



Your PDF Guides

You can read the recommendations in the user guide, the technical guide or the installation guide for SONY STR-K870P. You'll find the answers to all your questions on the SONY STR-K870P in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

User manual SONY STR-K870P
User guide SONY STR-K870P
Operating instructions SONY STR-K870P
Instructions for use SONY STR-K870P
Instruction manual SONY STR-K870P

STR-K870P

SERVICE MANUAL

Ver. 1.0 2005.02



US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model

* STR-K870P is the tuner and the amplifier section in HT-DOW870.

Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories. "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theatre Systems, Inc.

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

(Models of area code US only)

With 6-ohm load, both channels driven, from 120 - 20,000 Hz, rated 60 watts per channel, minimum RMS power, with no more than 0.7% total harmonic distortion from 250 milliwatts to rated output.

Amplifier section

Power Output⁽¹⁾

(Models of area code US, CAN)

(6-ohm, 1 kHz, THD 0.7%)

FRONT⁽²⁾ 60 W/ch

CENTER⁽²⁾ 60 W

STEREO⁽²⁾ 60 W/ch

STEREO BACK⁽²⁾ 60 W

(Models 1 kHz, THD 10%)

FRONT⁽²⁾ 100 W/ch

CENTER⁽²⁾ 100 W

STEREO⁽²⁾ 100 W/ch

STEREO BACK⁽²⁾ 100 W

(Models of area code AEP, UK, SP, EUR, MK)

(6-ohm, 1 kHz, THD 0.7%)

FRONT⁽²⁾ 60 W/ch

CENTER⁽²⁾ 60 W

STEREO⁽²⁾ 60 W/ch

STEREO BACK⁽²⁾ 60 W

(Models 1 kHz, THD 10%)

FRONT⁽²⁾ 100 W/ch

CENTER⁽²⁾ 100 W

STEREO⁽²⁾ 100 W/ch

STEREO BACK⁽²⁾ 100 W

(Models of area code AFS)

(6-ohm, 1 kHz, THD 0.7%)

FRONT⁽²⁾ 50 W/ch

CENTER⁽²⁾ 50 W

STEREO⁽²⁾ 50 W/ch

STEREO BACK⁽²⁾ 50 W

(Models 1 kHz, THD 0.7%)

FRONT⁽²⁾ 60 W/ch

CENTER⁽²⁾ 60 W

STEREO⁽²⁾ 60 W/ch

STEREO BACK⁽²⁾ 60 W

(Models 1 kHz, THD 10%)

FRONT⁽²⁾ 100 W/ch

CENTER⁽²⁾ 100 W

STEREO⁽²⁾ 100 W/ch

STEREO BACK⁽²⁾ 100 W

- Continued on next page -

FM STEREO FM-AM RECEIVER



[You're reading an excerpt. Click here to read official SONY STR-K870P user guide](#)

<http://yourpdfguides.com/dref/5455372>

Manual abstract:

manufactured under license from Dolby Laboratories. Dolby, Pro Logic and the double-D symbol are trademarks of Dolby Laboratories. DTS and DTS Digital Surround are registered trademarks of Digital Theater Systems, Inc. SPECIFICATIONS AUDIO POWER SPECIFICATIONS POWER OUTPUT AND TOTAL HARMONIC DISTORTION: (Models of area code US only) With 6 ohm loads, both channels driven, from 120 to 20,000 Hz; rated 60 watts per channel minimum RMS power, with no more than 0.02% Total Harmonic Distortion. Sony Corporation Audio Group Published by Sony Engineering Corporation STR-K870P 1) Measured under the following conditions: Area code Power requirements Video section Inputs/Outputs Video: 1 Vp-p, 75 ohms US, CN, MX, AEP, UK, SP, AUS, E51 120 V AC, 60 Hz 127 V AC, 60 Hz 230 V AC, 50 Hz 240 V AC, 50 Hz General Power requirements Area code Power requirements 2) Depending on the sound field settings and the source, there may be no sound output. 7 MHz Abbreviation AUS : Australian model CN : Canadian model E51 : Chilean and Peruvian models MX : Mexican model SP : Singapore model Design and specifications are subject to change without notice AM tuner section Tuning range Models of area code US, CN With 10-kHz tuning scale: 530 - 1,710 kHz 3) With 9-kHz tuning scale: 531 - 1,710 kHz 3) Models of area code AEP, UK, SP, AUS With 9-kHz tuning scale: 531 - 1,602 kHz Models of area code E51 With 10-kHz tuning scale: 530 - 1,610 kHz 3) With 9-kHz tuning scale: 531 - 1,602 kHz 3) Models of area code MX With 10-kHz tuning scale: 530 - 1,610 kHz Antenna Loop antenna Intermediate frequency 450 kHz 3) You can change the AM tuning scale to 9 kHz or 10 kHz. After tuning in any AM station, turn off the receiver. While holding down PRESET TUNING + or TUNING +, press ?/1. All preset stations will be erased when you change the tuning scale. To reset the scale to 10 kHz (or 9 kHz), repeat the procedure.

