

DENON

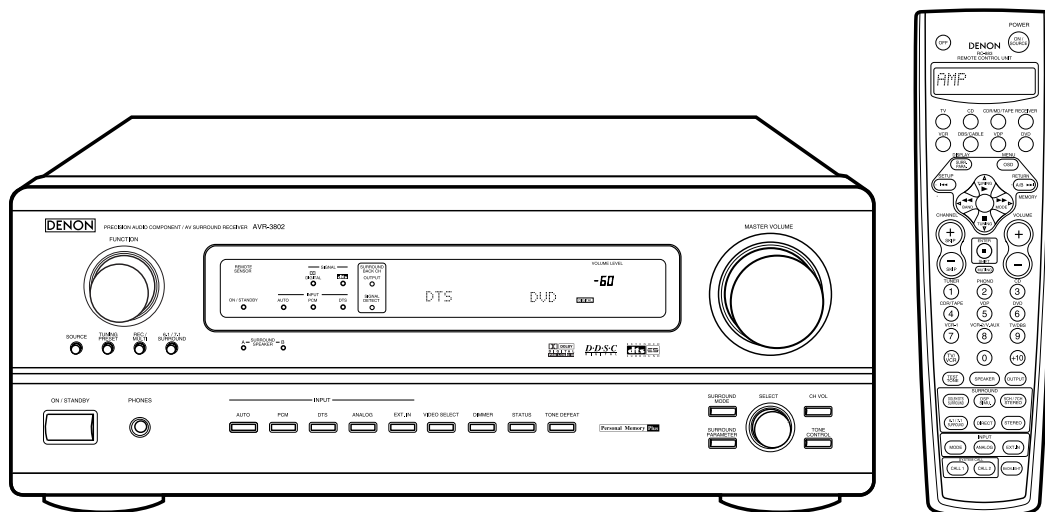
For U.S.A., Canada, Europe,
Asia, China, Hong Kong &
Taiwan R.O.C. model

Hi-Fi Component

SERVICE MANUAL

MODEL AVR-3802/1082

AV SURROUND RECEIVER



This service manual is composed of only pages whose contents are different from those for the model AVR-3801. For servicing, refer to the previously issued service manual of AVR-3801 at the same time.

● Some illustrations using in this service manual are slightly different from the actual set.

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SPECIFICATIONS

AUDIO SECTION

Power Amplifier

Rated output:	Front: 105W + 105W (8Ω/ohms, 20Hz ~ 20kHz with 0.05% T.H.D.) 110W + 110W (8Ω/ohms, 20Hz ~ 20kHz with 0.05% T.H.D.) (for North America model) 150W + 150W (6Ω/ohms, 1kHz with 0.7% T.H.D.) 180W + 180W (6Ω/ohms, EIAJ)
	Center: 105W (8Ω/ohms, 20Hz ~ 20kHz with 0.05% T.H.D.) 110W (8Ω/ohms, 20Hz ~ 20kHz with 0.05% T.H.D.) (for North America model) 150W (6Ω/ohms, 1kHz with 0.7% T.H.D.) 180W + 180W (6Ω/ohms, EIAJ)
	Surround: 105W + 105W (8Ω/ohms, 20Hz ~ 20kHz with 0.05% T.H.D.) 110W + 110W (8Ω/ohms, 20Hz ~ 20kHz with 0.05% T.H.D.) (for North America model) 150W + 150W (6Ω/ohms, 1kHz with 0.7% T.H.D.) 180W + 180W (6Ω/ohms, EIAJ)
	Surround Back: 105W + 105W (8Ω/ohms, 20 Hz ~ 20kHz with 0.05% T.H.D.) 110W + 110W (8Ω/ohms, 20Hz ~ 20kHz with 0.05% T.H.D.) (for North America model) 150W + 150W (6Ω/ohms, 1kHz with 0.7% T.H.D.) 180W + 180W (6Ω/ohms, EIAJ)
Dynamic power:	140W × 2ch (8Ω/ohms) 210W × 2ch (4Ω/ohms) 240W × 2ch (2Ω/ohms)
Output terminals:	Front, Center, Surr. Back/Multi Zone: 6 ~ 16Ω/ohms Surround: A or B 6 ~ 16Ω/ohms A + B 8 ~ 16Ω/ohms

