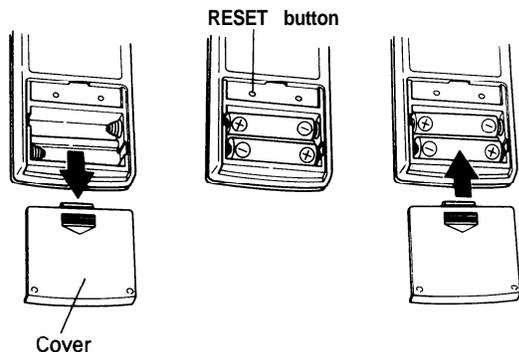


## REMOTE CONTROL OPERATION

### PUTTING BATTERIES INTO THE REMOTE CONTROL UNIT

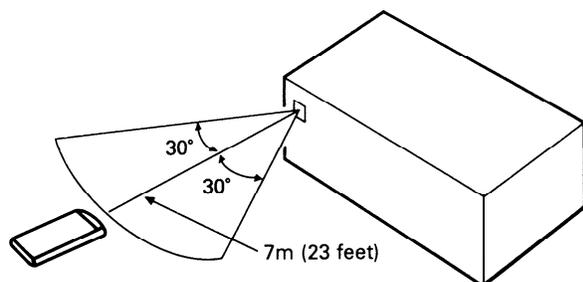


1. Open the battery compartment cover on the rear of the remote control unit. The cover should open easily if you slide it in the direction of the arrow while pressing on it with your thumb.
2. Take out the two supplied batteries size "AA" (IEC LR6/AM-3), and insert them into the battery compartment in accordance with the indications in the compartment.
3. Press the RESET button.
4. Close the cover of the battery compartment.

Incorrect use of batteries may lead to leakage or rupture. Always be sure to follow these guidelines:

- A. Always insert batteries into the battery compartment correctly matching the positive (+) and negative (-) polarities, as indicated inside the compartment.
- B. Never mix new and used batteries.
- C. Batteries of the same size may have different voltages, depending on their type. Do not mix different types of batteries.

### REMOTE CONTROL RANGE



When operating the remote control unit, point the front of the unit at the front panel of the receiver. The remote control unit may be used within a range of about 7 meters (23 feet) from the remote sensor, within angles of up to about 30 degrees.

Performance of the remote control unit is adversely affected in the presence of a strong fluorescent light. Keep such lights away, especially from the sensor window.

### Battery Replacement

When the batteries have run out, the CONTROL MODE buttons will not light properly. Be sure to replace the batteries as soon as possible. Remove the old batteries only if they can be replaced by new ones immediately.

Load batteries by following the instructions in the "PUTTING BATTERIES INTO THE REMOTE CONTROL UNIT" section.

Also be sure to always use the specified batteries (size "AA" (IEC LR6/AM-3) alkaline batteries).

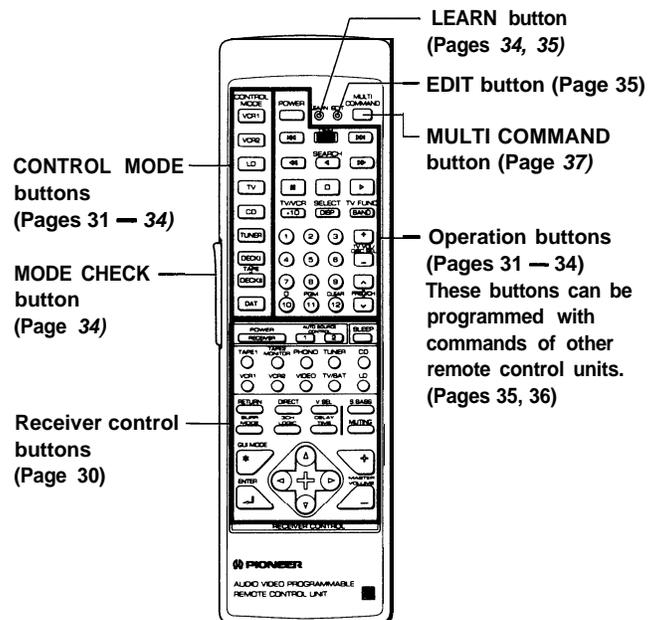
#### NOTE:

When no batteries are inserted, the programmed memory contents will be erased after about 30 minutes.

