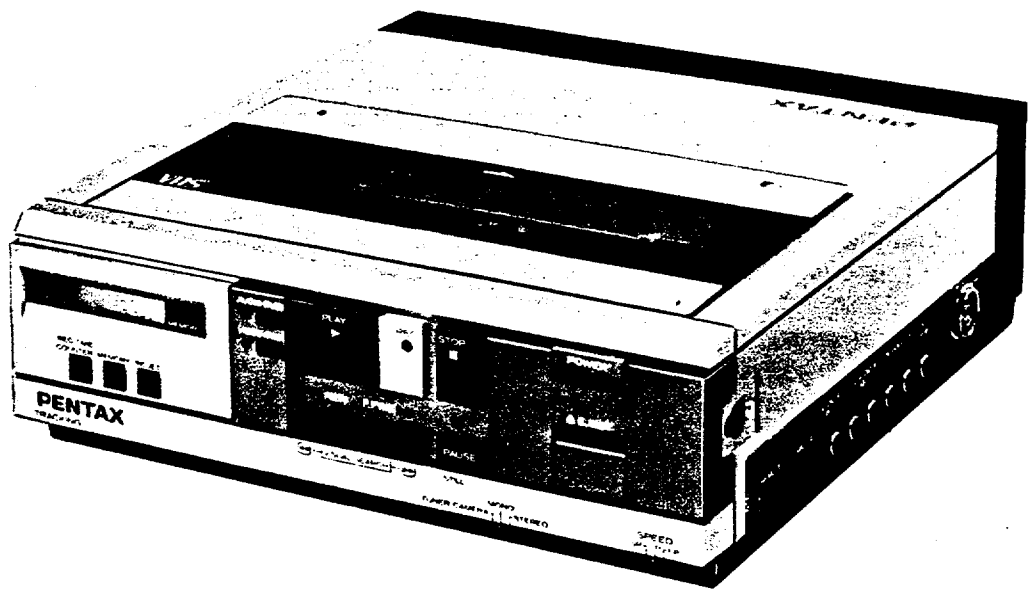


# PENTAX

VHS PORTABLE VTR

## MODEL PV-R1000A

INSTRUCTION MANUAL



**VHS**

THIS PORTABLE VTR IS A VHS  
TYPE VIDEO RECORDER.  
FOR PROPER OPERATION, ONLY  
THE VHS TYPE CASSETTE CAN BE  
USED.

**WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT  
EXPOSE THIS UNIT TO RAIN OR MOISTURE.**

# CONGRATULATIONS

You are now the proud owner of a Pentax Portable VTR. Please read this instruction manual carefully before use and refer to it if any difficulties arise.

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### WARNING:

Many television programs are copyrighted. One court has held that private, non-commercial, in-home video taping of copyrighted televised programs constitutes copyright infringement. Purchasers are advised not to copy such programs.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user of 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.

The exclamation point within an equilateral triangle is intended to alert the users of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,  
DO NOT REMOVE COVER (OR BACK).  
NO USER-SERVICEABLE PARTS INSIDE.  
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

## FEATURES

- *Portable — use it indoors or outdoors*
- *3-way power supply*
- *Soft-touch controls with microprocessor*
- *Power conservation feature so you don't waste battery power*
- *8 Hours recording and playback*
- *\* 5 head system*
  - For SP mode 2 exclusive heads*
  - For LP/EP mode 2 exclusive heads*
  - For special effect 1 exclusive head*
- *Compact and light — only 8 lbs (3.6 kg)*
- *Sound with sound feature*
- *Date recording function*
- *Special "visual search" feature (Both SP and EP Modes)*
- *Video/Audio dubbing feature*

This Instruction Manual primarily describes the operation and use of the VTR when used with the PV-BT01A Battery Pack. When the PV-R1000A is combined with the PV-U1000A Video Tuner or PV-A1000A AC Adaptor/Charger, refer to the respective Instruction Manuals for interconnection and operation instructions.

## PRECAUTIONS

1. Operate the unit only on 12 V DC. For AC operation, use PV-A1000A AC power adaptor or PV-U1000A Tuner/Timer unit. For car battery operation, use car battery cord PC-YC12 (optional) only. Do not use any other car battery cord.
2. Should any solid object or liquid fall into the cabinet, turn off the unit and have it checked by qualified personnel before operating it further.
3. Do not install the unit near heat sources such as radiators or in a place subject to direct sunlight, excessive dust, moisture, mechanical vibration or shock.
4. Keep the unit and cassette away from equipment with strong magnets, i.e., a microwave oven or a loud speaker
5. After playing a tape, remove the cassette from its compartment if the unit will not be used for any length of time.
6. Clean the cabinet, panel, and controls with a dry soft cloth, or a soft cloth lightly moistened with a mild detergent solution. **DO NOT** use any type of solvent, such as alcohol or benzene, which might damage the finish.
7. Allow for air circulation at bottom, top, and back of units.  
**DO NOT** slide things like books or magazines under the units.
8. PV-U1000A is designed to be operated in a horizontal position.  
**DO NOT** place the unit on a carpet because it can block the ventilation holes.
9. Unplug the AC cord when not in use for prolonged periods of time.
10. Do not place the portable VTR on the Tuner/Timer unit.
11. Do not insert wires, etc., through the cassette holder.
12. When using the AC power adaptor, always be sure to stop the recorder before switching off adaptor power.

### MOISTURE CONDENSATION

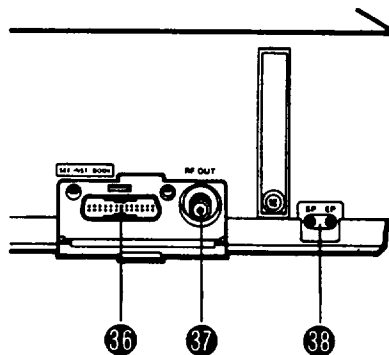
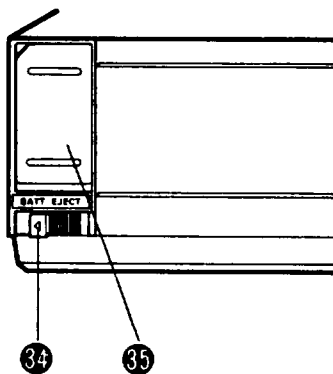
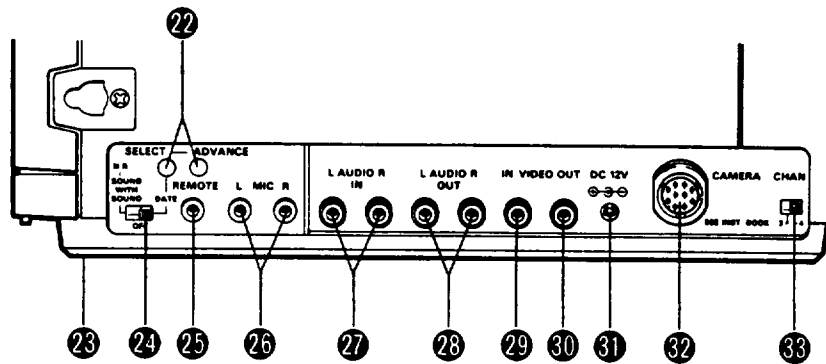
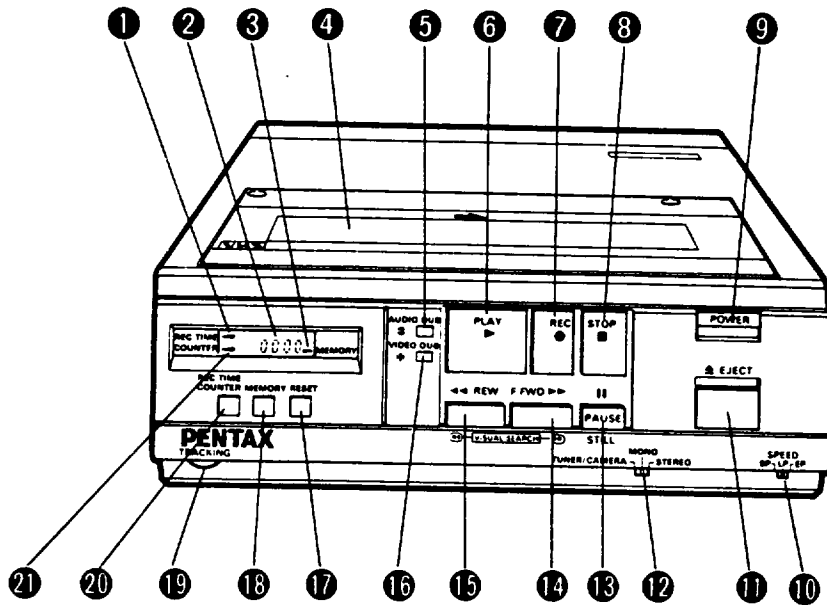
If you pour a cold liquid into a glass, water vapor in the air will condense on the surface of the glass. This is moisture condensation.