2 STR-K870P SAFETY CHECK-OUT After correcting the original service problem, perform the following safety check before releasing the set to the customer: Check the antenna terminals, metal trim, metallized knobs, screws, and all other exposed metal parts for AC leakage. check leakage as described below. LEAKAGE TEST The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA. Leakage current can be measured by any one of three methods. Follow the manufacturers instructions to use these instruments.

The Data Precision 245 digital multimeter is suitable for this job. 3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. @@@@ (Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size) : LEAD FREE

MARK Unleaded solder has the following characteristics. Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.

Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time. Soldering irons using a temperature regulator should be set to about 350 °C. Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful! Strong viscosity Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc. Usable with ordinary solder It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder. Model US model CN model AEP, UK models E51 model SP model AUS model MX model Abbreviation AUS : Australian model CN : Canadian model E51 : Chilean and Peruvian models MX : Mexican model SP : Singapore model Part No. /1 (power) 1 (18, 24, 36, 53) w; (18, 35, 37, 39) + q l (18, 35, 37, 39) 1 2 3 4 5 6 7 8 9 q; qa qs qd qf qg qh wl wk wj wh wg wf wd ws ed es ea e; wa w; ql qk qj 5 STR-K870P Before you use your remote Inserting batteries into the remote Insert R6 (size-AA) batteries with the + and - properly oriented in the battery compartment. When using the remote, point it at the remote sensor on the receiver. TUNING DISC ALT 9 q; qa ENTER m ANT - CLEAR SEARCH MODE Under normal conditions, the batteries should last for about 6 months. When the remote no longer operates the receiver, replace all batteries with new ones. Notes H GUIDE V X b AV MENU x MUTING TOP B MENU/v Do not leave the remote in an extremely hot or humid place.

Do not use a new battery with an old one. Do not expose the remote sensor to direct sunlight or lighting apparatuses. Doing so may cause a malfunction. If you don't use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion. V B v DISPLAY TV VOL MASTER VOL b O RETURN/EXIT TV CH TV/ VIDEO MAIN MENU qj qh qg qf qs qd WIDE TEST TONE 6 STR-K870P The tables below show the settings of each button. 7 ALT wd Receiver Remote Selects the decoding mode for audio sound. When ALT button lights up, it changes the remote key function to activate those buttons with orange printing. selects viewing angle or changes the angles. DISC ws CD player/ DVD player/ Blu-ray disc recorder/PSX/ Satellite tuner CD player/ VCD player Clears a mistake when you press the incorrect numeric buttons or returns to continuous playback etc. Selects the language you want during digital broadcast.

to watch DVD. After selecting a channel, disc or track using the numeric buttons, press to enter the value. /1 ed Selects the command mode of the remote. Receiver/ VCR/ Satellite tuner/ DVD player JUMP/TIME Satellite tuner/ Toggles between the previous and the 7 TV/ Blu-ray disc current channels. Recorder CD player/ MD deck/ VCD player/ DVD player MAIN MENU qh Receiver Shows the time or displays the playing time of disc, etc.

