



Toshiba D-R5SC Service Manual

1

2

3

4

Table Of Contents

5

6

7

8

9

10

11

12

13

14

15

16

17

18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33

--

•

[Table of Contents](#)

•

Bookmarks

--

Quick Links

[Download this manual](#) See also: [Owner's Manual](#)



SERVICE MANUAL

TOSHIBA

The above models are classified as green products (*1), as indicated by the underlined serial numbers. This Service Manual describes replacement parts for the green products.

When

repairing these green product(s), use the part(s) described in this manual and lead-free solder (*2).

For (*1) and (*2), see the next page.

DVD VIDEO RECORDER



FILE NO. 810-200602GR

DIGITAL VIDEO

TOSHIBA
D-R5SC

D-R5SU



DOCUMENT CREATED IN JAPAN, SEPT., 2006

REVISED.01

Mar., 2006 GREEN



[Table of Contents](#)

[Next Page](#)

1
2
3
4
5

Related Manuals for Toshiba D-R5SC

[DVD Recorder Toshiba D-R5SC Owner's Manual](#)

Toshiba dvd video recorder owner's manual d-r5su, d-r5sc (58 pages)

[DVR Toshiba D-R5SU Owner's Manual](#)

(58 pages)

[DVD Player Toshiba SD-3108 Owner's Manual](#)

(54 pages)

[DVR Toshiba D-R5SC Service Manual](#)

Dvd video recorder (33 pages)

[DVR Toshiba D-R5 Specification Sheet](#)

Toshiba digital video recorder specification sheet (2 pages)

[DVR Toshiba D-R560KU Owner's Manual](#)

D-r560ku user's guide (117 pages)

[DVR Toshiba DR570KU Owner's Manual](#)

Dr570ku user's guide (118 pages)

[DVR Toshiba D-R550KU Owner's Manual](#)

D-r550ku user's guide (115 pages)

[DVR Toshiba D-R550 Owner's Manual](#)

Dvd video recorder (125 pages)

[DVR Toshiba DR570KU Owner's Manual](#)

Toshiba dr570ku dvd video recorder owner's manual (123 pages)

[DVR Toshiba D-R560KU Service Manual](#)

(72 pages)

[DVR Toshiba D-R410KU Owner's Manual](#)

D-r410ku user's guide (101 pages)

[DVR Toshiba D-R4SU Owner's Manual](#)

(131 pages)

[DVR Toshiba D-R410KU Service Manual](#)

Toshiba d-r410ku dvd video recorder service manual (66 pages)

[DVR Toshiba D-RW2SC Service Manual](#)

(37 pages)

[DVR Toshiba D-R265SE Service Manual](#)

(41 pages)

Summary of Contents for Toshiba D-R5SC

[Page 1](#) REVISED.01 SERVICE MANUAL DIGITAL VIDEO DVD VIDEO RECORDER D-R5SC D-R5SU

The above models are classified as green products (*1), as indicated by the underlined serial numbers. This Service Manual describes replacement parts for the green products. When repairing these green product(s), use the part(s) described in this manual and lead-free solder (*2).

[Page 2](#) Hazardous Substances. From July 1, 2006, the RoHS Directive will prohibit any marketing of new products containing the restricted substances. Increasing attention is given to issues related to the global environmental. Toshiba Corporation recognizes environmental protection as a key management tasks, and is doing its utmost to enhance and improve the

quality and scope of its environmental activities.

[Page 3](#) **LASER BEAM CAUTION LABEL** When the power supply is being turned on, you may not remove this laser cautions label. If it removes, radiation of a laser may be received.
PREPARATION OF SERVICING Pickup Head consists of a laser diode that is very susceptible to external static electricity. Although it operates properly after replacement, if it was subject to electrostatic discharge during replacement, its life might be shortened.

[Page 4: Safety Notice](#)

SAFETY NOTICE SAFETY PRECAUTIONS LEAKAGE CURRENT CHECK Measure the AC voltage across the 1500 Ω resistor. Plug the AC line cord directly into a 120V AC outlet (do not use an isolation transformer for this check). Use an The test must be conducted with the AC switch on and AC voltmeter, having 5000 Ω ...

