

JVC

SERVICE MANUAL

COLOUR TELEVISION

BASIC CHASSIS

JK

AV-29R8(C-PH)

This service manual mainly consists of the following items:

- The items which differ from those for the AV-29RX(c) service manual.
- The initial value for each setting item.

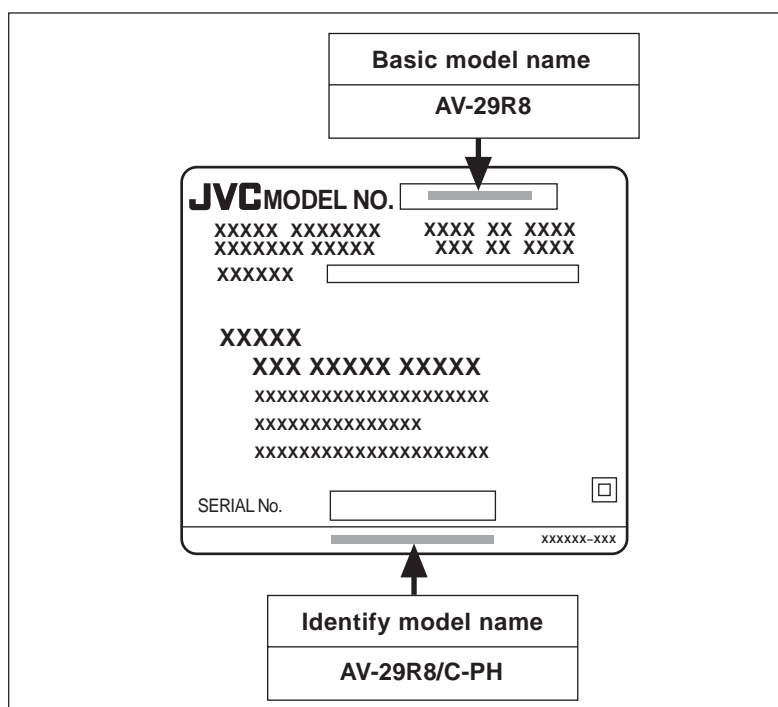
For details other than those described in this manual, please refer to the following service manual.

Reference Service Manual: AV-29RX(c) Service Manual (No. 51729, Jul. 2000)

Note: The page in parentheses shows the one for the AV-29RX(c) service manual (No. 51729, Jul. 2000).


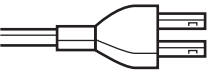
HOW TO IDENTIFY MODEL

While referring to the illustration given below, identify model name on the rating label affixed to the rear cover.



PARTS DIFFERENCE TABLE

The different parts between AV-29RX(c) and AV-29R8(c-PH) are described below:

| △ | REF. NO. | AV-29RX(c) | AV-29R8(c-PH) | PART NAME | DESCRIPTION |
|--|----------|--|--|----------------------|-------------|
| | | PART No. | PART No. | | |
| ■ EXPLODED VIEW PARTS LIST (Pages 35 and 36) | | | | | |
| △ | 13 | QMP40D0-200J5 or QMP40D0-200J3  | QMPR010-200-E2 or QMPR010-200-K2  | POWER CORD | |
| △ | 15 | LC10763-002C-H | LC10763-002C-HK | REAR COVER | |
| △ | 16 | LC20377-010B-H | GG20003-010A-H | RATING LABEL | |
| | 34 | LC10762-003B-H | LC10762-003B-HK | FRONT CABINET | |
| ■ PRINTED WIRING BOARD PARTS LIST [POWER & DEF PWB ASSY] (Page 41-) | | | | | |
| | — | SJK-2022A-H2 | SJK-2032A-H2 | POWER & DEF PWB ASSY | |
| | R2554 | QRZ9021-1R5 | QRZ9023-1R5 | F R | 1.5Ω 1W J |
| | K2903 | CE41433-001Z | — | BEADS CORE | |
| | K2904 | CE41433-001Z | — | BEADS CORE | |
| ■ PACKING PARTS LIST (Page 47) | | | | | |
| | 1 | LC10845-007A-H | GG10077-004A | PACKING CASE | |
| △ | 6 | LCT0864-001A-H | LCT0852-001A-H | INST BOOK | |
| | 7 | CM47385-00B-H | CP30902-051(R) | POS/SERIAL LABEL | |
| △ | 10 | LCT0661-001A-H | — | DIGEST MANUAL | |
| △ | 11 | LCT0662-001A-H | — | DIGEST MANUAL | |

