

## CONTENTS

### ENGLISH:

INTRODUCTION .....	2
BUTTON NAMES AND FUNCTIONS .....	3
RC2000 Mk II BASIC OPERATION .....	11
PROGRAMMING THE RC2000 Mk II .....	12
ADVANCED PROGRAMMING TECHNIQUES .....	22
OTHER FUNCTIONS .....	35
DIRECT COMMAND FUNCTIONS LISTING .....	38

### FRANÇAIS:

INTRODUCTION .....	47
NOMS ET FONCTIONS DES TOUCHES .....	48
FENETRE D'AFFICHAGE A CRISTAUX LIQUEDES (LCD) .....	11
OPERATIONS DE BASE DE LA RC2000 Mk II .....	54
PROGRAMMATION DE LA RC2000 Mk II .....	58
TECHNIQUES DE PROGRAMMATION AVANCEES .....	70
AUTRES FONCTIONS .....	83
INDICATEUR SONORE .....	84
LISTE DES FONCTIONS DE COMMANDE DIRECTE .....	84

SPECIFICATIONS .....	96
FIGURE .....	97

## ENGLISH

## INTRODUCTION

Thank you for purchasing the Marantz RC2000 Mk II learning remote control. We developed this remarkable component so that you can easily control an entire A/V system, with many more features than are typically offered with other learning remote controls.

Conventional remote controls that are usually supplied with audio and video components are often difficult to use, and may be designed with many small buttons identically sized and positioned too close together. Button labels are often not very legible, especially in low light (home theater) settings.

Today, a typical home theater system might include a number of components, such as audio amplifier, CD player, tape deck, TV, VCR, a laser disc player, AM/FM radio tuner, satellite receiver, and others. Usually, the remote that is supplied with a central component, such as the amplifier or the TV set, has sufficient capacity to operate its own unit, but may be difficult and/or cumbersome to use for controlling the entire A/V system.

The Marantz RC2000 Mk II is designed to take the place of all of your existing remotes. Now you have one easy to use remote to control your entire A/V system, and you can customize the RC2000 Mk II with your favorite command functions, regardless of the brands and models of the various components in your system.

For ease of use, the RC2000 Mk II features button "groups", logically placed to eliminate "hunting" around the keypad to find a particular button. With only 58 buttons, the RC2000 Mk II can actually provide over 400 different infrared commands, enough to control virtually any fully equipped home theater system.

For home theater viewing in darkened rooms, the RC2000 Mk II features a backlit keypad and backlit liquid crystal display (LCD) window, with automatic features to prevent battery exhaustion and to preserve the memory contents.

At the heart of the RC2000 Mk II is a sophisticated microprocessor which has the ability to "learn" remote codes from a variety of A/V components, and can even be "taught" to send a "string" of remote codes in a specific sequence at the touch of a button.

The ergonomically designed RC2000 Mk II provides buttons of different size and shape, with many buttons able to output different commands, depending on the source selected. The large, clear LCD window features alphanumeric display of functions in easy to read text, and the backlighting feature means that you'll easily and quickly find the right button even when the room is dark.

Finally, the smart power conservation feature means that towards the useful end of the battery life, you'll be advised when to change the batteries.

We suggest that before you begin using your RC2000 Mk II that you take a few minutes to read this manual, so that you can become familiar with its many features. If you already have one or more Marantz components in your A/V system, you'll find that the RC2000 Mk II is already pre-programmed with hundreds of functions, and you can begin using it immediately with no additional programming required.

Then, when you feel comfortable using the RC2000 Mk II and its provided commands, you may wish to "customize" it for your own system, by "learning" other remote commands for your other A/V components, and take advantage of other features, such as the macro capability.

Now, let's take a few minutes to become familiar with the basic layout of the RC2000 Mk II, and introduce you to its features. Some buttons are intentionally small and usable only with a small pointed object, such as the tip of a paper clip, so that they cannot be inadvertently activated in normal use. You'll use these small programming buttons only if you wish to activate the various learning and programming features, which we suggest you use only after you have become comfortable using the RC2000 Mk II in your system for a while.

## BUTTON NAMES AND FUNCTIONS

### 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 a paper clip tip) the mode changes as follows: **LEARN** → **USE** → **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 RC2000 Mk II changes to macro programming mode, and is ready to learn a sequence of remote control commands.

### ③ **CLONE**

The RC2000 Mk II has the ability to "replicate" itself, downloading some or all of its internal commands to another RC2000 Mk II. This button is used when you wish to "teach" another RC2000 Mk II some or all of the customized commands you've already programmed into the first RC2000 Mk II. Each time the button is pressed, the mode changes as follows: **CLONE TX** → **CLONE RX** → **OFF**.

### ④ **POWER ON and OFF**

These two buttons are used to turn the main component's (preamp 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 keypads, 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 power commands, such as TV, DVD player, laser disc player, VCR, 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:

1. Turn on the main system power
2. Turn on a particular source component (such as a laser disc player)
3. Turn on the TV set
4. Set the TV to its video input
5. Adjust the surround processor to the home theater surround decoding mode
6. 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 RC2000 Mk II keypad, we could easily exceed 300 buttons for an entire home theater system, which would result in either a huge keypad, 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 10 function 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

These buttons select either the source component that you wish to operate or the input that will be selected on the preamp or receiver. This is accomplished by the use of a single or double click. **To simply operate a source component without changing the input on the receiver or preamp, click that source component's function button once. To change the input on the receiver or preamp, click twice.** This offers the ability to cue up a particular CD or maybe a favorite laser disc without changing the source that you are listening to.

For example, to operate the laser disc player, press the **LD** button once. To set the amplifier or receiver to the laser disc input, press the **LD** button twice.

Once a source has been selected, the transport function and **PAGE** keys will directly operate the chosen component. 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. In addition, the function buttons can be programmed to activate a macro.

### Here are the button names and their functions:

<b>LD</b>	Laser disc player
<b>TV</b>	Television
<b>VCR</b>	Videocassette recorder
<b>DSS/MD</b>	Digital satellite TV decoder or MD component
<b>AUX</b>	Can be used for an auxiliary source component
<b>TUNER</b>	AM/FM tuner, or AM/FM tuner section of a receiver
<b>CD</b>	Compact disc player or changer
<b>TAPE</b>	Audio tape deck, or digital audio recorder
<b>DVD</b>	DVD Player
<b>AMP</b>	Amplifier or receiver control functions

Remember, when you press a function selector button once, the RC2000 Mk II will not transmit commands to change the function of amplifier, only change to operate the functions of the selected source component.

We have provided 10 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/MD** is a little different from the others, in that, the remote can be configured for either the US or the rest of the world. When the remote is configured for the US, the **DSS/MD** button will switch to the DSS input on the receiver of preamp and will control RCA / GE brand DSS equipment. If you have another brand of DSS, you can "teach" the RC2000 Mk II with the remote control codes of your equipment. If the remote is configured for the rest of the world (discussed later), the **DSS/MD** button will switch to and issue MD commands.

## 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 indicators. The LCD window features backlighting, making it easy to view when the room ambient light is very low.

## ⑪ Volume UP / 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 keypad, the ten number buttons (0-9) are used to enter numeric digits, useful for finding a specific track on a CD, or to tune a pre-set radio station, etc.

## 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.

## ⑮ TRANSPORT CONTROL functions

These buttons provide transport commands for your source components, such as laser disc player, CD player, DVD player, VCR, audio tape deck, etc., and are dependent on the function source selected. For example, when the RC2000 Mk II 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 RC2000 Mk II 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 RC2000 Mk II 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 OSD (On Screen Display)

Some components, such as an amplifier or receiver, TV set, etc., feature on screen display for operation and/or programming. The OSD button can be used to activate the on screen display, or turn it off if desired.

## 19 SPEAKER

This opening is for the speaker used for audible confirmation of button presses. This function may be toggled off and on, and the volume is adjustable.

### Note:

Do not insert a pen tip or a paper clip into this opening!