Analog

Input sensitivity/input impedance:	200mV/47kΩ/kohms
Frequency response:	10Hz ~ 100kHz: +0, -3dB (DIRECT model)
S/N:	102dB (DIRECT mode)
Distortion:	0.005% (20Hz ~ 20kHz) (DIRECT mode)
Rated output:	1.2V

Digital

D/A output:	Rated output — 2V (at 0dB playback) Total harmonic distortion — 0.008% (1 kHz, at 0 dB) S/N ratio — 102dB Dynamic range — 96dB Format — Digital audio interface
Digital input:	Format — Digital audio interface

Phono equalizer (PHONO input — REC OUT)

Input sensitivity:	2.5mV
RIAA deviation:	±1dB (20Hz to 20kHz)
Signal-to-noise ratio:	74dB (A weighting, with 5mV input)
Rated output/Maximum output:	150mV/8V
Distortion factor:	0.03% (1kHz, 3V)

VIDEO SECTION

Standard video jacks

Input/output level and impedance:	1Vp-p, 75Ω/ohms
Frequency response:	5Hz ~ 10MHz — +0, -3dB

S-video jacks

Input/output level and impedance:	Y (brightness) signal — 1Vp-p, 75Ω/ohms C (color) signal — 0.286Vp-p, 75Ω/ohms
Frequency response:	5Hz ~ 10MHz — +0, -3dB

Color component video jacks

Input/output level and impedance:	Y (brightness) signal — 1Vp-p, 75Ω/ohms Cb (blue) signal — 0.7Vp-p, 75Ω/ohms Cr (red) signal — 0.7Vp-p, 75Ω/ohms
Frequency response:	5Hz ~ 27MHz — +0, -3dB

TUNER SECTION

Receiving Range:	[FM] (note: μV at 75Ω/ohms, 0dBf=1 × 10 ⁻¹⁵ W) 87.50MHz ~ 107.90MHz (for North America and multiple voltage models) 87.50MHz ~ 108.00MHz (for Europe, China, Hong Kong, Taiwan R.O.C. and Multiple voltage models)	[AM] 520kHz ~ 1710kHz (for North America and Multiple voltage models) 522kHz ~ 1611kHz (for Europe, China, Hong Kong, Taiwan R.O.C. and multiple voltage models)
Usable Sensitivity: 50dB Quieting Sensitivity:	1.0μV (11.2dBf) MONO: 1.6μV (15.3dBf) STEREO: 23μV (38.5dBf)	18μV
S/N (IHF-A):	MONO: 80dB STEREO: 75dB	
Total Harmonic Distortion (at 1kHz):	MONO: 0.15% STEREO: 0.3%	

GENERAL

Power supply:	AC120V, 60Hz (for North America and Taiwan R.O.C. models) AC230V, 50Hz (for Europe model) AC220V, 50Hz (for China model)
Power consumption:	AC115V/230V, 50/60Hz (for Hong Kong and Multiple voltage models) 7.1A (for North America model) 400W (for Europe, China, Hong Kong and Multiple voltage models) 360W (for Taiwan R.O.C. model) 2.0W Max (Standby)
Maximum external dimensions:	434 (W) × 171 (H) × 416 (D)mm (17-3/32" × 6-11/32" × 16-3/8")
Weight:	16.5kg (36 lbs 6 oz)

REMOTE CONTROL UNIT (RC-883: for North America, China, Hong Kong, Taiwan R.O.C. and Multiple voltage models) (RC-884: for Europe model)

Batteries:	R6P/AA Type (three batteries)
External dimensions:	61 (W) × 230 (H) × 34 (D)mm (2-13/32" × 9-1/16" × 1-11/32")
Weight:	200g (Approx. 7 oz) (including batteries)

Note: The symbols in the column "Remarks" indicate the following destinations.
 EU: U.S.A. model E1C: China model
 EC: Canada model E1H: Hong Kong model
 E2: Europe model EUT: Taiwan R.O.C.model
 E1: Asia model

