REMOTE CONTROL UNIT RC-18SR

This chapter describes the functions which need to control the SR8000. See page 18 and following pages to refer other function of the RC-18SR.

4 POWER ON and OFF

These two buttons are use for turning on or off SR8000.

7 DIRECT button

Press one of these buttons to select a surround mode for the current listening session.

4110	**************************************			
AMP				
MODE1	AUTO	Auto select surround modes		
	2 DOLB	Dolby Digital or Pro Logic decoding		
	3 THX	THX cinema decoding		
		This button is not used for SR8000.		
	4 DTS	DTS-cinema or DTS-music		
	5 HALL	Hall surround sound		
	3 MTRX	Matrix surround sound		
	7	Movie surround sound		
	3	Stereo sound (no surround)		
MODE2	1 A/D	analog / digital select switch		
	į	Switches between the analog input and the		
		digital input.		
	2 DIR	source direct switch		
		When this switch is pressed, the signals are		
		transmitted by bypassing the tone control		
	İ	circuitry so that they can be reproduced with		
	3 ATT	higher quality.		
		attenuate for analog input		
	1 OSD	on screen display		
		Once the button is pressed, the on-screer		
		display is turned on and each a control buttor		
		related to the SR8000 is pressed thereafter, the		
		information will be displayed on the TV screen		
		When the button is pressed again to turn the		
		on-screen display off, it disappears from the TV		
		screen. (Refer to "ON-SCREEN MENU		
		SYSTEM" on page 8.)		
	MONO	monaural decoding		
		This button is not used for SR8000		
	63-D	3-D surround decoding		
		This button is not used for SR8000.		
	7	NIGHT mode for Dolby Digital		
	-	Pressing this button prevents the Dolby Digital		
		signal from playback at a loud voice. This		
		function reduces the voice by 1/3 to 1/4 al		
		maximum. Thus, it eliminates the occurrence		
		of an abruptly loud voice at night. However, the		
		function is valid only for the case when the		
		Dolby Digital signal (AC 3) is autored into		
		Dolby Digital signal (AC-3) is entered into		
		digital Input and data to compress the voice		
		exists in the signal to be played back.		
	8 MLTI	activates multi-room mode		
MODE3	1 TRB+	increases treble		
	2	decreases treble		
	3	increases bass		
	4 BAS-	decreases bass		
		The button 1 to 4 are used to control the tone.		
	5 R-EQ	activates RE-EQ function		
1		This button is not used for SR8000.		
	3 CH+	channel select button		
1		Press this button to adjust the volume levels of		
1		the front, center, surround, subwoofer		
		channels. Each press of the button changes		
		the channel which can be adjusted.		
<u> </u>	L	Line shannor willon can be aujusteu.		

	the second second second			
AMP				
MODE3		Increases channel level volume		
	8 LVL-	decreases channel level volume		
		After pressing the CH+ button, use the LVL+		
		and LVL- buttons to adjust the volume level of		
		each speaker channel.		
ROCESSOR	1 VOL+	increases external decoder's volume		
	1	This button is not used for SR8000.		
	2 VOL-	decreases external decoder's volume		
		This button is not used for SR8000.		
	3 6-CH	6 channel direct button		
		When the surround processor is connected to		
		the DIRECT IN JACKS, press this button to play		
		it.		
	4 BYP	bypasses external processor's decoding		
	5 SLEP	sleep timer button		
		This'button is used for setting the sleep timer.		
	6 DISP	display on/off function		
		When this button is pressed, the display		
		turned on or off.		
		surround mode select button		
	8 PHNO	phono function button		
		This button is not used for SR8000.		
TUNER				
BAND	1 FM	FM 'band button		
	2AM	AM/MW band button		
	3 LW	long wave band button		
		This button is not used for SR8000		
	4 BAND selects radio band button			
	mono/stereo/muting mode selector button			
	6 TIME time display button			
	This button-is not used for SR8000			
	7 F/P	frequency or preset channel display select		
		button.		
	8 SCAN	preset scan button		
B				

8 PAGE buttons'

-These buttons are used to select any 1 of the 4 pages of 8 functions for each **DIRECT** button, as explained above.

9 FUNCTION buttons

These buttons are used for selecting the input function. Press one of these buttons twice within 2 seconds.

11 VOLUME UP (+) AND DOWN (-)

These buttons are used to raise and lower the main system volume level.

12 TEN KEYPAD

They are useful for tuning a pre-set radio station and setting a station name.

13 M (MEMO) button

This button is used to enter the tuner preset memory numbers and station names.

14 C (Clear) button

This button is used to cancel certain memory or programming operations.

16 CURSOR, OK buttons

The cursor buttons can be used to navigate within on-screen menus. These buttons are unavailable when the mode is set to DSS, TV or DVD.

17 MUTE button

This button can be used to mute the sound temporarily.

19 LIGHTING button

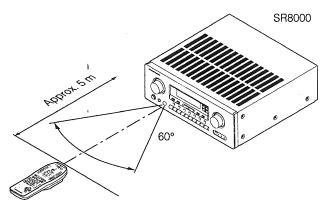
This button is used to activate the back-lit LCD screen and back-lit keys.

OPERATION OF REMOTE CONTROL UNIT

1. Remote control

The distance between the transmitter of the remote control unit and the IR SENSOR of the SR8000 should be less than about 5 meters. If the transmitter is pointed to a direction other than the IR SENSOR or if there is an obstacle between them, remote control may not be possible.

Remote-controllable range



Remote control unit (RC-I 8SR)

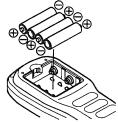
2. Loading batteries

The life of the batteries used with the remote control unit is about 4 months with normal use. Also be sure to replace batteries earlier when you notice that they are getting weak.

(1) Remove the back cover.



(2) Insert the alkaline batteries (AA type) with correct (+) and (-) polarity.



(3) Close until it clicks.

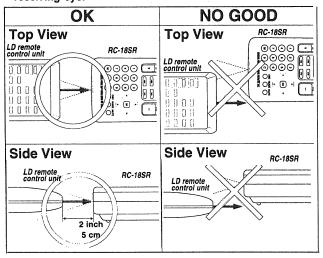


3. Receiving the remote control codes

The RC-18SR can learn most of the remote control codes from various equipment, it learns the full word length of the code it is receiving. Due to the sensitivity of the receiving LED the RC-18SR may also "learn" noise from fluorescent lights, etc. which can quickly fill up the memory of the RC-18SR.

In order to maximize the memory capacity of the RC-18SR please pay close attention to the following:

- (1) Aim the transmitting remote control at a direct line of sight to the RC-18SR remote receiver eye.
- (2) Keep 2 inches between transmitting remote and the RC-18SR receiving eye.



REMOTE CONTROL UNIT RC-18SR

 The remote control unit provided with the SR8000 is a "learning"-type, programmable unit capable of controlling almost any component in your system, as well as the Marantz D-BUS components (RC-5). The components to be controlled can be selected with 11 function buttons.

OPERATION

The provided remote control unit (RC-18SR) is a system remote controller. The **POWER** button 4, IO-key numeric buttons 2 and control buttons 5 are used in common across different input source components.

The input source system controlled with the RC-18SR changes when one of the input selector buttons \square is pressed.

@Example: To select the LD player as the input source and play an LD on it

Press the LD button twice within 2 seconds.

The input function of the SR8000 is switched to LD and the RC-18SR is set for control of the LD player.

10

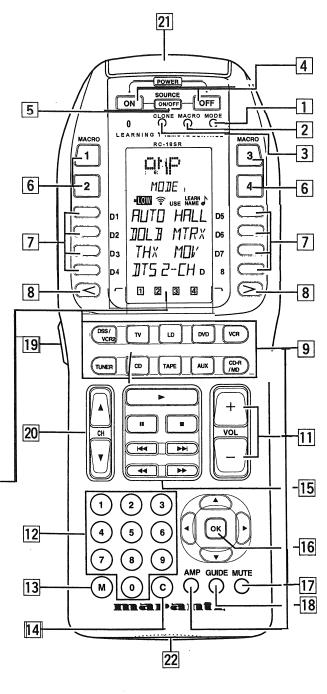
Press the PLAY ▶ button 15 to play an LD.

LOW

黑黑黑黑

4

FUNCTION AND OPERATION



1 MODE (operating mode)

This button is used to change from normal operation to the learning mode, and is used when "learning" commands from other brands of A/V components. Each time this button is pressed (using a small pointed instrument, such as the tip of a paper clip) the mode changes as follows: LEARN \rightarrow USE \rightarrow NAME. As the mode changes, the LCD display will show which mode is currently selected.

2 MACRO (for multiple step macro functions)

This button is used to memorize a series of functions. When this button is pressed, the RC-18SR changes to macro programming mode, and is ready to learn a sequence of remote control commands.

3 CLONE

The RC-18SR has the ability to "replicate" itself, downloading all of its internal pre-programmed and user-programmed commands to another RC-18SR or RC2000MKII. This button is used when you wish to "teach" another RC-18SR or RC2000MKII all of the customized commands you've already programmed in this RC-18SR.

4 POWER ON and OFF

These two buttons are used to turn the main component's (amplifier or receiver) AC power on and off. We provide both ON and OFF commands so that your A/V system is remote compatible with external infrared controllers, such as in-wall key pads, and etc.

5 SOURCE ON/OFF

This button is used to turn the AC power on and off to any of your A/V source components that have their own remote control turn-on and turn-off commands, such as TV, laser disc player, VCR, and etc.

6 MACRO 1-4

Each of these 4 buttons can be programmed with a "string" of commands, called a macro, to initiate a sequence of remote codes to achieve a particular result. For example, a macro button could be programmed to turn on the main system power, then turn on a particular source component (such as a laser disc player), then turn on the TV set, set the TV to AUX video input, and then adjust the surround processor to the home theater surround decoding mode, then activate the laser disc player's PLAY function. This means that by pressing one macro button, you can achieve the same result as pushing up to 20 buttons in sequence.

7 DIRECT

With today's high performance A/V systems, it is not unusual for each component in your system to have dozens of specialized command functions. If we were to duplicate all of those commands for each component onto the RC-18SR key pad, we could easily exceed 300 buttons for an entire home theater system, which would result in either a huge key pad, or buttons of infinitesimal size. The DIRECT command buttons (4 on each side of the LCD display, 8 total) work with the PAGE buttons (4 pages for each source component) to provide up to 32 dedicated specialized functions for each of the 11 function input selectors. Each DIRECT function may also be provided with an alphanumeric function indicator visible in the LCD display. You may even change the displayed name of each function to another name, if you wish.

