

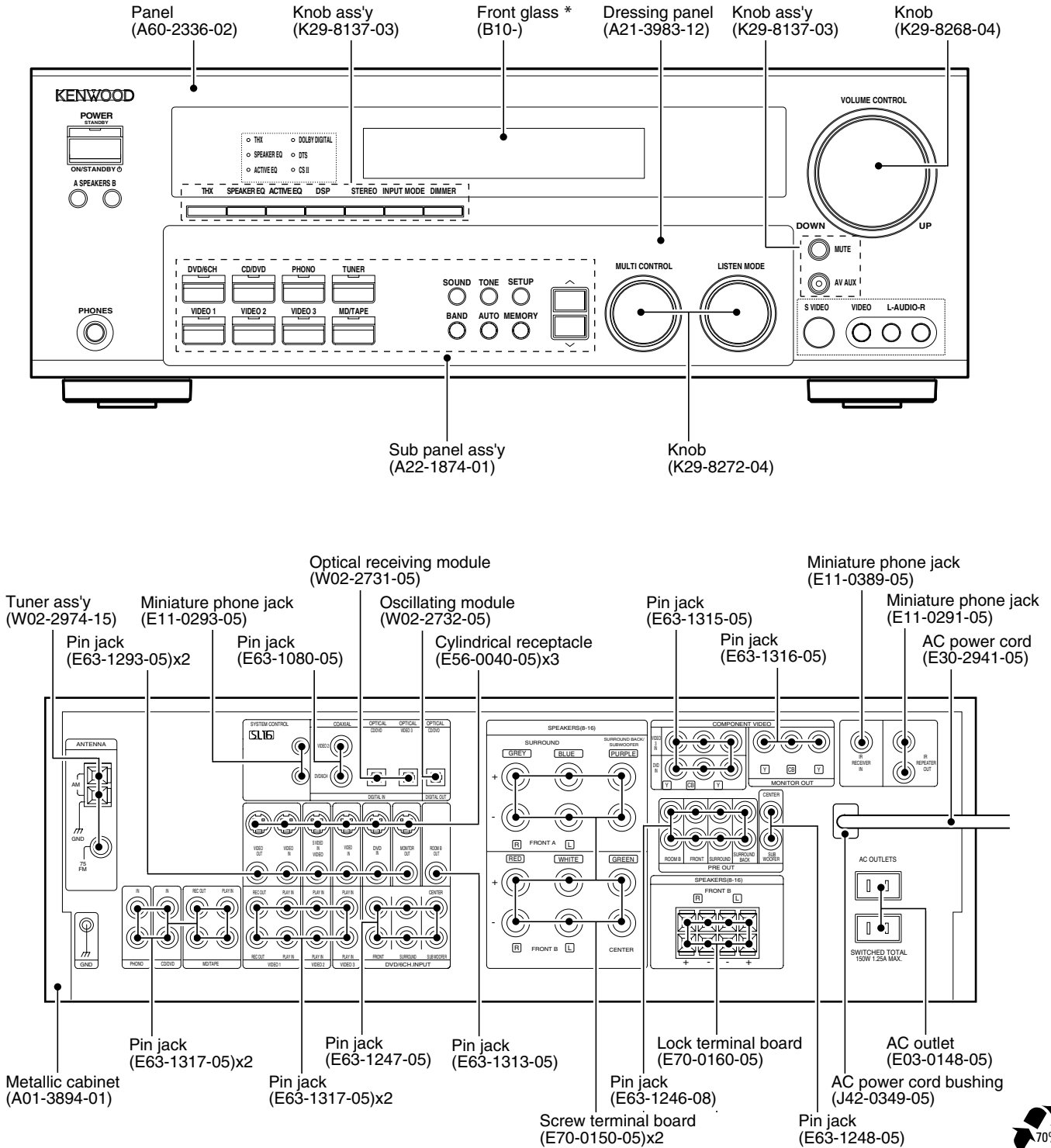
# VR-7070A/7080A

## SERVICE MANUAL

© 2003-8 PRINTED IN KOREA  
B51-5875-00 (K/K) 1362

**Note:**

A different information will be available from this service manual. Pls refer to original service manual(B51-5843-00), too.



\* Refer to parts list on page 6.



# VR-7070A/7080A

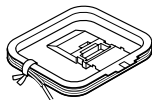
## ACCESSORIES / CAUTIONS

### Accessories

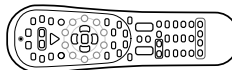
FM indoor antenna (1)  
(T90-0905-05)



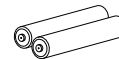
AM loop antenna (1)  
(T90-0893-05)



RF remote antenna (1)  
Refer to the table on this page below.