SPECIFICATIONS (Page 2)

| Item | | CONTENTS |
|-------------------------------------|--------------------|---|
| Dimensions (W × H × D) | | 732mm × 588mm × 508mm |
| Mass | | 52kg |
| TV RF System | | B, G, I, D, K, K1, M |
| Colour System | | PAL, SECAM, NTSC3.58, NTSC4.43 |
| Receiving Frequency | VHF (L) | 46.25MHz ~ 168.25MHz |
| | VHF (H) | 175.25MHz ~ 463.25MHz |
| | UHF | 471.25MHz ~ 863.25MHz |
| | CATV | Mid (X-Z, S1-S10), Super (S11-S20), Hyper (S21-S41) bands receivable |
| Intermediate Frequency | VIF Carrier | 38.0MHz |
| | SIF Carrier | 33.5MHz(4.5MHz), 32.5MHz(5.5MHz), 32.0MHz(6.0MHz), 31.5MHz(6.5MHz) |
| Colour Sub Carrier Frequency | PAL | 4.43MHz |
| | SECAM | 4.40625MHz, 4.25MHz |
| | NTSC | 3.58MHz / 4.43MHz |
| Power Input | | Rating: AC110 ~ 240V, 50/60Hz Operating: AC90 ~ 260V, 50/60Hz |
| Power Consumption | | 193W (Max) / 137W (Avg) |
| Picture Tube | | Visible size : 68cm measured diagonally |
| High Voltage | | 32.0kV ±1.5kV (at zero beam current) |
| Speaker & Audio Output | | Open dome speaker 10W+10W, 10cm round x 2 |
| Video Audio Input terminals | | |
| Video1 | S-Video | Y: 1Vp-p positive (Negative sync provided, when terminated with 75Ω) C: 0.286Vp-p (Burst signal, when terminated with 75Ω) |
| | Video | 1Vp-p 75Ω (RCA pin jack) |
| | Audio (L/R) | 500mVrms (-4dBs), High impedance (RCA pin jack) |
| Video2 | Video | 1Vp-p 75Ω (RCA pin jack) |
| | Audio (L/R) | 500mVrms (-4dBs), High impedance (RCA pin jack) |
| Video3 | Video/Y | V: Composite video 1Vp-p 75Ω (RCA pin jack) Y: Component video 1Vp-p 75Ω (RCA pin jack) |
| | Cb | Component video B-Y 0.7Vp-p 75Ω (RCA pin jack) |
| | Cr | Component video R-Y 0.7Vp-p 75Ω (RCA pin jack) |
| | Audio (L/R) | 500mVrms (-4dBs), High impedance (RCA pin jack) |
| Video4 (Front terminal) | S-Video | Y: 1Vp-p positive (Negative sync provided, when terminated with 75Ω) C: 0.286Vp-p (Burst signal, when terminated with 75Ω) |
| | Video | 1Vp-p 75Ω (RCA pin jack) |
| | Audio (L/R) | 500mVrms (-4dBs), High impedance (RCA pin jack) |
| Video Audio Output terminal | | |
| | Video | 1Vp-p 75Ω (RCA pin jack) |
| | Audio (L/R) | 500mVrms (-4dBs), High impedance (RCA pin jack) |
| Aerial Input Terminal | | 75Ω unbalanced, Coaxial |
| Headphone Jack | | Stereo mini jack (ø3.5mm) |
| AV Compu Link terminal | | AV Compu Link II, mini jack (ø3.5mm) |
| Remote Control Unit | | RM-C113 (AA/R06 dry battery × 2) |

Design & specifications are subject to change without notice.