Moisture condensation on the head drum, one of the most crucial parts of the Deck, will cause damage to the tape. The Deck has a humidity detector unit built in. When the Deck is exposed to a rapid temperature change from cold to warm, some condensation will occur. When moisture is present, stop indicator light will flash. While this light is on, the unit will not operate. Under these circumstances press the Eject button to lift the cassette holder and allow at least 2 hours for the Deck to dry out. When light stops blinking, unit can be operated.

## READ THIS FIRST!

1. Carefully unpack the VTR and Tuner/Timer units. Be sure not to misplace any of the cables or adaptor.
2. Locate the VHF antenna on your TV set. Identify whether your TV has a 300 ohm (two screws) or 75 ohm (athreaded barrel) connection.
3. On the back of the VTR, in the middle, there is a lid which opens downward. Open that lid. It will expose two connectors. One of the connectors is marked "RF OUT" and the other is for the cord of the Tuner/Time.
4. On the back of the Tuner/Timer there are two cords. One is the power cord, the other connects on the back of the VTR.
5. Locate the connectors on the back of the Tuner/Timer marked VHF In and VHF Out.
6. Attach one of the round cables (75 ohm) to the VHF Out.
7. In step #2 you identified the VHF antenna on your TV set as either 2 screws (300 ohm) or a threaded barrel (75 ohm). If you TV has a 300 ohm connector, locate the 75-300 ohm adaptor. It is a cylinder with threads at one end and two wires at the other end.
8. Attach the 75-300 ohm adaptor to the end of the cable coming off the VHF Out of the Tuner/Timer.
9. Attach the cable with the adaptor to the two screws of the TV set.
10. Plug in the power cord to a wall outlet.
11. Turn on the power on the VTR and the TV set.
12. Put the TV set on either channel 3 or channel 4, whichever has no broadcasting station in your area.
13. Locate the RF converter selector switch on the back of the VTR. Put that switch on channel 3 or channel 4, whichever has no broadcasting station in your area.
14. Press "EJECT" lever on the VTR. Insert the video cassette and press down the cassette holder.
15. Press "PLAY" on the VTR and enjoy the tape.

# DESCRIPTION OF PORTABLE VTR



## ① REC TIME INDICATOR

Comes on when REC TIME/COUNTER select switch is in "REC TIME".

## ② REC TIME/COUNTER DISPLAY

Indicates relative position of programs on tape or indicates recording time. It may be used to help to locate a programs starting point or to determine the elapsed recording time.

## ③ MEMORY INDICATOR

Memory indicator comes on when Memory counter button is turned on.

## ④ CASSETTE HOLDER

## ⑤ AUDIO DUB BUTTON ( )

Press "PLAY" and "AUDIO DUB" buttons simultaneously to audio dub.

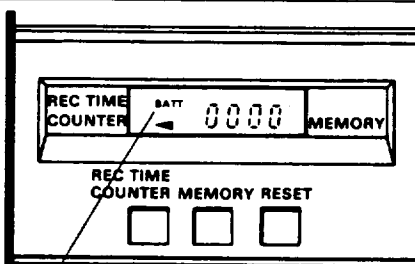
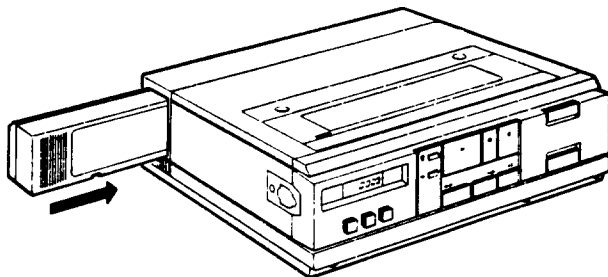
- 6 PLAY BUTTON (▶)**  
Press to start play.
- 7 RECORD BUTTON (●)**  
Press "PLAY" and "RECORD" buttons simultaneously to start recording.
- 8 STOP BUTTON (■)**  
Press to stop tape. The STOP button must be pressed between "RECORD" and any other operation. The STOP button must be pressed before "EJECT".
- 9 POWER SWITCH**
- 10 TAPE SPEED SELECTOR**  
Recording time with cassette tape T-160:  
EP : 8 Hours recording  
LP : 5.3 Hours recording  
SP : 2.6 Hours recording  
**Note:** Playback speed automatically corresponds with recorded speed.
- 11 EJECT BUTTON (▲)**  
Press to insert or remove cassette. The STOP button must be pressed before "EJECT".
- 12 AUDIO INPUT SELECT SWITCH**  
Selects the sound source to be recorded.
- 13 PAUSE/STILL BUTTON (II)**  
Press to pause during recording.  
Press to view still frame during playback of an EP or SP recorded tape.  
Press again to release.
- 14 FAST FORWARD/VISUAL SEARCH BUTTON (▶▶▶)**  
Press to activate fast forward.  
Press this button during playback of an EP or SP recorded tape. Forward playback picture at high speed can be seen.
- 15 REWIND/VISUAL SEARCH BUTTON (◀◀◀)**  
Press to start rewind.  
Press this button during playback of an EP or SP recorded tape. Reverse playback picture at high speed can be seen.
- 16 VIDEO DUB BUTTON (II)**  
This button is used when recording the desired scene or title on the recorded tape. Refer to Page 14 for details.
- 17 COUNTER RESET BUTTON**  
To reset counter to **0000**.
- 18 MEMORY COUNTER BUTTON**  
When pushed in MEMORY will stop at **9999**.
- 19 TRACKING CONTROL KNOB**  
To minimize noise in playback.
- 20 REC TIME/COUNTER SELECT SWITCH**  
Press to select Rec Time display or Counter display.
- 21 COUNTER INDICATOR**  
Comes on when REC TIME/COUNTER select switch is in "COUNTER".
- 22 DATE BUTTONS**  
These buttons are used for recording a date on the tape.
- 23 CAMERA SELECT SWITCH (Underneath plastic cap on the bottom)**  
Set this switch to "R" when using the Pentax camera which is provided with the recording check function, and to "N" when using a camera other than Pentax video camera which is not provided with this function. If the pause/run switch on the camera operates in the reverse manner, set this switch to "P".
- 24 NOISE REDUCTION/SOUND WITH SOUND/DATE SWITCH**  
During playback turn switch ON (left position) to reduce tape hiss or noise. During audio dubbing, set switch to "OFF" (center position) to record sound on right and left channels or to ON (left position) to record sound on right channel only (sound with sound). Set to "DATE" (right position) to record date.  
The "OFF" (center) position is for normal use.
- 25 REMOTE CONTROL JACK**  
Connect optional wired Remote control unit here.  
**Note:** Be sure to turn the power switch off when connecting optional wired Remote Control unit.
- 26 MICROPHONE JACKS**  
For microphone.
- 27 AUDIO IN**  
Receives audio signals from an external sound equipment, or from another VTR.
- 28 AUDIO OUT**  
Permits audio connection of your unit to a monitor or another VTR.
- 29 VIDEO IN**  
Receives video signal from an another VTR.
- 30 VIDEO OUT**  
Permits video connection of your unit to a monitor or another VTR.
- 31 EXTERNAL BATTERY JACK**  
Optional DC car cord plugs in here to connect VTR to car cigarette lighter socket or to a spare rechargeable battery.
- 32 CAMERA JACK**  
Camera is connected here.  
Automatically overrides any other input video signal. We recommend the use of a Pentax video camera (PC-K030A, PC-K020A, PC-K1500A, etc.) with this VTR.
- 33 RF CONVERTOR SWITCH**  
Set this switch to whichever channel (CH3 or CH4) is unused in your area.
- 34 BATTERY EJECT KNOB**  
Slide knob in direction of arrow to remove the battery.
- 35 BATTERY COMPARTMENT**  
Door opens when the battery is inserted.
- 36 TUNER/TIMER CONNECTING TERMINAL**  
This allows you to connect VTR to your tuner/timer with ease.
- 37 RF OUT**  
When VCR is not connected to tuner/timer, the coaxial connector cable provided connects VTR and TV for playback.
- 38 VERTICAL JITTER CONTROLS**  
Correct vertical "jitter" if it occurs during still picture playback.

