





## Sanyo DP50741 Service Manual

Remote control digital



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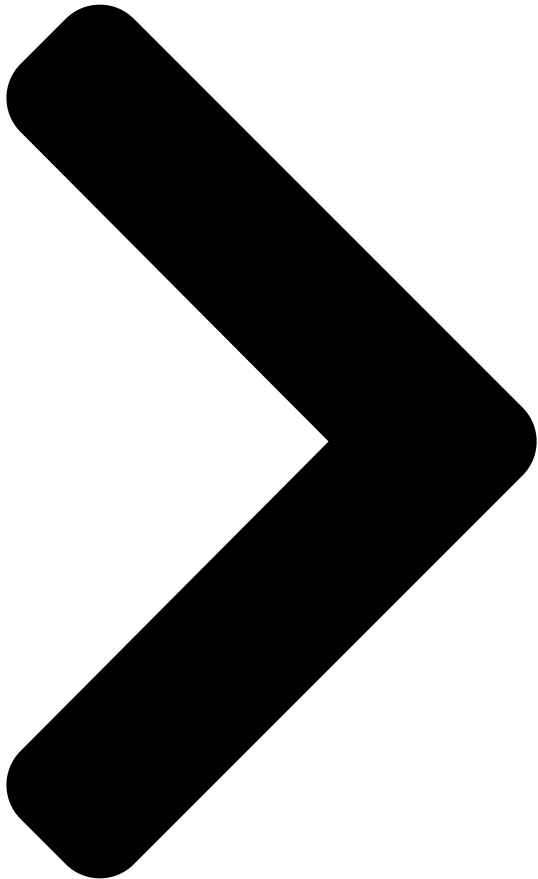
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**DP50710-00 / 01**

**DP50740-00 / 02 / 03**

**DP50741-01**

with panel # MD-50H13NBE

# Suggestions

The Pwr Bd. is seldom bad.

If the Pwr LED is turning OFF in 4-5 sec., these are the most common failures on the SC & SS Bds., If any are shorted, please replace the board.

SC

D451

D481

Q661

Q401

Q402

Q421

Q422

SS

Q001 —

Q002

Q021

Q022

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## Related Manuals for Sanyo DP50741

[Plasma TV Sanyo DP50741 Owner's Manual](#)

50" plasma hdtv (48 pages)

[TV Sanyo DP50741 Service Manual](#)

(42 pages)

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50" diagonal plasma 720p 600hz hdtv (2 pages)

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[TV Sanyo DP37649 Service Manual](#)

Sanyo dp37649 remote control digital color television (55 pages)

[TV Sanyo FVM4612 Service Manual](#)

(37 pages)

## Summary of Contents for Sanyo DP50741

[Page 1](#) DP50710-00 / 01 DP50740-00 / 02 / 03 DP50741-01 with panel # MD-50H13NBE  
Suggestions The Pwr Bd. is seldom bad. If the Pwr LED is turning OFF in 4-5 sec., these are the most common failures on the SC & SS Bds., If any are shorted, please replace the...

[Page 2](#) SANYO: DP50740-00 / 02 / 03 & DP50710-00 / 01 & DP50741-01 12/28/10 with PANASONIC 50" PLASMA PANEL (MD50H13NBE) SYMPTOM: TV's GREEN POWER LED WILL NOT REMAIN ON 2010-9B Unplugging any power cable from the SMPS to isolate the defective PCB will not work on this Panasonic panel.

[Page 3](#) BASE PATTERN TEST POINTS: 4 screws total: 2 screws through SU & SC Bds., VERY

IMPORTANT and 2 screws through SD & SC Bds. DP50710-00 / 01 (these screws are not chassis ground) DP50740-00 / 02 / 03 DP50741-01 11/04/10...

