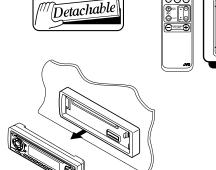
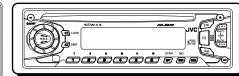
JVC SERVICE MANUAL CD RECEIVER





<u>000</u>



Area Suffix J ----- Northern America

KD-S670



Contents

Safety precaution	1-2
Preventing static electricity	1-3
Disassembly method	
Adjustment method ·····	1-11
Flow of functional until TOC read	1-12
Maintenance of laser pickup ·····	1-14
Replacement of laser pickup	1-14
Description of major ICs	1-15~27

Safety precaution

A CAUTION Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.

CAUTION Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.

Preventing static electricity

1. Grounding to prevent damage by static electricity

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

2. About the earth processing for the destruction prevention by static electricity

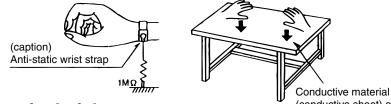
Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as CD players. Be careful to use proper grounding in the area where repairs are being performed.

2-1 Ground the workbench

Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

2-2 Ground yourself

Use an anti-static wrist strap to release any static electricity built up in your body.



3. Handling the optical pickup

(conductive sheet) or iron plate

- 1. In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)
- 2. Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

4. Handling the traverse unit (optical pickup)

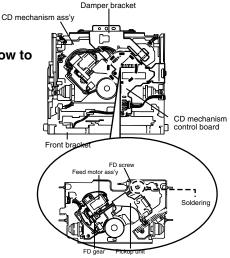
- 1. Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.
- 2. Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.
- 3. Handle the flexible cable carefully as it may break when subjected to strong force.
- 4. It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it

Attention when traverse unit is decomposed

*Please refer to "Disassembly method" in the text for pick-up and how to detach the substrate.

1.Solder is put up before the card wire is removed from connector on the CD substrate as shown in Figure. (When the wire is removed without putting up solder, the CD pick-up assembly might destroy.)

2.Please remove solder after connecting the card wire with when you install picking up in the substrate.



Disassembly method

<Main body>

■ Removing the front panel assembly (See Fig.1)

1. Press the eject button in the lower right part of the front panel. Remove the front panel assembly from the body.

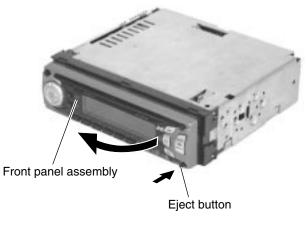
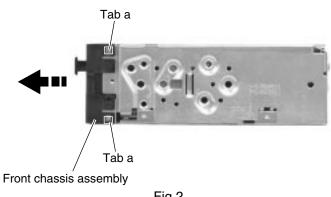
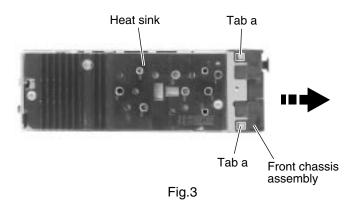


Fig.1





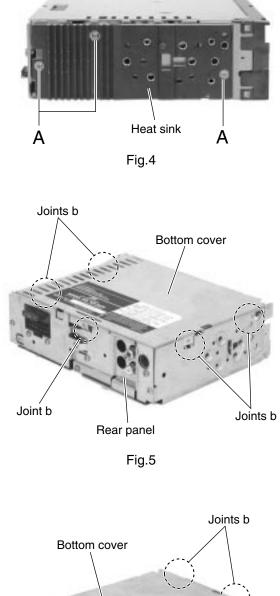


■ Removing the front chassis assembly (See Fig.2 and 3)

- · Prior to performing the following procedure, remove the front panel assembly.
- 1. Release the four joint tabs a on both sides of the front chassis assembly and remove the front chassis assembly toward the front.

■ Removing the heat sink (See Fig.4)

1. Remove the three screws **A** on the left side of the body.



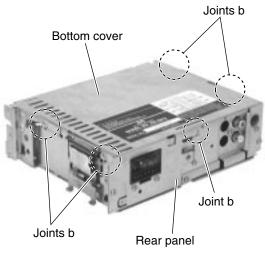


Fig.6

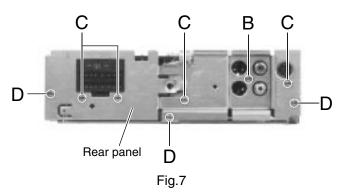
Removing the bottom cover (See Fig.5 and 6)

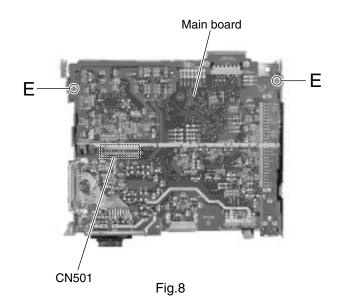
- Prior to performing the following procedure, remove the front panel assembly, the front chassis assembly and the heat sink.
- 1. Turn over the body and unjoint the five joints **b** with the bottom cover and the body using a screwdriver.

Removing the main board

(See Fig.7 and 8)

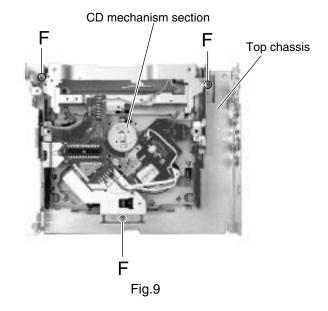
- Prior to performing the following procedure, remove the front panel assembly, the front chassis assembly, the heat sink and the bottom cover.
- 1. Remove the screw **B**, the four screws **C** and the three screws **D** attaching the rear bracket on the back of the body. Remove the rear panel.
- 2. Remove the two screws **E** attaching the main board on the bottom of the body. Disconnect connector CN501 on the main board in the direction of the arrow.





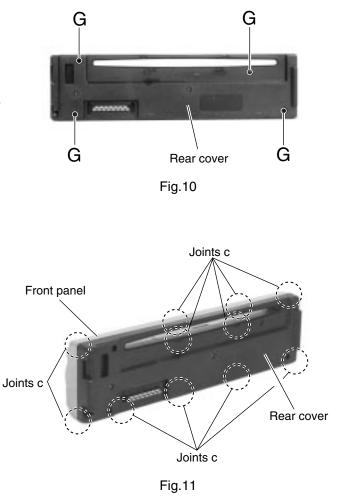
Removing the CD mechanism section (See Fig.9)

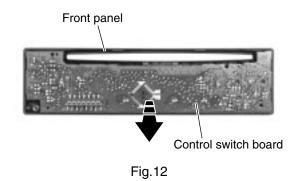
- Prior to performing the following procedure, remove the front panel assembly, the front chassis assembly, the heat sink, the bottom cover and the main board.
- 1. Remove the three screws **F** attaching the CD mechanism section on the back of the top chassis.



■ Removing the control switch board (See Fig.10 to 12)

- Prior to performing the following procedure, remove the front panel assembly.
- 1. Remove the four screws **G** attaching the rear cover on the back of the front panel assembly.
- 2. Unjoint the eleven joints **c** with the front panel and the rear cover.
- 3. Remove the control switch board on the back of the front panel.





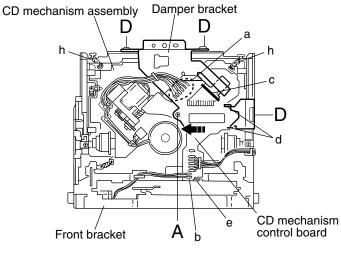
KD-S670

<CD mechanism section>

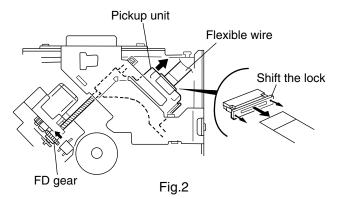
- Removing the CD mechanism control board (See Fig.1 and 2)
- 1. Unsolder the part **a** and **b** on the CD mechanism control board.
- 2. Remove the stator fixing the CD mechanism control board and the damper bracket (To remove the stator smoothly, pick up the center part).
- 3. Remove the screw **A** attaching the CD mechanism control board.
- 4. Remove the CD mechanism control board in the direction of the arrow while releasing it from the two damper bracket slots **d** and the front bracket slot **e**.
- 5. Disconnect the flexible wire from connector on the pickup unit.

ATTENTION: Turn the FD gear in the direction of the arrow to move the entire pickup unit to the appropriate position where the flexible wire of the CD mechanism unit can be disconnected easily.

(Refer to Fig.2)



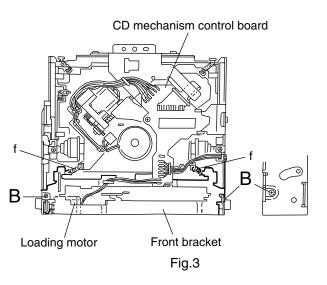


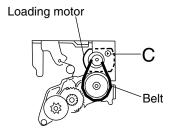


Removing the loading motor

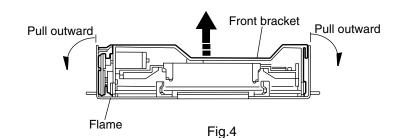
(See Fig.3 to 5)

- Prior to performing the following procedure, remove the CD mechanism control board.
- 1. Remove the two springs **f** attaching the CD mechanism assembly and the front bracket.
- 2. Remove the two screws **B** and the front bracket while pulling the flame outward.
- 3. Remove the belt and the screw **C** from the loading motor.





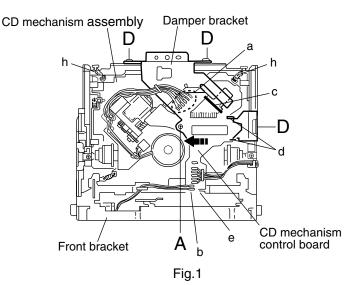




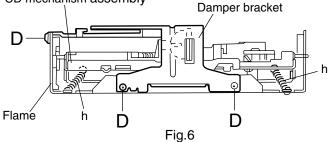
Removing the CD mechanism assembly (See Fig.1, 6 to 9)

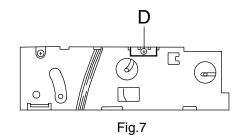
- Prior to performing the following procedure, remove the CD mechanism control board and the front bracket (loading motor).
- 1. Remove the three screws **D** and the damper bracket.
- 2. Raise the both sides fix arms and move the fix plates in the direction of the arrow to place the four shafts **g** as shown in Fig.8 and 9.
- 3. Remove the CD mechanism assembly and the two springs **h** attaching the flame.
- 4. Remove the two screws **E** and both sides rear damper brackets from the dampers. Detach the CD mechanism assembly from the left side to the right side.