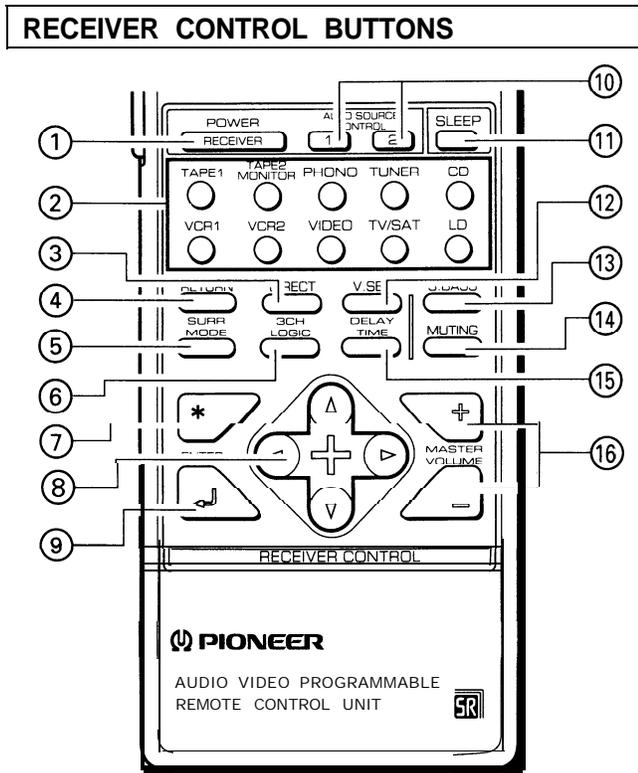
When you want to clear the Programmed memory, refer to page 37. The memory cannot be cleared simply by removing the batteries.

### OUTLINE OF BUTTON LAYOUT

- The buttons on the lower half of the remote control command receiver functions.
- Buttons on the upper half are used to operate other components.
- The remote control unit can "learn" the commands of other remote control units.
- There are 12 kinds of preset signals for operation of VCR 1, VCR 2, and TV. Select and use one of them.
- A maximum of seven commands can be programmed into the MULTI COMMAND button, enabling transmission of a sequence of commands at the push of a button.



# REMOTE CONTROL OPERATION



**① RECEIVER POWER button**  
Switches the receiver power between ON and STANDBY.

**② Input selector buttons**  
Press when switching the receiver's input selector. The CONTROL MODE also switches to the same component (except VIDEO and PHONO). (One CONTROL MODE button lights.) Pressing TAPE 1, TAPE 2 MONITOR, causes the CONTROL MODE DECK II button to light.

**③ DIRECT button**  
Press this to listen to source sound without passing the audio signal through sound quality and balance adjusting circuitry. The surround mode, and rear and center speakers are automatically switched off.

**④ RETURN button**  
Press the RETURN button to return the receiver into the initial state. TUNER is selected at this initial state. Adjust the sound level by using the MASTER VOLUME buttons.

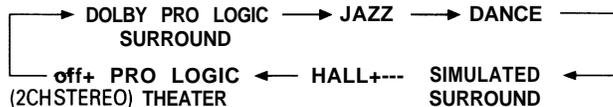
- TAPE 2 MONITOR ..... OFF . MUTING ..... OFF
- SURROUND MODE ..... OFF . FUNCTION ..... TUNER

And SPEAKERS buttons switch as follows.

| Before pressing the RETURN button | After pressing        |
|-----------------------------------|-----------------------|
| Both A and B are off              | → Only A is on        |
| Only A is on                      | → No change           |
| Only B is on                      | → Both A and B are on |
| Both A and B are on               | → No change           |

**NOTE:**  
Press the RETURN button, and the frequency last selected is received. If reception of a station is not possible with that frequency, the mode automatically switches to AUTO TUNING.

**⑤ SURR (SURROUND) MODE button**  
The surround mode changes in sequence each time you press this button.



**⑥ 3CH LOGIC button**  
Switches DOLBY 3CH LOGIC on and off.

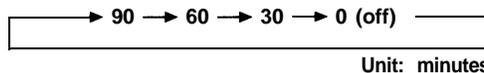
**⑦ GUI MODE button (GUI operation)**  
Switches GUI MODE on and off.

**⑧ Select/Adjust buttons (<, >, A, V) (GUI operation)**  
When using the GUI function with on-screen display, use for such operations as selection and adjustments (by moving the cursor).

**⑨ ENTER button (GUI operation)**  
Press to execute an operation selected with the Select/Adjust buttons ⑧.

**⑩ AUTO SOURCE CONTROL buttons**

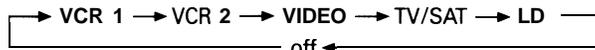
**⑪ SLEEP timer button**  
Activates the SLEEP timer. The length changes in the following manner each time the button is pressed:



Unit: minutes

When SLEEP is ON, the display section is about half as bright as when SLEEP is OFF.

**⑫ V.SEL (VIDEO SIGNAL SELECTOR) button**  
This switches only the video signal in sequence, leaving the sound unchanged.



**⑬ S.BASS button**  
Switch ON when you want to boost bass. The SUPER BASS indicator lights.

**⑭ MUTING button**  
Used to temporarily mute the sound. When it's in the on position, the "MUTING" indicator lights. The volume is restored when pressed again.

**⑮ DELAY TIME button**  
During DOLBY PRO-LOGIC SURROUND and SIMULATED SURROUND operation, delay time settings can be changed from 16 ms to 30 ms in 2 ms steps. The DELAY TIME button does not operate in any other surround mode.

