

# TOYOTA

## AUDIO COMPONENT SERVICE MANUAL

---



### CN-TS6271A

#### Display Unit

TOYOTA PART No. : 86111-20010

VEHICLE : AVENSIS

DESTINATION : Europe

PRODUCTED AFTER : Nov., 2002

### Specification\*

#### General

##### Power Supply

DC 12V (11V - 16V),

Test Voltage 13.2V

Negative Ground

##### Current Consumption

Less than 2.5A

##### Dimensions\*\*

179 x 109 x 50 mm

##### Weight\*\*

740g

#### Display Block

##### Display Type

7" wide TFT panel

##### Display Size

234 x 1440 (dot)

##### Pixel Layout

Vertical Stripe

\* Specifications and the design are subject to possible modification without notice due to improvements.

\*\* Dimensions and Weight shown are approximate.

---

**PUB. No. 80623**

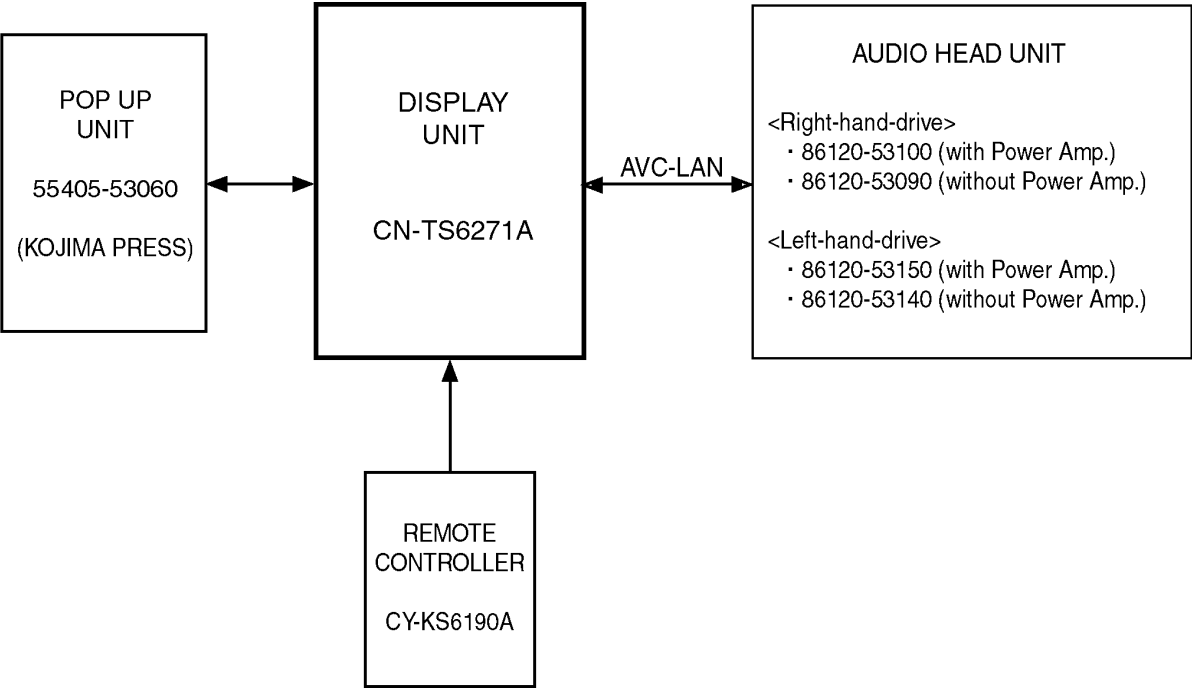
CONTENTS

	Page		Page
1 FEATUERS .....	2	6 IC BLOCK DIAGRAM .....	5
2 SYSTEM BLOCK DIAGRAM .....	2	7 REPLACEMENT PARTS LIST .....	6
3 FRONT VIEW .....	3	8 EXPLODED VIEW (Unit) .....	7
4 REAR VIEW AND CONNECTORS .....	3	9 WIRING DIAGRAM .....	8
5 WIRING CONNECTIONS .....	4	10 SCHEMATIC DIAGRAM .....	9