## 20 CHANNEL

For components that offer the ability to change channels, these buttons will control the up/down scanning of channels.

## 21 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.

## 22 LIGHTING

Press this button to activate the backlit LCD screen and backlit keys. A quick touch is all that is necessary. The backlighting will remain on for 2 seconds. If you wish, you can even re-program the RC2000 Mk II to shorten or lengthen the amount of time the backlighting is activated when this button is pressed.

## 23 Transmitter window

Infrared signals will emanate from behind this window. Simply aim the RC2000 Mk II towards the component(s) you wish to control. You may find that the RC2000 Mk II works fine when placed on a coffee table pointing towards your A/V system components.

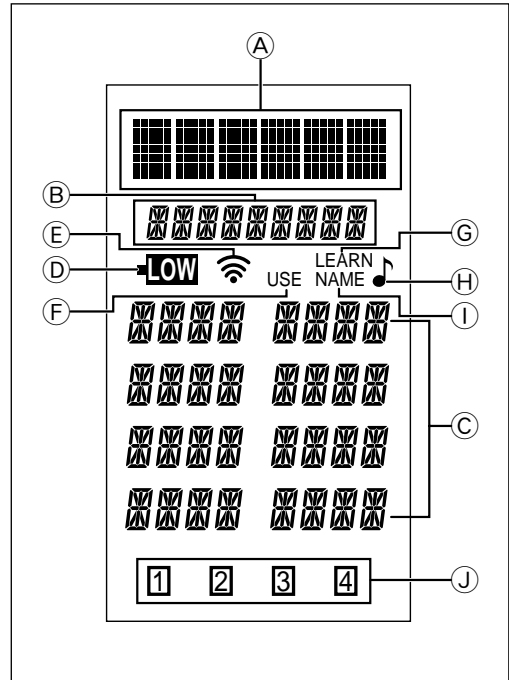
## 24 Receiving window

Used when learning commands from other remotes, this window is placed at the bottom of the RC2000 Mk II, so that the two remotes are vertically oriented for easy transfer of remote control information.

**All of the above buttons can be programmed with the exception of 1, 2, 3, 6, 8, and 22.**

## 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.



### (A) Function indication

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

### (B) Status indication

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

### (C) Direct commands

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

#### D 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. Even at this point, and during the time when the batteries are removed for replacement, any learned commands will remain in memory, along with customized labels, macros, settings, etc.

#### E Transmit indicator

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

#### F USE indicator

For normal operation, the USE indicator should be visible.

#### G LEARN indicator

Visible when the RC2000 Mk II is set to LEARN mode.

#### H 🎵 Indicator

Visible when the RC2000Mk II is set the beep function.

#### I NAME indicator

Visible when the RC2000 Mk II is in the learning mode, and function naming is being changed.

#### J PAGE display

This shows the current page of each function. When the macro function is activated, this display shows the macro number.

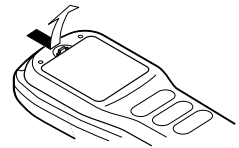
### Installing the batteries:

The battery compartment is located on the rear panel. Please use only alkaline or lithium batteries, "AA" size. The RC2000 Mk II 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.

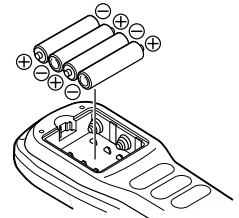
### Loading batteries

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

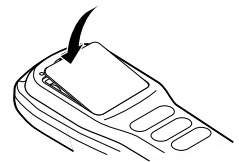
#### (1) Remove the back cover



#### (2) Insert batteries (AA type) with correct (+) and (-) polarity



#### (3) Close the back until it clicks



#### Note:

- Even when the batteries are removed for replacement, the learned codes are held in memory.
- Do not use old and new batteries together, for this may lead to battery corrosion, and / or improper operation.

## RC2000 Mk II BASIC OPERATION

### USE mode:

As supplied from the factory, the RC2000 Mk II 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.

1. If the RC2000 Mk II is in another mode (**NAME**, **LEARN**, etc.), press the operation mode button ① with the tip of a paper clip, until the USE indication appears.

2. Press one of the function buttons ⑨ to change to another component's commands, such as **LD** (refer to Figure 1). If you wish to change the receiver or preamplifier's input selection to the desired source, press the function button twice.

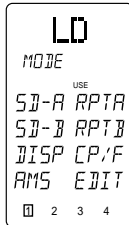


Figure 1

3. "LD" will be indicated within the LCD window, and the function codes will be set to operate the laser disc player, and if you double clicked the **LD** button, the preamplifier or receiver's input will be changed as well.

4. Now you can operate the laser disc player. When a button is pressed, the symbol indicates that a remote code is being transmitted.

5. Using the **DIRECT** buttons **D-1** through **D-8**, **PAGES 1** through **4**, up to 32 different specialized commands are available for each **FUNCTION**, up to a total of 320 specialized commands (32 direct commands times 10 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 RC2000 Mk II 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: The RC2000 Mk II is factory pre-programmed with 2 different preset codes. One is for the US (North America), and the other is for other countries (REST). Initially it is set for US codes at the factory. To change to other countries, see the section describing the **SETUP** screen.

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

**Page 2:** **LD:** Specialized laser disc functions

**Page 3:** **REC:** Recording from laser disc to VCR functions

**Page 4:** **VCD:** Video CD Operation (REST)

- At this point, you may wish to put this guide aside temporarily, and begin using the RC2000 Mk II 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 RC2000 Mk II right away. Take some time to become comfortable with the operation of the RC2000 Mk II. We think that its intuitive keypad 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. That section will describe the steps necessary to "teach" your RC2000 Mk II the remote codes from other components.

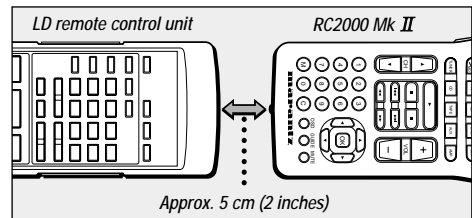
## PROGRAMMING THE RC2000 Mk II

### LEARN mode:

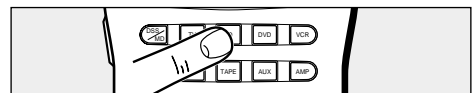
The RC2000 Mk II has the ability to learn remote codes for just about any component in your A/V system. If the original component was supplied with an infrared remote control, its commands can be learned by the RC2000 Mk II. If you have another brand of laser disc player, for example, you can program the RC2000 Mk II with its codes.

- For example, we'll show you how to "teach" the RC2000 Mk II commands from another brand of laser disc player.

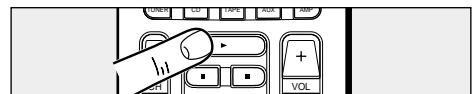
1. Using a sharp point (such as the tip of a paper clip), press the operation mode button ①. Each time you do this the mode will change from **USE** → **LEARN** → **NAME**. Stop when the **LEARN** indicator starts to blink.
2. Place the laser disc player's supplied infrared remote controller so that its transmitter window (usually at the top) is facing the infrared sensor window of the RC2000 Mk II (at the bottom), about 5 cm (2 inches) apart.



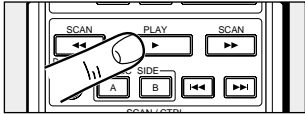
3. Press the **LD** function button ⑨ on the RC2000 Mk II



4. Press the **PLAY** button ⑮ on the RC2000 Mk II.



- Press and hold the corresponding **PLAY** button on the laser disc player's remote transmitter until the "OK" indicator appears in the RC2000 Mk II LCD window (see Figure 2). If the audible indicator is toggled on, you will hear a beep at this point.



Press and hold the **PLAY** button of the LD remote.