**⑯ MASTER VOLUME (+, -) buttons**  
Adjusts the overall volume.

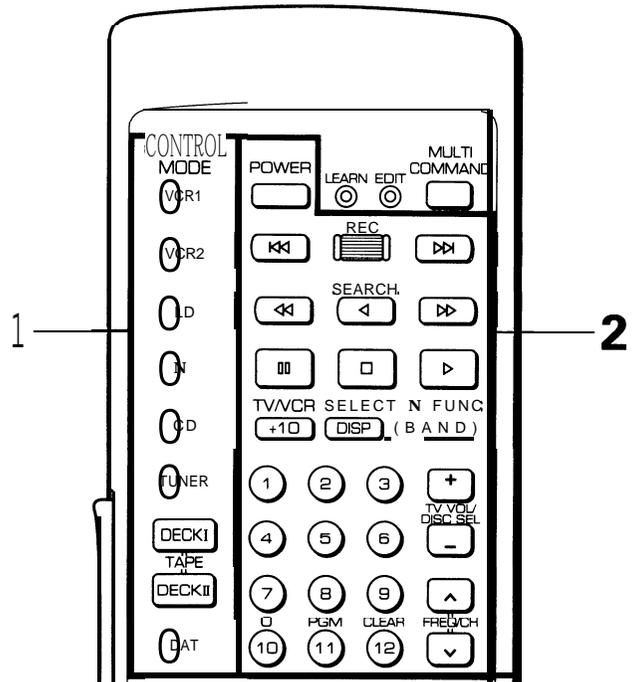
OPERATING OTHER COMPONENTS

REMOTE CONTROLLING OF ANY OTHER OF YOUR AUDIO-VISUAL COMPONENTS VIA THIS UNIT REQUIRES:

1. All components must be remote controllable (have a sensor window on the front panel) to receive direct command from this unit, upon successful learning of those commands by this programmable unit or,
2. All units must have remote control jacks (CONTROL IN/OUT) on the rear panel and be correctly connected to the receiver according to the diagram on page 16.

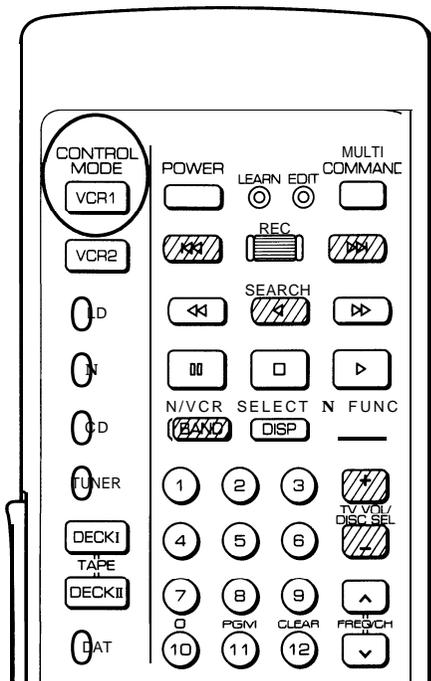
When operating components other than the receiver:

1. Press the CONTROL MODE buttons for the component you want to operate.
2. Press the operation button.



VCR 1 operation

buttons do not operate in the selected CONTROL MODE.



(With VCR 2, even if you press an operation button, no signal is output. Preset or program and use.)

POWER button:

Switches VCR power ON/OFF.

REC button:

Selects the recording mode.

◀ (REW) button:

Rewinds the tape and allows picture search.

▶▶ (FF) button:

Rapidly advances the tape and allows picture search.

|| (PAUSE/STILL) button :

Sets pause and still picture.

■ (STOP) button :

Stops tape transport.

▶ (PLAY) button:

Selects playback.

TV/VCR button:

This button can be used only for VCRs with a TV/VCR selector. Toggles the antenna output between TV and VCR.

DISP (DISPLAY) button:

Switches TV screen display ON/OFF.

I-12 buttons:

Use to call up channels.

CH A button:

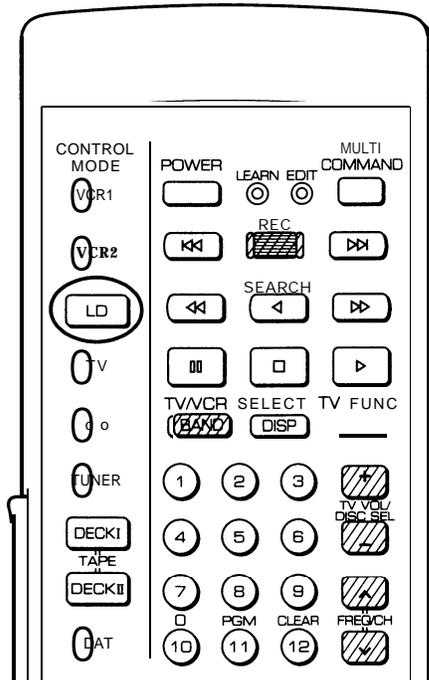
Shifts channels in ascending order.

CH V button:

Shifts channels in descending order.

## REMOTE CONTROL OPERATION

### LD player operation



#### POWER button:

Switches LD player power ON/OFF.

#### ◀◀ (CHAPTER SKIP) button:

Searches for the start of the chapter playing.

#### ▶▶ (CHAPTER SKIP) button:

Searches for the start of the next chapter.

#### SEARCH button:

Used for the search operation and for the memory repeat operation.

