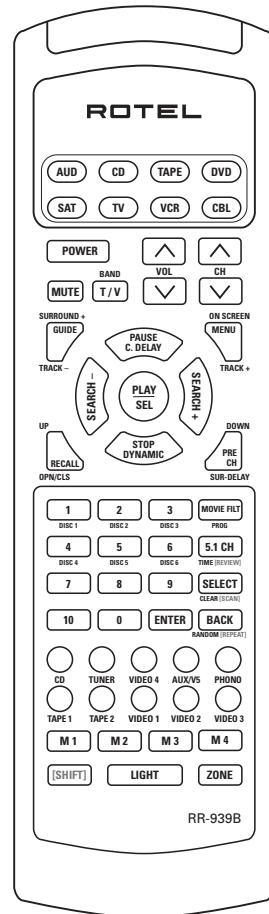
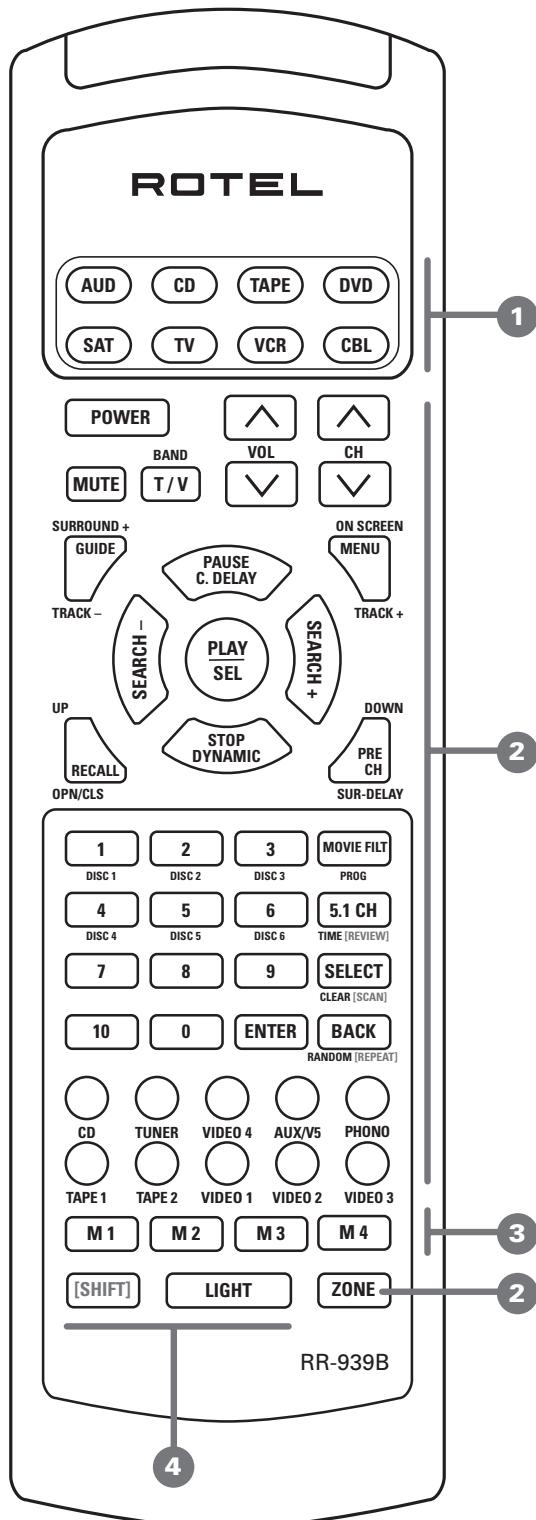


RR-939B

REMOTE CONTROL
TÉLÉCOMMANDE
FERNBEDIENUNG
MANDO A DISTANCIA
COMANDO A DISTANZA
AFSTANDSBEDIENING
FJERNBETJENING



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Introduction

Thank you for purchasing the RR-939B Universal Remote Control. It is designed to operate all current Rotel products as well as a wide range of popular audio and video components from other manufacturers. You will find that the RR-939B Remote Control is a significant improvement over conventional remotes in overall convenience and ease of operation.