PARTS LIST OF P.W.B. UNIT ASS'Y

1U-3315 POWER UNIT AVR-3801			
Ref. No.	Part No.	Part name	Remarks
SEMICONDUCTORS			
C507,508	2546223006	Electrolytic 12000µF/71V	CE68W==123MC(DL)

1U-3315 POWER UNIT AVR-3802/1082			
Ref. No.	Part No.	Part name	Remarks
SEMICONDUCTORS			
C507,508	2546213715	Electrolytic 15000µF/71V	CE68W==153MC(DL) *

1U-3316 EXT.IN UNIT ASS'Y AVR-3801			
Ref. No.	Part No.	Part name	Remarks
SEMICONDUCTORS GROUP			
IC801-804	2631098900	IC LM833MX	
RESISTORS GROUP			
R108	2472007901	Carbon chip 680 ohm 1/16W	RM73B--681JT
R301,302	2472007956	Carbon chip 1.1 kohm 1/16W	RM73B--112JT
R303,304	2472007901	Carbon chip 680 ohm 1/16W	RM73B--681JT
R307,308	2472007969	Carbon chip 1.2 kohm 1/16W	RM73B--122JT
R313,314	2472007969	Carbon chip 1.2 kohm 1/16W	RM73B--122JT
CAPACITORS GROUP			
C416	2544524943	Electrolytic 1µF/50V	CE04W1H010MT SMG/RE3

1U-3316 EXT.IN UNIT ASS'Y AVR-3802/1082			
Ref. No.	Part No.	Part name	Remarks
SEMICONDUCTORS GROUP			
IC801-804	2631098900	IC LM833MX	
RESISTORS GROUP			
R108		OPEN	
R301,302	2472009983	Carbon chip 10 kohm 1/16W	RM73B--103JT
R303,304	2472008968	Carbon chip 3.3 kohm 1/16W	RM73B--332JT
R307,308	2472010969	Carbon chip 22 kohm 1/16W	RM73B--223JT
R313,314	2472007985	Carbon chip 1.5 kohm 1/16W	RM73B--152JT
CAPACITORS GROUP			
C416		OPEN	

1U-3317 CONTROL UNIT AVR-3801			
Ref. No.	Part No.	Part name	Remarks
SEMICONDUCTORS			
IC303	2622856009	IC TMP88CU74-1B58	

1U-3317 CONTROL UNIT AVR-3802/1082			
Ref. No.	Part No.	Part name	Remarks
SEMICONDUCTORS			
IC303	2622970008	IC TMP88CU74-3DK8	

1U-3318 AMP CONNECT UNIT AVR-3801			
Ref. No.	Part No.	Part name	Remarks
CAPACITORS GROUP			
C331	2570503925	Ceramic chip 10pF/50V	CC73CH1H100DT
C332	2570503941	Ceramic chip 12pF/50V	CC73CH1H120JT
C557,558	2570503967	Ceramic chip 15pF/50V	CC73CH1H150JT
OTHER PARTS GROUP			
ST101	2050452004	Style pin	1
XL301	3990153006	Crystal 14.32MHZ-12PF	1
XL503	3990075003	Crystal 7.2 MHz	1

1U-3318 AMP CONNECT UNIT AVR-3802/1082			
Ref. No.	Part No.	Part name	Remarks
CAPACITORS GROUP			
C331	2570503909	Ceramic chip 8pF/50V	CC73CH1H8R0DT
C332	2570503912	Ceramic chip 9pF/50V	CC73CH1H9R0DT
C557,558	2570503983	Ceramic chip 18pF/50V	CC73CH1H180JT
OTHER PARTS GROUP			
ST101		OPEN	
XL301	3990739006	Crystal 14.32MHZ-RIBER	1
XL503	3990754007	Crystal 7.2 MHz-RIBER	1

1U-3319 REGULATOR UNIT AVR-3801			
Ref. No.	Part No.	Part name	Remarks
SEMICONDUCTORS			
IC701-703	2690178007	Optical connector GP1F37R1	
IC704	2622860901	IC MM74HCU04SJX	
IC707	2690177008	Optical connector GP1F38T2	
CAPACITORS GROUP			
C421		OPEN	
C477,478		OPEN	

