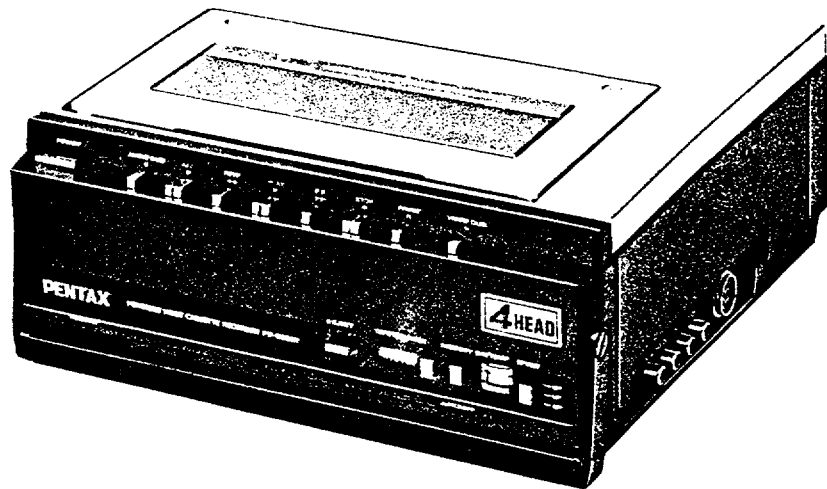


PENTAX

VHS PORTABLE VTR

MODEL PV-R020A

INSTRUCTION MANUAL



VHS

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

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

CONGRATULATIONS!

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

CONTENTS

FEATURES	2
PRECAUTIONS	3
READ THIS FIRST!	3
DESCRIPTION OF PORTABLE VTR	4-5
POWER SUPPLY	6-7
CONNECTION WITH TV SET	8
DESCRIPTION OF RF CONVERTER	8
INSERTION AND REMOVAL OF CASSETTE	8
RECORDING FROM A VIDEO CAMERA	9
PLAYBACK	10
AUDIO DUBBING	11
VIDEO DUBBING	12
TROUBLESHOOTING GUIDE	13
HEAD CLEANING	14
PERIODIC MAINTENANCE	14
SPECIFICATIONS	14

WARNING:

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

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*
- *Special "slow" features (Both SP and EP Modes) (with REMOTE CONTROL UNIT)*
- *Compact and light – only 5 kg with battery pack VT-BP65A (provided)*
- *Special "visual search" feature (Both SP and EP Modes) (with REMOTE CONTROL UNIT)*
- *Video dubbing feature*
- ** 4 head system*
For SP mode 2 exclusive heads
For LP, EP modes 2 exclusive heads

This Instruction Manual primarily describes the operation and use of the VTR when used with the VT-BP65A Battery Pack. When the PV-R020A is combined with the PV-U020A Video Tuner or PV-A020A AC Adaptor/Charger, refer to the respective Instruction Manuals for interconnection and operation instructions.

PRECAUTIONS

1. Operate the unit only on 12V DC. For AC operation, use the AC power adaptor or PV-U020A Tuner/Timer unit. For car battery operation, use car battery cord VT-CC70A (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 air ducts 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-U020A 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.

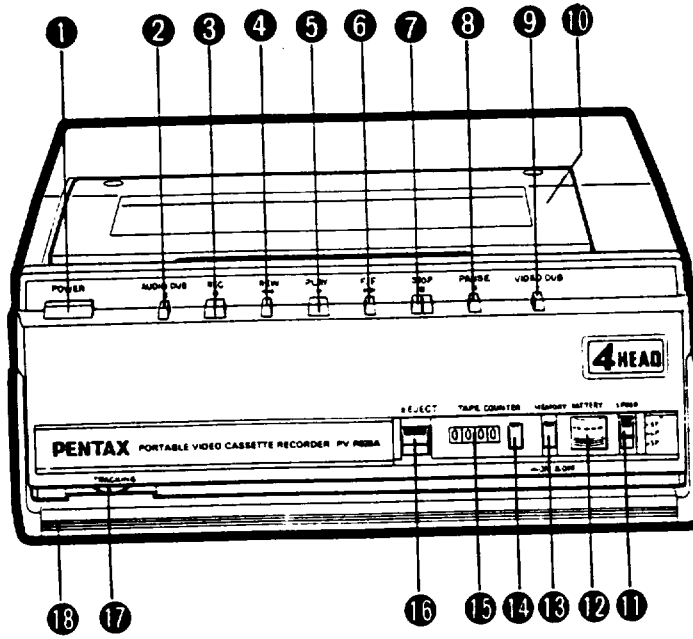
Moisture condensation on the head drum, one of the most crucial parts of the Deck, will cause damage to the tape. The Deck has a humidity detector unit built in. When the Deck is exposed to a rapid temperature change from cold to warm, some condensation will occur. When moisture is present, stop indicator light will flash. While this light is on, the unit will not operate. Under these circumstances press the Eject Lever 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!