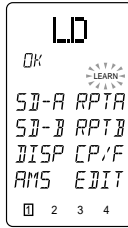


Figure 2

- If the "AGAIN" indicator appears in the RC2000 Mk II 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 RC2000 Mk II, "NG" (no good) will appear in the LCD window, meaning that the command is not "learnable". The RC2000 Mk II 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 RC2000 Mk II 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.
  - Proceed to learn the numeric "10 keys" from the source transmitter to the RC2000 Mk II's 10 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 minutes, the RC2000 Mk II will revert back to the **USE** 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 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). For any button for which a new code was not learned, the factory programmed RC-5 code will still be transmitted as usual.

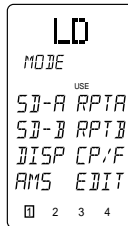


Figure 3

## Helpful tips about programming

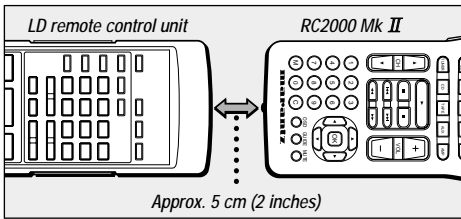
- Do not program the RC2000 Mk II under fluorescent lighting or sunlight. Fluorescent lights (including "energy saving" types that screw into incandescent sockets) contain energy in the infrared spectrum, and this energy is "noise floor" of infrared, making it harder for the learning device to separate the signal from the noise. At the worst, it can confuse the learning to teach it, or even not learn at all. Additionally, sunlight can saturate the RC2000 Mk II with infrared, making learning very difficult.
- Experiment with different programming distances. Even though the specification for the distance between the RC2000 MkII and the teaching remote during programming is 2 inches, this may be different depending on the remote that you are learning from. Some remotes are very powerful, or have lenses on their emitter whose focal length is very long. In these cases, if the remotes are too close together, you can "saturate" the RC2000 MkII. In these cases, you should adjust the distance between the two.
- Experiment with different length of button pushes. Even though you normally would press and hold the button on the "teaching" remote until the RC2000 Mk II responds, in some cases a short push might work better.
- Difficult remote codes. There might be some codes that the RC2000 MkII will not be able to learn. We have tried to maintain compatibility with as many products as possible, even expanding the bandwidth to accept commands from some of the new high frequency remotes. However, there is no way we can account for every possibility. However, you will most likely find out that the RC2000 Mk II will learn virtually every command that it is taught, by following the above tips. Above all, be patient during programming.

## Programming and renaming the DIRECT mode buttons **12**:

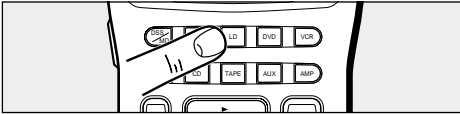
Each of the **DIRECT** buttons may be reprogrammed for specific functions that may not be in the factory preset programming. During this reprogramming, the RC2000 Mk II allows each newly programmed button to be renamed immediately. This prevents having to rename all of the buttons that will be reprogrammed ahead of time, or trying to remember which button were reprogrammed and with which command in order to try to rename later. 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 and rename the button **LD-A**.

- Using a sharp point (such as the tip paper clip), press the operation mode button **1** to switch the RC2000 Mk II to **LEARN** mode.

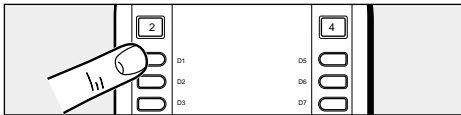
- Place the laser disc player's supplied infrared remote controller so that its transmitter window is facing the infrared sensor window of the RC2000 Mk II about 5 cm (2 inches) apart.



- Press the LD function button ⑨ on the RC2000 Mk II.

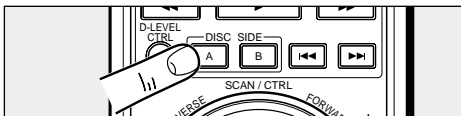


- Using the direct function page keys ◀ and ▶ ⑧, set the direct function to Page 1. Press the D-1 button ⑦ on the RC2000 Mk II. At this point, both the LEARN and NAME indicators will flash.



*Press the D1 button.*

- Press and hold the corresponding SIDE-A button on the laser disc player's remote transmitter until the "OK" indicator appears in the RC2000 Mk II LCD window.



*Press and hold the SIDE-A button of the LD remote.*

If the AGAIN indicator lights, it means that for some reason, the command was not learned. Try steps 3, 4 and 5 again.

### Renaming DIRECT keys during programming

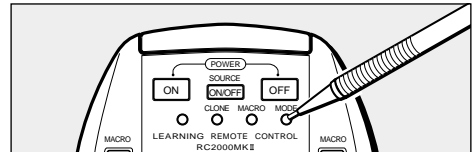
At this point you have taught the function, now it is time to rename. The remote will switch to the RENAME mode automatically after teaching the command. This is indicated by the left side of the D1 indicator blinking, meaning that you can re-write that character.

If you wish to skip re-writing, press the OK button within the cursor keys or other keys except ten keys.

- Choose the desired letter or number by pressing the 10 numeric keypad buttons. Each button has various characters assigned to it as follows:

10 Numeric Keypad	Toggles between...			
1	1	A	B	C
2	2	D	E	F
3	3	G	H	I
4	4	J	K	L
5	5	M	N	O
6	6	P	Q	R
7	7	S	T	U
8	8	V	W	X
9	9	Y	Z	/
0	0	+	-	SPACE   ,   '

- Using the ◀ or ▶ cursor buttons will choose the position to overwrite.
- Continuing along, rewrite the characters. After completion, press the OK button in the middle of the cursor buttons.
- 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 ▶ ⑧ 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 pen tip and return the RC2000 Mk II to the USE mode. Now, the newly memorized codes are usable from the RC2000 Mk II.



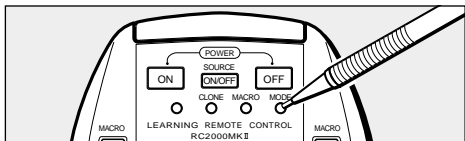
*Press the MODE button to switch to USE.*

### If you wish, you can re-write the names for each function name, status name, and the direct function 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 that 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 a paper clip tip, press the operation mode button ① until the NAME indicator appears and begins to blink in the LCD window.



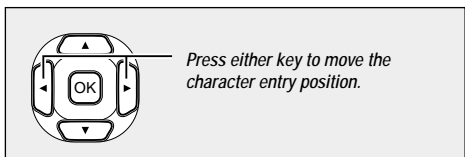
Press the **MODE** button to switch to **NAME**.

- Choose a button that you wish to re-name, in this case, press the "LD" function button ⑨.



Press **LD**.

- In the LCD window, the first character of the six function character display indicators starts blinking.



Press either key to move the character entry position.



Press "4" four times.

- Choose the desired letter or number by pressing the 10 keypad buttons ⑩. So, by pressing the 10 keypad number 4 four times, you get the letter "L" to appear in the display (see Figure 4).

You use the cursor buttons ◀ and ▶ ⑫ 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).

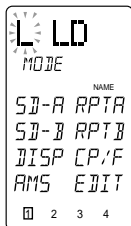
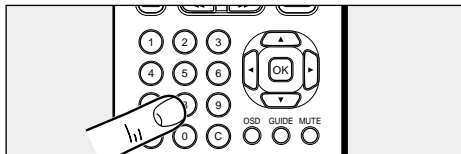
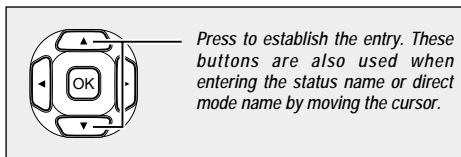


Figure 4

- Continuing along, re-write the remaining letters "V", "-", "5", "2", and "0". By pressing the cursor keys ◀ and ▶, each character is confirmed in place. When you go to other DIRECT function pages by using the page function keys ⑧, characters in the previous page are also confirmed in place.



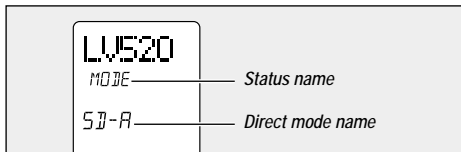
Press ⑧ twice.