#### [Page 4: Dp50710](#)

DP50710-00 / 01 DP50740-00 / 02 / 03 & DP50741-01 11/04/10 IF YOU BELIEVE THE SMPS IS DEFECTIVE The SMPS can be checked, but all cables & flat ribbons from the SMPS & Digital Processor PCB must be unplugged. The only exception is the cable from D25 (D Bd.) to P25 (SMPS) must be connected.

#### [Page 5: Table Of Contents](#)

HEIGHT ..... 838mm DEPTH INCLUDING BASE ....283mm DP50741, J4JF, PRODUCT CODE 111011204 REFERENCE No.

#### [Page 6: Safety Instructions](#)

SAFETY INSTRUCTIONS SAFETY PRECAUTIONS WARNING: The chassis of this receiver has a floating ground with the potential of one half the AC line voltage in respect to earth ground. Service should not be attempted by anyone not familiar with the precautions necessary when working on this type of equipment.

#### [Page 7: Service Adjustments](#)

SERVICE ADJUSTMENTS GENERAL This set has an On-screen Service Menu system included in Volume - the CPU that allows remote operation for most of the Enter Service Menu service adjustments. ON-SCREEN SERVICE MENU SYSTEM 1. Enter the Service Menu: • Turn off the receiver and disconnect the AC power supply.

#### [Page 8: On-Screen Service Menu](#)

ON-SCREEN SERVICE MENU Table 1. ON-SCREEN SERVICE MENU When IC801 (EEPROM) is replaced, check the bus data to confirm they are the same as below. See page 3 for On-Screen Service Menu access and adjustments. Title Initial Data Note MUTE Audio mute at Power ON Volume setup inspection Option 1 Data (HDMI)

#### [Page 9: Power Failure Circuit](#)

POWER FAILURE CIRCUIT Check the following if the unit is turned off by the power CPU (IC800) is programmed so the set will go to standby failure detector. mode when there is circuit failure as described below. (Refer to "Block Diagram Power Lines".) 1.

#### [Page 10: Mechanical Disassembly](#)

MECHANICAL DISASSEMBLY CAUTION: This PDP TV uses several different kinds of screws. Using the correct screw is necessary to prevent damage. Lead wires must be redressed to their previous locations after servicing. The Earth sheet and gasket are provided to prevent interference to other radio and television receivers. The Earth sheet and gasket should be returned to its previous position after servicing.

#### [Page 11: Digital](#)

MECHANICAL DISASSEMBLY (Continued) ELECTROSTATICALLY SENSITIVE DEVICES Many solid-state devices (especially Integrated Circuits) are Electrostatically Sensitive, and, therefore, require special handling techniques as described under "Servicing Electrostatically Sensitive Devices," on page two in this service literature. BOARD LOCATIONS 1: Main (Digital) Board 3: KEY SW Board 2: RC LED Board 4: Speakers...

[Page 12](#) MECHANICAL DISASSEMBLY (Continued) FILTER GLASS REMOVAL 1. Remove 4 screws (A:4x10) to take the panel module and panel holders (Mounting Frames) with boards off. Mounting Frame 3. Remove 5 screws (A:4x10) to take the shield front (4 pcs) and the filter glass off. Filter Grass -...

[Page 13](#) MECHANICAL DISASSEMBLY (Continued) KEY SW BOARD REMOVAL Remove 2 screws (D:3x10) to take the key sw board off. KEY SW Board DEC IND SPEAKER REMOVAL Remove 4 screws (A:4x10) to take off both speakers. Speaker Speaker RC LED BOARD REMOVAL Remove 1 screw (D:3x10) to take the RC Led board off.



## [Page 14: Panel Module Removal](#)

PANEL MODULE REMOVAL 1. Remove the 4 screws (C:4x8) from the Mounting Frames to take the panel module off. Mounting Frame CAUTION: This PDP TV uses several different kinds of screws. Using the correct screw is necessary to prevent damage. Lead wires must be redressed to their previous locations after servicing.