1U-3319 REGULATOR UNIT AVR-3802/1082			
Ref. No.	Part No.	Part name	Remarks
SEMICONDUCTORS			
IC701-703	2690194007	Optical connector GP1FA551RZ	
IC704	2621205907	IC TC74HCU04AF	
IC707	2690187001	Optical connector GP1FA551TZ	
CAPACITORS GROUP			
C421	2570516909	Ceramic 0.022µF/25V	CK73B1E223KT
C477,478	2570516909	Ceramic 0.022µF/25V	CK73B1E223KT

1U-3320 AUDIO/DSP UNIT AVR-3801			
Ref. No.	Part No.	Part name	Remarks
SEMICONDUCTORS GROUP			
IC301	2622615004	IC TMP93CS41F	
IC302	2622682901	IC SN74LV573ANS-EL2	
IC303	2622632003	IC W29EE011P-90	
IC403	2622779005	IC LH28F800BVE-BTL90	
RESISTORS GROUP			
R331		OPEN	
R332	2472018903	Carbon chip 0 ohm 1/16W	RM73B--0R0KT
R771,772	2472012925	Carbon chip 100 kohm 1/16W	RM73B--104JT
CAPACITORS GROUP			
C183,184	2544524943	Electrolytic 1µF/50V	CE04W1H010MT SMG/RE3
C185,186		OPEN	
C633,634	2543056917	Electrolytic 1µF/50V	CE04D1H010MBPT (SME)
OTHER PARTS GROUP			
FB611		OPEN	1
IC303	2070021004	IC SOCKET(IC160)	1
IC403	2070020005	IC SOCKET(IC197)	1

1U-3320 AUDIO/DSP UNIT AVR-3802/1082			
Ref. No.	Part No.	Part name	Remarks
SEMICONDUCTORS GROUP			
IC301	2622968007	IC TMP93CS40F-3DN0	
IC302		OPEN	
IC303		OPEN	
IC403	2622969006	IC LH28F800BVE(3802)	
RESISTORS GROUP			
R331	2472018903	Carbon chip 0 ohm 1/16W	RM73B--0R0KT
R332		OPEN	
R771,772	2472010943	Carbon chip 18 kohm 1/16W	RM73B--183JT
CAPACITORS GROUP			
C183,184		OPEN	
C185,186	2544524943	Electrolytic 1µF/50V	CE04W1H010MT SMG/RE3
C633,634	2544524985	Electrolytic 10µF/50V	CE04W1H100MT SMG/RE3
OTHER PARTS GROUP			
FB611	2570511904	Ceramic chip 0.01µF/50V	CK73F1H103ZT
IC303		OPEN	
IC403		OPEN	

Note: The symbols in the column "Remarks" indicate the following destinations.
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 E1: Asia model


