

# Sanyo PLV-55WHD1 Service Manual

Lcd projection tv hd pro series

18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	

Table of Contents

•

Bookmarks

•

Quick Links Download this manual See also: Service Manual, Owner's Manual



# SERVICE MANUAL

# Original Version LCD Projection TV

### **PRODUCT CODE :**

PLV-55WHD1 M8LA PLV-65WHD1 M8PA 1 122 293 00 1 122 364 00 FILE NO.



PLV-55WHD1	
MODEL NO.	
PLV-65WHD1	
Chassis No.	
M8L-55WHD100	
M8P-65WHD100	_
NOTE: Match the Chassis No. on the rating	
sheet on the cabinet with the	
Chassis No. in the Service Manual.	
If the Original Version Service	
Manual Chassis No. does not	
match the	
unites, additional	
Service Literature is required. You	
must refer to "Notices" to the	
Original Service Manual prior to	
servicing the unit.	
the cabinet of the LCD Projection TV.	
REFERENCE NO.	
U.S.A.	
SM5110797	
-00	_
Table of Contents	

Next Page

## Related Manuals for Sanyo PLV-55WHD1

Projection TV Sanyo PLV-55WHD1 Service Manual Lcd hd pro series (176 pages) Projection TV SANYO PLV-55WHD1 Service Manual Hd pro series lcd projection tv (48 pages) Projection TV Sanyo PLV-65WHD1 Owner's Manual Hd pro series wide screen lcd projection tv (35 pages) Projection TV Sanyo 710-00792-1 Installation Manual Rear projection display (8 pages) Projection TV Sanyo PLC-XR70N Owner's Manual Multimedia rear-projection display (46 pages) Projection TV Sanyo PLV-55WR1Z Service Manual Lcd projection tv (136 pages) Projection TV Sanyo PLV-45WR1Z Owner's Manual Lcd projection tv (72 pages)

# Summary of Contents for Sanyo PLV-55WHD1

#### Page 1: Service Manual

FILE NO. SERVICE MANUAL PLV-55WHD1 MODEL NO. Original Version PLV-65WHD1 U.S.A. LCD Projection TV Chassis No. M8L-55WHD100 M8P-65WHD100 NOTE: Match the Chassis No. on the rating sheet on the cabinet with the Chassis No. in the Service Manual. If the Original Version Service Manual Chassis No.

#### Page 2: Table Of Contents

#### Page 3: Safety Instructions

■ Safety Instructions SAFETY PRECAUTIONS WARNING: The chassis of this LCD projection TV is isolated (COLD) from AC line by using the converter transformer. Primary side of the converter and lamp power supply unit circuit is connected to the AC line and it is hot, which hot circuit is identified with the line () in the schematic diagram.

#### Page 4: Specifications

■ Specifications Technical Specifications Screen Size (Measured Diagonally): AC Power Consumption (average): PLV-55WHD1: 55-inches/PLV-65WHD1: 65-inches PLV-55WHD1: 120 V, 2.8 A LCD Panel System: PLV-65WHD1: 120 V, 2.8 A 0.7" wide TFT Active Matrix type, 3 panels Size and Weight (approximately):...

#### Page 5: Circuit Protections

■ Circuit Protections This LCD Projection TV provides the following circuit protections to operate in safety. If the abnormality occurs inside the LCD Projection TV, it will automatically turn off by operating one of the following protection circuits. ● Fuse A fuse(F601) is located inside of the LCD Projection TV.

Page 6 Circuit Protections • Lamp cover switch The lamp cover switch (SW1861) cuts off the

drive signal to the lamp circuit when the lamp cover is removed or no close completely. After opening the lamp cover for replacing the lamp unit, place the lamp cover correctly otherwise the LCD Projection TV can not be turned on.

#### Page 7: Installation

■ Installation Placing and Settling the LCD Projection TV CAUTION; When placing the LCD Projection TV, the spaces for ventilation must be maintained. SIDE and TOP REAR 4" (10cm) 8" (20cm) (20cm) 4" (10cm) Air Circulation BE SURE TO USE OR PLACE THE LCD The openings in the cabinet are provided for ventilation.

