

PENTAX

VIDEO TUNER

MODEL PV-U1000A

INSTRUCTION MANUAL



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 Video Tuner. Please read this instruction manual carefully before use and refer to it if any difficulties arise.

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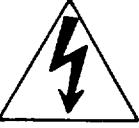

FEATURES

When used with portable VTR, PV-R1000A, this video tuner forms a video recording/playback system for home operation.

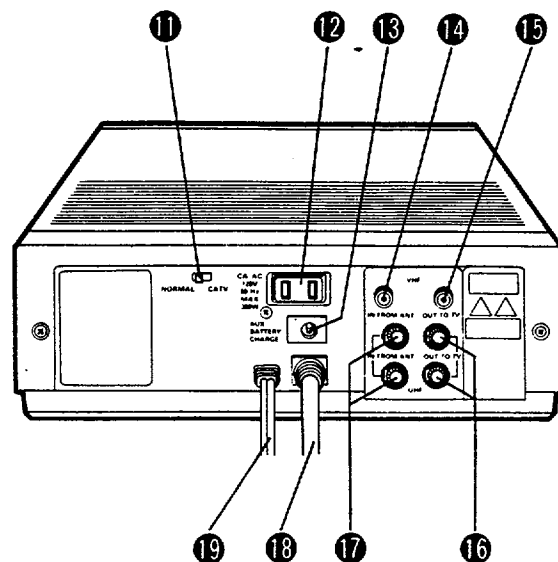
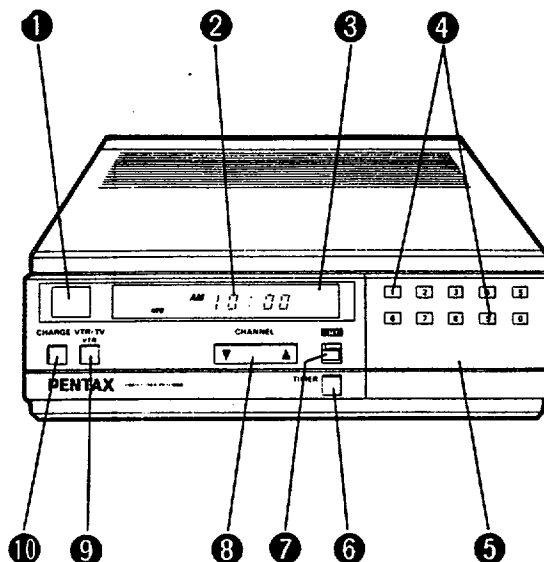
- *Easy connection with PV-R1000A portable VTR*
- *Programmable channel memory*
- *Tuning ability for cable systems channel A-5 through W+23 with voltage synthesized tuner*
- *Setting 7 programs/2 weeks is possible with built in program timer*
- *Infrared remote control operation*
- *Instant recording timer (IRT) function*
- *Can be used as AC adaptor for the portable VTR*
- *Can be used as an exclusive charger for battery pack PV-BT01A built-in the portable VTR*

PRECAUTIONS

- Avoid extreme heat.
- Avoid extreme moisture and dust.
- Avoid electrical shocks.
- Avoid places subject to strong vibrations.
- Unplug the AC cord when not in use for prolonged period of time.
- Avoid use in magnetic field.
- Do not block the ventilation holes at the top and bottom with newspapers or cushions. Do not place the unit on a carpet because this can block the ventilation holes.
- Install the unit horizontally.

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN		<p>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.</p> <p>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.</p>
<p>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.</p>			

DESCRIPTION OF VIDEO TUNER



- 1 INFRARED RAY RECEIVING SECTION**
Receives infrared rays from remote control unit.
- 2 CLOCK/TIMER DISPLAY**
Shows the present time of day and start and stop times of programs.
- 3 CHANNEL INDICATOR DISPLAY**
Shows channel number corresponding to channel selected.
- 4 10-KEY CHANNEL SELECT BUTTONS**
Select the channel you wish to view or record by pressing these buttons.
- 5 DOOR FOR TUNER/TIMER CONTROLS**
Swings down to reveal timer and tuner controls.
- 6 TIMER RECORD BUTTON**
Press after programming Digital Clock.
- 7 INSTANT RECORDING TIMER BUTTON (IRT)**
This allows unattended recording.
The timer will switch VTR off automatically at a pre-selected time. This is convenient when you go out during recording.
- 8 CHANNEL UP/DOWN SELECT BUTTON**
Allows you to scan preprogrammed channels. Refer to page 10 for operation.
- 9 OUTPUT SELECT SWITCH**
Selects the signal to be viewed. The indicator on the switch comes on when the unit is in "VTR" mode. In the "VTR" mode, the signal is received by your tuner and is displayed on the TV screen (channel 3 or 4). With the TV mode (indicator light off) the broadcast signal is received directly by your TV set. When the VTR power is turned off, the tuner automatically switches to "TV".