Press to establish the entry. These buttons are also used when entering the status name or direct mode name by moving the cursor.

### 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 ⑬ the left side of the status indicator begins blinking, and you can change its display according to the same method outlined above, using the 10 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.

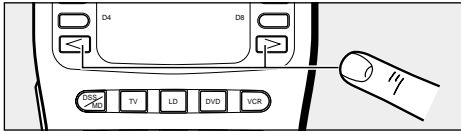


### How to re-write the DIRECT function button names:

- 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 10 main function selection buttons ⑨.

- You have up to four characters available for each direct function button name.

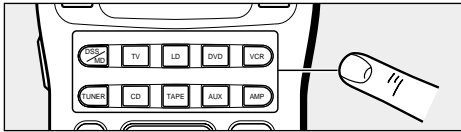
#### To change the page



*Press the page button.*

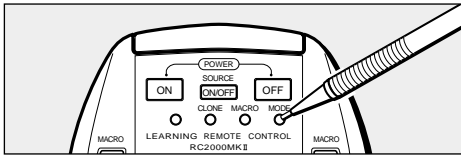
8. After completing all re-writing of any of the names, press the OK button within the cursor keys 16.

#### To change the function



*Press any of these buttons.*

9. If, during re-naming, a button has not been pressed for 1 minute, the RC2000 Mk II will revert to the prior operating mode automatically.
10. If re-writing of all of the desired direct mode functions has been completed, use the paper clip tip to press the operation mode button 17, and select the "USE" mode. Now, all of the re-written names are available for use.



*Press the MODE button to switch to USE.*

#### Note:

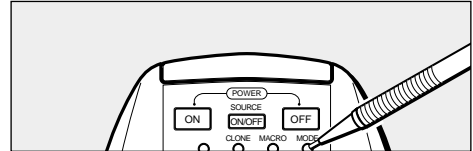
The status and direct mode names of each page that are not rewritten remain without being erased.

#### How to clear (erase) the memorized codes (and any re-written names):

The RC2000 Mk II 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 function(s)
- Erasing by direct buttons (Pages)
- Erasing all memory contents (complete erasure)
- Note: The factory-programmed RC-5 codes are not stored in RAM, and are therefore not erasable.

1. For any of these memory erasure options, you must first set the RC2000 Mk II to LEARN mode.



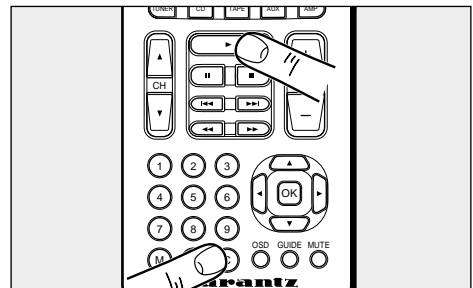
*Press the MODE button to switch to LEARN.*

2. **Erasing the commands assigned to pages 1-4 of each direct button:**

Press and hold the "CLEAR" button and press ◀ or ▶ button twice.  
You will see "DIR CLR" indicated in the LCD window. At that point, if you press "OK" in the cursor keys, you will erase all four pages in that particular direct function.  
After clearing, the RC2000 Mk II will restore any factory programmed codes.  
If you do not wish to clear the pages, press any other key other than the "OK" button.

3. **Erasing the memory assigned to a particular button:**

First check the current function. (In this example, let us assume that it is LD.)  
Press and hold the "CLEAR" button 14 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 codes will re-appear in its place.



*While holding the CLEAR button depressed, press PLAY twice. The LD PLAY code is cleared and the original RC-5 code is recalled.*

#### 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 ⑭, 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 5).

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 ⑮.

After clearing the memory contents for that function, the RC2000 Mk II will restore any factory programmed RC-5 codes for the function, if any, or will simply be empty.

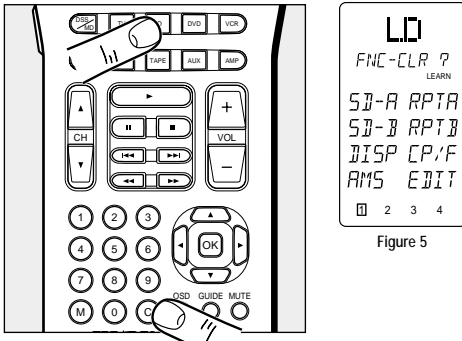


Figure 5

While holding the **CLEAR** button depressed, press **LD** twice; [FNC-CLR?] will be displayed.

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-1 through D-8, pages 1 through 4) are cleared as well.

#### Cleared buttons:

In addition to the **FUNCTION** button, the codes stored in the following buttons are cleared.

- All of the direct mode buttons ⑦ for 4 pages.
- All of the numeric keypad buttons ⑫.
- All of the **CONTROL** buttons ⑮.
- All of the **CURSOR** buttons ⑮.
- **MEMO** ⑬, **CLEAR** ⑭, **VOL** ⑪, **MUTE** ⑰, **OSD** ⑱ and **GUIDE** ⑲ buttons.

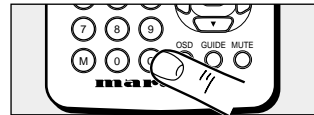
#### 5. Complete erasure:

While holding the **CLEAR** button ⑭ depressed, press both of the **ON** and **OFF POWER** buttons ④ simultaneously.

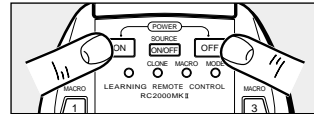
"ALL-CLR?" is displayed on the LCD window (see Figure 6).

If you wish to finalize the complete erasure process, press the "OK" button within the cursor keys ⑮.

If you do not wish to proceed with the complete erasure process, simply press any key other than **OK** button.



While holding the **CLEAR** button depressed,



pressing simultaneously displays [ALL-CLR?].

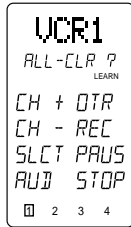


Figure 6

#### NOTE:

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.

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 RC2000 Mk II programming techniques, you may wish to continue "teaching" the RC2000 Mk II 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 RC2000 Mk II as you'd like, and possibly changed some or all of their names as well, then feel free to proceed to the next section.
- The all-clear operation takes about 15 seconds after the **OK** button is pressed.

## ADVANCED PROGRAMMING TECHNIQUES

### Macro mode:

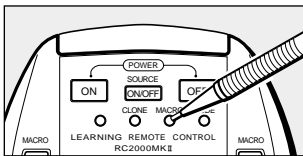
The word "macro" is used to describe a series of specific steps carried out in sequence. For example, a word processing program can use macros to carry out common repetitive typing tasks. During the day to day operation of an A/V system, you might find yourself pressing the same combination of remote control buttons often.

The RC2000 Mk II features the ability to "learn" a sequence of infrared commands, and "assign" that sequence to a single button, called a **MACRO** button ⑥. 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:

1. Turn the main amp power on
2. Turn the TV power on
3. Switch the TV to the AUX video input
4. Change the amp to the laser disc (LD) input
5. Turn the LD player power on
6. Activate the LD play command
7. 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.

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, it must be turned on). Macro programming may be assigned to the function buttons, as well as Macro 1-4.

1. 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 7). 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.



Press the **MACRO** button.



Figure 7

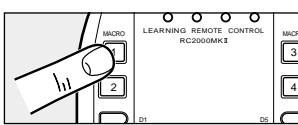
Press the **MACRO** button. (**MACRO** and **LEARN** will blink.)

2. Press macro button No. 1 ① to begin memorizing the various codes. In the LCD display window the indicator "M1-00" appears in the status line B (see Figure 8). The "M1-00" 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.



Figure 8

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 9)



Press the **MACRO** button.

