

**SONY**

TRINITRON® COLOR TV

# KV-25VXR

(CABLE COMPATIBLE TV)

## OPERATING INSTRUCTIONS

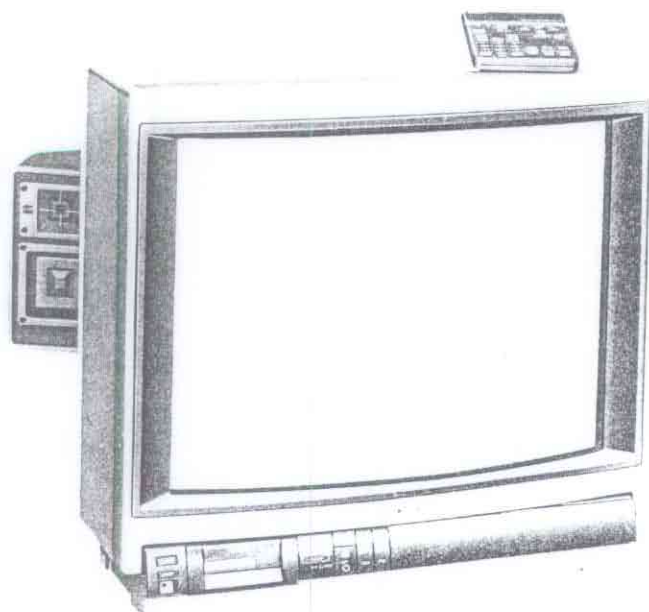
Before operating the unit, please read this manual thoroughly, and retain it for future reference.

### OWNER'S RECORD

The model and serial numbers are located at the rear. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. KV-25VXR

Serial No. \_\_\_\_\_



**Video 8**

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# WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

## INFORMATION

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient the receiving antenna
- relocate the equipment with respect to the receiver
- move the equipment away from the receiver
- plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

## Caution

Television programs, films, video tapes and other materials may be copyrighted. Unauthorized recording of such material may be contrary to the provisions of the copyright laws.

Also, use of this recorder with cable television transmission may require authorization from the cable television transmitter and/or program owner.

Use of this television receiver for other than private viewing of programs broadcast on UHF or VHF or transmitted by cable companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

This unit uses 8 mm video format cassettes. It records in the SP mode (approximately 1.43cm/second) and the LP mode (approximately 0.72cm/second) and play back in the SP mode and the LP mode.

# PRECAUTIONS

## Safety

- Operate the unit only on 120 V AC.
- One blade of the plug is wider than the other for the purpose of safety and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- Should any liquid or solid object fall into the cabinet, unplug the set and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it will not be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

## Installation

- To prevent internal heat build-up, do not block the ventilation openings.
- Do not install the unit in a hot or humid place or in a place subject to excessive dust or mechanical vibration.
- Keep the unit and cassette tapes away from equipment with strong magnets, such as a microwave oven or a large loud speaker.
- Do not leave the built-in VCR unused for a long time. Periodically, turn the power on and play a tape back for a few minutes.

## Cleaning

Cleaning the unit with a slightly damp soft cloth. Use a mild household detergent solution. Never use strong solvents such as thinner or benzine as they might damage the finish of the cabinet.

## Repacking

Retain the original carton and packing materials for safe transport of this unit in the future.

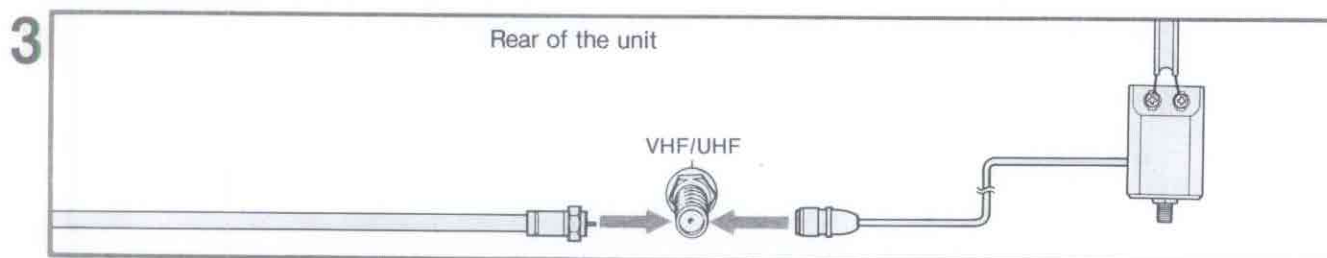
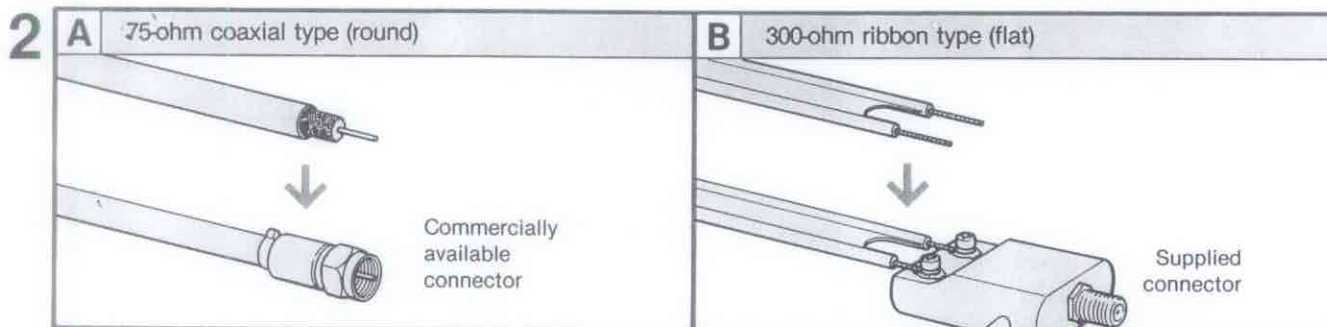


# ANTENNA/CABLE CONNECTION

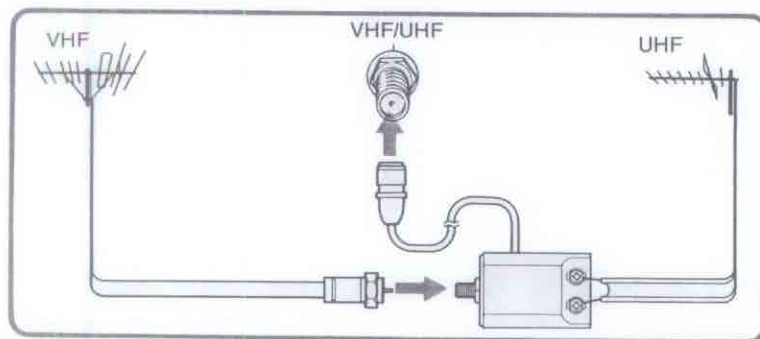
- 1 Check the cable type and prepare the cable end using the appropriate connector.

Antenna/cable to be connected	Lead-in type	Connector	Refer to illust.
VHF antenna	F-type (round)	Commercially available connector	A
	Ribbon type (flat)	Commercially available connector EAC-25	(B)
UHF antenna	Ribbon type (flat)	Supplied connector	B
Combination VHF/UHF antenna *	F-type (round)	Commercially available connector	A
CATV cable	F-type (round)	Commercially available connector	A

\* Most combination antennas are equipped with a signal splitter. Take off the splitter and attach the proper connector.



## When you connect both VHF and UHF antennas



The supplied antenna connector is also used as a U/V mixer.

Prepare the VHF antenna end as illustrated in A. Attach the antenna connector (mixer) to the TV antenna terminal and connect the cables to the mixer.

### Notes

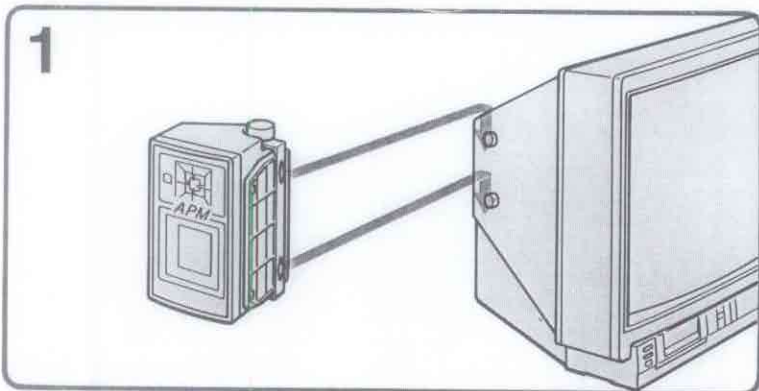
- We recommend using the round F-type VHF antenna cable for better reception.
- For CATV reception, use the special cable supplied by your local cable company.
- When the cable is connected to the TV with the U/V mixer, snow and noise may appear in the pictures of the cable TV channels over 37 (W+1).

### Note to CATV system installer

This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

# SPEAKER CONNECTION

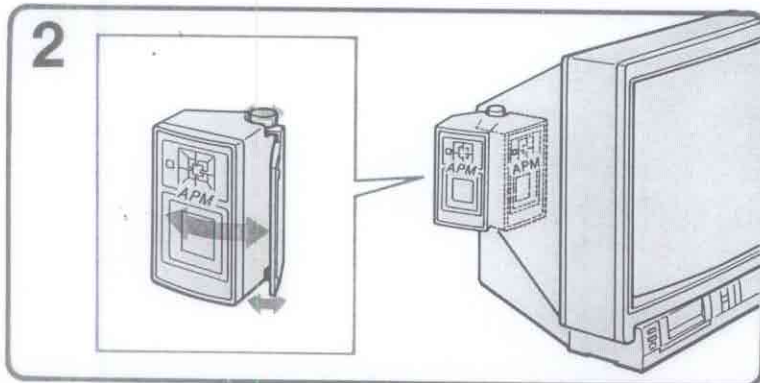
1



Attach the right and left speakers.

The "APM" label should be right side up.

2

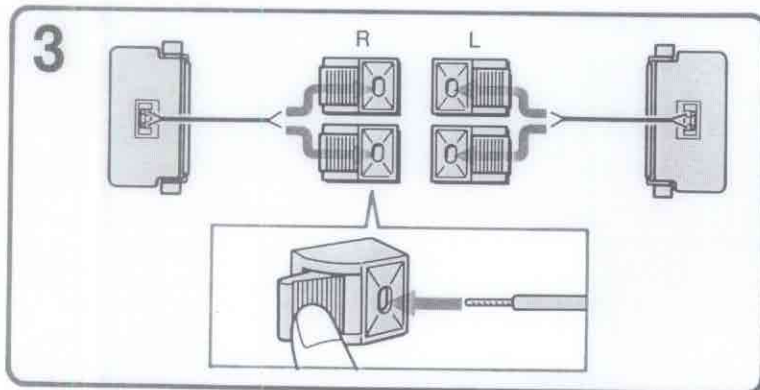


Turn the knobs counterclockwise to loosen.

Adjust the angle for the best sound reproduction.

Turn the knobs clockwise to lock the speakers in position.

3

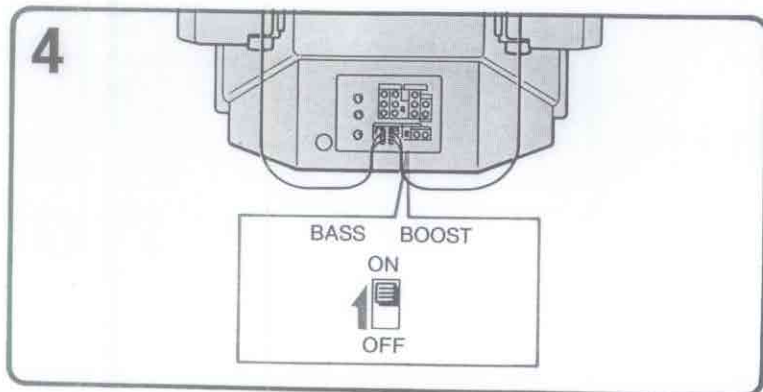


Connect the speaker cord to the SPEAKER terminals.

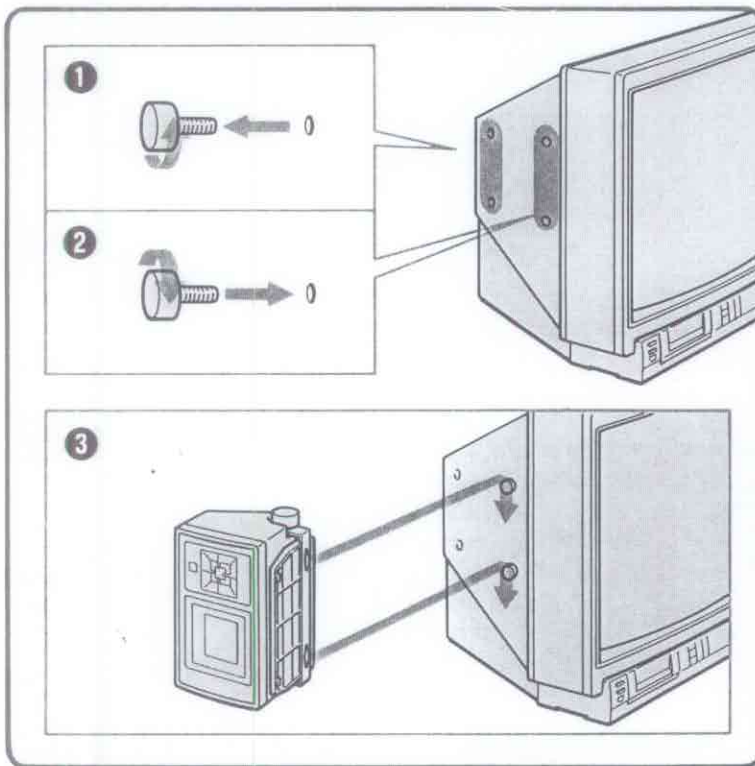
The cord with a red line	to ⊕ red terminal
The unmarked cord	to ⊖ black terminal

While pressing the tab, insert the wire.

4

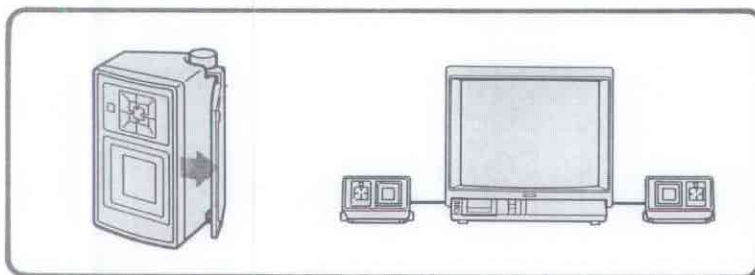


Set BASS BOOST to ON.



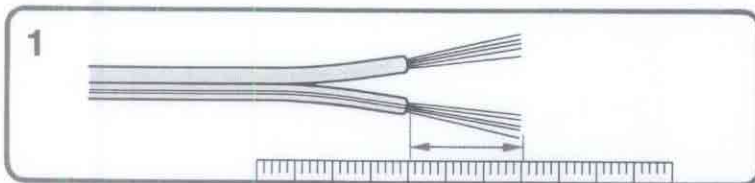
The speakers can be mounted closer to the screen.

- ① Remove the mounting screws.
- ② Insert and tighten.
- ③ Attach the speakers.



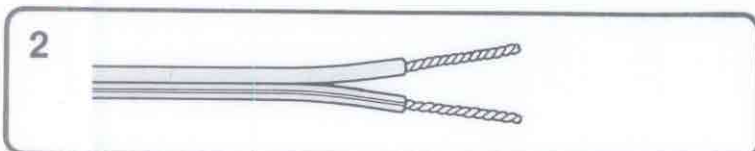
The speakers can be placed away from the unit.

If you connect larger speakers, they must be rated at 8-ohm impedance (with normal power holding capacity of more than 10W)



Prepare the speaker wires.

Strip about 5/8" (15mm) of the wire insulation.

