



Sanyo DP32647 Service Manual

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Troubleshooting

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Bookmarks

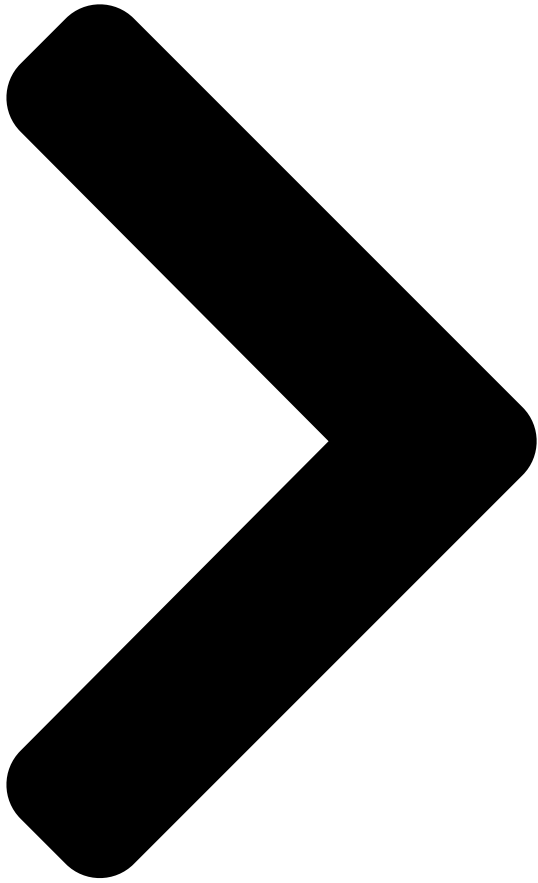
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SERVICE MANUAL

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

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VIZON®



DP32647, N3HK, PRODUCT CODE 113012704

with a double "Z" is a registered trademark of Sanyo Manufacturing Corporation.

Remote Control Digital Color Television

FILE NO.



VIZON®

DP32647

ORIGINAL VERSION

Chassis No. P32647-03

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.

Specifications

- Power Rating 120VAC
- Antenna Input Impedance 75Ω
- Receiving Channel 2 - 13 (VHF), 01, 14-94, 95-125 (CATV)
- Remote Ready 32 Key Remote Control
- Sound Output 3.0 W/CH
- Intermediate Frequency
- Picture IF Carrier 45.75MHz
- Sound IF Carrier 41.25MHz
- Color Sub Carrier 42.17MHz
- Cabinet Dimensions
- Width 812mm
- Height 614mm
- Depth including base 201mm

REFERENCE No.

(U.S.A.)

(CANADA)

155W, 2.7A (Max)

UHF/VHF/CATV

Digital

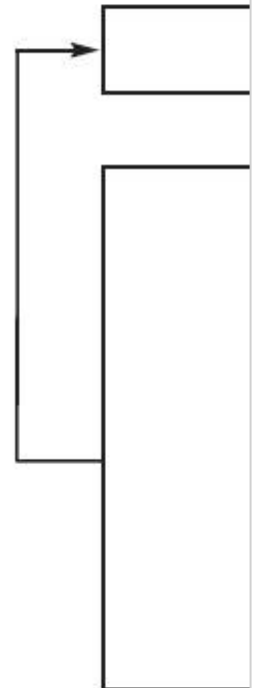
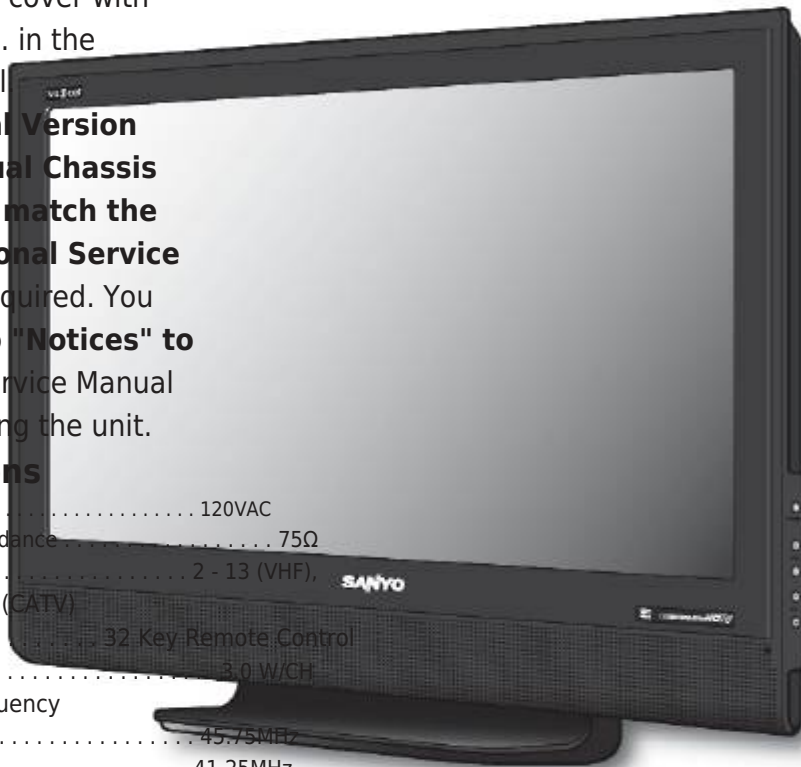
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Related Manuals for Sanyo DP32647