Selects the menu of the receiver. 7 STR-K870P Remote Button Operations Function Remote Button Operations Function MASTER VOL +/ qk MD/TAPE 5 MOVIE 7 Receiver Adjusts the master volume of the receiver. to listen to Minidisc or audio tape. Selects the preprogrammed sound fields for movie. selects MULTI CH IN source.

Selects the preprogrammed sound fields for music. Mutes the sound from the receiver. selects preset stations. SLEEP ef Receiver Receiver Receiver Activates the sleep function and the duration which the receiver turns off automatically. SKIP +/ wg Receiver Turns off the receiver Receiver/ and other Sony audio/ TV/VCR/ Satellite tuner/ video components. Adjusts the volume of the TV. (VTR mode 2) Selects the wide picture mode. Selects the surround back decoding modes.



[You're reading an excerpt. Click here to read official SONY STR-K870P user guide](http://yourpdfguides.com/dref/5455372)

<http://yourpdfguides.com/dref/5455372>

97 98 99 100 Pin Name DI DO ERROR XSTATE I/O O I I I Data signal output to DIR Data signal input from DIR Description PLL error muting signal input from DIR XSTATE data signal input from DIR 40 STR-K870P SECTION 4 EXPLODED VIEWS NOTE: $\hat{\Delta}\square\epsilon$ -XX and -X mean standardized parts, so they may have some difference from the original one. $\hat{\Delta}\square\epsilon$ The mechanical parts with no reference number in the exploded views are not supplied. $\hat{\Delta}\square\epsilon$ Items marked $\hat{\Delta}\square\square*\hat{\Delta}\square\square$ are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items. $\hat{\Delta}\square\epsilon$ Abbreviation AUS : Australian model CND: Canadian model E51 : Chilean and Peruvian models MX : Mexican model SP : Singapore model The components identified by mark 0 or dotted line with mark 0 are critical for safety. Replace only with part number specified. FRONT CABINET SECTION 10 9 #1 4 not supplied not supplied not supplied 4 4 3 4 #1 7 4 9 not supplied chassis section 2 not supplied #1 #1 2 not supplied 1 supplied with RV102 #1 Ref. CHASSIS SECTION-1 66 #1 Q754 not supplied Q604 Q753 Q654 Q703 not 57 Q704 Q504 supplied Q603 Q653 Q503 Q533 Q534 59 a 58 #1 not supplied #1 not supplied #1 #1 #1 #1 #1 #1 55 not supplied 66 #1 66 F901 66 60 a #1 T901 54 not supplied 65 TN1 not supplied 64 not supplied #1 62 63 61 #1 66 56 #1 #1 51 53 52 #1 51 52 #1 Ref. The components identified by mark 0 or dotted line with mark 0 are critical for safety. Replace only with part number specified. 42 STR-K870P 4-3. CHASSIS SECTION-2 66 #1 Q754 not supplied Q604 Q753 Q654 Q703 not 57 Q704 Q504 supplied Q603 Q653 Q503 Q533 Q534 59 a 58 #1 not supplied #1 not supplied #1 #1 #1 #1 #1 55 not supplied 66 #1 66 F901 66 60 a #1 T901 54 not supplied 65 TN1 not supplied 64 not supplied #1 62 63 61 #1 66 56 #1 #1 51 53 52 #1 51 52 #1 53 not supplied Ref. 1-443-523-11 1-443-524-11 1-443-525-11 1-443-526-11 1-693-675-11 1-693-675-21 1-693-676-21 1-693-678-11 7-685-646-79 Description Remark - Continued from page 42 Q533 6-702-390-01 Q534 6-702-391-01 Q603 6-702-390-01 Q604 6-702-391-01 Q653 6-702-390-01 Q654 Q703 Q704 Q753 Q754 6-702-391-01 6-702-390-01 6-702-391-01 6-702-390-01 6-702-391-01 POWER TRANSFORMER (MX) POWER TRANSFORMER (US, CND) POWER TRANSFORMER (AEP, UK, SP, AUS) POWER TRANSFORMER (E51) TUNER UNIT (E51, MX) TUNER UNIT (US, CND) TUNER UNIT (AEP, UK) TUNER UNIT (SP, AUS) SCREW +BVTP 3X8 TYPE2 IT-3 The components identified by mark 0 or dotted line with mark 0 are critical for safety. Replace only with part number specified. 