

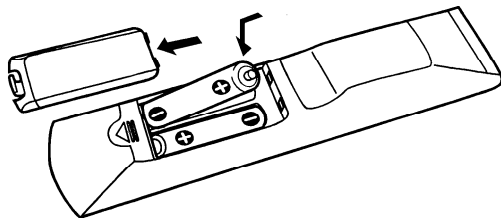
Operations Using the Remote RM-PP412

You can use the remote RM-PP412 to operate the components in your system.

Before you use your remote

Inserting batteries into the remote

Insert R6 (size-AA) batteries with the + and – properly oriented in the battery compartment. When using the remote, point it at the remote sensor  on the receiver.



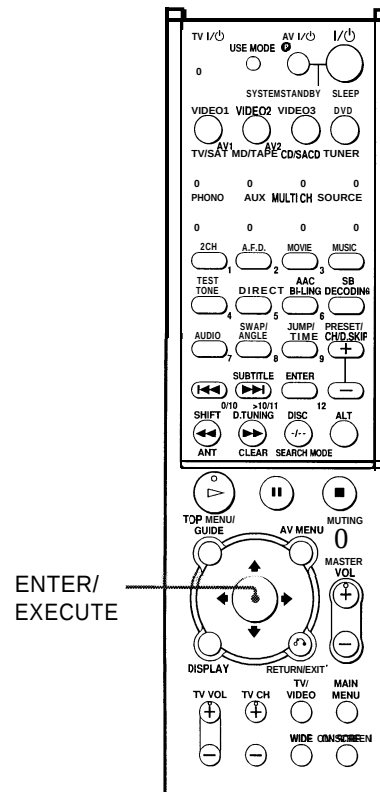
Tip

Under normal conditions, the batteries should last for about 6 months. When the remote no longer operates the receiver, replace all batteries with new ones.

Notes

- Do not leave the remote in an extremely hot or humid place.
- Do not use a new battery with an old one.
- Do not expose the remote sensor to direct sunlight or lighting apparatuses. Doing so may cause a malfunction.
- If you don't use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

Remote button description



The tables below show the settings of each button.

Remote Button	Operations	Function
I/⏻	Receiver	Turns the receiver on or off.
SLEEP	Receiver	Activates the sleep function and the duration which the receiver turns off automatically.
VIDEO 1	Receiver	To watch VCR. (VTR mode 3)
VIDEO2	Receiver	To watch VCR. (VTR mode 1)

Remote Button	Operations	Function
VIDEO3	Receiver	To watch VCR (VTR mode 2)
DVD	Receiver	To watch DVD.
TV/SAT	Receiver	To watch TV programs or satellite receiver.
MD/TAPE	Receiver	To listen to Minidisc or audio tape.
CD/SACD	Receiver	To listen to compact disc.
TUNER	Receiver	To listen to radio programs.
PHONO	Receiver	To listen to turntable.
AUX	Receiver	To listen to an audio equipment.
MULTI CH	Receiver	Selects MULTI CH IN source.
2CH	Receiver	Selects 2CH mode.
A.F.D.	Receiver	Selects A.F.D. AUTO, DOLBY PL, PLII MOV and PLII MUS.
MOVIE	Receiver	Selects C.ST.EX A, C.ST.EX B and C.ST.EX C.
MUSIC	Receiver	Selects HALL, JAZZ and CONCERT.
TEST TONE	Receiver	Press to output test tone.
DIRECT	Receiver	Selects 2CH ANALOG DIRECT
AAC BI-LING	Receiver	Selects Dual Mono or Bilingual sound of Dolby Digital, DTS or AAC, etc.
SB DECODING	Receiver	Press to select the surround back decoding modes.
SHIFT	Receiver	Press repeatedly to select a memory page for presetting radio stations or tuning to preset stations.
D.TUNING	Receiver	Tuner station direct key-in-mode.
MUTING	Receiver	Mutes the sound from the receiver.