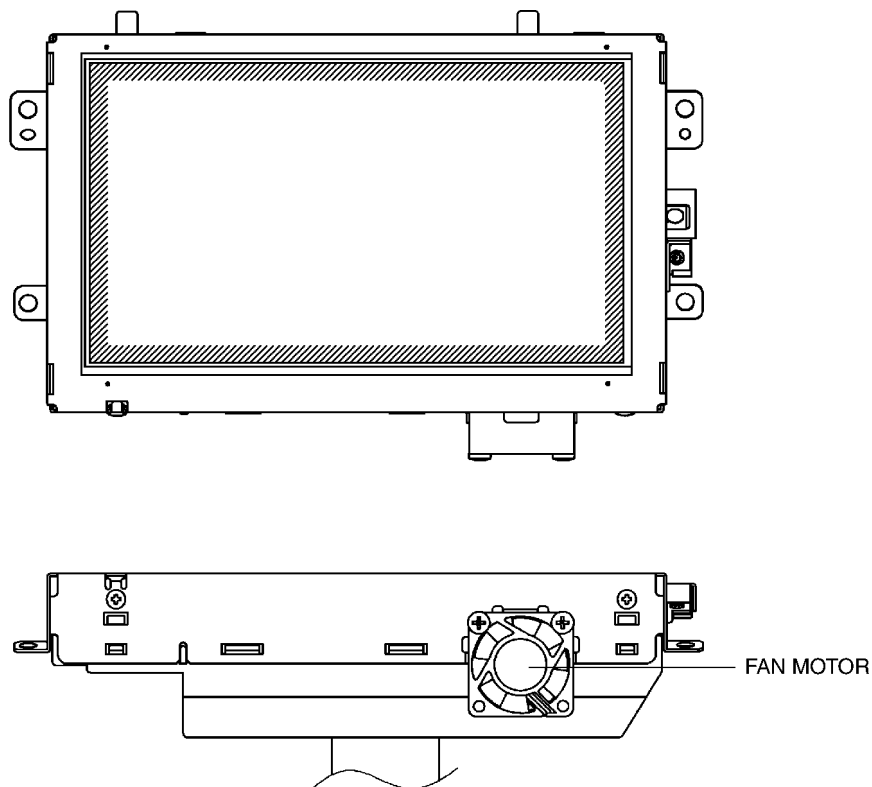
1 FEATUERS

- Compliance with TOYOTA AVC-LAN.
- Low-reflection 7" color TFT LCD.
- Compliance with NTCS input .