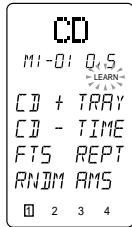
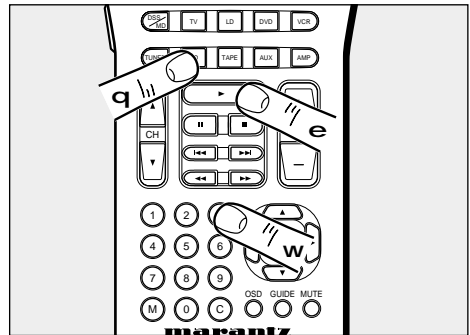


Figure 9

3. 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. If you wish to program one of the cursor buttons as part of the macro sequence, press and hold the "LIGHTING" button, then press the desired cursor button.

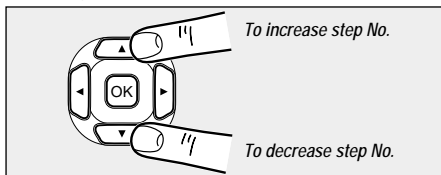


4. It is possible during macro programming to adjust the timing of the interval between macro steps. Using the cursor keys ⑩, the interval between macro playback steps can be increased or decreased in 1/2 second steps, over the range beginning at 1/2 second up to 10 seconds. For example, when the indicator 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 10 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 1/2 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.

- 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** ⑬, **CLEAR** ⑭ and **LIGHTING** ⑯.

#### Recalling the step number.



- 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).

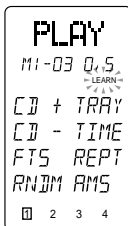
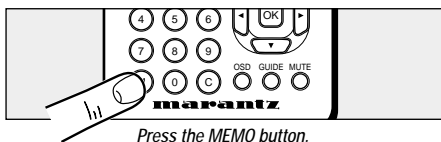


Figure 11



- In the event that you wish to revise a programmed macro sequence, search the step number you wish to change by using the direction keys ▲ and ▼ ⑫, 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.



- If you want to insert a new step between the programmed steps, press the **"MEMO"** button at the place that you wish to insert the step.
- If you wish to clear a step after programming is finished, select the step using the cursor keys and press **"CLEAR"**,
- During macro programming, if a button is not pressed within 1 minutes, the mode will automatically revert to the **"USE"** mode.

- When you have completed the macro programming sequence, press the **MACRO** ② operation button with the paper clip tip. 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 RC2000 Mk II has a special feature to prevent this from occurring, allowing you to access the special commands available under each RC2000 Mk II function button during a macro playback sequence, while at the same time prevent 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 RC2000 Mk II 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.

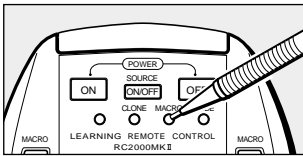
During the macro programming, make sure that you press the **LD** function selector button **BEFORE** you press any of the other function selector buttons in the sequence. You can then include any of the TV commands by pressing the **TV** function selector button, later in the sequence. When this macro is next used (played back), the RC2000 Mk II 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 button:

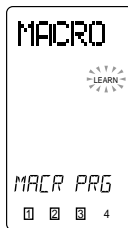
If you wish, you can also program a macro that can be activated by pressing one of the function selector ⑨ button. The programming steps are similar to the steps outlined for programming a macro number button ⑥. The following example shows how to program a macro under the LD (laser disc) function selector ⑨:

- Turn on the amplifier
- Switch the source to laser disc
- Switch the amplifier's surround mode to THX
- Turn on the television
- Switch to the television's AUX video input
- Turn on the laser disc player
- Begin laser disc playback

1. Press the **MACRO** ② operation mode button with a pen tip.



Press the **MACRO** button.



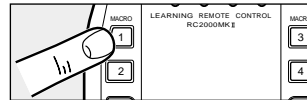
The **MACRO** and **LEARN** indicators blink.

2. Press the **LD** function button ⑨.
3. Press the following buttons: **POWER ON**, **LD**, **AMP**, direct function **D-5** on page ② (THX mode selector), **TV\***, **SOURCE ON**, direct function **D-4** on page ① (VIDEO input selector), **LD\***, **SOURCE ON**, and **PLAY**.
4. Press the **MACRO** ② button with the pen tip. The RC2000 Mk II will revert to the normal mode and save the macro under the **LD** function button.
5. To execute the new macro sequence, press once then immediately press and hold again the **LD** function selector button for more than 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 once then immediately press and hold that function button for more than 3 seconds.

The LCD display window will indicate the macro number in the LCD window (see Figure 13), or if a macro is programmed under a function key, the status line will display the macro under function buttons as follows:



Press the **MACRO** button with the desired number.

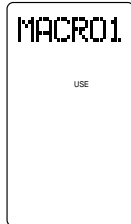


Figure 13

Macro under function button:

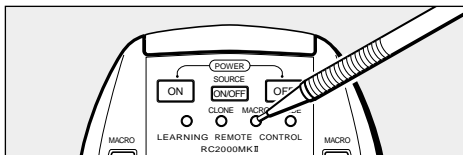
Status line shows:

- |              |  |
|--------------|--|
| <b>LD</b>    | "LD" as the first 2 characters in the line |
| <b>TV</b>    | "TV" as the first 2 characters in the line |
| <b>VCR</b>   | "VC" as the first 2 characters in the line |
| <b>DSS</b>   | "DS" as the first 2 characters in the line |
| <b>AUX</b>   | "AU" as the first 2 characters in the line |
| <b>TUNER</b> | "TU" as the first 2 characters in the line |
| <b>CD</b>    | "CD" as the first 2 characters in the line |
| <b>TAPE</b>  | "TP" as the first 2 characters in the line |
| <b>DVD</b>   | "DV" as the first 2 characters in the line |
| <b>AMP</b>   | "AP" as the first 2 characters in the line |
2. The macro sequence will begin, and the remote control codes will be sent from the RC2000 Mk II and the display will show the names of the transmitted codes. If you program a macro longer than 20 steps, where it is programmed through **MACRO 1** and **MACRO 2**, **MACRO 1** has to be pressed for the macro to transmit. Pressing **MACRO 2** will not have any effect.
  3. When the macro transmit sequence has ended, the RC2000 Mk II will return to the same mode as before the macro function was initiated.

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

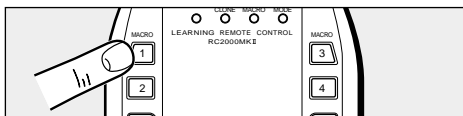
- Switch the receiver of preamp to CD
- Initiate CD playback
- Go to track No. 3 on the CD

1. Press the **MACRO** ② operation mode button with a paper clip tip.



Press **MACRO** with a paper clip tip, etc.

2. Press one of the **MACRO** buttons (1 through 4).



Press the **MACRO** button.

3. Press the following buttons:
  - **CD** function selector
  - numeric keypad No.3
  - transport control keypad **PLAY** button (see Figures 9, 10, and 11)

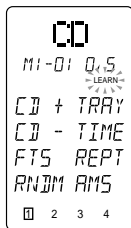
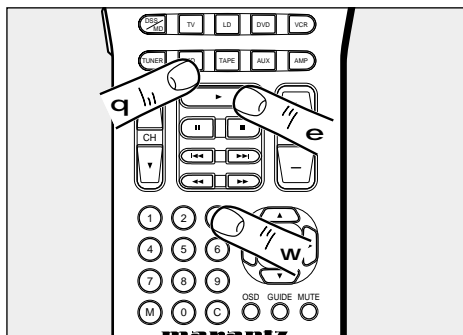


Figure 9

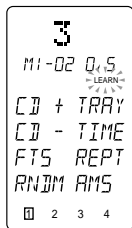


Figure 10

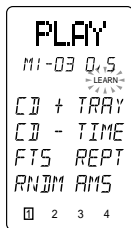
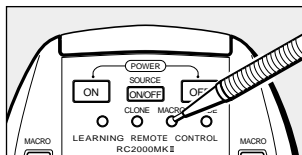


Figure 11

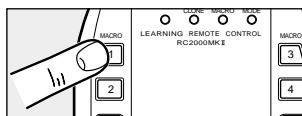
Note that this sequence will operate a Marantz CD player (or any other CD player equipped with the RC-5 remote control language). If you have another brand of CD player, you may wish to check its owner's manual to see if direct track selection is possible via remote, or if the macro sequence needs to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

4. Press the **MACRO** ② button with a paper clip tip. The RC2000 Mk II will revert to the normal mode (see Figure 12).



Press **MACRO** with the tip of a paper clip, etc.