#### ◀◀ (SCAN) button:

Selects fast backward.

#### ▶▶ (SCAN) button:

Selects fast forward.

#### ■ (PAUSE) button:

Video and audio are stopped and playback is paused.

#### ■ (STOP/EJECT) button:

Playback is stopped when pressed once. Pressing again causes the disc tray to come out.

#### ▶ (PLAY) button:

Selects playback.

#### i-10 button :

Use to input such information as chapter numbers higher than 10.

#### DISP (DISPLAY) button:

Switches TV screen display of chapter, frame/time number ON/OFF.

#### I-10 buttons:

Used for chapter and frame/time number search and for chapter program play.

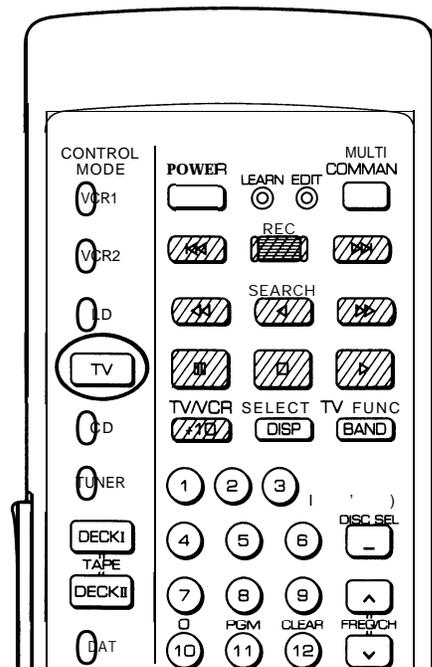
#### PGM (PROGRAM) button:

Allows use of chapter program play.

#### CLEAR button:

Used for releasing repeat playback, number correction and mode release during search operation, and for releasing chapter program play.

### TV operation



#### POWER button:

Switches the power of the TV ON/OFF.

#### DISP (DISPLAY) button :

TV image display ON/OFF.

#### TV FUNC (TV FUNCTION) button:

Used to change the TV FUNCTION.

• TV FUNC button cannot be used with some PIONEER TVs.

#### I-12 buttons:

Used to call up channels.

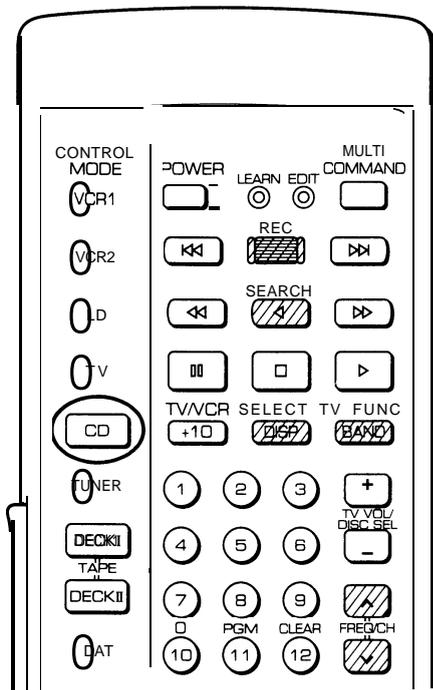
#### TV VOL (+, -) buttons:

Raises and lowers the volume.

#### CH A, V buttons:

Changes the channel in the direction of larger (A) and smaller (V) channel numbers.

CD player operation



**POWER button:**

Switches CD player power ON/OFF.

**◀ (TRACK SEARCH) button:**

Returns to the beginning of the track currently in playing.

**▶ (TRACK SEARCH) button:**

Advances to the next track.

**◀ (MANUAL SEARCH) button:**

Selects fast backward.

**▶ (MANUAL SEARCH) button:**

Selects fast forward.

**■ (PAUSE) button:**

Pauses playback.

**■ (STOP) button :**

Stops playback.

**▶ (PLAY) button:**

Selects playback.

**+10 button:**

Use when selecting a track number higher than 10. For example, to select 21, press the +10 button twice and then the 1 button. This button cannot be used with some CD players.

**1-10 buttons:**

For direct selection of a track or programming of tracks.

**PGM (PROGRAM) button:**

Press to program the CD player.

**CLEAR button:**

Erases a memorized program.

**DISC SEL (SELECT) +, - buttons:**

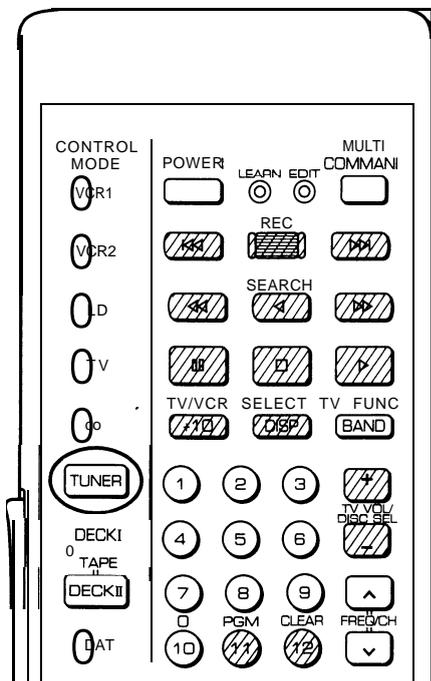
Use to select a disc of the file-type CD player.