## POWER SUPPLY

Pentax portable VTR PV-R1000A can use 3 power supplies — Exclusive battery pack PV-BT01A, car battery or household AC Power (using Video Tuner or AC Adaptor/Charger).

### To use the exclusive battery pack PV-BT01A

Insert the battery pack as shown in the diagram.



Battery indicator

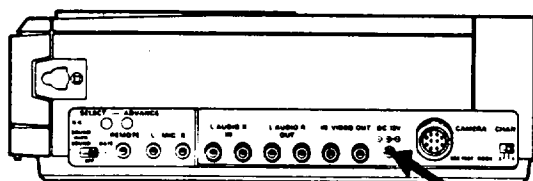
- It is important to charge battery pack before using your portable VTR.
- If the "stop" mode continues for more than 5 minutes when the battery is used, power is automatically shut off to prevent power from being wasted.
- When you are using your VTR as a portable, the tape counter displays BATT when the battery is in need of recharging.

- Use the PV-U1000A Video Tuner or PV-A1000A Adaptor/Charger to charge the PV-BT01A battery pack. Using other equipment is dangerous.

### To use with car battery power (optional car battery cord PC-YC12 manufactured by Asahi Optical Co. Ltd.)

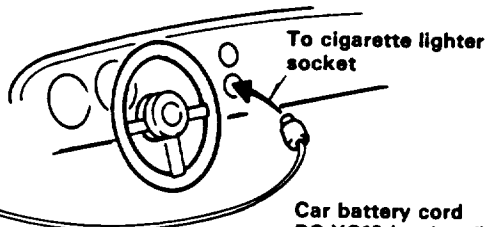
(You will need the car battery cord PC-YC12 (optional).)

Note: The PC-YC12 is for use with cars with a negative ground. Consult your Pentax regional Service Manager or VTR Service Center about using the unit with cars with a positive ground.



To External  
battery jack

Connect the car battery cord between the External battery jack of the PV-R1000A and the car's cigarette lighter socket.

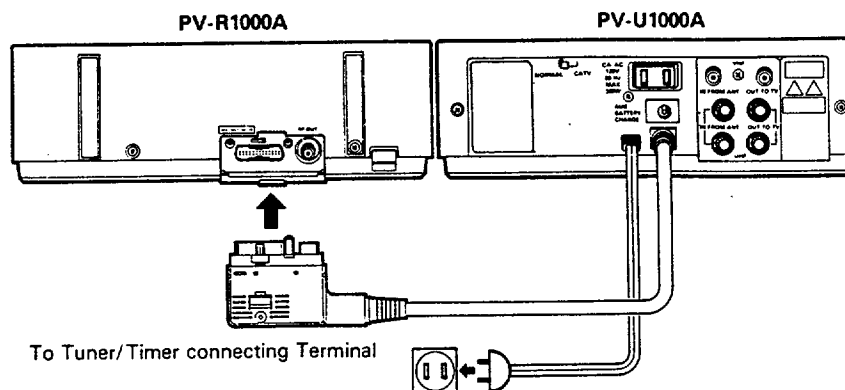


#### Note:

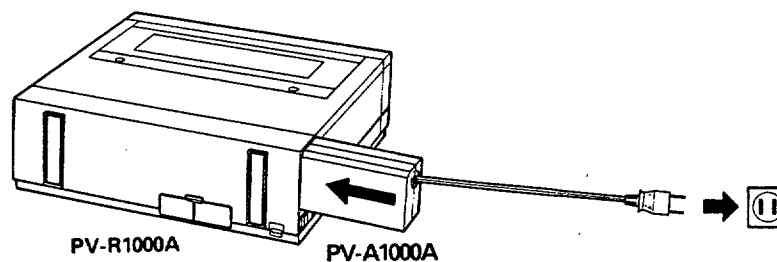
- If you are going to use the PV-R1000A for a long time, leave the car's engine idling, otherwise the car battery will discharge.
- It is recommended that you use a fully charged battery pack in the PV-R1000A. Car battery power tends to fluctuate, which can result in insufficient recordings.
- Be sure to set the unit to the stop mode before pulling out the cord.
- If the stop mode is used for more than 5 minutes, power is automatically shut off to prevent power from being wasted.

To use with household AC (Video Tuner PV-U1000A or AC Adaptor/Charger PV-A1000A)

• In Combination with Video Tuner PV-U1000A



• In combination with AC Adaptor/Charger PV-A1000A



- Turn on Power Switch of VTR.