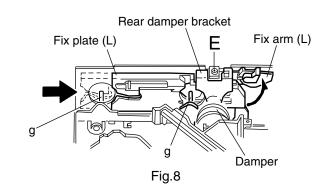
ATTENTION: The CD mechanism assembly can be removed if only the rear damper bracket on the left side is removed.

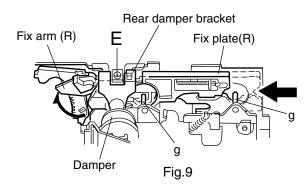


CD mechanism assembly









Removing the feed motor assembly (See Fig.10)

- Prior to performing the following procedure, remove the CD mechanism control board, the front bracket (loading motor) and the CD mechanism assembly.
- 1. Remove the two screws **F** and the feed motor assembly.

Removing the pickup unit (See Fig.10 and 11)

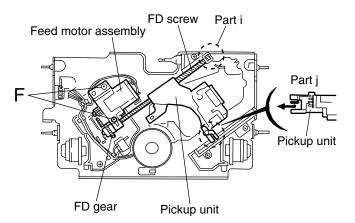
- Prior to performing the following procedure, remove the CD mechanism control board, the front bracket (loading motor), the CD mechanism assembly and the feed motor assembly.
- 1. Detach the FD gear part of the pickup unit upward. Then remove the pickup unit while pulling out the part i of the FD screw.

ATTENTION: When reattaching the pickuap unit, reattach the part j of the pickup unit, then the part i of the FD screw.

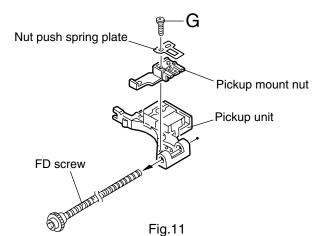
2. Remove the screw **G** attaching the nut push spring plate and the pickup mount nut from the pickup unit. Pull out the FD screw.

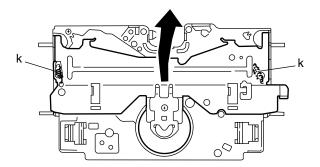
Removing the spindle motor (See Fig.12 and 13)

- Prior to performing the following procedure, remove the CD mechanism control board, the front bracket (loading motor), the CD mechanism assembly and the feed motor assembly.
- Turn up the CD mechanism assembly and remove the two springs k on both sides of the clamper arms. Open the clamper arm upward.
- 2. Turn the turn table, and remove the two screws **H** and the spindle motor.

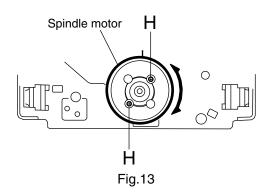










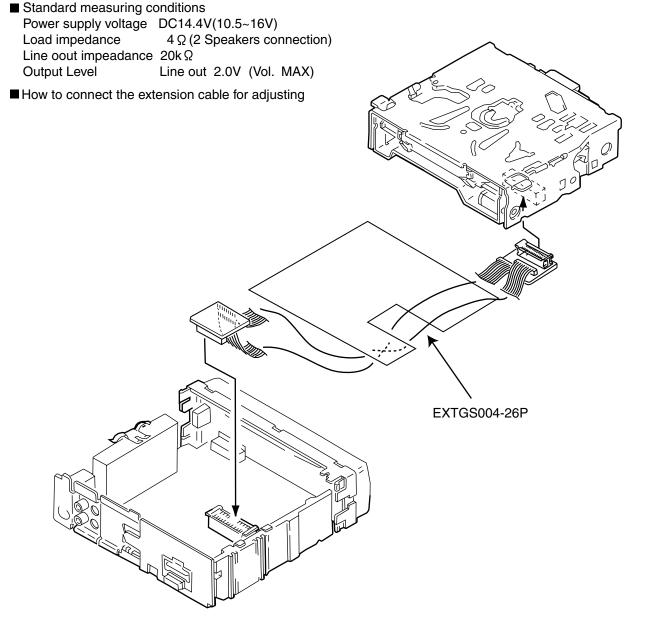


Adjustment method

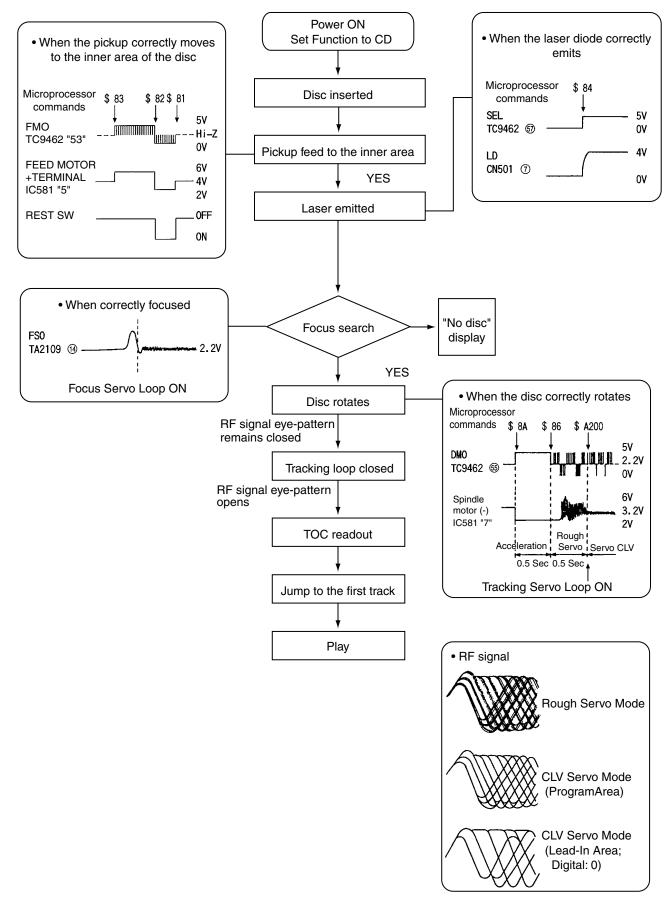
- Test instruments required for adjustment
 - 1. Digital oscilloscope (100MHz)
 - 2. AM Standard signal generator
 - 3. FM Standard signal generator
 - 4. Stereo modulator
 - 5. Electric voltmeter
 - 6. Digital tester
 - 7. Tracking offset meter
 - 8. Test Disc JVC :CTS-1000
 - 9. Extension cable for check EXTGS004-26P×1

- Standard volume position
 Balance and Bass & Treble volume : Indication"0"
 Loudness : OFF
 BBE : OFF
- Frequency Band
 FM 87.5MHz ~ 108.0MHz
 MW 520kHz ~ 1620 kHz
- Dummy load

Exclusive dummy load should be used for AM, and FM. For FM dummy load, there is a loss of 6dB between SSG output and antenna input. The loss of 6dB need not be considered since direct reading of figures are applied in this working standard.

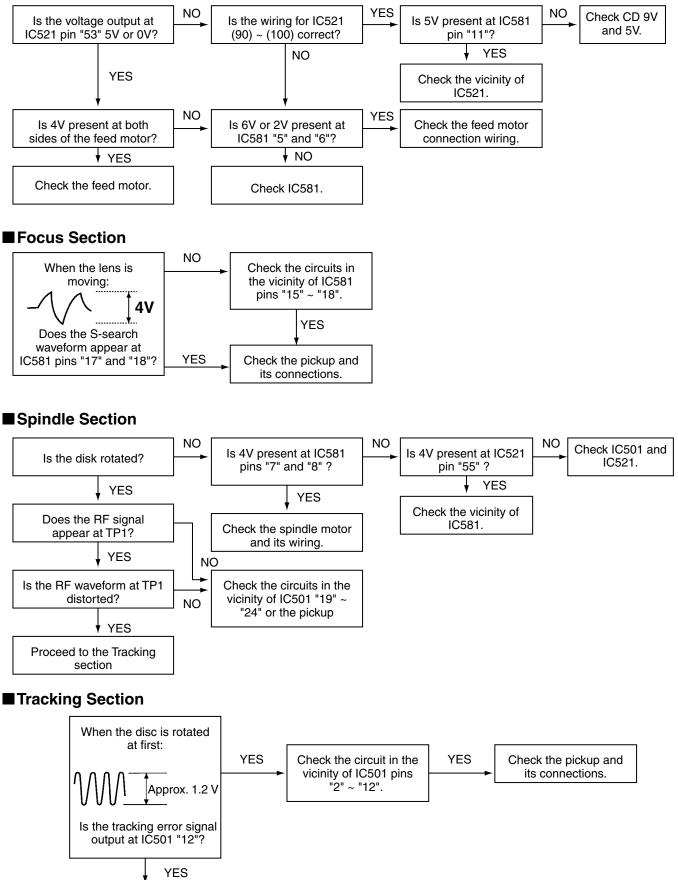


Flow of functional operation until TOC read



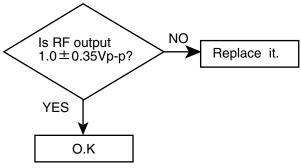
■ Feed Section

Check IC521.



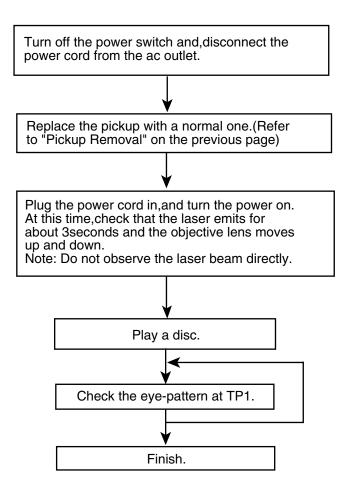
Maintenance of laser pickup

- (1) Cleaning the pick up lens Before you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.
- (2) Life of the laser diode When the life of the laser diode has expired. the following symptoms will appear. (1) The level of RF output (EFM output:ampli
 - tude of eye pattern) will be low.