[HDTV Sanyo DP26647A - 26 Wide-Screen LCD HDTV Owner's Manual](#)

Lcd hdtv (52 pages)

[LCD TV Sanyo DP32647 Owner's Manual](#)

(48 pages)

Summary of Contents for Sanyo DP32647

[Page 1: Table Of Contents](#)

Height614mm Depth including base201mm DP32647, N3HK, PRODUCT CODE 113012704 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 – the CPU that allows remote operation for most of the ser- Enter Service Menu vice adjustments. ON-SCREEN SERVICE MENU SYSTEM 1. Enter the Service Menu: •...

[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. See page 3 for On-Screen Service Menu access and adjustments. Title Initial Data Note Volume setup inspection Option 1 Data (HDMI) Option 2 Data (Display Panel) 1R00...

[Page 5: Power Failure Circuit](#)

POWER FAILURE CIRCUIT Check the following if the unit is turned off by the power This unit is equipped with a Power Failure Detector function failure detector. included in the CPU which checks for an abnormal condi- tion in the chassis power supplies. 1.

[Page 6: Mechanical Disassemblies](#)

MECHANICAL DISASSEMBLY ATTENTION This LCD TV uses several different kinds of screws. Using the correct screw is required to prevent damage. The gaskets are provided to prevent interference to other radio and television receivers. The gaskets must be returned to their previous positions after servicing. Lead wires must be redressed to previous positions after servicing.

[Page 7](#) BOARD AND SPEAKER REMOVAL 1: Main Board Removal 3: Control Board Removal Remove 5 screws (C:3X6) to take the main board Remove 2 screws (A:4X14) to take the control board off. off. 2: Power Unit Removal 4: Speakers Removal Remove 6 screws (C:3X6) to take the power unit off. Remove 4 screws (A:4X14) to remove each speaker.

[Page 8: 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 9](#) Schematic Schematic Part No. Part No. Description Description Location Location C800

RGFR000ZTCANL MT-GLAZE 0.000 ZA 1/10W CAPACITORS C804 RGF1003JTCANL MT-GLAZE 100K JA 1/10W C001 CPXLB1C100YAN NP-ELECT 10U M C805 CC1H220JLZCNG CERAMIC 22P J CPXLB1C100ZAN NP-ELECT 10U M C806 CC1H220JLZCNG CERAMIC 22P J C002 CK1H104ZLZFN...

[Page 10](#) Schematic Schematic Part No. Part No. Description Description Location Location C1601 CK1H104ZLZFN CERAMIC 0.1U Z C3210 CK1A105ZLZFN CERAMIC 1U Z C1603 CK1A105ZLZFN CERAMIC 1U Z C3211 CK1A105ZLZFN CERAMIC 1U Z C1604 CK1H104ZLZFN CERAMIC 0.1U Z C3212 CK1A105ZLZFN CERAMIC 1U Z C1606 CEXLB0J102VDN ELECT...

[Page 11](#) Schematic Schematic Part No. Part No. Description Description Location Location C5553 CEXLB1V470VDN ELECT 47U M C5808 CK1C224KLZBNG CERAMIC 0.22U K C5809 CK1H104ZLZFN CERAMIC 0.1U Z CEXLB1V470WAN ELECT 47U M C5554 CK1H104ZLZFN CERAMIC 0.1U Z C5812 CC1H120JLZCNG CERAMIC 12P J C5555 CK1H104ZLZFN CERAMIC 0.1U Z...