[Page 5: Table Of Contents](#)

CONTENTS 1. LOCATION OF MAIN PARTS 1-1. Location of Main Parts 1-2. Location of PC Boards 2. WIRING CONNECTION DIAGRAM 3. PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM 4. BLOCK DIAGRAMS 4-1. MPEG & SYSTEM Block Diagram 4-2. Power Supply Block Diagram 5.

[Page 6: Location Of Main Parts](#)

1. LOCATION OF MAIN PARTS 1-1. Location of Main Parts RAM DRIVE Fig. 1-1-1 1-2. Location of PC Boards Power Switch PC board Digital PC board AV Tuner Unit PC board DV/AV Input PC board Front Display PC board Power PC board Fig.

[Page 7: Wiring Connection Diagram](#)

2. WIRING CONNECTION DIAGRAM After the servicing is complete, return the wiring to its original state by using the diagram below as a reference. AV Tuner Unit PC board W301 W303 Digital PC board W104 Tape W802 W501 Tape W106 Power PC board Tape W105...

[Page 8: Printed Wiring Board And Schematic Diagram](#)

3. PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM W802 CN802 FLAT WIRE 2.54 9P CN302 ON/OFF 5V ON/OFF 5V +3.3 V +3.3 V +3.3 V +3.3 V Power AV-TUNER ON/OFF 5V ON/OFF 5V AP+12 V AP+12 V AN-12 V AN-12 V +33 V +33 V CN301...

[Page 9: Block Diagrams](#)

4. BLOCK DIAGRAM 4-1. MPEG & SYSTEM Block Diagram Digital Audio Out 128M SDRAM WM8776 IC504 J502 IC514 IC502 128M SDRAM 128M SDRAM L OUT IC507 Video FRONT 4558 R OUT 128M SDRAM Video IC503 32M FLASH CV BS IC511 IC513 2/2 BA7607 REAR...

[Page 10: Power Supply Block Diagram](#)

4-2. Power Supply Block Diagram T101 D301 C301 D101-D104 C105 RECTIFIER TRANS 12V SW AP+12V RECTIFIER SMOOTHING SMOOTHING Q101 D201 C201 SW IC RECTIFIER +32V 32V SW SMOOTHING IC101 D403 D404 L101 3.3V ADJUST CONTROL IC AC FILTER D401 C404 POWER ON SIG RECTIFIER 5V SW...

[Page 11: Circuit Diagrams](#)

5. CIRCUIT DIAGRAMS 5-1. Power Supply Circuit Diagram Fig. 5-5-1...

[Page 12: Front Display & Power Switch Circuit Diagram](#)

5-2. Front Display & Power Switch Circuit Diagram JC102 U102 L108 SW101 SW102 SW103 L109 L101 OPEN/CLOSE L108 CN105 L109 SW104 SW105 SW106 R126 R128 R130 CN104 PDHMS JC101 L102 AL_F STOP PLAY GR5# GR6# AR_F PWR_DECT DV INPUT CVBS_F GR4# TO DIGITAL DV IN SW108...

[Page 13: Audio & Video Tuner Circuit Diagram](#)

5-3. Audio & Video Tuner Circuit Diagram C . N C . N Fig. 5-5-3...

[Page 14: Digital Circuit Diagram](#)

5-4. Digital Circuit Diagram Digital Circuit System Diagram ATAPI INTERFACE Video Output

ATAPI INTERFACE VIDEO OUTPUT_1 CVBS CVBS CVBS AUDIO_OUT_R +3.3V +3.3V AUDIO_OUT_L
V_GND AGND V_GND 0R(0805) 75R/1% 75R/1% 75R/1% 75R/1% 75R/1% 75R/1% AUDIO
OUTPUT MUTE- AUDIO_OUT_L V_GND MUTE- V_GND AUDIO_OUT_R Activa100 Vaddis V...

[Page 15: Audio Output Circuit Diagram](#)

5-4-1. Audio Output Circuit Diagram J504 R280 GP1FAV51TK0F R281 SPDIF SP5V 2N3906 C102
R279 100pF C307 D15 BAT54S 47uF/16V BAT54S C308 0.1uF 220uF/16V A-12V A12V R288
R287 D20 BAT54S D18 BAT54S R285 R286 FB19 R290 100K N.C. 2N3906 2N3906 R292 4.7K
MUTE- +3.3V...