- 10 CHARGE SWITCH**
Press for battery charging.
- 11 NORMAL/CATV SELECT SWITCH**
Set to "NORMAL" when viewing or recording standard off-the-air broadcasts. Set to "CATV" when viewing or recording programs of cable channels.
- 12 AC OUTLET**
Connect another electrical unit (consuming a maximum 300W).
- 13 AUXILIARY BATTERY CHARGE TERMINAL**
A second rechargeable battery PV-BT01A connected with battery connector PV-BA01A can be plugged in here to charge.
NOTE: The second battery must be disconnected before the internal battery will be charged.
- 14 VHF ANTENNA INPUT**
Connect the VHF antenna to this terminal.
- 15 VHF ANTENNA OUTPUT**
Connect this terminal to the VHF antenna terminal on the back of the TV.
- 16 UHF ANTENNA OUTPUT**
Connect these terminals to the UHF antenna terminals on the back of the TV.
- 17 UHF ANTENNA INPUT**
Connect the UHF antenna to these terminals.
- 18 VTR CONNECTOR CORD**
Connects Video Tuner to Portable VTR connecting terminal.
- 19 AC POWER CORD**
Connects Video Tuner to a 120V AC outlet.

ANTENNA CONNECTION

There are 2 types of TV broadcasts, VHF and UHF.

There are areas where ① only VHF TV broadcasts can be received, ② only UHF TV broadcast can be received and ③ both VHF and UHF TV broadcasts can be received.

There are various types of antenna-hook-ups. Use the correct one, referring to the following diagrams. At first, in order to connect your Video Tuner and Portable VTR to your TV for recording and playback, it will be necessary to attach the antenna to your Video Tuner. Then you must connect your Video Tuner to your Television and VTR. Your Video Tuner and Portable VTR come with the necessary connectors and adaptors for most types of VTR installation.

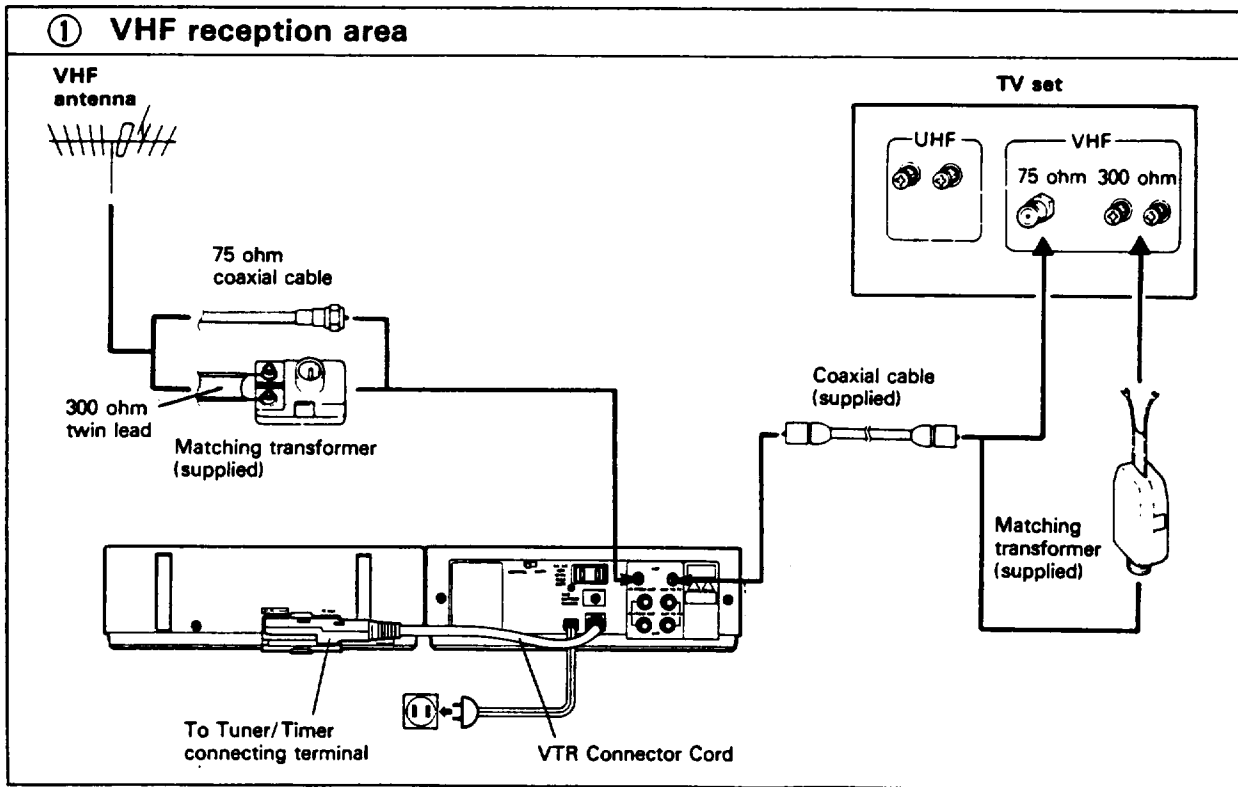
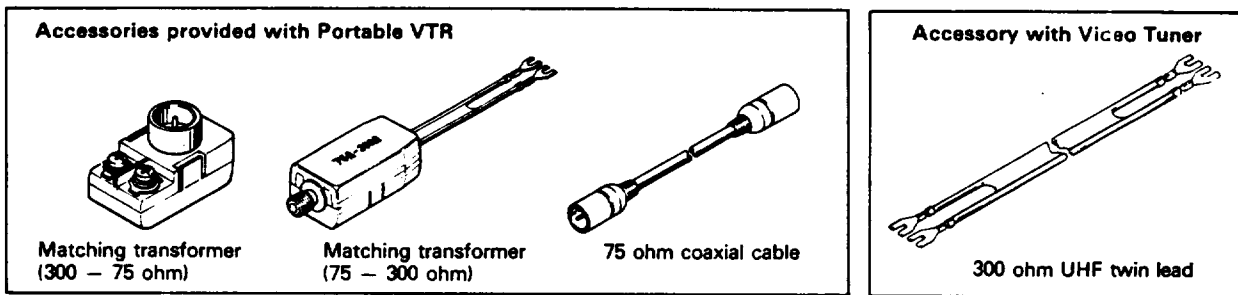
If your television is used on a cable system, special installation procedures may be required. We suggest you contact your dealer, cable company or local Pentax Service Center for assistance. Installation is not covered by the Limited Warranty.

