



# Sanyo DP42746 Service Manual

Remote control plasma color television



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Troubleshooting

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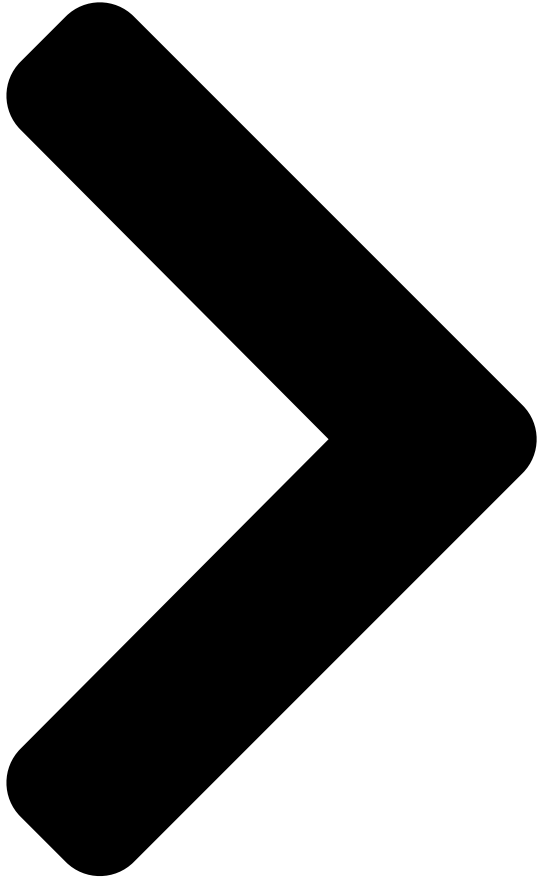
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## SERVICE MANUAL

Servicing should be performed by only trained and qualified service personnel.

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VIZON®



**DP42746, J3TZ, PRODUCT CODE 111009300**

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**Remote Control Plasma Color Television**



FILE NO.

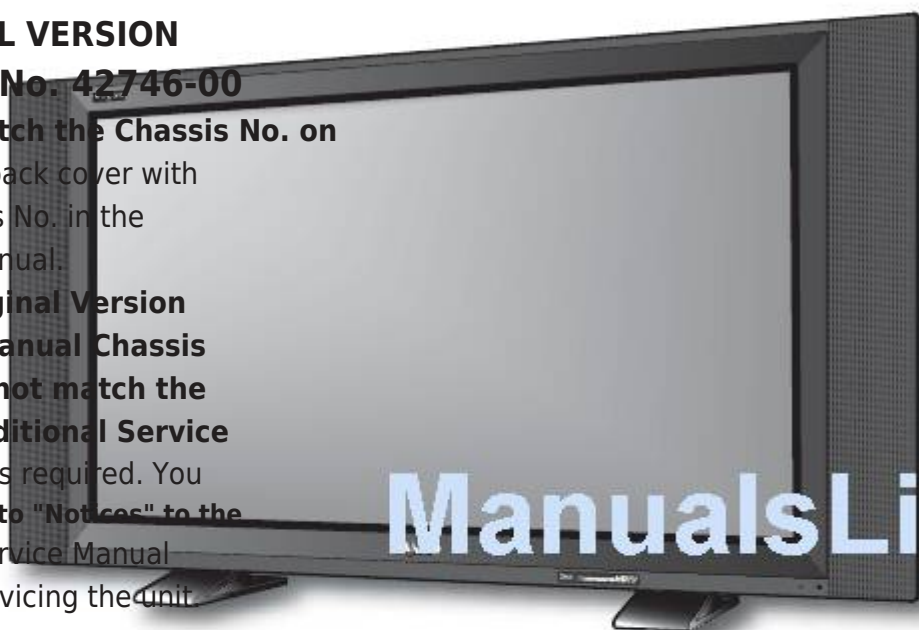
**DP42746**

**ORIGINAL VERSION**

**Chassis No. 42746-00**

**NOTE: Match the Chassis No. on the unit's back cover with the Chassis No. in the Service Manual.**

**If the Original Version Service Manual Chassis No. does not match the unit's, additional Service Literature is required. You must refer to "Notices" to the Original Service Manual prior to servicing the unit.**