+ button only . . . Use to select a disc No. (1 to 6) of multi-play CD players. It may also be used to select twin CD DISC I/II.

**NOTE:**

Some multi-play CD players cannot be controlled using these buttons.

Tuner operation



(The receiver tuner section can also be operated when TUNER is selected.)

**POWER button:**

Switches tuner power ON/OFF.

**1-10 buttons:**

For recall of tuner presets.

Buttons 1 to 10 are used for the receiver (Buttons 11 and 12 cannot be used).

Pressing a button more than once increases the number by ten. For example, press the 5 button once for 5ch, twice for 15ch, and three times for 25ch.

**BAND button:**

Switches the FM and AM bands in turn.

**FREQ A, V buttons:**

Shifts the frequency up (A) and down (V).

**Auto tuning:**

Press FREQ A (up) or V (down) button until the frequency starts to change, then release it. The tuner will automatically search for a broadcasting station and stops when one is found, and the TUNED indicator lights up. To search for another station, press again.

**Manual tuning:**

Press FREQ A (up) or V (down) button and release quickly. The tuning frequency will change by one step each time the button is pressed. Press as many times as necessary to tune in the desired station. The TUNED indicator lights up when the station is tuned in best.

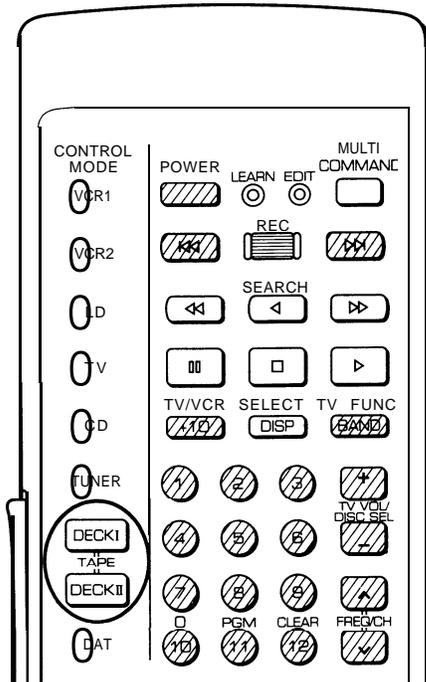
- If you keep the FREQ (A / V) button depressed after the frequency has began to change, the reception frequency changes continuously, and stops when the button is released.

**NOTE:**

When AUTO TUNING is in use, reception may not be possible over long distances or when signals are weak. At these times MANUAL TUNING is recommended.

## REMOTE CONTROL OPERATION

### DECK I, II operation



When using a single cassette deck, select DECK II.

**REC (REC) button:**

Selects the recording or recording standby mode.

**◀, ▶ (FF) buttons:**

Rapidly advances the tape in the direction of the arrow.

**◀ (PLAY) button :**

Selects reverse playback.

**⏸ (PAUSE) button:**

Temporarily stops tape transport. Press again to resume tape transport.

**■ (STOP) button :**

Stops the tape transport.

**▶ (PLAY) button :**

Selects forward playback.

**SELECT button:**

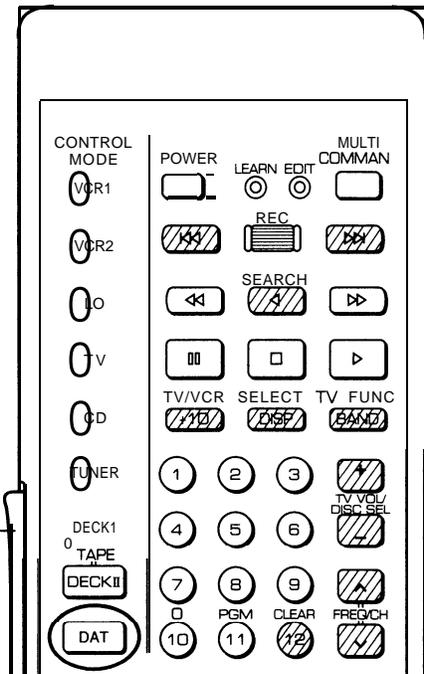
Selects the cassette No. (1 to 6) for multi-cassette changer.

### DAT (Digital Audio Tape deck) operation

|                     |  |
|---------------------|--|
| <b>POWER button</b> | Switches DAT deck power ON/OFF.  |
| <b>REC (REC)</b>    | Selects the recording mode.  |
| <b>◀◀ (REW)</b>     | Rewind.  |
| <b>▶▶ (FF)</b>      | Fast forward.  |
| <b>■ (PAUSE)</b>    | Temporarily stops tape transport.<br>Press again to resume tape transport. |
| <b>■ (STOP)</b>     | Stops the tape transports.   |
| <b>▶ (PLAY)</b>     | Playback.  |
| <b>I - I O</b>      | 1 to 10: Use to input numbers.   |
| <b>PGM</b>          | Use to playback a program.   |

### MODE CHECK button

When you press the MODE CHECK button, the button for the present CONTROL MODE (for example, LD) lights. If you continue pressing the button, the CONTROL MODE changes in sequence.