Please take a few moments to read this user guide. You'll find the time well spent as it will significantly shorten your search for remote control sanity.

Some Preliminary Precautions

- The RR-939B is surprisingly rugged but it is not indestructible. So please don't drop it — particularly not on a concrete floor! With normal care, the RR-939B's low maintenance design will let you enjoy its convenience for years to come.
- When the RR-939B needs a bit of cleaning, use a soft, lint-free damp cloth.
- Above all, don't try to take the RR-939B apart. There isn't anything inside you can fix anyway and disassembly will void the warranty.

Battery Installation

Remove the RR-939B and the package of 4 AAA batteries from the packing material. Turn the RR-939B over and lift the cover off the battery compartment by compressing the release tab and lifting up.

Place the four AAA batteries inside (follow the polarity drawing on the bottom of the compartment) and replace the cover. **MAKE SURE** you install the batteries correctly!

Using the RR-939B

The RR-939B can replace up to eight different remote controls. Stored in memory are control codes to operate your specific audio/video components, selected from hundreds of models in the RR-939B's extensive database. Programming the RR-939B to operate your components takes just minutes and need only be done once. See the **PROGRAMMING** section of this manual for easy to follow instructions.

Once the programming is complete, you select a component with the press of a button and turn the RR-939B into the remote control for your Rotel CD player or your Sony TV set or your Panasonic video recorder. Then, you simply press command buttons that duplicate the functions on the remote that came with your component.

To get started, look at the layout of the RR-939B and the following operating instructions:

Device Buttons ①

Eight buttons at the top of the RR-939B determine which set of commands is currently active. For example, if you press the AUDIO button (labeled AUD), the RR-939B becomes the remote control for your Rotel Surround Sound Processor. If you press the TV button, the RR-939B becomes the remote control for your TV set.

These buttons are also used in programming the RR-939B. See PROGRAMMING section below for details.

Command Buttons ②

This large group of buttons duplicates the functions on the remote controls for your audio/video components. A general description of these functions follows. Detailed information on the specific function of each button can be found in the CONTROL COMMANDS tables.

At the top of this group of buttons are basic controls such as Power, Volume, Channel Selection, etc.

Below these is a group of buttons that duplicate the transport functions on a tape recorder or VCR (Stop, Play, Pause, etc.) as well as the Up and Down commands that might be found on a cable or satellite TV receiver.

The next group of buttons duplicates the numeric keypad buttons such as might be used for direct track selection on a CD Player or direct channel selection on a TV set. Included in this section are special command buttons providing functions found on various components.

At the bottom of this group of buttons are ten round source selection buttons labelled CD, TUNER, TAPE, etc. These duplicate the source input selection buttons on a receiver, preamplifier, or surround sound processor. The function of these buttons is not the same as the DEVICE buttons at the top of the remote control. The DEVICE buttons determine which command set is active on the RR-939B. The source select COMMAND buttons switch inputs on the audio/video component being controlled.

To operate the RR-939B:

Step One: Press a DEVICE button to activate the commands for the desired component. This command set will remain active until you press a different DEVICE button.

Step Two: Press COMMAND buttons to operate the component you have selected.

Remember that the COMMAND buttons duplicate many controls on many different types of audio/video components and their function may vary depending on the type of component selected. For example, the PLAY/SELECT button engages the play mode on a CD Player, but it duplicates the SELECT function on a cable TV converter.

Note: The RR-939B tells you which command set is active. Each time you press a COMMAND button, the active DEVICE key blinks red to tell you which component you are controlling. If the COMMAND button that you press has no function in the active command set (for example, the numeric keys in VCR mode), no DEVICE button will blink, indicating that the COMMAND button is inactive.

