
IC	MICROCHIP PIC16F818-I/P8-BitCMOS DIP18	PCS	1	U13
IC	MC33079N	PCS	1	U15
IC	KA3525A	PCS	1	U16
TRANSISTER	ST L7815CV 15V 1A TO-220	PCS	1	U17
IC	TL072	PCS	3	U2 U4 U10
IC	5532DD	PCS	2	U3 U6
IC	TL074 DIP14	PCS	2	U5 U11
TRANSISTER	PC817 DIP4 PHOPTOCOUPLER	PCS	4	U7 U8 U9 U14
VR	220ohm blue	PCS	1	V1
VR	C50K L=15mm 41 BAND	PCS	1	VR1
VR	500ohm blue	PCS	2	VR1 VR5
VR	B20K*2 L=15mm	PCS	2	VR3 VR4
TRANSFORMER	Φ38mm 2*90W	PCS	1	X1
LED	3.2*1.8MM BLUE BLUE	PCS	4	
LED BOARD	37.8*18*1.0mm 94V0	PCS	1	
PCB	303.05*153.04*1.6mm FR-4	PCS	1	
HEAT SHRINK SLEEVE	Φ3*30mm BLACK	PCS	1	
CABLE	3PIN 2.5mm W/250mm RED/BLACK/RED 1007 22#	PCS	1	
CABLE	260mm RED/BLACK 1007 22#	PCS	2	