



Sanyo 14GX37 Service Manual

Pal/secam/ntsc av color tv receiver

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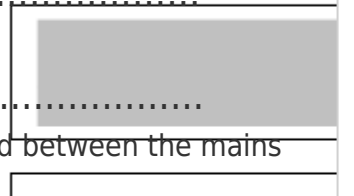
Trouble shooting.....

Chassis circuit diagram

Block diagram.....

Replaceable parts list

Some parts of the receiver are charged. Separate transformer must be used between the mains



plug and the

socket when repairing the chassis.

To prevent electric shock, do not remove the outer cover. No user serviceable parts inside.

Please refer

servicing to qualified service personnel.

SERVICE MANUAL

WARNING

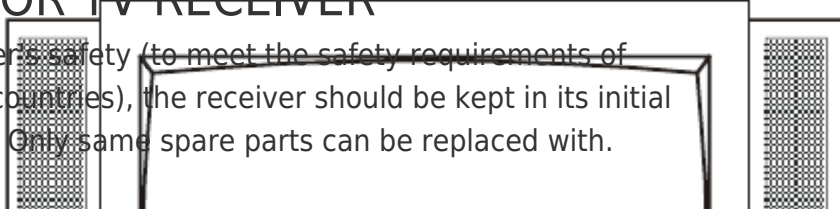
SANYO IIC CHASSIS

PAL/SECAM/NTSC(AV)

COLOR TV RECEIVER

For user's safety (to meet the safety requirements of some countries), the receiver should be kept in its initial status. Only same spare parts can be replaced with.

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Summary of Contents for Sanyo 14GX37

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----- SANYO IIC CHASSIS PAL/SECAM/NTSC(AV) COLOR TV RECEIVER For user's safety (to meet the safety requirements of some countries), the receiver should be kept in its initial status. Only same spare parts can be replaced with. Contents Page Specifications.....

[Page 2: Specifications](#)

SPECIFICATIONS Aerial impedance75Ωunbalanced
Convergence.....Auto focus system
Focus.....Double high level static focus Rated
audio output frequencyMax 3W×2 Picture carrier frequency
.....38MHZ Sound carrier frequency
.....31.5MHZ Power supply
.....AC 135~240V 60HZ/50HZ Power
consumption.....75W Loudspeaker
.....Round loudspeaker scanning deflection
.....Magnetic deflection Tuning
range.....

[Page 3](#) 1. Definitions of Ports 1 1 LC863328A-5W63 pins diagram (VLF) BAND1 50/60 (VHF)
BAND2 ALARM WOOFER VOL VOLUME-L VOLUME-R MUTE POWER WOOF ON/OFF XTAL1 XTAL2
S-VHS ENABLE KEY IN SCL1 AFT IN SDA1 SCL0 AC DETECT SDA0 RESET FILT BLANK CHROMA B
OUT V-SYNC...

[Page 4](#) P10/S00 Select UHF (BAND OPTION select "2" or "3") P11/SI0 50/60 Horizontal
frequency 50/60 output P12/SCK0 ALARM Alarm signal output P13/PWM1 WOOFER VOL Woofer
volume PWM output P14/PWM2 VOLUME-L Volume-L PWM output port P15/PWM3 VOLUME-R
Volume-R PWM output port POWER POWER ON/OFF signal output control port P17/PWM Tuning-
use 14bit PWM output port...

[Page 5](#) level. 1-3-1.Power switch control Port POWER ON POWER OFF Pin7(POWER) 1-3-2.
Band control BAND BAND BAND OPTION=2 BAND OPTION=0 OPTION=1 OPTION=3 Port V-L V-H
UHF V-L V-H UHF V-L V-H UHF Pin42(BAND1) Pin41(BAND2) Pin1(UHF) BAND OPTION LA7910
TUNER PORT/H POTR/L Port V-L V-H UHF V-L V-H UHF V-L V-H UHF V-L V-H UHF Pin42(BAND1)

[Page 6](#) 1-3-4. 50/60 output PORT Pin2(50/60) 1-3-5. Woofer function when stereo control
TA1216AN IC is employed TA1216AN is provided with woofer control function. If TA1216AN is
not used, CPU will reserve a woofer port to enable woofer control function. Pin36 is used as
on/off control, and Pin4 as woofer volume control output.

[Page 7](#) CPU can automatically determine the maximum channels to be stored according to
the capacity of external EEPROM connected. EEPROM model AT24C02 AT24C04 AT24C08
Channel max 3. Definitions of Local Buttons 3-1. Definitions of buttons (AD input port) PORT
VOLTAGE RANGE BUTTON FUNCTION DESCRIPTION 0V~3/32VDD...