8 PAGE

Used to select any 1 of the 4 pages of 8 functions for each DIRECT button, as explained above.

9 FUNCTION

Press one of these buttons once or twice to select a particular source component. For example, to set the amplifier or receiver to the laser disc input, press the LD button twice within 2 seconds. Along with the source selection, special functions may become available (the DIRECT keys), as well as activating the transport function keys, so that you can now directly operate the laser disc player from the RC-18SR. If you wish, you may even re-program the status indicators in the LCD window to reflect your own particular function name whenever that source (function) button is selected.

Here are the button names and their functions:

LD : Laser disc player

TV : Television

VCR1 : Video cassette recorder

DSS/VCR2: Digital satellite decoder or second video cassette

recorder

AUX : Can be used for an auxiliary source component TUNER : AM/FM tuner, or AM/FM tuner section of a receiver

CD Compact disc player or changer

TAPE Audio tape deck, or digital audio recorder

AMP Amplifier or receiver control functions

DVD Digital video disc player

CD-R/MD: CD-Recorder or mini disc player

Note:

Press a function selector button only once to select the LD player, etc. Remember, when you press a function selector button only once, the RC-18SR will not send out a remote control code to instruct the amplifier or receiver to change to that corresponding input, but the RC-18SR keypad and DIRECT function commands will provide the selected component's specialized remote control codes. Press a function selector button twice within 2 seconds to change the function of the amplifier or receiver.

For example, if you press the LD function button twice within 2 seconds, the amplifier or receiver's input will immediately be switched to the laser disc input, and the keypad and DIRECT function commands for laser disc operation will be activated. Press the CD function button only once, the amplifier or receiver's input will not switch to the CD input, however the RC-18SR keypad and DIRECT function commands for compact disc operation will be activated.

We have provided 11 popular function command selector buttons, based upon the typical input selections available with most quality A/ V amplifiers (or receivers) including popular Marantz models.

The function button DSS/VCR2 is a little different from the others, in that when you press this button, the RC-18SR will send out a command to the amplifier or receiver to switch to the DSS input, and then the RC-18SR keypad and DIRECT function commands will be configured for DSS (digital satellite system) control. We have included DSS commands within the RC-I 8SR's pre-programmed memory for RCA brand DSS equipment. If you have another brand of DSS, you can "teach" the RC-18SR with the remote control codes of your equipment.

10 LCD window

The LCD window provides a wealth of information, including function selection name, DIRECT function names, learning and programming steps, as well as useful indicators for battery status, and other helpful indicators. The LCD window features back-lighting, making it easy to view when the room light is very low.

11 Volume up (+) and down (-)

Used to raise and lower the main system volume level. Note that these buttons are clearly the largest size, and are conveniently located and contoured for easy operation, even in low lighting.

12 Ten keypad

Like a telephone key pad, the ten number buttons (O-9) are used to enter numeric digits. They are useful for finding a specific track on a CD, or to tune a pre-set radio station, etc. The "0" button performs the same operation as the "CLEAR" button on the SR8000 main unit.

13 MEMO

This button is used to program your CD player's track memory, or to enter a VCR recording program, and can be used to provide the MEMO function included with other components in your system.

14 CLEAR

This button is used to cancel certain memory or programming operations. It operates differently from the 'CLEAR" button on the SR8000 main unit.

15 Transport control functions

These buttons provide transport commands for your source components, such as laser disc player, CD player, VCR, audio tape deck, etc., and are dependent on the function source selected. For example, when the RC-18SR is set to LD (laser disc) mode, the transport keys will operate the laser disc player's PLAY, STOP, PAUSE, FAST FORWARD, FAST REVERSE, NEXT and PREVIOUS track functions. Change the RC-18SR function selector to VCR, and these keys will then operate the VCR's transport command functions, etc.

16 CURSOR buttons

Some components feature menus that are navigated with up, down, left and right direction commands. The cursor buttons can be used to navigate within on-screen menus, for components such as amplifier or receiver, TV set, DSS/satellite tuner, etc. These buttons are also used for certain RC-18SR programming functions.

17 MUTE

For those components (such as amplifier or receiver, TV, etc.) with a mute function, this button can be used to mute the sound temporarily.

18 GUIDE

This button is intended for owners of DSS (digital satellite system) or similar equipment, to activate the on-screen programming guide, used when changing channels, etc.

19 LIGHTING

Press this button to activate the back-lit LCD screen and back-lit keys independently SETUP mode. A quick touch is all that is necessary. The back-lighting will remain on for 3 seconds. If you wish, you can even re-program the RC-18SR to shorten or lengthen the amount of time the back-lighting is activated when this button is pressed.

20 Channel up(▲), down(r)

Press this button to change the tuner, TV, DSS or VCR preset channels to upward or downward.

21 Transmitter window

Infrared signals will eminate from behind this window. Simply aim the RC-18SR towards the component(s) you wish to control. You may find that the RC-18SR works fine when placed on a coffee table pointing towards your A/V system components.

22 Receiving window

Used when learning commands from other remotes, this window is placed at the bottom of the RC-18SR, so that the two remotes are vertically oriented for easy transfer of remote control information. Later in this guide we will show you which of the RC-18SR buttons can be "taught" new commands from other components.

LIQUID CRYSTAL DISPLAY (LCD) WINDOW

Within this display, all operating messages (function name, mode names, etc.) are shown. When a particular button is pressed (such as a transport command, like PLAY), its status will be shown in the display for 1 minute. The display will continue to show the source function selected continuously, however.

@ Function indication:

The selected source function is displayed, such as LD, TV, etc., up to 6 characters maximum.

⑤ Status indication:

The selected status of the present page, or other items, is displayed, up to 9 characters maximum.

© Direct commands:

8 DIRECT commands are available in 1 page, up to 4 characters maximum.

@ Battery indicator:

When the batteries are running low, this indicator will become visible. At this point, it will not be possible to learn any new remote codes, but normal remote control operation is still provided (including the use of any previously learned codes). At this point, you should consider changing the batteries soon. As time goes on, and the battery power diminishes further, this indicator will begin blinking. At this point, no remote commands will be transmitted. This is your signal to replace the batteries with fresh ones as soon as possible. Eventually, if you ignore the blinking battery indicator and do not install fresh batteries, then the batteries may eventually be totally exhausted, and the LCD display window will be completely blank. However, any previously learned commands and macros will not be erased from the microprocessor's memory.

The RC-18SR is supplied with a full set of RC-5 remote control codes in permanent (non-volatile) memory. Even if the batteries are fully exhausted, the RC-5 codes (used for Marantz AV components) and learned codes will never disappear.

We recommend that you use a quality brand of alkaline batteries, for best results and longest life. Newly available lithium "AA" batteries can even provide longer life than alkaline batteries, and are also recommended.

@ Transmit indicator:

When a button is pressed, this indicator shows that an infrared code is being transmitted.

① USE indicator:

For normal operation, the USE indicator should be visible,

Visible when the RC-18SR is set to LEARN mode.

® NAME indicator:

Visible when the RC-18SR is in the learning mode, and function naming is being changed.

(i) PAGE or MACRO indicator:

This indicator usually functions in association with a **PAGE** button **(8)**, but also functions as the MACRO indicator when a **MACRO** button **(6)** is pressed.

Visible when the RC-18SR is set to the beep function

Installing the batteries:

The battery compartment is located on the rear panel. Please use only alkaline or lithium batteries, "AA" size. The RC-18SR requires four AA batteries. There are markings in the battery compartment to show you the proper battery orientation. If after installing the batteries, you cannot see any indication in the LCD window when a button is pressed, re-check to ensure that the batteries are properly positioned in the compartment.

RC-18SR BASIC OPERATION

USE Mode:

As supplied from the factory, the RC-18SR is already permanently programmed with many pre-set commands common to Marantz and Philips equipment, as well as other brands of components that utilize the Philips RC-5 remote control language.

- If the RC-18SR is in another mode (LEARN, etc.), press the operation mode button 1 with the tip of a paper clip, until the USE indication appears.
- Press one of the function buttons (9), to change to another component's commands such as LD (refer to Figure 1).

Figure 1			
	L	D	
MO	JΕ		
511	-Я	RF	ТΗ
			T I
JII! AM!			VF IIT
	2	C 1	171
1	2	3	4

- "LD" will be indicated within the LCD window, and the function codes will be set to operate the laser disc player. Press the function button again within 2 seconds and the amplifier or receiver's input changes to laser disc.
- 4. Now you can operate the laser disc player: When a button is pressed, the symbol indicates that a remote code is being transmitted. Note that for a particular source component, not every button may have a command programmed for it. In that case, nothing would be indicated.
- 5. Using the DIRECT buttons D-I through D-8 and PAGES 1 through 4, up to 32 different specialized commands are available for each FUNCTION, up to a total of 352 specialized commands (32 direct commands times 11 functions). Note that for any particular function selector, not all 32 direct commands may be provided and/or named as supplied from the factory.
- 6. For example, the RC-18SR is supplied from the factory with 3 pages of DIRECT commands for the LD (laser disc) function. To change pages, press the page direction ◀ or ▶ buttons ⑧:

Page 1: MODE: Side A/B laser disc playback functions

Page 2: L D: Specialized laser disc functions

Page 3: R E C: Recording from laser disc to VCR functions

At this point, you may wish to put this guide aside temporarily, and begin using the RC-18SR with your A/V system. If you already have any Marantz components, or Philips and/or other brands of components that use the RC-5 remote control language, you can begin controlling those components with the RC-18SR right away. Take some time to become comfortable with the operation of the RC-18SR. We think that its intuitive key pad layout and easy to read LCD window will permit you to quickly become familiar with its operation.

If you do not have any Marantz or other brands of components that use the Philips RC-5 remote control language, then you may wish to proceed to the next section, which will describe the steps necessary to "teach" your RC-18SR remote codes from other components you may have in your system.

LEARN mode:

The RC-18SR has the ability to learn remote codes for just about any component in your A/V system. If the original component was supplied with an infrared remote control, its commands can be learned by the RC-18SR. If you have another brand of laser disc player, for example, you can program the RC-18SR with its codes. For example, we'll show you how to "teach" the RC-18SR commands from another brand of laser disc player.