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."

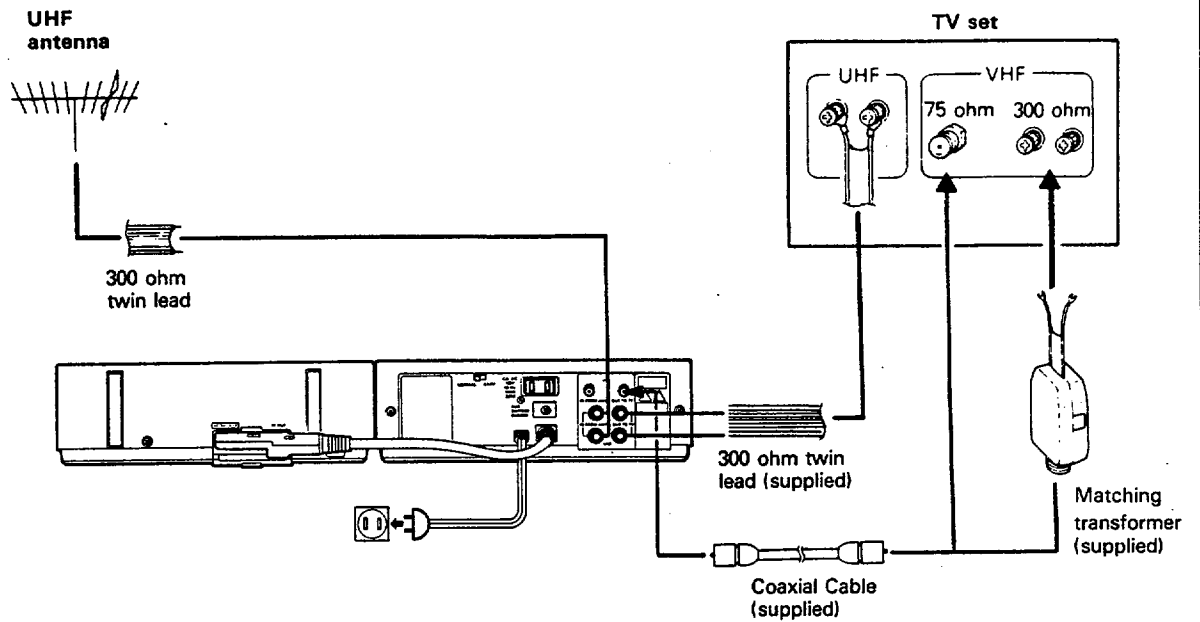
If you want to attach your Video Tuner to a Portable TV with "rabbit ears" (dipole antenna), you must disconnect the "rabbit ear" leads from the antenna input terminal of the TV. It will be necessary to extend these leads so they can be attached to your Video Tuner. We recommend an outside antenna.

• INSTALLATION ACCESSORIES

These matching transformers and connector cables come with your Video Tuner and Portable VTR. You will need one or more of them depending on the kind of antenna you use.