Remote Button	Operations	Function
↑/↓	Receiver	Select a menu item.
↔	Receiver	Makes adjustment or change the setting.
MASTER VOL +/-	Receiver	Adjusts the master volume of the receiver.
MAIN MENU	Receiver	Press this button repeatedly to select one of the four cursor modes: SET UP, LEVEL, TONE and NAME.
ON SCREEN	Receiver	To display the menus of the receiver on the TV screen.
AV I/⏻	TV/VCR/ CD player/ VCD player/ LD player/ DVD player/ MD deck/ DAT deck	Turns the audio and video components on or off.
SYSTEM STANDBY (Press AV I/⏻ and I/⏻ at the same time)	Receiver/ TV/VCR/ Satellite tuner/ CD player/ VCD player/ LD player/ DVD player/ MD deck/ DAT deck	Turns off the receiver and other Sony audio/ video components.
1-9 and 0/10	Receiver	Use with "SHIFT" button to preset radio station or tuning to preset stations and with "D.TUNING" for direct tuning.
	CD player/ VCD player/ LD player/ MD deck/ DAT deck	Select track numbers. 0/10 selects track 10.
	TV/VCR/ Satellite tuner	Select channel numbers.
>10/11	CD player/ VCD player/ LD player/ MD deck/ Tape deck	Select track numbers over 10.

continued

Remote Button Description (continued)

Remote Button	Operations	Function
AUDIO	TV/ VCR/ DVD player	Changes the sound to Multiplex, Bilingual or Multi channel TV Sound.
SWAP*/ ANGLE	TV	Swaps the small and large picture.
	DVD player	To select viewing angle or changes the angles.
JUMP/ TIME	TV	Toggles between the previous and the current channels.
	CD player/ VCD player/ DVD player	Shows the time or displays the playing time of disc, etc.
PRESET/ CH/ D.SKIP +/-	Receiver	Scans and selects preset stations.
	TV/VCR/ Satellite tuner	Selects preset channels.
	CD player/ VCD player/ DVD player/ MD deck	Skips discs (multi-disc changer only).
ENTER	TV/VCR/ Satellite tuner/ LD player/ MD deck/ DAT deck/ Tape deck	After selecting a channel, disc or track using the numeric buttons, press to enter the value.
DISC	CD player/ VCD player	Selects a disc directly (multi-disc changer only).
ANT	VCR	Selects output signal from aerial terminal: TV signal or VCR program.

* Only for Sony TVs with the picture-in-picture function.

Remote Button	Operations	Function
⏮/⏭	VCR/ CD player/ VCD player/ DVD player/ LD player/ MD deck/ DAT deck/ Tape deck	Skips tracks.
⏮/⏭	CD player/ VCD player/ DVD player/ LD player/ MD deck	Searches tracks (forward or backward).
	VCR/ DAT deck/ Tape deck	Fastforwards or rewinds.
▶	VCR/ CD player/ VCD player/ LD player/ DVD player/ MD deck/ DAT deck/ Tape deck	Starts play.
⏸	VCR/ CD player/ VCD player/ LD player/ DVD player/ MD deck/ DAT deck/ Tape deck	Pauses play or record. (Also starts recording with components in record standby.)
■	VCR/ CD player/ VCD player/ LD player/ DVD player/ MD deck/ DAT deck/ Tape deck	Stops play.
DISPLAY	TV/VCR/ VCD player/ LD player/ DVD player	Selects information displayed on the TV screen.
RETURN/ EXIT	VCD player/ LD player/ DVD player	Returns to the previous menu.
	Satellite tuner	Exits the menu.
SUBTITLE	DVD player	Changes the subtitles.