- Using a sharp point (such as the tip of a paper clip), press the operation MODE button 1. Each time you press the button, the mode within the LCD display, the LEARN indicator will begin blinking.
- Place the laser disc player's supplied infrared remote controller so that its transmitter window (usually at the top) is facing the receiving infrared sensor window ☐ of the RC-18SR (at the bottom), about 5 cm (2 inches) apart.

- Press the LD function button on the RC-18SR.
- 4. Press the play button 15 on the RC-18SR.
- Press and hold the corresponding PLAY button on the laser disc player's remote transmitter until the "OK" indicator appears in the RC-18SR LCD window (see Figure 2) or the beep sounds emit (if the beep sound function is set).



If the "AGAIN" indicator appears in the RC-18SR LCD window, it means that for some reason the command was not properly learned. Repeat steps 3, 4 and 5 above.

In the unlikely event that an infrared command cannot be learned by the RC-18SR, "NG" (no good) will appear in the LCD window, meaning that the command is not "learnable". The RC-18SR has been tested for compatibility with a very wide range of infrared remote control frequencies and data word lengths, but in some very rare instances, it may not be possible to learn a particular remote control command.

Continue to "teach" the RC-18SR the rest of the source transmitter's transport function commands, such as STOP, PAUSE, NEXT, PREVIOUS, FAST FORWARD and REWIND, by repeating steps 3, 4 and 5 above.

- 6. Proceed to learn the numeric "IO keys" from the source transmitter to the RC-18SR's IO key numeric pad 12 by repeating steps 3, 4 and 5 above.
- For each additional function, such as TV, VCR, etc., repeat steps 3, 4 and 5 above. During the LEARN operation, if any button is not pressed within 1 minute, the RC-18SR will revert back to the previous operating mode.
 - To make a function button learn a code, switch the input function then press the button again.
- After memorizing all desired remote codes, press the operation mode button 1 with the tip of a paper clip, and select the USE mode. The LCD display window will continue to display the USE indicator, and all of the newly memorized codes will be available (see Figure 3).

Figure 3

LD

HODE

SJ-A RPTA
SJ-J RPTJ

JISP CP/F
RMS EJIT

0 2 3 4

For any button for which a new code was not learned, the factory programmed RC-5 code will still transmit as usual.

Note:

POWER ON/OFF 4 code can be learned regardless of the function button selection:

Programming the DIRECT mode buttons 7:

The following example will show how to memorize the SIDE-A function command of another brand of laser disc player into the D1 direct button.

- Using a sharp point (such as the tip of a paper clip), press the operation MODE button 1 to switch the RC-18SR to LEARN mode.
- Place the laser disc player's supplied 'infrared remote controller so that its transmitter window is facing the receiving infrared sensor window 22 of the RC-18SR about 5 cm (2 inches) apart.
- Press the LD function button 9 on the RC-18SR.

- 5. Press and hold the corresponding SIDE-A button on the laser disc player's remote transmitter until the head of name blinks in the RC-18SR LCD window or beep sounds emit. The RC-18SR changes to the RENAME mode automatically as the next step. A function name of the DIRECT function button blinks, you can rename this blinking function name. You input the desired letter or number with the ten keypad. (See the table in step 3 of the next procedure for referece.) If you need not rename, press the OK button or the other buttons except the ten keypad.
- 6. Now, proceed to program the other commands from the laser disc player's remote transmitter to the other DIRECT function buttons (D2-D8). When you have "taught" all 8 direct functions for Page 1, press the page direction key ▶ ☐ to go to Page 2, and you can program more direct function keys.
- After memorizing all codes to all DIRECT function buttons, press
 the operation MODE button 1 with the tip of a paper clip and
 return the RC-18SR to the USE mode. Now, the newly memorized
 codes are usable from the RC-18SR.

If you wish, you can re-write the names for each function name, status name, and the direct function command names as follows:

For our example, you can change the LCD display window indication from "LD" to "LV-520" (which is the model number for a Marantz laser disc player). Remember, you can re-name a function selector button with a new name of up to six characters of letters and numbers in any combination

- Using the tip of a paper clip, press the operation MODE button 1
 until the NAME indicator appears and begins to blink in the LCD
 window.
- Choose a button that you wish to re-name, in this case, press the "LD" function button 9. In the LCD window, the first character of the six function character display indicators starts blinking "A", which is the first letter of the alphabet if you press "1" button twice
- Choose the desired letter or number by pressing the IO keypad buttons 12. Each IO keypad button has 4 characters attached to it as follows:

10 keypad button	Press, press again, press again, et	c.
1	$1 \rightarrow A \rightarrow B \rightarrow C \rightarrow 1 \rightarrow$	
2	$2 \rightarrow D \rightarrow E \rightarrow F \rightarrow 2 \rightarrow$	
3	$3 \rightarrow G \rightarrow H \rightarrow I \rightarrow 3 \rightarrow$	
4	$4 \rightarrow J \rightarrow K \rightarrow L \rightarrow 4 \rightarrow$	
5	$5 \rightarrow M \rightarrow N \rightarrow O \rightarrow 5 \rightarrow$	
6	$6 \rightarrow P \rightarrow Q \rightarrow R \rightarrow 6 \rightarrow$	*
7	$7 \rightarrow S \rightarrow T \rightarrow U \rightarrow 7 \rightarrow$	
8	$8 \rightarrow V \rightarrow W \rightarrow X \rightarrow 8 \rightarrow$	
9	$9 \rightarrow Y \rightarrow Z \rightarrow / \rightarrow 9 \rightarrow$	
0	$0 \rightarrow + \rightarrow \rightarrow SPACE \rightarrow , \rightarrow ' \rightarrow 0$	

So, in the above example, by pressing the IO keypad number 4 four times, you get the letter "L" to appear in the display (see Figure 4).

Figure 4
l'in
MOJE
nuue
SII-R RPTR
511-11 RPT11
JISP CP/F
AMS ETIT

1 2 3 4

4. You use the cursor buttons ■ and ▶ Is to move to the next character in the display. By pressing the right cursor button ▶, the letter "L" is confirmed in the first character space in the LCD window and the next character position begins blinking. If you wish to erase a previously memorized character, position the cursor over the character and put the SPACE character in its place (the SPACE character is ten keypad number 0 pressed four times, from the above character chart).

5. Continuing along, re-write the remaining letters "V", "-", "5", "2", and "0". By pressing the cursor keys

and

new and

new ach character is confirmed in place. When you go to other DIRECT function pages by using the page function keys

new and

new ach character is confirmed in place.

The name re-writing operation must be done on a function by function basis, that is, re-write the names for all of the LD direct functions, then switch to another function such as VCR, and begin the re-writing process anew to re-name the VCR direct function commands. After completing all re-writing of any of the names, press the OK button within the cursor keys [16].

How to re-write the STATUS name:

Using the same steps as outlined above, you can re-write the 9 character status name. During step 5 above, by pressing the up and down cursor keys 16 the left side of the status indicator begins blinking, and you can change its display according to the same method outlined above, using the IO keypad character generator. Remember, to confirm each character change, use the cursor keys ◀ and ▶. As above, when you change the direct function page by pressing the page direction keys ⑧, this will confirm the re-written characters in place as well for the page you just finished re-naming. You have up to 9 letters, numbers or other characters available for each status name.

How to re-write the DIRECT function button names:

You can change the name for each of the 8 direct function buttons by using the steps described above to change main function name and status name. Remember, each main function has 8 direct function buttons on each of the 4 pages, so you have up to 32 direct functions that can be re-named, if you wish, for each of the 11 main function selection buttons 9. You have up to 4 characters available for each direct function button name.

After completing all re-writing of any of the names, press the OK button within the cursor keys [16], or switch to another function button (such as CD). If, during re-naming, a button has not been pressed for 1 minute, the RC-18SR will revert to the prior operating mode (USE) automatically.

If re-writing of all of the desired direct mode functions has been completed, use the tip of a paper clip to press the operation MODE button 1, and select the "USE" mode. Now, all of the re-written names are available for use.

How to clear (erase) the memorized codes

(and any re-written names):

The RC-18SR has a high capacity RAM, which ordinarily will allow the learning of several hundred remote codes (and their associated new names, if desired). However, due to the fact that some remote codes occupy more memory space than others, it is possible that the available RAM fills up completely, and the "FULL" indicator appears in the LCD window. In this case, it will not be possible to learn any new remote codes without first deleting some or all of the previously learned remote codes and/or re-written names. There are 4 ways to erase learned remote codes from memory:

- Erasing by button(s)
- Erasing by DIRECT button(s)
- Erasing by function(s)
- Erasing all memory contents (complete erasure)
- Note that the factory-programmed RC-5 codes are not stored in RAM, and are therefore not erasable.

For any of these memory erasure options, you must first set the RC-18SR to LEARN mode.

Erasing the memory assigned to a particular button:

Press and hold the CLEAR button [4] and press the button that you wish to erase 2 times. The code previously learned by that button will be erased, and will then be either empty, or the original factory provided RC-5 code will re-appear in its place.

Erasing the memory assigned to a DIRECT buttons:

All codes and names which were previously memorized for each of the functions (such as TV, LD, VCR, etc.) in pages can be erased. Press and hold the CLEAR button [4] and press the < or > button [8] 2 times. You will see the "DIR- CLR?" (direct button - clear?) indication in the LCD window (see Figure 5). If you wish to go ahead and clear all of the memorized codes for that DIRECT button (8 buttons x 4), press the OK button

Figure 5

LD JIR-CLR ? SJ-A RPTA SJ-J RPTJ JISP CP/F RMS EJIT 0 2 3 4

Erasing the memory assigned to each function command set:

All codes and names which were previously memorized for each of the functions (such as TV, LD, VCR, etc.) can be erased.

Press and hold the CLEAR button [4], and press the function button that you want to erase 2 times. You will see the "FNC - CLR?" (function - clear?) indication in the LCD window (see Figure 6).

Figure 6

LD FNC-CLR 7 53-URPTH SJ-1 RPTH JISP CP/F IPMS _EJIT

If you wish to go ahead and clear all of the memorized codes for that function button, press the **OK** button within the cursor keys 16. After clearing the memory contents for that function, the RC-18SR will restore any factory programmed RC-5 codes for the function, if any, or will simply be empty.