<u>Page 8</u> Installation Air intake vents and exhaust vents Caution; This LCD Projection TV is equipped with cooling fans for protec- tion from overheating. Pay attention to following to ensure proper ventilation and avoid a possible risk of fire and malfunction. - Do not cover vent slots. Obstructions may block cooling air.

Page 9 Installation Placing on the TV stand Caution; When placing on a LCD Projection TV stand, take the measures against prevention of fall for safety. Stand attachment hole (3 holes at bottom of cabinet) Attach the LCD Projection TV stand. Note; Follow to installation manual of a LCD Projection TV stand. (PLV-5565STD) Installing the LCD Projection TV for safety.

#### Page 10: Cleaning

■ Cleaning ● Cleaning the LCD Projection TV Be sure to disconnect the AC Power cord from the AC outlet before cleaning the LCD Projection TV. ● Gently wipe the screen and the cabinet with a soft dry clean cloth. ●...

Page 11 Cleaning ● Optical parts care and cleaning After long periods of use, dust and other particles will accumulate on the LCD panel, prism, mirror, polarized glass, lens, etc., causing the picture to darken or color to blur. If this occurs, clean inside of the optical unit. Remove dust or other particles using air spray.

#### Page 12: Lamp Replacement

■ Lamp Replacement When the life of the projection lamp of this LCD Projection TV Front Panel draws to an end, the LAMP REPLACE indicator will become yellow. If this indicator turns to yellow, replace the lamp with a new one promptly. This indicator becomes yellow when the life of the projection LAMP...

<u>Page 13</u> Lamp Replacement Lamp Replace Counter Be sure to reset the lamp counter after the lamp is replaced. When the lamp counter is reset, the LAMP REPLACE indicator will be turned off. Press the MENU key to display the Main menu. Use the CURSOR ed keys to highlight (green) Lamp Counter Reset.

Page 14 Replacement lamp can be ordered through your dealer. When ordering a projection lamp, give the following information to the dealer. ● Model No. of your LCD Projection TV PLV-55WHD1 / PLV-65WHD1 ● Replacement Lamp Type No. POA-LMP96 (Service Parts No. 610 322 7382) This LCD Projection TV uses a high-pressure lamp which must be handled carefully and properly.

#### Page 15: Mechanical Disassemblies

■ Mechanical Disassemblies Disassemble should be made following procedures in numerical order. Following steps show the basic procedures, therefore unnecessary step may be ignored. Caution: Screws Expression (Type ) mm Diameter x Length The parts and screws should be placed exactly the same position as the original T type M Type otherwise it may cause lose of performance and product safety.

Page 16 Mechanical disassemblies Holder bracket back removal. 1. Remove the 4 screws-A(m3x8) and removw the Rear AV panel. 2. Remove the 7 screws-B(T4x12), remove the 2 screws-C(M3x6), remove the 2 screws D(M3x8) and remove the Holder bracket back. Holder bracket back Rear AV panel Fig.

<u>Page 17</u> Mechanical disassemblies Front cover removal. 1. Remove the Front cover of the LCD projection TV. (Press the latches on both side of the front cover and pull the front cover forward to remove.) Front cover Press the latch on both side. With pressing the button, pull the

front cover.

Page 18 Mechanical disassemblies -1 Side Grill unit and side key board unit removal. 1. Remove the 2 Screws-A(T4x12) from back side. 2. Remove the 4 Screws-B(T4x10) and remove the side key board unit. 3. Remove the 4 Screws-C(T4x10) and remove the Holder Grill-R. 4.

**Page 19** Mechanical disassemblies -3 Side key board unit disassemblies-1. 1. Remove the Screw-A(T3x8), remove the Button Grill, remove the spring, and remove the Holder button. Holder button Button Grill Spring Fig. 4-3 -4 Side key board unit disassemblies-2. 1. Remove the 4 Screws-A(T3x8) and remove the Earth bracket. 2.

Page 20 Mechanical disassemblies -5 Side key board unit disassemblies-3. 1. Remove the 3 Screws-A(T3x6) and remove the Key board. Key board Earth bracket Fig. 4-5 -1 Digital Tuner unit removal. 1. Remove the 2 Screws-A(M3x6), 2 grounding leads and remove the Earth Bracket-A. 2.