[Page 8](#) 3-3 User's remote control unit wiring PIN1 PIN2 PIN3 PIN4 LC7461M-8103 PIN20 C3 24
C2 23 PIN19 C1 22 C0 21 5 C4 -/-/-- PIN18 TV/AV 6 C5 GAME MENU WOOF PIN17 POS+ VOL+
PROD POWER PIN16 VOL- JUMP MUTE POS- PIN15 SLEEP...

[Page 9](#) 5. R2 RT14-1/4W-220Ω-J 6. C1 C2 CT1-05B-2B4-63V-220PF-K 7.
C3CD110X-6.3V-100UF-M 8. G1 455KHZ 9.VCC 2 AA size batteries User's code: C5 C4 C3 C2 C1
C0 4. Button Functions and Operation Instructions 4 1 POWER (remote control button) 1)
Function power on/off control 2) Description Each press of the (POWER) button makes a switch
between POWER ON and OFF.

[Page 10](#) 2) Description Each press of this button makes one switch between TV and AV. Auto
mute and black background functions are enabled during the switch. In AV mode numeric
buttons (0 9), (- -), POS and POS buttons do not work, only "AV"...

[Page 11](#) In CHANNEL menu press (0~9) and (- -) buttons to select the positions to be copied.
In AV mode press (0 9) or (- -) buttons do not work, but AV display will appear. During B/W

balance adjustment in one light line mode, press numeric buttons (0~7) can adjust sub-brightness, red bias, green bias and blue bias.

[Page 12](#) down the options in the menu (please refer to the operation instruction in relevant menu. In "B/W ADJUST", "ADJUST" and "SETUP" mode POS+ and POS- buttons are used to turn page up and down. In AV mode, press POS or POS button doesn't work but "AV"...

[Page 13](#) In "ADJUST" mode, this button does not work during adjusting options OSD status, while in other OSD display, press this button will return to the adjusting options OSD display. In "SETUP" mode this button does not work during setting options display status;...

[Page 14](#) 3) OSD display (about 5 seconds) VOLUME 4 8 MUTE remote control button 1) Function mute bright line-to-full screen switch. 2) Description Press MUTE button to enter into mute status, press again to cancel. Press POWER and VOL buttons can also cancel mute status. In mute status, mute OSD will be on display if there is no other OSD display (in "FACTORY"...

[Page 15](#) When in WOOF OSD, and WOOFER ON status, if "WOOF VOL.OPT" is set to "1" WOOF VOLUME will appear. Use VOL+ and VOL- to change the woofer output volume. If woofer function is not selected, then just cancel the relevant button on the remote control unit.

[Page 16](#) press VOL button to move downward. In PRESET menu, press figure buttons (0~9) and (-) button to select the program position to be adjusted directly. During fine adjustment and semi-auto search, the color of OSD display bar will turn to red, and the small erect bar displaying PWM setting values will turn into an arrow indicating direction.

[Page 17](#) with an arrow and its OSD display will become red. The OSD display of the options not selected is in green. "EXCHANGE" is to exchange the memory information of the current channel with that of the target channel; "CLEAR ALL" is to close all the memory of position storing channel information, that means no program is stored.

[Page 18](#) auto-search is completed. 4 12 PICTURE remote control button 1) Function to enter into PICTURE menu. 2) Description After reaching the PICTURE menu press PICTURE button to select, or press POS /POS to select options upward /downward. The option with an arrow is the currently selected option.

[Page 19](#) VIVID" and "LIGHT" that is to set corresponding brightness, contrast, sharpness, chrominance and tint . Besides, the "PERSONAL" can be adjusted as you like and be stored automatically into the EEPROM for use. "FACTORY" and "B/W BALANCE" modes also provide "FACTORY1"and "FACTORY2"...

[Page 20](#) Press VOL or VOL to increase or decrease the output values of relevant options. The output value of each option is divided equally into 100 steps. Press VOL+ can increase output value until it reaches the max (100). Press can decrease the output value until it reaches the minimum (0). When VOL+ or VOL- is used to change output values, a bar-like OSD at the bottom of the screen will indicate its changing direction with an arrow.

[Page 21](#) more than 500MS then minute or hour will be added by one after each 160MS. The cycle period of hour is 24 hours and that of minute is 60 minutes. When the hour is set to 23, press VOL- button again will clear the time setting. Press once again will start from 0 again.

[Page 22](#) 2) Description: Press SYSTEM button to reach SYSTEM menu. Press SYSTEM again to select options in circles, or to press POS+ or POS- to select option upward or downward. The option selected is pointed out by an arrow. Its OSD display is red.

[Page 23](#) 4 17 SLEEP (remote control button 1) Function set sleep time keep current page unchanged. 2) Description: The maximum sleep time is 120 minutes. Every 15 minutes equals one step. After sleep time is set, OFF-TIME is cancelled automatically. When sleep time goes to the last minute OSD will display information on sleep time, reminding that the TV will be turned off.