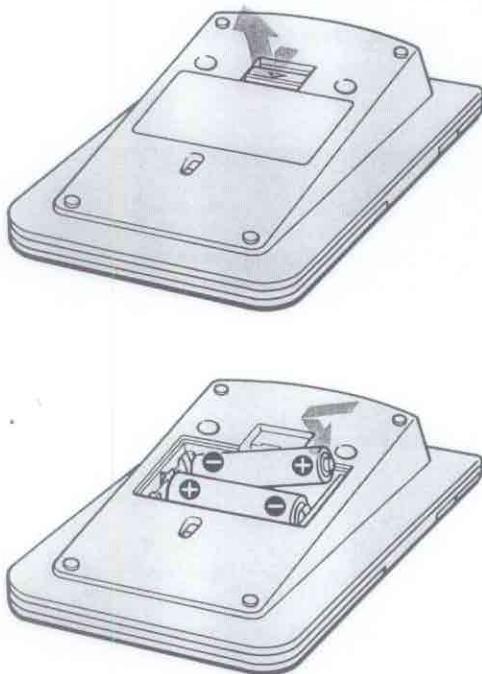


- 3 Set BASS BOOST to OFF to prevent excessive bass.

#### Notes

- Make sure that none of the speaker wire strands stick out, making contact with the neighboring speaker terminals.
- If you have connected speakers that are not shielded, place them at a distance away from the unit so that it will not be affected by the speaker magnets. If portions of the picture have poor color because of a temporary proximity to magnets, turn the POWER off, wait about 10 minutes and turn it on again.

# PREPARING THE REMOTE COMMANDER

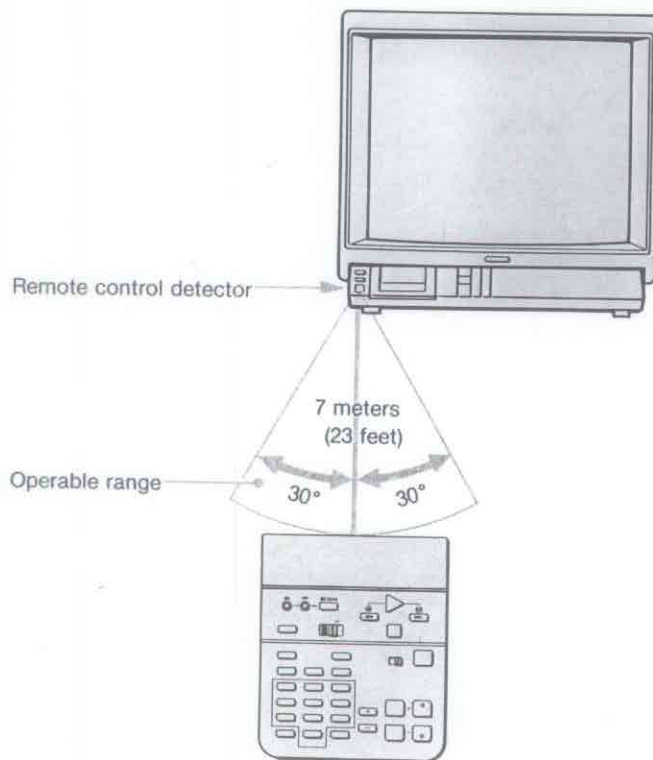


## Battery installation

Install two size AA (IEC designation R6) batteries into the battery compartment with the correct polarity.

## Notes

- In normal operation, batteries will last up to half a year. If the unit does not operate properly, the batteries might be exhausted. Replace all with new ones.
- To avoid damage from possible battery leakage, remove the batteries when the Commander will not be used for a long time.
- Be sure that there are no obstructions between the Commander and the unit.
- Operable range is limited.

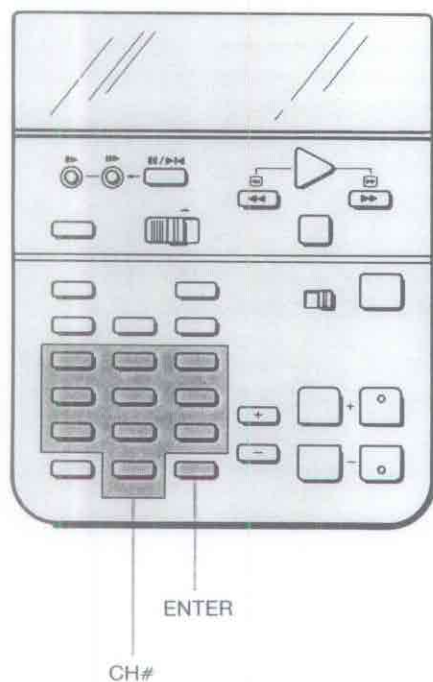
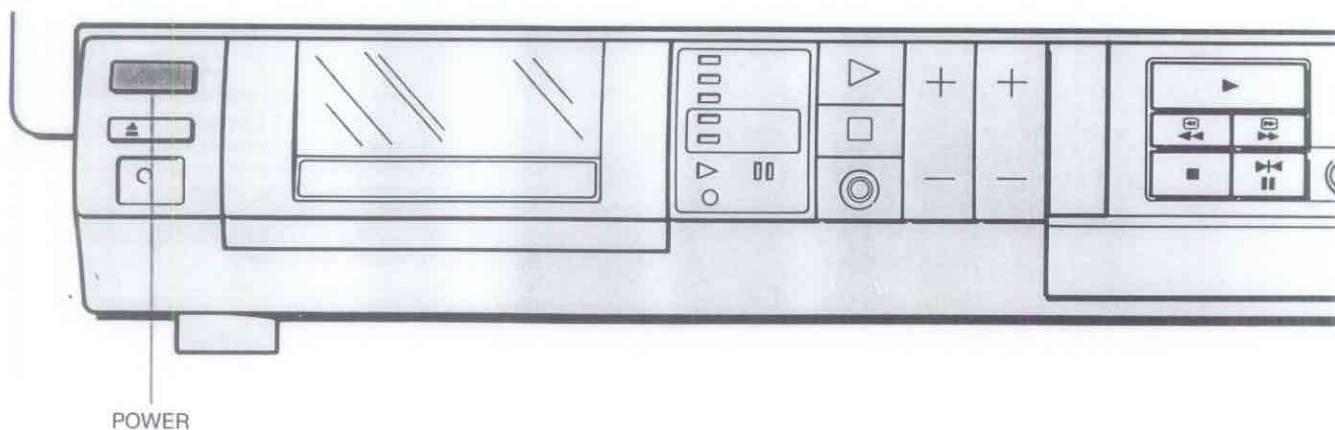




# PROGRAMMING CHANNELS

The TV can be programmed so that when the CHANNEL +/- keys are pressed, unwanted channels will be skipped.

Some channels have already been programmed into the TV at the factory. Scan through the channels, and select the channels to be added and those to be erased.

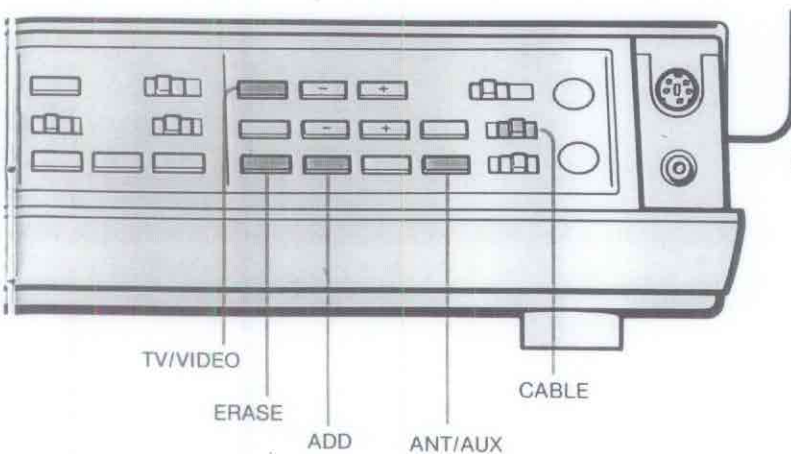


## PREPARATIONS

- 1 Press POWER to turn on the unit.
- 2 On-screen indications "VIDEO 1", "VIDEO 2" or "EXT-A" should be off. If not, press TV/VIDEO so that they disappear.
- 3 Set CABLE and ANT/AUX according to the channel to be added or erased.

Channel	CABLE switch	ANT/AUX key
VHF	OFF	Press so that "AUX" disappears.
UHF		
Cable TV	ON	Press so that "AUX" appears.
Pay cable TV		





### ADDING CHANNELS

- 1 Press CH# key(s) and then ENTER to select the channel to be added.
- 2 Press ADD.  
A "+" appears for a moment to the left of the on-screen channel number display. This channel has now been added to the channel scan memory.

Repeat steps 1 and 2 for other channels to be added.

### ERASING CHANNELS

- 1 Press CH# key(s) and then ENTER to select the channel to be erased.
- 2 Press ERASE.  
A "-" appears for a moment to the left of the on-screen channel number display. This channel has now been erased from the channel scan memory.

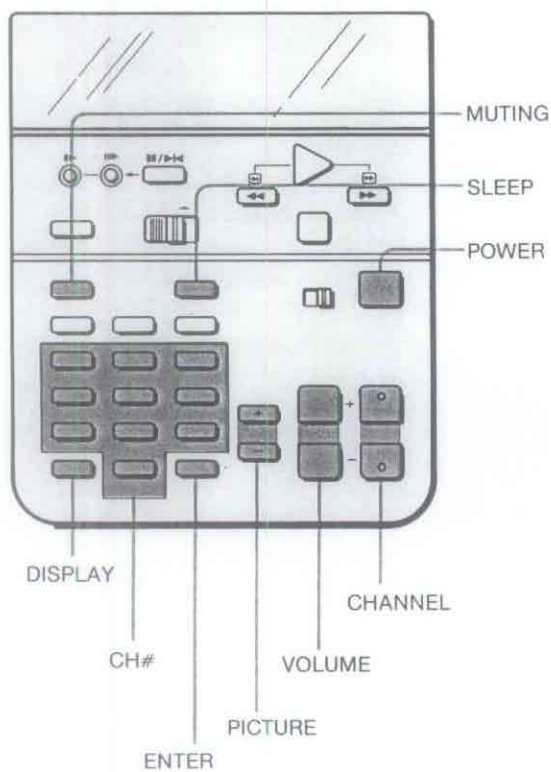
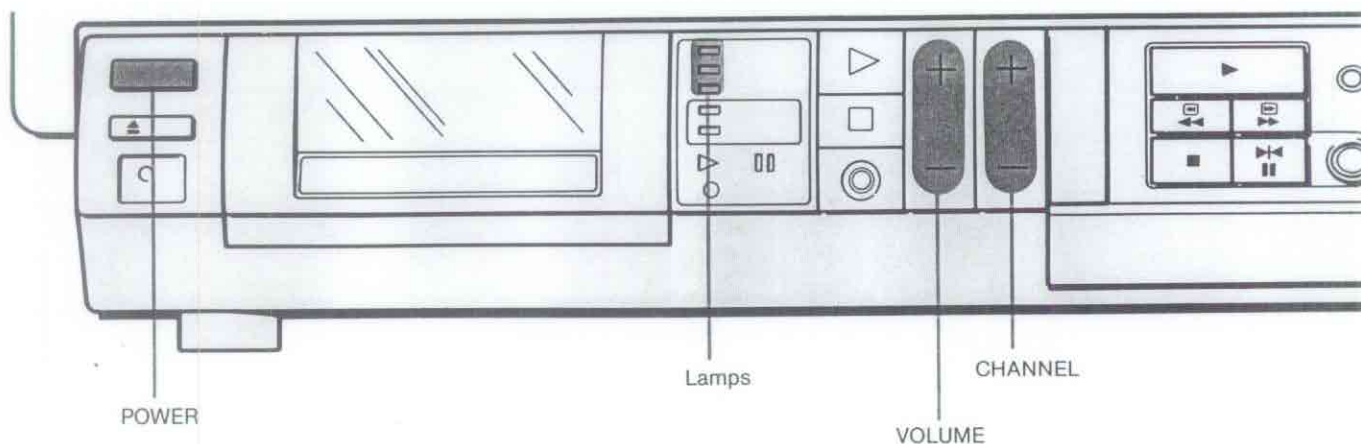
Repeat steps 1 and 2 for other channels to be erased.

To add erased channels again, follow the steps in "ADDING CHANNELS".

#### Note

When a VHF or UHF channel is erased, the cable TV channel with the same number is also erased and vice versa.

# WATCHING THE TV



## Receivable channels

VHF: 2-13

UHF: 14-69

Cable TV: 1-125

## Cable TV channel chart\*

Cable TV systems use letters or numbers to designate channels. To tune in a cable TV channel, refer to the chart below.

Number on this TV						1	5	6	14	15	16	17
Corresponding CATV channel						A-8	A-7	A-6	A	B	C	D

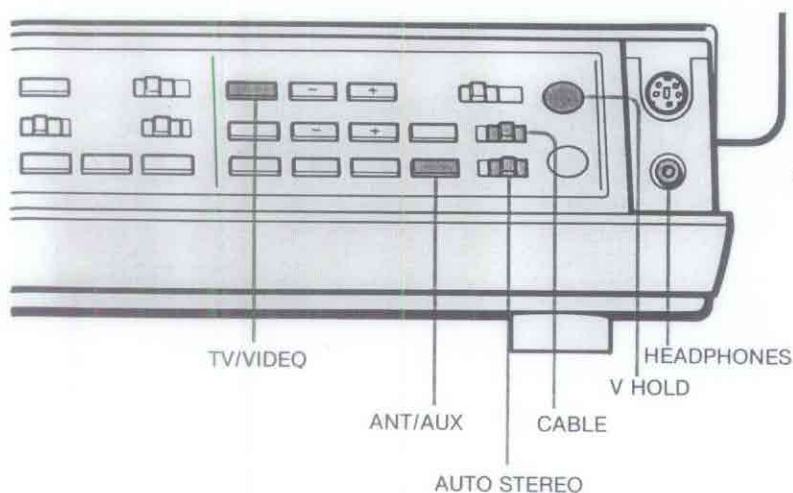
18	19	20	21	22	23	24	25	26	27	28	29	30
E	F	G	H	I	J	K	L	M	N	O	P	Q

31	32	33	34	35	36	37	38	39	..... 93 94			
R	S	T	U	V	W	W+1	W+2	W+3	..... W+57 W+58			

95	96	97	98	99	100	101	102	..... 123 124 125				
A-5	A-4	A-3	A-2	A-1	W+59	W+60	W+61	..... W+82 W+83 W+84				

Check with your local cable TV company for more complete information on the available channels.

\*The designation of the cable TV channels conforms to the EIA/NCTA recommendation.



Front panel opened.

## PREPARATION

- 1 Press POWER to turn on the unit.
- 2 On-screen indications "VIDEO 1", "VIDEO 2" or "EXT-A" should be off. If not, press TV/VIDEO so that they disappear.
- 3 Set AUTO STEREO to ON to receive stereo broadcasts.
- 4 Set CABLE and ANT/AUX according to the channel to be watched.

Channel	CABLE switch	ANT/AUX key
VHF	OFF	Press so that "AUX" disappears.
UHF		
Cable TV	ON	Press so that "AUX" appears.
Pay cable TV		

### To select a channel directly

Press CH# key(s), then press ENTER.

For example, to select channel 125, press 1, 2, 5 and ENTER.

If you have pressed the wrong CH# key and have not pressed ENTER yet, wait until the on-screen channel number display disappears. Then press the correct buttons.

### To scan the channels in numerical sequence

Press CHANNEL.

### To adjust the volume

Press VOLUME.

### To adjust the picture contrast

Press PICTURE.

### If the picture rolls vertically

Adjust V HOLD.

### To keep the on-screen indications displayed

Press DISPLAY.

Press again to make them disappear.

### To mute the sound immediately

Press MUTING. "MUTING" appears.

Press again to restore the sound to its previous level.

### To have the unit turn off automatically after one hour

Press SLEEP. "SLEEP" appears for a moment.

The TV SLEEP lamp lights up and remains lit until the unit is turned off. To cancel the sleep timer, press SLEEP again so that the lamp goes off.

### To listen with a pair of headphones

Connect the headphones (optional) to the HEADPHONES jack.