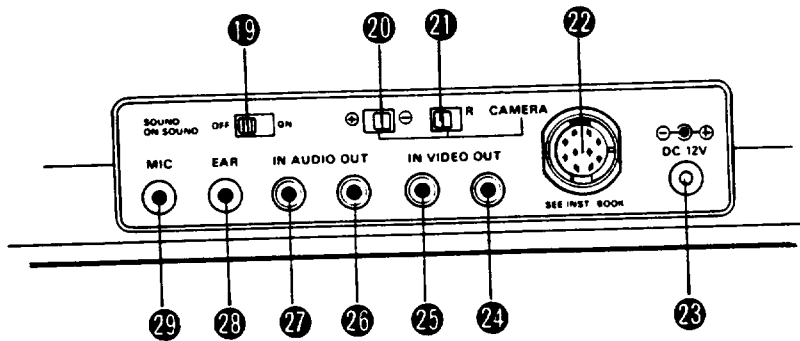
1. Carefully unpack the VTR and Tuner /Timer units. Be sure not to misplace any of the cables or adaptors.
2. Locate the VHF antenna on your TV set. Identify whether your TV has a 300 ohm (two screws) or 75 ohm (a threaded barrel) connection.
3. On the back of the VTR, in the middle, there is a panel which opens downward. Open that panel. It will expose two round connectors, one is larger than the other. The smaller one is marked "RF OUT" also in the middle, there are two remote jacks.
4. On the back of the Tuner/Timer there are four cords. One is the power cord, the other three connect to the pins of corresponding connectors on the back of the VTR. The largest cord (the one nearest the bottom of the Tuner/Timer) connects to the larger of the two round connectors 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 your 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

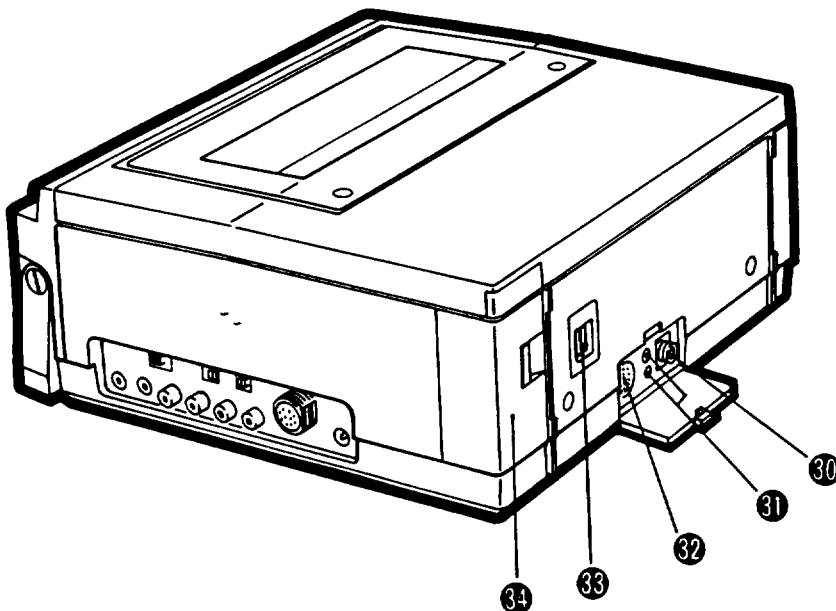
FRONT VIEW



SIDE VIEW



REAR VIEW



- 1 POWER SWITCH**
- 2 AUDIO DUB BUTTON (⊖)**
Press "PLAY" and "AUDIO DUB" buttons simultaneously to audio dub.
- 3 RECORD BUTTON (●)**
Press "PLAY" and "RECORD" buttons simultaneously to start recording.
- 4 REWIND BUTTON (◀◀)**
Press to start rewind.
- 5 PLAY BUTTON (▶)**
Press to start playback.
- 6 FAST FORWARD BUTTON (▶▶)**
Press to activate fast forward.
- 7 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".
- 8 PAUSE BUTTON (||)**
Press to pause during recording.
Press to view still frame during playback of an EP or SP recorded tape.
Press again to release.
- 9 VIDEO DUB BUTTON (Ⓜ)**
This button is used when recording the desired scene or title on the recorded tape. Refer to Page 12 for details.
- 10 CASSETTE HOLDER**
- 11 TAPE SPEED SELECTOR**