SPECIFIC SERVICE INSTRUCTIONS

SETTING OF SYSTEM CONSTANT SET (Page 10)

Table 1

| CONTENTS | VARIABLE RANGE | INITIAL SETTING VALUE |
|----------------|--|-----------------------|
| COLOUR | ☐▶ MULTI →▶ TRIPLE →▶ PAL ☐ | MULTI |
| MSP | ☐▶ YES →▶ NO ☐ | NO |
| SUPER BASS | ☐▶ YES →▶ NO ☐ | NO |
| CENTER SPEAKER | ☐▶ YES →▶ NO ☐ | NO |
| TEXT | ☐▶ YES →▶ NO ☐ | NO |
| BLUE BACK MUTE | ☐▶ YES →▶ NO ☐ | NO |
| VOLUME LIMIT | ☐▶ YES →▶ NO ☐ | YES |
| COLOUR AUTO | ☐▶ YES →▶ NO ☐ | NO |
| TILT | ☐▶ YES →▶ NO ☐ | YES |
| C-TRAP | ☐▶ 1 →▶ 0 ☐ | 1 |
| E.M.C. | ☐▶ YES →▶ NO ☐ | NO |
| N/S WHITE BACK | ☐▶ YES →▶ NO ☐ | NO |
| 7 LED SPEED | ☐▶ 00 →▶ 10 →▶ 20 →▶ ... →▶ 1250 ☐ ☐▶ 1270 ←▶ 1260 ←▶ ☐ | 100 |

USER SETTING CONDITIONS (Page 10)

Table 2

| PICTURE SETTING | | FEATURES | |
|------------------|---|-------------------|----------------------------------|
| PICTURE MODE | BRIGHT | SLEEP TIMER | OFF |
| CONTRAST | CENTER | ON TIMER | PR1 0:00 |
| BRIGHT | CENTER | BLUE BACK | ON |
| SHARP | CENTER | CHILD LOCK | OFF |
| COLOUR | CENTER | CHANNEL GUARD | -- |
| TINT | CENTER | AUTO SHUT OFF | OFF |
| WHITE BALANCE | COOL | VIDEO-3 SETTING | COMPONENT |
| PICTURE FEATURES | | INSTALL | |
| A.A.C | ON | LANGUAGE | ENGLISH |
| AUTO VNR | AUTO | AUTO PROGRAM | -- |
| COLOUR SYSTEM | TV: According to preset CH VIDEO: AUTO PAL | EDIT / MANUAL | PRESET CH only Others: blank |
| ZOOM | REGULAR | DEMO | |
| ECO SENSOR | OFF | DEMO | OFF |
| PICTURE TILT | CENTER | OTHERS | |
| SOUND SETTING | | VOLUME | Appropriate sound level |
| BASS | CENTER | CHANNEL PRESET | Refer to Operating Instructions. |
| TREBLE | CENTER | CHANNEL POSITION | 1 POSITION |
| BALANCE | CENTER | SUB POWER | ON |
| AI VOLUME | ON | ON SCREEN DISPLAY | POSITION INDICATION |
| BBE | ON | TV/VIDEO | TV |
| SPATIALIZER | OFF | SOUND SYSTEM | B/G |

SERVICE ADJUSTMENTS

■ Initial Setting Value

■ SETTING OF VSM PRESET (Page 19)

[INITIAL SETTING VALUES OF VSM PRESET (SUB MENU 5. VSM PRESET)]

| ITEM \ PICTURE MODE | BRIGHT | STANDARD | SOFT |
|---------------------|--------|----------|------|
| 1. BRIGHT | +0 | +0 | +0 |
| 2. CONT | +17 | +0 | -4 |
| 3. COLOR | +0 | +0 | -1 |
| 4. SHARP | +0 | +0 | -3 |
| 5. TINT | +0 | +0 | +0 |

: Do not adjust.

■ SETTING OF WHITE BALANCE PRESET (Page 20)


[SETTING OF WHITE BALANCE PRESET (SUB MENU 6. WB PRESET)]

| ITEM \ WHITE BALANCE | COOL | MID | WARM |
|----------------------|------|-----|------|
| 1. R DRIVE | 0 | -3 | +26 |
| 2. B DRIVE | 0 | -23 | -27 |

: Do not adjust.

■ VIDEO / CHROMA CIRCUIT ADJUSTMENT (Page 20)