**NOTE:**

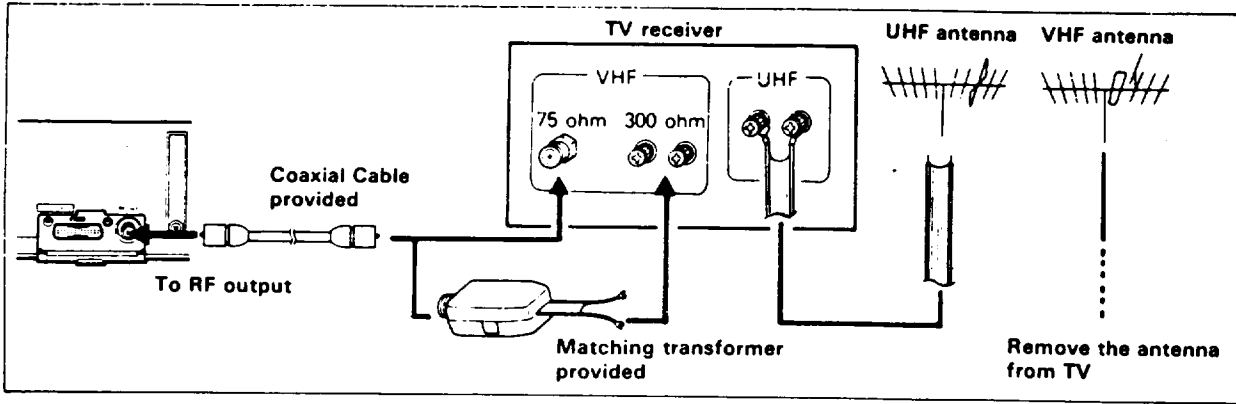
- When the Video Tuner is connected to the VTR, the power supply from the built-in battery pack is automatically cut off.
- If stop mode continues for more than 5 minutes when the AC Adaptor/Charger is used, power is automatically shut off to prevent power from being wasted.
- Be sure to turn the power switch of VTR to "OFF" to save battery power after the unit enters the STOP mode.

## CONNECTION WITH TV SET

There are 3 methods to connect the VTR with the TV set as follows.

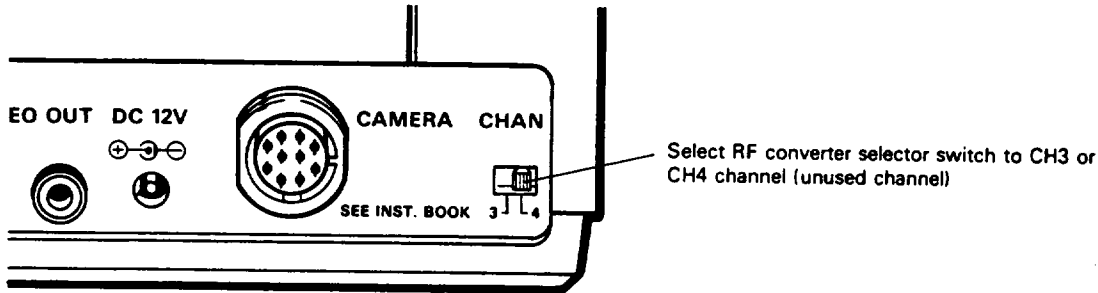
- 1 Direct connection,
- 2 Connection in combination with the AC Adaptor/Charger, and
- 3 Connection in combination with the Video Tuner.

“Direct connection” is described in the following. Read respective instruction manuals for items 2 and 3.



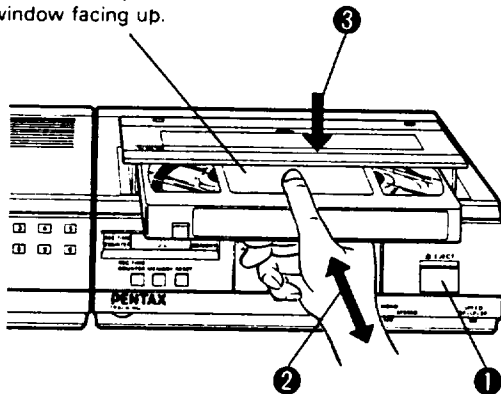
## DESCRIPTION OF RF CONVERTER

The RF converter changes the video and audio signals from tape playback to standard television broadcast signal on channel 3 or 4. To obtain video recorder output on either channel 3 or 4, set the RF converter selector switch to whichever channel is unused in your area as follows:



## INSERTION AND REMOVAL OF CASSETTE

Insert the cassette with the transparent window facing up.



### INSERTION

- 1 Press EJECT button
- 2 Insert the cassette
- 3 Press down the cassette holder

### REMOVAL

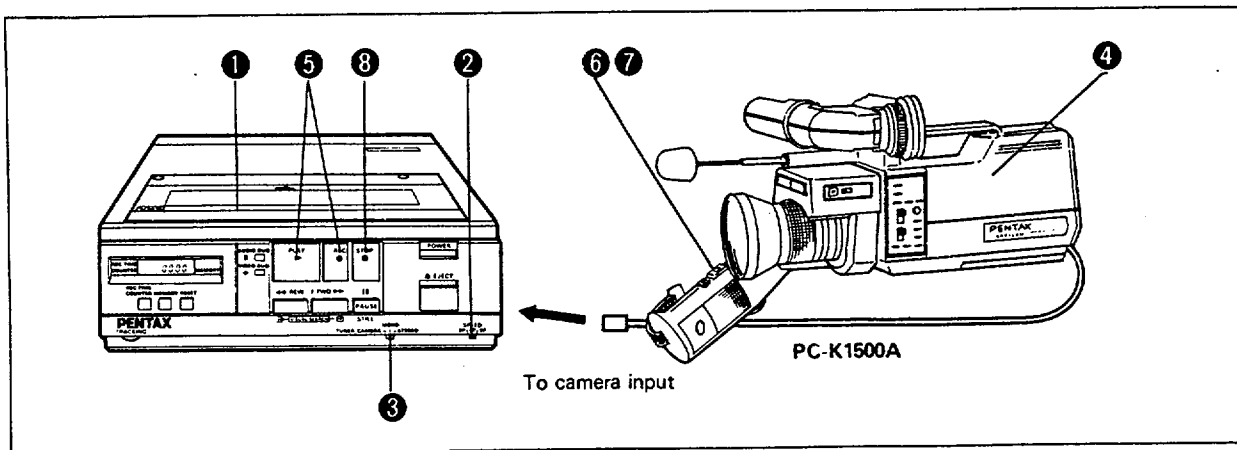
- 1 Press EJECT lever
- 2 Remove the cassette
- 3 Press down the cassette holder

NOTE: See instructions included with Video Cassette Tape.



# RECORDING FROM A VIDEO CAMERA

Refer to the Instruction Manual of the Camera as well as these instructions.

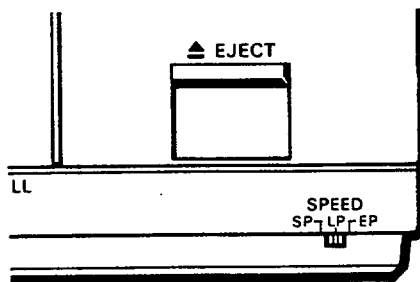


- ① Insert Cassette.
- ② Select SPEED SELECTOR SWITCH to "EP", "LP" or "SP".
- ③ Set the Audio input select switch to "TUNER/CAMERA".
- ④ Adjust aperture, focus etc. on camera. Refer to Instruction Manual of the Video Camera.
- ⑤ Press RECORD button and PLAY button simultaneously.
- ⑥ Press Remote Control button on Camera. Recording begins.
- ⑦ Press Remote Control button again, to pause during recording.
- ⑧ Press STOP button to stop recording.