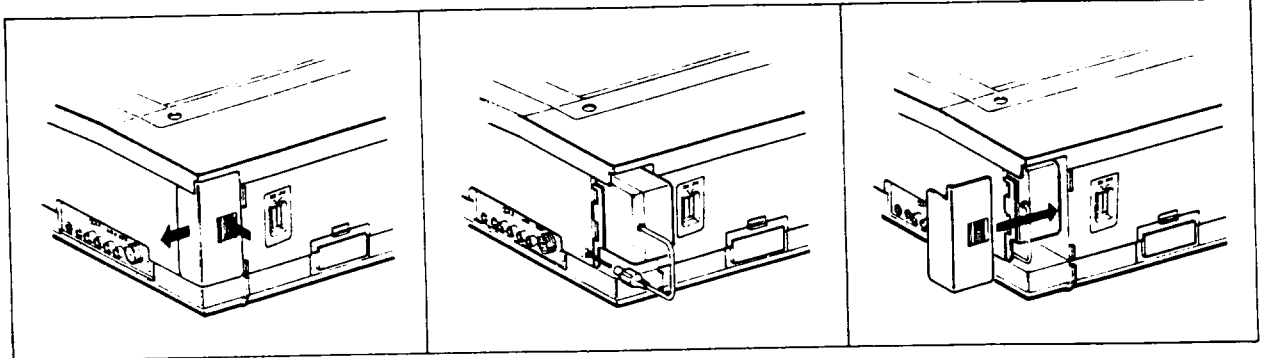
EP : 8 Hours recording	(T-160 tape)
EP : 6 Hours recording	} (T-120 tape)
LP : 4 Hours recording	
SP : 2 Hours recording	

Note: Playback speed selected automatically.
- 12 BATTERY METER**
This meter shows the capacity of the battery pack when the battery pack VT-BP65A is used. The section colored green shows that the battery capacity is sufficient and the section colored red shows insufficient capacity. When the pointer of the meter is on red, charge the battery or replace it with a sufficiently charged battery pack.
- 13 MEMORY COUNTER SWITCH**
When pushed in MEMORY will stop at 9999.
- 14 COUNTER RESET BUTTON**
To reset counter to 0000.
- 15 TAPE COUNTER**
Shows the tape position.
- 16 EJECT LEVER (▲)**
Press to insert or remove cassette. The STOP button must be pressed before "EJECT".
- 17 TRACKING CONTROL KNOB**
To minimize noise in playback.
- 18 HANDLE**
- 19 SOUND ON SOUND SWITCH**
This switch is used for recording new sound on the recorded material. Refer to page 11 for details.
- 20 CAMERA PAUSE POLARITY SWITCH**
Set this switch to "⊕" for a camera (PC-K003A) which lights the record indicator with pause released. Set it to "⊖" for cameras that operate pause/run of the VTR with reversed indication.
- 21 CAMERA SELECT SWITCH**
Set this switch to the "R" side when using the camera PC-K003A which is provided with the recording check function, and to the opposite side when using the camera which is not provided with this function.
- 22 CAMERA JACK**
Camera is connected here.
Automatically overrides any other input video signal.
- 23 EXTERNAL BATTERY JACK**
Optional DC car cord plugs in here to connect VTR to car cigarette lighter socket or to a spare rechargeable battery.
- 24 VIDEO OUT**
Permits video connection of your unit to a monitor or another VTR.
- 25 VIDEO IN**
Receives video signal from a video camera or another VTR.
- 26 AUDIO OUT**
Permits audio connection of your unit to a monitor or another VTR.
- 27 AUDIO IN**
Receives audio signals from a camera, external sound equipment, or from another VTR.
- 28 EARPHONE JACK**
Connect earphone.
- 29 MICROPHONE JACK**
For microphone.
- 30 RF OUT**
RF connector cord from VIDEO TUNER or AC ADAPTOR/CHARGER connects VTR and VIDEO TUNER or AC ADAPTOR/CHARGER. When VTR is not connected to VIDEO TUNER or AC ADAPTOR/CHARGER, the antenna cable (provided) connects VTR and TV to monitor playback.
- 31 REMOTE CONTROL JACK**
Connect Remote Cable from Video Tuner.
- 32 TUNER/ADAPTOR JACK**
VTR connector cord from VIDEO TUNER or AC ADAPTOR/CHARGER plugs in here.
- 33 RF CONVERTOR SWITCH**
Set this switch to whichever channel (CH3 or CH4) is unused in your area.
- 34 BATTERY DOOR**
Rechargeable battery is located behind the door.

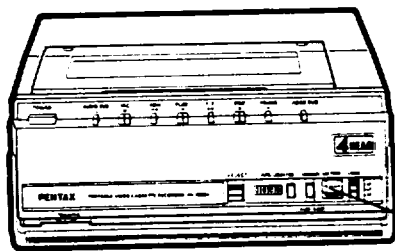
POWER SUPPLY

Pentax portable VTR PV-R020A can use 3 power supplies — Exclusive battery pack VT-BP65A, car battery or household AC Power (using Video Tuner or AC Adaptor/Charger).

To use the exclusive battery pack VT-BP65A



- 1 Remove the battery door in the direction of the arrow.
- 2 Insert the battery pack and then connect the plug into the socket.
- 3 Close the battery door.