[Page 24](#) In GAME mode, press either GAME or DISPLAY button to quit game. In GAME mode, the function of auto-turnoff without signal will be cancelled. Only the said control buttons and POWER button work in GAME mode. Other buttons do not work. Rules of "888": 3 same figures

wins 5 gold coins;...

[Page 25](#) 5-1. Manual B/W balance adjustment 1). Operation instruction: Press PROD button to enter into "B/W BALANCE" mode and the first adjustable item "sub-brightness" will turn up then. The OSD display of the B/W balance adjustment covers one line on the top to reserve the central space for camera lighting.

[Page 26](#) FUNCTION Sub brightness- Red bias - Green bias - Blue bias - c) During production, factory use remote control unit can be used to speed up adjustment. Please refer to 4-4 for button definitions. 2-2. The adjustment of adjusting options and setting options 1).

[Page 27](#) OSD display LA76810 bus data Name Range BLK.STR.DEF Blk Str Def Black level stretch definition AFC GAIN AFC Gain AFC gain V.SEPUP V.SEPUP Vertical separation sensitivity CD.MODE Count Down Mode DIGITAL OSD Digital OSD Digital OSD set GRAY MOD Gray Mode B.GAM.SEL Select RG.GAM.DEF...

[Page 28](#) LINE MODE No picture mode switch during FULL With picture mode switch during FULL SCREEN/LIGHT LINE switch SCREEN/LIGHT LINE switch STEREO OPT Stereo off Stereo on STEREO IC Stereo IC TA1216AN off Stereo IC TA1216AN on WOOF VOL.OPT Woofer (headphone) volume control on Woofer (headphone) volume control off SIF M/N 4.5M sound off...

[Page 29](#) a). "PROD/ " has the same function as that of the "PROD/ " button on an ordinary remote control unit. b). "ADJUP/ADJDOWN" is used to turn pages upward and downward. It works only in "B/W BALANCE", "ADJUST" and "SETUP" mode. It has the same function as what the ordinary remote control "POS+"...

[Page 30](#) no program position is stored, it can automatically enter into auto-search mode after start-up. 6-3. EEPROM check function When EEPROM is damaged, TV set can not work normally, because the bus adjusting data and the result of setting options are stored in EEPROM. Therefore CPU will automatically check EEPROM upon cold start-up.

[Page 31](#) 1) Operation instruction: Press PROD button to enter into "FACTORY" mode. Press and hold VOL- button on remote control unit till the volume decreases to "0", and meanwhile press POS- button on the remote control unit to open factory flag setting up menu.

[Page 32](#) LOGO2 ON SIZE LOGO1 ON SIZE 2*2 H.POS COLOR H.POS COLOR V.POS V.POS Maintenance adjustment 1 Adjusting +B voltage 1.1 testing point-----two ends of C561 1.2 if +B voltage won't meet the requirement, adjust RP551 level switch to make it comply with the requirement.

[Page 33](#) in the vertical center. 6.4 AV receives Philips circular test signal (NTSC system). 6.5 Press CH±button to select NT.V.SIZE option. Use VOL±to adjust the value of NT.V.SIZE till the picture appears in the vertical center. 6.6 Press PROD (FACTORY) till exit. 7 Vertical linearity adjustment .1 Receive Philips circular test signal(PAL system).

[Page 34](#) Troubleshooting list |Yes No raster Check V513/V512 Check N551/V554 Check whether the line /V511/V501 /VD554/R569 of B6 12V is normal Check VD551/V551 Check whether the line of B1 110V is normal Check V431 waveform Check voltage of Replace N101 normal or not N101pin Check whether Replace T471/439...

[Page 35](#) Horizontal raster (no vertical scan) Check waveform of Check voltage Check C451/L451/ N451/7pin of N451/6pin V551/V552/V553 Check waveform of Check N451/VD451 N451/7pin normal or not No sound Check waveform of N101/52pin Check waveform of N101/52 Check N101 Check waveform of N101/1pin Check C819/R831/R832 Check waveform of N801/21pin Check waveform of N801/17pin...

[Page 36](#) No color Check relevant settings open or not Reset according adjusting instruction Check voltage of N101/39pin/36pin's Check C210/C207/C208 element/31pin normal or not /R205R206...

[Page 37](#) меню телевизора. Контактная площадка находится под указанной на рисунке кнопкой, но сама кнопка не имеет металлизированного напыления. Для ТВ Erisson 2107, 14GX37 Аналогично модели 2105, пульт модели 2107(14GX37) содержит в себе возможность управления входом в сервисное меню телевизора. Контактная площадка

находится под указанной на...

This manual is also suitable for:

[lic](#)