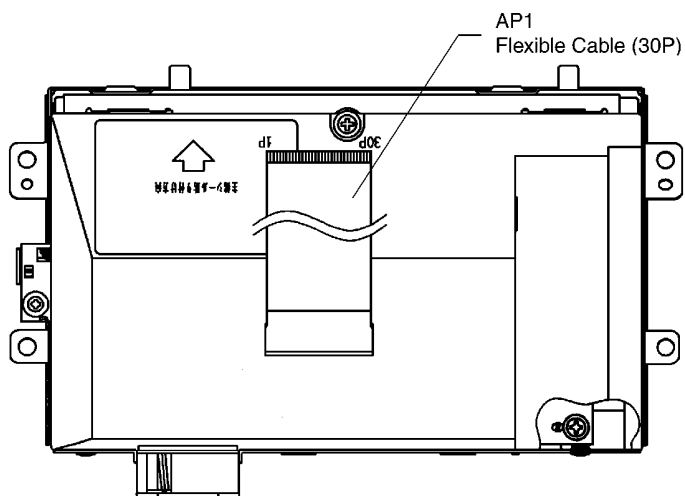
2 SYSTEM BLOCK DIAGRAM



### 3 FRONT VIEW



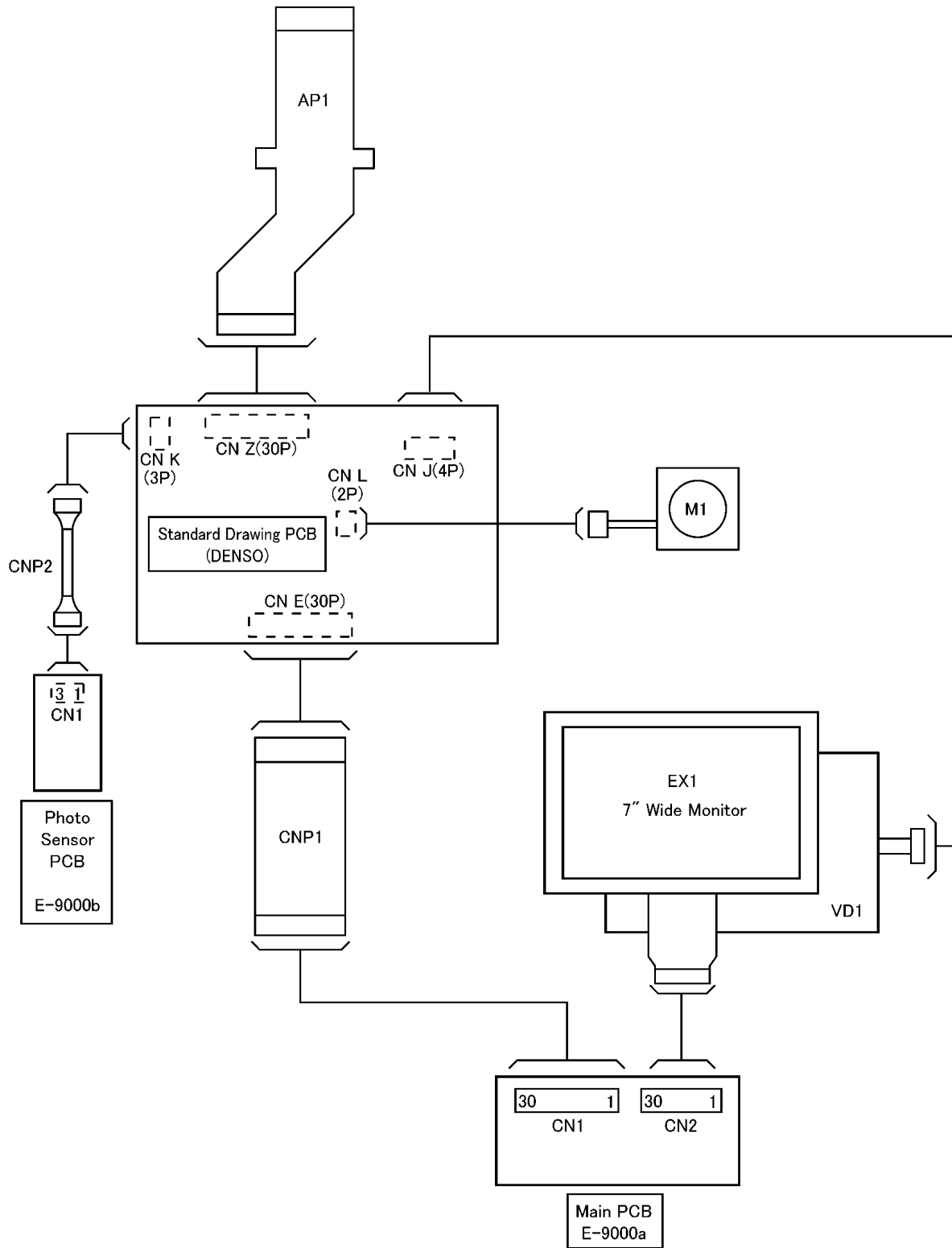
### 4 REAR VIEW AND CONNECTORS



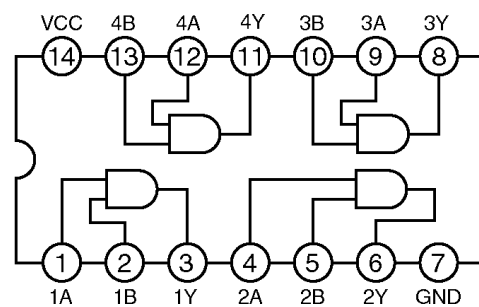
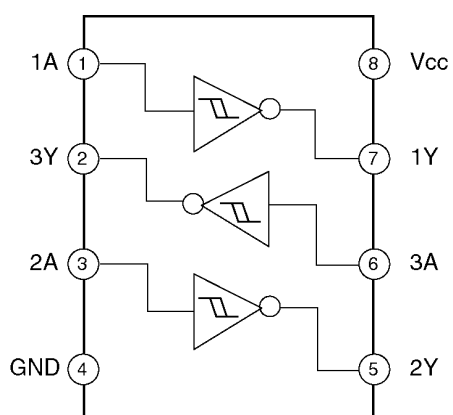
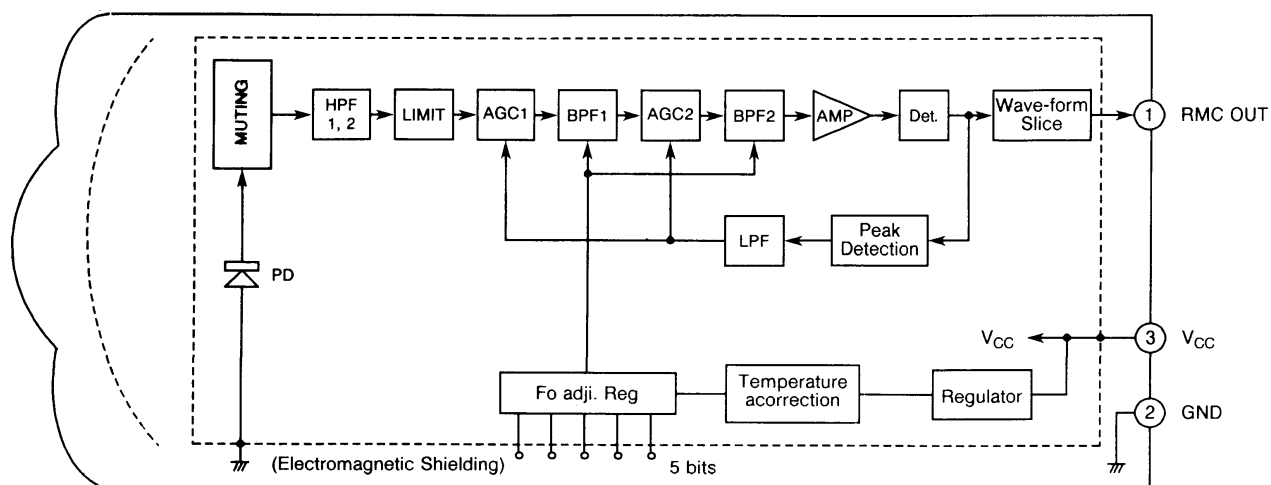
AP1 30P FLEXIBLE CABLE

1. Power Supply, +B1	(+B1)	11. AVC-LAN TX+	(TX+)	21. Shield (Remo Cont. Sig.)	(SG1)
2. Power Supply, +B1	(+B1)	12. AVC-LAN TX-	(TX-)	22. OPEN/CLOSE	(RE2)
3. Power Supply, +B1	(+B1)	13. Shield (TX Sig.)	(SG)	23. Video R	(R)
4. Power Supply, ACC	(ACC)	14. Reverse Sig.	(REV)	24. Ground (Video Sig.)	(VG)
5. Ignition Sig.	(IG)	15. Speed Sig.	(SPD)	25. Video B	(B)
6. Ground	(GND)	16. Parking Break Sig.	(PKB)	26. Video G	(G)
7. Nighttime Dimmer	(ADIM)	17. OPEN/CLOSE Sig.	(OPEN/CLOSE)	27. Video Ref. Vol.	(VR)
8. Nighttime Dimmer	(TAIL)	18. Diagnosis Input	(TC)	28. Composite Sync. Sig.	(SYNC)
9. Ground	(GND)	19. Remote Cont.	(RE1)	29. Video Sig.	(NTSC)
10. Ground	(GND)	20. Title Sig.	(TILT)	30. Shield (TV Sig.)	(SG)