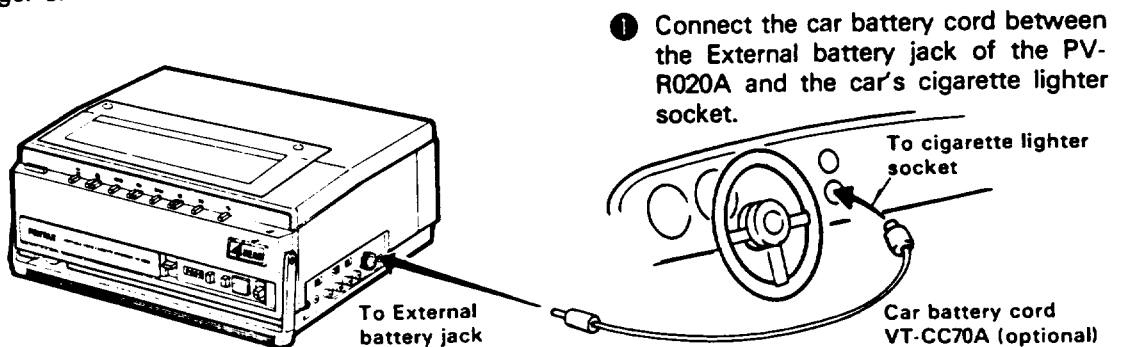
- It is important to charge battery pack both before using and after using your portable VTR.
- When the portable VTR is operating with the battery pack, if the pointer of the battery meter is red, it shows that the battery capacity is insufficient; replace it with a charged battery pack or charge it.

- Use the PV-U020A Video Tuner or PV-A020A Adaptor/Charger to charge the VT-BP65A battery pack. Using other equipment is dangerous.

To use with car battery power (car battery cord VT-CC70A (optional))

(You will need the car battery cord VT-CC70A (optional).)

Note: The VT-CC70A 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.

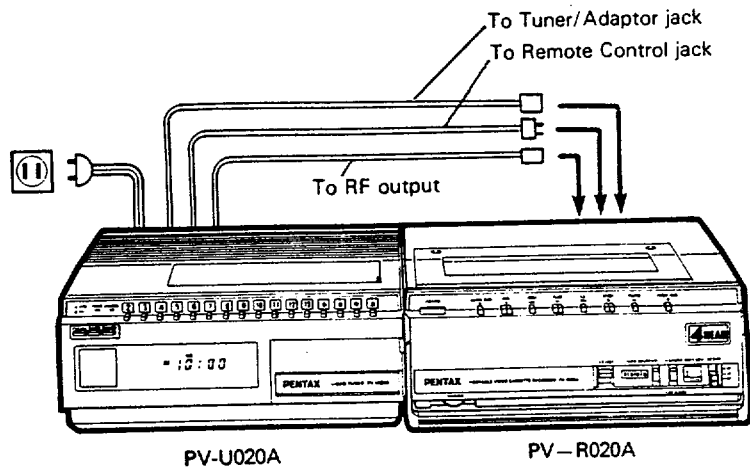


Note:

- If you are going to use the PV-R020A for a long time, leave the car's engine idling, otherwise the battery will discharge.
- It is recommended that you use a fully charged battery pack in the PV-R020A. Car battery power tends to fluctuate, which can result in bad recordings.
- Be sure to set the unit to the stop mode when pulling out the cord.

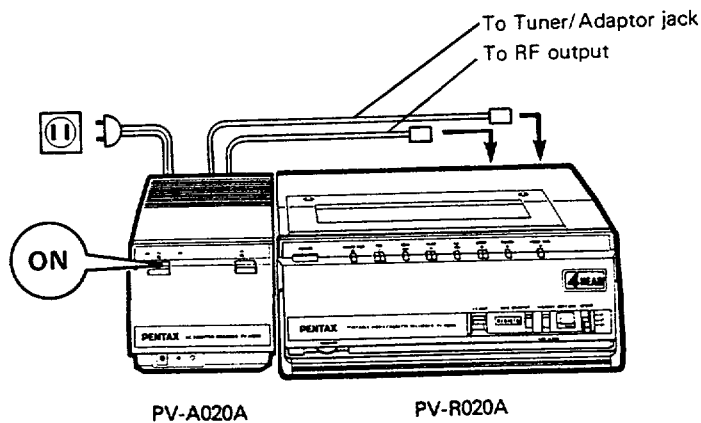
To use with household AC (Video Tuner PV-U020A or AC Adaptor/Charger PV-A020A)

• In Combination with Video Tuner PV-U020A



- Turn on Power Switch of VTR.

• In combination with AC Adaptor/Charger PV-A020A



- Turn on Power Switch of VTR after turning on Power Switch of AC Adaptor/Charger.