### PROGRAMMING

The remote control unit has a LEARN mode and an EDIT mode. In the EDIT MODE, there is a PRESET mode and a MULTI-EDIT mode.

- **LEARN MODE:** In each of the CONTROL MODE, a single remote control signal can be input into each of the operation buttons.
- **EDIT MODE**

**PRESET MODE:** In the VCR 1, VCR 2, or TV CONTROL MODE, you can select and use one of the 12 kinds of preset remote control signals.

**MULTI-EDIT MODE:** Input up to seven commands into the MULTI COMMAND button, and transmit the sequence of commands at the push of a single button.

### LEARN

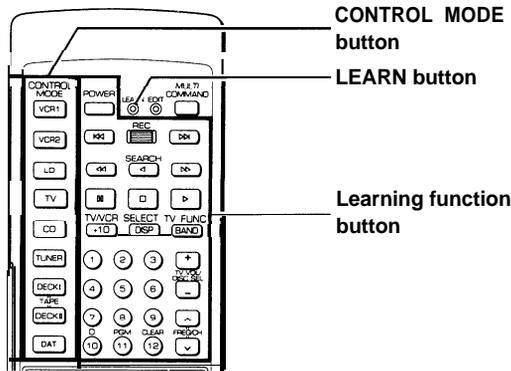
This system's remote control can "learn" the commands of other remote control units, regardless of manufacturer, as long as the other unit is of the infrared type.

On rare occasions, programming this unit may be impossible with some special types of infrared remote control units.

In some cases you may still need the original remote control unit for special situations. But as a rule, you will be able to use this PIONEER remote control for most system control needs, including video as well as audio equipment.

**Learning capacity and buttons that can learn**

The buttons shown in the diagram can learn. By changing the CONTROL MODE, a single button can be used to learn a maximum of nine commands, enabling a total of 261 commands to be learned. However, the capacity for learning differs depending on the remote control signal. With PIONEER remote control signals, about 70 commands can be learned.



**[Learning procedure]**

1. Press the LEARN button to switch to the LEARN mode.
2. Press one of the CONTROL MODE buttons.
3. Press one of the Learning function buttons.
4. Receive a remote control signal from another remote control and learn.

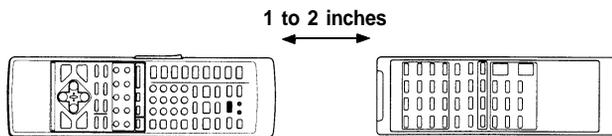
**[Operation example]**

As a learning example, an explanation follows on how to use the CONTROL MODE VCR 1 button to learn the VCR PLAY signal.

Place the transmission sections of the programmable remote control unit and the remote control of the VCR facing each other.

**NOTE:**

Be sure to place the remote controls on a stable surface such as a table while doing this. Also, avoid placing near fluorescent lighting fixtures or in direct sunlight. When programming operations, use new batteries.

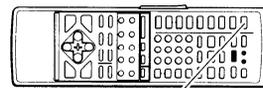
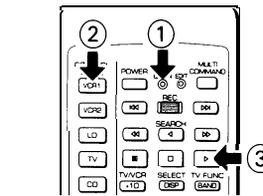


Place the two units on a table, separated by 2 to 5 cm (1 to 2 inches).

Memorization will not be possible if they are too close.

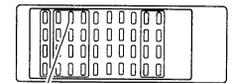
1. Press the LEARN button.
  - All the CONTROL MODE buttons flash at random.
2. Press the VCR 1 CONTROL MODE button.
  - Only the VCR 1 button flashes.
3. Press the [▶] button.
  - The VCR 1 button goes out, and lights after about one second. If you perform procedure 4 before the VCR 1 button lights, correct learning is not possible, so be sure to confirm that the button is lit.
4. Press and hold the PLAY button on the VCR remote control.
  - When learning is completed, the VCR 1 button goes out, and all the CONTROL MODE buttons flash at random. The VCR 1 [▶] button has learned the new signal. During the learning operation, if you press the VCR [▶] button twice, or move the remote control, correct learning is not possible.

To continue learning with other buttons, continue from procedure 2.



When it goes out, learning has been completed.

(VCR remote control)



Press the PLAY button.

To end the learning operation, press the LEARN button.

**[When learning is not possible]**

After the selected CONTROL MODE button (for example, VCR 1) flashes twice, and all the CONTROL MODE buttons flash, repeat the learning operation from procedure 2.

**[When learning is not possible because memory is full]**

After the selected CONTROL MODE button (for example, VCR 1) flashes four times, the LEARN MODE is canceled.

If the memory becomes full even when you have used only a small number of buttons for learning, take the following steps.

- Try learning once more using the button that resulted in full memory. Memory may appear to be full even when it is not due to the two remote controls being too far apart, not enough power remaining in the batteries, or the effect of light from fluorescent lighting fixtures or direct sunlight.