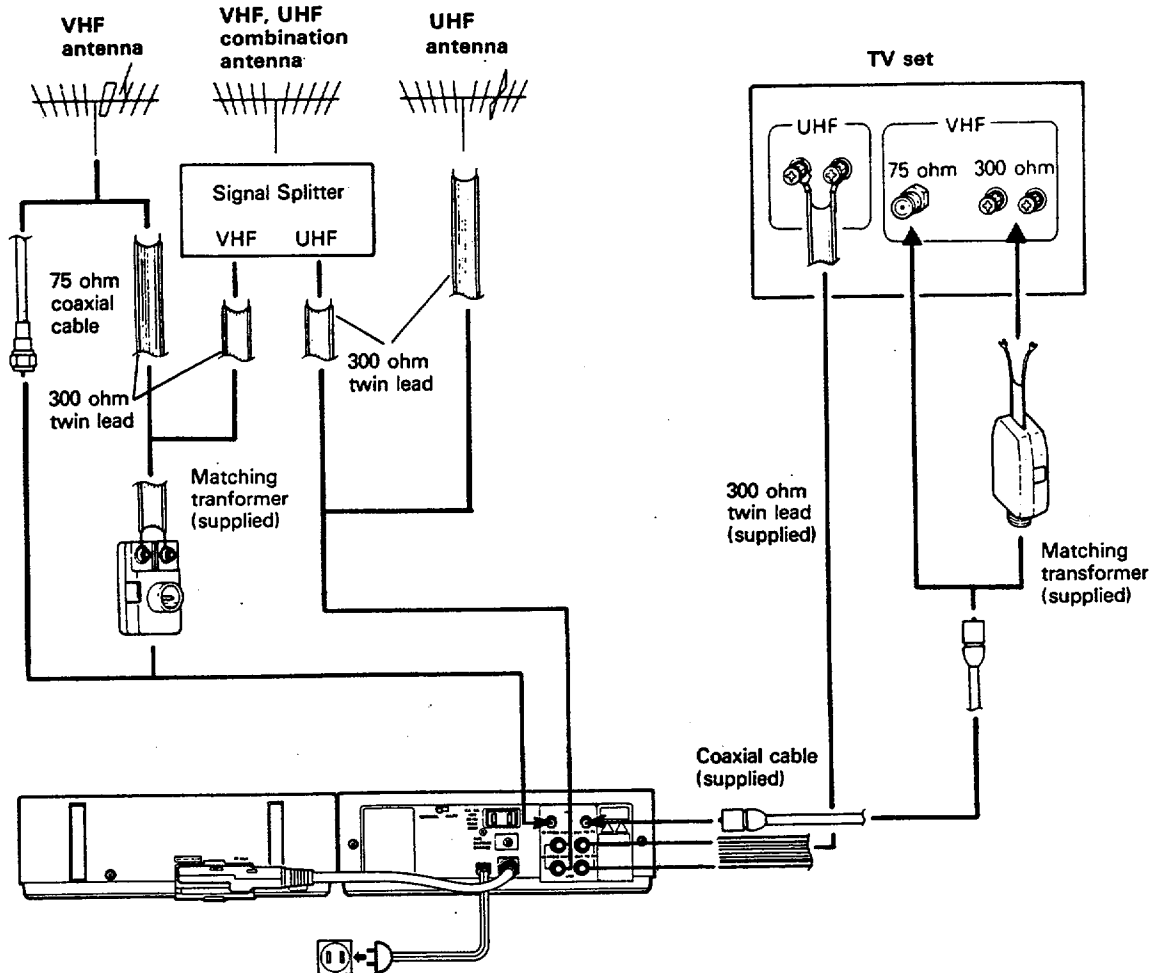


② UHF reception area



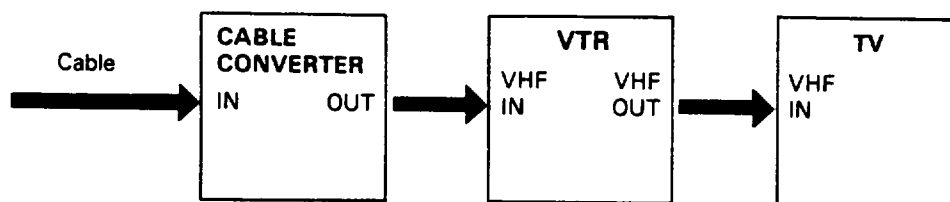
Note: It is necessary to connect coaxial cable to VHF antenna terminals.

③ Both VHF and UHF reception area



CABLE SYSTEM CONNECTION

Basic method

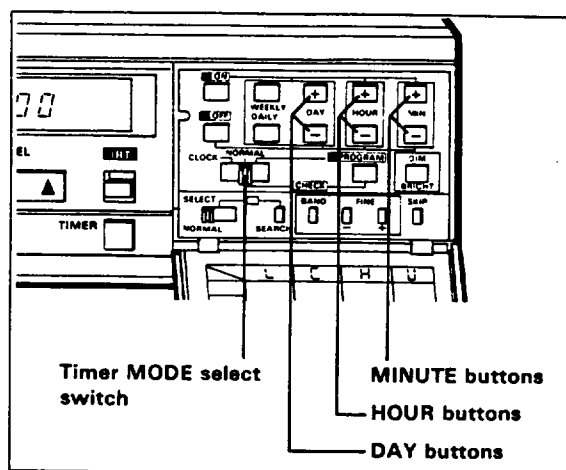
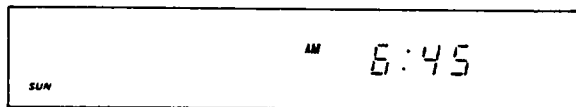


Note: With this connection you can only watch and record the same program. The cable converter must be turned on for recording.