The COMMAND buttons are labelled, often with multiple labels if the button serves different purposes for different kinds of components. As long as you remember that pressing a DEVICE button turns the RR-939B into, for example, a CD player remote control or a VCR remote control, the functions of each button should be intuitive. Tables listing the function of each button for each type of component are supplied with this manual.

A few buttons have a second function, activated by pressing and releasing the SHIFT button before pressing the COMMAND button, as described below.

Macro Buttons ③

A macro is a series of individual commands triggered by pressing one button. Macros make operating a complex home entertainment system much easier. For example, think of playing a videotape: You turn on the TV, turn on the VCR, select the TV input connected to the VCR, and, finally, put the VCR into Play mode. That's four separate commands — and it may take you as many as six pushes on various buttons to execute them. A macro makes this simpler by executing all the needed commands with just one push of a button.

There are five MACRO buttons on the RR-939B – the four buttons labeled M1, M2, M3, and M4, along with the POWER button. A sequence of up to eight different commands can be memorized to be replayed automatically with the press of a MACRO button. See the section, PROGRAMMING MACROS, for more detailed information.

Note: Macro buttons are available only in the AUD, SAT, and CBL modes. However, you can include switching to a different DEVICE mode as part of a macro, in order to operate other components.

To replay a MACRO, first activate one of the DEVICE modes (AUD, SAT, and CBL only). Then, press the desired MACRO button. If a macro has been programmed for that button, the RR-939B will replay the memorized sequence of commands and the DEVICE button will blink red for each command. If no macro has been programmed, or if macros are not available in that DEVICE mode, nothing will happen and no DEVICE buttons will blink.

Special Buttons ④

There are two special function buttons at the bottom of the RR-939B remote.

The LIGHT button turns on backlighting so you can see the buttons in a dark room. The lights stay on for 7 seconds and will stay on for an additional 7 seconds each time another button is pressed.

The SHIFT button activates additional commands for some buttons. These functions are shown in italics on the illustrations and in the command tables. To activate one of these commands, press and release the SHIFT button and then press the desired COMMAND button.

Programming

The RR-939B can replace up to eight different remote controls, one for each of the eight DEVICE buttons. Before you use it, you must program the RR-939B, i.e. tell it which audio/video components you wish it to control.

The RR-939B contains hundreds of command sets for various A/V components. Programming the remote involves selecting the command sets that correspond to the components in your system, and assigning them to the eight DEVICE buttons by entering a three digit code. This need only be done once during initial set-up of the RR-939B.

The easiest way to proceed is to find your components and corresponding three-digit codes from the list of codes supplied with this manual. If your component is not listed, there is an alternative auto-search method for finding the right command set.

Three Digit Code Programming

Find your audio/video component in the code list and note the 3-digit code(s):

Step One: Turn on the component you wish to memorize.

Step Two: Press the corresponding DEVICE button (for example, if you are memorizing the command set for a CD player, press the CD DEVICE button at the top of the RR-939B). While pressing the DEVICE button, simultaneously press the MUTE button and hold both for at least one second. The DEVICE key will light in red for 20 seconds, indicating that you have entered the program mode. The next step must be done within this 20 second period, or the RR-939B will revert to its standard operating mode.

Step Three: Point the RR-939B at the audio/video component and enter the 3-digit code, using the numeric buttons. The DEVICE key will flash each time you enter a digit. If you have entered the correct code, the component will turn off. If there is more than one 3-digit code for your brand of source component, continue entering additional 3-digit codes from the list until the component turns off, indicating that you have found the right one.

Step Four: Store the code number by pressing the corresponding DEVICE button again. The button will blink twice to confirm the storage of the code in memory.

Step Five: Test the COMMAND buttons, using the tables as a reference for the available functions. If the functions do not work correctly, repeat the above steps, with the next available 3-digit code from the list for your brand of component.