## [Page 15: Chassis Electrical Parts List](#)

CHASSIS ELECTRICAL PARTS LIST CAUTION: To Protect against electrical shock and for continued product safety, refer to SAFETY PRECAUTIONS and PRODUCT SAFETY NOTICE on Page 2. PRODUCT SAFETY NOTICE PRODUCT SAFETY SHOULD BE CONSIDERED WHEN A REPLACEMENT IS MADE IN ANY AREA OF A RECEIVER. COMPONENTS INDICATED BY A IN THIS PARTS LIST AND THE SCHEMATIC DIAGRAM DESIGNATE COMPONENTS IN WHICH SAFETY CAN BE OF SPECIAL SIGNIFICANCE.

[Page 16](#) Schematic Schematic Part No. Part No. Description Description Location Location  
"ASSY,PWB,MAIN\_B-J4F\_SEI" C1004 F1H1A105A036 CERAMIC 1U K C1006 F1H1A105A036  
CERAMIC 1U K CAPACITORS C1009 F1H1A105A036 CERAMIC 1U K C001 F1H1H102A219  
CERAMIC 1000P K C1010 F1H1A105A036 CERAMIC 1U K C002 F1H1H102A219 CERAMIC 1000P  
K C1012 F1H1A105A036...

[Page 17](#) Schematic Schematic Part No. Part No. Description Description Location Location  
C2407 F1H1A105A036 CERAMIC 1U K C5540 F1H1A105A036 CERAMIC 1U K C2409  
F1H1H1010005 CERAMIC 100P J C5541 F1H1A105A036 CERAMIC 1U K C2410 F1H1H1010005  
CERAMIC 100P J C5542 F1H1A105A036 CERAMIC 1U K C2416 F1H1H104A220 CERAMIC...

[Page 18](#) Schematic Schematic Part No. Part No. Description Description Location Location  
F1J0106A020 CERAMIC 10U K 6.3V C5666 F1H1H4700006 CERAMIC 47P J C5590  
F1H1A105A036 CERAMIC 1U K C5667 F1H1H4700006 CERAMIC 47P J C5591 F1H1H104A913  
CERAMIC 0.1U K C5702 F1H1H104A220 CERAMIC 0.1U Z C5592 F1H1H104A913 CERAMIC...

## [Page 19: Integrated Circuits](#)

Schematic Schematic Part No. Part No. Description Description Location Location C6563  
F1H1H104A220 CERAMIC 0.1U Z DZ02DZ3.9Y—G ZENER DIODE 02DZ3.9Y(TPH3 C6600  
F1H1H104A220 CERAMIC 0.1U Z D1001 B0BC3R9A0384 ZENER DIODE MM3Z3V9B C6601  
F1H1H104A220 CERAMIC 0.1U Z B0BC4R0A0006 ZD UDZS-TE-173.9B C6602 F1H1H104A220  
CERAMIC 0.1U Z DZ02DZ3.9Y—G ZENER DIODE 02DZ3.9Y(TPH3...

[Page 20](#) Schematic Schematic Part No. Part No. Description Description Location Location  
IC2404 COJBAA000356 IC TC7SH08FU(TE85L) L1631 D0GDR00JA072 MT-GLAZE 0.000 ZA 1/10W  
COJBAA000484 IC 74AHC1G08GW D0GDR00Z0002 MT-GLAZE 0.000 ZA 1/10W IC2405  
COJBAA000356 IC TC7SH08FU(TE85L) L1644 G1C100MA0445 INDUCTOR 10U M COJBAA000484  
IC 74AHC1G08GW L1661 D0GDR00JA072 MT-GLAZE 0.000 ZA 1/10W...