ManualsLib.com

**Specifications**

- Power Rating ..... 120VAC
- Antenna Input Impedance ..... 75
- Receiving Channel ..... 2 - 13 (VHF), 01, 14-94, 95-125 (CATV)
- Remote Ready ..... 32 Key Remote Control
- Sound Output ..... 5.0 W/CH
- Intermediate Frequency
- Picture IF Carrier ..... 45.75MHz
- Sound IF Carrier ..... 41.25MHz
- Color Sub Carrier ..... 42.17MHz
- Cabinet Dimensions
- Width ..... 1206mm
- Height ..... 720mm
- Depth including base ..... 248mm

**REFERENCE No.**

**(U.S.A.)**

**(CANADA)**

351W, 4.2A (Max)  
UHF/VHF/CATV

factina Corporation

Digital  
14 - 69 (UHF),  
[1-99 \(Digital\)](#)

**SM**  
**780114**

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# Troubleshooting

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## Related Manuals for Sanyo DP42746

[Plasma TV Sanyo DP42746 Owner's Manual](#)

(59 pages)

[TV Sanyo DP42746 Connection Manual](#)

Sanyo dp42746: connection guide (3 pages)

[TV Sanyo DP42746 Quick And Easy Setup](#)

Sanyo dp42746: quick start (2 pages)

[Plasma TV Sanyo DP50719 Owner's Manual](#)

50" plasma hdtv (19 pages)

[Plasma TV Sanyo DP50710 Owner's Manual](#)

50" plasma hdtv (60 pages)

[Plasma TV Sanyo DP50710 Owner's Manual](#)

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

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[Plasma TV Sanyo Vizzon DP50747 Owner's Manual](#)

Sanyo plasma hdtv owner's manual (52 pages)

[Plasma TV Sanyo DP50747 Owner's Manual](#)

Sanyo high-definition digital plasma television owner's manual (52 pages)

[Plasma TV Sanyo DP50747 Owner's Manual](#)

Plasma hdtv (52 pages)

[Plasma TV Sanyo DP50747 Service Manual](#)

Sanyo remote control plasma color television (52 pages)

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## Summary of Contents for Sanyo DP42746

### [Page 1: Table Of Contents](#)

Height .....720mm Depth including base ....248mm DP42746, J3TZ, PRODUCT CODE 111009300  
REFERENCE No.

## [Page 2: Safety Instructions](#)

SAFETY INSTRUCTIONS SAFETY PRECAUTIONS READING SHOULD NOT EXCEED 750 mV. AC VOLTMETER WARNING: The chassis of this receiver has a floating (5000 ohms per volt or more sensitivity) ground with the potential of one half the AC line voltage in respect to earth ground.

## [Page 3: Service Adjustments](#)

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

[Page 4](#) ON-SCREEN SERVICE MENU Table 1. ON-SCREEN SERVICE MENU When IC802 (EEPROM) is replaced, check the bus data to confirm they are the same as below. The shaded menu should be checked and be set up or readjusted according to the procedures described in the following pages. Initial Setup Data marked with an \* should be changed from Initial Reference Data.

## [Page 5: Service Adjustments](#)

SERVICE ADJUSTMENTS (Continued) SEPARATION ADJUSTMENT MULTI-SOUND SECTION ADJUSTMENTS 7. Turn off the receiver and disconnect the AC power cord Note: Multi-Sound Section must be adjusted after (AC 120V line). A101 (U/V Tuner), IC3401 (MTS Decoder), Digital 8. Connect oscilloscope CH1 to TP317 and CH2 to TP318 Module or IC802 (EEPROM) is replaced.

## [Page 6: Power Failure Circuit](#)

POWER FAILURE CIRCUIT History of Power Failure CPU (IC801) is programmed so the set will go to the stand-by mode when there is circuit failure as described below. When finishing the repair or stopping the Power Failure, (Refer to "Power Supply Lines.") the history of past failures can be checked.

## [Page 7: Mechanical Disassembly](#)

MECHANICAL DISASSEMBLY BACK CABINET REMOVAL - SIDES Remove 24 screws to take the side cabinets off. (A:3X8, 6pcs; B:4X12, 18pcs) BACK CABINET REMOVAL- CENTER Remove 31 screws to take the back cabinet off. (C:3X8, 10pcs; D:4X12, 17pcs; E:6X18, 4pcs) — 7 —...

[Page 8](#) MECHANICAL DISASSEMBLY (CONT.) BOARD LOCATIONS 1: MAIN BOARD REMOVAL 4: KEY SW BOARD REMOVAL Remove 2 tuner nuts (Digital and Analog) and take off the Disconnect plug K8E. Remove a screw (4X12) to take the terminal base. Disconnect plugs K8MB, K8MA, K8A, K8B, key switch board with the panel, button, and holder K8F, K8E, and KSP.