PARTS LIST OF EXPLODED VIEW

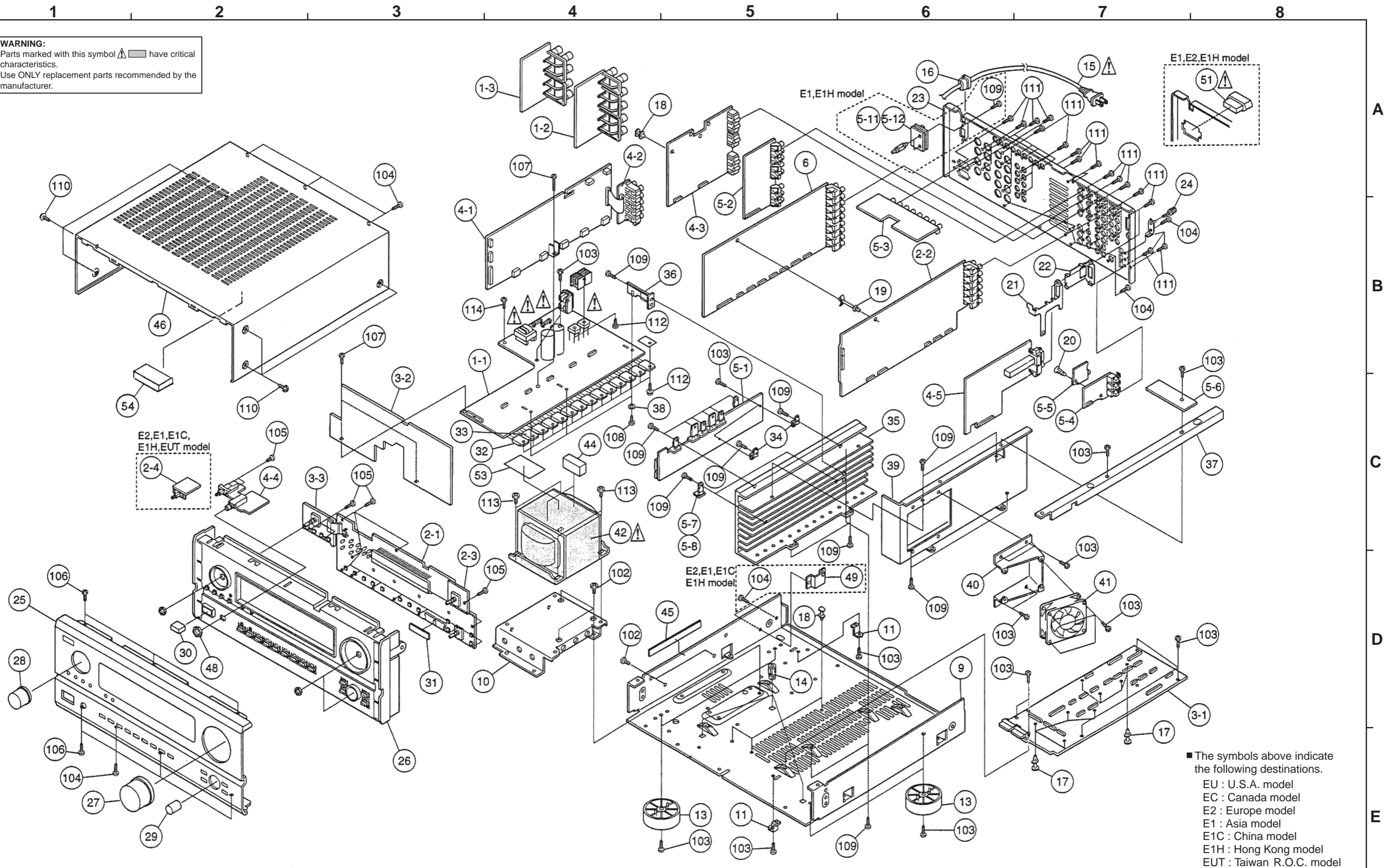
AVR-3801					AVR-3802/1082					
Ref. No.	Part No.	Part name	Remarks	Q'ty	Ref. No.	Part No.	Part name	Remarks	Q'ty	
1	1U-3315	Power unit Ass'y	for EU,EC	1	1	1U-3315G	Power unit Ass'y	for EU,EC,1082EU	1	
	1U-3315 A		for E1,E1H			1U-3315 K		for E1,E1H		
	1U-3315 B		for E2			1U-3315 J		for E2		
-1-1	1U-3315-1	Power unit		1	-1-1	1U-3315G-1	Power unit		1	
	1U-3315-2	SP F unit				1U-3315G-2	SP F unit			
-1-2	1U-3315-3	SP S unit		-1-2	1U-3315G-3	SP S unit				
-1-3	1U-3316	EXT.IN unit Ass'y	for EU,EC	1	-1-3	1U-3316G	EXT.IN unit Ass'y	for EU,EC,1082EU	1	
2	1U-3316 A		for E1,E1H,E1C	1	2	1U-3316 K		for E1,E1H,E1C	1	
	1U-3316 B		for E2			1U-3316 J		for E2		
	1U-3316 E		for EUT			1U-3316 M		for EUT		
-2-1	1U-3316-1	Display unit		-2-1	1U-3316G-1	Display unit				
-2-2	1U-3316-2	EXT IN VR unit		-2-2	1U-3316G-2	EXT IN VR unit				
-2-3	1U-3316-3	VOL. unit		-2-3	1U-3316G-3	VOL. unit				
-2-4	1U-3316-4	Power SW unit	for E1,E1H,E1C,EUT,E2	1	-2-4	1U-3316K-4	Power SW unit	for E1,E1H,E1C,EUT,E2	1	
3	1U-3317	Control unit Ass'y	for EU,EC	1	3	1U-3338G	Control unit Ass'y	for EU,EC,1082EU	1	
	1U-3317 A		for E1,E1H			1U-3338 K		for E1,E1H		
	1U-3317 B		for E2			1U-3338 J		for E2		
1U-3317 E		for EUT		1U-3338 M		for EUT				
1U-3317 F		for E1C		1U-3338 L		for E1C				
-3-1	1U-3317-1	Control unit		-3-1	1U-3338G-1	Control unit				
-3-2	1U-3317-2	Connect unit		-3-2	1U-3338G-2	Connect unit				
-3-3	1U-3317-3	Front unit		-3-3	1U-3338G-3	Front unit				
4	1U-3318	AMP connect unit Ass'y	for EU,EC	1	4	1U-3318G	AMP connect unit Ass'y	for EU,EC,1082EU	1	
	1U-3318 A		for E1,E1H			1U-3318 K		for E1,E1H		
	1U-3318 B		for E2			1U-3318 J		for E2		
1U-3318 E		for EUT,E1C		1U-3318 L		for EUT,E1C				
-4-1	1U-3318-1	AMP connect unit		-4-1	1U-3318G-1	AMP connect unit				
-4-2	1U-3318-2	PRE OUT unit		-4-2	1U-3318G-2	PRE OUT unit				
-4-3	1U-3318-3	S-video unit		-4-3	1U-3318G-3	S-video unit				
-4-4	1U-3318-4	P.SW & H/P unit		-4-4	1U-3318G-4	P.SW & H/P unit				
-4-5	1U-3318-5	Tuner unit		-4-5	1U-3318G-5	Tuner unit				
5	1U-3319	Regulator unit Ass'y	for EU,EC	1	5	1U-3319G	Regulator unit Ass'y	for EU,EC,1082EU	1	
	1U-3319 A		for E1,E1H			1U-3319 K		for E1,E1H		
	1U-3319 B		for E2,E1C			1U-3319 J		for E2,E1C		
1U-3319 E		for EUT		1U-3319 M		for EUT				
-5-1	1U-3319-1	Regulator unit		-5-1	1U-3319G-1	Regulator unit				
-5-2	1U-3319-2	C.video unit		-5-2	1U-3319G-2	C.video unit				
-5-3	1U-3319-3	COMP.video unit		-5-3	1U-3319G-3	COMP.video unit				