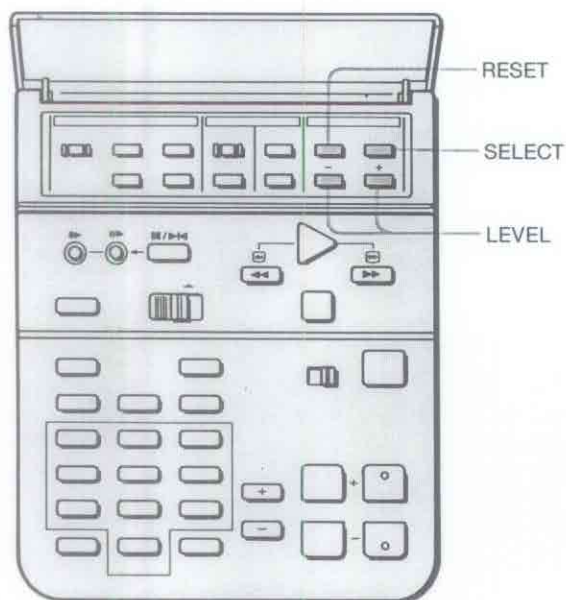
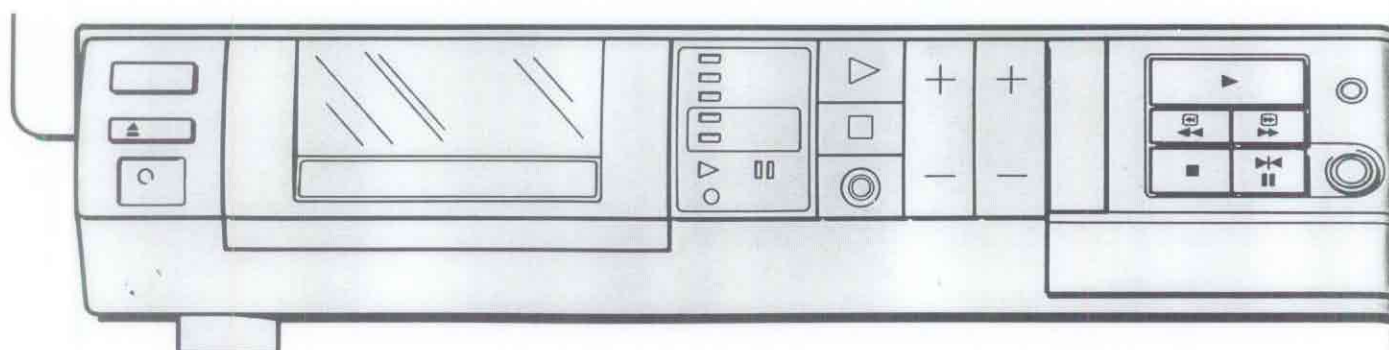
The sound from the speakers will be cut off.

### To turn off the unit

Press POWER again.



## PICTURE AND SOUND ADJUSTMENTS



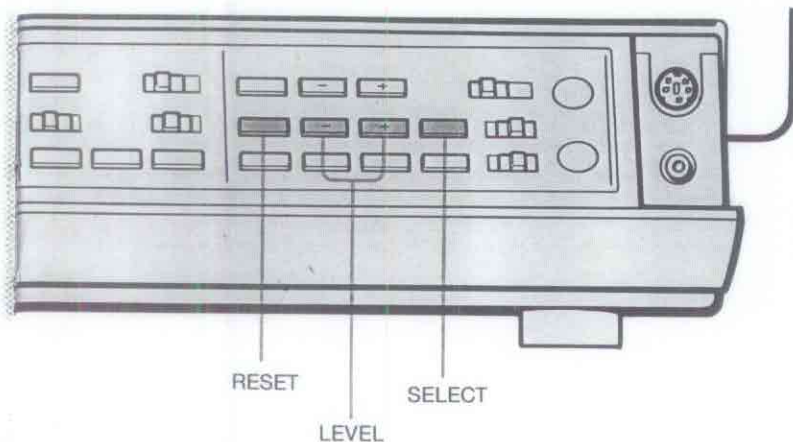
The following elements may be adjusted to suit individual tastes.

Picture: HUE, COLOR, BRIGHT (brightness), SHARP (sharpness).  
Sound: TREBLE, BASS, BALANCE.

Selected element	LEVEL keys
	– (L) key
HUE	Skin tone becomes purplish. The red segments increase.
COLOR	less color intensity
BRIGHT	less brightness
SHARP	less sharpness
TREBLE	less treble response
BASS	less bass response
BALANCE	The left speaker's output is emphasized. The green segments increase.

**To reset the elements to the factory-set levels.**

Press RESET. "RESET" appears for a moment.



- 1 Press SELECT repeatedly until the element to be adjusted appears on the screen.
- 2 Press LEVEL to adjust the selected element.  
A segmented color bar appears to indicate the level of adjustment.

#### + (R) key

Skin tone becomes greenish.  
The green segments increase.

more color intensity  
The red segments increase.

more brightness  
The green segments increase.

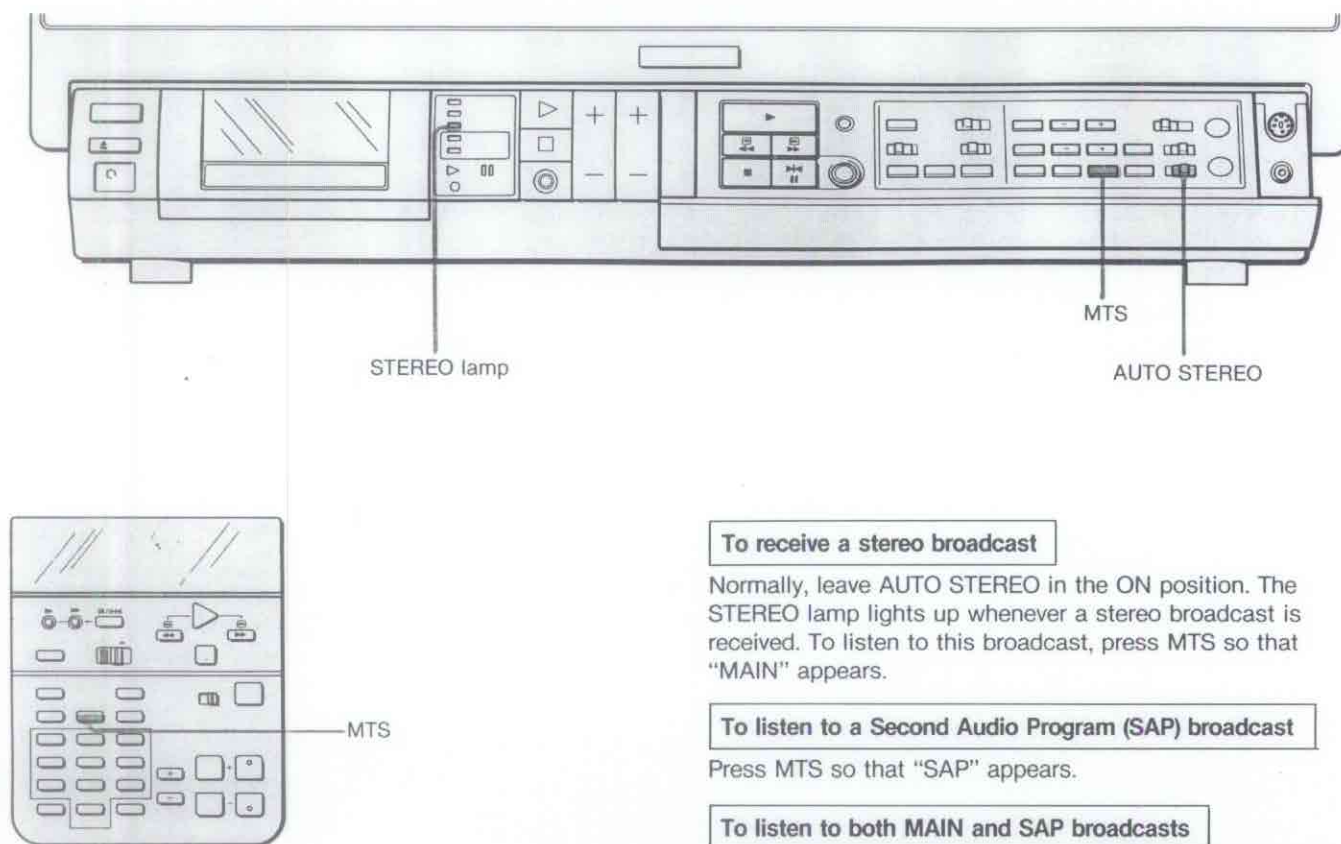
more sharpness  
The green segments increase.

more treble response  
The green segments increase.

more bass response  
The green segments increase.

The right speaker's output is emphasized.  
The red segments increase.

## LISTENING TO MULTICHANNEL TV SOUND (MTS) BROADCASTS



### To receive a stereo broadcast

Normally, leave AUTO STEREO in the ON position. The STEREO lamp lights up whenever a stereo broadcast is received. To listen to this broadcast, press MTS so that "MAIN" appears.

### To listen to a Second Audio Program (SAP) broadcast

Press MTS so that "SAP" appears.

### To listen to both MAIN and SAP broadcasts

Press MTS so that "BOTH" appears. The MAIN and SAP sounds are emitted from the left and right speakers respectively. The MAIN sound becomes monaural even if it is a stereo broadcast.

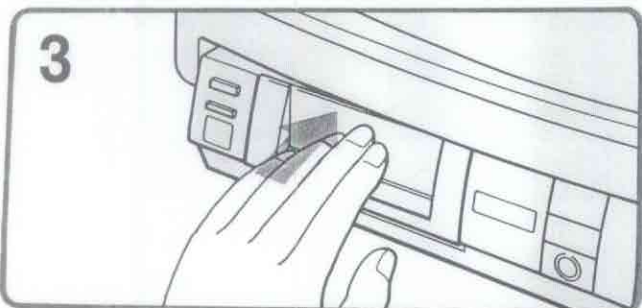
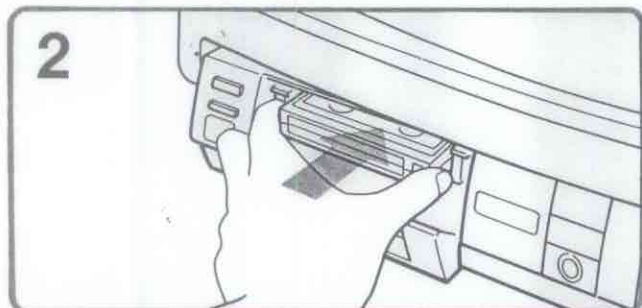
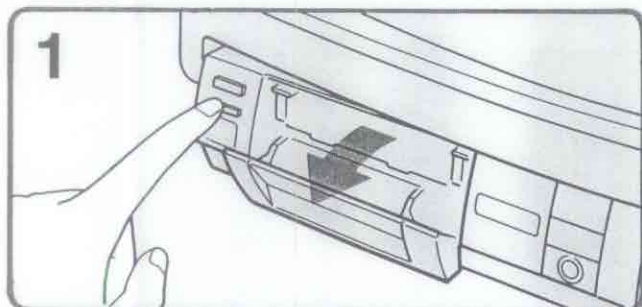
### Notes

- Excessive noise may be heard during a stereo broadcast as a result of weak signals. In this case, set AUTO STEREO to OFF. The sound becomes monaural but the noise should be eliminated.
- If the SAP or BOTH mode is selected when in fact there is no SAP broadcast, no sound is heard.



# NOTES ON CASSETTE

## CASSETTE INSERTION



**To open the cassette holder,** press ▲.

**To remove the cassette,** press ▲. Be sure to close the cassette holder after removing the cassette.

**To illuminate the cassette holder**

Press LIGHT inside the front panel.

Press again to turn off the light.

To prevent accidental erasure



When a new recording is made on a previously recorded tape, the previous recording is automatically erased.

**Playback speed, recording speed**

Cassette	Tape speed	
	SP	LP
P6-15	15 min.	30 min.
P6-30	30 min.	1 hr.
P6-60	1 hr.	2 hr.
P6-90	1 hr. 30 min.	3 hr.
P6-120	2 hr.	4 hr.

The LP tape speed is twice as slow as the SP tape speed. For better picture and sound, recording in the SP speed is recommended.

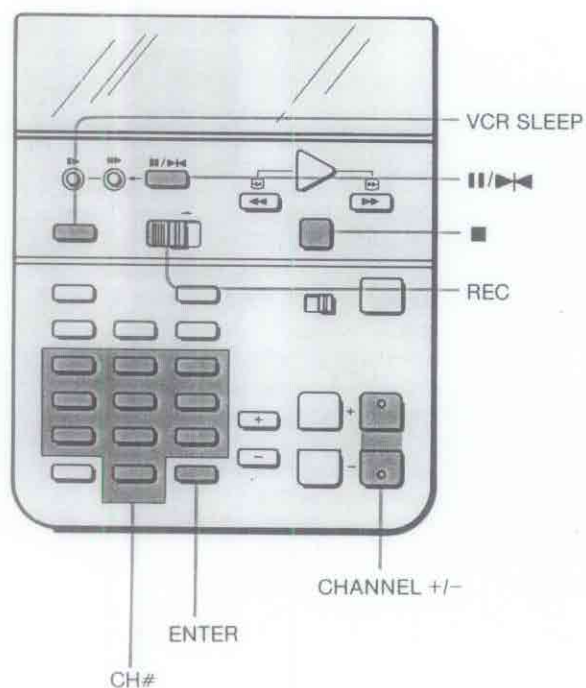
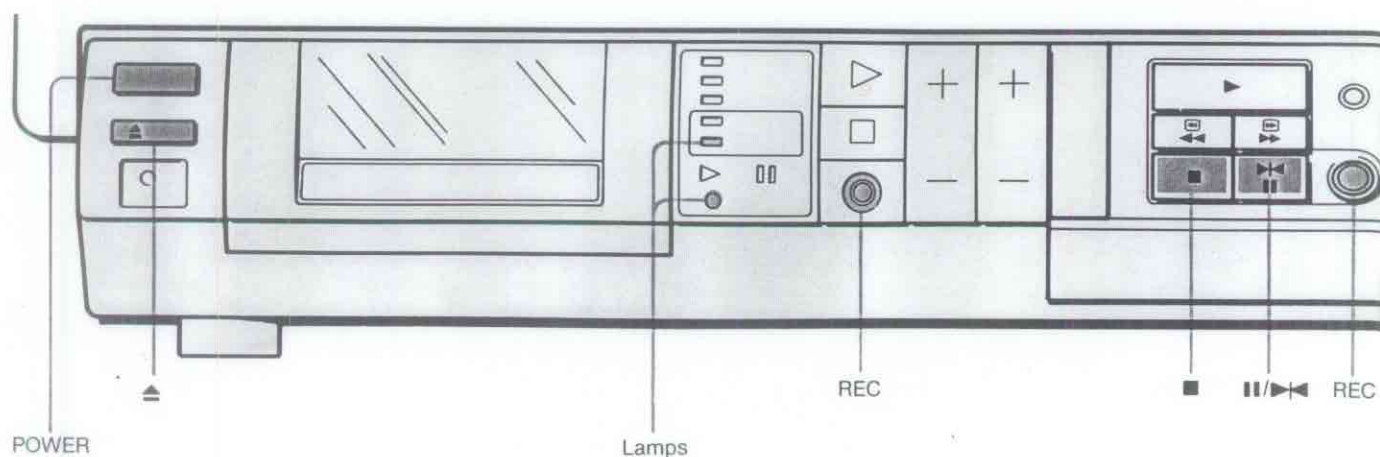
During playback the speed in which the tape was recorded is selected automatically.

### Notes

- Insert a cassette with the window side up.
- Never insert anything in the small holes on the rear of the cassette.
- Store cassettes in their cases and keep them in an upright position to prevent intrusion of dust and uneven winding.

# RECORDING TV PROGRAMS

The TV program that you are just watching or any other program can be recorded with the built-in VCR.



## PREPARATION

- 1 Insert a cassette.
- 2 Set AUTO STEREO to ON to receive stereo broadcasts.
- 3 Select the tape speed and MTS sound.