## ■ TAPE SPEED SELECTOR

This unit can use video cassettes which provide up to 8 hours continuous recording. Set the Tape speed selector according to the tape length and recording time required.

### • CASSETTE RECORDING TIME



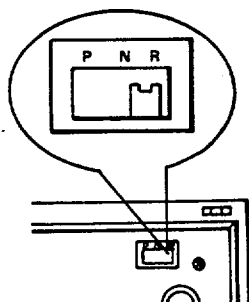
TAPE SPEED SELECTOR	Recording Time			
	T-30	T-60	T-120	T-160
SP	30 min	60 min	120 min	160 min
LP	60 min	120 min	240 min	320 min
EP	90 min	180 min	360 min	480 min

**Note:** It is recommended to use "SP" when recording a music program.

**Note:** Playback speed automatically corresponds with recorded speed.

## ■ CAMERA SELECT SWITCH

There are cameras which can check the recorded material quickly. And cameras which cannot do it.



Be sure to change over the select switch before use. Set to "R" for Pentax cameras which can check the recorded material quickly, and to "N" for cameras other than Pentax cameras which cannot do this. If the pause/run switch on the camera operates in reverse manner, set this switch to "P".

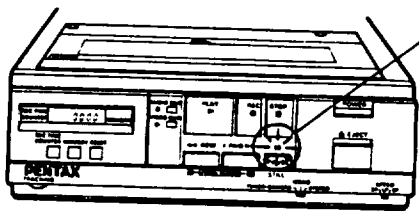
Refer to Instruction manual of Pentax camera for recording check operation.

## ■ PAUSE OPERATION WITH CAMERA REMOTE PAUSE CONTROL

Power consumption in the record pause mode is almost the same as that during camera recording using the battery pack. The VTR enters the power save mode when the record pause mode continues for 5 minutes or more, and reduces power consumption to approx. 1W. The pause indicator flashes in the power save mode.

## ■ POWER SAVE FUNCTION

Power consumption in the record pause mode is almost the same as that during camera recording using the battery pack. The VTR enters the power save mode when the record pause mode continues for 5 minutes or more, and reduces power consumption to approx. 1W. The pause indicator flashes in the power save mode.



Pause indicator flashes.

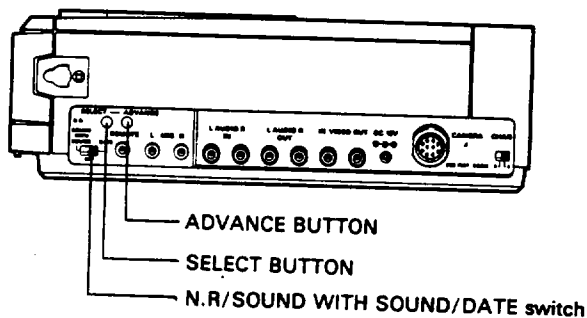
- ➔ Recording starts with the remote control button of camera pressed.
- ➔ Operation stops with the stop button pressed.

The unit also enters the power save mode with the power save switch of Pentax camera sets to "POWER SAVE". In this case, recording starts again when the power save switch of the camera is returned to "NORM" and the remote control button of the camera is pressed.

\* The power save function does not work when the VTR is operating with the video tuner.

## ■ RECORDING DATE FUNCTION

The date on which a recording is performed can be recorded.



1. Set the N.R/SOUND WITH SOUND/DATE switch to "DATE" (right side).

"00.00.00" appears in the screen of the camera's electronic viewfinder and TV monitor.

2. Set the recording date by pressing the SELECT and ADVANCE buttons.

\* When the SELECT button is pressed, the mark "■" on "0" moves.

When the SELECT button is pressed when the mark "■" reaches rightmost position, it disappears. With the button pressed again, it returns to the leftmost position.

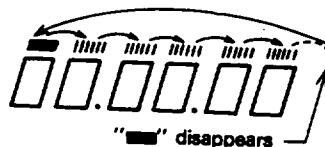
\* When the ADVANCE button is pressed, the numeral below the mark "■" is rounded up by 1. The numeral disappears when it changes from "9" to "0".

3. Now, setting the date is complete.

When recording starts, the date is recorded.

NOTES: • The date can be also recorded when recording a TV program. Set the date while monitoring on the TV screen.

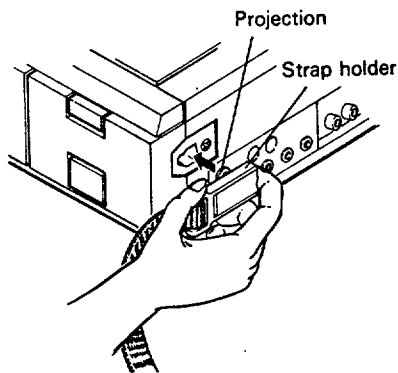
• The date previously set is held in memory if the N.R/SOUND WITH SOUND/DATE switch is moved to a position other than "DATE". It is also held in memory for approximately one hour after the Power switch is switched off.



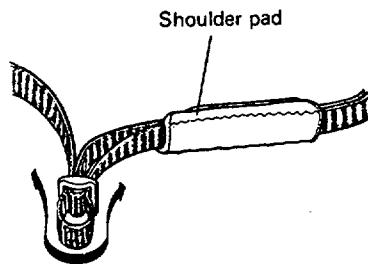
Numeral disappears after "9".

## ■ USING THE SHOULDER STRAP

### To Install the Shoulder Strap

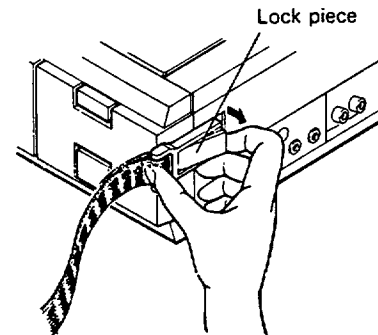


1. Attach each projection of the strap holders to the mounting holes on the sides of VTR and pull it forward until the projections are locked.



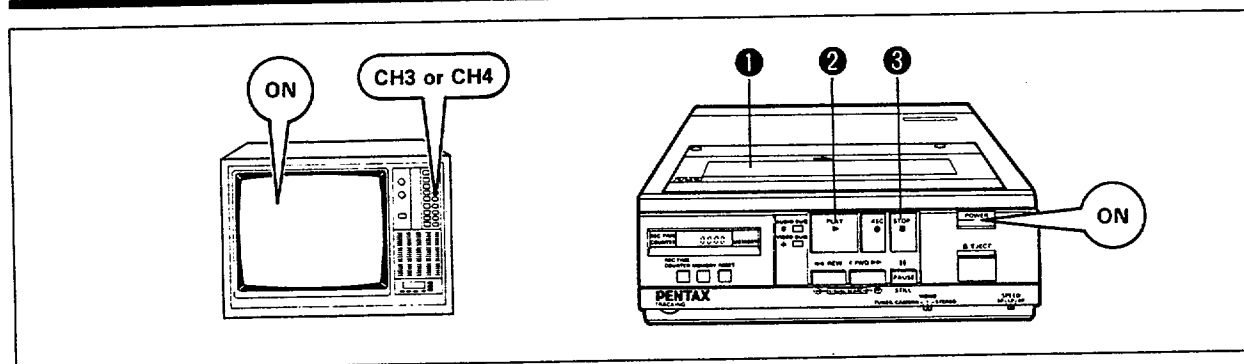
2. Adjust the length of the strap to the desired position and move the shoulder pad to the appropriate position.