If you want to cancel the memory clear operation, do not press the "OK" button, but instead simply touch any other button. When you clear all the commands associated with a function button, all of the learned direct function commands (D-I through D-8, pages 1 through 4) and control buttons, ten keypad, etc are cleared as well.

Complete erasure:

While holding the CLEAR button 14 depressed, press both of the ON and OFF POWER buttons 4 simultaneously; "ALL-CLR?" is displayed on the LCD window (see Figure 7).

Figure 7

UCR.

RLL-CLR.?

CH+ DTR

CH- REC

SLCT PAUS

AUJ STOP

If you wish to finalize the complete erasure process, press the OK button within the cursor keys $\fbox{16}$. If you do not wish to proceed with the complete erasure process, simply press any key other than OK. Remember, the RC-5 codes as supplied from the factory cannot be erased from memory, but they can be replaced with different codes as you wish.

- The all-clear operation takes about 15 seconds after the OK button is pressed.
- By now, you have learned how to memorize codes from other brands of components, including changing the various function, status, and direct function names.

Before continuing on to the more advanced RC-18SR programming techniques, you may wish to continue "teaching" the RC-18SR remote control with any or all other commands for other components in your system. When you feel you've transferred as many different commands from other components into the RC-18SR as you'd like, and possibly changed some or all of their names as well, then feel free to proceed to the next section.

ADVANCED PROGRAMMING TECHNIQUES

Macro mode:

The word "macro" is used to describe a series of specific steps carried out in sequence. For example, a word processing program can use macros to carry out common repetitive typing tasks. During the day to day operation of an A/V system, you might often find yourself pressing the same combination of remote control buttons. The RC-18SR features the ability to "learn" a sequence of infrared commands, and "assign" that sequence to a single button, called a MACRO button . Then, when you want to achieve a specific result, you can activate a macro button to begin sending out a series of commands. For example, suppose you wish to activate your A/V system, and watch a movie on laser disc. A single macro button could send out the following commands in this suggested sequence:

 Turn the main amp power on, then turn the TV power on, then switch the TV to the AUX video input, then change the amp to the laser disc (LD) input, then turn the LD player power on, then activate the LD play command, then set the amp surround sound mode to Dolby Pro Logic.

The above 7 step sequence can be programmed into a single macro button, and can be used anytime you want to watch a LD movie. Other macro functions could be used for CD listening, or any other sequence of steps that you regularly perform while controlling your A/V system.

Macro commands are available when the RC-18SR is set to USE mode.

To program a macro, first identify which commands you wish to memorize, and note if any commands must be in a specific order (for example, before you can activate an amplifier's surround mode, the amp must first be turned on).

 Press the MACRO 2 operation mode button with the tip of a paper clip. Within the LCD window, the MACRO indication appears, then the LEARN indicator starts blinking (see Figure 8).



If a macro was previously programmed, one or more of the numeric indicators at the bottom of the LCD window will appear with a box around it.

2. Press the MACRO button 1 6 to begin memorizing the various codes. In the LCD display window the indicator "MI-00" appears in the status line (b) (see Figure 9).

FTS REPT RNJM RMS

The "MI-00" indication signifies Macro number 1, no steps yet programmed. As each macro step is programmed, the "00" indicator will advance by one digit-"01", "02", etc. After the first macro step is programmed, two additional digits (with a decimal in between) become visible at the end of the status line, showing the timing value for each step (see Figure IO).

Figure 10

CD

MIDIQS

EIH TRAY

EIH TRAY

EIH TRAY

RIPT

RNIM AMS

- Press the command buttons in the desired sequence. When you
 press a command button to be learned into the macro sequence,
 its name will appear within the LCD window. Every time you
 press another remote command, the macro step number
 increases one by one.
- 4. It is possible during macro programming to adjust the timing of the interval between several macro steps. Using the cursor keys [16], the interval between macro playback steps can be increased or decreased in 1/2 second steps, over the range beginning at 1/2 second up to 10 seconds. For example, when the indicator shows "0.5 SEC", if you press the ◀ direction key, the interval time would change to 10 seconds, then with another press of the ◀ direction key, it would change to 9.5 seconds, etc. Use the ▶ direction key to increase the interval time, and use the ◀ direction key to decrease the interval time.

Some equipment may not be able to receive infrared commands in one-half second steps. If after programming a macro you find that the sequence was not properly carried out, you may wish to experiment with different sequence timings to obtain the correct operation results by using the adjustment method described above.

Within each MACRO button, up to 20 steps can be memorized. In the event that you wish to memorize more than 20 steps per macro, then press another MACRO button 6, and follow the above operations. A maximum of 80 steps can be programmed this way. However, you will probably find that 20 steps is more than enough to carry out even the most complex macro instructions to achieve a specific home theater operating result.

Note:

To memorize the cursor button 16 except **OK** button, press and hold the **LIGHTING** button 20 before pressing the cursor button.

When programming macro steps, note that the following buttons would not normally be included in a macro sequence, and are therefore not available for inclusion in a macro:

MODE 1, MACRO 2, CLONE 3, PAGE 8, VOLUME 11, MEMO ☐ CLEAR 14 and LIGHTING 20.

To check to see which MACRO buttons 6 have been programmed with macros, at the beginning of the macro learning sequence the four numerical (1 through 4) indicators at the bottom of the LCD window will show a box around the number for each MACRO button that already has a macro assigned to it (see Figure 11, which shows that only MACRO button number 1 has a macro assigned to it).

Figure 11

FLAY MI-03 Q.S. CII+ TRAY CII- TIME FTS REPT RNIM AMS

In the event that you wish to revise a programmed macro sequence, search the step number you wish to change by using the cursor button A and ▼ 16, and then re-enter the new command. If you memorized different commands than have already been programmed, then the previous macro sequence will be erased and re-written over with the new sequence. To add the new command, press the MEMO button at your desired point. To delete the sequence, press the CLEAR button at your desired point.

During macro programming, if a button is not pressed within 1 minute, the mode will automatically revert to the original mode (USE). When you have completed the macro programming sequence, press the MACRO 2 operation button with the tip of a paper clip. The "END" indication appears in the LCD display window. When you release the MACRO button, all indications will revert to the initial status.

There is one more important point to note about programming a macro sequence. During a macro sequence, you may include more than one function selection button to access some transport and/or other commands. Depending on the macro sequence, this might result in the amplifier or receiver's function selection to be

inadvertently changed as well when the macro is played back. The RC-18SR has a special feature to prevent this from occurring, allowing you to access the special commands available under each RC-18SR function button during a macro playback sequence, while at the same time preventing the amplifier or receiver from constantly switching its input source back and forth at the same time.

During the programming sequence, just remember that if you wish to activate a specific input selector on your amplifier or receiver, make sure that you press the desired input selection button FIRST. Subsequent function button selections can be incorporated in the macro sequence, but on playback, the RC-18SR will only send out a function selection infrared command to the amplifier or receiver based upon the first function command used in the macro sequence. For example, you may wish to have a macro sequence which activates the laser disc player input on your amplifier or receiver, and then have additional commands in the sequence to instruct your TV set to switch to an external video source to receive the laser disc video signal. During the macro programming, make sure that you press the LD function selector button BEFORE you press any of the other function selector buttons in the sequence. You can then include any of the TV commands by pressing the TV function selector button, later in the sequence. When this macro is next used (played back), the RC-18SR will send out the command to change the amplifier or receiver's input selector to laser disc input (since its function selector button was the first one programmed into that macro sequence), and will not subsequently change the amplifier or receiver's input to TV (but will send out any special TV commands that you included in the macro sequence).

Programming a macro under a function selector key:

If you wish, you can also program a macro that can be activated by pressing one of the function selector 9 keys. The programming steps are similar to the steps outlined for programming a macro number button 1. The following example shows how to program a macro under the LD (laser disc) function selector 9:

(activate the main amplifier's power on, switch the source to laser disc, switch the amplifier's surround mode to PRO LOGIC, switch on the television, switch to the television's AUX video input, power up the laser disc player, and begin laser disc playback)

- Press the MACRO 2 operation mode button with the tip of a paper clip.
- Press the LD function button 9.
- 3. Press the following buttons:
 - POWER ON, LD, AMP, direct function D-2 (Dolby mode selector) in page 1, TV*, SOURCE ON, direct function D-3 (VIDEO input selector) in page 1, LD*, SOURCE ON, and PLAY.
- Press the MACRO 2 button with the tip of a paper clip. The RC-18SR will revert to the normal mode and save the macro under the LD function button.
- To execute the new macro sequence, press and hold the LD function selector button for 3 seconds.

Using the macro function(s) you have programmed:

1. Press the desired MACRO 6 button. The corresponding macro number will appear at the bottom of the display window, Or if a macro has been programmed under a function button, press and hold that function button for 3 seconds. The LCD display window will indicate the macro number in the LCD window (see Figure 12), or if a macro is programmed under a function key, the status line will display the macro under function buttons as follows:

Figure 12



Macro under function button:	Status line shows:		
LD	"LD" as the first 2 characters of the line		
TV	"TV" as the first 2 characters of the line		
VCR1	"VC" as the first 2 characters of the line		
DSSNCR2	"DS" as the first 2 characters of the line		
AUX	"AX" as the first 2 characters of the line		
TUNER	"TU" as the first 2 characters of the line		
CD	"CD" as the first 2 characters of the line		
TAPE	"TP" as the first 2 characters of the line		
DVD	"DV" as the first 2 characters of the line		
CD-R/MD	"CR" or "MD"as the first 2 characters of the line		
AMP	"AP" as the first 2 characters of the line		

- The macro sequence will begin, and the remote control codes will be sent from the RC-18SR and the display will show the names of the transmitted codes.
- When the macro transmit sequence has ended, the RC-18SR will return to the same mode as before, then the macro function was initiated.

Now that we've explained how to program a macro, perhaps the following suggested example can help you become more familiar with the process:

(to switch the RC-18SR to CD, then initiate CD playback, and go to track 3 on the CD)

- Press the MACRO 2 operation mode button with the tip of a paper
- Press one of the MACRO buttons (1 through 4).
- Press the following buttons:
- CD function selector, then numeric key pad 3, then transport control key pad PLAY key. (see Figures 13, 14, and 15)

Figure 13	Figure 14	Figure 15
CD HIDIQS CD+ TRAY CD- TIME FTS REPT RNIM AMS	3 MI-02 Q.S. C.II+ TRAY C.II- TRAY FTS REPT RNIM AMS	PLAY n 1-03 Q.5, CI+ TRA CI-TRA ETT REPT RNIM AMS

Note that this sequence will operate a Marantz CD player (or any other CD player equipped with the RC-5 remote control language). If you have another brand of CD player, you may wish to check its owner's manual to see if direct track selection is possible via remote, or if the macro sequence needs to be adjusted according to the programming steps required by your CD player.