Switch	Set to...
MODE	SP or LP
STD	MAIN or SAP

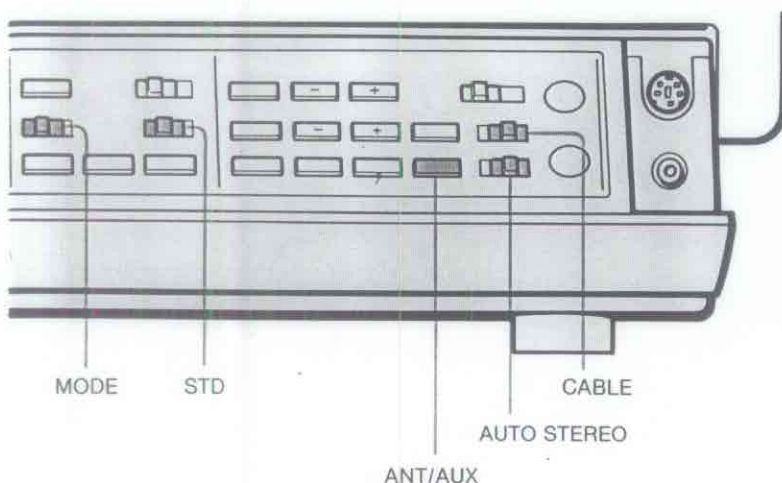
- 4 Set CABLE and ANT/AUX according to the channel to be recorded.

Channel	CABLE switch	ANT/AUX key
VHF	OFF	Press so that "AUX" disappears.
UHF		
Cable TV	ON	Press so that "AUX" appears.
Pay cable TV		

## MAIN or SAP sound selection

MTS (Multichannel TV Sound)	STD switch	Sound recorded on the	
	Set to...	PCM track	STD (standard) track
MAIN	MAIN	MAIN	MAIN
MAIN + SAP	SAP	MAIN	SAP

You cannot record only the SAP sound because it is always sent with the MAIN sound.



## OPERATION

- 1 Select the desired channel.
- 2 Slide REC to the right. (or; Press REC on the unit.)

To stop recording, press ■.

To stop recording for a moment, press **II/III/IV**.  
(Recording pause mode)

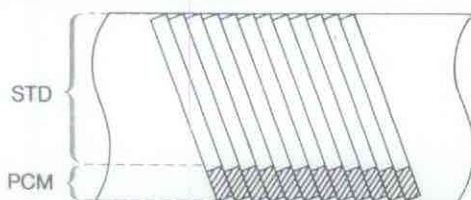
To resume recording, press **II/III/IV** again.

### Notes

- If you want to change the selected TV channel while recording, set the VCR to the recording pause mode and then select the channel.
- The recording pause mode will be released after about 7 minutes and then the recording will stop.
- The MTS sound which is to be recorded is always selected with STD.  
The on-screen "MAIN", "SAP" or "BOTH" changes each time you press MTS although the selection is independent of what is actually being recorded.
- If you want to watch the pictures of external equipment connected to VIDEO 1 or VIDEO 2 during the TV program recording, press TV/VIDEO.

Two tracks are on the 8 mm format tape.

- 1 **STD (standard) track**  
Video and monaural audio signals can be recorded here.  
MAIN or SAP (when it is accompanied by MAIN) can be recorded.
- 2 **PCM track**  
Monaural or stereo audio signals are recorded here.  
Only the MAIN sound can be recorded.



## To set the VCR's stop time only, after recording has started

The recording duration can be set for up to 5 hours in 30-minute intervals.

- 1 Press VCR SLEEP. The VCR SLEEP lamp lights.
- 2 Select the duration with VCR SLEEP.

Each time you press VCR SLEEP (within 10 seconds), the on-screen duration indication will change as follows:

"0H 30M TO GO" → "1H 00M TO GO" → ... → "5H 00M TO GO" → "0H 00M TO GO"

- The duration indication disappears after about 10 seconds.
- The duration will decrease minute by minute to 0H 00M and the recording will stop automatically after the selected duration has elapsed.

## To stop recording

Press ■.

## To check the selected duration

Press VCR SLEEP. → The time remaining at this point is displayed.

Ex: 0H 27M  
0H 30M

Press once more. → The duration that was preset initially appears.

## If you want to reset the duration

Press VCR SLEEP again. Successively, the time duration will increase by 30-minute intervals with each push on the button.

1H 00M  
1H 30M

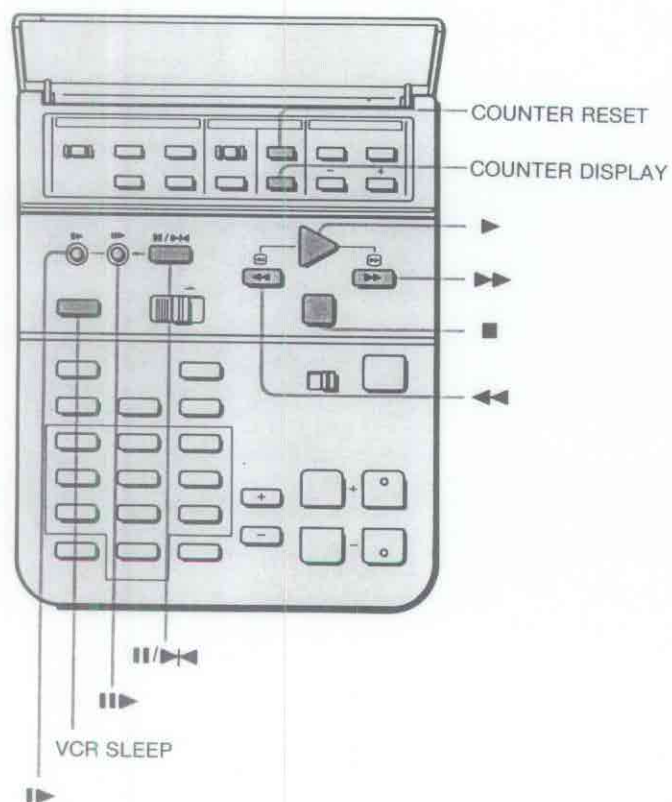
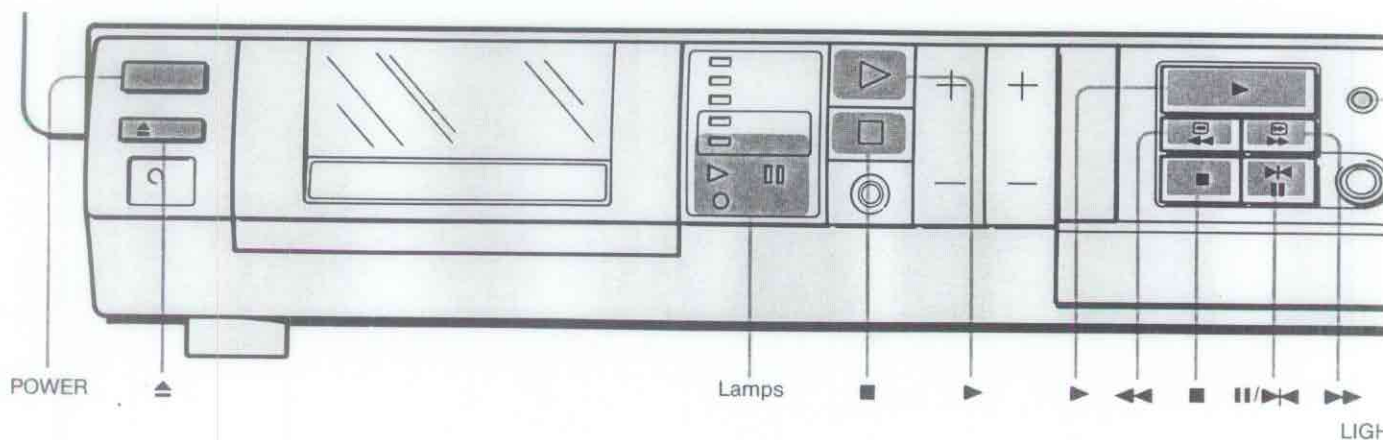
## If you turn off the POWER during recording

The recording will go on although the screen is blank. (If the unit is in the recording pause mode, this mode will be kept.) The recording will stop automatically after the selected time duration has elapsed.

## If you want to change the selected TV channel while recording with VCR SLEEP timer

Set the VCR in the recording pause mode, select the new channel, and then press **II/III/IV** again.





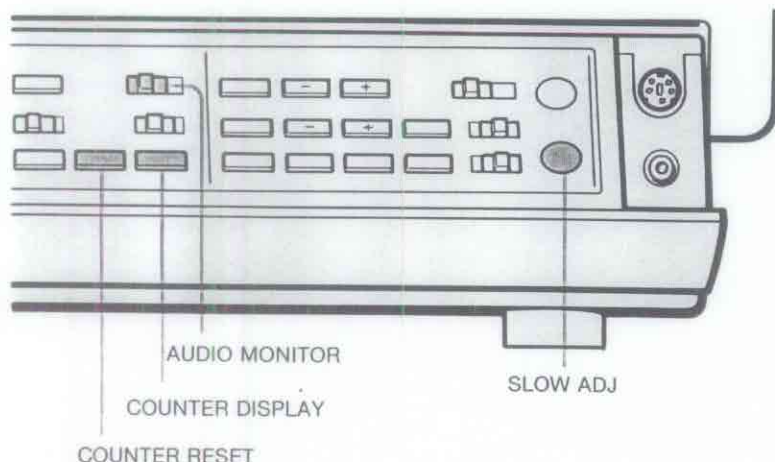
## OPERATION

- 1 Insert a cassette.
- 2 Set AUDIO MONITOR for the audio track desired.

Audio desired	AUDIO MONITOR selector
MAIN	PCM
SAP	STD
BOTH	MIX

- 3 Press ►. The PLAY lamp lights up.

To stop playback, press **■**.



#### To rewind the tape

Press ◀◀.

#### To advance the tape rapidly

Press ▶▶.

#### To locate a particular point while viewing the picture —Picture search

Keep ▶▶ or ◀◀ pressed during playback, playback pause mode or slow-motion picture. Streaks will appear and the sound will be muted. The picture may become dark.

#### To stop the tape for a moment—Still picture

Press III/II◀ during playback. The PAUSE lamp lights up. To resume playback, press III/II▶ or ▶. To protect the tape, the pause mode will be automatically released after about 7 minutes and playback will stop.

#### To advance the picture frame by frame—Stop-action advance picture

Press III/II◀ and then III/II▶. To resume normal playback, press III/II◀ or ▶.

#### To view the picture at one-fifth the speed of normal playback—Slow motion picture

Press III/II◀ and then II▶, or press II▶ directly. To resume normal playback, press ▶.

If a noise band appears in the slow motion picture,  
① adjust SLOW ADJ to improve the picture quality.  
② Then, reset the unit in the playback mode, then in the still picture mode. Check that the picture quality is as same as in the slow-motion picture. If noise appears more than in the slow motion picture, repeat steps ① and ②.

#### When the tape is played back to the end

It is rewound automatically.

#### To have the VCR turn off automatically

The VCR sleep timer can be set for 30 minutes or up to 5 hours in 30-minute intervals.

Press VCR SLEEP to select the duration time. Each time VCR SLEEP is pressed (within 10 seconds), the on-screen indication changes as follows.

"0H 00M TO GO" → "0H 30M TO GO" → "1H 00M TO GO" → ... → "5H 00M TO GO"

The VCR SLEEP lamp lights up and remains lit until the unit is turned off. The on-screen indication disappears after about 10 seconds. To cancel the VCR sleep timer, press VCR SLEEP enough times so that the lamp goes off.

#### To index the tape

Press COUNTER DISPLAY. The counter is displayed on the screen.

Before playback or recording, press COUNTER RESET to reset the counter to "0000" if required. Note the counter reading at the desired points.

Refer to these readings to locate the desired points later. To make the counter disappear, press COUNTER DISPLAY again.

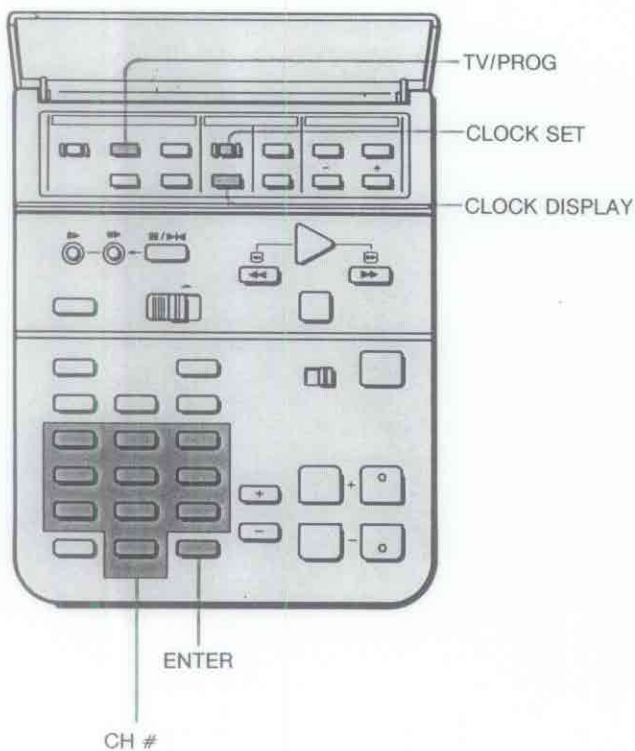
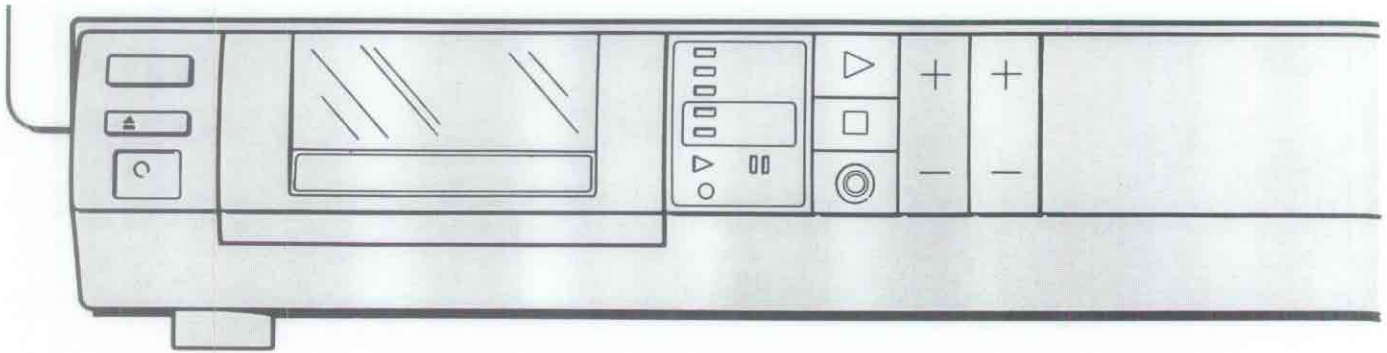
#### Notes

- When a tape recorded in the SP mode is played back in the pause or picture search mode, the picture may appear in black and white or shake.
- In the picture search mode, streaks may appear wider with a tape recorded in the SP mode than with a tape recorded in the LP mode.
- In the picture search mode, the number of streaks may vary and the distance between the streaks may vary according to the recording condition. (Especially in the LP mode.)
- The built-in VCR's playback pause picture monitored on another TV or TV monitor (connected to SELECTED OUTPUT terminals) may be unstable.
- During the playback pause mode, on-screen indications and letters in the "VCR TIMER" page can be unstable.

# TIMER-ACTIVATED RECORDING

4-event/3-week programmable timer (for any day or everyday of the week)  
Follow the on-screen directions and set items with the supplied

## HOW TO SET THE INTERNAL CLOCK



- 1 Press TV/PROG.  
An introduction appears.

"VIDEO 8" WITH PCM  
SOUND IS BUILT-IN.

JUST FOLLOW MY  
DIRECTIONS, YOU CAN  
PRESET THE TIMER TO  
RECORD TV PROGRAMS.  
FIRST, PRESS [ENTER].