### To Remove the Shoulder Strap



Slide the strap holder backward while raising the lock piece.

## PLAYBACK



- 1 Insert the cassette.
- 2 Press PLAY button.
- 3 Press STOP button to stop.

### Still playback

Press the PAUSE/STILL button to stop the picture on the screen during playback a tape recorded in SP or EP.

During still playback, press the PAUSE button to return to normal playback, or the STOP button to stop the tape.

- Note:
- If you see vertical shaking on the TV screen in the still playback mode, rotate the VERTICAL JITTER control on the back of the video deck using the screwdriver to minimize shaking.
  - The playback picture will have some amount of "noise" in the still playback mode.
  - When the still playback mode continues for about 5 minutes, the video deck switches to the stop mode automatically to prevent damage to the tape.

### Slow playback

Slow playback picture can be seen by pressing the PLAY button during still playing back a tape recorded in SP or EP.

To release slow playback, press PLAY or STOP button. The VTR will change to the mode corresponding to the button pressed.

- Note:
- If you see vertical shaking on the TV screen in the slow playback mode, rotate the VERTICAL JITTER control on the back of the video deck using the screwdriver provided to minimize shaking.
  - The playback picture will have some amount of "noise" in the slow playback mode.

### Visual search

This allows you to view the picture on a recorded tape at high speed in both the forward and reverse directions.

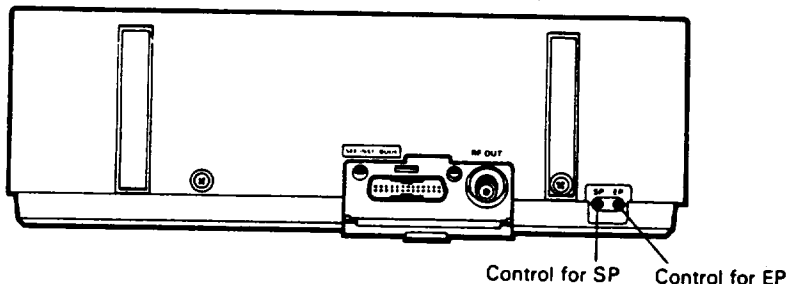
Press the PLAY button to playback a tape recorded in SP or EP, then press and hold either the VISUAL SEARCH button REW or F. FWD. Pictures can be viewed at high speed in either the forward or reverse direction.

Note: The playback picture will have some noise in the visual search mode.

### Vertical jitter adjustment

If the picture blurs with rapid up/down motion in the still or slow playback mode, remove the plastic cap on the back panel and rotate the control to the right or left using the adjustment driver provided so that still objects in the background are most clear.

Adjust the control in the EP hole when the tapes recorded in an EP mode are played back. Adjust the control in the SP hole when the tapes recorded in SP mode are played back.



## OTHER RECORDING AND PLAYBACK FUNCTIONS

### Tracking control adjustment

When playing prerecorded tapes or those recorded on units other than your own, black and white streaks may appear on your TV screen. If this occurs, turn TRACKING control slowly either direction until streaks disappear. When playback of this particular tape is over readjust the TRACKING control to its original position. Original position is the center position.

### Tape counter

This indicates the amount of video tape transported as a number. Press the RESET button to set the counter reading to 0000 when starting recording or playing back. Note the number on the tape counter at the beginning and end of each program you record. This will allow you to use the counter to find the desired program later.

### Counter memory

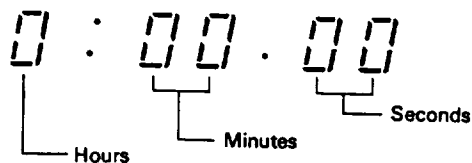
The COUNTER MEMORY button is used to stop tape at a desired point in the rewind mode. This is useful if there is a section of tape you want to review immediately after recording or if you want to return to the same point several times in a row.

### To use the counter memory:

1. Press the REC TIME/COUNTER switch to set the display from Rec Time display to counter display.
2. Turn the COUNTER MEMORY button on.  
Be sure to check that the memory indicator (▶) is on.
3. Begin playing or recording a tape.
4. At the point where you want playback to begin, reset the Tape Counter to "0000" by pressing its RESET button.
5. Continue to play or record the tape.
6. Press STOP button.
7. Press REWIND button. Tape will be rewound to the preselected starting point about "0000".

### Record time display

Pressing the REC TIME/COUNTER switch changes the counter display to show the elapsed time of recording. When starting a recording press the RESET switch to set the display to "0:00.00".



The elapsed recording time can be used to check the remaining time available for recording.

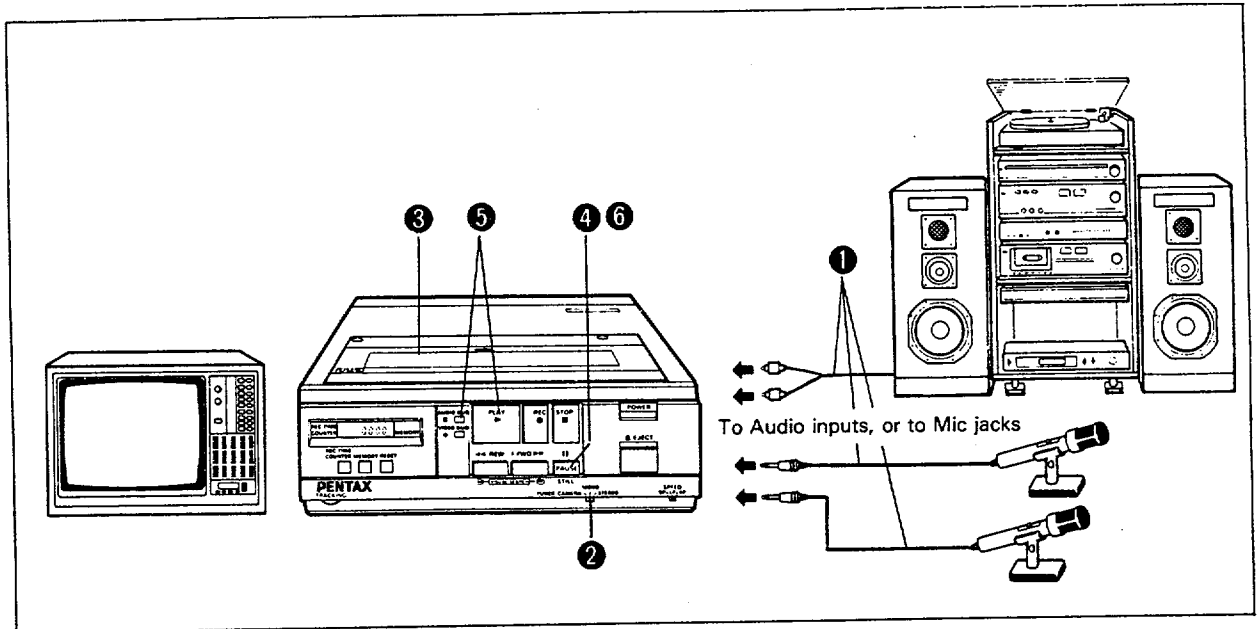
Note: Record time display is returned to counter display when REWIND or FAST FORWARD button is pressed.