NOTE:

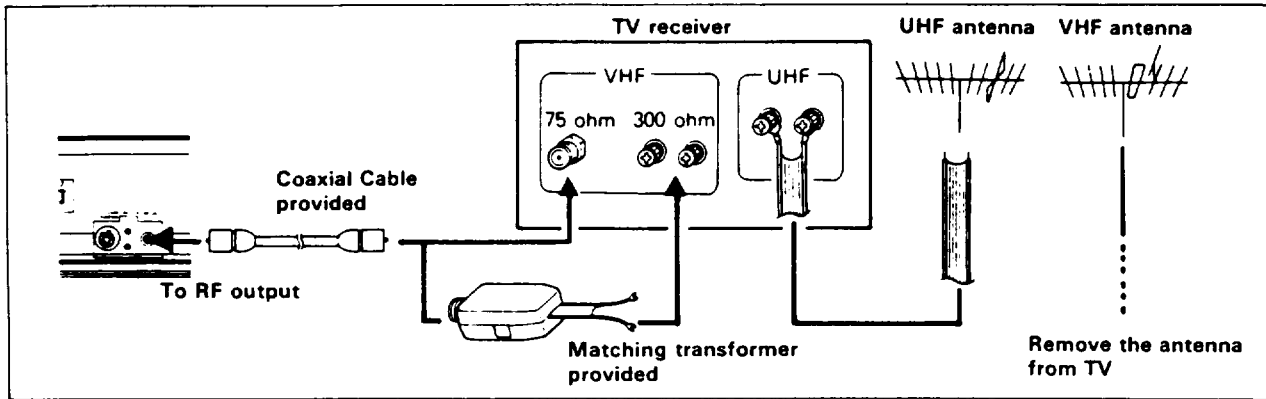
- When the Video Tuner or the AC Adaptor/Charger is connected to the Tuner/Adapter jack on VTR, the power supply from the built-in battery pack is automatically cut off.
- When power failure occurs during use of Portable VTR with the AC120V power supply, it may become impossible to take out the cassette.
In this event, wait for restoration of the power or remove the cable connected to the Tuner/Adapter jack at the back of VTR and connect the fully charged battery pack, then the cassette can be taken out.
- Be sure to turn the power switch of VTR to "OFF" 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:

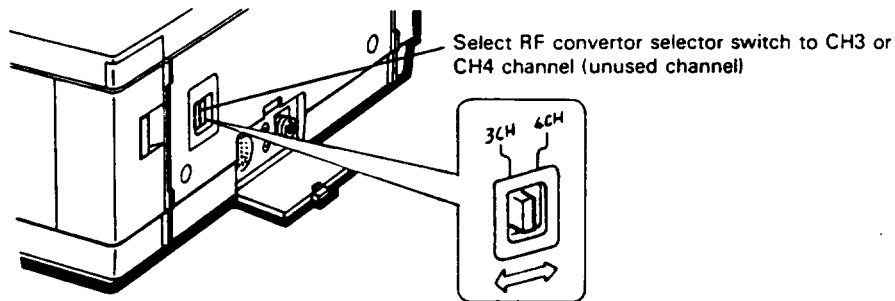
- 1 Direct connection,
- 2 Connection in combination with the AC Adaptor/Charger, and
- 3 Connection in combination with the Video Tuner.

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



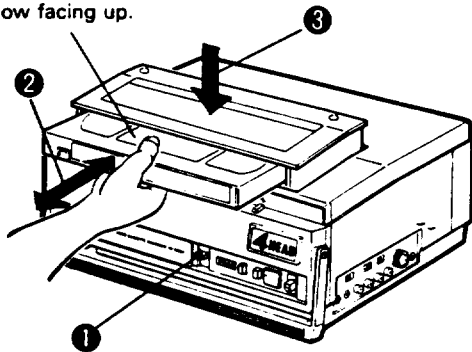
DESCRIPTION OF RF CONVERTOR

The RF convertor 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 convertor 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 lever
- 2 Insert the cassette
- 3 Press down the cassette holder