- 2 Follow the on-screen directions

BEFORE STARTING,  
YOU MUST FIRST SET  
THE BUILT-IN CLOCK

START BY PRESSING  
[CLOCK SET]



CLOCK SET		
SUN	12:00 AM	
SET THE DAY WITH CH# KEY THEN [ENTER]		
1 SUN	2 MON	3 TUE
4 WED	5 THU	6 FRI
7 SAT		

Day of the week  
AM or PM  
Hour/minute

CLOCK SET
TUE 5:15 PM
NOW PRESS, [ENTER] TO START THE CLOCK

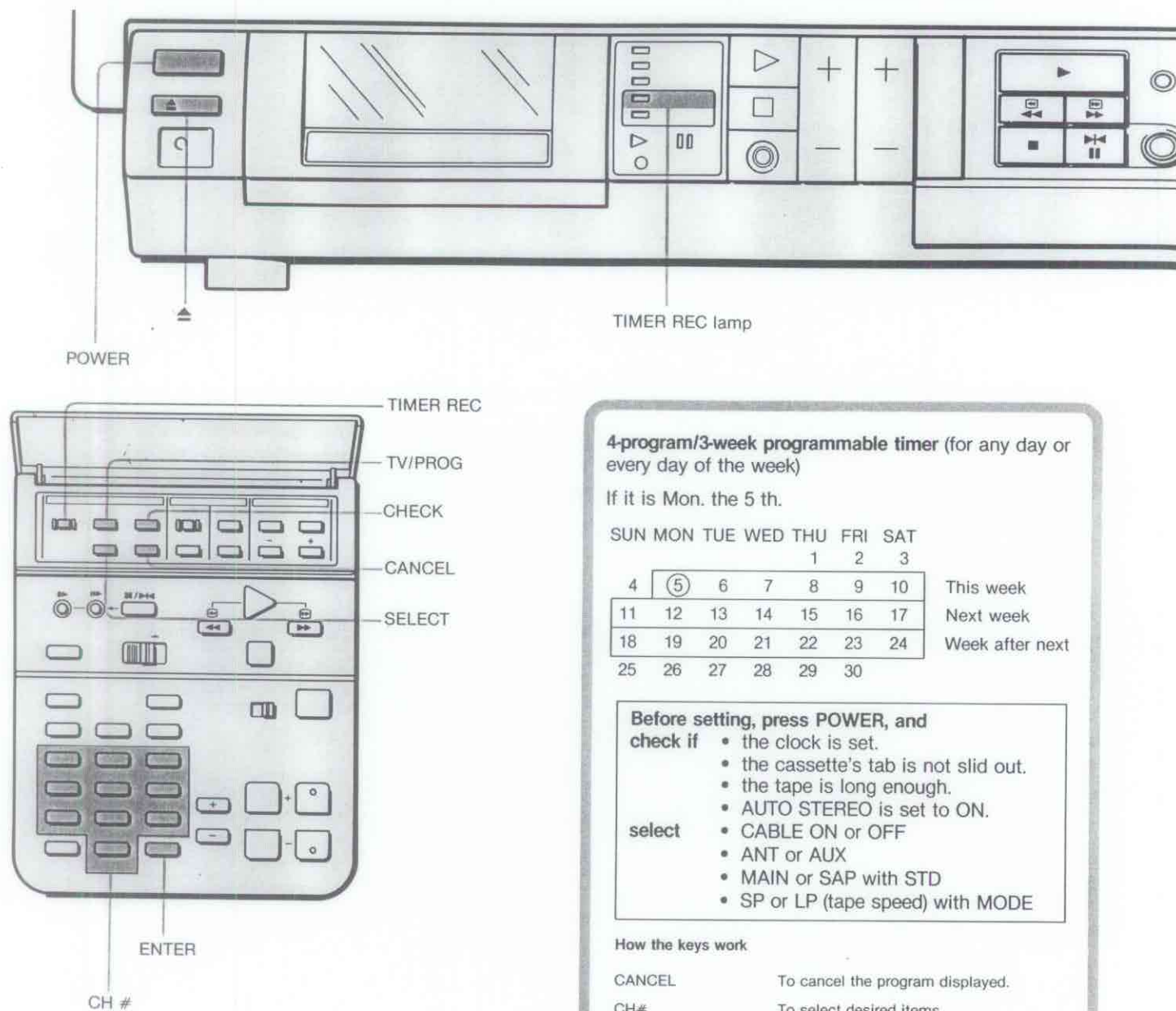
The current day and time display will disappear after about 10 seconds.

--:-- AM → --:-- 1 AM → 1:00 AM  
 Press "1".      Press ENTER.

Press "0" four times. Press "7", "4" and "5".

Press **CLOCK DISPLAY**.

## HOW TO SET THE PROGRAM TIMER



### 4-program/3-week programmable timer (for any day or every day of the week)

If it is Mon. the 5 th.

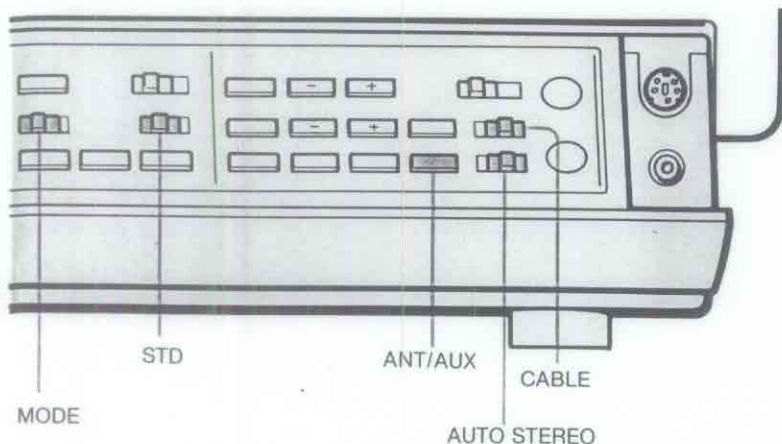
SUN	MON	TUE	WED	THU	FRI	SAT	
				1	2	3	
4	⑤	6	7	8	9	10	This week
11	12	13	14	15	16	17	Next week
18	19	20	21	22	23	24	Week after next
25	26	27	28	29	30		

### Before setting, press POWER, and check if

- the clock is set.
  - the cassette's tab is not slid out.
  - the tape is long enough.
  - AUTO STEREO is set to ON.
- select
- CABLE ON or OFF
  - ANT or AUX
  - MAIN or SAP with STD
  - SP or LP (tape speed) with MODE

### How the keys work

CANCEL	To cancel the program displayed.
CH#	To select desired items.
CHECK	To list up the four timer settings on one page. Press again to go back to the previously displayed page. You can display this "CHECK" list any time you want.
CLOCK SET	To summon the "CLOCK SET" page.
ENTER	To input commands selected by CH#.
TIMER REC ON/OFF	To activate/deactivate the timer for recording.
TV/PROG	To make the "VCR TIMER" page appear/disappear. You can set, reset, or cancel the timer settings on the displayed "VCR TIMER" page by using the appropriate keys.
SELECT	To select one of the four timer programs.



- 1** Press TV/PROG.  
The "VCR TIMER" page appears.

VCR TIMER	PROG 1
---:--AM →	---:--AM CH---
PROG 1 CAN BE SET NOW PRESS, [ENTER]: SET PROG 1 [TV/PROG]: BACK TO TV	

- 2** To set timer for program 1, press ENTER.  
To go back to TV, press TV/PROG.

VCR TIMER	PROG 1
 ---:--AM → ---:--AM CH---	
SELECT REC-WEEK WITH CH# KEY THEN [ENTER] 1 THIS WK    2 NEXT WK 3 WK AFTER NEXT 4 EVERYDAY	

Follow the directions in the bottom zone. (blue background)

Select items to fill in the blanks in the middle zone. (red background)

Every time you press ENTER, the next item appears.

Here, set:

Recording week

Recording day (unnecessary for every day recording)

Starting time

Ending time

Channel

All the items should be set.

**3**

VCR TIMER	PROG 1
THIS WEEK 10:00 AM →	SAT 11:00 AM CH95
PROG 1 IS SET NOW PRESS, [TV/PROG]: BACK TO TV [SELECT]: NEXT PROG [CANCEL]: CANCEL PROG	

When you have set all the items, press TV/PROG.

To set other programs, press SELECT.

To cancel the program you just have set, press CANCEL.

**4**

The unit enters automatically the timer recording standby mode.

The previously displayed picture reappears.

Notice that the TIMER REC lamp is lit.

Whether the POWER is turned on or off, the recording will start at the preset time and will automatically stop when the recording is completed.

The program setting except the everyday setting will be erased.

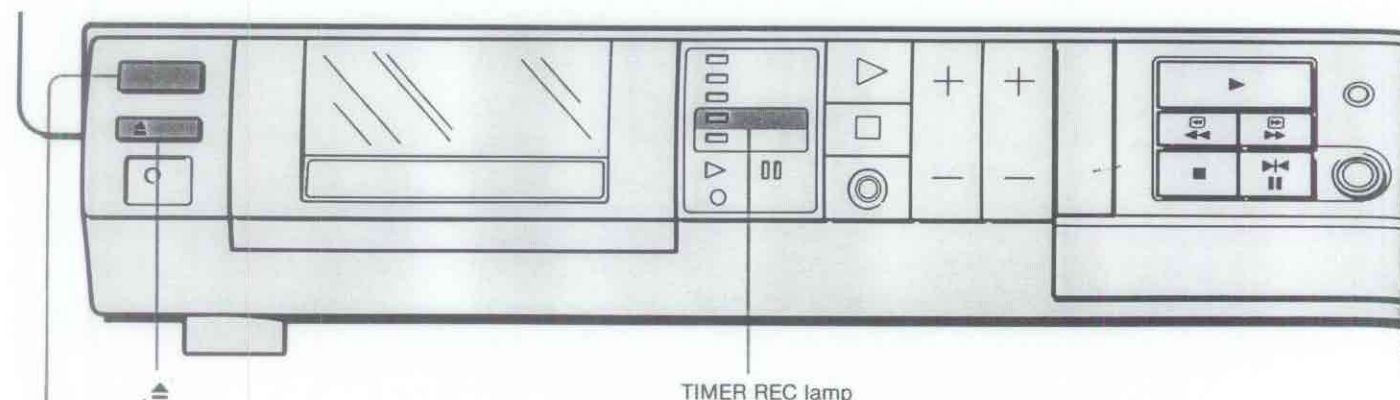
When the unit enters the timer recording standby mode, the VCR's tape running, tape counter reset and VCR SLEEP functions are blocked.

However, you can

- check, change or preset programs of the VCR.
- watch TV programs.
- monitor the picture and/or the sound of the equipment connected to VIDEO 1/VIDEO 2.

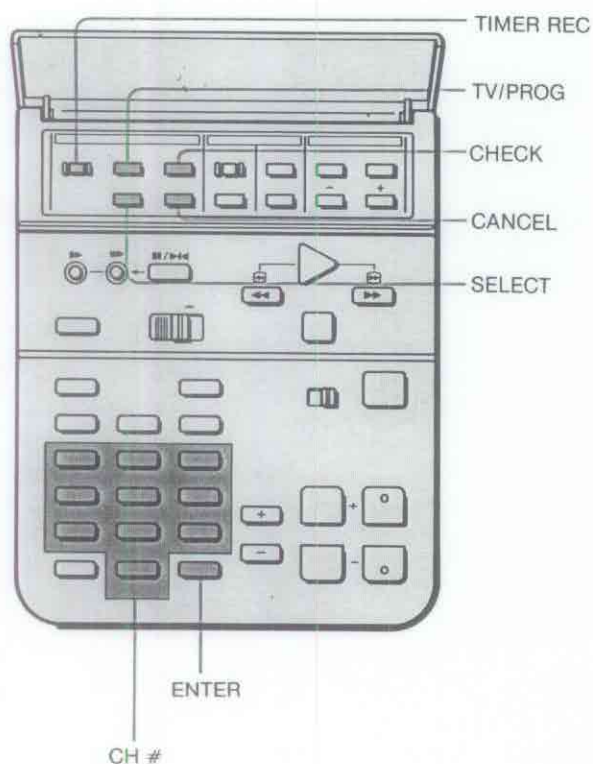
If you want to release the built-in VCR, press TIMER REC so that the TIMER REC lamp goes off.





POWER

TIMER REC lamp



TIMER REC

TV/PROG

CHECK

CANCEL

SELECT

ENTER

CH #

#### While setting

#### If you have made a mistake

Press TV/PROG until the "VCR TIMER" page reappears. Press ENTER until the item to be changed flashes, and reset the item.

#### To cancel the program

Press CANCEL.

#### To set other programs

VCR TIMER	PROG 2
---	---
--:--AM →	--:--AM CH---
PROG 2 CAN BE SET NOW PRESS, [ENTER]: SET PROG 1 [TV/PROG]: BACK TO TV	

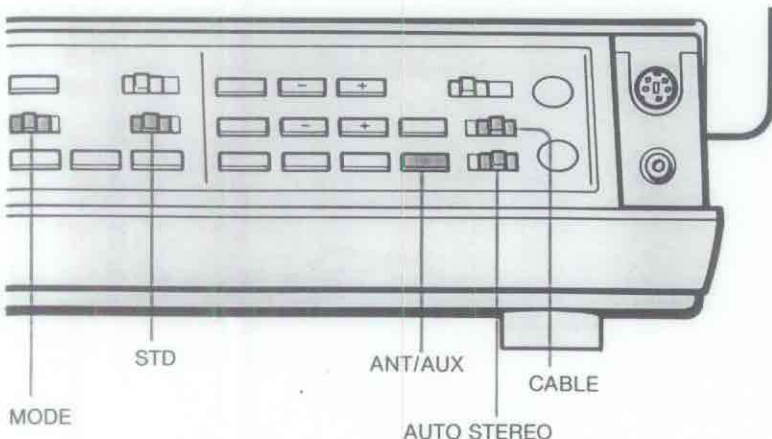
Once a program is set, press SELECT to display the program number to be set next. You can select any of four program numbers and set items. The four programs can be set in any order.

#### To check the settings

1	THIS WEEK	SAT
	10:00 A → 11:00 A	CH95
2	---	---
	--:--A → --:--A	CH---
3	NEXT WEEK	SUN
	8:00 P → 9:00 P	CH112
4	---	---
	--:--A → --:--A	CH---
[CHECK]: TO RETURN		

- 1 Press CHECK.
- 2 Press again to go back to the picture that you were watching.





#### Before the timer-activated recording starts

##### To change the settings

- 1 Press TV/PROG.
- 2 Press SELECT until the program to be changed appears.
- 3 Press ENTER until the item to be changed flashes.
- 4 Reset the item.
- 5 Press TV/PROG.

##### To erase the setting of a particular program

- 1 Press TV/PROG.
- 2 Press SELECT until the program to be erased appears.
- 3 Press CANCEL.
- 4 Press TV/PROG.

#### When "1 MINUTE TO TIMER REC" flashes on the screen

The built-in VCR prepares to record, and at 6 seconds to the preset time, the display changes automatically to the channel that will be recorded.

This channel cannot be changed any more.

#### During recording

- You can
- check, cancel and preset other programs (but you cannot change items of the program which is being recorded.).
  - watch and monitor the picture and/or sound of the equipment connected to VIDEO 1/VIDEO 2.

##### To interrupt the timer recording

Press TIMER REC. The TIMER REC lamp goes off.

If you are watching a TV program, only the VCR function stops. If you are not watching the TV, the whole unit turns off.

The timer setting except for everyday is cancelled.

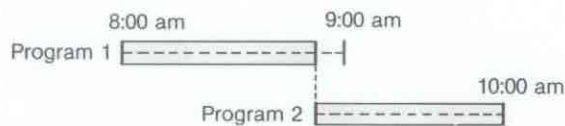
##### When the tape ends during timer recording

The tape stops but it will not be rewound to the beginning.

#### Notes on timer recording

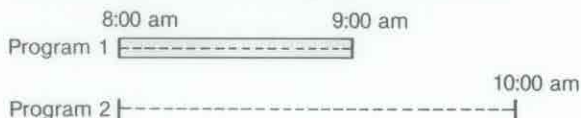
The shaded portions in the illustrations below will be recorded.

##### When the presets of your timer-activated recordings overlap



The recording of the program which starts later than the other will be made as set and the end of the first program will be cut off.

##### When the turn-on time of programs are the same



The recording of the program having the lower program number will be made. The program 2 (except for everyday) will be cancelled.

##### If a power interruption occurs before a timer recording

An interruption of less than 24 hours does not affect the memory of the timer.

For longer interruptions, the clock and timer setting memories are erased.






##### If a power interruption occurs during a timer recording

The recording will resume if the power is restored before the end of that timer program. As long as the interruption lasts less than 24 hours, any other timer recordings will take place as set.