[Page 9](#) STAND REMOVAL Position TV face down on a padded or cushioned surface to protect the screen and finish. Remove 2 screws (6X18) from each foot and remove. FILTER GLASS REMOVAL 1. Remove the key switch board. 2. Disconnect the following socket connections. Control Board ~ Main Board: Speakers ~ Main Board: 3.

[Page 10](#) MECHANICAL DISASSEMBLY (CONT.) FILTER GLASS REMOVAL (Cont.) 4. Remove 20 screws (G:3X8) to take the filter glass and upper plates off. FRONT CABINET REMOVAL 1. Remove 18 screws (F:4X12) to take the filter glass with upper and lower plates (assembly parts) off. 2.

[Page 11](#) Control Board (Upper) Holder (Lower) PANEL MODULE REMOVAL 1. Remove the key switch board. 2. Disconnect the following socket connections. Main Board ~ Power Unit: CN8004, CN8007 D-TU Board ~ Power Unit: CN8010 Filter Board ~ Power Unit: CN8001 Control Board ~ Main Board: Speakers ~ Main Board: PDP Module ~ D TU Board K8LV...

[Page 12](#) MECHANICAL DISASSEMBLY (CONT.) POWER UNIT REMOVAL Remove 9 screws to take the power unit off. ATTENTION This PDP TV uses several different kinds of screws. Using the correct screw is required to prevent damage. The gasket is provided to prevent interference to other radio and television receivers.

## [Page 13: 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 STAR (#) IN THIS PARTS LIST AND THE SCHEMATIC DIAGRAM DESIGNATE COMPONENTS IN WHICH SAFETY CAN BE OF SPECIAL SIGNIFICANCE.

[Page 14](#) Schematic Schematic Part No. Part No. Description Description Location Location  
MAIN PC BOARD C1061 CEXLB1C101WAN ELECT 100U M C1062 CEXLB1C100WAN ELECT 10U M  
C1063 CEXLB1C100WAN ELECT 10U M C1064 CK1E104ZLZFN CG CERAMIC 0.1U Z CAPACITORS  
C1065 CEXLB1C100WAN ELECT 10U M C002 CE1C470M4ZANN ELECT 47U M...

[Page 15](#) Schematic Schematic Part No. Part No. Description Description Location Location  
C3420 CEXLB1H1R0WAN ELECT 1U M L805 1AV4L26B0130G INDUCTOR, 600 OHM C3421  
CEXLB1H1R0WAN ELECT 1U M L806 1AV4L26B0130G INDUCTOR, 600 OHM C3422  
CEXLB1H1R0WAN ELECT 1U M L1021 1AV4L2FB3R3MG INDUCTOR, 3.3U M C3423  
CEXLB1H1R0WAN ELECT 1U M...

[Page 16](#) Schematic Schematic Part No. Part No. Description Description Location Location  
T2SC2812N-L7P TR 2SC2812N-L7-TB T2SA1037K-S-P TR 2SA1037K-T-96-S T2SC3928A1R-P TR  
2SC3928A1R T2SA1179-M6-P TR 2SA1179-M6 T2SC3928A1S-P TR 2SC3928A1S T2SA1179-M7-P  
TR 2SA1179-M7-TB Q803 T2SC2412K-R-P TR 2SC2412K-T-96-R T2SA1179N-M6P TR 2SA1179N-  
M6-TB T2SC2412K-S-P TR 2SC2412K-T-96-S T2SA1179N-M7P TR 2SA1179N-M7-TB T2SC2812-  
L6-P TR 2SC2812-L6-TB T2SA1235A1E-P...

[Page 17](#) Schematic Schematic Part No. Part No. Description Description Location Location  
Q1102 T2SC2412K-R-P TR 2SC2412K-T-96-R Q3404 T2SC2412K-R-P TR 2SC2412K-T-96-R  
T2SC2412K-S-P TR 2SC2412K-T-96-S T2SC2412K-S-P TR 2SC2412K-T-96-S T2SC2812-L6-P TR  
2SC2812-L6-TB T2SC2812-L6-P TR 2SC2812-L6-TB T2SC2812-L7-P TR 2SC2812-L7-TB  
T2SC2812-L7-P TR 2SC2812-L7-TB T2SC2812N-L6P TR 2SC2812N-L6-TB T2SC2812N-L6P TR  
2SC2812N-L6-TB T2SC2812N-L7P TR 2SC2812N-L7-TB...