- Check buttons already used for learning. If the CONTROL MODE button remains lit after you have quickly pressed and released a button used for learning, memorization in that button is incorrect, resulting in the memory full condition. If you perform learning once more, abnormal data is cleared, returning you to normal conditions.

**NOTE:**

- After pressing the LEARN button, if you do not press a button within about 30 seconds, the LEARN MODE is canceled.
- After pressing one CONTROL MODE button, if you do not press a button that can learn within about 30 seconds, the LEARN MODE is canceled. If a button other than a one that can learn is pressed, the condition for CONTROL MODE button input is resumed.
- After pressing an operation button that can learn, if a remote control signal is not received within 45 seconds, the LEARN MODE is canceled.

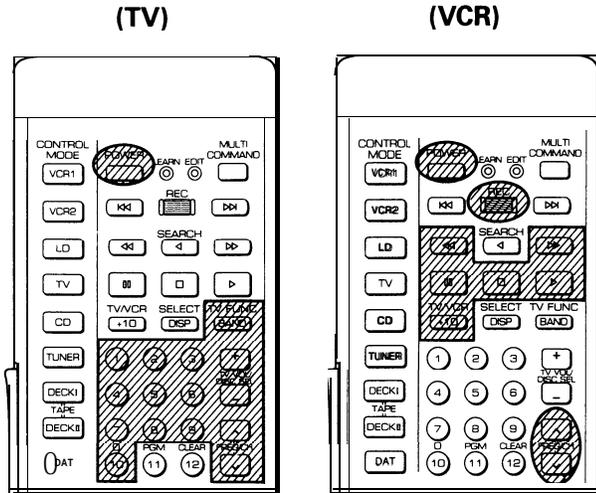
**EDIT**

In the EDIT MODE, there is the PRESET MODE and MULTI-EDIT MODE.

**PRESET MODE (TV, VCR 1, VCR 2)**

12 kinds of remote control signal formats are already preset for basic TV and VCR functions. If they conform to your TV or VCR functions, you can automatically preset operation buttons with the desired format's remote control signals and use to commands operations. Preset operation buttons are indicated in the diagram by [diagonal lines]. When you also want to use other buttons, use the LEARN operation to memorize commands.

## REMOTE CONTROL OPERATION



Button functions are the same as PIONEER's unified remote control code functions, so refer to page 32 concerning TV functions, and page 31 concerning VCR functions.

### NOTE:

- If there is a remote control operation button for a function your TV or VCR does not have, operation is not possible.
- Depending on the kind of remote control signal, it may not be possible to preset TV FUNC button for TV operation.
- The PIONEER remote control code remains in the TVDISP, 11, and 12 buttons, and the VCR DISP, 1 to 12 buttons without presetting.

### [Procedure for presetting]

1. Press the EDIT button to switch to the EDIT mode.
2. Press one of the CONTROL MODE buttons (VCR 1, VCR 2, or TV).
3. Press one of the buttons 1 to 12.
  - One kind of code is preset.
  - To continue presetting, repeat operation procedure 2, 3.
4. Press the EDIT button.
  - The EDIT mode is canceled.
5. Confirm that the component (TV or VCR) can be operated by the preset code.
 

If operation is not possible, repeat the procedure from step 2, and press a different number button (1-12) at step 3 to search for a preset code that enables operation. Refer to the diagram on this page.

### [Operation example]

As a preset example, here is an explanation of how to preset in VCR 1.

1. Press the EDIT button.
  - The VCR 1, VCR 2, and TV CONTROL MODE buttons flash in sequence.
2. Press the VCR 1 CONTROL MODE button.
  - Only the VCR 1 button flashes.
3. Press one of the buttons 1 to 12.
  - For example, if you press button 1, the remote control signal format selected with VCR 1 operation button 1 is preset. The CONTROL MODE buttons light in sequence (indicating that registration has been completed), and then the VCR 1, VCR 2, and TV buttons flash in sequence. (Returning to the condition in procedure 1.)
  - To continue presetting for VCR 2 and TV, repeat operation procedures 2 and 3.
4. Press the EDIT button.
  - The EDIT mode is canceled.

5. Point the remote control at the sensor window of the VCR you want to operate and press an operation button to confirm that operation is possible.
  - If operation is possible, presetting has been completed.
  - If operation is not possible, repeat operations from step 2, selecting a different number button (1 to 12) at step 3.

If there is a button among buttons 1 to 12 that cannot operate, press the EDIT button once more to cancel the EDIT mode, and memorize in the LEARN mode.

### NOTE:

- After pressing the EDIT button, if you do not press a button within about one minute, the EDIT mode is canceled.
- After presetting, you can use the LEARN mode to memorize a command in a preset button, but the preset signal is erased.
- After memorizing in the LEARN mode, if you preset operations under specified buttons, signals memorized in the LEARN mode are cleared.