Press the MACRO 2 button with the tip of a paper clip. The RC-18SR will revert to the normal mode (see Figure 16).

> Figure 16 END

5. To execute the new macro sequence, press the appropriate MACRO button (1 through 4) that you chose at the beginning of the above programming sequence. (see Figures 17, 18, and 19)

Figure 17	Figure 18
CD	3
M I-O I O, S	M 1-02 0,5
CII+ TRAY CII- TIME FTS REPT RNIM AMS	CII+ TRAY CI- TIME FTS REPT RNIM AMS
1 2 3 4	1 2 3 4

Figure 19 **PLAY** M I-03 0,5 []]+ TRAY TIME FTS REPT RNIM RMS fil 2 3 4

Note:

If you would like to cancel the MACRO function, press the STOP 15

Now, we'll show you another macro programming example, with a more sophisticated sequence:

(activate the main amplifier's power on, switch the source to laser disc, switch the amplifier's surround mode to PRO LOGIC or Dolby Digital, switch on the television, switch to the television's AUX video input, power on the laser disc player, and begin laser disc playback).

- Press the MACRO 2 operation mode button with the tip of a paper
- Press one of the MACRO buttons (1 through 4). 2.
- Press the following buttons: POWER ON, LD, AMP, direct function D-2 (Dolby mode) on page 1. TV*, SOURCE ON, direct function D-3 (VIDEO input selector) on page 1, LD*, SOURCE ON, and PLAY.
- Press the MACRO 2 button with the tip of a paper clip. The RC-18SR will revert to the normal mode.
- To execute the new macro sequence, press the appropriate MACRO button (1 through 4) that you chose at the beginning of the above programming sequence.
- Note that the function selector buttons TV and LD marked with an asterisk (*) in this macro sequence do not actually send out infrared codes but simply change over the RC-18SR's programmed memory code banks for those respective functions.

If you would like to clear the MACRO programmed sequence(s), press and hold the CLEAR 14 button and simultaneously press the appropriate MACRO button (1 through 4) or function button. "MR1-CLR?" (macro I-clear?) appears in the LCD window. Release the buttons, and then press the OK button (within the cursor control buttons), and the macro is erased. If you do not wish to erase the macro, simply press any other button (but not the OK button).

CLONE mode:

Duplicating the memory contents of one RC-18SR to another RC-18SR or RC2000MKII.

For a complete home theater system, with numerous components from many different manufacturers, you may find that you have stored dozens, even hundreds of different codes, along with specialized names macros, etc. We have provided a very quick and simple procedure that allows you to download the entire customized memory contents of one RC-18SR remote control into another RC-18SR or RC2000MKII.

To "clone" (duplicate) the memory contents of one RC-18SR

into another RC-18SR or RC2000MKII, please follow these steps:

- Place the source RC-18SR (the one with all of the customized commands, names, macros, macro sequences, etc) with its infrared transmitter window 21 facing the receiving infrared sensor of another "fresh" RC-18SR or RC2000MKII (5 cm, or 2 inches apart).
- Press the CLONE button 3 of the source RC-18SR or RC2000MKII with the tip of a paper clip, and select "CLONE TX" (clone transmit) mode.

Note:

When using RC18SR, "RC2002" is displayed in LCD window. If the receiving remote control unit is RC2000MKII, then the display does not change. If the receiving remote control unit is RC-18SR, then the display is changed to "RC18SR" by pressing the cursor button A [6]. (see Figure 20)

Fi ure 20 RC2002 r CLONE IX_ |

 Press the CLONE button 3 of the learning (receiving) RC-18SR or RC2000MKII with the tip of a paper clip or a similar object, and select "CLONE RX" (clone receive mode).

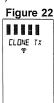
When using RC18SR, "RC2002" is displayed in LCD window. If the transmitting remote control unit is RC2000MKII , then the display does not change. If the transmitting remote control unit is RC-18SR, then the display is changed to "RC18SR" by pressing the cursor button A $\fbox{16}$. Then press the **PLAY** button $\fbox{15}$.

Note:

When the transmitting remote control unit is RC2000MKII, then All clone does not activate. To clone the Function key, press the each Function key except DSS/VCR2 and AMP keys. Eight keys can be cloned at once. If All clone activates without pressing the Function button, "N/A" will display and the clone is not performed When the transmitting remote control unit is RC-18SR and receiving remote control unit is RC2000MKII, The DSS/VCR2, CD-R/MD and AMP keys cannot be cloned. To clone the Function key, press each Function key except DSS/VCR2, CD-R/MD and AMP keys.

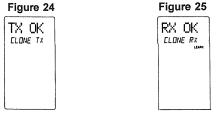


4. Press the source RC-18SR's or RC2000MKII's transport control PLAY 15 button to begin the infrared data transmission sequence. If you wish to duplicate only 1 to 8 function's memory, press the function button(s) you wish before pressing the PLAY button. Now the "LEARN" indicator of receiving RC-18SR starts to blink. (see Figure 23)





After all bars are lit up on both displays, "TX OK" (transmission OK) will appear in the source RC-18SR's LCD window, and "RX OK" (reception OK) will appear in the "cloned" RC-18SR's LCD window, confirming the end of the copying process (see Figures 24 and 25).



Please be sure that, during the copying process, neither RC-18SR is physically disturbed (ideally, they should be placed on a table or other surface, and not hand-held during the copying process). If, for some reason, the copying process was interrupted, the "clone" RC-18SR's LCD display window will indicate "RX NG" (reception no good). Simply begin the clone process anew by repeating the above steps.

Note:

Cloning is only available between the same remote control unit series, therefore the RC-18SR cannot be cloned by the RC2000.

5. If the source RC-18SR's memory contents are at or near full capacity, the copying process will take about 3 minutes. After completion of the copying (cloning) process, press the CLONE button 3 on both RC-18SR's with the tip of a paper clip, and select the OFF mode.

Then, you'll have two identically programmed RC-18SR remotes, one of which can again be used as your system's primary remote control, and you'll have the added confidence of knowing that in the event of inadvertent programming (or memory contents being cleared somehow), you can simply retrieve the "backup" RC-18SR that you've safely tucked away, and within minutes restore the programming contents of the original RC-18SR with your customized configuration.

Note

Some direct keys are marked "♦" in Direct Command Functions Listing (page 28 to31). The "♦" mark means as follows;

When RC-18SR is cloned with RC2000MKII, the name of the direct key can be cloned, however the remote control code (the factory preset code) cannot be cloned. Only learned remote control codes can be cloned. Then the remote control code is learned by "LEARN mode". Refer to page 21.

The table of cloning relations

Transmitting Receiving	RC-I 8SR	RC2000MKII
RC-I 8SR	ALL OK	only FUNC.
RC2000MKII	only FUNC.	ALL OK ,

ALL OK: All functions can be cloned.

only FUNC.: The following functions cannot be cloned; RC-18SR: DSS/VCR2, CD-R/MD, AMP RC2000MKII: DSS/MD, AMP

OTHER FUNCTIONS

The Marantz RC-18SR includes the ability to tailor the lighting features according to your preferences. As supplied from the factory, the RC-18SR has lighting features (and lighting timings):

The lighting time is set at the factory for a period of 2 seconds which you can change if you prefer a different lighting time. If you wish to maximize battery life, you can de-active the lighting function entirely.

There is also a lighting button [20], so that in any light situation, you can activate the backlighting feature. The lighting time in this case is set at the factory for a period of 2 seconds, which you can also change. If you wish to conserve battery power, you can deactivate the lighting function entirely.

RC-5 Shipped destination:

As mentioned earlier in this guide, the RC-18SR is provided with many commands from the factory with infrared codes conforming to the Philips RC-5 remote control language (used by Marantz, Philips, and some other companies)., We have provided two different RC-5 command code sets in the RC-18SR, due to the local requirements of different markets and the different types of remote control codes used in those markets. One code set is for North American (USA) users, while the other code set is for REST users. Your RC-18SR has been set at the factory for USA (United States) codes. It can be easily changed, if you wish.

Set-Up:

To change the lighting time(s), or the destination setting, please follow these steps:

 Select the SETUP mode, by holding the MEMO button 13 and at the same time pressing the OK button within the cursor keys 16. (see Figures 26 and 27)

F	Figure 26		
	SET	UP	
٠,٠	LAMP	5 5	
	BEEP VER TIMR	OFF USA O M	

SETUP

LAMP OFF
BEEP +++
VER REST
TIMP 3D M

LAMP - Lighting function ON or OFF and TIME

Press the D-5 direct function button, and you can then set the time (in seconds) directly using the numeric key pad 12 buttons. A time figure consisting of only 1 digit can be input by pressing the figure then waiting for 2 seconds or input "0" before entering a desired digit. You can set time in the range from 0 up to 60 seconds (More time would use up more battery life than fewer seconds). "2" is set when shipped from the factory. To set "OFF" input "0".

BEEP sound

The beep sounds when any buttons are pressed except the AMP button.

The beep sound level can be set by pressing the D-6 button. The display indicates "+" indication and the beeps are sounded by pressing the D-6 button. The "+" indication is followed, by another the "+" indication as the beep sound is increased; + \rightarrow +++ \rightarrow ++++ \rightarrow +++++

When the "++++" appears, this is the maximum. If the D-6 button is pressed once more, it will reset to OFF.

" \mathbf{J} " is indicated in the LCD window when the beep sound is set. **Note:**

The beep sound is different between the function buttons and other buttons.

VER

Press the D-7 direct function button to switch between USA and REST.

If you need to change this function, we recommend that you make the change before you begin "learning" any new infrared codes for other brands of equipment in your system.

Note:

The name of the **DIRECT** buttons will be erased if the USA/REST version is pressed.