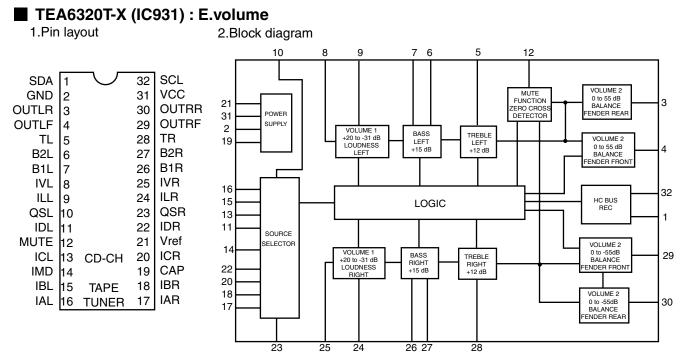


(3) Semi-fixed resistor on the APC PC board The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power. Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor. If the laser power is lower than the specified value, the laser diode is almost worn out, and the laser pickup should be replaced. If the semi-fixed resistor is adjusted while the pickup is functioning normally, the laser pickup may be damaged due to excessive current.

Replacement of laser pickup



Descrption of major ICs

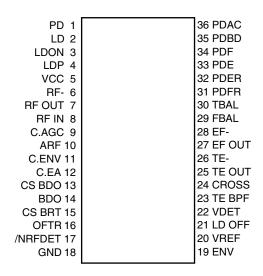


3.Pin functions

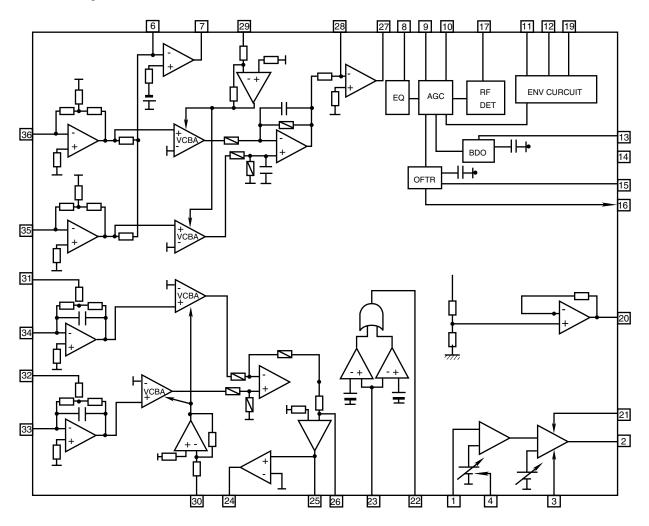
Pin No.	Symbol	I/O	Functions	Pin No.	Symbol	I/O	Functions
1	SDA	I/O	Serial data input/output.	17	IAR	Ι	Input A right source.
2	GND	-	Ground.	18	IBR	-	Input B right source.
3	OUTLR	0	output left rear.	19	CAP	-	Electronic filtering for supply.
4	OUTLF	0	output left front.	20	ICR	Ι	Input C right source.
5	TL	I	Treble control capacitor left channel or input from an external equalizer.	21	Vref	-	Reference voltage (0.5Vcc)
6	B2L	-	Bass control capacitor left channel or output to an external equalizer.	22	IDR	-	Not used
7	B1L	-	Bass control capacitor left channel.	23	QSR	0	Output source selector right channel.
8	IVL	I	Input volume 1. left control part.	24	ILR	-	Input loudness right channel.
9	ILL	Ι	Input loudness. left control part.	25	IVR	-	Input volume 1. right control part.
10	QSL	0	Output source selector. left channel.	26	B1R	-	Bass control capacitor right channel
11	IDL	-	Not used	27	B2R	0	Bass control capacitor right channel or output to an external equalizer.
12	MUTE	-	Not used	28	TR	Ι	Treble control capacitor right channel or input from an external equalizer.
13	ICL	I	Input C left source.	29	OUTRF	0	Output right front.
14	IMO	-	Not used	30	OUTRR	0	Output right rear.
15	IBL	Ι	Input B left source.	31	Vcc	-	Supply voltage.
16	IAL	Ι	Input A left source.	32	SCL	Ι	Serial clock input.

■ AN8806SB-W (IC501) : RF & Servo amp.

1.Pin layout



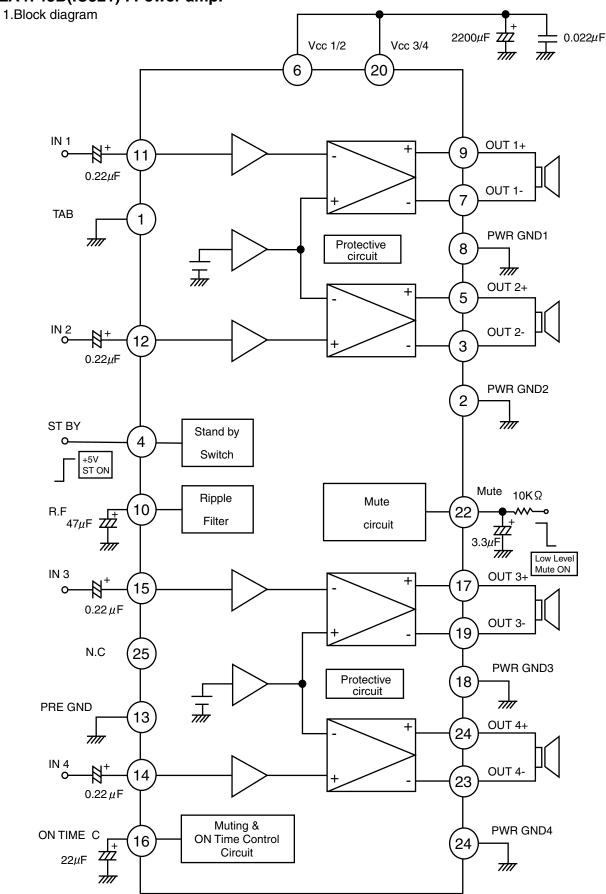
2.Block diagram



3. Pin function

Pin No.	Symbol	I/O	Function						
1	PD	I	APC amp . Input terminal						
2	LD	0	APC amp . Output terminal						
3	LD ON	Ι	_D ON/OFF control terminal						
4	LDP		Connect to GND						
5	VCC		Power supply						
6	RF-	I	RF amp . Reversing input terminal						
7	RF OUT	0	RFamp . Output terminal						
8	RF IN	I	AGC input terminal						
9	C.AGC	I/O	AGC loop filter connection terminal						
10	ARF	0	ARF output terminal						
11	C.ENV	I/O	RF detection capacity connection terminal						
12	C.EA	I/O	HPF-amp capacity connection terminal						
13	CS BDO	I/O	Capacity connection terminal for RF discernment side envelope detection						
14	BDO	0	BDO output terminal						
15	CS BRT	I/O	Capacity connection terminal for RF discernment side envelope detection						
16	OFTR	0	OFTR output terminal						
17	/NRFDET	0	RFDET output terminal						
18	GND		Connect to GND						
19	ENV	0	3TENV output terminal						
20	VREF	0	VREF output terminal						
21	LD OFF		APC OFF control terminal						
22	VDET	0	VDET output terminal						
23	TE BPF	Ι	VDET input terminal						
24	CROSS	0	CROSS output terminal						
25	TE OUT	0	TE amp . Output terminal						
26	TE-	Ι	FE amp . Reversing input terminal						
27	FE OUT	0	FE amp . output terminal						
28	FE-	I	FE amp . Reversing input terminal						
29	FBAL	Ι	F.BAL control terminal						
30	TBAL	Ι	T.BAL control terminal						
31	PDFR	I/O	I-V amp conversion resistance adjustment terminal						
32	PDER	I/O	I-V amp conversion resistance adjustment terminal						
33	PDF	Ι	I-V amp input terminal						
34	PDE	Ι	I-V amp input terminal						
35	PD BD	I	I-V amp input terminal						
36	PD AC	Ι	I-V amp input terminal						

■ LA4743B(IC321) : Power amp.



LA4743B

2.Terminal layout

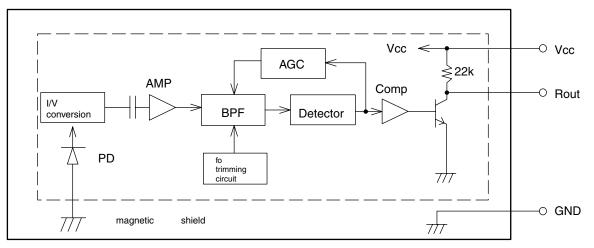
\langle																				-						
	TAB	GND	OUTRR-	STBY	OUTRRH	VCC1/2	OUTRF-	GND	OUTRF1	AIPPLE	INAF	INRR	SGND	INLA	INLF	ONTIME	OUTLF1	СND	OUTLF-	VCC3/4	OUTLR	MUTE	OUTLR-	GND	NC	
																									65.	