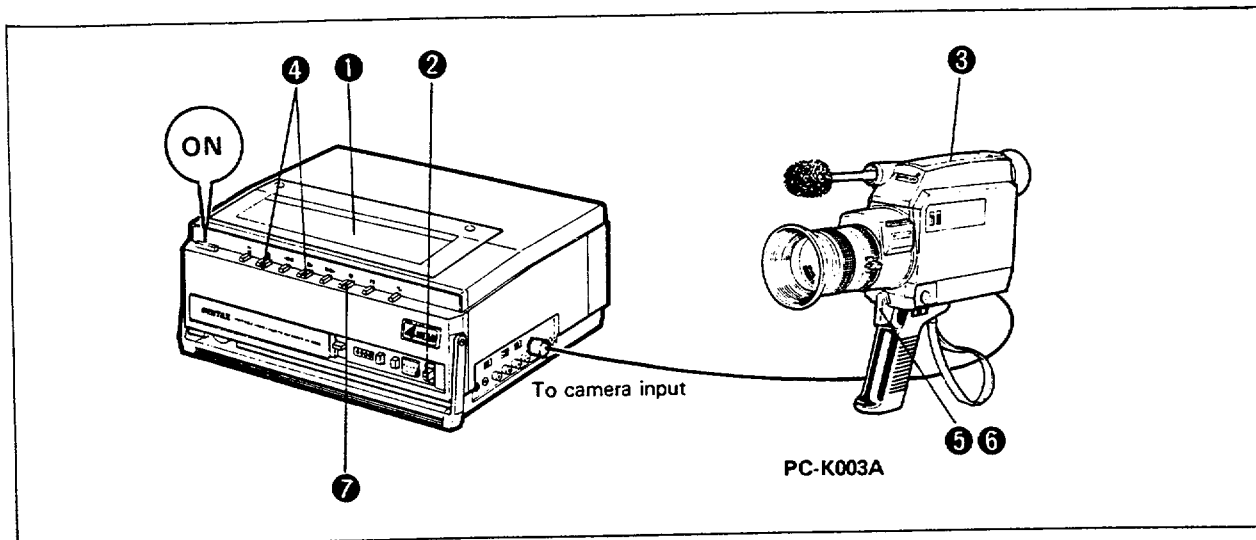
REMOVAL

- 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

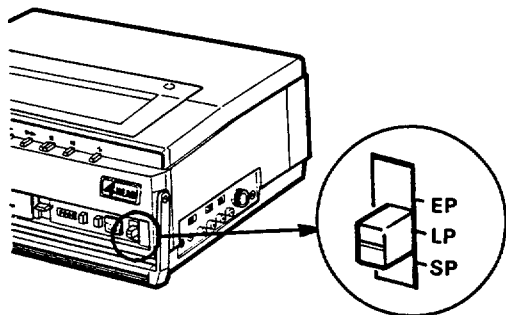
Refer to the Instruction Manual of the Camera as well as these instructions.



- ① Insert Cassette.
- ② Select SPEED SELECTOR SWITCH to "EP", "LP" or "SP".
- ③ Adjust aperture, focus etc. on camera. Refer to Instruction Manual of the Video Camera.
- ④ Press RECORD button (●) and PLAY button (▶) simultaneously.
- ⑤ Press Remote Control button on Camera. Recording begins.
- ⑥ Press Remote Control button again, to pause during recording.
- ⑦ Press STOP button (■) to stop recording.

■ TAPE SPEED SELECTOR

The video cassettes used in this unit can be used to record TV programs continuously up to 8 hours. Set the Tape speed selector to the desired position according to the program to be recorded.



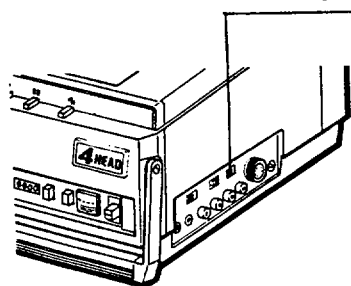
• CASSETTE RECORDING TIME

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

Note: Playback speed is selected automatically.

■ VIDEO/CAMERA SELECT SWITCH

There is a camera PC-K003A which can check the recorded material quickly.



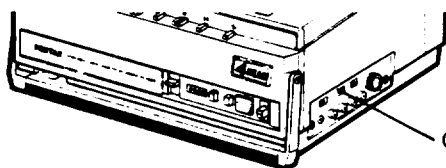
Be sure to change over the select switch before use. Set to "R" for camera (PC-K003A) which can check the recorded material quickly, and to the opposite side for cameras which cannot do this.

Refer to PC-K003A Instruction manual for recording check operation.

■ CAMERA POLARITY SELECT SWITCH

When video cameras made by companies other than PENTAX (Video Camera PC-K003A) are used, the record indicator "V" may not light during tape running but light during stop.

Change over this switch to "⊖" in such a case.
Set this switch to "⊕" for PENTAX Video Camera.



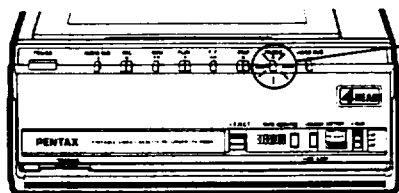
Camera polarity select switch

■ PAUSE OPERATION WITH CAMERA REMOTE PAUSE CONTROL

When a camera is connected and the VTR is placed in the RECORD Mode, pause cannot be released with the VTR pause control. It must be released using the camera remote pause control (Camera has pause priority in recording).

■ POWER SAVE FUNCTION

Power consumption in the record pause mode is almost same as that in recording (5.8W) 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.



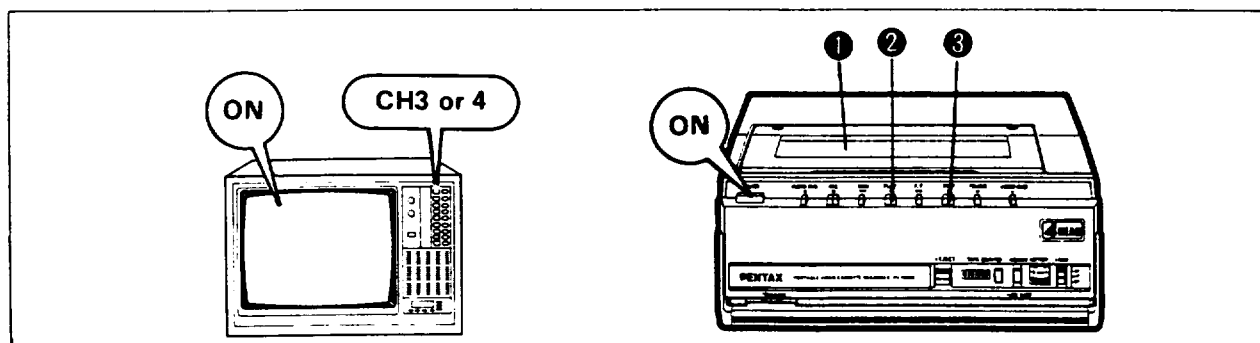
Pause indicator flashes.