[Page 12](#) Schematic Schematic Part No. Part No. Description Description Location Location C6162 CK1H104ZLZFN CERAMIC 0.1U Z C6253 CEXLB1H4R7VDN ELECT 4.7U M C6170 CK1H104ZLZFN CERAMIC 0.1U Z CEXLB1H4R7WAN ELECT 4.7U M C6171 CEXLB0J221VDN ELECT 220U M 6.3V C6254 CK1A474KLZBNG CERAMIC 0.47U K CEXLB0J221WAN ELECT 220U M...

[Page 13](#) Schematic Schematic Part No. Part No. Description Description Location Location IC1251 QCD4052BNSR-P IC CD4052BNSR C6364 CEXLB0J221VDN ELECT 220U M 6.3V CEXLB0J221WAN ELECT 220U M 6.3V QTC4052BF---P IC TC4052BF-EL C6365 CK1H104ZLZFN CERAMIC 0.1U Z IC1600 QLA5774MPE--P IC LA5774MP-DL-E C6500 CK1H104ZLZFN CERAMIC 0.1U Z IC1610 QPQ070XNA1ZPP...

[Page 14](#) Schematic Schematic Part No. Part No. Description Description Location Location L1656 RGFR000ZTAANL MT-GLAZE 0.000 ZA 1/10W L2009 RGFR000ZTAANL MT-GLAZE 0.000 ZA 1/10W L1657 RGFR000ZTAANL MT-GLAZE 0.000 ZA 1/10W L2011 RGFR000ZTAANL MT-GLAZE 0.000 ZA 1/10W L1658 RGFR000ZTAANL MT-GLAZE 0.000 ZA 1/10W L2012 RGFR000ZTAANL MT-GLAZE 0.000 ZA 1/10W...

[Page 15](#) Schematic Schematic Part No. Part No. Description Description Location Location L6501 RGFR000ZTAANL MT-GLAZE 0.000 ZA 1/10W L6159 RGFR000ZTAANL MT-GLAZE 0.000 ZA 1/10W L6502 RGFR000ZTAANL MT-GLAZE 0.000 ZA 1/10W L6160 RGFR000ZTAANL MT-GLAZE 0.000 ZA 1/10W L6161 RGFR000ZTAANL MT-GLAZE 0.000 ZA 1/10W L6504 RGFR000ZTAANL MT-GLAZE 0.000 ZA 1/10W...

[Page 16](#) Schematic Schematic Part No. Part No. Description Description Location Location Q805 T2SC2412K-R-P TR 2SC2412K-T-96-R Q1252 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 T2SC3928A1R-P TR 2SC3928A1R...

[Page 17](#) Schematic Schematic Part No. Part No. Description Description Location Location Q1606 T2SC2412K-R-P TR 2SC2412K-T-96-R Q5804 T2SA1037AK-RP TR 2SA1037AK T146 R T2SA1037AK-SP TR 2SA1037AK T146 S T2SC2412K-S-P TR 2SC2412K-T-96-S T2SC2812-L6-P TR 2SC2812-L6-TB T2SA1037K-R-P TR 2SA1037K-T-96-R T2SC2812-L7-P TR 2SC2812-L7-TB T2SA1037K-S-P TR 2SA1037K-T-96-S T2SA1179-M6-P TR 2SA1179-M6 T2SC2812N-L6P...

[Page 18](#) Schematic Schematic Part No. Part No. Description Description Location Location Q6360 T2SC2412K-R-P TR 2SC2412K-T-96-R R004 RGF1801JTCANL MT-GLAZE 1.8K JA 1/10W T2SC2412K-S-P TR 2SC2412K-T-96-S R005 RGAR000ZTDANL MT-GLAZE 0.000 ZA 1/2W T2SC2812-L6-P TR 2SC2812-L6-TB R006 RGAR000ZTDANL MT-GLAZE 0.000 ZA 1/2W T2SC2812-L7-P TR 2SC2812-L7-TB R008 RGF1002JTCANL MT-GLAZE...

[Page 19](#) Schematic Schematic Part No. Part No. Description Description Location Location R1062 RGF2203JTCANL MT-GLAZE 220K JA 1/10W R864 RGF1000JTCANL MT-GLAZE 100 JA 1/10W R1063 RGF1000JTCANL MT-GLAZE 100 JA 1/10W R865 RGF1000JTCANL MT-GLAZE 100 JA 1/10W R866 RGF1000JTCANL MT-GLAZE 100 JA 1/10W R1064 RGF3303JTCANL MT-GLAZE...

[Page 20](#) Schematic Schematic Part No. Part No. Description Description Location Location
R1620 RGF2702FTCANL MT-GLAZE 27K FA 1/10W R1903 RGF1002JTCANL MT-GLAZE 10K JA
1/10W R1621 RGF1002FTCANL MT-GLAZE 10K FA 1/10W R1904 RGF1801JTCANL MT-GLAZE 1.8K
JA 1/10W R1622 RGF1201FTCANL MT-GLAZE 1.2K FA 1/10W R1905 RGF2201JTCANL MT-GLAZE...