Batteries (R6/AA) (2)



### REMOTE CONTROL vs MODEL

MODEL	ABBRI.	PARTS #	BATTERY COVER
VR-7070A	K7	A70-1620-05	A09-1274-08
VR-7070A	P7	A70-1620-05	A09-1274-08
VR-7080A	K8	A70-1619-05	A09-1275-08
VR-7080A	P8	A70-1619-05	A09-1275-08

### DIFFERENT POINT

Model	Service Manual	Surround	Audio	Display	Sub	
VR-7070	B51-5843-00	X08-3130-12	X09-6760-10	X14-7630-10	X25-6490-14	
VR-7070A	-		<b>X09-6830-10</b>		<b>Change point;</b> <b>R97,98,147,148,197,198, VR1-</b> <b>6,Q11-14,31-34,51-54, D23</b>	<b>X25-6620-10</b>
VR-7080	B51-5843-00		X09-6760-10			X25-6490-14
VR-7080A	-		<b>X09-6830-10</b>			<b>X25-6620-10</b>

#### Note:


A different information will be available from this service manual. Pls refer to original service manual(B51-5843-00), too.

### Cautions

#### Resetting the Microcomputer

The microcomputer may malfunction (unit cannot be operated, or shows an erroneous display) if the power cord is unplugged while the power is ON, or due to some other external factor. If this happens, execute the following procedure to reset the microcomputer and return the unit to its normal operating condition.

- Please note that resetting the microcomputer will clear the contents of the memory and returns the unit to the state it was in when it left the factory.