[Page 21](#) Schematic Schematic Part No. Part No. Description Description Location Location  
L6131 G1CR47JA0041 "INDUCTOR,0.47U J" B1ABDF000024 TR 2SC3928A1S L6132  
G1CR47JA0041 "INDUCTOR,0.47U J" Q1623 B1ABGD000003 TR 2SC2411K-T146-Q L6200  
D0GDR00JA072 MT-GLAZE 0.000 ZA 1/10W Q1660 B1ABGD000003 TR 2SC2411K-T146-Q  
D0GDR00Z0002 MT-GLAZE 0.000 ZA 1/10W Q1700 B1ABCE000028 TR MMBTSC3928R...

[Page 22](#) Schematic Schematic Part No. Part No. Description Description Location Location  
R842 D0GB472JA072 MT-GLAZE 4.7K JA 1/10W R1045 D0GB101JA069 MT-GLAZE 100 JA 1/10W  
R843 D0GB472JA072 MT-GLAZE 4.7K JA 1/10W R1046 D0GB334JA068 MT-GLAZE 330K JA 1/10W  
R845 D0GB472JA072 MT-GLAZE 4.7K JA 1/10W R1047 D0GB154JA068 MT-GLAZE...

[Page 23](#) Schematic Schematic Part No. Part No. Description Description Location Location  
R1643 D0GBR00JA071 MT-GLAZE 0.000 ZA 1/10W R2411 D0GB101JA069 MT-GLAZE 100 JA  
1/10W R1644 D0GB471ZA037 MT-GLAZE 470 FA 1/10W R2412 D0GB472JA072 MT-GLAZE 4.7K  
JA 1/10W R1645 D0GB102ZA038 MT-GLAZE 1K FA 1/10W R2414 D0GB334JA068 MT-GLAZE...

[Page 24](#) Schematic Schematic Part No. Part No. Description Description Location Location  
R5528 D0GB750JA072 MT-GLAZE 75 JA 1/10W R5738 D0GB102ZA038 MT-GLAZE 1K FA 1/10W  
R5529 D0GB750JA072 MT-GLAZE 75 JA 1/10W R5740 D0GB680JA072 MT-GLAZE 68 JA 1/10W  
R5530 D0GB392ZA038 MT-GLAZE 3.9K FA 1/10W R5751 D0GBR00JA071 MT-GLAZE...

[Page 25](#) Schematic Schematic Part No. Part No. Description Description Location Location  
R6516 D0GBR00JA071 MT-GLAZE 0.000 ZA 1/10W MISCELLANEOUS R6517 D0GBR00JA071 MT-  
GLAZE 0.000 ZA 1/10W A100 1AA0B10N310M0 "ASSY,PWB,MAIN\_B- R6518 D0GBR00JA071 MT-  
GLAZE 0.000 ZA 1/10W J4JF\_SEI" R6519 D0GB470J0002 MT-GLAZE 47 JA 1/10W A201  
1AA0B10N3250A "ASSY,PWB,KEY\_SW J4JF"...

### [Page 26: Digital](#)

ASSEMBLY BOARD REPLACEMENTS (SERVICE PARTS) "For Main unit replacement please get the correct assembly name/part number" Service Name: ASSY,PWB,MAIN\_B-J4JF\_SEI Japan BOM part number: 1AA0B10N310M0 "For PDP Panel replacement please get the correct assembly name/part number" Service Name: PDP PANEL Japan BOM part number: 8MD50H13M1J-- "For KEW\_SW unit replacement please get the correct assembly name/part number"...

### [Page 27: Component And Testpoint Locations](#)

COMPONENT AND TESTPOINT LOCATIONS MAIN BOARD PARTS SIDE K801 K802 K803 K8CTRA 1  
3 K8E R1661 R1662 L800 K1003 R1011 D802 R805 D1001 R820 R1012 XL1002 R806 D800  
R800 R804 C1802 C801 R803 R802 C1801 R1845 R1840 SC1002 R1800 C820 Q1660 XL1003  
C806...