Repeat the steps above for each of up to eight components, assigning each one to the appropriate DEVICE key.

Auto-Search Programming

If the code table does not provide a 3-digit code or if none of the code numbers assigned to your brand of component work, use the following auto-search method to find a code number that will operate your components.

Step One: Turn on the component you wish to operate.

Step Two: Press the corresponding DEVICE button and the MUTE button, simultaneously for one second or more. The LED will light for 20 seconds.

Step Three: Press and hold the CH UP or CH DOWN button. This sends a succession of Power ON/OFF code signals that are stored in memory. Stop pressing the CH button as soon as the component turns off, signifying that you have found a code set that operates that component.

Step Four: Press the DEVICE button to store the code set you have found. The button will blink twice to confirm that you have stored the code.

Step Five: Test the remote control functions. If any do not work properly, repeat the preceding steps until you find the right code.

Displaying a Code Number

To find out which 3-digit code is currently stored on a DEVICE button:

Step One: Press the DEVICE button and the MUTE button simultaneously for one second or more. The DEVICE button will light red for 20 seconds.

Step Two: Press the RECALL button. The DEVICE button will blink a number of times, indicating the first digit in the code, followed by a one second interval with the light off, followed by a number of blinks indicating the second digit, followed by another interval, followed by blinks indicating the third digit. For example, one blink, three blinks, and eight blinks, with one second intervals in between, represents the 3-digit code number 138.

Note: The number ZERO in a 3-digit code is represented by 10 blinks.



Macro Programming

There are five MACRO buttons – the four labeled M1, M2, M3, and M4 plus the POWER button. When the RR-939B is in the AUDIO, SAT, or CABLE mode, the macro buttons can store and replay a sequence of up to 8 commands.

To memorize a macro sequence:

Step One: Press a DEVICE button (AUD, SAT, or CBL only) and the MUTE button simultaneously for at least one second. The DEVICE button will light red for 20 seconds.

Step Two: Press the MACRO button you wish to program.

Step Three: Press a sequence of commands (up to 8) that you wish to store. Pressing a DEVICE button to change modes during the sequence counts as one command.

Step Four: Press the CH UP button to store the macro sequence. The DEVICE button will blink twice to confirm.

Note: Because the POWER button can be used as a MACRO button, the normal Power On/Off commands are temporarily stored on the MUTE button during the macro learning sequence. To include a power on/off command in a macro, simply press the MUTE button.

To erase a previously stored macro sequence, follow the above steps, skipping Step 3 without entering any commands, i.e. memorize a blank macro.



Volume Punch Through

It may be desirable to have the AUDIO or TV volume commands available at all times. For example, when using the RR-939B to control your CD player, you might want the VOLUME buttons (which would normally be inactive in CD mode) to change the volume of your preamp or surround sound processor. This feature, called Volume Punch Through, can be used to make the volume commands from either the AUDIO or TV device mode available in other device modes.

To set-up the Volume Punch Through feature:

Step One: Press the DEVICE button (the device you wish to transfer the volume function **to**) and the MUTE button simultaneously for at least one second.

Step Two: Press the VOLUME UP button.

Step Three: Press the AUDIO or TV DEVICE button (the device you wish to transfer the volume function **from**). The DEVICE button will blink twice to confirm.