[Page 18](#) Schematic Schematic Part No. Part No. Description Description Location Location  
R833 RGF2701JTCANL MT-GLAZE 2.7K JA 1/10W R1003 RGF75R0JTCANL MT-GLAZE 75 JA 1/10W  
R834 RGF2701JTCANL MT-GLAZE 2.7K JA 1/10W R1004 RGF4703JTCANL MT-GLAZE 470K JA  
1/10W R838 RGF1000JTCANL MT-GLAZE 100 JA 1/10W R1005 RGF4703JTCANL MT-GLAZE...

[Page 19](#) Schematic Schematic Part No. Part No. Description Description Location Location  
R1106 RGF1001JTCANL MT-GLAZE 1K JA 1/10W R3419 RGF6802FTCANL MT-GLAZE 68K FA  
1/10W R1201 RGF47R0JTCANL MT-GLAZE 47 JA 1/10W R3420 RGF3301JTCANL MT-GLAZE 3.3K  
JA 1/10W R1202 RGF1002JTCANL MT-GLAZE 10K JA 1/10W R3421 RGF3001JTCANL MT-GLAZE...

[Page 20](#) Schematic Schematic Part No. Part No. Description Description Location Location  
FILTER PC BOARD KEY SWITCH PC BOARD CAPACITORS CAPACITORS # C602 CGXAV27224CAN  
MT-POLYEST 0.22U M 275V C1951 CK1E104ZLZFN CG CERAMIC 0.1U Z # C606 CKXAV2E102AAC  
CERAMIC 1000P M 250V # C607 CKXAV2E102AAC CERAMIC 1000P M 250V...

### [Page 21: Cabinet Parts List](#)

UNITED BUTTON CORD, POWER-3.0MK 1AA2DES0784-H DEC SHEET, AC 1AA2DES0874-- DEC  
SHEET, AV 1AA2DES0784-G DEC SHEET, TUNER 1AA2DES0789-G DEC SHEET DTV  
1AA2SDA0008-F STAND (2) 1AA2DEM0371-- DEC RC LED 1AA2DES0861 DEC SHEET, DTV  
1AV2BAAS015A- BADGE, SANYO 1AA2DES0712-F DEC SHEET, VIZON — 21 —...

### [Page 22: Component And Testpoint Locations](#)

COMPONENT AND TESTPOINT LOCATIONS MAIN BOARD PARTS SIDE KFAN1 KFAN2 L1886 R830  
R852 R871 L1889 R880 R854 R825 R904 R905 R844 R884 R901 R855 R843 R856 R842 R885  
L1894 IC806 IC805 Q801 Q901 C1616 R897 R903 IC1601 IC1604 R1625 R1610 D1607 IC801  
R861...

[Page 23](#) MAIN BOARD FOIL SIDE KFAN2 KFAN1 Q1801 C1601 X801 PWB,MAIN-J3TZ  
1AA4B10N1650A R2816 Q2801 Q102 K1061 K1021 K1001 K\_IIC R1026 L1812 R1061 R1021  
K1101 R1065 R1025 — 23 —...

### [Page 24: Locations](#)

COMPONENT AND TESTPOINT LOCATIONS (Cont.) CONTROL BOARD FOIL SIDE CONTROL BOARD  
PARTS SIDE B10N1650B SCA191 SC1902 JP1910 A1902 C1904 D1903 C1903 R1900 R1917

B10N1650B A1902 R1916 SC1901 KEY BOARD PARTS SIDE SW1954 SW1952 SW1951 SW1953 D1957 SW1955 D1956 JP1951 PWB,CONTROL J3TZ B10N1650C K19F KEY BOARD FOIL SIDE...

[Page 25](#) BLOCK DIAGRAM POWER LINES K19F K19E K6MA K601 CN8007 CN8004 — 25 —...

### [Page 26: Block Diagrams](#)

BLOCK DIAGRAM SIGNAL LINES — 26 —...

[Page 27](#) IC BLOCK DIAGRAMS Audio Processor (IC3401) VOL-R BASS TREB VOL-R LSOUT-R AUX1-R AUX1-L VOL-L LSOUT-L BASS TREB FEXT1 VOL-L TREBLE SURR BASS VOLIN-L EXT1/EXT2/M1 TOUT-L VCATC VCAWQT MAININ VCAIN VEOUT VETC VEWQT MAINOUT SUBOUT STIN SAPIN SAPOUT PLINT DGND PCINT2 PCINT1 IREF —...