### Noise reduction

During playback of a tape you may hear some audio high-frequency hiss. The noise reduction system is possible to reduce this hiss noise by placing the N.R./SOUND WITH SOUND/DATE switch to "ON" (left position).

## AUDIO DUBBING

The AUDIO DUB button on your VTR allows you to insert a new soundtrack on a previously recorded cassette using either a microphone and or your component audio system.

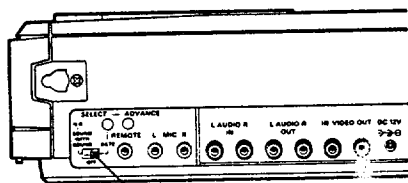


- 1 Connect the audio source to AUDIO INPUT jacks or the microphones to MIC jacks of VTR. When dubbing from monoural source, plug it to the right AUDIO or MIC input.
  - 2 Set the Audio input switch to "MONO" for recording from monoural source or to "STEREO" for recording from stereo source.
  - 3 Play the recorded cassette. Refer to "PLAYBACK" on page 11.
  - 4 Press PAUSE button at the point where you want to make the audio dubbing.
  - 5 Press PLAY and AUDIO DUB buttons at the same time to audio dub.
    - During audio dub, the source that will be recorded can be heard from the TV, so adjust the input level to the VTR while monitoring the TV audio. Set the TV volume control to normal setting.
    - When using a microphone, set the TV audio off, or very low, to avoid howling type feedback.
  - 6 Press PAUSE button again to release pause. Audio dubbing will start.
- Note:**
- When the AUDIO DUB button is pressed, only the recorded sound is erased and new sound is recorded; the video image is left as it is.
  - Audio dubbing is not possible when safety tab on the video cassette is removed.

### ■ SOUND WITH SOUND SWITCH

When this switch is set to "ON" (left position) for audio dubbing, the sound on the left channel of the recorded tape is not erased but new sound is recorded on the right soundtrack. When played back, new sounds will be heard together with original sounds.

**Note:** Be sure to set it to "OFF" after use. If it is left "ON", the previous recorded sound on the left channel is not erased, but new sound is recorded on the right channel when the next audio dubbing is performed.



SOUND WITH SOUND SWITCH

## ■ ORDER OF PRIORITY OF DIFFERENT INPUTS

### AUDIO SIGNAL

When the Audio input select switch is set to "STEREO" or "MONO":

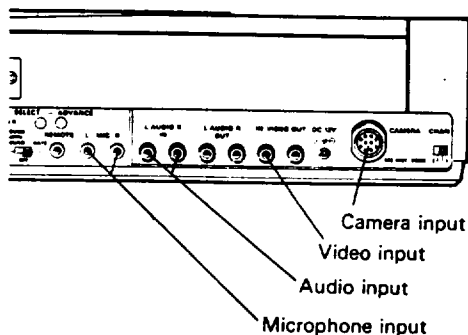
- 1 External equipment connected to microphone input.
- 2 External equipment connected to the audio input.

When the Audio input select switch is set to "TUNER"/"CAMERA":

- 1 Color Video Camera connected to the camera input.
- 2 Video Tuner connected to the tuner/timer input.

### VIDEO SIGNAL

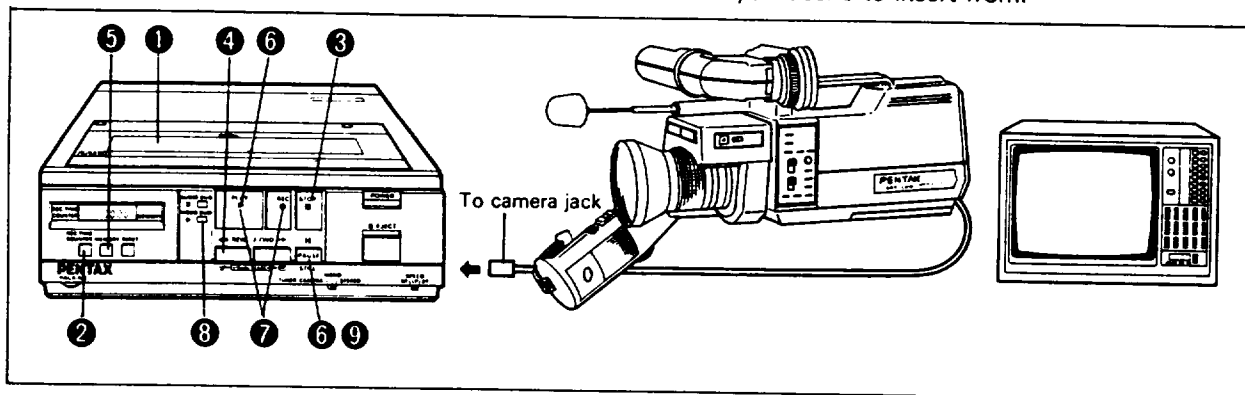
- 1 Color Video Camera connected to the camera input.
- 2 External equipment connected to the video input.
- 3 Video Tuner connected to the tuner/timer input.



## VIDEO DUBBING

When adding desired titles later to a recorded tape, a tape without distortion at the joints can be produced. Sound is left as it is. This is specially convenient to record titles on a tape previously recorded using a camera. If new video is inserted during dubbing, prior video is erased. Superimposing titles is not possible.

- Preparation ..... Connect the video source such as camera you desire to insert from.



- 1 Play back the recorded cassette. Turn the tracking knob to minimize noise. Detect the position where video dubbing of a new scene (title, etc.) is to be applied.
- 2 Press the REC TIME/COUNTER switch to set the display from Rec Time to counter display.
- 3 Press the STOP button at the position desired to stop video dubbing.
- 4 Press the COUNTER RESET button to set the TAPE COUNTER to "0000", and then press the REWIND button to rewind the tape to the video dubbing start position.
- 5 Set the COUNTER MEMORY switch to ON.
- 6 Again press the PLAY button to play, and press the PAUSE button when the video dubbing start position appears.
- 7 Press the RECORD button and PLAY button simultaneously.
- 8 Press the VIDEO DUB button. Now, preparation for recording the new scene (title, etc.) is completed.
- 9 Press the PAUSE button. Press the remote control button of the camera when the video camera is connected. Now, a new scene (title, etc.) can be recorded.
- 10 The unit automatically stops at the point where the counter reaches "0000".

### Note:

- Video dubbing is not possible in the intermediate section between programs.
- Be sure to perform the tracking adjustment in item 1 when applying Video Dubbing to an old tape or a tape recorded using another video deck.
- Do not set the COUNTER MEMORY switch to "OFF" during Video Dubbing.
- Color noise may appear on the played picture of a section to which Video Dubbing has been applied.