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.

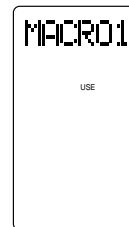


Press the **MACRO** button.

While the RC2000 Mk II is completing a macro transmission, all other buttons are temporarily deactivated, except for the transport control **STOP** keys ⑮.

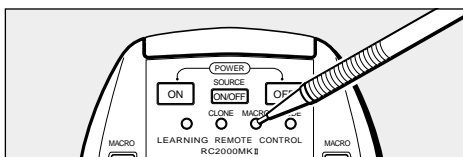


Figure 12



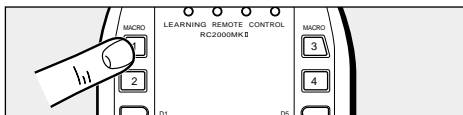
**Now, we'll show you another macro programming example, with a more sophisticated sequence:**

1. Activate the main amplifier's power on
  2. Switch the source to laser disc
  3. Switch the amplifier's surround mode to Pro Logic
  4. Switch on the television
  5. Switch to the television's AUX video input
  6. Power up the laser disc player
  7. Begin laser disc playback
1. Press the **MACRO** (2) operation mode button with a paper clip tip.



*Press MACRO with the tip of a paper clip, etc.*

2. Press one of the **MACRO** buttons (1 through 4).

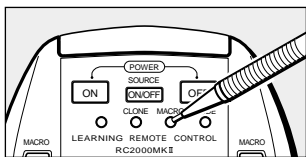


*Press the MACRO button.*

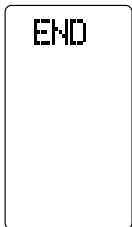
3. Press the following buttons:

- POWER ON
- LD
- AMP\*
- direct function D-5 (Pro Logic mode selector)
- TV\*
- SOURCE ON
- direct function D-4 (VIDEO input selector)
- LD\*
- SOURCE ON
- PLAY

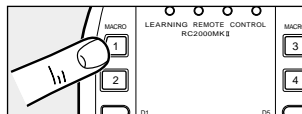
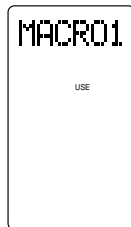
4. Press the **MACRO** (2) button with the paper clip tip. The RC2000 Mk II will revert to the normal mode.



*Press the MACRO button.*



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.



*Press the MACRO button.*

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 RC2000 Mk II's programmed memory code banks for those respective functions.

**If you want to stop the macro sequence, press STOP button (5).**

### Clearing a Macro Sequence

If you would like to clear the MACRO programmed sequence(s), press and hold the appropriate MACRO button (1 through 4) at the same time pressing the CLEAR button (14). The LCD shows "MACRO" at the (A) area of the window, and "MR1-CLR?" (Macro 1- clear?) at the (B) area of the window. Release the keys, and then press the OK key (within the cursor control keys), and the macro is erased. If you do not wish to erase the macro, simply press any other key (but not the OK key).

If you would like to clear a macro function that has been assigned to a function button, press and hold the appropriate function button for more than 3 seconds, at the same time pressing the "CLEAR" button. The LCD shows "MACRO" at the (A) area of the window, and "LD-CLR?" (if it is the LD macro function that is being cleared). Release the keys, and press the OK button to clear the macro.

**CLONE mode:** Duplicating the memory contents of one RC2000 Mk II to another RC2000 Mk II.

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 either the entire customized memory contents of one RC2000 Mk II remote control into another fresh RC2000 Mk II, or the contents of any particular function.

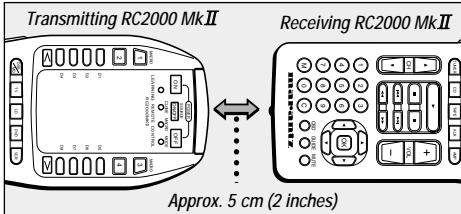
In an active household, you may find that one or more family members might become adventuresome with the RC2000 Mk II's many programming features. Although the RC2000 Mk II's programming sequences are relatively straightforward, re-programming an RC2000 Mk II after someone else has inadvertently "cleared" the entire customized memory contents might be an inconvenience, to say the least.

There are 2 different modes that can be selected for the CLONE mode. The first one copies the complete memory of the first RC2000 Mk II into the second RC2000 Mk II. The second mode copies the contents of an individual function to the second RC2000 Mk II. If you are transferring the entire memory, all learned codes, names, settings and macros will be transferred exactly.

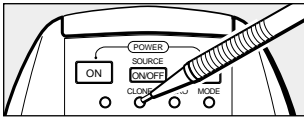


**To “clone” (duplicate) ALL of the memory contents of one RC2000 Mk II into another RC2000 Mk II, please follow these steps:**

1. Place the source RC2000 Mk II (the one with all of the customized commands, names, macros, macro sequences, and the like) with its infrared transmitter window 23 facing the infrared sensor 24 of another “fresh” RC2000 Mk II (5 cm, or 2 inches apart).



2. Press the **CLONE** button 3 of the source RC2000 Mk II with a paper clip tip, and select “CLONE TX” (clone transmit) mode (see Figure 17).



*Press the CLONE button.*

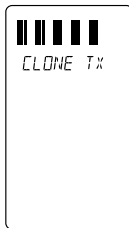
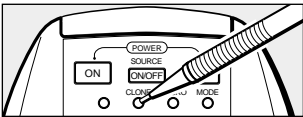


Figure 17

3. Press the **CLONE** button 3 of the learning (receiving) RC2000 Mk II with the tip of a paper clip or a similar object, and select “CLONE RX” (clone receive mode). Then press the **PLAY** button 15.



*Press the CLONE button.*

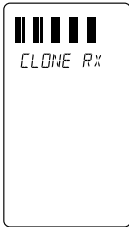
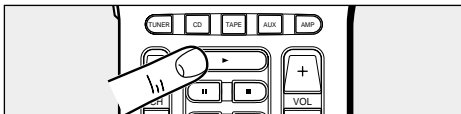


Figure 18

4. Press the source RC2000 Mk II's transport control **PLAY** 15 key to begin the infrared data transmission sequence. Now the “LEARN” indicator of receiving RC2000 Mk II starts to blink.



*Press the PLAY button.*

During the transmission, the LCD windows of both RC2000 Mk II remote controls will show a bar-type indicator, moving from left to right during the transmission process.



After all bars are lit up on both displays, “TX OK” (transmission OK) will appear in the source RC2000 Mk II's LCD window, and “RX OK” (reception OK) will appear in the “cloned” RC2000 Mk II's LCD window, confirming the end of the copying process (see Figures 19 and 20).

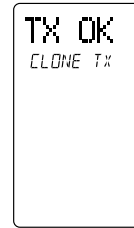


Figure 19

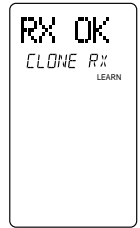


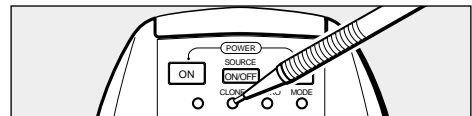
Figure 20

If the audible beep indicator is on, it will sound to let you know that cloning is complete.

- Please be sure that, during the copying process, neither RC2000 Mk II 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” RC2000 Mk II's LCD display window will indicate “RX NG” (reception no good). Simply begin the clone process anew by repeating the above steps.

5. If the source RC2000 Mk II'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 on both RC2000 Mk II's with the paper clip tip, and select the OFF mode.