## 5 WIRING CONNECTIONS



## 6 IC BLOCK DIAGRAM



# 7 REPLACEMENT PARTS LIST

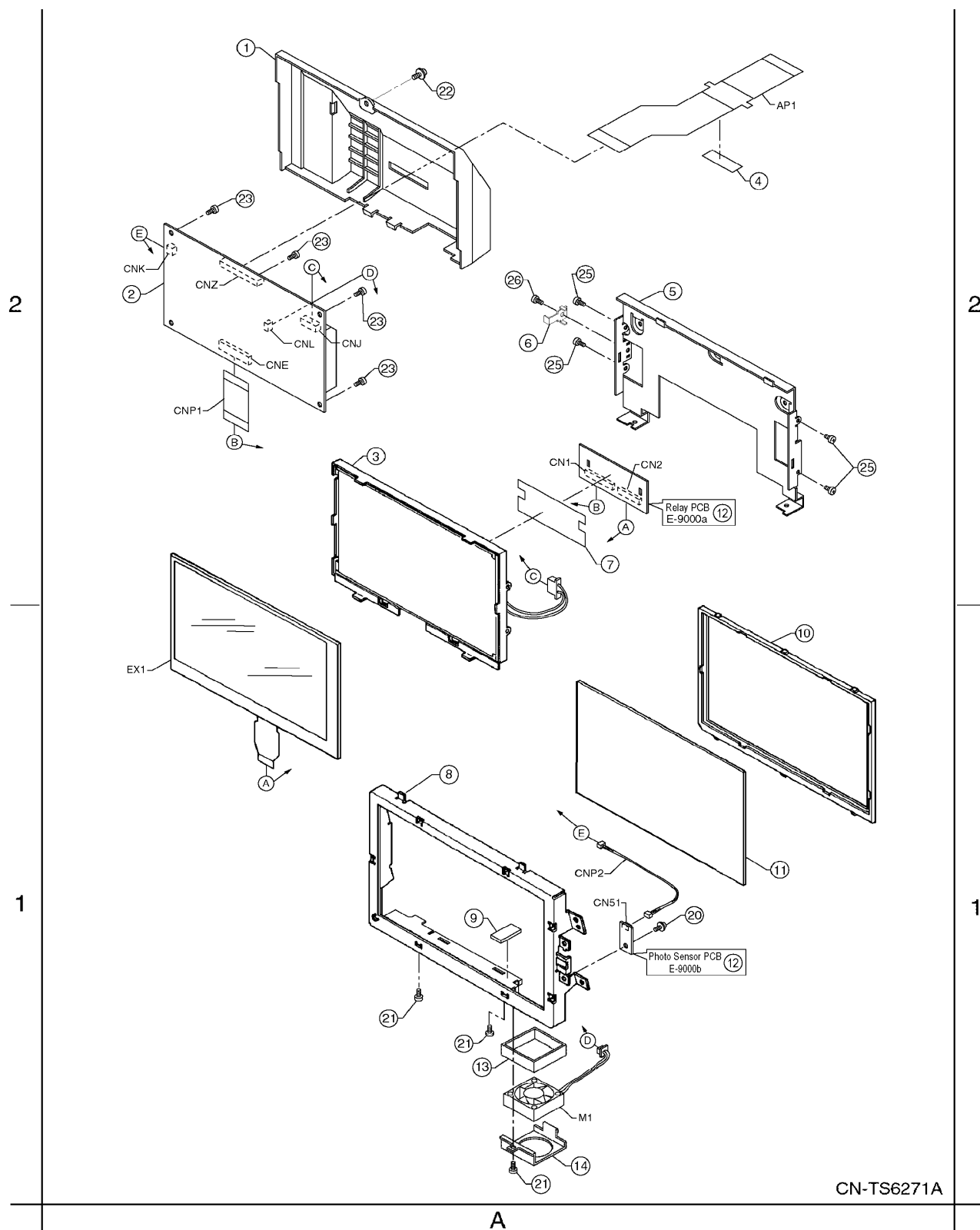
Notes :

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components, identified by  $\triangle$  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.
4. The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
5. "MCC" marks in remarks column are indicated supply parts of Matsushita Communication Industrial Corp. of America (MCC).