<u>Page 21</u> Mechanical disassemblies -2 Digital Tuner unit disassemblies. 1. Remove the 5 Screws-A(M3x6), remove the Screw-C(M3x5) and remove the Shield plate top. 2. Remove the heat sink sheet and remove the shield sheet. (Do not remove when it is unnecessary.) 3.

<u>Page 22</u> Mechanical disassemblies Optical/Chassis unit removal. 1. Remove the a Screws-A(T4x10). 2. Loosen the 3 Screws-B(T4x23) and remove the Optical/Chassis unit. Optical / chassis unit Fig. 6 Loosen the 3 screws-B. For the fall prevention to the inside, the screw dose not come. Loosen the 3 screws-B.

Page 23 Mechanical disassemblies -1 Speaker units removal. 1. Remove the 3 Screws-A(T4x14) and remove the Speaker unit-R. 2. Remove the 3 Screws-B(T4x14) and remove the Speaker unit-L. Speaker unit-R Fig. 7-1 Speaker unit-L -2 Speaker unit-R, L disassemblies. 1. Remove the 4 Screws-A(T3x8) and remove the Cover. 2.

Page 24 Mechanical disassemblies Cover Switch Board removal. 1. Remove the 2 Screws(T3x8) and remove the Cover Switch Board. Cover Switch Board Fig. 8 Main Board Duct removal. 1. Remove the 4 Screws(M3x8) and remove the Duct. Duct Fig. 9 - 24 -...

Page 25 Mechanical disassemblies 10-1 Main board and Analog tuner unit removal. 1. Remove the 3 Screws(M3x8) and remove the Main board and analog tuner unit upward. Main board and analog tuner unit WARNING! Not to damage the connector. Fig. 10-1 10-2 Main board removal.

Page 26 Mechanical disassemblies AV Rear board removal. 1. Remove the 4 Screws-A(M3x6) and remove the Earth Bracket-AV. 2. Remove the 3 Screws-B(M3x6) and remove the Rear AV Board. Rear AV Board Earth Bracket AV Fig. 11 1 Mounting AV Board and FAN unit removal. 1.

Page 27 Mechanical disassemblies 2 FAN(FN906) unit removal. 1. Remove the 4 Screws(M4x25) and remove the FAN(FN906). FN906 Fig. 12-2 The direction of a wind. - 27 -...

Page 28 Mechanical disassemblies AC shield TOP removal. 1. Remove the 4 Screws(M3x6), remove the Eartg bracket and remove the AC Shield Top. 2. Disconnect the connector on the Lamp Ballast Board. Earth bracket AC shield Top Lamp Ballast Connector Fig. 13 AC Power unit removal.

Page 29 Mechanical disassemblies 1 AC Power unit disassemblies. 1. Remove the Screw-C(M4x6) and remove the Grounding lead. 2. Remove the 3 Screws-A(M3x6) and remove the Lamp Ballast unit. 3. Remove the 3 Screws-B(M3x6) and remove the AC Shield side-B. Grounding Lead AC Shield side-B Fig.

Page 30 Mechanical disassemblies 3 FAN(FN905) removal. 1. Remove the 4 screws (M4x30) and remove the FAN (FN905). The direction of a wind. Fig. 15-3 FN905 4 Power unit disassemblies. 1. Remove the 4 screws (M3x6) and remove the Power Board. Power Board AC Shield bottom Fig.

Page 31 Mechanical disassemblies 1 REF Duct unit and PBS Duct unit removal. 1. Remove the 4 Screws-A(M3x6) and remove the REF Duct unit. 2. Remove the 4 Screws-B(M3x6) and remove

the PBS Duct unit. PBS Duct unit REF Duct unit Fig. 16-1 2 REF Duct unit disassemblies.

Page 32 Mechanical disassemblies 3 PBS Duct unit disassemblies. 1. Remove the 2 Screws-A(T3x10) and remove the Mounting Duct PBS-R. 2. Remove the 2 Screws-B(T3x12) and remove the FAN (FN902). 3. Remove the 2 Screws-C(T3x10) and remove the Cover duct PBS. Cover Duct PBS Mounting Duct PBS-L FN902 Fig.