[Page 16: Decoder & Sdram Circuit Diagram](#)

5-4-2. Decoder & SDRAM Circuit Diagram VDD_DAC +1.8V +3.3V +3.3V 47uF/16V 47uF/16V
47uF/16V 47uF/16V +3.3V +1.8V RESET CIRCUIT RESET- RESET- IC510 NVMDA0 DAC_BU
NVMDA1 DAC_RV ANALOG VIDEO OUTPUTS NVMDA2 DAC_GY CVBS CVBS CVBS NVMDA3
DAC_CVBS NVMDA4 DAC_Y NVMDA5 DAC_C COSYNC TP12 NVMDA6 COSYNC...

[Page 17: Hdmi Circuit Diagram](#)

5-4-3. HDMI Circuit Diagram J503 HDMI_TYPE_A +1.8V +3.3V TDMS_D2+ FB25
TDMS_D2_SHIELD HD_3.3V TDMS_D2- TDMS_D1+ FB26 TDMS_D1_SHIELD HD_1.8V TDMS_D1-
TDMS_D0+ +3.3V +1.8V TDMS_D0_SHIELD TDMS_D0- TDMS_CLK+ A12V HD_+5V
TDMS_CLK_SHIELD A12V IC515 TDMS_CLK- L78L05/TO92 A12V R340 1.8K +3.3V HD_+5V
DDC/CEC_GND C354 C355 2N7002 HD_+5V +1.8V A12V...

[Page 18: Audio & Video Input Circuit Diagram](#)

5-4-4. Audio & Video Input Circuit Diagram TP95 VGND AGND VGND IC518 CN507 TP72 9PIN +
HOUSING C383 10nF TP73 R352 330R R349 AL_FRONT I55_CVBSIN C384 10nF C387 C385 10nF
C386 TP74 CTLA 47uF/16V 0.1uF R356 TP75 CTLB 75R/1% BA7653AFV TP76 VGND VGND...

[Page 19: 1394 Circuit Diagram](#)

5-4-5. 1394 Circuit Diagram +3.3V +1.5V PHY_PLL_VCC PHY_VCC IC505 ISODIR ISODIR
ISOVALRX ISOVALRX ISORDY ISORDY ISOCCLK PCI_AD31 HSDIO_CLK ISOCCLK ISOSTART PCI_AD30
HSDIO_SYNC ISOSTART ISOVALTX PCI_AD29 HSDIO_DVALID/HSDIO_EN ISOVALTX ERROR
PCI_AD28 HSDIO_ERROR GBADR[9:0] GBADR[9:0] PCI_AD27 DSSCLK27 GBDAT[15:0] ISODO
R216 GBDAT[15:0] PCI_AD26 HADIO_D0 GBADR9 ISOD1 PCI_AD25/MCIF_A11...

[Page 20: Encoder & Sdram Circuit Diagram](#)

5-4-6. Encoder & SDRAM Circuit Diagram +3.3V +1.8V +3.3V +1.8V +3.3V 47uF/16V 47uF/16V
47uF/16V IC506 4.7K ISOSTART ISOSTART ISOVALRX ISOVALRX OSBCLK SBCLK ISOVALTX
ISOVALTX OSBVALID SBVALID ISODIR SBDAT ISOCCLK ISOCCLK OSBREQ SBREQ
ISORDY ISORDY ISODO AODAT I55_AODAT ISOD[7:0] ADC_ADAT ISOD1 AIDAT...

[Page 21: Atapi Interface Circuit Diagram](#)

5-4-7. ATAPI Interface Circuit Diagram RP20 22RX4 22RX4 22RX4 RP19 22RX4 ATDD[0..15]
TP43 TP44 TP45 TP46 TP47 TP48 TP49 TP50 TP51 DRVRST- TP52 CN504 HEADER 20X2 TP53
TP54 TP55 TP56 TP57 TP58 TP59 TP60 TP61 TP62 TP63 TP64 TP65 22RX4 ATDMARQ TP66
ATIOW-...