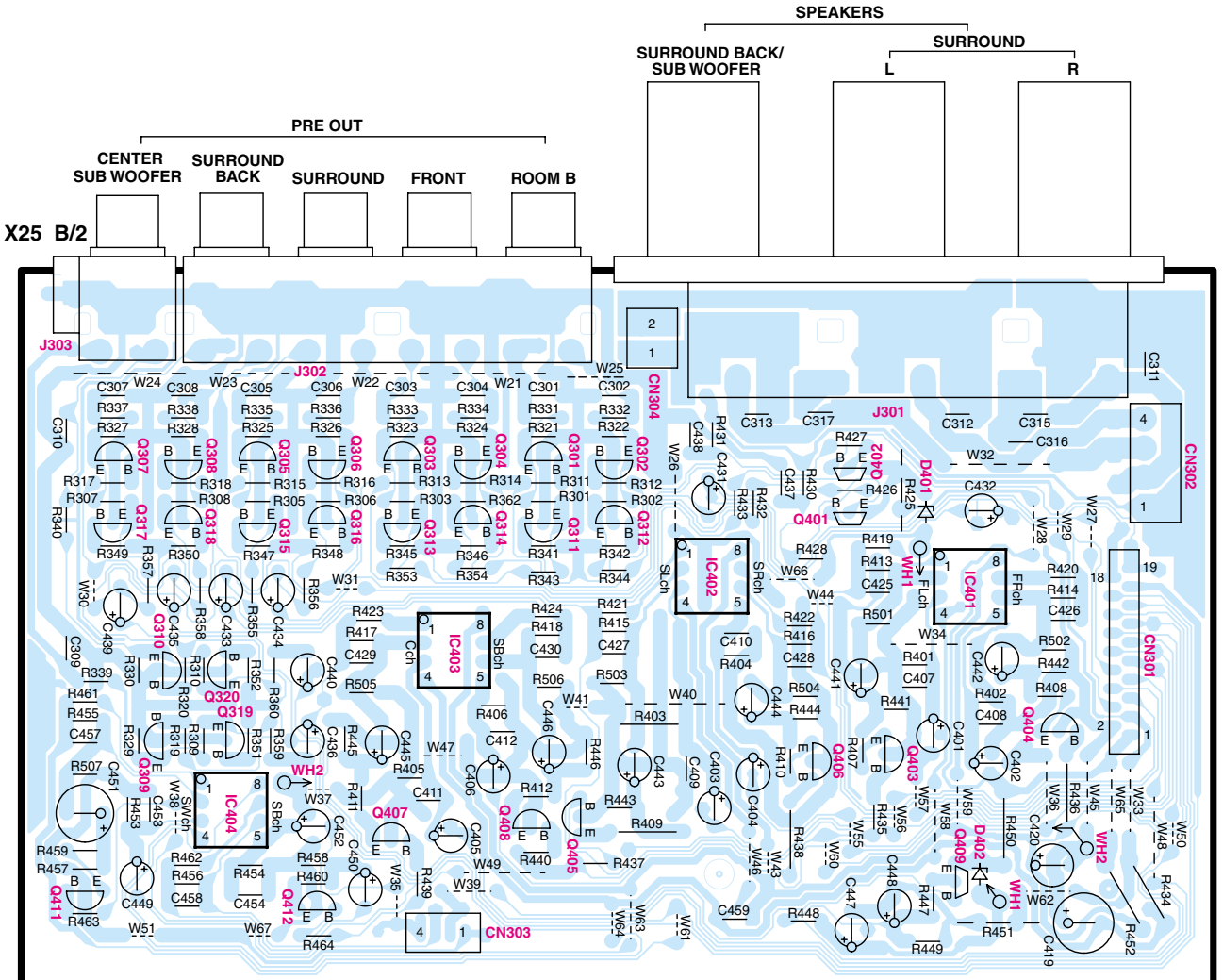
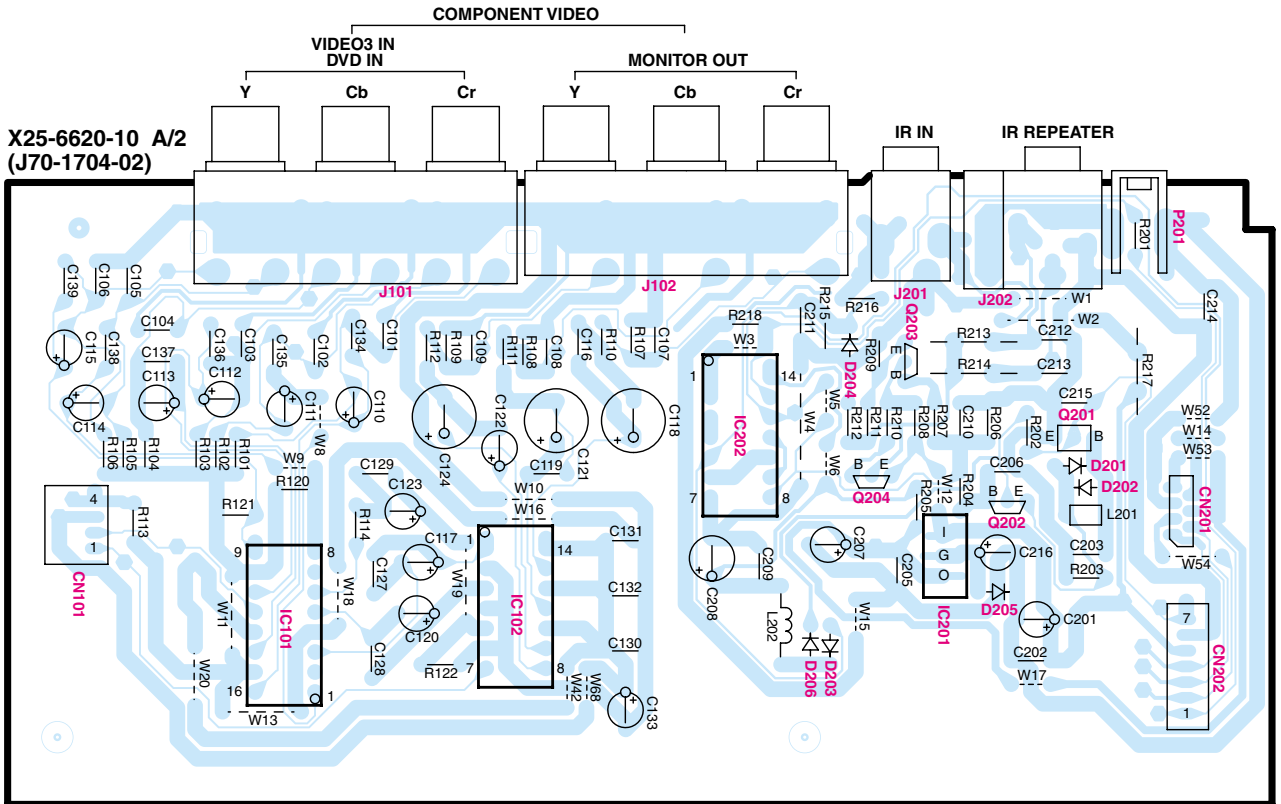
Unplug the power cord from the wall outlet, then plug it back in while holding down the POWER ON/STANDBY  key.

#### Memory back up function

Please note that the following items will be deleted from the unit's memory if the power cord is disconnected from the AC outlet for approximately 1 day.