RR-939B

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ROTEL hifi

RR-939B

REMOTE CONTROL

TÉLÉCOMMANDE

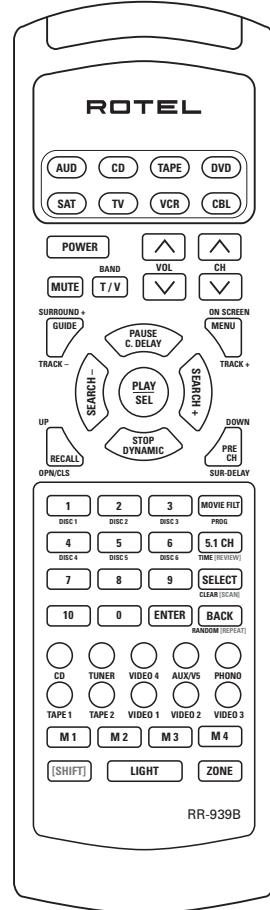
FERNBEDIENUNG

MANDO A DISTANCIA

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AFSTANDSBEDIENING

FJERNBETJENING



Codes and Commands

Codes de Commande

Gerätetasten und Codenummern

Códigos y Ordenes

Comandi di controllo

Code Lijst en Functie Commandos

Kodeliste og Kontroll Kommandoer

AUDIO

AUDIO		McIntosh		026	
Rotel RSP966	001 002	Mission	020 023		
Rotel RSP975	001 002	NAD	027 028	029	
Rotel RX975	001	Nakamichi	030 032	033	
Rotel RSX965	001	Onkyo	034 035	036 037	
Rotel RSX965RDS	001	Pioneer	039 040	041 042	
Rotel RTC965	001	Proceed	043 044	045	
Rotel RSP976	001 002	Sony	046		
Rotel RT955	001		046 047	048 049	
Rotel RA985	001 002		050 051	052 053	
Rotel RC995	001 002		054 055		
Rotel RC972	001 002	Yamaha	056 057	058	
Rotel RSP985	001 002	DVD			
Rotel RSP980	001 002	Rotel	012		
Rotel RTC970	002	Denon	001		
Rotel RT940	002	JVC	012		
Rotel RTC940	003	LG	010		
Rotel RTC950	003	Magnavox	013		
Rotel RX950	003	Mitsubishi	002		
Rotel RMZ955	004				

CD

	Pioneer	004
	Proscan	005 006
Rotel RCD930	RCA	005 006
Rotel RCD951	Samsung	011 015
Rotel RCD971	Sony	007
Rotel RCD991	Toshiba	008
Rotel RCD950	Yamaha	009

DVD

Rotel	012
Denon	001
JVC	012
LG	010
Magnavox	013
Mitsubishi	002

1 DP

Daewoo	024
Denon	030
Goldstar	027
Kenwood	025
Magnavox	026
Optimus	032
Panasonic	021
Philips	026
Pioneer	020 034
RCA	031
Realistic	032
Samsung	023 029
Sharp	025 028
Sony	022
Technics	021
Toshiba	025
Yamaha	033

TAPE

TAPE		NAD	015 025
		NEC	001 019 024 056
Rotel RD960	001		130 134
Rotel RMZ955	003	Nikei	043
Denon	011 012	Onking	043
Pioneer	004 007 008	Onwa	043
Pioneer (LD)	002	Optonica	019 081
Yamaha	005 006 009	Panasonic	034 056 080 164

TV

Deutsch

Daytron	004 143	Sanyo	007 057 082
Dynasty	043	Scott	004 028 043 048
Electrohome	024 143		143
Emerson	001 004 005 028 043 048 076 096 143 155	Sears	004 007 015 028 030 057 082 094 143 160
Fisher	007 057	Sharp	004 014 019 022
Funai	028 043		028 143 175
Futuretech	043	Signature	072
GE	004 034 056 073 130 144 155 160 161	Sony	070 126
		Soundesign	003 004 028 043
Goldstar	004 106 127 143	SSS	004 043
Grundig	004 007 010 011 012 023 075 143 158 163 203 204 205 207 209	Sylvania	001 003 059 060 063 127 160 164
		Symphonics	052
		Tandy	081