Then, you'll have two identically programmed RC2000 Mk II 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” RC2000 Mk II that you've safely tucked away, and within minutes restore the programming contents of the original RC2000 Mk II with your customized configuration.



*Press on both the receiving and transmitting units.*


## Cloning the contents of a function:

1. Follow steps 1-3, above.
2. Press the function button of the source RC2000 Mk II. You can select up to 8 function buttons at one time. The LCD window will show the selected function.
3. Press the source RC2000 Mk II's transport control PLAY button to begin the cloning sequence.
4. Follow the same procedure as step 5, above.

### Note:

Cloning is available between the same remote models only. This means you cannot clone between the RC2000 and RC2000 Mk II

## OTHER FUNCTIONS

The Marantz RC2000 Mk II includes the ability to tailor the lighting features according to your preferences. There is a LIGHTING button , so that in low light situations, 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, in order to conserve battery power. You can adjust the lighting time down as low as 1 second after you release the lighting button, or up to 99 seconds.

### Shipped destination:

As mentioned earlier in this guide, the RC2000 Mk II 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 RC2000 Mk II, according 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 (US) users, while the other code set is for the rest of the world. Your RC2000 Mk II has been set at the factory for USA codes. It can be easily changed, if you wish.

In the US mode, the DSS/MD button is set up for DSS.

Due to this feature, you could conceivably program 2 different sets of operation into the DIRECT buttons, one set under "US", and another "REST" (the rest of the world).

## AUDIBLE INDICATOR

There is an audible "beep" indicator that is heard when operating the RC2000 Mk II buttons to confirm the code transmission. You can turn this on or off, and adjust the volume. There is a difference in pitch between the function buttons and the transport or direct buttons. This audible indicator can also be heard during learning or cloning to confirm the success of the procedure.

### Set-Up:

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

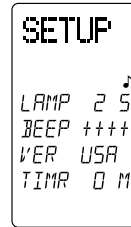


Figure 21

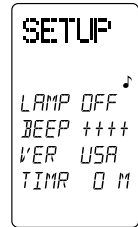


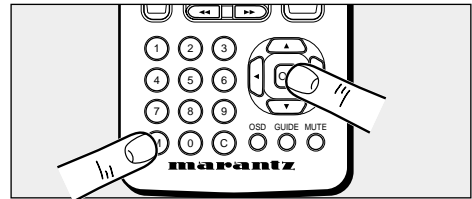


Figure 22

1. Select the SET UP mode, by holding the MEMO button  and at the same time press the OK button within the cursor keys .



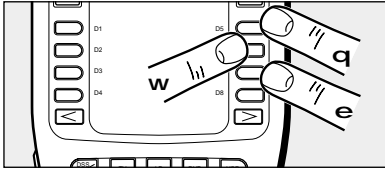
Press the OK button while holding the MEMO button depressed.

**LAMP:** Sets the time for lighting. You can set the time from 1 to 60 seconds. To adjust, press the D5 button. "2 (SECOND)" indicator begins to blink. You then set the time using the numeric keys. If you set the time to 0 seconds, it will read "OFF" when you hit the OK button. At that point, the lighting will not operate, except LIGHTING button.

**You can also adjust the contrast of the LCD screen at this point by pressing the Volume + or - buttons.**

**BEEP:** This indicates whether the audible beep indicator is on or off and the relative volume. Press the D6 button to adjust. Each time the button is pressed, you will see a "+" indicator in the window. Maximum volume is 4, followed by the OFF indicator.

**VER:** Press the **D-7** direct function button to switch between USA to 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.

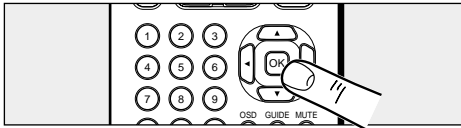


**q** D5 : LAMP  
**w** D6 : BEEP  
**e** D7 : VER

### CAUTION

The name of direct button will be erased after change version.

- When you have completed your customized lighting (and/or version) settings, press the **OK** button within the cursor buttons to confirm the settings and return to the original operating mode.



Press OK.

### 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 four months, based upon 15 remote control operations per day (every day), and 5 lighting operations per day (everyday). Unfortunately, due to the infinite number of ways that people use their remote, there is no completely accurate way to predict battery life. However, lighting is one of the bigger users of power. 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 RC2000 Mk II'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. 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 RC2000 Mk II in your A/V system, you may wish to consider reducing the lighting time if possible, as this can help to extend the battery life.

## DIRECT COMMAND FUNCTIONS LISTING

Within the RC2000 Mk II LCD window, each of the 8 Direct Function buttons has a 4 character label 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 10 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 RC2000 Mk II for your own particular selection of A/V components.

### AMP

<b>1. MODE-1</b>	1 AC-3	selects Dolby Digital AC-3 decoding
	2 RF	select RF input
	3 OPT	select OPT input
	4 COAX	select COAX input
	5 P/L	Dolby Pro Logic decoding
	6 6-CH	selects 6 channel discrete mode
	7 2-CH	Stereo (no surround decoding)
	8 NITE	SWITCHES NIGHT ON/OFF
<b>2. MODE-2</b>	1 AC-3	selects Dolby Digital AC-3 decoding
	2 P/L	Dolby Pro Logic decoding
	3 3-ST	Dolby 3-STEREO decoding
	4 MOV	Movie surround sound
	5 THX	THX Cinema decoding
	6 MTRX	Matrix surround sound
	7 HALL	Hall surround sound
	8 2-CH	Stereo (no surround decoding)
<b>3. SETUP</b>	1 TEST	activates test tone
	2 DLAY	delay time increase
	3 R-EQ	SWITCHES CINEMA RE-EQ ON/OFF
	4 ATT	SWITCHES ATT ON/OFF
	5 CH+	channel level increase Volume
	6 LVL+	Dolby Digital volume increase
	7 LVL-	Dolby Digital volume decrease
	8 MLTI	activates multi-room mode

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**AMP**

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4. PROCESSOR 1	RF	select RF input
2	OPT	select OPT input
3	COAX	select COAX input
4	BYP	bypasses Dolby Digital decoding
5	VOL+	Dolby Digital volume increase
6	VOL-	Dolby Digital volume decrease
7	SLEP	activates SLEEP timer
8	6-CH	select 6 channel discrete mode

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**TUNER**

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1. BAND	1 FM	FM band
	2 AM	AM band
	3 LW	long wave band
	4 BAND	selects radio band
	5 MODE	mono/stereo/muting mode selector
	6 TIME	activates clock function
	7 F/P	frequency or preset channel display
	8 SCAN	programmed preset channel scan
2. REC	1 TP-1	commands for Tape 1 control (NO output)
	2 REC	record
	3 PAUS	pause
	4 STOP	stop
	5 TP-2	commands for Tape 2 control (NO output)
	6 REC	record
	7 PAUS	pause
	8 STOP	stop
3. RDS	1 STM	selects STATION MODE
*for REST only	2 AF	selects AF function
	3 PTY	selects PTY function
	4 DISP	selects DISPLAY function
	5	
	6	
	7	
	8 DWR	selects WAVE RANGE of DSR

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**CD**

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1. MODE	1 CD+	CD changer next disc
	2 CD-	CD changer previous disc
	3 FTS	favorite track selection
	4 RNDM	random (shuffle)
	5 TRAY	tray open/close
	6 TIME	time display elapsed/remain/total
	7 REPT	repeat
	8 AMS	automatic music scan
2. CHANGER 1	1 CD 1	Disc 1
	2 CD 2	Disc 2
	3 CD 3	Disc 3
	4 CD 4	Disc 4
	5 CD 5	Disc 5
	6 EDIT	tape edit function
	7 RCL	recall track programming
	8 CNCL	cancel track programming
3. CHANGER 2	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 Tape 1 control (NO output)
	2 REC	record
	3 PAUS	pause
	4 STOP	stop
	5 MD	commands MD control (NO output)
	6 REC	record
	7 PAUS	pause
	8 STOP	stop