| CONTENTS | | PAL | SECAM | NTSC 3.58 | NTSC 4.43 |
|-----------------|------------|-----|-------|-----------|-----------|
| 1. CUTOFF | R | -60 | | | |
| | G | -60 | | | |
| | B | -60 | | | |
| 2. DRIVE | R | +0 | | | |
| | B | +0 | | | |
| 3. BRIGHT | TV | 0 | +3 | +1 | — |
| | VIDEO | -1 | +2 | +2 | — |
| | COMPONENT | -2 | | | |
| 4. CONT | TV | -15 | 0 | 0 | — |
| | VIDEO | 0 | 0 | 0 | — |
| | COMPONENT | +2 | | | |
| 5. COLOUR | TV / VIDEO | +10 | +18 | +0 | 0 |
| | COMPONENT | +8 | | +17 | |
| 6. TINT | TV | +6 | +6 | +7 | 0 |
| | VIDEO | +6 | +6 | +14 | 0 |
| | COMPONENT | +6 | | 0 | |
| 7. BLACK OFFSET | R-Y | — | 0 | — | — |
| | B-Y | — | 0 | — | — |
| 8. SHARP | TV | -14 | -13 | -12 | — |
| | VIDEO | -8 | -7 | -9 | — |
| | COMPONENT | -10 | | | |

 : Do not adjust.

Adjustment of SUB COLOUR-II (Page 23)

| Adjustment part | Description |
|------------------|---|
| 5. COLOUR | |
| PAL COLOUR | Value (A) in the figure: Set to -3V (W & G) . |
| SECAM COLOUR | Value (A) in the figure: Set to -5V (W & G) . |
| NTSC 3.58 COLOUR | Value (A) in the figure: Set to +3V (W & G) . |

Adjustment of SUB TINT-II (Page 24)

| Adjustment part | Description |
|-----------------|--|
| 6. TINT | |
| NTSC 3.58 TINT | Value (B) in the figure: Set to +4V (W & Cy) . |

■ DEFLECTION CIRCUIT ADJUSTMENT (Page 26)

[DEFLECTION ADJUSTMENTS INITIAL SETTING VALUE (SUB MENU 4. DEF)]

| Setting item | Adjustment name | Initial setting value | | | | | |
|--------------|--|-----------------------|------|------|------|------|------|
| | | REGULAR | | ZOOM | | 16:9 | |
| | | 50Hz | 60Hz | 50Hz | 60Hz | 50Hz | 60Hz |
| 1. V-SHIFT | Vertical shift | -5 | -1 | 0 | +1 | 0 | 0 |
| 2. V-SIZE | Vertical size | +7 | -1 | +36 | +35 | -39 | -39 |
| 3. SUBTITLE | Subtitle | 0 | +1 | -7 | +7 | 0 | 0 |
| 4. H-CENT | Horizontal center | -10 | +5 | -1 | -1 | 0 | -1 |
| 5. H-SIZE | Horizontal size | -12 | -1 | -4 | -4 | 0 | -1 |
| 6. EW-PIN | Side pin correction | -3 | +1 | -4 | -4 | +2 | 0 |
| 7. TRAPEZ | Trapezoidal distortion correction | +4 | -2 | 0 | -1 | 0 | +1 |
| 8. EW.COR.L | Corner pin correction Low side | -2 | 0 | -1 | -1 | +1 | +1 |
| 9. EW.COR.H | Corner pin correction High side | -2 | 0 | 0 | 0 | +1 | +1 |
| 10. V.S-COR | Vertical size correction | +13 | 0 | 0 | 0 | 0 | 0 |
| 11. V-LIN | Vertical Linearity | +2 | -1 | -1 | -1 | +1 | 0 |
| 12. H-BLK-R | Horizontal Blanking Right | 0 | 0 | 0 | 0 | +77 | 0 |
| 13. H-BLK-L | Horizontal Blanking Left | 0 | 0 | 0 | 0 | +2 | 0 |
| 14. V-EHT | V size correction level caused by EHT change | -4 | 0 | 0 | 0 | 0 | 0 |
| 15. H-EHT | H size correction level caused by EHT change | -3 | 0 | 0 | 0 | 0 | 0 |
| 16. EHT-GAIN | Size correction gain caused by EHT change | +3 | 0 | 0 | 0 | 0 | 0 |

: Do not adjust.

■ AUDIO CIRCUIT ADJUSTMENT (Page 30)

[AUDIO ADJUSTMENTS INITIAL SETTING VALUE (SUB MENU 3. AUDIO)]

| Setting item | Variable range | Fixed value |
|----------------|----------------|-------------|
| 1. ERROR LIMIT | 000H ~ FF0H | 100H |
| 2. A2 ID THR | 00H ~ FFH | 14H |
| 3. BASS | -17 ~ +17 | +0 |
| 4. TREBLE | -17 ~ +17 | +0 |

: Do not adjust.



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