Battery life:

- Battery life will vary from user to user, if the remote is used constantly or only occasionally, including the amount of backlighting usage. We feel that you can expect the batteries to last about 4 months based upon 15 remote control operations per day (every day), and 3 lighting operations per day (every day). If the remote is used more often, and if the lighting times are set to longer times than the factory settings, then the battery life may be shortened somewhat.
- As explained earlier in the guide, the RC-18SR's sophisticated battery conservation system will advise you long before the battery power is fully exhausted, and will further warn you to replace the batteries by simply becoming inoperative at a certain point. The customized memory contents and user-adjusted settings will still be retained in memory. When you install a fresh set of batteries, the memory contents are protected always, because the RC-18SR uses the non-volatile memory. Alkaline (and the newer lithium) types are recommended for longest battery life.

As you become more familiar over time with how you are using the RC-18SR in your A/V system, you may wish to consider reducing the lighting time(s) if possible, as this can help to extend the battery life.

Adjustment of the LCD contrast

The LCD contrast can be adjusted as follows;

Enter SETUP mode of the RC-18SR by pressing the MEMO and OK buttons. Press the VOL+ to increase the LCD contrast. Press the VOL - to decrease the LCD contrast. Press the OK button to end this setting and return the original operation.

DIRECT COMMAND FUNCTIONS LISTING

Within the RC-18SR LCD window, each of the 8 Direct Function buttons has 4 character labels attached for pre-programmed remote commands. These commands can be used with various Marantz A/V components, or other components using the Philips RC-5 remote control language.

You can easily replace the factory-supplied remote command codes with different codes from other brands of equipment. Most functions that are supplied apply to a wide variety of equipment from many companies. The following list shows the remote code assignments for the direct function buttons, for each of the 11 main function selector buttons, as supplied from the factory. You can add or replace function commands, including re-naming them if you wish, in order to customize the RC-18SR for your own particular selection of AVV components