3.Pin function

Pin No.	Symbol	Function
1	TAB	Header of IC
2	GND	Power GND
3	OUTRR-	Output(-) for front Rch
4	STBY	Stand by input
5	OUTRR+	Output (+) for front Rch
6	VCC1/2	Power input
7	OUTRF-	Output (-) for rear Rch
8	GND	Power GND
9	OUTRF+	Output (+) for rear Rch
10	RIPPLE	Ripple filter
11	INRF	Rear Rch input
12	INRR	Front Rch input
13	SGND	Signal GND
14	INLR	Front Lch input
15	INLF	Rear Lch input
16	ONTIME	Power on time control
17	OUTLF+	Output (+) for rear Lch
18	GND	Power GND
19	OUTLF-	Output (-) for rear Lch
20	VCC3/4	Power input
21	OUTLR+	Output (+) for front
22	MUTE	Muting control input
23	OUTLR-	Output (-) for front
24	GND	Power GND
25	NC	Non connection

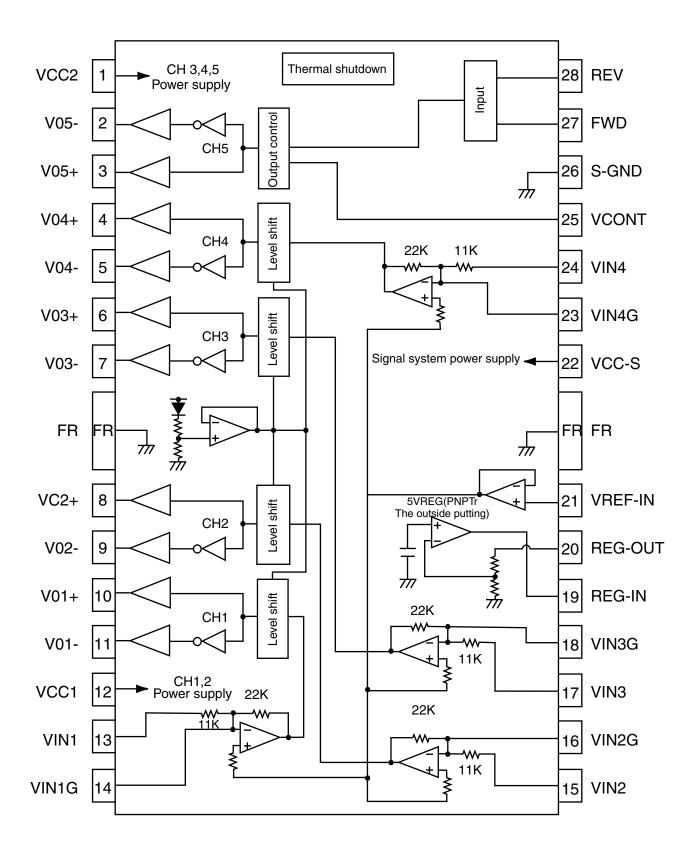
RPM6938-SV4(IC602) : Remote sensor

1.Block diagram



LA6567H-X(IC541) : CD driver

1.Pin layout & blockdiagram



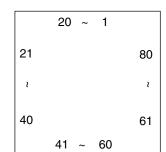
2. Pin f	function	LA6567H-X(2/2)
Pin no.	Symbol	Function
1	VCC2	CH3,4,5 Power supply(It is short with VCC1,VCC-S)
2	V05-	Loading output(-)
3	V05+	Loading terminal (+)
4	V04+	CH4 Output terminal(+)
5	V04-	CH4 Output terminal(-)
6	V03+	CH3 Output terminal(+)
7	V03-	CH3 Output terminal(-)
8	V02+	CH2 Output terminal(+)
9	V02-	CH2 Output terminal(-)
10	V01+	CH1 Output terminal(+)
11	V01-	CH1 Output terminal(-)
12	VCC1	CH1,2(BTL) Power supply(It is short with VCC-S,VCC2)
13	VIN1	CH1 Input terminal
14	VIN1G	CH1 Input terminal(For gain adjustment)
15	VIN2	CH2 Input terminal
16	VIN2G	CH2 Input terminal(For gain adjustment)
17	VIN3	CH3 Input terminal
18	VIN3G	CH3 Input terminal(For gain adjustment)
19	REG-IN	Regulator terminal(Outside putting PNP base)
20	REG-OUT	Regulator terminal(Outside putting PNP collector)
21	VREF-IN	Standard voltage input terminal
22	VCC-S	Signal system power supply(It is short with VCC1, VCC2)
23	VIN4G	CH4 Input terminal(For gain adjustment)
24	VIN4	CH4 Input terminal
25	VCONT	5CH(VLO) Output voltage set terminal
26	S-GND	Signal system GND
27	FWD	5CH(VLO)Signal output switch terminal(FWD),Input of logic of loading part
		5CH(VLO)Signal output switch terminal(REV),
28	REV	Input of logic of loading part

* Frame(FR)at the center becomes system GND power.

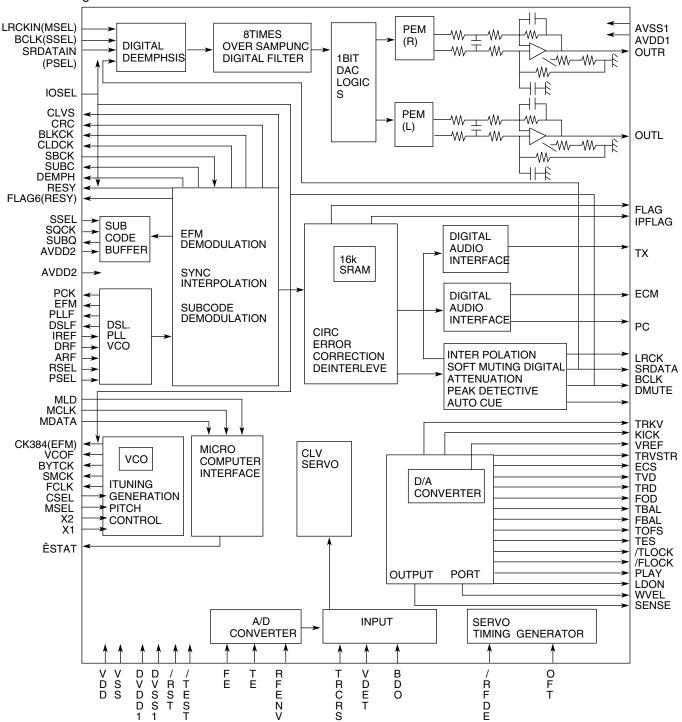
* Please be short-circuited on the outside and use the terminal of the power supply system and three terminals of VCC-S, VCC1, VCC2.