Ref. No.	Part No.	Part Name & Description	Remarks
[E9000]			
IC's and TRANSISTORS			
IC51	YEAMSBX8035F	IC	
IC101	C0JBAB000149	IC	
IC102	C0JBAZ000525	IC	
IC103	C0JBAA000291	IC	
DIODES			
D1	YEAD1SS355T1	Diode	
D2	YEAD1SS355T1	Diode	
D3	YEAD1SS355T1	Diode	
D4	MA2J72900L	Diode	
D5	MA2J72900L	Diode	
CAPACITORS			
C1	YECUZ1H221JC	Ceramic, 220PF 50WV	
C2	YECUZ1H332KX	Ceramic, 3300PF 50WV	
C3	F1H1H152A201	Ceramic, 1500PF 50WV	
C4	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C5	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C6	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C7	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C8	F1L1E2250002	Ceramic, 2.2 $\mu$ F 25WV	
C9	F1L1C4750006	Ceramic, 4.7 $\mu$ F 16WV	
C10	YECUV0J106KX	Ceramic, 10 $\mu$ F 6.3WV	
C11	YECUV0J106KX	Ceramic, 10 $\mu$ F 6.3WV	
C12	YECUV0J106KX	Ceramic, 10 $\mu$ F 6.3WV	
C13	F1L1C4750006	Ceramic, 4.7 $\mu$ F 16WV	
C14	F1L1E2250002	Ceramic, 2.2 $\mu$ F 25WV	
C15	YECUV0J106KX	Ceramic, 10 $\mu$ F 6.3WV	
C52	YECUV0J106KX	Ceramic, 10 $\mu$ F 6.3WV	
RESISTORS			
J1	ERJ3GEY0R00V	Chip, 0 $\Omega$ 1/16W	
J2	ERJ3GEY0R00V	Chip, 0 $\Omega$ 1/16W	
J3	ERJ3GEY0R00V	Chip, 0 $\Omega$ 1/16W	
J7	ERJ3GEY0R00V	Chip, 0 $\Omega$ 1/16W	
R1	ERJ3GEYJ152V	Chip, 1.5k $\Omega$ 1/16W	
R2	ERJ3GEYJ122V	Chip, 1.2k $\Omega$ 1/16W	
R3	ERJ3GEYJ331V	Chip, 330 $\Omega$ 1/16W	

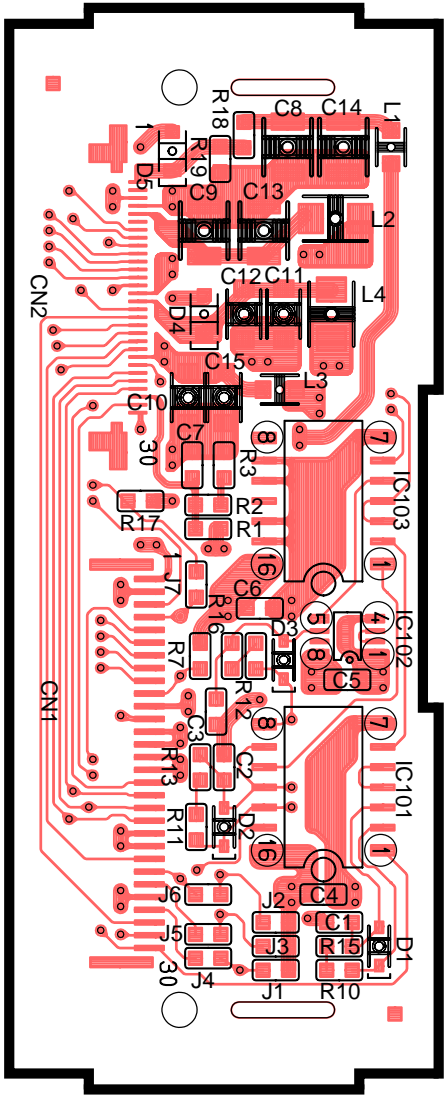
Ref. No.	Part No.	Part Name & Description	Remarks
R7	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R10	ERJ3GEYJ222V	Chip, 2.2k $\Omega$ 1/16W	
R11	ERJ3GEYJ152V	Chip, 1.5k $\Omega$ 1/16W	
R12	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R13	ERJ3GEYJ221V	Chip, 220 $\Omega$ 1/16W	
R15	ERJ3GEYJ391V	Chip, 390 $\Omega$ 1/16W	
R16	ERJ3GEYJ561V	Chip, 560 $\Omega$ 1/16W	
R18	ERJ3GEYJ821V	Chip, 820 $\Omega$ 1/16W	
R19	ERJ3GEYJ822V	Chip, 8.2k $\Omega$ 1/16W	
R51	ERJ6GEYJ471	Chip, 470 $\Omega$ 1/10W	
CONNECTORS			
CN1	YEAESFR30R1E	Connector, 30P	
CN2	YEAES243730	Connector, 30P	
CN51	K1KA03A00153	Connector, 3P	
COILS			
L1	YELTBLM21A10	Coil	
L2	G1C101K00009	Coil	
L3	YELTBLM21A10	Coil	
L4	G1C100K00005	Coil	
Mechanical Parts			
MISCELLANEOUS			
EX1	EDTCA40QA0	LCD	
M1	UDQFHF01	DC Motor	
AP1	YEAP2821	Flexible Cable, 30P	
CNP1	K9ZZ00000836	Connector, 30P	
CNP2	K1HB039D0003	Connector, 3P	
1	YEFA05801	Bottom Cover	
2	YEFX9992775	Drawing PCB Ass'y	
3	A4LBHF000008	Back Light	
4	YEFX9992668	Conductive Tape	
5	YEFX0215135A	Bracket	
6	YEFX0215166	Bracket, GND	
7	YEFV012083	Insulator	
8	YEFA07605	Front Plate Ass'y	
9	YEFS011823	Pad	
10	YEFS011762	Pad	
11	YEFJ012123	Ornament Plate	
12	YEP0PT9000B0	PCB w/Component	RTL
13	YEFS04759	Gum packing	
14	YEFX0215925	Bracket	
20	YEJS06119	Screw, M2.6x4mm	
21	YEJS06027	Screw, M3x4mm	
22	YEJT03007	Screw, M3x5mm	
23	YEJT03015	Tapping Screw, M3x6mm	
25	XSB2+3FX	Screw, M2x3mm	
26	XTB26+4FFX	Tapping Screw, M2.6x4mm	