Pole	AND I	1 MODE : 1	ALITO T	colocte Auto-coloct
## STHX selects THX cinema decoding ## Selects DTS decoding ## Surround sound ## Move surround sound ## Mov	AMP	I MODE-I	AUTO	elects Auto select surround modes
4 DTS 5 HALL 3 MTRX 7 MOV 3 2-CH Stereo sound (no surround) 2 MODE-2 1 A/D 2 DIR 3 ATT 4 OSD 5 MONO 3 3-D 5 MONO 3 3-D 7 NITE 3 MLTI 3 MLTI 4 OSD 7 NITE 3 MLTI 4 OSD 7 NITE 5 HAS- 4 BAS- 4 BAS- 4 BAS- 5 R-EQ 5 CH+ 7 LVL+ 8 LVL- 4 PROCESSOR6 1 VOL+ 8 LYL- 4 BYP 5 SLEP 6 DISP 7 MODE 8 PHNO 1 BAND 1 FM band 2 AM 4 BAND 1 FM band AM/MW band 1 long wave band 1 Stereo sound Matrix surround sound Motrix surtound Motrix s				
5 HALL 3 MTRX 7 MOV 3 2-CH Stereo sound (no surround) 2 MODE-2 1 A/D 2 DIR 3 ATT 4 OSD 5 MONO 3 3-D 7 NITE 3 MLTI 3 MLTI 3 MLTI 4 OSD 7 NITE 3 BAS+ 4 BAS- 4 BAS- 4 BAS- 5 R-EQ 3 CH+ 7 LVL+ 8 LVL- 4 PROCESSOR6 1 VOL+ 8 LYL- 4 BYP 5 SLEP 6 DISP 7 MODE 8 PHNO 8 PHNO 8 PHNO 8 PM DAM 8 BAND 1 FM BAN		8		· · · · · · · · · · · · · · · · · · ·
3 MTRX 7 MoV 8 Matrix surround sound 7 MOV 3 2-CH Stereo sound (no surround) 2 MODE-2 1 A/D 2 Switches analog / digital input 5 switches source direct 6 Switches attenuater for analog input 6 Switches on screen display 7 MITE 7 Switches on screen display 7 NITE 8 Switches on screen display 7 NITE 8 Switches attenuater for analog input 6 Switches on screen display 7 NITE 8 Switches on screen display 8 Switches on screen display 9 NITE 8 Switches on screen display 9 NITE 8 Switches 8 Switches 8 Switches 10 NITE 8 Switches 8 Switches 10 NITE				<u> </u>
7 MOV 3 2-CH Stereo sound (no surround) 2 MODE-2 1 A/D 2 DIR switches analog / digital input switches source direct switches attenuater for analog input switches on screen display monaural decoding 3 3-D surround decoding 3-D surround decoding selects NIGHT mode for Dolby Digital activates multi-room mode 3 MODE-3 1 TRB+ 2 TRB- 3 BAS+ 4 BAS-				
3 2-CH Stereo sound (no surround) 2 MODE-2				
2 MODE-2 1 A/D 2 DIR 3 ATT 4 OSD 5 MONO 5 3-D 7 NITE 3 MLTI 3 MLTI 3 MODE-3 1 TRB+ 2 TRB- 3 BAS+ 4 BAS- 4 BAS- 5 R-EQ 3 CH+ 7 LVL+ 8 LVL- 4 PROCESSOR6 5 SLEP 6 DISP 7 MODE 8 PHNO 5 SLEP 6 DISP 7 MODE 8 PHNO 5 MONO 8 3 ATT 5 witches analog / digital input switches source direct 5 witches on screen display monaural decoding 8 witches on screen display monaural decoding 9 Surround decoding 9 Selects NIGHT mode for Dolby Digital activates multi-room mode 1 TRB+ 1 Creases treble 1 decreases treble 1 decreases bass 1 decreases bass 2 decreases bass 3 decreases bass 4 decreases bass 4 decreases bass 4 decreases channel level volume 4 PROCESSOR6 5 R-EQ 6 creases channel level volume 6 decreases external decoder's volume 6 decreases external decoder's volume 7 decreases external processor's decoding activates display off function 8 PHNO 8 PHNO 9 Selects surround mode 8 PHNO 1 FM band 2 AM AM/MW band 1 long wave band 1 long wave band 1 long wave band 2 long wave band 3 long wave band 8 selects radio band				
2 DIR 3 ATT 4 OSD Witches attenuater for analog input switches on screen display monaural decoding 7 NITE 3 MLTI 3 MLTI 3 MODE-3 1 TRB+ 2 TRB- 3 BAS+ 4 BAS- 4 BAS- 5 R-EQ 3 CH+ 7 LVL+ 8 LVL- 4 PROCESSOR6 1 VOL+ 8 LVL- 4 PROCESSOR6 5 SLEP 6 DISP 7 MODE 8 PHNO 1 BAND 1 FM 2 AM AM/MW band 3 LW 4 BAND 2 SWitches source direct switches attenuater for analog input switches source direct switches attenuater for analog input switches on screen display monaural decoding selects NIGHT mode for Dolby Digita activates multi-room mode lecreases treble decreases treble decreases treble decreases channel level volume decreases channel level volume decreases external decoder's volume decreases external decoder's volume activates 6 channel setup bypasses external processor's decoding activates 8 pt imer function selects surround mode selects surround mode selects phono function			5 2-CH	Stereo sound (no surround)
3 ATT 4 OSD Switches attenuater for analog input switches on screen display monaural decoding 3 -D surround decoding 7 NITE 3 MLTI selects NIGHT mode for Dolby Digita activates multi-room mode 3 MODE-3 1 TRB+ 2 TRB- 3 BAS+ 4 BAS- 6 decreases treble decreases bass decreases bass decreases bass - S R-EQ 5 R-EQ 7 LVL+ 8 LVL		2 MODE-2	1 A/D	switches analog / digital input
## Sosphere Sosphere ## S			2 DIR	switches source direct
⊗ 5 MONO monaural decoding ⊗ 3 3-D 3-D surround decoding 3 MLTI selects NIGHT mode for Dolby Digital activates multi-room mode 3 MODE-3 1 TRB+ 2 TRB- 3 BAS+ 1 DECESSORE ncreases treble 1 DECESSORE ⊗ 5 R-EQ 3 DECESSORE activates RE-EQ function 1 DECESSORE 3 CH+ 7 LVL+ 8 LVL- 1 DECESSORE 1 VOL+ 2 DECESSORE increases channel level volume 1 DECESSORE 4 PROCESSORE 1 VOL+ 2 DECESSORE increases external decoder's volume 1 DECESSORE 4 BYP 2 DECESSORE 1 VOL+ 2 DECESSORE increases external decoder's volume 1 DECESSORE 4 BYP 3 DECESSORE 1 VOL+ 2 DECESSORE increases external decoder's volume 1 DECESSORE 4 BYP 3 DECESSORE 1 VOL+ 2 DECESSORE increases external decoder's volume 1 DECESSORE 4 BYP 3 DECESSORE 1 VOL+ 2 DECESSORE increases external decoder's volume 1 DECESSORE 5 SLEP 4 DECESSORE activates 6 Channel setup 2 DECESSORE bypasses external processor's decoding 2 DECESSORE 6 DISP 5 SLEP 6 DECESSORE activates display off function 2 DECESSORE activates display off function 3 DECESSORE 8 PHNO 8 DECESSORE 1 BAND 8 DECESSORE AM/MW band 3 LW 1 DECESSORE 9 DECESSORE 1 VOL+ 2 DECESSORE AM/MW 2 DECESSORE			3 ATT	switches attenuater for analog input
3 3-D 7 NITE 3 MLTI 3 MLTI 3 MODE-3 1 TRB+ 2 TRB- 3 BAS+ 4 BAS- 4 BAS- 5 R-EQ 5 CH+ 7 LVL+ 8 LVL- 4 PROCESSOR6 4 BYP 5 SLEP 6 DISP 7 MODE 8 PHNO 1 BAND 1 FM 2 AM 4 BAND 3 MODE-3 3 MODE-3 3 MODE-3 1 TRB+ 2 TRB- 3 BAS+ 4 BAS- 4 BYP 5 SLEP 5 SLEP 6 DISP 7 MODE 8 PHNO 3 CH+ 7 LVL+ 8 BVC- 7 MODE 8 PHNO 3 CH+ 8 BYP 7 Display Surround decoding selects phono function 4 PROCESSOR6 3 MODE-3 1 TRB+ 2 TRB- 3 MLTI 6 College of the cases treble 6 decreases bass 6 decreases bass 6 decreases bass 7 Activates RE-EQ function 1 Pext channel (up) 1 Creases external decoder's volume 1 decreases external decoder's volume 1 decreases external decoder's volume 1 decreases external processor's decoding activates display off function 1 Selects surround mode 1 BAND 1 FM band 2 AM 4 BAND 2 AM 4 BAND 3 LW 4 BAND 4 BAND 5 SLEP selects radio band	,		4 OSD	switches on screen display
7 NITE 3 MLTI 3 MLTI 3 MODE-3 1 TRB+ 2 TRB- 3 BAS+ 4 BAS- 4 BAS- 4 PROCESSOR6 4 BYP 5 SLEP 6 DISP 7 MODE 8 PHNO 1 BAND 1 FM 5 NITE 3 MLTI 2 selects NIGHT mode for Dolby Digital activates multi-room mode 1 TRB+ 2 TRB- 3 BAS+ 1 DRB- 4 DRB- 3 BAS+ 1 DRB- 3 BAS+ 1 DRB- 4 DRB- 3 BAS+ 1 DRB- 4 DRB- 4 DRB- 3 BAS+ 1 DRB- 4 DRB- 4 DRB- 4 DRB- 5 SLEP 6 DISP 7 MODE 8 PHNO 1 FM DBB- 5 SLEP 6 DISP 7 MODE 8 PHNO 1 FM DBB- 5 SLECTS DRB- 6 DISP 7 MODE 8 DRB- 7 MODE 8 PHNO 1 FM DBB- 8 DRB- 8 DRB- 8 DRB- 9		8		monaural decoding
3 MLTI activates multi-room mode 3 MODE-3 TRB+ ncreases treble decreases treble decreases treble ncreases bass decreases dec		8		•
3 MODE-3 1 TRB+ 2 TRB- 3 BAS+ 4 BAS- 4 BAS- 5 R-EQ 3 ctivates RE-EQ function 7 LVL+ 8 LVL- 4 PROCESSOR6 1 VOL+ 3 6-CH 3 6-CH 4 BYP 5 SLEP 6 DISP 7 MODE 8 PHNO TUNER 1 BAND 1 FM 2 AM AM/MW band 8 3 LW 4 BAND 5 R-EQ 9 activates RE-EQ function 1 rext channel (up) 1 rext channel level volume 1 decreases channel level volume 1 decreases external decoder's volume 1 decreases external decoder's volume 2 volume 2 tolume 3 decreases external decoder's volume 4 processor's decoding activates of splay off function 2 selects surround mode 3 selects phono function TUNER 1 BAND 1 FM 2 AM AM/MW band 3 LW 4 BAND 5 selects radio band				selects NIGHT mode for Dolby Digita
2 TRB- 3 BAS+ 4 BAS- 4 BAS- 5 R-EQ 5 CH+ 7 LVL+ 8 LVL- 4 PROCESSOR6 5 S-CH 8 LVC- 6 CH 8 LVL- 6 CH 8 LVL- 7 LVL+ 8 LVL- 7 LVL+ 8 LVL- 8 LVL- 8 LVL- 8 LVL- 9 CH			3 MLTI	activates multi-room mode
3 BAS+ 4 BAS- 4 BAS- 5 R-EQ 3 CH+ 7 LVL+ 8 LVL- 4 PROCESSOR6 1 VOL+ 8 LVL- 3 6-CH 6 DISP 7 MODE 8 PHNO 5 SLEP 6 DISP 7 MODE 8 PHNO 6 B PHNO 7 LVLR 7 LVL+ 8 DVC- 9 AM/MW band 9 AM/MW band 1 CAM/MW band 1 CAM/MW band 1 CAM/MW band 2 AM/MW band 3 LW 4 BAND 5 R-EQ activates bass 4 cecreases bass 4 cecreases channel level volume 6 DISP 7 MODE 8 PHNO 7 MODE 8 PHNO 8 AM/MW band 9 Selects radio band		3 MODE-3	1 TRB+	ncreases treble
4 BAS- 5 R-EQ activates RE-EQ function 3 CH+ 7 LVL+ 8 LVL- 1 cereases channel level volume 4 PROCESSOR6 1 VOL+ 8 LVC- 1 cereases channel level volume 4 PROCESSOR6 1 VOL+ 8 LVC- 1 cereases external decoder's volume decreases external decoder's volume decreases external decoder's volume decreases external processor's decoding activates display off function activates display off function activates display off function selects surround mode selects phono function TUNER 1 BAND 1 FM FM band 2 AM AM/MW band 3 LW long wave band 4 BAND selects radio band			2 TRB-	decreases treble
S R-EQ activates RE-EQ function 3 CH+ next channel (up) 7 LVL+ ncreases channel level volume decreases channel level volume 4 PROCESSOR6 VOL+ decreases external decoder's volume 3 6-CH activates 6 channel setup bypasses external processor's decoding activates sleep timer function 5 SLEP activates display off function 7 MODE selects surround mode selects surround mode 8 PHNO selects phono function TUNER 1 BAND 1 FM FM band 2 AM AM/MW band 3 LW long wave band 4 BAND selects radio band			3 BAS+	ncreases bass
3 CH+ 7 LVL+ 8 LVL- 10 recreases channel level volume 4 PROCESSOR6 1 VOL+ 8 LVL- 10 increases external decoder's volume 4 PROCESSOR6 2 VOL- 3 6-CH 6 BYP 6 SLEP 6 DISP 7 MODE 8 PHNO 1 BAND 1 FM 2 AM 2 AM 4 BAND 5 SLEV 1 BAND 1 FM band 2 AM 4 BAND 5 SLEV 1 BAND 1 FM band 2 AM 4 BAND 5 SLEV 1 BAND 1 FM band 2 AM 4 BAND 5 SLEV 1 BAND 1 FM band 2 AM 4 BAND 5 SLEV 1 BAND 1 FM band 2 AM 4 BAND 5 SLEV 1 BAND 1 FM band 2 AM 5 M/MW band 6 SLEV 6 SLEV 6 CHANNEL			4 BAS-	decreases bass
7 LVL+ 8 LVL- 10 ncreases channel level volume 11 decreases channel level volume 12 VOL- 3 6-CH 4 BYP 5 SLEP 6 DISP 7 MODE 8 PHNO 1 BAND 1 FM 2 AM 2 AM 4 BAND 5 SLEW 1 BAND 1 FM 2 AM 4 BAND 5 SLEW 1 BAND 1 FM 2 AM 4 BAND 5 SLEW 1 BAND 1 FM 2 AM 4 BAND 5 SLEW 1 BAND 1 FM 2 AM 4 BAND 5 SLEW 1 BAND 1 FM 2 AM 4 BAND 5 SLEW 1 BAND 1 FM 2 AM 4 BAND 5 SLEW 1 BAND 1 FM 2 AM 4 BAND 5 SLEW 1 BAND 6 SLEW 6 SL		8	5 R-EQ	activates RE-EQ function
A PROCESSOR6 VOL+ Increases external decoder's volume			3 CH+	next channel (up)
4 PROCESSOR6 VOL+ 8 2 VOL- 3 6-CH activates 6 channel setup 5 SLEP activates sleep timer function 6 DISP 7 MODE 8 PHNO Selects surround mode 8 PHNO Selects phono function TUNER 1 BAND 1 FM FM band 2 AM AM/MW band 8 BAND Selects radio band 1 FM SAM SELECT 1 BAND SELECT 1 BAND SELECT SELECT 1 BAN			7 LVL+	ncreases channel level volume
Source Source			8 LVL-	decreases channel level volume
S 2 VOL- decreases external decoder's volum activates 6 channel setup bypasses external processor's decoding activates sleep timer function activates display off function activates display off function selects surround mode selects phono function		4 PROCESSOR6	1 VOL+	increases external decoder's volume
S 4 BYP bypasses external processor's decoding activates sleep timer function activates display off function selects surround mode selects phono function		⊗	2 VOL-	decreases external decoder's volume
S S S S S S S S S S				
5 SLEP 6 DISP 7 MODE 8 PHNO 8 PHNO 8 PHNO 6 DISP 7 MODE 8 PHNO 8 Selects surround mode 9 selects phono function TUNER 1 BAND 1 FM 2 AM AM/MW band 9 3 LW 1 long wave band 4 BAND 8 selects radio band		⊗	4 BYP	bypasses external processor's decoding
6 DISP 7 MODE 8 PHNO selects surround mode selects phono function TUNER 1 BAND 1 FM FM band 2 AM AM/MW band 8 3 LW long wave band 4 BAND selects radio band			5 SLEP	
TUNER 1 BAND 1 FM selects surround mode selects phono function TUNER 1 BAND 1 FM FM band AM/MW band long wave band 4 BAND selects radio band			6 DISP	1
TUNER 1 BAND 1 FM FM band 2AM AM/MW band long wave band 4 BAND selects radio band			7 MODE	
2AM AM/MW band 3 LW long wave band 4 BAND selects radio band		8	8 PHNO	selects phono function
2AM AM/MW band S LW long wave band 4 BAND selects radio band	TUNER	1 BAND	1 FM	FM band
⊗ 3 LW long wave band selects radio band				i
4 BAND selects radio band		8	1	
	İ			1
• • • • • • • • • • • • • • • • • • • •			1	
⊗ 6 TIME time display		⊗	1	1
			1	frequency or preset channel display
8 SCAN programmed preset channel scan			8 SCAN	

F	UNERI	2 REC	1 TP-1	commands for Tape 1 control
				NO output)
			2 REC	ecord
ı			3 PAUS	ause
١			4 STOP	top
1			5 TP-2	commands for Tape 2 control
				NO output)
1			3 REC	ecord
1		-	7 PAUS	nause
			3 STOP	:top
ı		3 RDS	1 STM	elects station mode
		(for	2 AF	elects AF function
١		REST	3 PTY	elects PTY function
١		only)	1 DISP	elects display function
1		,,	5	
1			6	·
1			7	
۱			8 DWR	selects DSR wave range
	CD	I MODE	1 CD+	CD changer next disc
		, WODL	2 CD -	CD changer previous disc
		•	3 TEXT	activates text function
١		, i	4 RNDM	andom (shuffle) play function
			5 TRAY	ray open/close
١			6 TIME	ime display elapsed/remaining/total
١		•	7 RCL.	ecall program memory
			8 AMS	automatic music scan
١		2 CHANGER1	1 CD1	selects Disc 1
			2 CD2	selects Disc 2
			3 CD3	selects Disc 3
١			4 CD4	selects Disc 4
١			5 CD5	selects Disc 5
ı			6 EDIT	ape edit function
-		1	7 REPT	epeat function
			8 CNCL	cancel track programming
		3CHANGER:	1 UNIT	selects unit No.
		•	2 DISC	selects disc No.
			3 TR	selects track No.
			4 CATG	selects category
			5 MODE	selects mode
			6 TITL	selects function title mode
			7 T-S	selects title search
			8 ENT	selects enter
		4 REC	1 TAPE	commands for Tape control (no output
			2 REC	record
			3 PAUS	pause
			4 STOP	stop
			5MD	commands for MD control (no output)
			6 REC	record
			7 PAUS	pause
			8 STOP	stop
	TAPF	E 1 MODE	1 TP-A	selects tape deck A