Other connections are possible but may require additional antenna accessories which are not supplied. Cable ready VTR models can be used with this connection, but for maximum flexibility of use, additional accessories are required.

SETTING CLOCK FOR CORRECT TIME

- 1 Set Timer MODE select switch to "CLOCK".
- 2 Press DAY button (forward or reverse) to select present day of the week. Day indicators (SUN through SAT) light, in sequence, across the bottom of the Digital Display.
- 3 Press HOUR button (forward or reverse) to select correct hour. Hold the button down to advance rapidly. Be sure AM/PM indicator is correct.
- 4 Press MINUTE button (forward or reverse) to select correct minute. Hold the button down to advance rapidly.
- 5 Set Timer MODE select switch to "NORMAL". For example, for Sunday 6:45 AM, the Digital Display will appear as shown:



- Note:
- 12:00 A.M. is midnight; 12:00 P.M. is noon.
 - When video tuner is plugged into an AC outlet for first time, the clock display flashes "SUN AM 12:00".
 - Be sure to set the Timer MODE select switch to "NORMAL" after setting the clock or the clock does not operate.
 - Select the desired intensity level of CLOCK/TIMER display by pressing the DIM/BRIGHT button.

Power failure compensation

If AC power to the tuner is disconnected or lost due to power failure, the correct time and any programmed information will be retained for approximately one hour. Power failure compensation is automatically performed and the clock display is extinguished.

The power failure indicator (PF) will be displayed in the clock display to tell you that an interruption to the power supply has occurred. To clear the PF indicator you will need to return the Timer MODE select switch to "NORMAL" after setting it to the "CLOCK".

If the power failure is longer than one hour, the clock display will flash "SUN AM 12:00" when the power is restored.

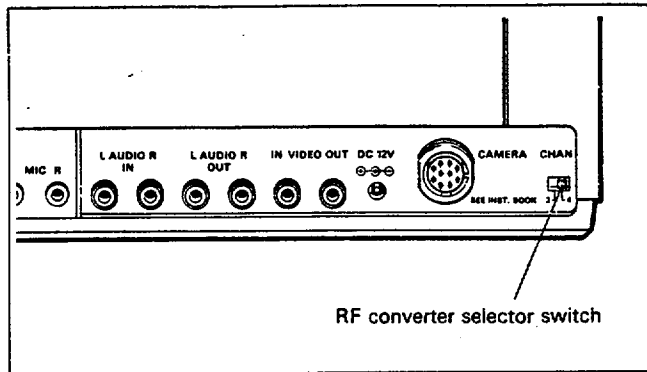
The clock will therefore need to be reset and any programmed information will be lost.

This facility is operated by an internal capacitor.

This capacitor has not been charged when the AC cord is first inserted into the AC outlet, therefore your video tuner must be AC powered for at least 10 minutes before full power failure compensation occurs.

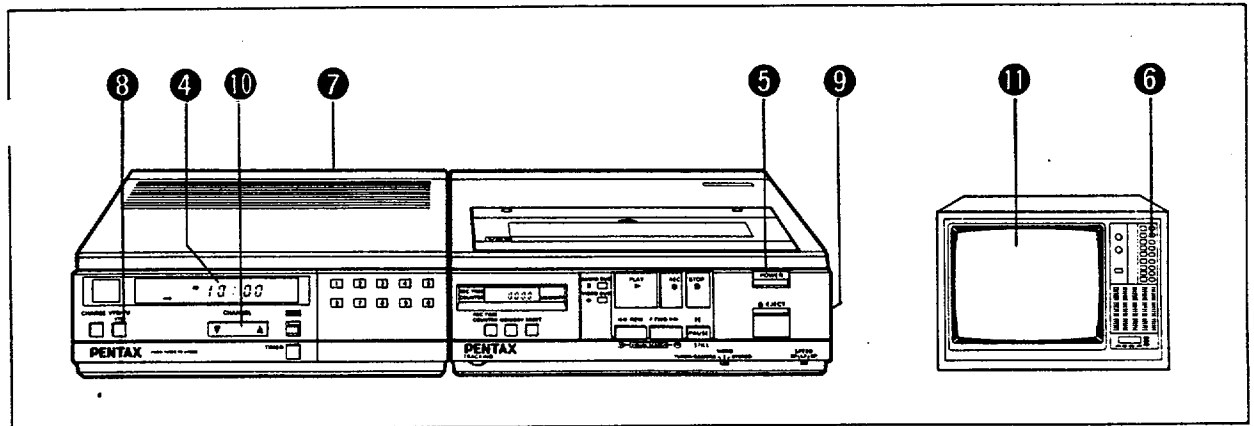
DESCRIPTION OF RF CONVERTER (Portable VTR)

The RF converter changes the video and audio signals from the tuner or tape playback, to a 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:



Select RF converter selector switch (located on the Portable VTR) to CH3 or CH4 (unused channel).