-5-4	1U-3319-4	Digital In-1 unit		-5-4	1U-3319G-4	Digital In-1 unit				
-5-5	1U-3319-5	Digital In-2 unit		-5-5	1U-3319G-5	Digital In-2 unit				
-5-6	1U-3319-6	Holder unit		-5-6	1U-3319G-6	Holder unit				
-5-7	1U-3319-8	PT903 unit		-5-7	1U-3319G-8	PT903 unit				
-5-8	1U-3319-9	PT902 unit		-5-8	1U-3319G-9	PT902 unit				
-5-11	1U-3319-11	Voltage select-1 unit	for E1,E1H	-5-11	1U-3319K-11	Voltage select-1 unit	for E1,E1H			
-5-12	1U-3319-12	Voltage select-2 unit	for E1,E1H	-5-12	1U-3319K-12	Voltage select-2 unit	for E1,E1H			
6	1U-3320	AUDIO/DSP unit Ass'y	for EU,EC	1	6	1U-3320G	AUDIO/DSP unit Ass'y	for EU,EC,1082EU	1	
	1U-3320A		for E1,E1H,E1C			1U-3320 K		for E1,E1H,E1C		
	1U-3320 B		for E2			1U-3320 J		for E2		
1U-3320E		for EUT		1U-3320M		for EUT				
12	4124716001	Support bracket		12	4124716001	Support bracket			0	
23	1051353103	Back panel	for EU,EC	1	23	1051381007	Back panel	for EU,EC	1	
	1051353129	Back panel	for E2	1		1051381010	Back panel	for E2	1	
	1051353132	Back panel	for E1,E1H	1		1051381023	Back panel	for E1,E1H	1	
	1051353158	Back panel	for E1C	1		1051381036	Back panel	for E1C	1	
	1051353145	Back panel	for EUT	1		1051381049	Back panel	for EUT	1	
						1051381078	Back panel	for 1082EU	1	
25	1442745003	Front panel Ass'y	for EU,EC	1	25	1442770007	Front panel Ass'y	for EU,EC	1	
	1442745032	Front panel Ass'y (BK)	for E2	1		1442770023	Front panel Ass'y (BK)	for E2	1	
	1442745045	Front panel Ass'y (G)	for E2	1		1442770036	Front panel Ass'y (G)	for E2	1	
	1442745029	Front panel Ass'y	for E1,E1H,EUT,E1C	1		1442770049	Front panel Ass'y	for E1,E1H,EUT,E1C	1	
						1442770052	Front panel Ass'y	for 1082EU	1	
26	1462221002	Inner panel Ass'y	for EU,EC	1	26	1462221138	Inner panel Ass'y(BK)	for EU,EC,E2	1	
	1462221015	Inner panel Ass'y	for E2,E1,E1H,EUT,E1C	1		1462221141	Inner panel Ass'y(G)	for E2,E1,E1H,EUT,E1C	1	
42	2336352006	Power trans	for EU,EC,EUT	1	42	1462221154	Inner panel Ass'y(BK)	for 1082EU	1	
	2336356002	Power trans	for E2	1		2336363008	Power trans	for EU,EC,EUT,1082EU	1	
	2336357001	Power trans	for E1,E1H	1		2336364007	Power trans	for E2	1	
	2336317009	Power trans	for E1C	1		2336365006	Power trans	for E1,E1H	1	
						2336366005	Power trans	for E1C	1	
				4610976025	Rubber sheet	Top cover		1		
SCREWS					SCREWS					
	101	4737002005	Screw 3X6 CBTS (S)-Z	10		101	4737002005	Screw 3X6 CBTS (S)-Z		0
	103	4737005002	Screw 3X10 CBTS (S)-Z	29		103	4737005002	Screw 3X10 CBTS (S)-Z		28
					114	4718010100	Special screw	Power unit	1	