MN35510 (IC561) : Digital servo & digital signal processor

1. Terminal Layout



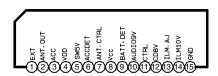
2. Block Diagram



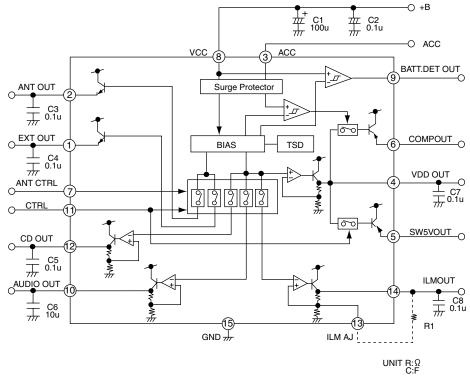
Pin 1 Bythol Vo Function Pin 2 Symbol VO Function 1 BCK 0 Not used 44 TES 0 Tracking error shunt signal output(H:shunt) 2 LACK 0 Not used 42 PLAY - Not used 3 SPDAT 0 Not used 44 AFR 1 RF signal input 5 DVSS - Connected to GND 45 IFE 1 Belerance current input pin 6 TX O Olgital audio interface output 48 PLF 10 Loop filter pin for DSL 7 MCLK 1 Micom command dock signal input 48 VLDE 10 Loop filter pin for DSL 8 MDAT 1 Micom command dock signal input 48 VLDE 10 Loop filter pin for DSL 11 FLOCK O Sense signal output Active :Low 52 PCK Not used 12 TLOCK O Tracking lock signal output Active :Low 52 PCK Not used 13 BLKK I Outside clock for sub-code -lock signal output Active :Low 53 PCK Not used 14 SDCG Sub-code -lock signal outp	3. D	escriptio	on					MN35510
2 LRCK 0 Not used 42 PLAY - Not used 3 SRDATA O Not used 43 WVEL - Not used 4 DVDDI - Power supply (Digital) 44 ARF I Refarence current input plin 6 TX 0 Digital audio interface output 45 DRF I Bearne current input plin 7 MCLK I Mcom command data input 45 DLF I/O Loop filter pin for DSL 8 MDATA I Mcom command data input 49 VCOF Not used 11 FLOCK O Sense signal output Active :Low 51 AVSS2 - Not used 12 TLOCK O Focus lock signal output Active :Low 52 FFM - Not used 13 BLKCK 0 sub-code -block -clock signal output 55 SUBC - Not used 14 SQCK 1 Outside clock for sub-code - Slock signal output<		symbol	I/O	Function		symbol	I/O	Function
3 SRDATA 0 Not used 43 WVEL - Not used 4 DVDDT - Power supply (Digital) 44 ARF 1 Refignal input 5 DVSS1 - Connected to GND 45 IREF 1 Reference current input pin 6 TX O Digital audio interface output 45 DRF 1 Bias pin for DSL 7 MCLK 1 Micom command took signal input 48 PLLE VO Loop filter pin for DSL 9 MLD 1 Micom command took signal input 49 VCOF - Not used 11 FLOCK 0 Sense signal output Active :Low 52 EFM - Not used 12 TLOCK 0 Focus lock signal output Active :Low 52 EFM - Not used 13 BLKCK 0 sub-code - block - clock signal output Active :Low 52 EFM - Not used 14 SOCK 1 Outside clock for sub-code C resister input 54 POO Not used Connected to GND(for X	1	BCLK	0	Not used	41	TES	0	Tracking error shunt signal output(H:shunt)
Image: A stand of the standard of the s	2	LRCK	0	Not used	42	PLAY	-	Not used
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6 TX 0 Digital audio interface output 46 DRF 1 Bias pin for DSL 7 MCLK 1 Micom command dock signal input (Data is latched at signals' nising point) Discrete the command data input 47 DSLF 10 Loop filter pin for DSL 9 MLD 1 Micom command dota signal input 48 PLLF 10 Loop filter pin for PLL 9 MLD 1 Micom command dota signal input 49 VCOF – Not used 10 SENSE 0 Sense signal output 50 AVD02 – Power supply(Analog) 11 FLOCK 0 Fracking lock signal output Active :Low 51 AVS22 – Not used 13 BLKCK 0 Sub-code - olock - code cuptut 55 SUEC – Not used 14 SOCK 1 Outside clock for sub-code Orde cuptut 55 SUEC – Not used 15 SUEQ 0 Sub-code Orde-code output 58 XI 1 Input of 16.9344MHz Xtal oscillation circuit 16 DMCK – Not used	4	DVDD1	_	Power supply (Digital)	44	ARF	I	RF signal input
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Image: Procession of the second se	9	MLD	Ι	Micom command load signal input	49	VCOF	-	Not used
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13 BLKCK O sub-code - block - clock signal output 53 PCK - Not used 14 SQCK I Outside clock for sub-code Q resister input 54 PDO - Not used 15 SUBQ Q Sub-code Q - code output 55 SUBC - Not used 16 DMUTE - Connected to GND 56 SBCK - Not used 17 STATUS Q Status signal (CRC, CUE, CLVS, TTSTOP, ECLV, SQOK) 57 VSS - Connected to GND(for X'tal oscillation circuit 18 RST I Reset signal input (L:Reset) 58 XI I Input of 16.9344MHz X'tal oscillation circuit 20 PMCK - Not used 60 VDD - Power supply(for X'tal oscillation circuit) 21 THV 0 Traverse enforced output 62 CLDCK - Not used 22 TVD 0 Traverse enforced output 63 FLAG - Not used 23 PC - Not used 65 FLAG - N	11	FLOCK	0	Focus lock signal output Active :Low	51	AVSS2	-	Connected to GND(Analog)
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31TBALOTracking Balance adjust signal output71TEST-pull up32FEIFocus error signal input(Analog input)72AVDD1-Power supply(Digital)33TEITracking error signal input(Analog input)73OUT LOLch audio output34RF ENVIRF envelope signal input(Analog input)74AVSS1-Connected to GND35VDETIVibration detect signal input(H:detect)75OUT RORch audio output36OFTIOff track signal input(H:off track)76RSEL-pull up37TRCRSITrack cross signal input(L:detect)77CSEL-Connected to GND38RFDETIBDO input pin(L:detect)79MSEL-Connected to GND39BDOIBDO input pin(L:detect)79MSEL-Connected to GND	29	VREF	I		69	RESY	_	Not used
32FEIFocus error signal input(Analog input)72AVDD1-Power supply(Digital)33TEITracking error signal input(Analog input)73OUT LOLch audio output34RF ENVIRF envelope signal input(Analog input)74AVSS1-Connected to GND35VDETIVibration detect signal input(H:detect)75OUT RORch audio output36OFTIOff track signal input(H:off track)76RSEL-pull up37TRCRSITrack cross signal input(L:detect)78PSEL-Connected to GND38RFDETIBDO input pin(L:detect)79MSEL-Connected to GND39BDOIBDO input pin(L:detect)79MSEL-Connected to GND	30	FBAL	0	Focus Balance adjust signal output	70	IOSEL	_	pull up
33TE1Tracking error signal input(Analog input)73OUT LOLch audio output34RF ENVIRF envelope signal input(Analog input)74AVSS1-Connected to GND35VDETIVibration detect signal input(H:detect)75OUT RORch audio output36OFTIOff track signal input(H:off track)76RSEL-pull up37TRCRSITrack cross signal input(L:detect)77CSEL-Connected to GND38RFDETIRF detect signal input(L:detect)78PSEL-Connected to GND39BDOIBDO input pin(L:detect)79MSEL-Connected to GND	31	TBAL	0	Tracking Balance adjust signal output	71	TEST	_	pull up
34RF ENVIRF envelope signal input(Analog input)74AVSS1-Connected to GND35VDETIVibration detect signal input(H:detect)75OUT RORch audio output36OFTIOff track signal input(H:off track)76RSEL-pull up37TRCRSITrack cross signal input(L:detect)77CSEL-Connected to GND38RFDETIRF detect signal input(L:detect)78PSEL-Connected to GND39BDOIBDO input pin(L:detect)79MSEL-Connected to GND	32	FE	Ι	Focus error signal input(Analog input)	72	AVDD1	-	Power supply(Digital)
35 VDET I Vibration detect signal input(H:detect) 75 OUT R O Rch audio output 36 OFT I Off track signal input(H:off track) 76 RSEL - pull up 37 TRCRS I Track cross signal input(L:detect) 77 CSEL - Connected to GND 38 RFDET I RF detect signal input(L:detect) 78 PSEL - Connected to GND 39 BDO I BDO input pin(L:detect) 79 MSEL - Connected to GND	33	TE	Ι	Tracking error signal input(Analog input)	73	OUT L	0	Lch audio output
36 OFT I Off track signal input(H:off track) 76 RSEL - pull up 37 TRCRS I Track cross signal input 77 CSEL - Connected to GND 38 RFDET I RF detect signal input(L:detect) 78 PSEL - Connected to GND 39 BDO I BDO input pin(L:detect) 79 MSEL - Connected to GND	34	RF ENV	Ι	RF envelope signal input(Analog input)	74	AVSS1	-	Connected to GND
37 TRCRS I Track cross signal input 77 CSEL - Connected to GND 38 RFDET I RF detect signal input(L:detect) 78 PSEL - Connected to GND 39 BDO I BDO input pin(L:detect) 79 MSEL - Connected to GND	35	VDET	Ι	Vibration detect signal input(H:detect)	75	OUT R	0	Rch audio output
38 RFDET I RF detect signal input(L:detect) 78 PSEL - Connected to GND 39 BDO I BDO input pin(L:detect) 79 MSEL - Connected to GND	36	OFT	Ι	Off track signal input(H:off track)	76	RSEL	-	pull up
39 BDO I BDO input pin(L:detect) 79 MSEL — Connected to GND	37	TRCRS	Ι	Track cross signal input	77	CSEL	-	Connected to GND
	38	RFDET	Ι	RF detect signal input(L:detect)	78	PSEL	-	Connected to GND
40 LDON O Laser ON signal output(H:on) 80 SSEL - Pull up	39	BDO	Ι	BDO input pin(L:detect)	79	MSEL	-	Connected to GND
	40	LDON	0	Laser ON signal output(H:on)	80	SSEL	-	Pull up

■ HA13164(IC901):Regulator

1.Terminal layout



2.Block diagram



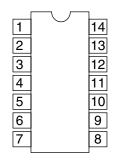
note1) TAB (header of IC) connected to GND

3.Pin function

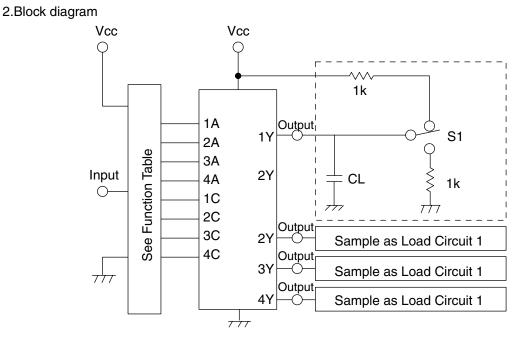
Pin No.	Symbol	Function
1	EXTOUT	Output voltage is VCC-1 V when M or H level applied to CTRL pin.
2	ANTOUT	Output voltage is VCC-1 V when M or H level to CTRL pin and H level
		to ANT-CTRL.
3	ACCIN	Connected to ACC.
4	VDDOUT	Regular 5.7V.
5	SW5VOUT	Output voltage is 5V when M or H level applies to CTRL pin.
6	COMPOUT	Output for ACC detector.
7	ANT CTRL	L:ANT output OFF , H:ANT output ON
8	VCC	Connected to VCC.
9	BATT DET	Low battery detect.
10	AUDIO OUT	Output voltage is 9V when M or H level applied to CTRL pin.
11	CTRL	L:BIAS OFF, M:BIAS ON, H:CD ON
12	CD OUT	Output voltage is 8V when H level applied to CTRL pin.
13	ILM AJ	Adjustment pin for ILM output voltage.
14	ILM OUT	Output voltage is 10V when M or H level applies to CTRL pin.
15	GND	Connected to GND.

■ HD74HC126FP-X (IC631) : Buffer

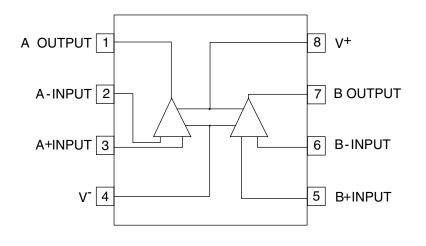
1.Terminal layout



Inp	out	Outout
С	Α	Y
L	Х	Z
Н	L	Н
Η	Η	L



■ NJM4565M-WE (IC351) : Ope. amp



LC75823W (IC601) : LCD driver

1. Pin Layout & Symbol

	~ ~
ayout & Symbol S S S S S S S S S S S S S S S S S S S	S50 S49
	<u> </u>
64 63 62 61 60 59 58 57 56 55 54 53 52 51 5	50 49
S1 0−1	48 +0 S48
S2 0+2	47
S3 0 - 3	46
S4 0−4	45
S5 -5	44 ~ S44
S6 0 − 6	43 – • S43
S7 0 − 7	42 – 0 S42
S88	41 🕂 S41
S9 - 9	40 – 0 S40
S10 - 10	39 – S39
S11 -11	38 – S38
S12 - 12	37 – S37
S13 - 13	36 – S36
S14 - 14	35 – S35
S15 - 15	34 – S34
S16 - 16	33 – S33
17 18 19 20 21 22 23 24 25 26 27 28 29 30	31 32
S17 S18 S19 S21 S21 S22 S22 S22 S22 S22 S22 S22 S22	31
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2. Pin Function

Pin No.	Symbol	I/O	Function
1 to 52	S1 to S52	0	Function Segment output pins used to display data transferred
110 52	0110 002		by serial data input.
53 to 55	COM1 to COM3	0	Common driver output pins. The frame frequency is given
			by : t0=(fosc/384)Hz.
56	VDD		Power supply connection. Provide a voltage of between
			4.5 and 6.0V.
57	ĪNH	Ι	Display turning off input pin.
			INT="L" (Vss) off (S1 to S52, COM1 to COM3="L"
			INT="H" (VDD) on
			Serial data can be transferred in display off mode.
58	VDDD1	I	Used for applying the LCD drive 2/3 bias voltage
			externally.
			Must be connected to VDD2 when a 1/2 bias drive scheme
			is used.
59	VDD2		Used for applying the LCD drive 1/3 bias voltage
			externally.
			Must be connected to VDD1 when a 1/2 bias drive scheme
			is used.
60	Vss		Power supply connection. Connect to GND.
61	OSC	I/O	
			An oscillator circuit is formed by connecting an external
	CE		resistor and capacitor at this pin.
62	0E		Serial data CE : Chip enable
63	CL		to the controller. CL : Sync clock
03	UL		
64	DI		DI : Transfer data
04			