Remote Button	Operations	Function
CLEAR	DVD player	Press if you made a mistake when you press the number button or press to return to the continuous play etc.
SEARCH MODE	DVD player	Select searching mode. Press to select the unit for search (track, index, etc.)
TOP MENU/ GUIDE	DVD player	Displays DVD title.
	Satellite tuner	Displays guide menu.
AV MENU	VCR/ Satellite tuner/ DVD player	Displays menu.
	VCD player/ LD player/ DVD player	Returns to the previous menu or exits the menu.
	VCR/ Satellite tuner/ DVD player	Selects a menu item.
ENTER/ EXECUTE	VCR/ Satellite tuner/ DVD player	Press to enter the selection.
TV I/⏻	TV	Turns the TV on or off.
-/-	TV	Selects the channel entry mode, either one or two digit.
TV VOL +/-	TV	Adjust the volume of the TV.
TV CH +/-	TV	Select preset TV channels.
TV/ VIDEO	TV	Selects input signal: TV input or video input.
WIDE	TV	Selects the wide picture mode.
USE MODE	Remote	To set up the remote.
AV1 and AV2	Remote	Select the command mode of the remote.
SOURCE	Remote	Selects 2ND AV output.
ALT	Remote	Change remote key function to activate those buttons with orange printing.

Notes

- Some functions explained in this section may not work depending on the model of the receiver.
- The above explanation is intended to serve as an example only. Therefore, depending on the component the above operation may not be possible or may operate differently than described.
- To activate the buttons with orange printing, press ALT first before pressing the buttons.
- Press MAIN MENU on the remote before you use the +/-/+I) buttons for receiver operation.
- Press TOP MENU/GUIDE or AV MENU on the remote before you use the remote to control the satellite tuner, VCR and DVD player.
- The VIDE03, TV/SAT, PHONO, AUX, SOURCE, DIRECT, AAC BI-LING, SB DECODING, 12 and ON SCREEN functions are not available for set operation.

Selecting the command mode of the remote

Set the remote command mode using the USE MODE button and the remote command mode buttons.

Selecting the command mode

You can switch the command mode (AV1 or AV2) of the remote. If the command mode of the receiver and the remote is different, you cannot use the remote to operate the receiver.

Press AV1 or AV2 while pressing down USE MODE.

The indicator lights once (twice for AV2), then the command mode switches.

To check the command mode of the remote

Press USE MODE. You can check the remote by the indicator.

Mode	Indicator lights
AV1	once
AV2	twice

To reset the remote to factory settings

Press I/⏻, AV I/⏻, and MASTER VOL – at the same time.

The indicator lights 3 times, then goes off.

Programming the remote

You can program the remote to control non-Sony components by changing the code. Once the control signals have been memorized, you can use those components as part of your system.

Furthermore, you can also program the remote for Sony components that the remote is unable to control. Note that the remote can only control components that accept infrared wireless control signals.

1 Press AV I/⏻ while pressing down USE MODE.

The indicator lights.

2 Press the input selector button (including TV I/⏻) for the component you want to control.

For example, if you are going to control a CD player, press CD/SACD.

3 Press the numeric buttons to enter the numeric code (or one of the codes if more than one code exists) corresponding to the component and the maker of the component you want to control.

See the tables on pages 41-42 for information on the numeric code(s) corresponding to the component and the maker of the component (the first digit and the last two digits of the numeric code correspond to the category and the maker's code respectively.)

4 Press ENTER.

Once the numeric code has been verified, the indicator slowly flashes twice and the remote automatically exits the programming mode.

5 Repeat steps 1 to 4 to control other components.

To cancel programming

Press USE MODE during any step. The remote automatically exits the programming mode.

To activate the input source after programming

Press the programmed button to activate the input source you want.

If programming is unsuccessful, check the following:

- If the indicator does not light up in step 1, the batteries are weak. Replace both batteries.
- If the indicator flashes 4 times in quick succession while entering the numeric code, an error has occurred. Start again from step 1.

Notes

- The indicator turns off while a valid button is pressed.
- In step 2, if several input selector buttons are pressed, only the last pressed button is valid.
- In step 2, if you press TV I/⏻, only TV VOL +/-, TV CH +/-, TV/VIDEO and WIDE buttons are reprogrammed.
- In step 3, if an input selector button is pressed, the new input source is selected and the programming procedure returns to the beginning of step 3.
- For the numeric codes, only the first three numbers entered are valid.

To clear the memory of the remote

To clear all programmed and learned signals, do the following to reset the remote to factory settings.

Press I/⏻, AV I/⏻ and MASTER VOL – at the same time.

The indicator flashes 3 times, then goes off.