Hallma

Infinity	164	Technics	034 080
JBL	164	Techwood	004
JCP	001	Teknika	003 004 024 028
JCPenny	004 024 030 065 101 143 160	Telerent	043 072 101 143
JVC	034 038 070	Thomson	072
Kenwood	001 070	TMK	194 195 196 197
Kloss	059	Toshiba	198 199 200 201
KTV	043 143	Television	004
Lodgenet	072	Vidikron	015 030 101
Logik	072	Vidtech	143
Luxman	004	Wards	004
LXI	007 015 052 081 160 164	Yamaha	019 028 060
Magnavox	001 003 004 022 059 060 063 127 164	York	063 072 164
Marantz	001 164	Yupiteru	004
Mitsubishi	004 024 109	Zenith	004
MTC	001 004 101		043

VGR

Aiwa	034 043		054 101
Ampro	072	Ricoh	058
Anam	031	Runco	072
Audio Dynamics	012 023 043	Salora	014
Broksonic	035 037	Samsung	017 040 107 109
Canon	031	Sansui	043 048
Craig	001 040	Sanyo	001 010 014 040
Curtis Mathes	031 041	Scott	017 037 131
Daewoo	005 010 017 111 117	Sears	001 004 008 009 010 014 017 081
DBX	012 023 043		101
Dynatech	034 053	Sharp	031 054
Electrohome	059	Sony	001 009 031 052
Emerson	006 017 029 031 034 035 037 101 131 153	Soundesign	034
Fisher	001 008 009 010	STS	004
Funai	034	Sylvania	031 034 059 067
GE	031 072 107 109 144 147	Symphonic	034
Go Video	132	Tandy	010 034
Goldstar	004 012 101	Tatung	043
Grundig	160 162 163 164 165 166	Teac	034 043
Harman Kardon	012	Technics	031 070
Hitachi	018 026 034 043 150	Teknika	031 034 101
Instant Replay	031	Thomas	034
JCL	031	Thomson	177 178
JCPenny	004 012 040 101	TMK	006
Jensen	043	Toshiba	004 008 017 059
JVC	012 031 043 048 055 060 130 150 152	Totevision	040 101
Kenwood	014 034 048	Unitech	040
Lloyd	034	Vector Research	012
LXI	001 004 009 017 034	Victor	048
Magin	040	Video Concepts	012 034
Magnavox	031 034 041 067	Videosonic	040
Marantz	012 031 067 069	Wards	001 004 017 031 034 040 053 054
Marta	101		131
Matsui	030		
MEI	031		
Memorex	001 010 014 031 034 040 053 072 101	Yamaha	012 034 043
MGA	059	Zenith	034 048 056 058
Minolta	004		072 080 101
Mitsubishi	004 059 061		
MTC	034 040		
Multitech	034		
NEC	012 023 043 048		
Nordmende	043		
Optonica	053 054		
Panasonic	070		
Pentax	004 031		
Philco	031 034 067		
Philips	031 034 054 067 101 162 166 167 168 169 170		
Pilot	101		
Pioneer	004 021 048		
Pulsar	072		
Quartz	014		
RCA	004 034 040 041 107 109 144 147		
			SAT
			CABLE
		Americast	005
		Jerrold	006 007
		Pioneer	001 002 003
		Scientific-Atlanta	004
		Tocom	010
		Zenith	008 009

Rotel Control Commands

Codes de Commande

Gerätetasten und Codenummern für Rotel-Geräte

Ordenes de Control

Comandi di controllo Rota

Betal Function Commandos

Botel kontrollkommandoer

Note: [SHIFT] button functions shown in *italics*

Remarque: les fonctions de la touche [SHIFT] sont données en italique.

Hinweis: Die mit der [SHIFT]-Taste zu aktivierenden Funktionen sind kursiv gedruckt.

Nota: Las teclas de función [SHIFT] se indican en cursiva.

Nota: Le funzioni del tasto [SHIFT] sono evidenziate in corsivo.

Attentie: (SHIFT) knop functies worden in italic getoond.

NB: Funksjonene under SHIFT-knappen er anvist i kursiv.