LC72366-9989 (IC601) : Main micon 1. Pin layout

1	80	~	65	64
2				٢
24	25	~	40	41

2. Pin function

Pin 1 Symbol Function Pin No Symbol Function 1 XIN 4.5MHz crystal oscillation 41 CD ON CD 8V supply on 2 TEST2 Connect to ground 42 RELAW SV power control 3 JBUS SI J-BUS signal data output (to 74HC126) 43 BBE CTL No use 6 JBUS KO J-BUS volput clock signal (to 74HC126) 44 BEEP No use 6 JBUS KO CONT J-BUS Volput clock signal (to 74HC126) 45 SWM 6 JBUS KO CONT J-BUS Volput clock signal (to 74HC126) 46 SW1 CD mechanism switch 1 for disc in & 8cm disc. 7 SUBQ CD LSI sub code clock 49 JOG0 Rotary encoder input 0 10 RESET Micon reset pin 50 JOS1 Rotary encoder input 1 11 LCDS K LCD driver chata output 52 STATUS CD LSI status signal 12 LCDS K LCD driver chap enable port 54 SDN Fwale statesin 14						
1 XIN 4.5MHz crystal oscillation 41 CD ON CD 8V supply on 2 TEST2 Connect to ground 42 RELAY SV power control 4 JBUS SO J-BUS signal data input (to 74HC126) 43 BBEE CTL No use 5 JBUS SO J-BUS output clock signal (to 74HC126) 44 BEEP No use 6 JBUS COMT J-BUS OUTOCONT 46 SW4 CD mechanism switch 1 for disc in, 8cm disc 7 SUBQ CD LSI sub code data input 47 SW3 CD mechanism switch 1 for disc in, 8cm disc 8 No use 48 REST CD fokup rest position 60 9 SQCK CD LSI sub code clock 49 JOG0 Rotary encoder input 0 10 RESET Micon reset pin 50 JOG0 Rotary encoder input 1 11 LCDS N No use 51 CD SIstatus signal 13 LCDSCK LCD driver data output 52 STATUS CD Status signal 14 LCD CE LCD driver data output 57 REMOCON Remoon input 15 FMILLUMI No use 57 REMOCON Remoon input 16 AMILLUMI No use 59 <t< td=""><td></td><td>Symbol</td><td>Function</td><td></td><td>Symbol</td><td>Function</td></t<>		Symbol	Function		Symbol	Function
3 JBUS SI J-BUS signal data input (to 74HC126) 43 BBE CTL No use 4 JBUS SO J-BUS signal data output (to 74HC126) 44 BEEP No use 6 JBUS I/O CONT J-BUS Signal data output (to 74HC126) 45 SW4 7 SUBQ OD LSI sub code data input 47 SW3 CD mechanism switch 1 for disc in, 8cm disc 7 SUBQ OD LSI sub code data input 47 SW3 CD mechanism switch 1 for disc in, 8cm disc 9 SOCK CD LSI sub code clock 49 JOG0 Rotary encoder input 0 10 RESET Micon reset pin 50 JOG1 Rotary encoder input 1 11 LCDS N LCD driver data output 52 STATUS CD LSI status signal 13 LCDSCK LCD driver chip enable port 54 SDX5T Station datection, Stereo indication 14 LCDCE LCD driver chip enable port 54 SDX1T J-BUS Interrupt 17 CD ILLUM No use 57 BAND FM mono selection 18 MMILLUM No use 60 MUT M		XIN	4.5MHz crystal oscillation		CD ON	CD 8V supply on
4 JBUS SO J-BUS signal data output (to 74HC126) 44 BEEP No use 5 JBUS SOC NOT J-BUS V0 control 46 SW4 CD mechanism switch 1 for disc in, 8cm disc 6 JBUS V0 CONT J-BUS V0 control 46 SW4 CD mechanism switch 1 for disc in, 8cm disc 7 SUBQ CD LSI sub code data input 47 SW3 CD mechanism switch 1 for disc in, 8cm disc 9 SQCK CD LSI sub code clock 49 JOG0 Potary encoder input 0 10 RESET Micon reset pin 50 JOG1 Potary encoder input 1 11 LCD SO LCD driver data output 52 STATUS CD LSI status signal 12 LCD SCK LCD driver clock signal 53 PSAVE2 Power save 2 : +8 detect 14 LCD CE LCD driver clock signal 53 REMCCON Remocon input 15 FMILLUMI No use 57 BAND FM/Adm band selection 17 CD ILUMI No use 59 IFRQ/AGC During FM auto search, IF request output H after SD 18 DIMMER OUT No use 61 LEVEL </td <td>2</td> <td>TEST2</td> <td></td> <td>42</td> <td>RELAY</td> <td></td>	2	TEST2		42	RELAY	
5 JBUS SCK J-BUS output clock signal (to 74HC126) 45 SW4 6 JBUS VO CONT JABUS VO CONT J-BUS I/O control 46 SW1 CD mechanism switch 1 for disc present, loading end 7 SUBQ CD LSI sub code data input 47 SW3 CD mecha. switch 3 for disc present, loading end 9 SQCK CD LSI sub code clock 49 JOG0 Rotary encoder input 0 10 RESET Micon reset pin 50 JOG1 Rotary encoder input 1 11 LCD SO LCD driver data output 52 STATUS CD LSI satus signal 12 LCD SO LCD driver choick signal 53 REMCOON Remocon input 13 LCDSCK LCD driver choick signal 53 REMCOON Remocon input 14 LCD CE LCD driver choick signal 53 REMCOON Remocon input 16 AMILLUMI No use 57 BAND FMIAN band selection 17 CD LILUMI No use 57 BAND FMIAN band selection 19 LM0 CD loading motor output 59 IFRQ/AGC During FM auto search, AGC output 20 LM1 CD loading motor output 59 IFRQ/AGC During FM auto search, AGC outpu	3	J BUS SI	J-BUS signal data input (to 74HC126)	43	BBE CTL	No use
6 JBUS I/O CONT J-BUS I/O control 46 SW1 CD mechanism switch 1 for disc in, 8cm disc 7 SUBQ CD LS1 sub code data input 47 SW3 CD mechanism switch 3 for disc present, loading enc 8 No use 48 REST CD pickup rest position 9 SQCK CD LS1 sub code clock 49 JOG0 Rotary encoder input 0 10 RESET Micon reset pin 50 JOG1 Rotary encoder input 1 11 LCD SO LCD driver data output 52 STATUS CD LS1 status signal 13 LCDSCK LCD driver clock signal 53 PSAVE2 Power save 2 : +B detect 14 LCD CE LCD driver club enable port 54 SDST Station detection, Stereo indication 15 FMILLUMI No use 55 REMOCON Remocon input 16 AM ILLUMI No use 58 MONO FM mono selection 17 CD loading motor output 59 IFMQAGD During FM auto search, IF request output H after SD 20 LM0 CD loading motor output 59 IFMQAGE <t< td=""><td>4</td><td>J BUS SO</td><td>J-BUS signal data output (to 74HC126)</td><td>44</td><td>BEEP</td><td>No use</td></t<>	4	J BUS SO	J-BUS signal data output (to 74HC126)	44	BEEP	No use
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8 No use 48 REST CD pickup rest position 9 SQCK CD LSI sub code clock 49 J/GG0 Rotary encoder input 0 10 RESET Micon reset pin 50 J/GG1 Rotary encoder input 0 11 LCD SI No use 51 CD SENSE CD LSI status signal 12 LCD SO LCD driver data output 52 STATUS CD LSI status signal 13 LCDSCK LCD driver clock signal 53 PSAVE2 Power save 2 :+B detect 14 LCD CE LCD driver chock signal 53 PSAVE2 Power save 2 :+B detect 15 FMILLUMI No use 55 REMCCON Remocon input 16 AM ILUMI No use 57 BAND FMAMD savetcinn, Stereo indication 17 CD loading motor output 59 IFRO/CON Powen save 2, HD detect No 20 LM1 CD loading motor output 59 IFRO/AGC During FM auto search, AGC output 21 No use 60	6	J BUS I/O CONT	J-BUS I/O control	46	SW1	CD mechanism switch 1 for disc in, 8cm disc
9 SQCK CD LSI sub code clock 49 JOG0 Rotary encoder input 0 10 RESET Micon reset pin 50 JOG1 Rotary encoder input 1 11 LCD S0 LCD driver data output 52 STATUS CD LSI sense signal 13 LCDSCK LCD driver clock signal 53 PSAVE2 Power save 2 : +B detect 14 LCD CE LCD driver clock signal 53 PSAVE2 Power save 2 : +B detect 14 LCD CE LCD driver clock signal 53 PSAVE2 Power save 2 : +B detect 15 FM ILLUMI No use 55 REMOCON Remocon input 16 AM ILLUMI No use 55 RBMOCO Remocon input 17 CD ILLUMI No use 58 MONO FM auto search, IF request output H atters D 18 DIMMER OUT No use 59 IFRO/AGC During FM auto search, AGC output 21 No use 60 MUTE Muting switch 22 22 No use 61 LEVEL Level meter input 23 No use	7	SUBQ	CD LSI sub code data input	47	SW3	CD mecha. switch 3 for disc present, loading end
10 RESET Micon reset pin 50 JOG1 Rotary encoder input 1 11 LCD SI No use 51 CD SENSE CD LSI sense signal 12 LCD SO LCD driver data output 52 STATUS CD LSI status signal 13 LCDSCK LCD driver clock signal 53 PSAVE2 Power save 2: +B detect 14 LCD CE LCD driver clock signal 53 PSAVE2 Power save 2: +B detect 15 FMILLUMI No use 55 REMOCON Remocon input 16 AM ILLUMI No use 57 BAND FlwAM band selection 17 CD ILLUMI No use 58 MONO FM mono selection 19 LM0 CD loading motor output 59 IFRO/AGC During FM auto search, IF request output Hater SD 20 LM1 CD loading motor output 59 IFRO/AGC During FM auto search, IF request output Hater SD 21 No use 60 MUTE Muting switch 142 22 No use 61 LEVCH Level meter input 23 N	8		No use	48	REST	CD pickup rest position
11 LCD SI No use 51 CD SENSE CD LSI status signal 12 LCD SO LCD driver data output 52 STATUS CD LSI status signal 13 LCDSCK LCD driver clock signal 53 PSAVE2 Power save 2 : +B detect 14 LCD CE LCD driver clock signal 53 PSAVE2 Power save 2 : +B detect 15 FM ILLUMI No use 56 JBUS INT JBUS interrupt 16 AM ILLUMI No use 57 BAND FWAM band selection 17 CD Icluding motor output 59 IFRQ/AGC During FM auto search, IF request output H after SD 20 LM1 CD loading motor output 59 IFRQ/AGC During FM auto search, AGC output 21 No use 60 MUTE Muting switch 10 22 No use 61 LEVEL Level meter input 23 No use 62 SMETER S meter input 24 KS2 No use 64 KEY0 Key 1 data input (AD) 25 KS1 No use 67 PSAVE1 <td>9</td> <td>SQCK</td> <td>CD LSI sub code clock</td> <td>49</td> <td>JOG0</td> <td>Rotary encoder input 0</td>	9	SQCK	CD LSI sub code clock	49	JOG0	Rotary encoder input 0