Page 33 Mechanical disassemblies Shield Reflector removal. 1. Remove the Screw-A(T3x8), remove the 2 screws-B(M3x6) and remove the Shield Reflector. Shield Reflector Fig. 18 Lamp unit removal. 1. Loosen the 2 Screws and remove the Lamp unit forward. Lamp unit Loosen the 2 screws Fig.

<u>Page 34</u> Mechanical disassemblies Optical unit removal. 1. Remove the 5 Screws(M3x12.6) and remove the Optical unit. Optical Unit Fig. 20 Lamp Reflector unit removal. 1. Remove the 3 Screws(T3x10) and remove the Lamp Reflector unit. Note: The screw tightening procedure is as follows. 1.

Page 35 Mechanical disassemblies 1 Joint Board unit and Lamp ballast connector removal. 1. Remove the Screw-A(T3x10) and remove the Joint Board unit. 2. Remove the 2 Screws-B(M3x8) and remove the Lamp Ballast connector. Joint Board unit Lamp Ballast connector Fig. 22-1 2 Joint Board unit disassemblies.

Page 36 Mechanical disassemblies 1 Condenser Lens unit and Relay Lens unit removal. 1. Remove the 2 Screws-A(M2.5x5) and remove the Condenser Lens unit. 2. Remove the 2 Screws-B(M2.5x5) and remove the Relay Lens unit. Condenser Lens unit Relay Lens unit Fig. 23-1 2 Condenser Lens unit disassemblies.

Page 37 Mechanical disassemblies 3 Relay Lens unit disassemblies. 1. Remove the 4 Screws(M2x4), remove the Plate and remove the Relay Lens. Plate Relay Lens Holder Relay Lens Fig. 23-3 - 37 -...

Page 38 Mechanical disassemblies 1 Polarized Glass units (IN) removal. 1. Remove the 3 Screws(M2.5x5) and remove the Polarized Glass units (R,G,B). Polarized Glass unit (IN-BLUE) Polarized Glass unit (IN-GREEN) Polarized Glass unit (IN-RED) Fig. 24-1 2 Polarized Glass units disassemblies. 1. Unhook and remove the Polarized Glass upward. Polarizes glass Blue (IN) Polarizes glass Green (IN) Polarizes glass Red (IN)

<u>Page 39</u> Mechanical disassemblies Projection Lens-LCD Panel / Prism unit removal. 1. Remove the 4 Screws(M4x12) and remove the Projection Lens-LCD Panel/Prism unit. (Slightly pull forward and remove downward.) Fig. 25 1 Projection Lens unit removal. 1. Remove the 4 Screws(M3x8) and remove the Projection Lens unit. LCD Panel / Prism unit Projection Lens unit Fig.

<u>Page 40</u> Mechanical disassemblies 2 Projection Lens unit disassemblies. 1. Remove the 4 Screws-A(M3x12) and remove the Spring Plate. 2. Remove the Projection Lens. 3. Remove the Adjustment Cams and remove the Adjustment Plate. Adjustment Adjustment Plate Projection Lens Spring Plate Adjustment Lens Base Fig.

Page 41 Mechanical disassemblies 1 LCD Panel/Prism unit removal. 1. Remove the 4 Screws(M2.5x4) and remove the LCD Panel/Prism unit. LCD Panel/Prism unit Mounting LCD Base Fig. 27-1 2 Polarized Glass (OUT) removal. 1. Unhook part(a), remove the Plates and remove the Polarized Glasses. Part(a) Plate Plate...

Page 42 Mechanical disassemblies Optical base-top removal. 1. Remove the 9 Screws(T3x10) and remove the Optical base-top. Optical base -top Fig. 28 -1 Optical parts removal. 1. Remove the Mirror(W) and stopper mirror-A, stopper mirror-B upward. 2. Remove the Integrator Lens(IN) and stopper-C upward. 3.

Page 43 Mechanical disassemblies Direction of installation of stopper. Direction of installation of stopper. (Integrator Lens) (PBS) Fig. 29-1c Fig. 29-1b -2 Optical parts removal. 1. Remove the Integrator Lens(OUT) and stopper-A upward. 2. Remove the Dicroic mirror(B) and 2 stoppers-B upward. 3.