TAPE	1 MODE	2 TP-B	sologie tano dosk P
IAPE	I MODE	· 1	selects tape deck B
		3 DIR	auto-reverse direction
		4 TIME	time display
		5 TRAY	tray open/close
		6 AMS	automatic music scan
		7 REC	record
		8 PAUS	pause
DVD	1 MODE1	1 ANGL	selects angle
		2 TITL	selects title menu
		3 SUBT	selects subtitle
		4 MENU	selects main menu
	•	5 OSD	activates on screen display
		6 AUD	selects audio
		7 SET	selects setup menu
		8 RTN	returns to menu
	2 MODE2	1 SLOW	slow forward
		2 LPLY	last play function
		3 RNDM	shuffle play function
		4 RPT	repeat modes
		5 A/B	repeat A to B
		6 +10	digit entry +10
		7 T/C	title and chapter
		8 ZOOM	zoom mode on/off
		0 200101	200H Hode Olyon
	3 KARAOKI	1 ONOF	karaoke on/off
		2 ONCE	once more play again
		3 MEL0	melody play
		4 VOCL	vocal support play
		5 MODE	karaoke modes
		6 3-D	surround processor on/off
		7 VSLF	very slow forward
		8 VSLR	very slow reverse
	4 REC	1 VCR1	selects VCR1 control (no output)
		2 REC	record
		3 PAUS	pause
		4 STOP	stop
		5 MD	l '
-		6 REC	selects MD control (no output)
		7 PAUS	pause
		8 STOP	stop
_	4 14005	4.65:	
-D	1 MODE	1 SD-A	side A
		2 SD-B	side B
		3 DISP	display on/off
		4 AMS	automatic music scan
		5 RPTA	Repeat A start point
		6 RPTB	Repeat B stop point
		7 CP/F	selects chapter or flame
		8 EDIT	activates tape edit function
1	2 LD	1 MSP+	increases CAV multi-speed
1		4	'
		2 MSP-	decreasesCAV multi-speed
		2 MSP- 3 FRM+	decreasesCAV multi-speed frame advance

LD	2 LD	5 MS-F	CAV multi-speed forward direction
	2 25	6 MS-R	CAV multi-speed reverse direction
		7 AUD	Stereo, left only, right only channel
l			
		8 D/CX	digital audio, analog audio, CX NR
	3 REC	1 VCR1	commands for VCR 1 control
			(NO output)
		2 REC	record
		3 PAUS	pause
		4 STOP	stop
		5 VCR2	commands for VCR 2 control
			(NO output)
		6 REC	record
1		7 PAUS	pause
		8 STOP	stop
	4 VCD	1 PBC	enlaste playback control
l			selects playback control
	(for	2 KARA	selects karaoke
	REST	3 IDX+	index up
İ	only)	4 IDX-	index down
İ		5 SEL	play or select audio
		6 RTN	stop or select return
į		7 NEXT	next track
		8 PREV	previous track
TV	1 MODE	1 A/CH	alternate channel
	(for USA	2 100s	100's
	only)	3 VID	video
	O(my)	4 INFO	information
1			
		5 VOL+	increases TV volume
		6 VOL-	decreases TV volume
		7 MUTE	mute sound on/off
	•	8 OSD	activates on screen display
	2 MODE/MENI	1 S-PI	smart picture
İ	(for USA	2 s-so	smart sound
	only)	3 S-CH	smart channel
		4	
		5 MENU	menu
İ		6 ADV	advance
		7 STAT	status
		8	
	3 PIP1	1 PIP	PIP on/off
	(for USA	2 SWAP	PIP swap
1	only)	3 FREZ	PIP freeze
	1	4 POSI	PIP position
		5 SIZE	PIP size
		6 STRO	PIP strobe
		7 PREV	PIP preview
		8 RPLY	PIP instant replay
	4 PIP2/REC		PIP clear
	(for USA	2 SLOW	PIP slow motion
	only)	3	
		4	
		5 VCR1	

TV	4 PIP2/REC	6 REC	record	1	VCR1	2 PLAY MODE	8	
		7 PAUS	pause					
		8 STOP	stop			3 MENU	1 MENU	activates menu
							2 STAT	shows current status
l v	1 MODE	1 CH +	next channel (up)				3 CLR	clear programming
	(for	2 CH -	previous channel (down)				4 GOT0	go to next item
	REST	3 CH-C	channel call				5 PLUS	video PLUS
		4 VID						VIG601 200
	only)	ļ	external (aux) video input				6	•
		5 VOL+	increases TV volume			·	7	
		6 VOL-	decreases TV volume				8	
		7 MUTE	mute sound on/off	П				
		8 OSD	on screen display on/off		DSS	DSS	1 DISP	brings up on screen channel marker
			100	Н			2 PREV	goes to previously selected channel
	2 MENU/CBL	1 MENU	activates menu				3 CH+	next channel
	(for	2 SLP	activates sleep timer				4 CH-	previous channel
	REST	3 CBL +	cable tuning next channel				5 FAV	favorite users and channel lists
	only)	4 CBL -	cable tuning previous channel				6 ALT	alternate audio channel, languages
	, ,,	5 ADV	advances to next menu page				7 FTCH	brings up on screen channel logos
		6 STAT	shows current status				8 ANT	selects broadcast or cable antenna
		7 M-UP					SANI	Selects broadcast of cable afferma
			Menu up (next)		ļ	MODE	4 011	
		8 M-DN	Menu down (previous)			? MODE	1 CH+	next channel
				H	1		2 CH-	previous channel
	3 REC	1 VCR1	commands for VCR 1 control				3 SLCT	selects TV or VCR
	(for	2 REC	record				4 AUD	audio track selector
	REST	3 PAUS	pause				5 OTR	one touch recording
	only)	4 STOP	stop				6 REC	record
		5 VCR2	commands for VCR 2 control				7 PAUS	pause
			(NO output)				8 STOP	stop
1		6 REC	record	l				
		7 PAUS	pause	l		3 PLAY MODE	1 2XPL	two times play speed
1		8 STOP	stop			3. 3.1 111051	2 SLOW	slow speed play
		0 0101	3.00				3 STIL	still frame
1	4 TV TXT	TV TXT 1 T/PG switches time display	T			i i	Still Harrie	
1			, ,				4 F CKID	alsia da mandi maaamaa
	(for	2 HOLD	activates page hold				5 SKIP	skip to next program
	REST	3 ENLG	selects large of text page		1		6 VIS+	VHS index search next
	only)	4 RVL	selects display of text page				7 VIS-	VHS index search previous
		5 CNCL	activates cancel picture	1	1		8	
		6 PG+	increases page		1			
1		7 PG-	decreases page			4 MENU	1 MENU	activate menu
		8 ENT	enters the next page	į			2 STAT	show current status
 				\vdash	1		3 CLR	clear programming
/CR1	1 MODE	1 CH+	next channel (up)				4 GOT0	go to next item
		2 CH-	previous channel (down)		1		5	-
		3 SLCT	selects TV or VCR	1			6	
		4 AUD	audio track selector	1			7	
		5 OTR	one touch recording				8	
			_		L		0	
		6 REC	record	1	,,,,,,	4.550		1.6.100
		7 PAUS	pause	1	₹UX	1 REC	1 VCR1	commands for VCR 1 control
		8 STOP	stop		1			(NO output)
					1		2 REC 3 PAUS	record
1	2 PLAY MODE	1 2XPL	twice normal playback speed					pause
		2 SLOW	slower than normal playback speed		1		4 STOP	stop
		3 STIL	still frame				5 VCR2	commands for VCR 2 control
		4						(NO output)
1		5 SKIP	skip to next program marker			1	6 REC	record
		6 VIS+	VHS index search next				7 PAUS	pause
		7 VIS-		1			8 STOP	stop
<u></u>		1 110-	VHS index search previous	丄			0 3108	3100

ĀUX	2 VCD/PHI 1 (for REST only)	1 CD+ 2 CD- 3 OSD 4 SCAN 5 A/B 6 SLOW 7	selects disc up selects disc down OSD on/off selects time search repeat A to B slow forward
	3 VCD/PHI 2 (for REST only)	1 PBC 2 KARA 3 IND+ 4 IND- 5 SEL 6 RTN 7 NEXT 8 PREV	selects playback control selects karaoke program selects video index up selects video index down selects in PBC returns in PBC next previous
	4 VCD/PHI 3 (for REST only)	1 CD+ 2 SHUT 3 OVEW 4 RESM 5 CHAN 6 FADR 7	selects disc up selects shutter function selects digest function selects last paly function selects channel selects MPX/vocal fader
MD (for RES only)	1 MODE 1	1 MD-A 2 MD-B 3 RPT 4 DISP 5 EJCT 6 AMS 7 RNDM 8 LP	selects MD A selects MD B selects repeat modes selects display modes eject automatic music scan randam display selects SP/LP mode
	2 EDIT	1 EDIT 2 CHAR 3 DEL 4 ENT 5 AMRK 6 SYNC 7 PROG 8	selects edit mode selects character mode selects delete selects enter selects auto marker syncro REC selects program mode
	3 REC	1 MD 2 RECP 3 PAUS 4 STOP 5 TAPE 6 REC 7 PAUS 8 STOP	command MD (no output) REC-pause pause stop command tape (no output) record pause stop
CD-R (for US/ only)	I	1 INPT 2 INCR 3 SYNC	selects input source increments track number activates SYNCRO. recording

CD-R	1 REC	4 REC	records pause
		5 TRAY	opens/closes tray
		6 DISP	dispaly mode
		7 FINL	finalizes (writes TOC)
		8 BLNK	records blank
	2 MODE	1 PROG 2 REPT 3 FTS 4 FAST 5 VOL+ 6 VOL- 7 IDX+ 8 IDX-	activates program mode activates repeat mode activates FTS mode searches FAST increases volume decreases volume increases index decreases index