TIMER REC switch, once set to OFF, cannot be set to ON from 1 minute to the timer program starting time.

# APPLICATIONS WITH OPTIONAL EQUIPMENT

For connection, use the optional cords listed below. The letters in each example of connection are keyed to those in the list.

<b>A</b>	<p><b>VMC-1P3 (1 m)/-2P3 (2 m)</b></p> <p>Video phono plug Audio phono plugs (2)</p>  <p>Video phono plug Audio phono plugs (2)</p>
<b>B</b>	<p><b>RK-74A (1.5 m)</b></p> <p>Phono plugs (2)</p>  <p>Phono plugs (2)</p>
<b>C</b>	<p><b>RK-69A (1.2 m)/-34A (3 m)</b></p> <p>Mini plug</p>  <p>Mini plug</p>
<b>D</b>	<p><b>Connecting cord supplied to the Sony editing controller (RM-E100V series)</b></p> <p>5-pin</p>  <p>5-pin</p>
<b>E</b>	<p><b>VMC-609MS (2m)</b></p> <p>Video phono plug Audio phono plugs (2)</p>  <p>Video phono plug Audio phono plug</p>

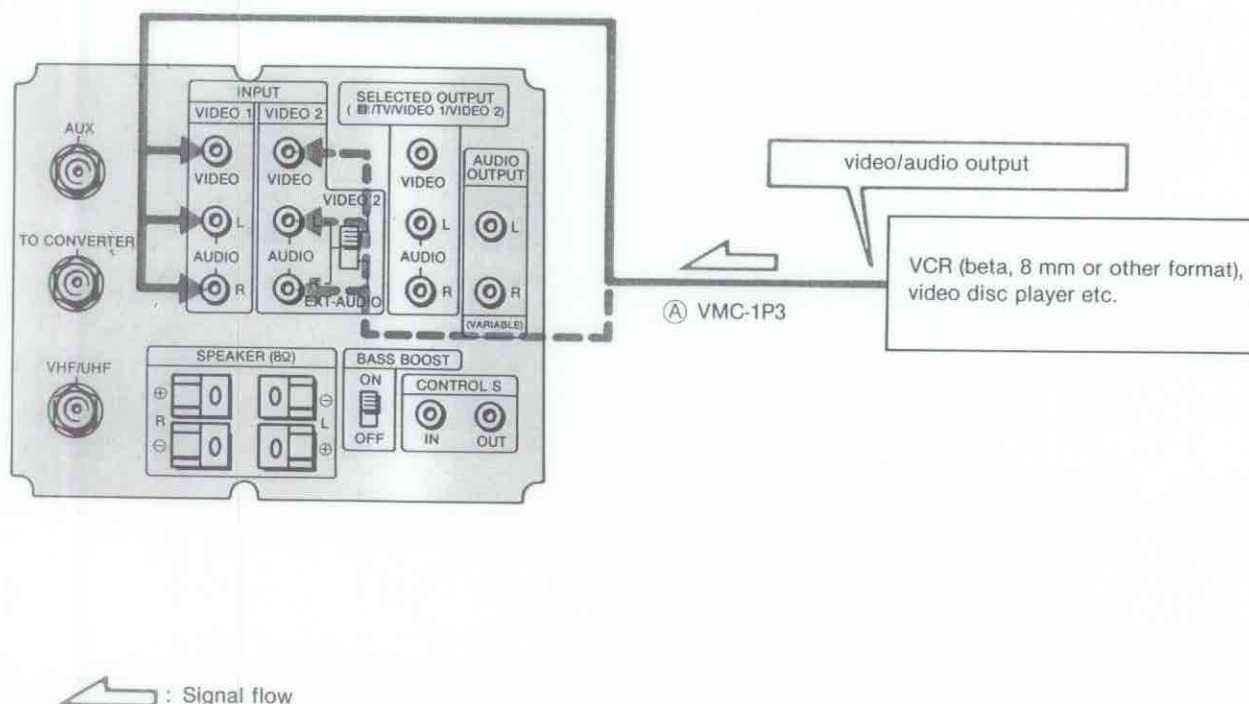
## Notes on connection

- Before connecting, make sure that the power to each piece of equipment is turned off.
- The plugs should be fully inserted into the jacks. A loose connection may cause hum and noise.
- Match the color when connecting the plugs to the jacks.

## TO VIEW PICTURE OF EXTERNAL EQUIPMENT AND RECORD ON THE BUILT-IN VCR

### System outline

#### Rear of the unit



- 1 Press TV/VIDEO on the unit so that "VIDEO 1" or "VIDEO 2" appears on the screen\*.
- 2 Set the connected equipment in the playback mode.

\*"VIDEO 1" for equipment connected to VIDEO 1 terminal.  
 "VIDEO 2" for equipment connected to VIDEO 2 terminal.

- Two VCRs can be connected using both VIDEO 1 and VIDEO 2 jacks.
- If you connect a VCR to VIDEO 2, set VIDEO 2/EXT-AUDIO to VIDEO 2.
- If you want to record the displayed picture, slide REC on the Commander (or, press REC on the unit).

The supplied Remote Commander allows you to control both this unit and other equipment\*

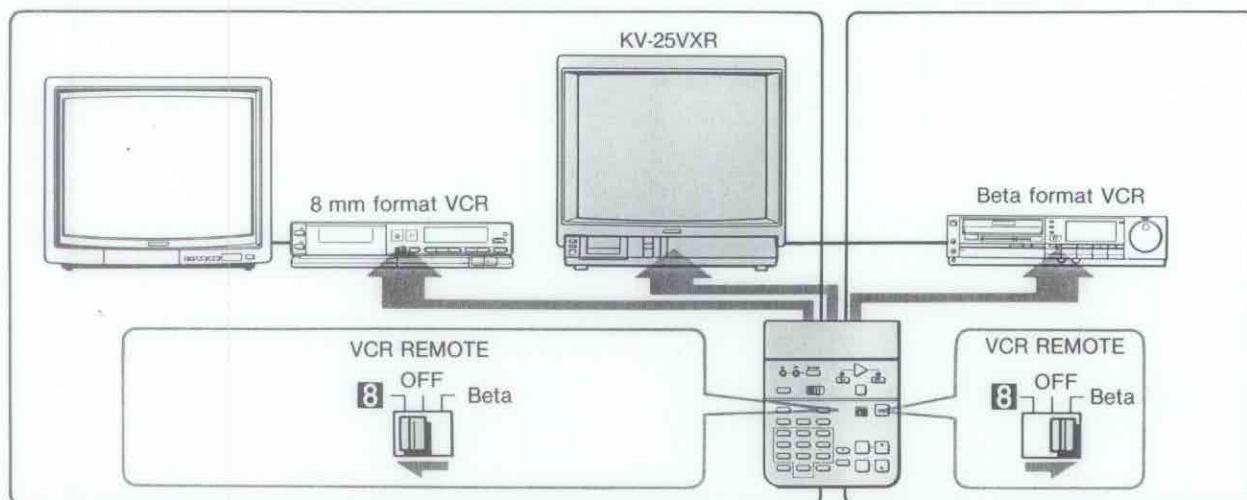
Switch VCR REMOTE on the Commander to the appropriate position so that the remote control signal emitted by the Commander is effective for each unit.

- \* Only for those equipped with a remote sensor.

To operate the KV-25VXR, and the 8 mm format VCRs, set to **8**.

To operate the Beta format VCRs, set to Beta.

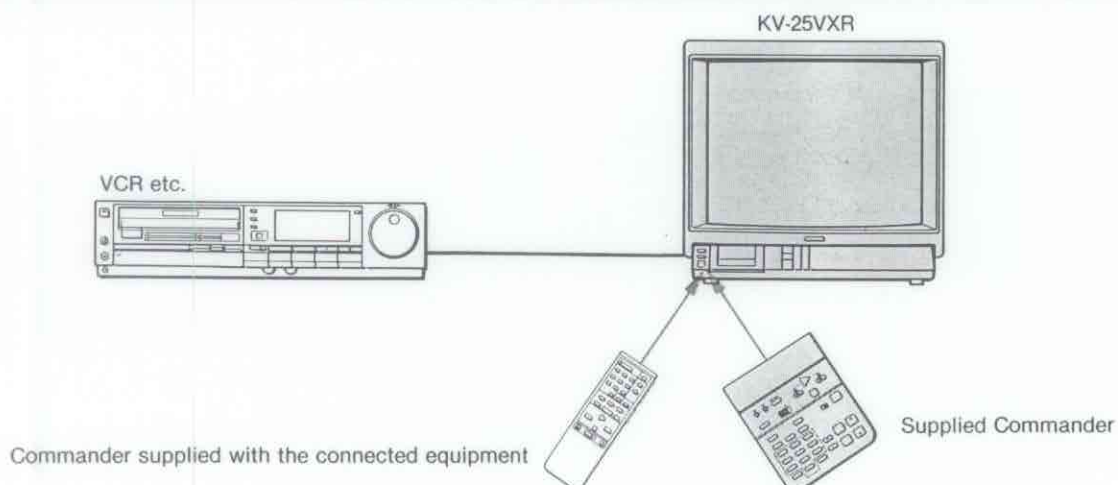
- If VCR REMOTE is switched to OFF, the Commander is deactivated.
- "Beta" for "VCR I" and **8** for "VCR II" category VCRs.



To operate other equipment by remote control through this unit

— Use of the Sony control system —

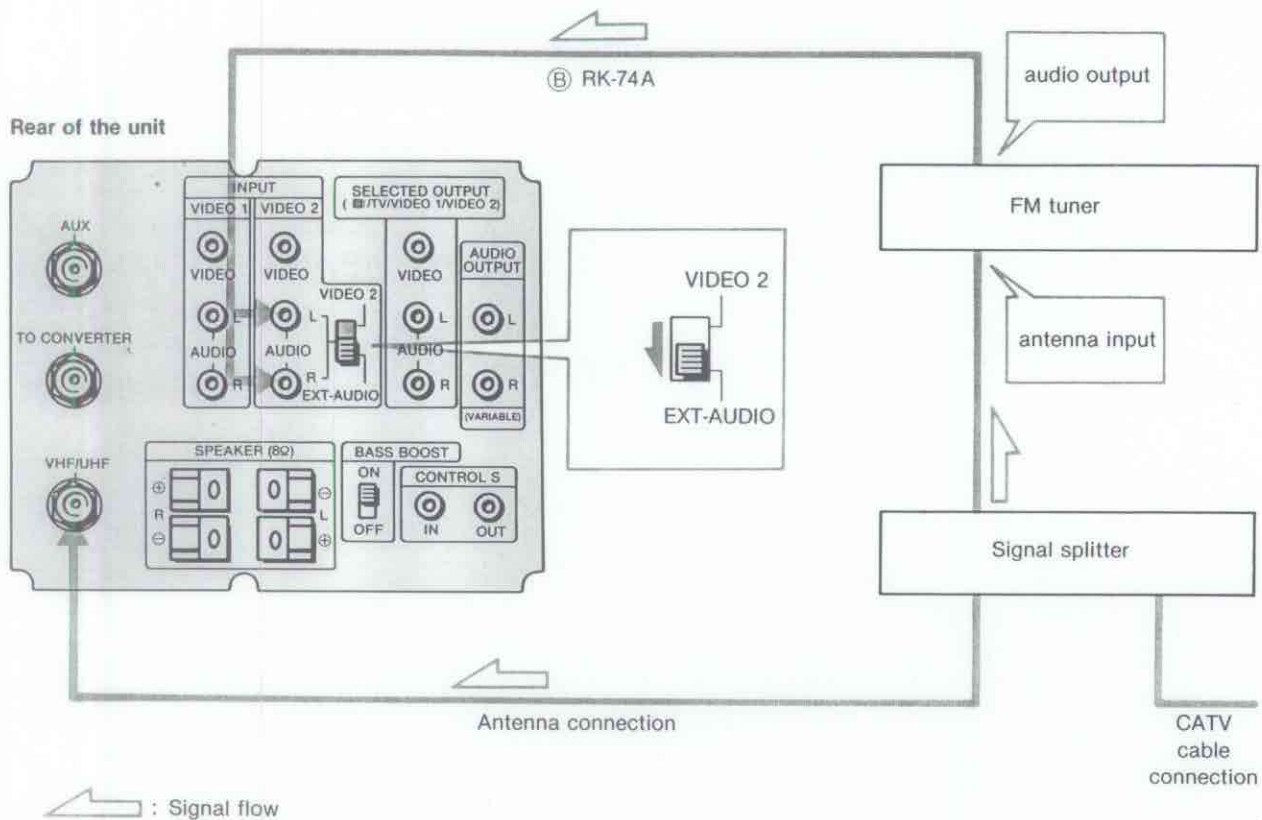
If your audio/video equipment has a CONTROL S input jack, you can operate it by remote control through the KV-25VXR. (Useful especially when units to be controlled are located apart from each other.) Connect the CONTROL S input of the equipment to CONTROL S OUT of the KV-25VXR.





## FM SIMULCAST RECORDING

### System outline



You can monitor and record in stereo sound certain cable TV programs, such as MTV (Music TV), whose audio signals are sent over cable on certain FM frequencies.

The incoming cable signal is split by an optional signal splitter and fed to both this unit (for picture) and an FM tuner (for sound).

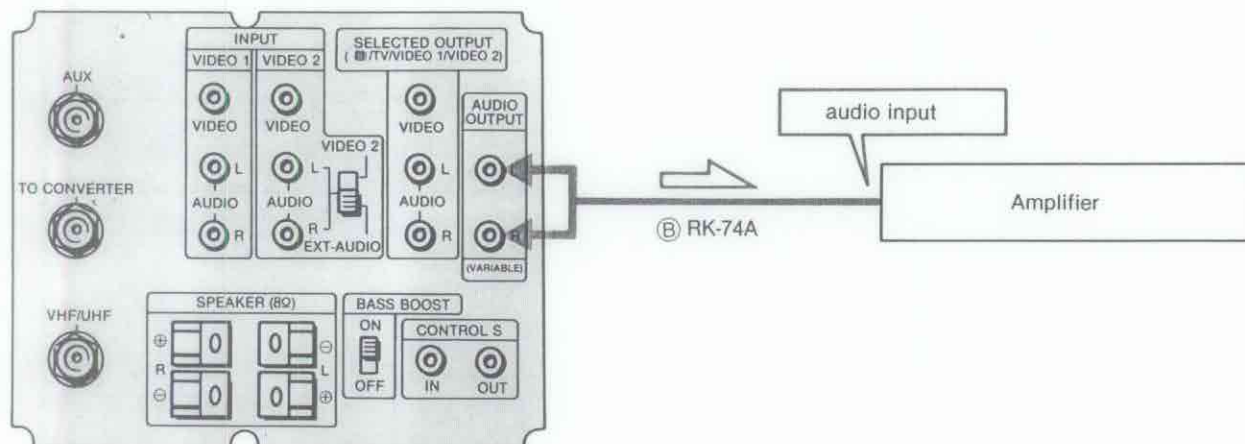
- 1 Set VIDEO 2/EXT-AUDIO to EXT-AUDIO.
- 2 Press TV/VIDEO so that "EXT-A" appears on the screen.
- 3 Set CABLE to ON.
- 4 Depending on the channel to be viewed, display the on-screen "AUX" by pressing ANT/AUX.  
For regular cable TV channels: "AUX" should be off.  
For pay cable TV channels: "AUX" should be displayed.
- 5 Tune in the desired channel both on this unit and the FM tuner.

The recording operation is same as usual.