The numeric codes corresponding to the component and the maker of the component

Use the numeric codes in the tables below to control non-Sony components and also Sony components that the remote is normally unable to control. Since the remote signal that a component accepts differs depending on the model and year of the component, more than one numeric code may be assigned to a component. If you fail to program your remote using one of the codes, try using other codes.

Notes

- The numeric codes are based on the latest information available for each brand. There is a chance, however, that your component will not respond to some or all of the codes.
- All of the input selectors on this remote may not be available when used with your particular component.

To control a CD player

Maker	Code(s)
SONY	101, 102, 103
DENON	104, 123
JVC	105, 106, 107
KENWOOD	108, 109, 110
MAGNAVOX	111, 116
MARANTZ	116
ONKYO	112, 113, 114
PANASONIC	115
PHILIPS	116
PIONEER	117
TECHNICS	115, 118, 119
YAMAHA	120, 121, 122

To control a DAT deck

Maker	Code(s)
SONY	203
PIONEER	219

To control an MD deck

Maker	Code(s)
SONY	301
DENON	302
JVC	303
KENWOOD	304

To control a tape deck

Maker	Code(s)
SONY	201, 202
DENON	204, 205
KENWOOD	206, 207, 208, 209
NAKAMICHI	210
PANASONIC	216
PHILIPS	211, 212
PIONEER	213, 214
TECHNICS	215, 216
YAMAHA	217, 218

To control an LD player

Maker	Code(s)
SONY	601, 602, 603
PIONEER	606

To control a video CD player

Maker	Code(s)
SONY	605

continued

Programming the remote (continued)

To control a VCR

Maker	Code(s)
SONY	701, 702, 703, 704, 705, 706
AIWA	710, 750, 757, 758
AKAI	707, 708, 709, 759
BLAUPUNKT	740
EMERSON	711, 712, 713, 714, 715, 716, 750
FISHER	717, 718, 719, 720
GENERAL ELECTRIC	721, 722, 730
GOLDSTAR	723, 753
GRUNDIG	724
HITACHI	722, 725, 729, 741
ITT/NOKIA	717
JVC	726, 727, 728, 736
MAGNAVOX	730, 731, 738
MITSUBISHI/MGA	732, 733, 734, 735
NEC	736
PANASONIC	729, 730, 737, 738, 739, 740
PHILIPS	729, 730, 731
PIONEER	729
RCA/PROSCAN	722, 729, 730, 731, 741, 747
SAMSUNG	742, 743, 744, 745
SANYO	717, 720, 746
SHARP	748, 749
TELEFUNKEN	751, 752
TOSHIBA	747, 755, 756
ZENITH	754

To control a DVD player

Maker	Code(s)
SONY	401, 402, 403
PANASONIC	406, 408
PHILIPS	407
PIONEER	409
TOSHIBA	404
DENON	405

To control a TV

Maker	Code(s)
SONY	501, 502
DAEWOO	504, 505, 506, 507, 515, 544
FISHER	508
GOLDSTAR	503, 511, 512, 515, 534, 544
GRUNDIG	517, 534
HITACHI	513, 514, 515, 544
ITT/NOKIA	521, 522
JVC	516
MAGNAVOX	503, 518, 544
MITSUBISHI/MGA	503, 519, 544
NEC	503, 520, 544
PANASONIC	509, 524
PHILIPS	515, 518
PIONEER	509, 525, 526, 540
RCA/PROSCAN	510, 527, 528, 529, 544
SAMSUNG	503, 515, 531, 532, 533, 534, 544
SANYO	508, 545, 546, 547
SHARP	535
TELEFUNKEN	523, 536, 537, 538
THOMSON	530, 537, 539
TOSHIBA	535, 540, 541
ZENITH	542, 543

To control a satellite tuner or cable box

Maker	Code(s)
SONY	801, 802, 803, 804
JERROLD/G.I.	806, 807, 808, 809, 810, 811, 812, 813, 814
PANASONIC	818
RCA	805, 819
S. ATLANTA	815, 816, 817

To control a tuner

Maker	Code(s)
SONY	002, 003, 004, 005