[Page 28](#) IC BLOCK DIAGRAMS (Cont.) Audio AMP (IC001) Standby Standby SW CH 1 CH 1 CH 1 CH 1 Input Output (in) (out) RNf1 PRE-GND POWER TSD Protector (For input) (Thermal protection curcuit) (For output) RNf2 CH 2 CH 2 CH 2 Output CH 2 (in)

### [Page 29: Troubleshooting Flow Charts](#)

TROUBLESHOOTING FLOW CHARTS NO POWER fuse (F601) Check: open? Varistor (VA611), Power Unit the voltage Check: Power Unit to "5V\_ST" line supplied? All 0V (except '5V\_ST' line) the voltage to all lines Check: around supplied? CPU (IC801), IC (IC802, IC1803), Crystal (X801), Transistor (Q801), Power Unit (or the voltage to some lines is not supplied.) After a few seconds, the set will be switched off.

[Page 30](#) NO AUDIO All Modes ? Is there Check: signal at speaker Speaker (SP901, SP902) terminal ? Is there Check: signal at IC001 2pin (L) Line: IC001 6pin - IC801 (CPU) 38pin (Mute) or 4pin (R) ? Parts: Around IC001 (Audio AMP.) Check: Parts: Around IC3401 (Audio Control) Check:...

### [Page 31: Trouble Shooting Flow Charts](#)

TROUBLESHOOTING FLOW CHARTS (Cont.) NO VIDEO Check: RF(TV) only All Inputs? Line: A101 17pin - Q101 - IC1201 2pin Parts: Around A101 (TU\_IF), Q101 AV1 only Check: Line: IC1201 1pin (Composite Video: CV) AV2 only IC1201 5pin (S-Input: Y) Digital Module K6MA 35pin (S-Input: C) Check: Line: Q1021 - Digital Module K6MA 23pin (Y)

### [Page 32: Control Port Functions](#)

CONTROL PORT FUNCTIONS System Control (CPU : IC801) Pin Name Function I/O Description CVin Reserve GND (0Vdc) P70/INT0/TOLCP LINE OFF Detect AC Voltage Reduction (Normal: High) P71/INT1/TOHCP Reserve (Open) P72/INT2/TOIN Reserve (Open) P73/INT3/TOIN RC in RC Input Key in Key Input AFT S-Figure in AFT S-Figure Input P82/AN2...

### [Page 33: Control Port Functions](#)

CONTROL PORT FUNCTIONS (Cont.) System Control (CPU : IC801 Cont.) Pin Name Function I/O Description P12/SCK0 CRT/FPD Option Setting (CRT: High, FPD: Low) PDP/LCD Option Setting (PDP: High, LCD: Low) PWMA Reserve (Open) PWMB Reserve (Open) PWMC Reserve (Open) P17/PWMD Reserve (Open) Reserve...

### [Page 34: Schematic Diagrams](#)

SCHEMATIC DIAGRAMS 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 35](#) IC, DIODE, AND TRANSISTOR PIN LAYOUTS INTEGRATED CIRCUITS PHOTO COUPLERS DIODES TRANSISTORS TOP VIEW TOP VIEW MARK COUNT TERMINALS IN ARROW DIRECTION SIDE VIEW INFRARED EMITTING B ... BASE C ... COLLECTOR A..ANODE E ... EMITTER K..CATHODE CHIP TRANSISTORS CHIP RESISTORS TOP VIEW TOP VIEW 12 x 10 = 12K ohm...

[Page 36](#) 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,

### [Page 37: Digital](#)

MODEL DP42746 Chassis No. P42746-00 SCHEMATIC DIAGRAMS ELECTROSTATICALLY SENSITIVE DEVICES POWER VOL.+ VOL.- CH.+ CH.- Key SW Board Many solid-state devices (especially Integrated Circuits) are Electrostatically Sensitive, and, therefore, require special handling techniques as described under ASSY,PWB,KEY-SW SW1955 SW1953 SW1954...

### [Page 38: Schematic Diagrams](#)

MODEL DP42746 Chassis No. P42746-00 SCHEMATIC DIAGRAMS To Digital Board To Control Board To Key-SW Board K8MA R1812 R1817 K8MB R1816 L1891 1/10GZ0C 1/10GZ0C Main Board 1/10GZ0C 1/10GZ0.0 A\_GND A\_GND R1815 A\_GND A\_GND 1/10GZ0C C1853 ASSY,PWB,MAIN-J3TZ C1851 MA\_GND A\_GND R1813...