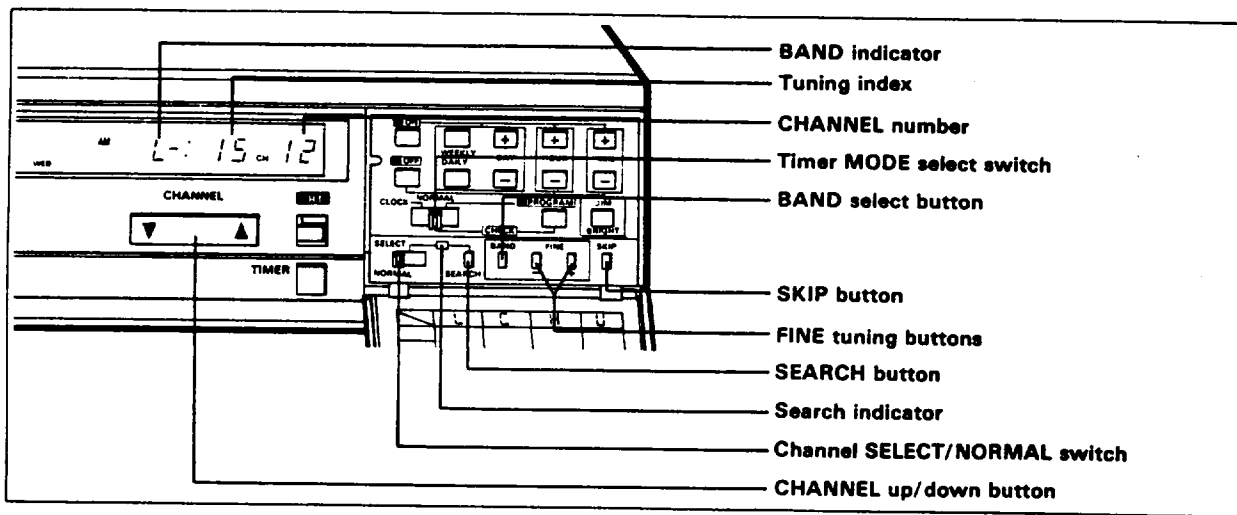
OPERATING YOUR VIDEO TUNER AND PORTABLE VTR



- 1 Make antenna connections from your antenna to your Video Tuner, and from the Video Tuner to your TV.
- 2 Connect the Video Tuner to Portable VTR.
- 3 Connect the power cord on the Video Tuner to an unswitched power outlet.
- 4 Set the clock to the correct time. (See page 6.)
- 5 Turn on the TV and VTR.
- 6 Set the TV to Channel 3 (or 4).
- 7 Set the NORMAL/CATV select switch to "NORMAL".
- 8 Press the Output select switch to set the unit to the "VTR" mode. (VTR Indicator light will come on.)
- 9 Set the RF converter switch of VTR to channel 3 (or 4).
- 10 Select an active TV channel by pressing the CHANNEL up/down select button.
Note: Your tuner has been preset to receive VHF channels 2 through 13 when shipped.
- 11 The TV channel selected by the Video Tuner should now be shown on the TV. If so, fine tune the TV for the best picture.
- 12 The VTR is now ready to begin recording and play when the tape is inserted. If you wish to add channels not factory-preset on the Video Tuner, use the procedure which follows:

Adjustment of built in television tuner

Your tuner can be preset for up to 80 memorized channels. It has been preset to receive VHF channels 2 through 13 when shipped. The channel number in the display will originally match the actual TV channel selected. During the procedure which follows, you can reprogram any display channel number, so that it selects any actual TV channel. This means that after programming of the memorized channels, the tuner display can indicate a different number than the actual TV channel tuned by that channel memory position. You can set any channel memory position to receive any station. This ability is most useful when the tuner is used in CATV installations. To add UHF or CATV channels not factory preset, or to preset the VHF channels in some other order, use the procedure which follows.



1. Set the NORMAL/CATV select switch located on the back of your tuner to the appropriate position. Set to "NORMAL" when receiving UHF or VHF broadcasts, or to "CATV" for CATV broadcast reception.
2. Open the door for TUNER/TIMER controls.
3. Set the Timer MODE select switch to "NORMAL" and channel SELECT/NORMAL switch to "SELEC
4. Select the channel number to be memorized by pressing the CHANNEL up/down button.

Note: The channel number will flash on and off to indicate that channel number has not been preset. If the channel number has been preset, the number will not flash.