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**TAPE**

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1. MODE	1 TP-A	selects tape deck A
	2 TP-B	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

---

**TV**

---

1. <b>MODE</b>	1 CH+	next channel (up)
	2 CH-	previous channel (down)
	3 CH-C	channel call
	4 VID	external (aux) video input
	5 VOL+	TV volume increase
	6 VOL-	TV volume decrease
	7 MUTE	mute sound on/off
	8 OSD	on screen display on/off
2. <b>MENU/CBL</b>	1 MENU	activate menu
	2 SLP	activate sleep timer
	3 CBL+	cable tuning next channel
	4 CBL-	cable tuning previous channel
	5 ADV	advance to next menu page
	6 STAT	Show current status
	7 M-UP	Menu up (next)
	8 M-DN	Menu down (previous)
3. <b>REC</b>	1 VCR 1	commands for VCR 1 control (NO output)
	2 REC	record
	3 PAUS	pause
	4 STOP	stop
	5 VCR 2	commands for VCR 2 control (NO output)
	6 REC	record
	7 PAUS	pause
	8 STOP	stop
4. <b>TV TXT</b> *for REST only	1 T/PG	switches TIME Display
	2 HOLD	Activates PAGE HOLD.
	3 ENLG	Selects LARGE of TEXT page
	4 RVL	Selects display of TEXT page
	5 CNCL	Activates CANCEL PICTURE
	6 PG+	Increase page
	7 PG-	Decrease page
	8 ENT	Enter the TEXT PAGE

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**LD LD/VCR:for REST**

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1. <b>MODE</b>	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	select CHAPTER or FLAME
	8 EDIT	activate tape edit function

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**LD LD/VCR:for REST**

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2. <b>LD</b>	1 MSP+	CAV multi-speed increase
	2 MSP-	CAV multi-speed decrease
	3 FRM+	frame advance
	4 FRM-	frame reverse
	5 MS-F	CAV multi-speed forward direction
	6 MS-R	CAV multi-speed reverse direction
	7 AUD	stereo, left only, right only channel
	8 D/CX	digital audio, analog audio, CX NR
3. <b>REC</b>	1 VCR 1	commands for VCR 1 control (NO output)
	2 REC	record
	3 PAUS	pause
	4 STOP	stop
	5 VCR 2	commands for VCR 2 control (NO output)
	6 REC	record
	7 PAUS	pause
	8 STOP	stop
4. <b>VCD</b> *for REST only	1 PBC	Selects PLAY BACK CONTROL
	2 KARA	Switches KARAOKE
	3 IDX+	INDEX UP
	4 IDX-	INDEX DOWN
	5 SEL	PLAY or Select Audio
	6 RTN	STOP or Select RETURN
	7 NEXT	TRACK NEXT
	8 PREV	TRACK Previous

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**DVD**

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1. <b>MODE1</b>	1 ANGL	selects ANGLE
	2 TITL	selects TITLE MENU
	3 SUBT	selects SUB TITLE
	4 MENU	selects MAIN MENU
	5 TRAY	OPEN/CLOSE the TRAY
	6 SUND	select LANGUAGES
	7 SET	SETTING MENU
	8 RTN	RETURN to MENU
2. <b>MODE2</b>	1 SLOW	Slow forward
	2 LPLY	LAST PLAY
	3 RNDM	SHUFFLE PLAY
	4 RPT	REPEAT MEDES
	5 A/B	REPEAT A to B
	6 +10	DIGIT ENTRY +10
	7 T/C	TITLE and CHAPTER
	8 ZOOM	ZOOM MODE ON/OFF

---

**DVD**

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3. KARAOKE	1 ONOF	KARAOKE ON/OFF
	2 ONCE	ONCE PLAY AGIN
	3 MELO	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	commands for VCR1 control (NO output)
	2 REC	record
	3 PAUS	pause
	4 STOP	stop
	5 MD	commands for MD control(NO output)
	6 REC	record
	7 PAUS	pause
	8 STOP	stop

---

**VCR**

---

1. MODE	1 CH+	next channel (up)
	2 CH-	previous channel (down)
	3 SLCT	select TV or VCR
	4 AUD	audio track selector
	5 OTR	one touch recording
	6 REC	record
	7 PAUS	pause
	8 STOP	stop
2. PLAY MODE	1 2X.PL	twice normal playback speed
	2 SLOW	slower than normal playback speed
	3 STILL	still frame
	4	
	5 SKIP	skip to next program marker
	6 VIS+	VHS index search next
	7 VIS-	VHS index search previous
	8	
3. MENU	1 MENU	activate menu
	2 STAT	show current status
	3 CLR	clear programming
	4 GOTO	go to next item
	5 PLUS	video PLUS
	6	
	7	
	8	

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**DSS**

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1. DSS	1 DISP	brings up on screen channel marker
	2 PREV	goes to previously selected channel
	3 CH+	next channel
	4 CH-	previous channel
	5 FAV	favorite users and channel lists
	6 ALT	alternate audio channel, languages
	7 FTCH	brings up on screen channel logos
	8 ANT	selects broadcast or cable antenna
2. MODE	1 CH+	next channel (up)
	2 CH-	previous channel (down)
	3 SLCT	select TV or VCR
	4 AUD	audio track selector
	5 OTR	one touch recording
	6 REC	record
	7 PAUS	pause
	8 STOP	stop
3. PLAY MODE	1 2XPL	twice normal playback speed
	2 SLOW	slower than normal playback speed
	3 STILL	still frame
	4	
	5 SKIP	skip to next program marker
	6 VIS+	VHS index search next
	7 VIS-	VHS index search previous
	8	
4. MENU	1 MENU	activate menu
	2 STAT	show current status
	3 CLR	clear programming
	4 GOTO	go to next item
	5	
	6	
	7	
	8	

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**MD**

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1. MODE1	1 MD-A	Selects MD A
	2 MD-B	Selects MD B
	3 RPT	Repeat start scan
	4 DISP	brings up on screen channel marker
	5 EJCT	Tape EJECT
	6 AMS	automatic music scan
	7 RNDM	random (shuffle)
	8 LP	Selects SP/LP mode

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**MD**

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2. EDIT	1 EDIT	activate tape edit function
	2 CHAR	Selects CHARACTER mode
	3 DEL	Selects DELETE
	4 ENT	Selects ENTER
	5 AMRK	Selects Auto Marker
	6 SYNC	SYNCRO REC
	7 PROG	Selects Program mode
	8	
3. REC	1 MD	commands for MD control (NO output)
	2 RECP	record
	3 PAUS	pause
	4 STOP	stop
	5 TAPE	commands for Tape control (NO output)
	6 REC	record
	7 PAUS	pause
	8 STOP	stop

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**AUX**

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1. REC	1 VCR 1	commands for VCR 1 control (NO output)
	2 REC	record
	3 PAUS	pause
	4 STOP	stop
	5 VCR 2	commands for VCR 2 control (NO output)
	6 REC	record
	7 PAUS	pause
	8 STOP	stop
2. VCD/PHI1	1 CD+	CD changer next disc
	2 CD-	CD changer previous disc
	3 OSD	on screen display on/off
	4 SCAN	programmed preset channel scan
	5 A/B	Repeat A to B
	6 SLOW	slower than normal playback speed
	7	
	8	
3. VCD/PHI2	1 PBC	Selects Play Back Control
	2 KARA	Selects KARAOKE Program
	3 IND+	Selects Video INDEX up
	4 IND-	Selects Video INDEX down
	5 SEL	Select in PBC
	6 RTN	Selects in PBC
	7 NEXT	goes to NEXT channel
	8 PREV	goes to previously selected channel

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**AUX**

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4. VCD/PHI3	1 CD+	CD changer next disc
	2 SHUT	Selects SHUTTER function
	3 OVEW	Selects digest function
	4 RESM	Selects Last play function
	5 CHAN	Selects channel
	6 FADR	Selects MPX/Vocal fader
	7	
	8	

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Model  
**RC2000MkII**  
User Guide

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Learning  
Remote Control

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