- Power mode.
- Input selector settings.
- Picture output.
- Speaker ON/OFF.
- Volume level.
- BASS, TREBLE, INPUT level.
- TONE ON/OFF.
- LOUDNESS ON/OFF.
- Dimmer level.
- MD/TAPE settings.
- Listen mode setting.
- Speaker settings.
- SW RE-MIX ON/OFF.
- Distance setting.
- Bass peak level.
- Input mode setting.
- Midnight mode setting.
- PRO LOGIC II mode setting.
- CS II mode setting.
- Broadcast band.
- Frequency setting.
- Preset stations.
- Tuning mode.
- THX mode.
- DSP mode.
- ACTIVE EQ mode.
- SPEAKER EQ mode.

# PC BOARD



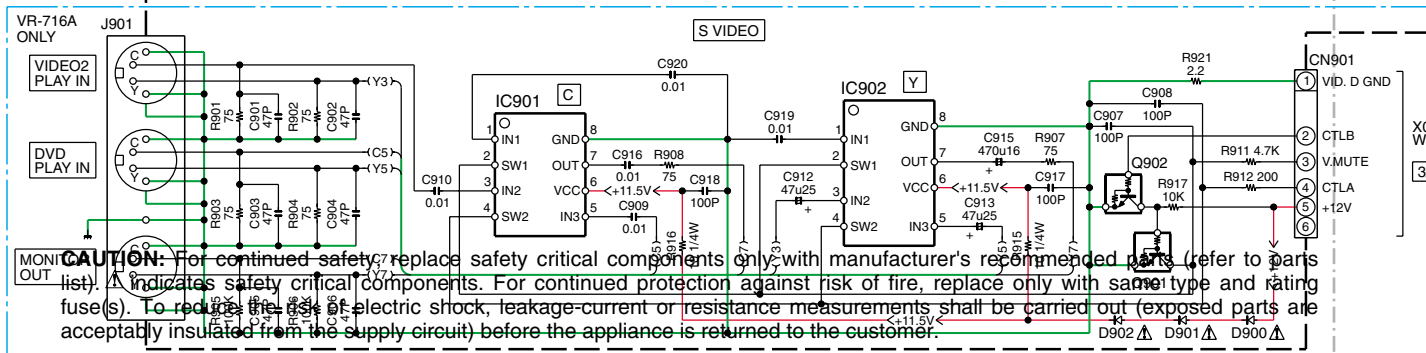
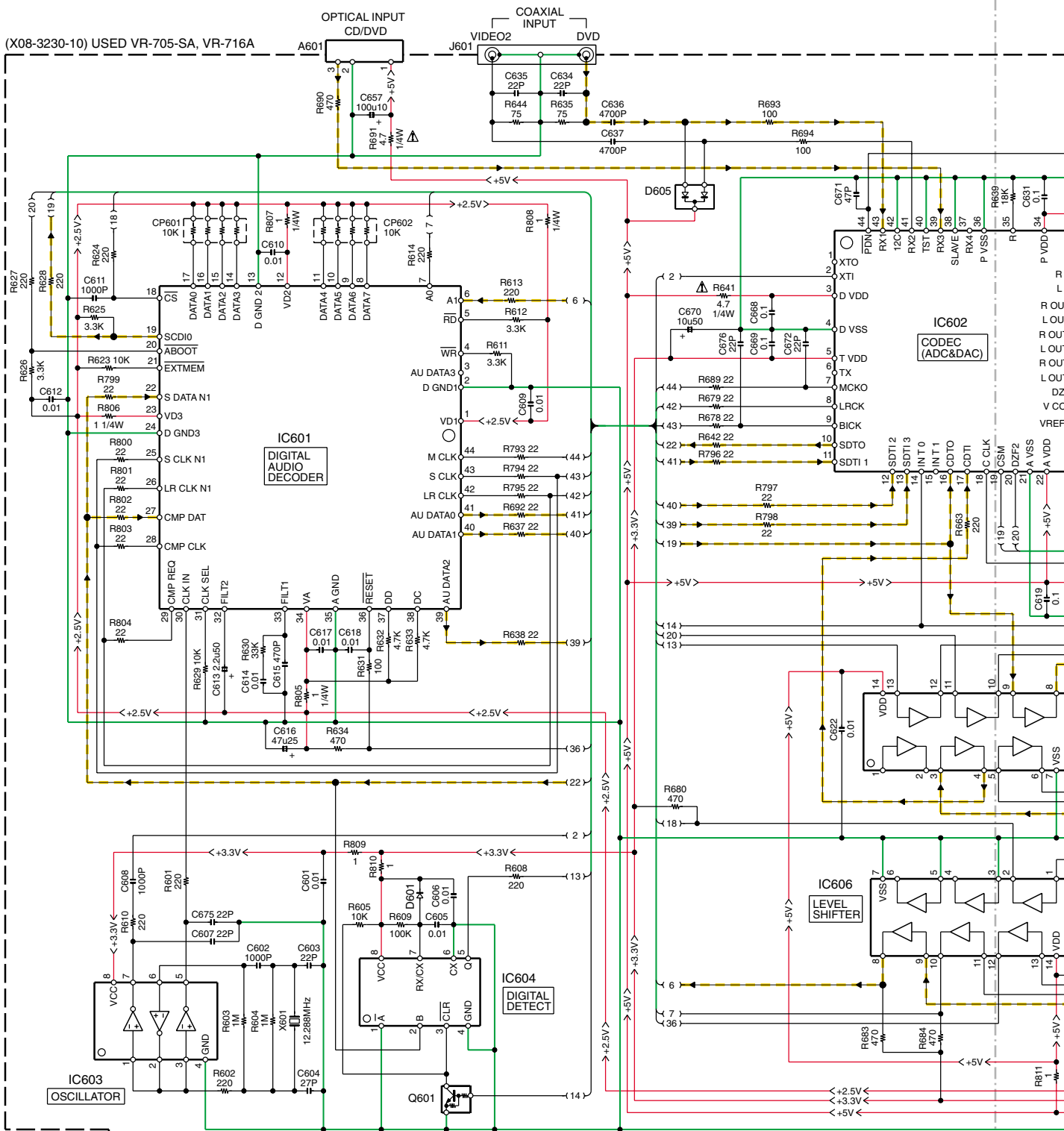
Refer to the schematic diagram for the value of resistors and capacitors.