Your video tuner PV-U1000A has been preset to receive VHF channels 2 through 13. Accordingly, channel numbers 2 through 13 will not flash, channel numbers 1 and 14 through 80 will flash the first time.

You should determine which channel memory positions have not been preset before entering programming information.

New information automatically erases previous programmed data.

5. Press the BAND select button to select the desired band. The indication on the display will change in sequence L, C, H, U, L continuously when this button is pressed.

Indication on display	Channels to be received		
L	VHF low channels	2~6	(54MHz - 88MHz)
	EXT MID band channels	A-5	(90MHz - 96MHz) CATV
C	EXT MID band channels	A-4~A-1	(96MHz - 120MHz) CATV
	MID band channels	A~1	(120MHz - 174MHz) CATV
H	VHF high channels	7~13	(174MHz - 216MHz)
	SUPER band channels	J~O	(216MHz - 252MHz) CATV
U	UHF channels	14~83	(470MHz - 890MHz)
	SUPER band channels	P~W	(252MHz - 300MHz) CATV
	HYPER band channels	W+1~W+23	(300MHz - 438MHz) CATV

For example, if you're going to tune one of UHF channels 14 through 83, display the letter "U" by pressing the BAND select button.

6. After the correct band is indicated, press the SEARCH button. The Tuning index advances continuously and the SEARCH indicator will flash on and off.

When a station is reached, the Tuning index will stop advancing and the SEARCH indicator will light to indicate the station has been preset. The program received appears on the TV screen. If you do not wish to preset the station being received, press the SEARCH button again. At the next station, the Tuning index will stop advancing and the SEARCH indicator will light, and new station can be preset. Repeat this until the desired station is reached. By repeating this, the BAND indicator on the display will change in sequence L, C, H, U, L

Note: If your TV picture is not clear, you must perform fine tuning. Press and hold the FINE tuning button (forward or reverse) until a clear picture is obtained. In this case the AFS* facility is automatically cancelled only for channel to be fine tuned.

* AFS (Automatic Frequency Setting)

An AFS circuit is employed in this video tuner.

This AFS circuit automatically maintains best obtainable channel reception for optimum recording quality.

However, the AFS facility is automatically cancelled and best picture is obtained when you fine tune the channel by pressing the FINE tuning button.

7. Follow the same steps as explained in steps 2 through 6 above for other channels.

8. After adjustment all channels, return the channel SELECT/NORMAL switch to "NORMAL".

The channels preset in memory as shown in the above procedure can be selected by the 10-key controls or CHANNEL up/down select button.

The provided channel sheet is used to list programs to which you will preset your video tuner. List the programs and paste sheet on the side panel or the bottom of the remote control unit etc. so as not to hinder you when you operate the unit.

NOTES:

- When the picture of any particular channel cannot be received, adjust the Video Tuner fine tuning knob (described in "NOTE" on item 6).
- When the pictures of no channels can be received, your TV set is not tuned properly, so adjust the TV set by the following procedure.

A. TV set with a mechanical tuner

1. Set the TV channel to CH3 or 4 (The same channel as the RF converter of the VTR.)
2. Adjust FINE TUNING so that a clear picture is obtained.

B. TV set with an electronic tuner

1. Set the TV channel to a channel position which you do not use.
2. Set the band selector switch to VHF "LOW" or to CH2—CH13.
3. Turn the channel preset control to the low (CH2) end of it's range, then tune towards the high end until the CH3 (or 4) output is found, then adjust it for the clearest picture. The TV preset will now be set to the same channel as the RF converter of the VTR.
4. Press the Video Tuner Channel Select Buttons to verify that all preset channels can be received.

Channel selection

10-key selection

Your tuner is equipped with a 10-key pad for direct channel selection. To obtain the channel you want, two numbers must be pressed. For example, press "0" and "8" for channel 8.

80 channels (01-80) can be preset in memory. If you display other numbers, for example, if you display "83" on the display, channel "83" is not kept in memory, accordingly after 2 seconds channel "83" returns to the last preselected channel.

Channel up/down selection

In addition to the individual channel selection controls, the channel up and down control permits advancing the tuner directly to the next higher or lower programmed channel. Holding the channel up/down control depressed lets you scan programmed channels, stopping briefly at each to let you see program.

Eliminating unwanted preset channels

You can rearrange the desired channels by eliminating unwanted preset channels for channel up/down selection.

1. Press the CHANNEL up/down button until an unwanted channel is found.

2. Set the channel SELECT/NORMAL switch to "SELECT".

The SEARCH indicator will come on.

3. Press the SKIP button.

The SEARCH indicator will go off indicating the channel has been erased from memory.

4. Repeat steps 1 and 3 until all unwanted channels have been erased.

5. After eliminating them, move the channel SELECT/NORMAL switch to "NORMAL".

Note: A channel which has been erased cannot be selected by the CHANNEL up/down button, but can be selected by the 10-key buttons.