### Programmable remote control codes of other manufacturers in the preset mode

The following table shows the PRESET MODE buttons (1 to 12) used to call up the remote control codes of other manufacturers. Preset remote control signals in the table, however, may not always enable operation. Numbers in parenthesis indicate a reduced possibility of operation.

| Manufacturer | TV                   | VCR      |
|--------------|----------------------|----------|
| RCA          | 1, (10)              | (1), (6) |
| ZENITH       | 3                    | (3), (4) |
| GE           | 8, (11), (1)         | (1), (8) |
| SONY         | 4                    | 4        |
| TOSHIBA      | 5                    | 5, (9)   |
| HITACHI      | 6, (10)              | 6        |
| PHILIPS      | 7                    | —        |
| JVC          | —                    | 7        |
| PANASONIC    | 8                    | 8        |
| MITSUBISHI   | 9, (10)              | 9        |
| SANYO        | —                    | 10, (12) |
| SHARP        | (2)                  | 2        |
| GOLD STAR    | (10)                 | (11)     |
| MAGNAVOX     | (7), (10), (12)      | (8), (9) |
| SYLVANIA     | (7), (10), (12)      | (8), (9) |
| QUASER       | 8                    | 8        |
| FISHER       | —                    | 12, (10) |
| WARD'S       | (2), (7), (10), (11) | (2)      |

**MULTI-EDIT MODE**

A maximum of seven commands can be programmed into MULTI COMMAND button. This enables a series of signals to be transmitted simply by pushing the MULTI COMMAND button.

(Example) Programming the following three commands into the MULTI COMMAND button.

- ① RECEIVER POWER
- ② RECEIVER FUNCTION CD
- ③ CD PLAY (▶)

1. Press the EDIT button. (Switches to the EDIT mode)
  - The VCR 1, VCR 2, and TV CONTROL MODE buttons flash in sequence.
2. Press the MULTI COMMAND button. (Switches to the MULTI-EDIT mode)
  - The CONTROL MODE buttons flash at random.
3. Press the RECEIVER POWER button.
  - The CONTROL MODE buttons go out, and then flash at random. (Registration is completed)
4. Press the CD receiver input selector button.
  - The CONTROL MODE buttons go out, and then flash at random. (Registration is completed)
5. Press the CD CONTROL MODE button.
  - The CD button flashes.
6. Press the PLAY (▶) button.
  - The CD button goes out, and then the CONTROL MODE buttons flash at random. (Registration is completed)
7. Press the MULTI COMMAND button.
  - The CONTROL MODE buttons light in sequence. (This means that registration has been completed), and then the VCR 1, VCR 2, and TV buttons flash in sequence.
8. Press the EDIT button.
  - The EDIT mode is canceled.

If you press the MULTI COMMAND button, these remote control signals are transmitted in the order programmed, so if CONTROL IN/OUT is connected (refer to page 16), and if remote control signals can reach both the receiver and CD player sensor windows, power to the receiver switches on, the input selector switches to CD, and the CD player starts playing. (When the CD player's power cord is plugged into the receiver's switched AC OUTLET.)

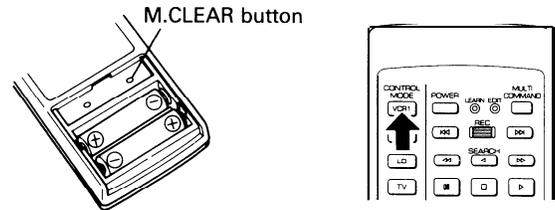
**NOTE:**

- After pressing the seventh command, the MULTI-EDIT mode is registered automatically (The VCR1, VCR 2, and TV CONTROL MODE buttons flash in sequence), but the EDIT mode is not canceled. To cancel the EDIT mode, press the EDIT button.
- After memorizing six or less commands, if you cancel the EDIT mode without pressing the MULTI COMMAND button again, all the registered commands are cleared, leaving the previous commands as they were.
- If a button is for transmission, even if it is not an operation button in the selected CONTROL MODE, registration is still possible. (Buttons such as the VCR 1 ◀.)  
In this case, during signal transmission, the CONTROL MODE button momentarily lights, but the remote control code is not transmitted.
- If the component to be operated is installed at a distance, if there is an obstacle between a specific component sensor window and the remote control, or if component operation speeds are very different, MULTI-COMMAND operation may be incorrect. When repeating operations, first return to the initial settings for each component. For operations such as power ON/OFF, if components are switched ON, they can be switched OFF by transmitting a signal.

**RETURNING TO THE INITIAL SETTINGS**

**Initialization of particular CONTROL MODES**

1. Remove the battery compartment cover.
2. While pressing the M.CLEAR button inside the cover, press the button for the CONTROL MODE (for example, VCR 1) that you want to initialize.
  - For example, if you initialize VCR 1 using the method mentioned above, the CONTROL MODE button lights for about one second, and the VCR 1 operation buttons are initialized.



**Initializing the entire memory**

1. Remove the battery compartment cover.
2. While pressing the M.CLEAR button inside the cover, press the RESET button.
  - Do not release the M.CLEAR button before releasing the RESET button. While pressing the M.CLEAR button, press the RESET button, and quickly release.
  - Initialization is not possible if the buttons are pressed in the reverse order.
  - All the CONTROL MODE operation buttons are initialized, and data in the MULTI COMMAND button is cleared.