# VR-7070A/7080A

AK-2

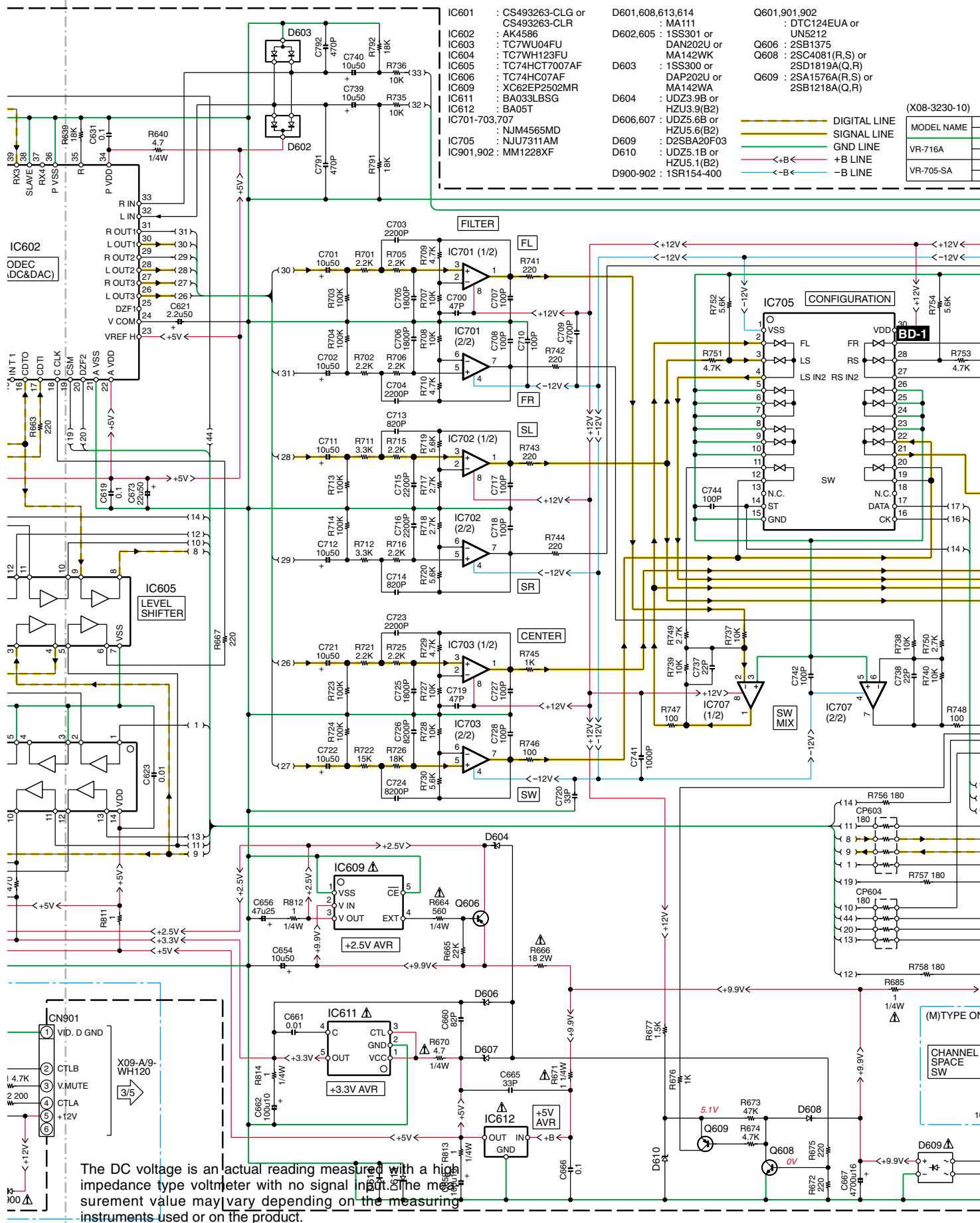
AK-2

(X08-3230-10) USED VR-705-SA, VR-716A



**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

# VR-7070A/7080A



The DC voltage is an actual reading measured with a high impedance type voltmeter with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.

\* New Parts  
Parts without **Parts No.** are not supplied.  
Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.  
Teile ohne **Parts No.** werden nicht geliefert.

①

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
<b>VR-7070A(K7,P7)/VR-7080A(K8,P8)</b>						
601	1C		A01-3894-01	METALLIC CABINET		
602	1C		A09-1274-08	BATTERY COVER	K7P7	
602	1C		A09-1275-08	BATTERY COVER	K8P8	
604	2C		A21-3983-12	DRESSING PANEL		
605	2D		A22-1874-01	SUB PANEL ASSY		
606	2C		A60-2336-02	PANEL		
607	1C		A70-1619-05	REMOTE CONTROLLER ASSY	K8P8	
607	1C		A70-1620-05	REMOTE CONTROLLER ASSY	K7P7	
-			B12-0443-04	INDICATOR		
-			B60-5341-00	INSTRUCTION MANUAL	K8P8	
-			B60-5342-00	INSTRUCTION MANUAL	P8	
-			B60-5343-00	INSTRUCTION MANUAL	K7P7	
-			B60-5344-00	INSTRUCTION MANUAL	P7	
-		*	B60-5421-00	INSTRUCTION MANUAL		
611	3A	*	B07-2617-11	ESCUTCHEON+KNOB(#633)		