- ➔ 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 PC-K003A set to "POWER SAVE". In this case, recording starts again when the power save switch of the camera is returned to "OPERATE" and the remote control button of the camera is pressed.

* The power save function does not work when the VTR is operating with an AC power supply.

PLAYBACK



- ① Insert the cassette.
- ② Press PLAY button (▶).
- ③ Press STOP (■) button to stop.

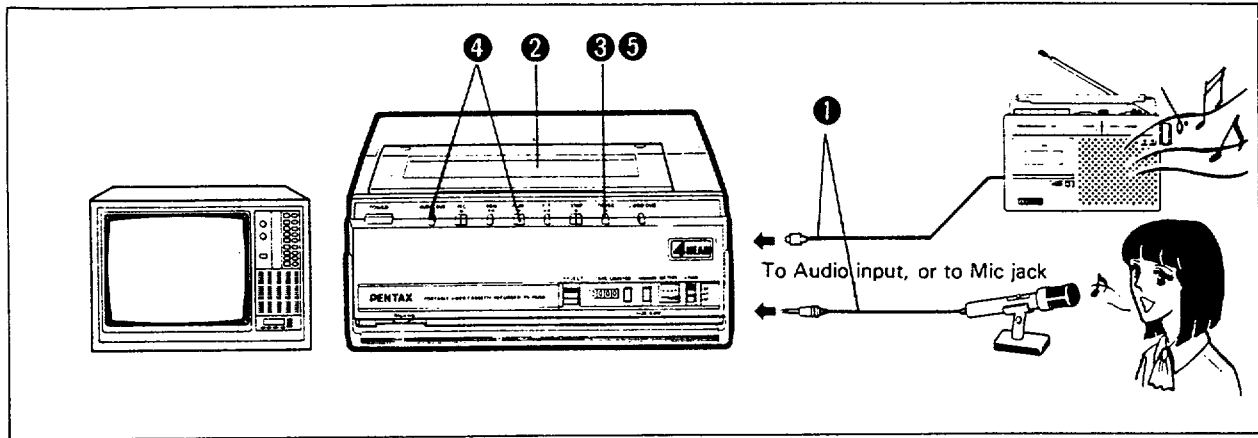
■ COUNTER MEMORY SWITCH

The COUNTER MEMORY switch is used to stop tape at a desired point in the REWIND mode.

1. Begin playing or recording a tape.
2. At the point where you want playback to begin, reset the Tape Counter to [0000] by pressing its reset button.
3. Switch COUNTER MEMORY to the "ON" position.
4. Continue to play or record the tape.
5. Press STOP button.
6. Press REWIND button. Tape will be rewound to preselected starting point [9999].

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 or your component audio system.



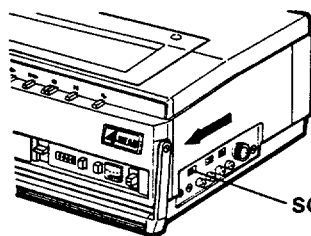
- ❶ Connect the audio source to AUDIO INPUT jack or a microphone to MIC JACK of VTR.
- ❷ Play the recorded cassette. Refer to "PLAYBACK" on page 10.
- ❸ Press PAUSE button (**||**) at the point where you want to make the audio dubbing.
- ❹ Press PLAY (**▶**) and AUDIO DUB (**⊖**) buttons at the same 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.
- ❺ Press PAUSE button (**||**) again to release pause.

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 ON SOUND SWITCH

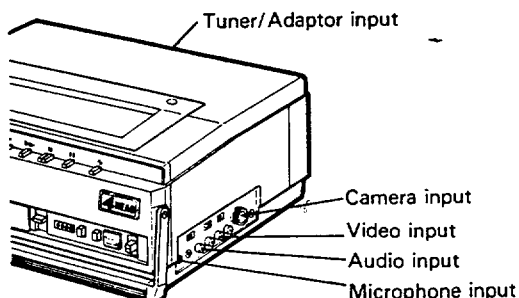
When this switch is set to ON for audio dubbing, the sound of the recorded tape is not erased but it is recorded dubbed with new sound. When played back, new sounds will be heard together with original sounds.



SOUND ON SOUND SWITCH

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

■ ORDER OF PRIORITY OF DIFFERENT INPUTS



AUDIO SIGNAL

- ❶ External equipment connected to microphone input.
- ❷ External equipment connected to the audio input.
- ❸ Color Video Camera connected to the camera input.
- ❹ Video Tuner connected to the tuner/adaptor input.