12 LCD SO LCD driver data output 52 STATUS CD LSI status signal 13 LCDSCK LCD driver clock signal 53 PSAVE2 Power save 2 : +B detect 14 LCD CE LCD driver chip enable port 54 SD/ST Station detection, Stereo indication 15 FM ILLUMI No use 55 REMOCON Remocon input 16 AM ILLUMI No use 57 BAND FM/AM band selection 17 CD ILLUMI No use 58 MONO FM mono selection 19 LM0 CD loading motor output 59 IFRQ/AGC During FM auto search, IF request output H after SD 20 LM1 CD loading motor output 60 MUTE Muting switch 21 No use 61 LEVEL Level meter input 23 No use 62 S METER S meter input 24 KS2 No use 63 KEY2 Key 2 data input (AD) 26 KS0 Output for initial setting diode matrix 65 KEY1 Key 1 data input (AD) 28 K2 No	10	RESET	Micon reset pin	50	JOG1	Rotary encoder input 1
13 LCDSCK LCD driver clock signal 53 PSAVE2 Power save 2 + B detect 14 LCD CE LCD driver chip enable port 54 SD/ST Station detection, Stereo indication 15 FM ILLUMI No use 55 REMOCON Remocon input 16 AM ILLUMI No use 56 J BUS INT J BUS interrupt 17 CD ILLUMI No use 57 BAND FM/AM band selection 18 DIMMER OUT No use 58 MONO FM mono selection 19 LM0 CD loading motor output 59 IFRQ/AGC During FM auto search, IF request output H after SD 20 LM1 CD loading motor output 59 IFRQ/AGC During FM auto search, IF request output H after SD 21 No use 60 MUTE Muting switch 22 23 No use 61 LEVEL Level meter input 24 KS2 No use 64 KEY2 Key 2 data input (AD) 26 KS0 Output for initial setting diode matrix 65 KEY1 Key 1 data input (AD) <	11	LCD SI	No use	51	CD SENSE	CD LSI sense signal
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15 FM ILLUMI No use 55 REMOCON Remocon input 16 AM ILLUMI No use 56 J BUS INT J-BUS interrupt 17 CD ILLUMI No use 57 BAND FM/AM band selection 18 DIMMER OUT No use 58 MONO FM mono selection 19 LM0 CD loading motor output 59 IFRQ/AGC During FM auto search, IF request output H after SD 20 LM1 CD loading motor output 60 MUTE Muting switch 21 No use 61 LEVEL Level meter input 23 No use 62 S METER S meter input 24 KS2 No use 63 KEYC HANGE Connect to ground 25 KS1 No use 64 KEY2 Key 1 data input (AD) 26 KS0 Output for initial setting diode matrix 65 KEY1 Key 1 data input (AD) 28 K2 No use 67 PSAVE1 Power save 1, ACC power detect 29 K1 Input for initial setting diode matrix 68 <t< td=""><td>13</td><td>LCDSCK</td><td>LCD driver clock signal</td><td>53</td><td>P.SAVE2</td><td>Power save 2 : +B detect</td></t<>	13	LCDSCK	LCD driver clock signal	53	P.SAVE2	Power save 2 : +B detect
16 AM ILLUMI No use 56 J BUS INT J-BUS interrupt 17 CD ILLUMI No use 57 BAND FM/AM band selection 18 DIMMER OUT No use 58 MONO FM mono selection 19 LM0 CD loading motor output 59 IFRQ/AGC During FM auto search, IF request output H after SD detected. During AM auto search, AGC output. 20 LM1 CD loading motor output 60 MUTE Muting switch 21 No use 60 MUTE Muting switch 23 22 No use 61 LEVEL Level meter input 24 23 No use 62 S METER S meter input 24 KS2 No use 63 KEYC HANGE Connect to ground 25 KS1 No use 64 KEY2 Key 2 data input (AD) 26 KS0 Output for initial setting diode matrix 65 KEY1 Key 1 data input (AD) 28 K2 No use 67 PSAVE1 Power save 1, ACC power detect 29 K1 Input for initita	14	LCD CE	LCD driver chip enable port	54	SD/ST	Station detection, Stereo indication
17 CD ILLUMI No use 57 BAND FW/AM band selection 18 DIMMER OUT No use 58 MONO FM mono selection 19 LM0 CD loading motor output 59 IFRQ/AGC During FM auto search, IF request output H after SD detected. During AM auto search, AGC output. 20 LM1 CD loading motor output 60 MUTE Muting switch 21 No use 60 MUTE Muting switch 22 No use 61 LEVEL Level meter input 23 No use 62 SMETER S meter input 24 KS2 No use 63 KEY CHANGE Connect to ground 25 KS1 No use 64 KEY2 Key 2 data input (AD) 26 KS0 Output for initial setting diode matrix 65 KEY1 Key 1 data input (AD) 27 DETACH Front panel detect 66 KEY0 Key 0 data input (AD) 28 K2 No use 67 PSAVE1 Power save 1, ACC power detect 29 K1 Input for initial setting diode matrix	15	FM ILLUMI	No use	55	REMOCON	Remocon input
18DIMMER OUTNo use58MONOFM mono selection19LM0CD loading motor output59IFRQ/AGCDuring FM auto search, IF request output H after SD20LM1CD loading motor outputdetected. During AM auto search, AGC output.21No use60MUTEMuting switch22No use61LEVELLevel meter input23No use62S METERS meter input24KS2No use63KEY CHANGEConnect to ground25KS1No use64KEY2Key 2 data input (AD)26KS0Output for initial setting diode matrix65KEY1Key 1 data input (AD)28K2No use67PSAVE1Power save 1, ACC power detect29K1Input for initial setting diode matrix68SENSEVoltage sense30K0Input for initial setting diode matrix69No use31Vdd5V power supply70FM IF COUNTFM IF counter data input32SW2CD mechanism switch 2 for 12cm disc71No use33CDLSI RESETCD LSI command clock signal73Vdd5V power supply34MCLKCD LSI command data output76AM OSCNo use35MDATACD LSI command clock signal75FM OSCFM input frequency36MLDCD LSI command clock signal75FM OSCFM input frequency37No use76 </td <td>16</td> <td>AM ILLUMI</td> <td>No use</td> <td>56</td> <td>J BUS INT</td> <td>J-BUS interrupt</td>	16	AM ILLUMI	No use	56	J BUS INT	J-BUS interrupt
19LM0CD loading motor output59IFRQ/AGCDuring FM auto search, IF request output H after SD20LM1CD loading motor outputdetected. During AM auto search, AGC output.21No use60MUTEMuting switch22No use61LEVELLevel meter input23No use62S METERS meter input24KS2No use63KEY CHANGEConnect to ground25KS1No use64KEY2Key 2 data input (AD)26KS0Output for initial setting diode matrix65KEY1Key 1 data input (AD)28K2No use67PSAVE1Power save 1, ACC power detect29K1Input for initial setting diode matrix68SENSEVoltage sense30K0Input for initial setting diode matrix69No useNo use31Vdd5V power supply70FM IF COUNTFM IF counter data input32SW2CD mechanism switch 2 for 12cm disc71No use33CD LSI reset72No use3634MCLKCD LSI command clock signal73Vdd5V power supply35MDATACD LSI command data output76AM OSCNo use36MLDCD LSI command cload signal75FM OSCFM input frequency37No use77No use38No use38No use77No use39SCLE.volume	17	CD ILLUMI	No use	57	BAND	FM/AM band selection
20LM1CD loading motor outputdetected. During AM auto search, AGC output.21No use60MUTEMuting switch22No use61LEVELLevel meter input23No use62S METERS meter input24KS2No use63KEY CHANGEConnect to ground25KS1No use64KEY2Key 2 data input (AD)26KS0Output for initial setting diode matrix65KEY1Key 1 data input (AD)28K2No use67PSAVE1Power save 1, ACC power detect29K1Input for initial setting diode matrix68SENSEVoltage sense30K0Input for initial setting diode matrix69No useNo use31Vdd5V power supply70FM IF COUNTFM IF counter data input32SW2CD mechanism switch 2 for 12cm disc71No use33CD LSI command clock signal73Vdd5V power supply34MCLKCD LSI command clock signal75FM OSCFM input frequency37No use76VssGround38No use38No use77No use74No use39SCLE.volume data output78EOPLL error output signal40SDAE.volume data output79TEST1Connect to ground	18	DIMMER OUT	No use	58	MONO	FM mono selection
21No use60MUTEMuting switch22No use61LEVELLevel meter input23No use62S METERS meter input24KS2No use63KEY CHANGEConnect to ground25KS1No use64KEY2Key 2 data input (AD)26KS0Output for initial setting diode matrix65KEY1Key 1 data input (AD)27DETACHFront panel detect66KEY0Key 0 data input (AD)28K2No use67PSAVE1Power save 1, ACC power detect29K1Input for initial setting diode matrix68SENSEVoltage sense30K0Input for initial setting diode matrix69No use31Vdd5V power supply70FM IF COUNTFM IF counter data input32SW2CD mechanism switch 2 for 12cm disc71No use33CD LSI reset72No use34MCLK34MCLKCD LSI command clock signal73Vdd5V power supply35MDATACD LSI command load signal75FM OSCFM input frequency36MLDCD LSI command load signal75FM OSCFM input frequency37No use77No use38No use7738No use77No use78EO39SCLE.volume data output78EOPLL error output signal40SDA <td>19</td> <td>LM0</td> <td>CD loading motor output</td> <td>59</td> <td>IFRQ/AGC</td> <td>During FM auto search, IF request output H after SD</td>	19	LM0	CD loading motor output	59	IFRQ/AGC	During FM auto search, IF request output H after SD