# 8 EXPLODED VIEW (Unit)

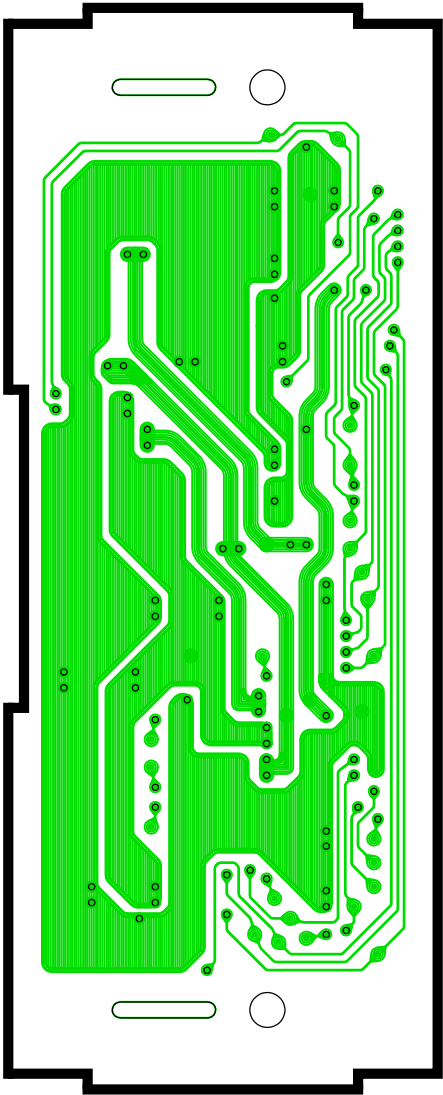


# 9 WIRING DIAGRAM

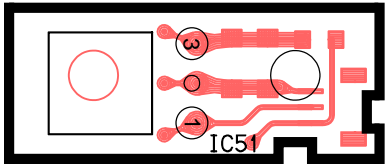
## 9.1. Main / Photo Sensor Block



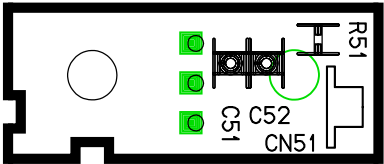
[E-9000a][Top View]



[E-9000a][Bottom View]



[E-9000b][Top View]



[E-9000b][Bottom View]



## 10 SCHEMATIC DIAGRAM

### 10.1. Main / Photo Sensor Block