[Page 21](#) Schematic Schematic Part No. Part No. Description Description Location Location
R5577 RGF15R0JTCANL MT-GLAZE 15 JA 1/10W R6086 RGF4701FTCANL MT-GLAZE 4.7K FA
1/10W R6087 RGF1001FTCANL MT-GLAZE 1K FA 1/10W R5578 RGF15R0JTCANL MT-GLAZE 15 JA
1/10W R5579 RGF15R0JTCANL MT-GLAZE 15 JA 1/10W R6088 RGF000ZTCANL MT-GLAZE...

[Page 22](#) Schematic Schematic Part No. Part No. Description Description Location Location
R6264 RGF000ZTCANL MT-GLAZE 0.000 ZA 1/10W R6509 RGF5R60JTCANL MT-GLAZE 5.6 JA
1/10W R6266 RGF2200JTCANL MT-GLAZE 220 JA 1/10W R6510 RGF47R0JTCANL MT-GLAZE 47 JA
1/10W R6267 RGF2200JTCANL MT-GLAZE 220 JA 1/10W R6511 RGF47R0JTCANL MT-GLAZE...

[Page 23](#) Schematic Schematic Part No. Part No. Description Description Location Location
SWITCHES MISCELLANEOUS SW1901 1AV4S10B0900J SWITCH, PUSH 1P-1T A001
1AA0B10N222A0 ASSY, PWB, MAIN-N3HK 1AV4S10B5650J SWITCH, PUSH 1P-1TX1 A002
1AA0B10N225B0 ASSY, PWB, CONTROL-N3HK SW1902 1AV4S10B0900J SWITCH, PUSH 1P-1T
A1901 1AV4U20C11701 UNIT, REMOCON RECEIVER 1AV4S10B5650J SWITCH, PUSH 1P-1TX1
A6100...

[Page 24: Cabinet Parts List](#)

DESCRIPTION 1AA2CAM0538-- CABINET FRONT 1JC6P1P0261-- OWNERS MANUAL (ENG/SPA/FRE)
1AA2CBM0424-- CABINET BACK 1AV0U10B43104 ASSY, REMOCON 1AA2SDM0146-- STAND
BASE 1AA2RCM0295-A RC-BATTERY LID 1AA2BUM0529-- BUTTON UNITED 1AA2CPM0140-- CAP
RC 1AA2DES0861-K DEC SHEET DTV 1AV2BAAS015AA BADGE, SANYO 1AA2DES0712-F DEC
SHEET, VIZON — 24 —...

[Page 25: Component And Testpoint Locations](#)

COMPONENT AND TESTPOINT LOCATIONS MAIN BOARD PARTS SIDE R866 K_DL R1629 K_DEBUG
K1000 R842 R1633 R843 R892 R1635 D9100 R844 R9107 K9100 R864 R1684 L2014 C701 R865
C683 C825 R1648 R1637 R1688 R863 L1605 IC001 R858 R1681 IC001A RB6355 R872 R1634
IC001B R6264...

[Page 26](#) COMPONENT AND TESTPOINT LOCATIONS (Cont.) MAIN BOARD FOIL SIDE L1723
L1722 SC1508 K9100 L2017 L1721 R1515 R017 R9108 R1517 L2016 C011 K_DL IC001 L1713
R1518 R1805 C842 R9105 K_DEBUG C694 IC001A C002 R1516 SC1805 IC001B R9101 L1716
SC1509 K1000 IC001C L6704 R1807 R9106...

[Page 27](#) BLOCK DIAGRAM POWER LINES — 27 —...

[Page 28: Block Diagrams](#)

BLOCK DIAGRAM SIGNAL LINES — 28 —...

[Page 29](#) IC BLOCK DIAGRAMS IC001, Audio AMP Standby Input amplifier + OUT1 IN 1 Output
amplifier - OUT1 MUTE Vcc ground shorting protection circuit Load shorting protection circuit
Thermal protection circuit + OUT2 IN 2 Output amplifier - OUT2 Input amplifier Ripple Filter
IC1201, IC1251 Video and Audio Select...

[Page 30](#) IC BLOCK DIAGRAMS (CONT.) IC1600, DC to DC Converter IC1620, DC to DC
Converter — 30 —...

[Page 31](#) IC1630, DC to DC Converter IC1640, DC to DC Converter — 31 —...