## TO MONITOR TV OR BUILT-IN VCR SOUND WITH A STEREO SYSTEM

### System outline

#### Rear of the unit



 : Signal flow

#### Sound volume adjustment

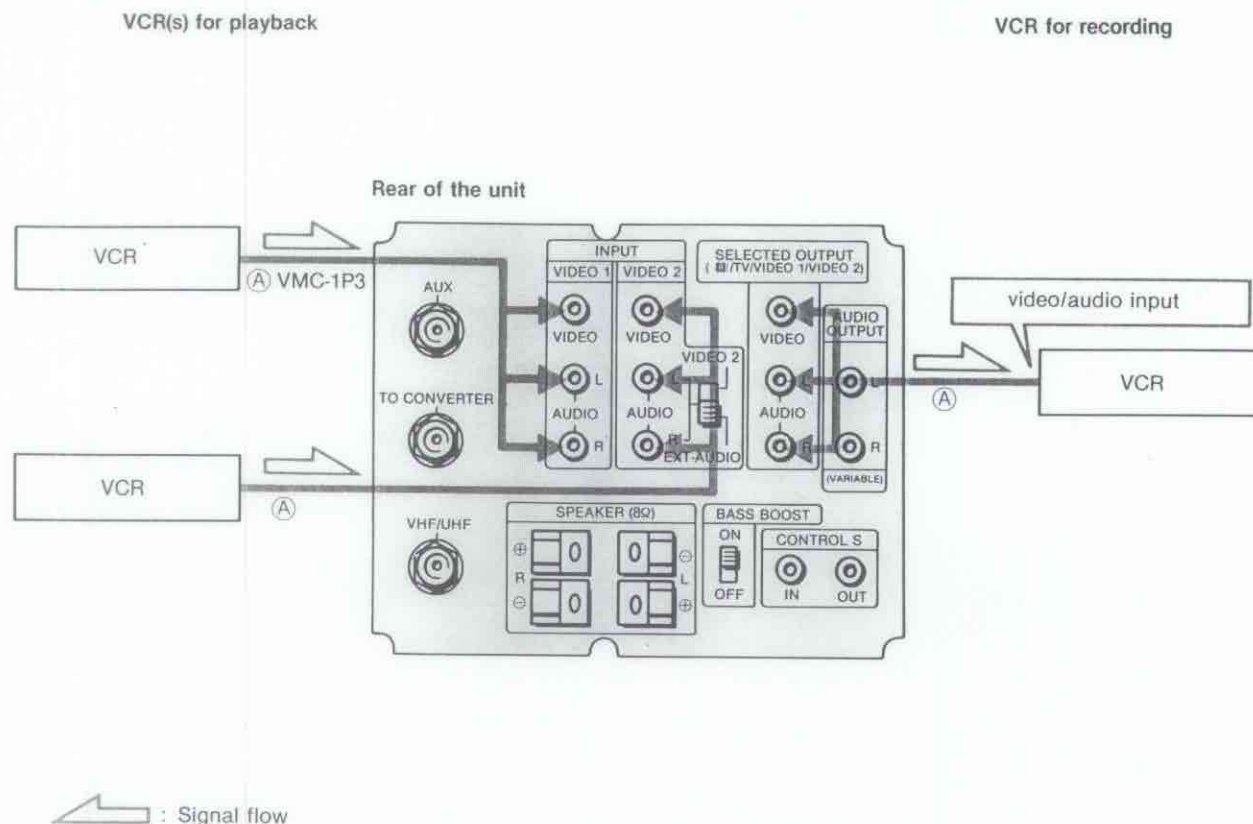
On the amplifier, set to the medium level.

On the KV-25VXR, adjust with VOL on the Commander.

# TAPE EDITING

To edit from TV, built-in VCR or from external VCRs onto another VCR connected to the SELECTED OUTPUT terminals

## System outline



You can record a TV program, 8 mm VCR playback or playback of the external VCR onto a tape of another VCR connected to the SELECTED OUTPUT terminals. Select the video source to be edited with VIDEO OUTPUT on the front compartment of the KV-25VXR. The selected signals will be fed from the SELECTED OUTPUT terminals and can be recorded by the connected VCR.

While editing a tape, you can monitor on the KV-25VXR's screen the picture selected with SELECTED OUTPUT or TV/VIDEO.

Selected output signal = Recorded signal	On-screen picture
8 mm	Picture that you select with TV/VIDEO (8 mm/TV/VIDEO 1/VIDEO 2)
TV	
VIDEO 1	
VIDEO 2	

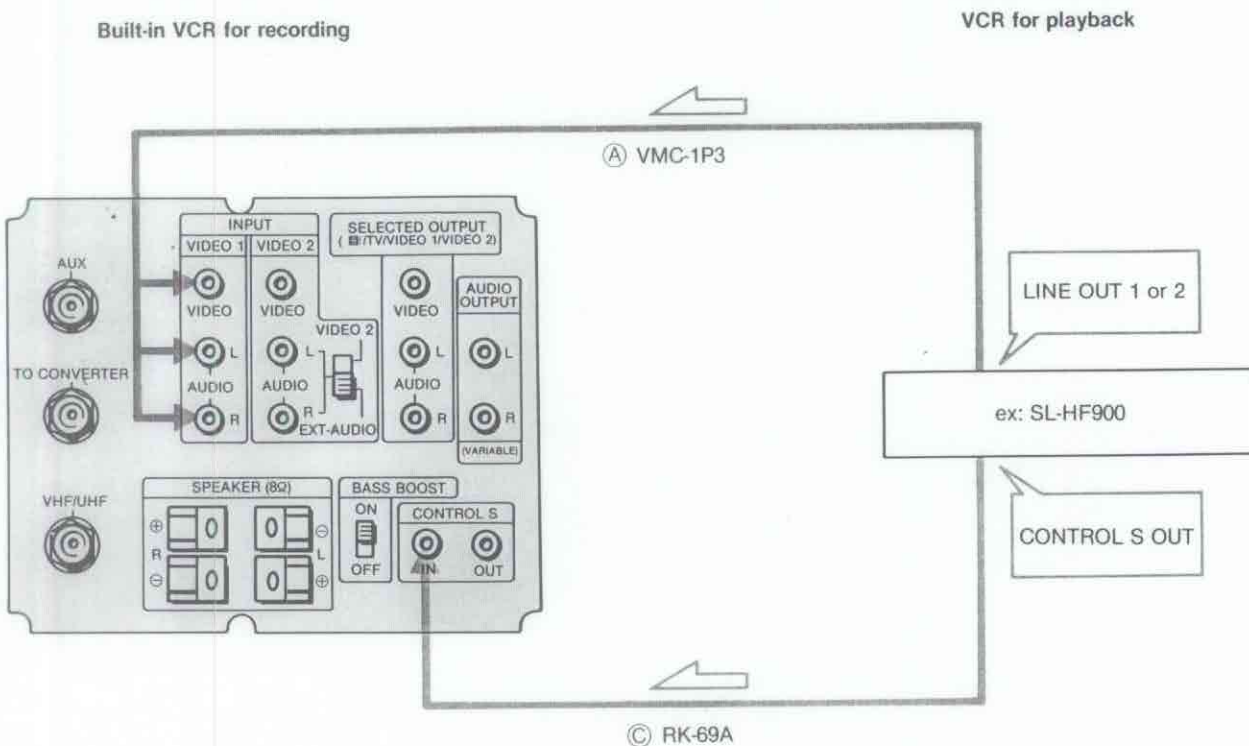
### About VIDEO 2/EXT-AUDIO switch

To edit a video tape from a VCR connected to VIDEO 2 IN, set the switch to VIDEO 2.

To record from an external sound source connected to VIDEO 2 IN, set the switch to EXT-AUDIO.

To edit from a VCR equipped with the CONTROL S (EDIT) output

### System outline



: Signal flow

Only the particular scenes preset on the playback VCR will be edited (automatic assemble editing). Recording start/stop on the built-in VCR can be activated in synchronization with playback start/stop on the playback VCR.

#### On the KV-25VXR

Press TV/VIDEO on the supplied Remote Commander to select VIDEO 1 (or 2 to which the VCR for playback is connected).

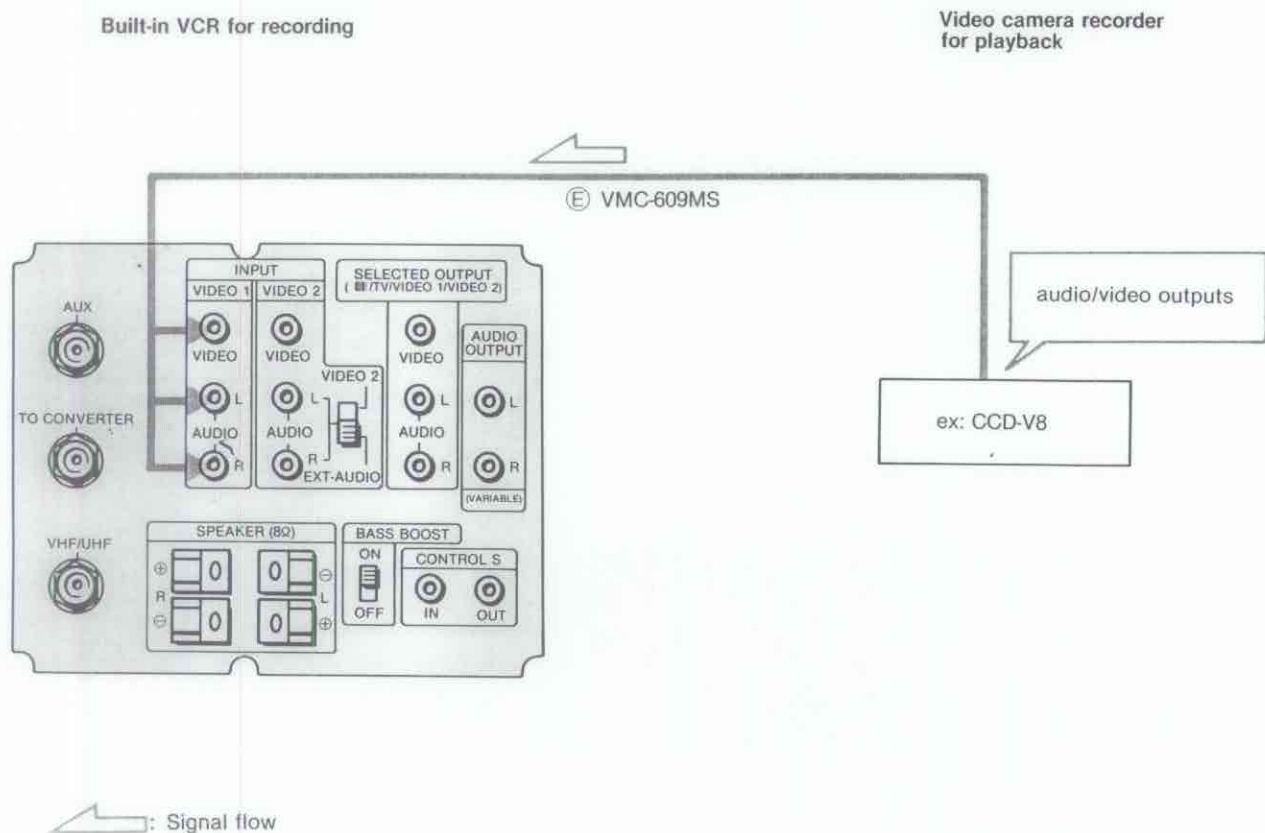
#### On the connected VCR

Start the automatic assemble editing following the instruction manual of the VCR.



To edit a tape from a Sony video camera recorder on the built-in VCR

### System outline



### On the player

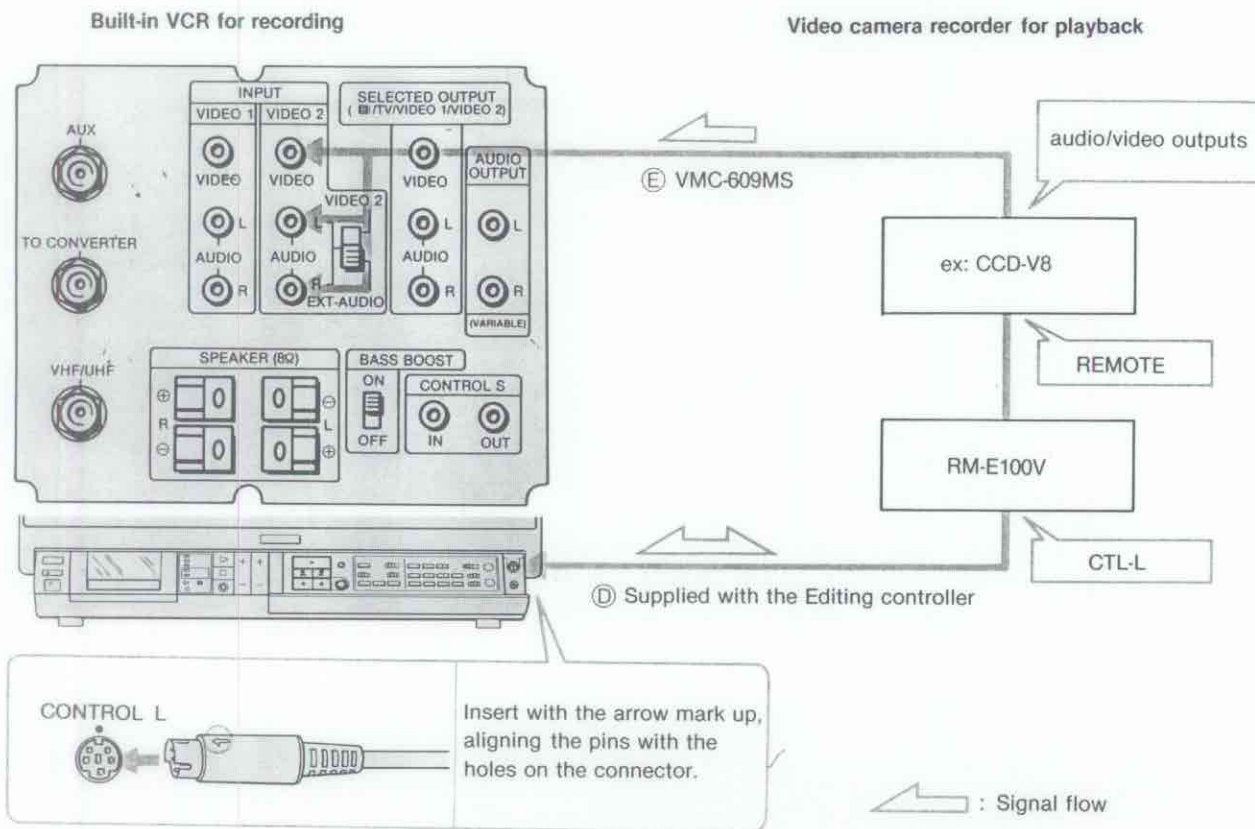
Set to the playback mode.

### On the recorder

Press TV/VIDEO to select VIDEO 1 or 2 whichever the unit for playback is connected to.  
Start recording.

To edit a tape from the Sony video camera recorder using the Sony RM-E100V series editing controller

### System outline



With this controller, you can preset the locations of the scenes you want to record (up to 8 scenes) in the controller and with a press of a button, these scenes will be recorded by this VCR automatically in the order preset.

Tape transport on the "player" and "recorder" are controlled by the RM-E100V.

# SPECIFICATIONS

## Television section

Television system	American TV standard
Channel coverage	VHF: 2-13 UHF: 14-69 CATV: 1-125
Picture tube	Microblack Trinitron <b>25-inch picture measured diagonally</b> 27-inch picture tube measured diagonally 114-degree deflection
Antenna	75-ohm external antenna terminal for VHF/UHF, AUX and TO CONVERTER
Inputs	VIDEO 1 (phono jacks) Video: 1 Vp-p, 75-ohms unbalanced, sync negative Audio: 408 m Vrms (100% modulation, 47 kilohms) VIDEO 2 (phono jacks) Video: 1 Vp-p, 75-ohms unbalanced, sync negative Audio: 408 m Vrms (100% modulation, 47 kilohms)
Outputs	SELECTED OUTPUT (phono jacks) Video: 1 Vp-p, 75-ohms unbalanced, sync negative Audio: 408 m Vrms (100% modulation, 47 kilohms) AUDIO (phono jacks) 408 m Vrms MAX (variable) (100% modulation, 47 kilohms)
Control S input/output	CONTROL S IN (mini jack) CONTROL S OUT (mini jack)
Control L	5-pin connector
Speaker output	10 W × 2
FROM TV STAND connector	For the optional SU-171 TV stand

## VCR section

Video recording system	Rotary two heads, Helical scanning FM system
Audio recording system	Standard track: Rotary head, FM system (monaural) PCM track: PCM system (2 channels)
Video signal	NTSC color, EIA standards
Usable cassette	8 mm video format cassette
Tape speed	SP: Approx. 1.43 cm/sec. LP: Approx. 0.72 cm/sec.
Recording or playback time	SP: 2 hr., LP: 4 hr. (with P6-120 cassette)
Fast-forward time	Approx. 3 min. (with P6-90 cassette)
PCM system	
Sampling frequency	31.5 kHz
Audio frequency	20-15 kHz
Wow and flutter	Less than 0.005% RMS

## Timer

Clock	Crystal lock
Time indication	12-hour cycle
Timer setting	Only for recording 4-event/3-week max., adjustable for any day or for all 7 days of the week

## General

Power requirements	120 V AC, 60 Hz
Power consumption	215 W max. (5 W in standby condition)
Dimensions	Approx. 635 × 585.5 × 475 mm (w/h/d) (25 × 23¼ × 18¾ inches) including projecting parts and controls
Weight (without speakers)	Approx. 48.5 kg (106 lb 15 oz)
Accessories supplied	Speaker (1 pair) Remote Commander RM-737 (1) with 2 size AA batteries Antenna connector EAC-66 (1) Cleaning cassette V8-25CL (1)
Optional accessories	TV stand with foot pedals SU-171 TV stand SU-172 Audio/Video connecting cables (See page 26.)