612	2D	*	B07-2607-03	ESCUTCHEON		
613	2C		B07-2609-03	ESCUTCHEON		
614	2D		B07-2620-13	ESCUTCHEON		
615	2C		B10-3925-12	FRONT GLASS	K7P7	
615	2C		B10-3933-12	FRONT GLASS	K8P8	
616	2C		B11-1571-13	COLOR FILTER		
617	2D		B12-0440-04	INDICATOR		
618	2D		B12-0442-04	INDICATOR		
620	2C		B43-0314-04	KENWOOD BADGE		
△ 625	1E		E30-2941-05	AC POWER CORD		
626	1E,2E		E35-2841-05	FLAT CABLE		
628	1D,2E		E35-3216-05	FLAT CABLE		
637	2E		G11-2885-04	CUSHION		
638	1D,2E		G11-2886-04	CUSHION		
639	2C		G11-2887-04	CUSHION		
-			J61-0307-05	WIRE BAND		
643	2E		J02-1532-03	FOOT		
△ 644	2E		J19-3751-04	UNIT HOLDER		
654	1E		J42-0349-05	POWER CORD BUSHING		
659	2D		K29-8268-04	KNOB		
660	2C		K29-8272-04	KNOB		
661	2D		K29-8137-03	KNOB ASSY		
△ 665	2D	*	L07-3275-05	POWER TRANSFORMER		
670	1C		T90-0893-05	LOOP ANTENNA		
671	1C	*	T90-0905-05	LEAD WIRE ANTENNA		
675	1E		W02-2974-15	TUNER ASSY		
<b>AUDIO (X09-6830-10)</b>						
R97 ,98			RD14NB2E151J	RD 150 J 1/4W		
R147,148			RD14NB2E151J	RD 150 J 1/4W		
R197,198			RD14NB2E151J	RD 150 J 1/4W		
VR1 -6			R32-0030-05	SEMI FIXED VARIABLE RESISTOR		
D23			HZS11N(B)	ZENER DIODE		
D23			MTZJ11(B)	ZENER DIODE		
D23			RD11ES(B)	ZENER DIODE		