Page 44 Mechanical disassemblies -3 Optical parts removal. 1. Remove the Mirror(B) and

stopper-A, stopper-B upward. 2. Remove the 2 Mirrors(R) and 2 stoppers-A, 2 stoppers-B upward. Stopper-B Stopper-A Stopper-A Stopper-B Stopper-B Mirror(B) Mirror(R) Stopper-A Mirror(R) Fig. 29-3 -4 Optical parts removal. 1.

<u>Page 45</u> Mechanical disassemblies 1 LCD Duct unit removal. 1. Remove the 4 Screws(T3x8) and remove the LCD Duct unit. LCD Duct unit Holder Base unit Fig. 30-1 2 LCD Duct unit disassemblies. 1. Unhook and remove the LCD Duct Top. 2. Remove the 4 Screws (T3x14) and remove the FANs(FN903, FN904). LCD Duct Top FN903 FN904...

Page 46 Mechanical disassemblies Ducts removal. 1. Remove the 5 Screws-A(T3x6) and remove the Duct REF Bottom. 2. Remove the 4 Screws-B(T3x6) and remove the Duct PBS Bottom. Duct REF Bottom Duct PBS Bottom Fig. 31 Holder Base - 46 -...

<u>Page 47</u> Mechanical disassemblies Lamp Cover removal. 1. Loosen the Screw and remove the Lamp cover. Loosen the screw Lamp Cover Fig. 32-1 Lamp replacement Loosen the 2 screws that secure the lamp with a screwdriver and pull out the Lamp by holding the holes on the both sides.

Page 48 Mechanical disassemblies Front panel unit removal. 1. Remove the 3 Screws(M4x8), remove the Front panel unit and remove the Front cover. Front panel unit Front cover Fig. 33 Fig. 33-a Caution: Do not remove these screws. - 48 -...

Page 49 Mechanical disassemblies Front panel unit disassemblies-1. 1. Remove the 5 Screws-B(T3x8) and remove the LED Board. LED Board Fig. 34 Front panel unit disassemblies-2. 1. Remove the LED spacer unit and remove the Decoration R/C Inlay. 2. Remove the Power button and remove the Decoration power Inlay. LED spacer unit Decoration R/C inlay LED spacer...

Page 50 Mechanical disassemblies Cabinet unit removal. 1. Remove the 4 Screws A (T4x14). - -- (from Back side) 2. Remove the 4 Screws B (T4x14). --- (from front side) 3. Remove the Cabinet unit upward. Cabinet unit Fig. 36-a Fig. 36-b - 50 -...

Page 51 Mechanical disassemblies 1 Cabinet unit disassemblies. 1. Remove the 16 Screws(T4x14) and remove the Cabinet Front Unit. (Remove the 19 Screws.------ PLV-65WHD1) Cabinet Front unit Cabinet Back unit Fig. 37-1 Caution; Be careful not to damage the screen and mirror. The screen and mirror are installed in the Cabinet front and Cabinet back unit.

Page 52 Mechanical disassemblies 2 Cabinet Back unit disassemblies. 1. Remove the 6 Screws-A(T4x10) and remove the Holder Top. 2. Remove the 4 Screws-B(T4x10) and remove the Holder Side-L. (Remove the 5 Screws.----- PLV-65WHD1) 3. Remove the 4 Screws-C(T4x10) and remove the Holder Side-R. (Remove the 5 Screws.----- PLV-65WHD1) 4.

Page 53 Mechanical disassemblies 3 Cabinet Front unit disassemblies. 1. Remove the 6 Screws-A(T4x12) and remove the Holder Top. (Remove the 8 Screws.------ PLV-65WHD1) 2. Remove the 8 Screws-B(T4x12) and remove the 2 Holder Sides. (Remove the 10 Screws.------PLV-65WHD1) 3. Remove the 6 Screws-C(T4x12) and remove the Holder Bottom. (Remove the 8 Screws.------ PLV-65WHD1) 4.

# This manual is also suitable for:

Plv-65whd1