[Page 22: Power Supply Circuit Diagram](#)

5-4-8. Power Supply Circuit Diagram TP15 IC508 LT1086-ADJ +1.8V VOUT C162 47uF/16V 0.1uF
121R/1% TP16 10uF/16V 0.1uF 47uF/16V 53.6R/1% 10uF/16V 47uF/16V 0.1uF TP90 CN509 TP91
DF1117-ADJ SOT-223 IC501 +1.5V 47uF/16V 47uF/16V 0.1uF R233 TP92 TP93 C246 105R_1%
8x1 W/HOUSING C248 TP94 DIP8/W/H/P2.54 10uF/16V...

[Page 23: Video Output Circuit Diagram](#)

5-4-9. Video Output Circuit Diagram C289 15pF C290 C291 150pF 150pF C292 15pF +3.3V
C293 C294 150pF 150pF +3.3V V_GND C295 15pF AGND V_GND TP96 TP97 TP98 J501 C296
C297 FB13 150pF 150pF FB14 FB15 C298 15pF CVBS C299 C300 150pF 150pF V_GND...

[Page 24: Pc Boards](#)

6. PC BOARDS 6-1. DV/AV Input PC Board Fig. 6-6-1 DV/AV Input PC Board (Top side) Fig. 6-6-2
DV/AV Input PC Board (Bottom side) 6-2. Power Switch PC Board Fig. 6-6-3 Power Switch PC

Board (Top side) Fig. 6-6-4 Power Switch PC Board (Bottom side)

[Page 25: Front Display Pc Board](#)

6-3. Front Display PC Board Fig. 6-6-5 Front Display PC Board (Top side) Fig. 6-6-6 Front Display PC Board (Bottom side)

[Page 26: Av Tuner Unit Pc Board](#)

6-4. AV Tuner Unit PC Board Fig. 6-6-7 AV Tuner Unit PC Board (Top side) Fig. 6-6-8 AV Tuner Unit PC Board (Bottom side)

[Page 27: Digital Pc Board](#)

6-5. Digital PC Board Fig. 6-6-9 Digital PC Board (Top side) Fig. 6-6-10 Digital PC Board (Bottom side)

[Page 28: Exploded Views](#)

7. EXPLODED VIEWS 7-1. Packing Assembly A106 TC A101 A104 A105 A107 TU A101 A102 A103 Fig. 7-7-1...

[Page 29: Chassis Assembly](#)

7-2. Chassis Assembly B101 W301 EU04 P801 EU01 EU02 W501 B001 Y001 Fig. 7-7-2...

[Page 30: Parts List](#)

8. PARTS LIST: D-R5 Location TSB P/N Reference No. Description A101 AH930020 TDRAC10001A * OWNER'S MANUAL (ENGLISH)TSB CODE (For SU,SC Version) AH930021 A102 TDRAC10003A * QUICK SETUP GUIDE(1 PAGE)(ENGLISH) A103 AH910018 TRE900006XX * REMOTE CONTROL A104 AH930022 TDRAC10002A * OWNER'S MANUAL (FRENCH) TSB CODE (For SC Version) AH930023 A105 TDRAC10004A...

[Page 31](#) Location TSB P/N Reference No. Description MAIN UNIT ASS'Y AH910020 TQC000011XX @TRANSISTOR SOT-23 BAT54D(SMD) AH910020 TQC000011XX @TRANSISTOR SOT-23 BAT54D(SMD) AH910020 TQC000011XX @TRANSISTOR SOT-23 BAT54D(SMD) AH910020 TQC000011XX @TRANSISTOR SOT-23 BAT54D(SMD) AH910020 TQC000011XX @TRANSISTOR SOT-23 BAT54D(SMD) AH910020 TQC000011XX @TRANSISTOR SOT-23 BAT54D(SMD) AH910020...

[Page 32: Specifications](#)

SPECIFICATIONS Power requirement during operation Power requirement at standby 1.3W Power supply 120V AC, 60 Hz Mass 3.5kg External dimension Width 430 x Height 62 x Depth 302mm Incoming channels TV : 2-69CH, Cable : 1-125CH Antenna input/output terminal VHF/UHF : 75Ω, RF Connector Signal system Standard NTSC Color TV system Laser...

[Page 33](#) 1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN...

This manual is also suitable for:

D-r5su