# TROUBLESHOOTING GUIDE

PROBLEM	THINGS TO CHECK	SOLUTION
No power	<ul style="list-style-type: none"> <li>• Is the power cord connected?</li> <li>• Is the timer switch "on"?</li> <li>• Is the battery fully charged?</li> </ul>	<ul style="list-style-type: none"> <li>• Connect the power cord to AC outlet.</li> <li>• Make sure timer switch is off.</li> <li>• Battery may be discharged; replace with new battery.</li> </ul>
No color; poor picture during normal TV viewing	<ul style="list-style-type: none"> <li>• Is the VTR/TV switch on "TV" position?</li> <li>• Is the antenna connected properly?</li> </ul>	<ul style="list-style-type: none"> <li>• Switch VTR/TV switch to "TV" position.</li> <li>• Correctly connect the antenna.</li> </ul>
Black streaks on picture	<ul style="list-style-type: none"> <li>• Is the tape tracking properly?</li> </ul>	<ul style="list-style-type: none"> <li>• Correctly adjust the Tracking Control.</li> </ul>
Recording or playback cannot be done.	<ul style="list-style-type: none"> <li>• Are all power switches on?</li> <li>• Is there moisture in the VTR?</li> <li>• Is there a cassette tape in VTR?</li> <li>• Is a safety tab on video cassette?</li> <li>• Is the timer in the "on" position?</li> <li>• Is the VTR/TV switch set on "VTR" position?</li> <li>• Is the Pause Switch on VTR engaged?</li> <li>• Is there anything connected to the Camera Input, Audio In or Video In on the VTR?</li> </ul>	<ul style="list-style-type: none"> <li>• Engage all power switches.</li> <li>• Check for "stop" light flashing.</li> <li>• Put cassette tape in VTR.</li> <li>• Be sure video cassette has a safety tab.</li> <li>• Make sure the timer is not engaged.</li> <li>• Make sure the VTR/TV switch is on "VTR".</li> <li>• Make sure the Pause Switch is not engaged.</li> <li>• Make sure there is nothing connected to the Camera Input, Audio In or Video In on the VTR.</li> </ul>
Time recording was not done.	<ul style="list-style-type: none"> <li>• Has the timer been properly programmed?</li> <li>• Is there tape remaining on the cassette?</li> <li>• Is the timer switch engaged?</li> </ul>	<ul style="list-style-type: none"> <li>• Make sure the program timer is correctly set.</li> <li>• Program may have exceeded cassette length.</li> <li>• Make sure the timer switch is engaged.</li> </ul>
Tape stops before completely rewind.	<ul style="list-style-type: none"> <li>• Is the Memory Switch engaged?</li> </ul>	<ul style="list-style-type: none"> <li>• Turn off tape Memory Switch.</li> </ul>
The battery pack is quickly discharged.	<ul style="list-style-type: none"> <li>• Is the operating temperature below specification?</li> <li>• Is the battery pack fully charged?</li> </ul>	<ul style="list-style-type: none"> <li>• Operating temperature is too cold.</li> <li>• The battery pack is not fully charged.</li> </ul>
The function buttons cannot be activated.	<ul style="list-style-type: none"> <li>• Is the VTR power "on"?</li> <li>• Is there tape remaining on the cassette?</li> <li>• Is the "stop" light flashing?</li> </ul>	<ul style="list-style-type: none"> <li>• Turn "on" VTR power switch.</li> <li>• The tape is at the end of the spool; replace with new cassette tape.</li> <li>• Moisture has condensed inside the VTR, with power on let it sit until the light stops flashing.</li> </ul>
The playback picture is not clear.	<ul style="list-style-type: none"> <li>• Is the RF conversion channel properly adjusted?</li> <li>• Was the cassette tape recorded on another VTR?</li> <li>• Are the video heads clean?</li> </ul>	<ul style="list-style-type: none"> <li>• Fine tune the RF conversion channel (3 or 4).</li> <li>• Adjust the tracking control.</li> <li>• Clean video heads.</li> </ul>
The cassette tape cannot be ejected.	<ul style="list-style-type: none"> <li>• Is the VTR in the record or playback mode?</li> </ul>	<ul style="list-style-type: none"> <li>• Press "stop", then press "eject".</li> </ul>
Previous sound is not erased during recording.	<ul style="list-style-type: none"> <li>• Is the "sound with sound" engaged?</li> </ul>	<ul style="list-style-type: none"> <li>• Set "sound with sound" to off.</li> </ul>

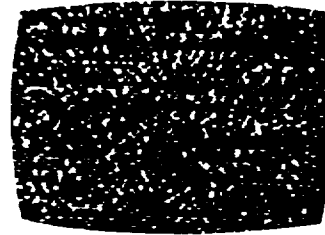
## PERIODIC MAINTENANCE

The Video Deck is a precision electromechanical device which will require periodic maintenance after a period of normal use. We expect that no maintenance other than head cleaning will be required during the warranty period by most users, unless the Deck is heavily used or seldom used. Normal maintenance is the responsibility of the user, although defective parts are covered during the warranty period. Consult your VTR Service Center to determine recommendations for normal maintenance based on your location, use patterns and machine age.

## HEAD CLEANING

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- Picture playback may become blurred or be interrupted while the TV program received is clear. This does not mean that the recorded program has been erased.
- Dirt accumulated on the head after long periods of use causes this problem. In this case, head cleaning requiring highly technical care is necessary.
- For head cleaning, consult the nearest dealer or VTR Service Center for recommendations.



## SPECIFICATIONS

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Recording:	Rotary two head Helical Scan Azimuth Recording
Video	NTSC Color EIA Standard
Cassette:	VHS Type
Heads:	5 Video heads: 2 for SP, 2 for LP/EP, 1 for special effect 1 Full track audio/video erase head 1 Combination head for control track, audio erase and audio record/play (3 head/single housing)
Tape Speed:	33.35 mm/sec (SP), 16.67 mm/sec (LP), 11.12 mm/sec (EP)
Tape Width:	12.7 mm
RF Output:	Channel 3 or Channel 4
Video Input:	0.5 — 2Vp-p 75 ohm Unbalanced
Video Output:	1Vp-p 75 ohm Unbalanced
Audio Input:	—20 dB 50 kohm
Microphone Input:	—69 dB 1 kohm
Audio Output:	—6 dB 500 ohm
Video Recording S/N:	Better than 46 dB (SP), Better than 43 dB (LP), Better than 40 dB (EP)
Horizontal Resolution:	240 lines (SP), 230 lines (LP), 230 lines (EP)
Audio Response:	50 Hz — 10 kHz (SP), 50 Hz — 7 kHz (LP), 100 Hz — 6 kHz (EP)
Audio S/N:	Better than 43 dB (SP), Better than 40 dB (LP) Better than 40 dB (EP)
Power Input:	DC 12V
Power Consumption:	4.8W Nominal (recording with DC 12V power supply)
Cabinet Size:	9-15/16"(W) x 3-3/8"(H) x 10-3/8"(D) 253(W) x 85(H) x 263(D) mm
Weight:	Approx. 8 lbs (3.6 kg)
Accessories:	1 — Co-axial cable with F-type connectors 1 — Matching transformer 300 — 75 ohm 1 — Matching transformer 75 — 300 ohm 1 — Adjustment driver 1 — Shoulder strap

**Design and specifications subject to change without notice.**



### PENTAX

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