[Page 28](#) MAIN BOARD SOLDER SIDE K802 K8CTRA K801 K803 C1025 R873 R883 CL14 CL11  
C819 K8FRA R1005 C802 L1802 C806 L1801 R876 R1833 C1814 Q801 C1821 C1807 R871 R811  
R1829 R1843 R810 R869 C804 C1820 R1844 R812 R813 C1818 C1809 R1827 C807 R1847  
C1815...

[Page 29](#) CONTROL BOARD PART SIDE PWB,KEY\_SW J4JF 1AA4B10N2680A CH.- CH.+ VOL.-  
VOL.+ INPUT MENU SW1907 SW1906 SW1905 SW1904 SW1903 SW1902 D1905 POWER  
SW1901 A30C5 CONTROL BOARD SOLDER SIDE R1912 D1903 D1905 PWB,KEY\_SW J4JF  
1AA4B10N2680A A30C5 R1902 R1908 R1904 R1909 R1903 SW1905 SW1907 D1901 SW1902...

### [Page 30: Block Diagram Power Lines](#)

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### [Page 31: Block Diagram Signal Lines](#)

BLOCK DIAGRAM SIGNAL LINES - 27 -...

### [Page 32: Ic Block Diagrams](#)

IC BLOCK DIAGRAMS IC001, Audio AMP C ctrl Protection current/thermal interface Logic Volume control Regulators Bias Digital signal processing Power stage - 28 -...

[Page 33](#) IC BLOCK DIAGRAMS (CONT.) IC1640, IC5730 DC to DC Converter IC801, EEPROM - 29 -...

[Page 34](#) IC1660, DC to DC Converter IC1670, DC to DC Converter BOOT (SW+Vreg.) BOOT C2 = 10µF/25V V IN = 12V Current Sense C8 = 10µF/25V Rb = 0 Pre Drive C1 = 0.01µF UVLO 1 : N V OUT = 3.3V R10 = 4.3kΩ...

[Page 35](#) IC BLOCK DIAGRAMS (CONT.) IC5500 Block Diagram IC6200, Low output Amplifier - 31 -...

[Page 36](#) IC8500, USB Protection IC5700, DDR: Double Data Rate SDRAM - 32 -...

[Page 37](#) IC BLOCK DIAGRAMS (CONT.) IC6600, HDMI SELECTOR DDH(3V3) TDA9996 DDH(1V8) RXA\_C+ OUT\_C+ RXA\_C- OUT\_C- RXA\_D0+ RXA\_D0- RXA\_D1+ RXA\_D1- RXA\_D2+ OUT\_D0+ RXA\_D2- OUT\_D0- RXB\_C+ RXB\_C- RXB\_D0+ RXB\_D0- RT AND EQ RXB\_D1+ RXB\_D1- OUT\_D1+ RXB\_D2+ HDMI OUT\_D1- RXB\_D2- SWITCH RXC\_C+ RXC\_C- RXC\_D0+ RXC\_D0-...

### [Page 38: Troubleshooting Flow Charts](#)

TROUBLESHOOTING FLOW CHARTS NO POWER Check: Power Unit fuse open? the voltage Check: Power Unit to "5V\_STBY" line supplied? All 0V (except '5V\_STBY' line) the voltage to all lines Check: arround supplied? CPU (IC800), IC (IC803), Crystal (X801), Power Unit (or the

voltage to some lines is not supplied.) After a few seconds, the set will be switched off.

### [Page 39: Digital](#)

TROUBLESHOOTING FLOW CHARTS (CONT.) NO VIDEO Trouble Shooting Video US1P(50) Check: RF(TV) ,Digital(TV) All Inputs? Line: A6100 19pin - IC5500 153pin A6100 21pin - IC5500 152pin only Parts: Around A6100 (TU\_IF), IC5500 Check: AV1 only Line: Terminal(CV) - IC5500 155pin Terminal(Y) - IC5500 177pin Terminal(C) - IC5500 176pin Parts: Around IC5500...