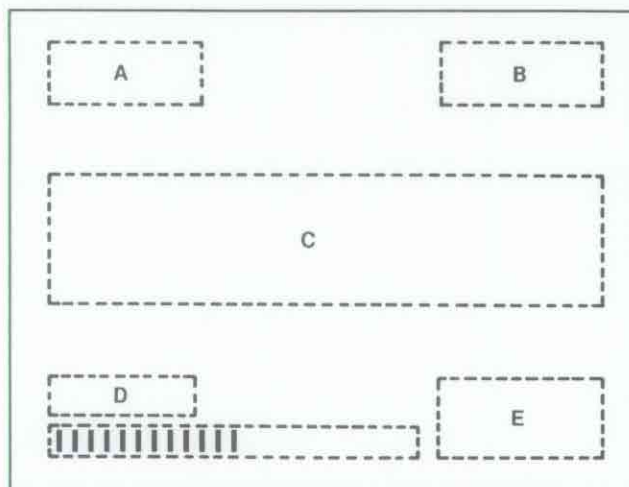
Design and specifications subject to change without notice.



# REFERENCE FOR ON-SCREEN MESSAGES

## ON-SCREEN INDICATIONS

Indications in 6 different zones will show how the unit is working.



### A About VCR

**PLAY** (Playback)  
**PLAY PAUSE** (Playback pause)  
**FF** (Fast-forward)  
**REW** (Rewind)  
**REC** (Recording)  
**REC PAUSE** (Recording pause)  
**STOP**  
**EJECT**  
**STANDBY**  
**[SP]**  
**[LP]**  
**[STEREO]** (Playback or a pre-recorded tape with PCM stereo sound)

### B About TV

**1-125** (Channel number)  
**AUX 1-AUX 125** (Pay TV channel number)  
**MAIN** (MAIN sound of the MTS program)  
**SAP** (Second Audio Program)  
**BOTH** (MAIN and SAP)  
**VIDEO 1** (Signals from VIDEO 1 jack)  
**VIDEO 2** (Signals from VIDEO 2 jack)  
**EXT-A** (Audio signal from VIDEO 2 jack with VIDEO 2/EXT-AUDIO set to EXT-AUDIO.)  
**SLEEP** (To turn off automatically after one hour.)  
**MUTING** (Speaker sound muted for a moment.)  
**+ channel number** (A channel is tuned in and memorized.)  
**- channel number** (A channel is erased from the memory.)

### C On-screen messages (See p.37)

### D Picture and sound adjustment element and its level

**VOLUME**  
**PICTURE**  
**HUE**  
**COLOR**  
**BRIGHT**  
**SHARP**  
**TREBLE**  
**BASS**  
**BALANCE**

**RESET** (Level of adjustment for the above elements—except **VOLUME** and **PICTURE**—is reset to the factory preset level.)

**Segmented color bar indicating the level of adjustment for each element.**

### E Tape counter, current time, VCR SLEEP timer's time sequence

**COUNTER 0000**  
**SAT 5:15 PM** (or 5:15)  
**0 H 00 M TO GO** (remaining time of VCR SLEEP timer)

## ON-SCREEN MESSAGES

Message	indicates	what to do
TAPE BEGINNING		Start playing back or recording.
TAPE END		Rewind the tape or change to a new one.
TAPE WILL END SOON	Within 5 minutes of the tape end.	
PLEASE INSERT A TAPE	No tape is inserted.	Insert a tape.
TAPE TAB IS SET TO SAFETY POSITION	The tab on the tape is slid out.	Slide the tab in. (Not for commercially available pre-recorded tapes.)
1 MINUTE TO TIMER REC	Timer recording will start in one minute.	
TIMER REC	Timer recording is now being made.	To stop recording, press TIMER REC ON/OFF
TIMER REC IN STANDBY MODE	VCR is in timer recording standby mode. The tape running is blocked and it cannot be ejected.	To release the standby mode, press TIMER REC to OFF.
TIMER HAS NOT BEEN SET		Press TV/PROG and start the timer setting.
	The last timer setting that you made was incomplete.	Recall the program page and complete the setting.
TAPE RUNNING	<ul style="list-style-type: none"> <li>• Tape is now running.</li> <li>• VCR sleep timer is on.</li> </ul>	To stop the tape running, press STOP.
THERE HAS BEEN A POWER INTERRUPTION	A power interruption of more than 24 hour occurred.	Timer and clock settings are erased. Reset them.
CLOCK IS NOT SET	Clock setting is incomplete. Timer programs cannot be realized.	Set the internal clock.
PROG 1 IS CANCELLED 2 3 4	<ul style="list-style-type: none"> <li>• You have cancelled the program with CANCEL.</li> <li>• TIMER REC is set to OFF.</li> <li>• Starting time of more than 2 programs are the same</li> </ul>	New timer program can be set.
TIMER REC IS OFF	<ul style="list-style-type: none"> <li>• You have set TIMER REC to OFF.</li> <li>• All the timer settings have been activated and completed.</li> </ul> The timer recording standby mode is released.	Use the VCR normally. (playback, recording possible)
TIMER SETTING ERROR PROG 1 IS CANCELLED 2 3 4	The timer program setting was incorrect.	Reset the program.
	The timer program setting was incomplete.	Set all the timer setting items.
VCR SLEEP CANNOT BE SET	VCR is in FF(fast-forward), REW(rewind), picture search, still picture or timer recording mode.	VCR SLEEP function is effective only for playback, playback pause, recording, recording pause, slow motion, stop-action advance modes.
SEE MANUAL VCR TROUBLESHOOTING	VCR malfunction.	See "OTHERS" in the list of troubleshooting on the back cover.

# REFERENCE FOR LOCATION AND FUNCTION OF CONTROLS

A	ADD (TUNING)	key	To tune in channels.
	AUX	terminal	Connect to the output of a decoder for pay cable TV.
	ANT/AUX	key	Press so that "AUX" appears on the screen to view the pay cable TV programs. Press again for VHF/UHF/CATV programs.
	AUTO STEREO ON/OFF	switch	Normally set to ON. Set to OFF if there is too much local interference.
	AUDIO MONITOR	selector	To select the MTS sound of a tape which is played back by the built-in VCR.
	AUDIO OUTPUT	phono jacks	Connect to the audio input(s) of an amplifier, etc.
B	BASS BOOST	switch	Normally set to ON. When you connect speakers larger than the supplied ones, set to OFF.
C	CABLE ON/OFF	switch	Set to ON to receive CATV programs.
	CANCEL	key	To clear the settings of the VCR timer.
	CH# (channel number)	keys	To select the channel, to adjust the time and to set the timer recording items.
	CHANNEL +/-	keys	To scan all pretuned channels.
	CHECK	key	To check the programmed timer settings.
	CLOCK SET	key	Press as the first step for clock setting.
	CLOCK DISPLAY	key	To summon the current time.
	CONTROL L	5-pin connector	Connect to the REMOTE terminal of a Sony video camera recorder or to CONTROL L terminal of other equipment.
	CONTROL S IN	mini jack	Connect to a CONTROL S OUT(EDIT) or CONTROL OUT terminal of a VCR, etc.
	CONTROL S OUT	mini jack	Connect to a CONTROL S IN or CONTROL IN terminal of a VCR, etc.
	COUNTER DISPLAY	key	Press to display the tape counter. Press again to make it disappear.
	COUNTER RESET	key	To reset the tape counter to 0000.
D	DISPLAY	key	Press to summon the on-screen indications. Press again to make them disappear.
E	EJECT	key	To open the cassette holder or to eject the cassette.
	ENTER	key	To input the commands made by the #CH keys.
	ERASE (TUNING)	key	To erase unused channels.
F	▶▶ (FF)	key	Press to advance the tape rapidly.
	FROM TV STAND	6-pin DIN connector	Connect the optional SU-171 TV stand.
H	HEADPHONES	phone jack	Connect headphones here.
L	LEVEL L-/R+ (TV ADJUSTMENT)	keys	To adjust the TV's picture or sound level.
	LIGHT	key	To turn on/off the illumination light in the front compartment.
M	MODE SP/LP	selector	Select the tape speed SP or LP.
	MTS	key	To select the MTS sound.
	MUTING	key	Press to mute the sound. Press again to restore the sound.
P	⏸ (PAUSE)	key	To stop the tape for a moment.
	PAUSE	lamp	Lights when the unit is in the playback or recording pause mode.
	PICTURE +/-	keys	To adjust the picture contrast.
	▶ (PLAY)	key	Press to start playing back a tape.
	PLAY	lamp	Lights during playback.
	POWER	switch	Press to turn on/off the unit. If preset, VCR's timer recording can be done without turning on the POWER.



R	● (REC)	key (switch)	To start recording.
	REC	lamp	Lights during recording.
	RESET (TV ADJUSTMENT)	key	Press to restore the optimum picture and sound level as preset at the factory.
	◀◀ (REWIND)	key	Press to rewind the tape rapidly.
S	STD	switch	To select the MTS sound to be recorded.
	SELECT (TV ADJUSTMENT)	key	For TV picture and sound. Press to select the element to be adjusted.
	SELECT (8) TIMER SET)	key	For VCR's timer setting. Press to display any of the 4 timer setting programs.
	SELECTED OUTPUT	phono jacks	Connect to video and audio outputs of a VCR etc.
	SLEEP	key	To set the TV's sleep timer.
	SLOW ADJ (adjust)	control	Turn to stabilize the slow motion picture.
	■ (STOP)	key	Press to stop the tape.
	SPEAKER	terminals	Connect the speakers.
	STEREO	lamp	Lights for a stereo broadcast program.
T	TIMER REC	lamp	Lights during timer recording and timer recording standby mode.
	TIMER REC ON/OFF	switch	Press to set the unit in the timer recording standby mode. Press again to release the standby mode.
	TO CONVERTER	terminal	Connect to the input of a decoder for pay cable TV.
	TV/PROG	key	Press to start the VCR timer settings.
	TV/VIDEO	key	Press to select the picture of the TV, built-in VCR, VIDEO 1 or VIDEO 2.
	TV SLEEP	indicator	Lights while the TV SLEEP timer is operating.
V	VCR REMOTE 8 /OFF/Beta	selector	Set to 8: to operate this unit and any 8 mm format VCRs. Beta to operate any Beta format VCRs.
	VCR SLEEP	key	Press to select the duration of the VCR SLEEP timer.
	VCR SLEEP	lamp	Lights while the VCR SLEEP timer is operating.
	VHF/UHF	terminal	Connect VHF/UHF/CATV cable here.
	V HOLD	control	Turn to stabilize the TV picture vertically.
	VIDEO 1	phono jacks	Connect the video and audio outputs of a VCR, video disc player, etc.
	VIDEO 2	phono jacks	Connect the video and audio outputs of a VCR, video disc player, etc. or the audio outputs of an amplifier, etc.
	VIDEO 2/EXT-AUDIO	selector	Set to VIDEO 2 if you connect video equipment such as a VCR, a video disc player, etc. To listen to the sound of the connected audio equipment, such as an amplifier, set to EXT-AUDIO.
	VIDEO	indicator	Lights while the built-in VCR or equipment connected to VIDEO 1 or 2 terminal is operating.
	VIDEO OUTPUT	selector	Select the signal to be output from the SELECTED OUTPUT terminals.
	VOLUME +/-	keys	For volume control of the TV, built-in VCR and the equipment connected to VIDEO 1 or 2 jacks.
	▶▶ (fast-forward)	key	To advance the tape rapidly.
	⏸ (pause)	key	To stop the tape for a moment.
	▶ (playback)	key	To start playing back a tape.
	● (recording)	key	To start recording.
	◀◀ (rewind)	key	To rewind the tape rapidly.
	■ (stop)	key	To stop the tape.
	1/5 (1/5 speed)	key	Press during the playback or playback pause mode. The tape will run in 1/5 of the normal speed. To restore the normal speed, press ▶.
	⏮ (stop action advance)	key	Press during the playback pause mode. The picture advances frame by frame.

# TROUBLESHOOTING

	TV/VCR	
POWER	POWER does not go on.	Plug the unit into a wall outlet.
CLOCK	The clock setting is erased.	There has been a power interruption. Reset the clock and timer settings.

	TV	
	Poor picture, good sound	<ul style="list-style-type: none"> <li>Adjust PICTURE.</li> <li>Adjust BRIGHT.</li> <li>Check antenna/cable connections.</li> </ul>
	Good picture, no sound	<ul style="list-style-type: none"> <li>Press VOL +.</li> <li>Check the TV/VIDEO setting.</li> <li>Check the MTS switch setting.</li> <li>Check the EXT-AUDIO switch setting.</li> </ul>
	No picture (screen not lit), no sound	<ul style="list-style-type: none"> <li>Plug the unit into a wall outlet.</li> <li>Check the TV/VIDEO setting.</li> </ul>
	No color	Is it a color program?
	Stereo sound is heard in monaural.	AUTO STEREO is set to OFF.
	Snow and noise only	<ul style="list-style-type: none"> <li>Is it an active or the correct channel?</li> <li>Check the CABLE switch setting.</li> <li>Check antenna connections.</li> </ul>
	Dotted lines or stripes	This is often caused by local interference. (Ex. cars, neon signs, hairdryers, etc.) Adjust antenna for minimum interference.
	Double images or ghosts	Reflections from nearby mountains or buildings often cause this problem. A highly directional outdoor antenna or CATV cable may improve the picture.
	Picture rolls vertically	Turn V HOLD in the front compartment until the picture stabilizes.
	Try another channel. It could be station trouble.	

	VCR	
PLAYBACK	The picture does not appear.	Check the TV/VIDEO setting.
	The playback picture is not clear.	The video heads may be contaminated. Clean them with the Sony V8-25CL video head cleaning cassette. For details, refer to the instructions on the V8-25CL.
	SAP sound cannot be played back.	Set AUDIO MONITOR to STD.
	No sound is heard during playback.	A tape on which no SAP sound is recorded is being played back with AUDIO MONITOR set to STD. Set it to PCM or MIX.
RECORDING	The TV program being recorded does not appear on the screen.	Check the TV/VIDEO setting.
	The cassette is ejected when REC is pressed.	The safety tab on the cassette is slid shut.
	SAP sound cannot be recorded.	Set STD to SAP.
TIMER	Timer recording is not made as preset.	<ul style="list-style-type: none"> <li>The clock is not set correctly.</li> <li>There has been a power interruption.</li> <li>The tape is at its end.</li> <li>Two or more timer settings overlap.</li> <li>TIMER REC was not set to ON.</li> </ul>
	"SUN 12:00AM" blinks when CLOCK DISPLAY is pressed.	The clock setting is erased. Reset the clock and if necessary, the timer programs.

	OTHERS	
	"SEE MANUAL VCR TROUBLE-SHOOTING" flashes on the screen.	<p>The tape has not been loaded correctly and does not run normally.</p> <ul style="list-style-type: none"> <li>Take up any slack on the tape and insert it again.</li> <li>Use a new cassette.</li> </ul> <p>Moisture has condensed on the drum assembly inside the unit.</p> <ul style="list-style-type: none"> <li>Let the tape dry and insert again.</li> </ul>

If the problem still cannot be solved, contact your nearest Sony service facility.