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②

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
Q11 ,12			TRAIT8N*5	TRANSISTOR		
Q13 ,14			TRAIT8P*5	TRANSISTOR		
Q31 ,32			TRAIT8N*5	TRANSISTOR		
Q33 ,34			TRAIT8P*5	TRANSISTOR		
Q51 ,52			TRAIT8N*5	TRANSISTOR		
Q53 ,54			TRAIT8P*5	TRANSISTOR		
<b>SUB(X25-6620-10)</b>						
C101-109			CC45FCH1H100D	CERAMIC 10PF D		
C110-115			CE04LW1H100M	ELECTRO 10UF 50WV		
C116			CK45FF1H103Z	CERAMIC 0.010UF Z		
C117			CE04LW1H100M	ELECTRO 10UF 50WV		
C118			CE04LW1A471M	ELECTRO 470UF 10WV		
C119			CK45FF1H103Z	CERAMIC 0.010UF Z		
C120			CE04LW1H100M	ELECTRO 10UF 50WV		
C121			CE04LW1A471M	ELECTRO 470UF 10WV		
C122			CE04KW1E330M	ELECTRO 33UF 25WV		
C123			CE04LW1H100M	ELECTRO 10UF 50WV		
C124			CE04LW1A471M	ELECTRO 470UF 10WV		
C127-129			CK45FF1H103Z	CERAMIC 0.010UF Z		
C130-132			CQ93FMG1H104J	MYLAR 0.10UF J		
C133			CE04LW1E470M	ELECTRO 47UF 25WV		
C134-139			CK45FF1H103Z	CERAMIC 0.010UF Z		
C201			CE04LW1H100M	ELECTRO 10UF 50WV		
C202			CK45FF1H103Z	CERAMIC 0.010UF Z		
C203			CQ93FMG1H683J	MYLAR 0.068UF J		
C205,206			CK45FF1H103Z	CERAMIC 0.010UF Z		
C207			CE04LW1A101M	ELECTRO 100UF 10WV		
C208			CE04LW1A221M	ELECTRO 220UF 10WV		
C209			CK45FF1H103Z	CERAMIC 0.010UF Z		
C210			CC45FSL1H221J	CERAMIC 220PF J		
C211-213			CC45FSL1H101J	CERAMIC 100PF J		
C214,215			CK45FF1H103Z	CERAMIC 0.010UF Z		
C216			CE04LW1H010M	ELECTRO 1.0UF 50WV		
C301-310			CC45FSL1H221J	CERAMIC 220PF J		
C311-313			CK45FB1H332K	CERAMIC 3300PF K		
C315-317			CC45FSL1H101J	CERAMIC 100PF J		
C401-406			CE04KW1H220M	ELECTRO 22UF 50WV		
C407-412			CC45FSL1H221J	CERAMIC 220PF J		
C419			CE04KW1E221M	ELECTRO 220UF 25WV		
C420			CE04KW1E101M	ELECTRO 100UF 25WV		
C425,426			CC45FCH1H101J	CERAMIC 100PF J		
C427-430			CC45FCH1H100D	CERAMIC 10PF D		
C431-436			CE04KW1E470M	ELECTRO 47UF 25WV		
C437,438			CE04HW1E220M	NP-ELEC 22UF 25WV		
C439,440			CE04KW1E470M	ELECTRO 47UF 25WV		
C441,442			CE04KW1A101M	ELECTRO 100UF 10WV		
C443-446			CE04KW1H220M	ELECTRO 22UF 50WV		
C447			CE04LW1H100M	ELECTRO 10UF 50WV		
C448			CE04KW2A3R3M	ELECTRO 3.3UF 100WV		
C449,450			CE04KW1H220M	ELECTRO 22UF 50WV		
C451			CE04KW1E221M	ELECTRO 220UF 25WV		
C452			CE04KW1H220M	ELECTRO 22UF 50WV		
C453,454			CC45FSL1H221J	CERAMIC 220PF J		
C457			CQ93FMG1H392J	MYLAR 3900PF J		