### [Page 40: Digital](#)

TROUBLESHOOTING FLOW CHARTS (CONT.) NO AUDIO Trouble Shooting Audio US1P(42) Is there Check: All Modes ? signal at speaker Speaker (SP901, SP902) terminal ? Is there Check: signal at IC001 ? Line: IC001 23pin - IC800 (CPU) 22pin (Mute) Parts: Around IC001 (Audio AMP.) Check: Parts: Around IC5500 209-215pin,IC5623,IC5624 Check:...

### [Page 41: Control Port Functions](#)

CONTROL PORT FUNCTIONS System Control (CPU : IC800) IC specification Assignment Explanation P12/SCK0 REG SW4 no use (REG SW4) P13/SO1 REG SW5 no use (REG SW5) P14/SI1/SB1 IIC-BUS for NV Data of IIC Bus Active 'L' for IIC data NV P15/SCK1 IIC-BUS for NV Clock of IIC Bus Active 'L'...

[Page 42](#) IC specification Assignment Explanation P73/INT3/T0IN Rcin Remote control signal input RESET in CPU Reset input RESET : Low (and for on-board write) 32.678KHz X'tal input (for clock timer) Xout 32.678KHz X'tal output (for clock timer) VSS1 GND (0Vdc) CF1/AN12 Main clock input (8MHz ceramic oscillator) CF2/AN13 Main clock output (8MHz ceramic oscillator) VDD1...

### [Page 43: Main Sheet Block Diagram & Peripherals](#)

MAIN SHEET BLOCK DIAGRAM & PERIPHERICALS USB Power SW +3.3V +1.8V DDR2 SPI Flash +12V +1.0V/+3.3V/+9V/ +12V (128Mb) 512Mb (366MHz) fault +24V +12V Write protect RF-IN BCM35143 Digital/ USB2.0 8VSB/QAM Analog DEMUX Tuner MPEG2 Demod. Video Video1 Decode (Composite/S) S-Detect Video AC-3 JTAG...

### [Page 44: Schematic Notes](#)

SCHEMATIC NOTES NOTES ON SCHEMATIC DIAGRAMS 1. All resistance values in ohms K=1,000 M=1,000,000. 2. Resistors specified with resistance value are "1/6DJ." 3. Resistors specified with type of resistor, tolerance and resistance value are "1/4." 4. Unless otherwise noted on schematic, all capacitor values less than 1 are expressed in  $\mu\text{F}$  (Micro Farad), and the values more than 1 are in pF.

### [Page 45: Ic, Diode, And Transistor Pin Layouts](#)

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PC BOARD CONNECTIONS AND LOCATIONS K8CTRA TUNER - 42 -...

### [Page 47: Capacitor And Resistor Code Chart](#)

S .....Oxide Metalized Y .....Wire Wound C .....Solid D .....Carbon Film W .....Wire Wound For parts or service contact Sanyo Manufacturing Corporation P.O. Box 2000 3333 Sanyo Road Forrest City, Arkansas 72335-2000 June 2011 SMC Published in Mexico...

### [Page 48: Schematic Diagrams](#)

MODEL DP50741 Chassis No. P50741-01 SCHEMATIC DIAGRAMS ELECTROSTATICALLY SENSITIVE DEVICES J10EA043N Many solid-state devices (especially Integrated Circuits) are Electrostatically Sensitive, and, therefore, require special handling techniques as described under C1620 R1617 "Servicing Electrostatically Sensitive Devices," on page two in this service literature.

[Page 49](#) MODEL DP50741 Chassis No. P50741-01 SCHEMATIC DIAGRAMS \*R6335 \*R6336 C6331 LVDS\_POW ELECTROSTATICALLY SENSITIVE DEVICES \*C6332 Many solid-state devices (especially Integrated Circuits) are Electrostatically D D G \*R6339 Sensitive, and, therefore,

require special handling techniques as described under \*R6340 \*R6337 C6335...