PARTS LIST OF PACKING ACCESSORIES

AVR-3801					AVR-3802/1082				
Ref. No.	Part No.	Part name	Remarks	Q'ty	Ref. No.	Part No.	Part name	Remarks	Q'ty
203	5113663009	Inst manual (E3)	for EU,EC	1	203	5113785107	Inst manual (EU)	for EU,EC	1
	5113729008	Inst manual (EC)	for EC	1		5113786106	Inst manual (EC)	for EC	1
	5113709002	Inst manual (E2)	for E2	1		5113803005	Inst manual (E2)	for E2	1
	5113708003	Inst manual (E1)	for E1,E1H,EUT	1		5113804004	Inst manual (E1)	for E1,E1H,EUT	1
	5113710004	Inst manual (E1C)	for E1C	1		5113805003	Inst manual (E1C)	for E1C	1
215	5012100029	Carton case	for EU,EC,E1,E2,EUT	1	215	5113884008	Inst manual (1082)	for 1082EU	1
	5012100032	Carton case	for E1H	1		5012100058	Carton case	for EU,EC,E1,E2,EUT	1
221	5133549006	Carton label (T)	for EUT	1	221	5012100061	Carton case	for E1H	1
	5133518008	Carton label (C)	for E1C	1		5012099059	Carton case	for 1082EU	1
						5133549035	Carton label (T)	for EUT	1
					5133518037	Carton label (C)	for E1C	1	

EXPLODED VIEW

WARNING:
Parts marked with this symbol  have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.



■ The symbols above indicate the following destinations.
EU : U.S.A. model
EC : Canada model
E2 : Europe model
E1 : Asia model
E1C : China model
E1H : Hong Kong model
EUT : Taiwan R.O.C. model