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Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
C458			CC45FCH1H100D	CERAMIC 10PF D		
C459			CC45FSL1H470J	CERAMIC 47PF J		
CN101			E40-3262-05	PIN ASSY		
CN202			E40-3251-05	PIN ASSY		
CN301			E40-8483-05	FLAT CABLE CONNECTOR		
CN302			E40-4101-05	PIN ASSY		
CN303			E40-3248-05	PIN ASSY		
CN304			E40-4248-05	PIN ASSY		
J101			E63-1315-05	PIN JACK		
J102			E63-1316-05	PIN JACK		
J201			E11-0389-05	MINIATURE PHONE JACK(3.5 STERE		
J202			E11-0291-05	MINIATURE PHONE JACK(2P)		
J301			E70-0150-05	SCREW TERMINAL BOARD		
J302			E63-1246-05	PIN JACK		
J303			E63-1248-05	PIN JACK		
L201			L40-1011-58	SMALL FIXED INDUCTOR(100UH,K)		
L202			L92-0017-05	FERRITE CORE		
R213,214			RD14NB2E471J	RD 470 J 1/4W		
R217			RD14NB2E471J	RD 470 J 1/4W		
R425			RD14NB2E561J	RD 560 J 1/4W		
R434			RD14GB2E150J	FL-PROOF RD 15 J 1/4W		
R450			RD14GB2E561J	FL-PROOF RD 560 J 1/4W		
R451			RD14NB2E102J	RD 1.0K J 1/4W		
R452			RD14GB2E150J	FL-PROOF RD 15 J 1/4W		
D201-206			HSS104A	DIODE		
D201-206			1SS133	DIODE		
D401			MTZJ3.9(B)	ZENER DIODE		
D401			RD3.9ES(B)	ZENER DIODE		
D402			MTZJ5.1(B)	ZENER DIODE		
D402			RD5.1ES(B)	ZENER DIODE		
IC101			NJM2584D	ANALOGUE IC		
IC102			NJM2580D	ANALOGUE IC		
IC201			BA05T	ANALOGUE IC		
IC202			TC74HC00AP	IC(2INPUT NAND GATE)		
IC401			NJM4580D-D	IC(OP AMP X2)		
IC402			NJM4565D-D	IC(OP AMP X2)		
IC403			NJM4580D-D	IC(OP AMP X2)		
IC404			NJM4565D-D	IC(OP AMP X2)		
Q201			DTA124ESA	DIGITAL TRANSISTOR		
Q201			KRC103M	DIGITAL TRANSISTOR		
Q201			UN4212	DIGITAL TRANSISTOR		
Q202,203			KTC3199(Y,GR)	TRANSISTOR		
Q202,203			2SC1740S(Q,R)	TRANSISTOR		
Q202,203			2SC2785(F,E)	TRANSISTOR		
Q204			KTA1267(Y,GR)	TRANSISTOR		
Q204			2SA1175(F,E)	TRANSISTOR		
Q204			2SA933AS(Q,R)	TRANSISTOR		
Q301-320			2SC2878(B)	TRANSISTOR		
Q401,402			DTA124ESA	DIGITAL TRANSISTOR		
Q401,402			KRA103M	DIGITAL TRANSISTOR		
Q401,402			UN4112	DIGITAL TRANSISTOR		
Q403-408			2SC2878(B)	TRANSISTOR		
Q409			DTA124ESA	DIGITAL TRANSISTOR		

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Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
Q409			KRA103M	DIGITAL TRANSISTOR		
Q409			UN4112	DIGITAL TRANSISTOR		
Q411,412			2SC2878(B)	TRANSISTOR		

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PARTS LIST VR-7070A/7080A

# VR-7070A/7080A

# KENWOOD

AUDIO VIDEO SURROUND RECEIVER

## VR-7080A

## VR-7070A

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## INSTRUCTION MANUAL

KENWOOD CORPORATION

B60-5421-00 00 MA (K, P) KW 0305

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Thank you for purchasing this product. This Receiver you just purchased has been upgraded with new features.

### ***120 Watts per channel (stereo) of K-STAT™ Power***

Kenwood's exclusive K-STAT discrete amplifier features self-adjusting transistors that provide optimum low-distortion performance at all volume levels.

### ***HD (High Definition) Component Video Switching***

The Component Video inputs will pass a High-definition video signal to an HD-capable TV or monitor, producing significantly improved video images over conventional NTSC video.

### ***Upgraded Specifications***

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#### ***AUDIO section***

Rated power output during STEREO operation

120 watts per channel minimum RMS, both channels driven, at 8 $\Omega$ from 20 Hz to 20 kHz with no more than 0.09% total harmonic distortion. (FTC)
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Effective power output during SURROUND operation

FRONT (20 ~ 20 kHz, 0.09 % T.H.D. at 8 $\Omega$ one channel driven)	120 W + 120 W
CENTER (20 ~ 20 kHz, 0.09 % T.H.D. at 8 $\Omega$ one channel driven)	120 W
SURROUND (20 ~ 20 kHz, 0.7 % T.H.D. at 8 $\Omega$ one channel driven)	120 W + 120 W
SURROUND BACK/SUBWOOFER (20 ~ 20 kHz, 0.09 % T.H.D. at 8 $\Omega$ one channel driven)	120 W

Total harmonic distortion ..... 0.009 % (1 kHz, 60 W, 8  $\Omega$ )

The VR-7070A and VR-7080A receivers are identical to the VR-7070 and VR-7080 except for the features and specifications described in this addendum. For all other information and specifications, please refer to the VR-7070 and VR-7080 Instruction Manuals.
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