22No use61LEVELLevel meter input23No use62S METERS meter input24KS2No use63KEY CHANGEConnect to ground25KS1No use64KEY2Key 2 data input (AD)26KS0Output for initial setting diode matrix65KEY1Key 1 data input (AD)27DETACHFront panel detect66KEY0Key 0 data input (AD)28K2No use67PSAVE1Power save 1, ACC power detect29K1Input for initial setting diode matrix68SENSEVoltage sense30K0Input for initial setting diode matrix69No use31Vdd5V power supply70FM IF COUNTFM IF counter data input32SW2CD mechanism switch 2 for 12cm disc71No use33CD LSI RESETCD LSI reset72No use34MCLKCD LSI command clock signal73Vdd5V power supply35MDATACD LSI command load signal75FM OSCFM input frequency36MLDCD LSI command load signal75FM OSCFM input frequency37No use77No use38No use38No use77No use26AU39SCLE.volume clock output78EOPLL error output signal40SDAE.volume data output79TEST1Connect to ground	20	LM1	CD loading motor output			detected. During AM auto search, AGC output.
23No use62S METERS meter input24KS2No use63KEY CHANGEConnect to ground25KS1No use64KEY2Key 2 data input (AD)26KS0Output for initial setting diode matrix65KEY1Key 1 data input (AD)27DETACHFront panel detect66KEY0Key 0 data input (AD)28K2No use67PSAVE1Power save 1, ACC power detect29K1Input for initial setting diode matrix68SENSEVoltage sense30K0Input for initial setting diode matrix69No use31Vdd5V power supply70FM IF COUNTFM IF counter data input32SW2CD mechanism switch 2 for 12cm disc71No use33CD LSI RESETCD LSI reset72No use34MCLKCD LSI command clock signal73Vdd5V power supply35MDATACD LSI command load signal75FM OSCFM input frequency36MLDCD LSI command load signal75FM OSCFM input frequency37No use76VssGround38No use77No use39SCLE.volume clock output78EO40SDAE.volume data output79TEST1Connect to ground	21		No use	60	MUTE	Muting switch
24KS2No use63KEY CHANGEConnect to ground25KS1No use64KEY2Key 2 data input (AD)26KS0Output for initial setting diode matrix65KEY1Key 1 data input (AD)27DETACHFront panel detect66KEY0Key 0 data input (AD)28K2No use67P.SAVE1Power save 1, ACC power detect29K1Input for initial setting diode matrix68SENSEVoltage sense30K0Input for initial setting diode matrix69No use31Vdd5V power supply70FM IF COUNTFM IF counter data input32SW2CD mechanism switch 2 for 12cm disc71No use33CD LSI RESETCD LSI reset72No use34MCLKCD LSI command clock signal73Vdd5V power supply35MDATACD LSI command data output76AM OSCNo use36MLDCD LSI command load signal75FM OSCFM input frequency37No use76VssGround38No use77No use39SCLE.volume clock output78EOPLL error output signal40SDAE.volume data output79TEST1Connect to ground	22		No use	61	LEVEL	Level meter input
25KS1No use64KEY2Key 2 data input (AD)26KS0Output for initial setting diode matrix65KEY1Key 1 data input (AD)27DETACHFront panel detect66KEY0Key 0 data input (AD)28K2No use67P:SAVE1Power save 1, ACC power detect29K1Input for initial setting diode matrix68SENSEVoltage sense30K0Input for initial setting diode matrix69No use31Vdd5V power supply70FM IF COUNTFM IF counter data input32SW2CD mechanism switch 2 for 12cm disc71No use33CD LSI RESETCD LSI reset72No use34MCLKCD LSI command clock signal73Vdd5V power supply35MDATACD LSI command data output76AM OSCNo use36MLDCD LSI command load signal75FM OSCFM input frequency37No use76VssGround38No use77No use39SCLE.volume clock output78EOPLL error output signal40SDAE.volume data output79TEST1Connect to ground	23		No use	62	SMETER	S meter input
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27DETACHFront panel detect66KEY0Key 0 data input (AD)28K2No use67PSAVE1Power save 1, ACC power detect29K1Input for initial setting diode matrix68SENSEVoltage sense30K0Input for initial setting diode matrix69No use31Vdd5V power supply70FM IF COUNTFM IF counter data input32SW2CD mechanism switch 2 for 12cm disc71No use33CD LSI RESETCD LSI reset72No use34MCLKCD LSI command clock signal73Vdd5V power supply35MDATACD LSI command data output76AM OSCNo use36MLDCD LSI command load signal75FM OSCFM input frequency37No use76VssGround38No use77No use39SCLE.volume clock output78EO40SDAE.volume data output79TEST1Connect to ground	25	KS1	No use	64	KEY2	Key 2 data input (AD)
28K2No use67P:SAVE1Power save 1, ACC power detect29K1Input for initial setting diode matrix68SENSEVoltage sense30K0Input for initial setting diode matrix69No use31Vdd5V power supply70FM IF COUNTFM IF counter data input32SW2CD mechanism switch 2 for 12cm disc71No use33CD LSI RESETCD LSI reset72No use34MCLKCD LSI command clock signal73Vdd5V power supply35MDATACD LSI command data output76AM OSCNo use36MLDCD LSI command load signal75FM OSCFM input frequency37No use76VssGround38No use77No use39SCLE.volume clock output78EOPLL error output signal40SDAE.volume data output79TEST1Connect to ground	26	KS0	Output for initial setting diode matrix	65	KEY1	Key 1 data input (AD)
29K1Input for initial setting diode matrix68SENSEVoltage sense30K0Input for initial setting diode matrix69No use31Vdd5V power supply70FM IF COUNTFM IF counter data input32SW2CD mechanism switch 2 for 12cm disc71No use33CD LSI RESETCD LSI reset72No use34MCLKCD LSI command clock signal73Vdd5V power supply35MDATACD LSI command data output76AM OSCNo use36MLDCD LSI command load signal75FM OSCFM input frequency37No use76VssGround38No use77No use39SCLE.volume clock output78EOPLL error output signal40SDAE.volume data output79TEST1Connect to ground	27	DETACH	Front panel detect	66	KEY0	Key 0 data input (AD)
30K0Input for initial setting diode matrix69No use31Vdd5V power supply70FM IF COUNTFM IF counter data input32SW2CD mechanism switch 2 for 12cm disc71No use33CD LSI RESETCD LSI reset72No use34MCLKCD LSI command clock signal73Vdd5V power supply35MDATACD LSI command data output76AM OSCNo use36MLDCD LSI command load signal75FM OSCFM input frequency37No use76VssGround38No use77No use39SCLE.volume clock output78EOPLL error output signal40SDAE.volume data output79TEST1Connect to ground	28	K2	No use	67	P.SAVE1	Power save 1, ACC power detect
31Vdd5V power supply70FM IF COUNTFM IF counter data input32SW2CD mechanism switch 2 for 12cm disc71No use33CD LSI RESETCD LSI reset72No use34MCLKCD LSI command clock signal73Vdd5V power supply35MDATACD LSI command data output76AM OSCNo use36MLDCD LSI command load signal75FM OSCFM input frequency37No use76VssGround38No use77No use39SCLE.volume clock output78EOPLL error output signal40SDAE.volume data output79TEST1Connect to ground	29	K1	Input for initial setting diode matrix	68	SENSE	Voltage sense
32SW2CD mechanism switch 2 for 12cm disc71No use33CD LSI RESETCD LSI reset72No use34MCLKCD LSI command clock signal73Vdd5V power supply35MDATACD LSI command data output76AM OSCNo use36MLDCD LSI command load signal75FM OSCFM input frequency37No use76VssGround38No use77No use39SCLE.volume clock output78EO40SDAE.volume data output79TEST1Connect to ground	30	K0	Input for initial setting diode matrix	69		No use
33CD LSI RESETCD LSI reset72No use34MCLKCD LSI command clock signal73Vdd5V power supply35MDATACD LSI command data output76AM OSCNo use36MLDCD LSI command load signal75FM OSCFM input frequency37No use76VssGround38No use77No use39SCLE.volume clock output78EOPLL error output signal40SDAE.volume data output79TEST1Connect to ground	31	Vdd	5V power supply	70	FM IF COUNT	FM IF counter data input
34MCLKCD LSI command clock signal73Vdd5V power supply35MDATACD LSI command data output76AM OSCNo use36MLDCD LSI command load signal75FM OSCFM input frequency37No use76VssGround38No use77No use39SCLE.volume clock output78EOPLL error output signal40SDAE.volume data output79TEST1Connect to ground	32	SW2	CD mechanism switch 2 for 12cm disc	71		No use
35MDATACD LSI command data output76AM OSCNo use36MLDCD LSI command load signal75FM OSCFM input frequency37No use76VssGround38No use77No use39SCLE.volume clock output78EO40SDAE.volume data output79TEST1Connect to ground	33	CD LSI RESET	CD LSI reset	72		No use
36MLDCD LSI command load signal75FM OSCFM input frequency37No use76VssGround38No use77No use39SCLE.volume clock output78EOPLL error output signal40SDAE.volume data output79TEST1Connect to ground	34	MCLK	CD LSI command clock signal	73	Vdd	5V power supply
37No use76VssGround38No use77No use39SCLE.volume clock output78EOPLL error output signal40SDAE.volume data output79TEST1Connect to ground	35	MDATA	CD LSI command data output	76	AM OSC	No use
38No use77No use39SCLE.volume clock output78EOPLL error output signal40SDAE.volume data output79TEST1Connect to ground	36	MLD	CD LSI command load signal	75	FM OSC	FM input frequency
39 SCL E.volume clock output 78 EO PLL error output signal 40 SDA E.volume data output 79 TEST1 Connect to ground	37		No use	76	Vss	Ground
40 SDA E.volume data output 79 TEST1 Connect to ground	38		No use	77		No use
	39	SCL	E.volume clock output	78	EO	PLL error output signal
80 XOUT 4.5MHz crystal oscillation	40	SDA	E.volume data output	79	TEST1	Connect to ground
				80	XOUT	4.5MHz crystal oscillation

JV



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