43 STR-K870P AC SELECT DIGITAL SECTION 5 ELECTRICAL PARTS LIST $\hat{\Delta}\square\epsilon$ Items marked $\hat{\Delta}\square\square*\hat{\Delta}\square\square$ are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items. SEMICONDUCTORS In each case, u: $\hat{\Delta}\mu$, for example: μ A. Abbreviation AUS : Australian model CND: Canadian model E51 : Chilean and Peruvian models MX : Mexican model SP : Singapore model Remark Ref. 1-100-566-91 1-162-960-11 1-162-974-11 1-162-974-11 1-162-970-11 1-100-566-91 1-100-566-91 1-100-566-91 1-100-566-91 1-162-960-11 1-100-566-91 1-100-566-91 1-162-960-11 1-162-960-11 1-100-566-91 1-100-566-91 1-162-974-11 1-100-566-91 1-162-974-11 1-100-566-91 1-126-947-11 1-100-566-91 1-162-918-11 1-162-918-11 1-100-566-91 1-162-927-11 1-100-566-91 1-100-566-91 1-100-566-91 1-100-566-91 1-104-662-91 1-162-974-11 1-162-905-11 1-100-566-91 1-126-916-11 1-162-923-11 1-100-566-91 1-100-566-91 1-100-566-91 1-126-947-11 1-126-964-11 1-100-566-91 1-162-962-11 When indicating parts by reference number, please include the board name. The components identified by mark 0 or dotted line with mark 0 are critical for safety. Replace only with part number specified. NOTE: $\hat{\Delta}\square\epsilon$ Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set. @@@@Replace only with part number specified. @@Replace only with part number specified. @@Replace only with part number specified. 1uF 10% 50V TM501 1-755-170-11 RELAY (12V) 0 RR17 1-249-393-11 CARBON 1-249-393-11 CARBON 10 10 5% 1/4W (AEP, UK, SP, AUS) 5% 1/4W (AEP, UK, SP, AUS) < RELAY > RY610 1-755-170-11 RELAY (12V) The components identified by mark 0 or dotted line with mark 0 are critical for safety. Replace only with part number specified. 2K 1 47K 22K 10K 5% 5% 20% 5% 5% 5% 5% 5% 5% 1/2W 1/2W 1/2W (US, CND) 1/4W 1/4W 1/4W 1/4W 1/4W 1/4W 1-127-868-11 CERAMIC < CONNECTOR > * CNP202 1-564-705-11 PIN, CONNECTOR (SMALL TYPE) 3P CNP203 1-691-765-11 PLUG (MICRO CONNECTOR) 3P < CONNECTOR > CNS250 1-568-443-11 SOCKET, CONNECTOR 13P The components identified by mark 0 or dotted line with mark 0 are critical for safety. Replace only with part number specified. 1uF 220PF 220PF 10% 10% 10% 10% 50V 50V 50V 50V 1-693-678-11 TUNER UNIT (SP, AUS) 1-828-963-11 WIRE (FLAT TYPE) (11 CORE) (EXCEPT AEP, UK) 1-828-980-11 WIRE (FLAT TYPE) (15 CORE) (AEP, UK) 1-828-972-11 WIRE (FLAT TYPE) (13 CORE) 1-532-388-32 FUSE T2AL/250V (AEP, UK, MX, SP, AUS) The components identified by mark 0 or dotted line with mark 0 are critical for safety. Replace only with part number specified. 56 STR-K870P MEMO 57 STR-K870P REVISION HISTORY Clicking the version allows you to jump to the revised page. Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page. .



[You're reading an excerpt. Click here to read official SONY STR-K870P user guide](http://yourpdfguides.com/dref/5455372)

<http://yourpdfguides.com/dref/5455372>