ROTEL

RTC975/RSP975

RSX965/RTC965	RSP985	RTC940/950
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RA985/RT955	RSP980
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RC995/972/RSP976	RT940/RTC970
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AUDIO 001	AUDIO 002	AUDIO 003
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POWER	Power	Power [Pow]	Power
VOL+	Volume +	Volume +	Volume +
VOL-	Volume -	Volume -	Volume -
MUTE	Mute [Preset]	Mute	Mute
PLAY	Enter	Enter	
STOP	Dynamic	Stop	
SEARCH -	-	-	
SEARCH +	+	+	
PAUSE	C. Delay	Pause	
RECALL	Recall	Up	
GUIDE	Surround +	Surround +	
MENU	On Screen	Menu	
PRE CH	Sur. Delay	Down	
T/V	Band [T/Pre]	Band	Band
CH +	Tuning +	Tuning +	Tuning +
CH -	Tuning -	Tuning -	Tuning -
0	0	0	
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	
10		10	Plus 8
ENTER	Out. Balance	Enter	
MOVIE FILT	Movie Filter	Movie Filter	
5.1 CH	5.1 Channel	5.1 Channel *	
SELECT	Input Select	Center Focus	
BACK	Bal. Check	Back	
TUNER	Tuner	Tuner	Tuner
CD	CD	CD	CD
TAPE 1	Tape 1	Tape Monitor	Tape 1
TAPE 2	Tape 2	Tape 2	Tape 2
PHONO	Phono/LD	Phono/LD	
VIDEO 1	Video 1	Video 1	
VIDEO 2	Video 2	Video 2	
VIDEO 3	Video 3	Video 3	
VIDEO 4	Aux 1	Aux 1	Aux 1
AUX/V5	Aux 2	Aux 2	
[SHIFT]	Off	Off	
ZONE	Zone/Rec	Zone/Rec	

RR-939B

RMZ955	RCD991/971	RCD975/970/965
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RCD950/951/930	RCD955/945
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RCC945/955

AUDIO 004	CD 001	CD 002
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POWER	Standby		
VOL+	Volume +		
VOL-	Volume -		
MUTE	Mute		
PLAY	Play	Play	Play
STOP	Stop	Stop	Stop
SEARCH -	Rewind	Search -	Search -
SEARCH +	Fast Forward	Search +	Search +
PAUSE		Pause	Pause
RECALL		Open/Close	
GUIDE		Track -	Track -
MENU		Track +	Track +
PRE CH			
T/V	Fav. Station	A - B	A - B
CH +	Preset +		
CH -	Preset -		
0		10	0
1		1 [Disc 1]	1
2		2 [Disc 2]	2
3		3 [Disc 3]	3
4		4 [Disc 4]	4
5		5 [Disc 5]	5
6		6 [Disc 6]	6
7		7	7
8		8	8
9		9	9
10		Plus 10	
ENTER		Disc Select	Disc Select
MOVIE FILT		Program	Program
5.1 CH		Time [Review]	Time [Review]
SELECT	Select	Clear [Scan]	Clear [Scan]
BACK	Back	Random [Rep]	Random [Rep]
TUNER	Tuner		
CD	CD		
TAPE 1	Tape/SAT		
TAPE 2			
PHONO			
VIDEO 1	Video/CD		
VIDEO 2	X		
VIDEO 3			
VIDEO 4			
AUX/V5			
[SHIFT]			

* RTC970 requires [Shift] function for 5.1 CH input

* On droit utiliser la fonction [SHIFT] pour commander l'entrée du canal 5.1 CH de l'appareil RTC970

* El RTC-970 requiere la función [Shift] para la entrada de 5.1 canales

* Beim RTC-970 muß für den 5.1-Eingang die [SHIFT]-Taste gedrückt werden

* L'RTC-970 richiede la funzione [SHIFT] per l'ingresso del canale 5.1

* RTC970 heeft een (SHIFT) functie voor de 5.1 ingang nodig

* RTC-970 krever SHIFT-funksjon for 5.1 inngang



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