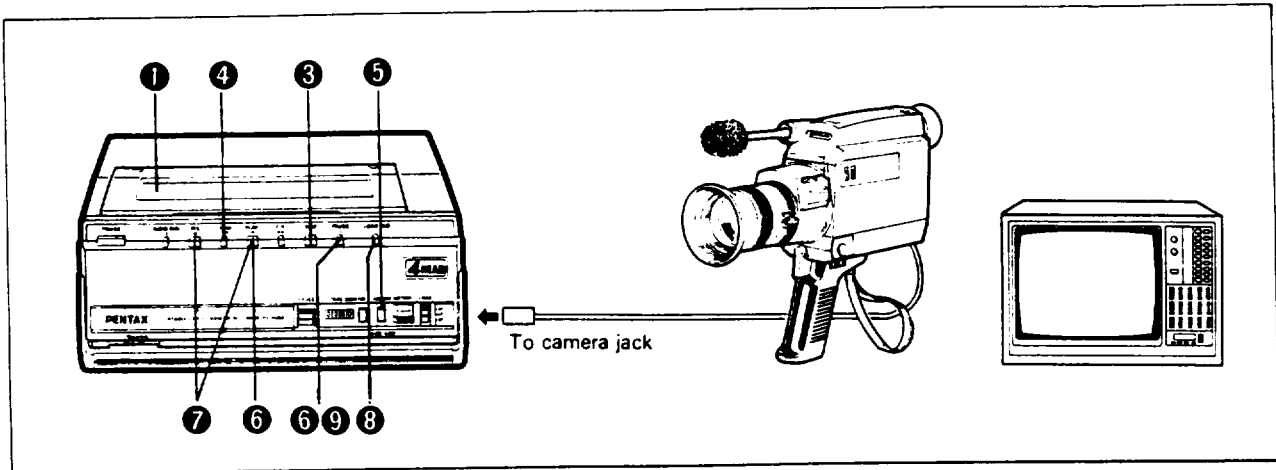
VIDEO SIGNAL

- ❶ Color Video Camera connected to the camera input.
- ❷ External equipment connected to the video input.
- ❸ Video Tuner connected to the tuner/adaptor 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.

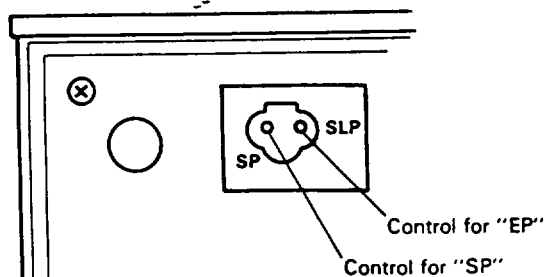
- Preparation Connect the video source such as camera you desire to insert from.



- 1 Play back the recorded cassette. Turn the tracking knob to minimize noise.
- 2 Detect the position where video dubbing of a new scene (title, etc.) is to be applied.
- 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.
 - Avoid using a fine pattern for a scene such as a title to be used with Video Dubbing.
- If you have vertical shakes on the TV screen in the still frame mode or slow mode, remove the plastic cap on the bottom panel and rotate the control to the right or left using an adjustment driver provided.
- Adjust the SLP control hole when the tapes recorded in an EP mode are played back.
 - Adjust the SP control hole when the tapes recorded in SP mode are played back.

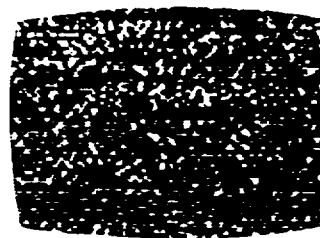


TROUBLESHOOTING GUIDE

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

HEAD CLEANING

- The playback picture 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.



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.

SPECIFICATIONS

Recording:	Rotary two-head Helical Scan Azimuth Recording
Video	NTSC Color EIA Standard
Cassette:	VHS Type (T-30, T-60, T-120, T-160, etc.)
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
RF Input:	VHF 75 ohm UHF 300 ohm
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:	Over than 46 dB (SP), Over than 43 dB (LP), Over 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:	5.8W Nominal (recording with DC 12V power supply)
Cabinet Size:	263(W) x 108(H) x 257(D) mm
Weight:	Approx. 5 kg (including Battery Pack VT-BP65A)
Accessories:	1 — Coaxial cable with F-type connectors 1 — Matching transformer 300 — 75 ohm 1 — Matching transformer 75 — 300 ohm 1 — Exclusive battery pack VT-BP65A 1 — Earphone 1 — Adjustment driver

Design and specifications subject to change without notice.

For information concerning repairs, operation or technical assistance, please contact the Service Manager of your nearest Regional Office.

Pentax Corporation
35 Inverness Drive East
Englewood, Colorado 80112
Tel. 303-773-1101

Pentax Plaza
2 Linden Place
Great Neck, New York 11021
Tel. 516-487-9800

8363 Reseda Boulevard
Northridge, California 91324
Tel. 213-701-5080

Butterfield Office Plaza, Suite 107W
2625 Butterfield Road
Oak Brook, Illinois 60521
Tel. 312-323-9000

3150 Holcomb Bridge Road
Norcross, Georgia 30071
Tel. 404-325-1171