[Page 32](#) IC BLOCK DIAGRAMS (CONT.) IC5500 Screen Controller — 32 —...

[Page 33](#) IC5700, IC5720 DDR: Double Data Rate SDRAM — 33 —...

[Page 34](#) IC BLOCK DIAGRAMS (CONT.) IC6100, TS Demodulator — 34 —...

[Page 35](#) IC6200, A/D Converter — 35 —...

[Page 36](#) IC BLOCK DIAGRAMS (Cont.) IC6502, DVI / HDMI SWITCH (3.3V) VSADJ TMDS Drive 3~to~1 MUX TMDS Drive TMDS Drive (3.3V) TMDS Drive HPD1 HPD2 Control Logic HPD_SINK HPD3 SCL1 SCL_SINK SDA1 SDA_SINK SCL2 SDA2 SCL3 SDA3 — 36 —...

[Page 37](#) IC6551, HDMI MULTIPLEXER Same as above block — 37 —...

[Page 38](#) IC BLOCK DIAGRAMS (CONT.) IC6270, STEREO A/D CONVERTER AVDD CONTROL INTERFACE AGND SDATO LRCLK DIGITAL AUDIO FILTERS INTERFACE BCLK MCLK — 38 —...

[Page 39: Troubleshooting Flow Charts](#)

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

[Page 40](#) TROUBLESHOOTING FLOW CHARTS (Cont.) NO AUDIO Is there Check: All Modes ? 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 IC3200 (Audio Control)

[Page 41](#) NO VIDEO Check: RF (TV) only All Inputs? Line: A6100 4pin - Q101 - IC1201 2pin Parts: Around A6100 (TU_IF), Q101 AV1 only Check: Line: IC1201 1pin (Composite Video: CV) IC1201 5pin (S-Input: Y) IC1201 13pin - IC5500 Y3 (AV1: C) Check: AV2 only Line:...

[Page 42: 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 Display Enable (Unused) P73/INT3/TOIN RC in RC Input Key in Key Input AFT S-Figure in AFT S-Figure Input...

[Page 43](#) CONTROL PORT FUNCTIONS (Cont.) System Control (CPU : IC801 Cont.) Pin Name Function I/O Description P12/SCK0 PDP/LCD Option Setting (PDP: High, LCD: Low) Panel Size 3 Panel size Panel Size 2 Panel size Panel Size 1 Panel size Panel Size 0 Panel size Reserve (Open)

[Page 44: Schematic Notes](#)

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 μF (Micro Farad), and the values more than 1 are in pF .

[Page 45: Pin Layouts](#)

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 46: Capacitor And Resistor Codes](#)

CAPACITOR AND RESISTOR CODE CHART CAPACITOR (Example) 500 C K 1500 B D $\pm 0.5\text{pF}$ T+50% - J $\pm 5\%$ K $\pm 10\%$ M $\pm 20\%$ N $\pm 30\%$ Characteristics P+100% - Value code Z+80% -...

[Page 47: Pc Board Connections And Locations](#)

PC BOARD CONNECTIONS AND LOCATIONS — 47 —...

[Page 48](#) For parts or service contact Sanyo Manufacturing Corporation P .O. Box 2000 3333 Sanyo Road Forrest City, Arkansas 72335-2000 May 2007 SMC Published in U.S.A. — 48 —...

[Page 49: Schematic Diagrams](#)

MODEL DP32647 Chassis No. P32647-03 SCHEMATIC DIAGRAMS ELECTROSTATICALLY SENSITIVE DEVICES NOTES; Many solid-state devices (especially Integrated Circuits) are Electrostatically TO SPEAKER 1. RESISTORS SPECIFIED WITH RESISTANCE VALUE ARE "1/6DJ" Sensitive, and, therefore, require special handling techniques as described under 2. RESISTORS SPECIFIED WITH TYPE OF RESISTOR, TOLERANCE (1.8V_DIGITAL,3A)

[Page 50](#) MODEL DP32647 Chassis No. P32647-03 SCHEMATIC DIAGRAMS L6217 L6220 L5800 1/10GZ0.0 1/10GZ0.0 1/10GZ0.0 L6221 L6216 1/10GZ0.0 1/10GZ0.0 C5804 Q5801 CJ15CL C5801 C5807 L6215 L6222 L5801 R5807 C5806 L6556 1/10GZ0.0 1/10GZ0.0 D3.3V KZ0.1LZF 1/10GZ0.0 R5804 L2GA150JG 1/10GJ CJ68CL 16KK0.22LZB L6557 1/10GZ0.0...