Adding channels to the channel up/down selection

After setting new preset channels per "Adjustment of built in television tuner", they can be add to the up/down selection. You can also add channels previously deleted from up/down selections. Proceed as follows:

1. Using the 10-key pad, select the channel which had been previously eliminated and you desire to preset again into the memory. The picture can be viewed on the TV screen.

2. Move the channel SELECT/NORMAL switch to "SELECT".

(The SEARCH indicator should go off.)

3. Press the SKIP button.

The SEARCH indicator will come on. The channel has been now programmed in memory.

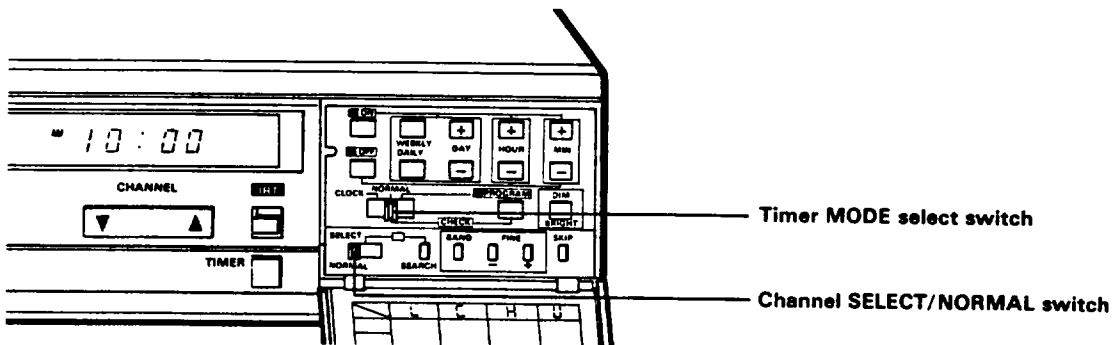
4. Repeat steps 1 and 3 for other channels if desired.

5. After programming, return the channel SELECT/NORMAL switch to "NORMAL".

These programmed channels can be selected by the CHANNEL up/down button.

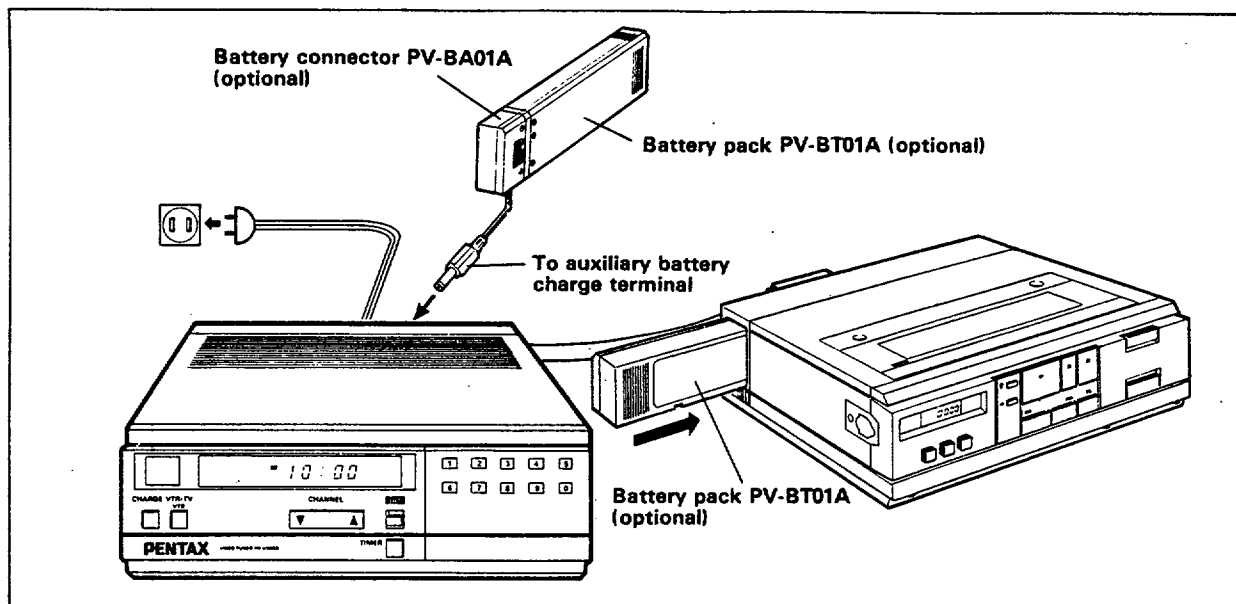
Remarks:

For normal use, be sure to set the Timer MODE select and channel SELECT/NORMAL switches to "NORMAL".



HOW TO CHARGE BATTERY PACK

Video Tuner can be used as a battery charger for PV-BT01A, exclusive battery pack of Portable VTR.



To charge battery pack built-in Portable VTR

- 1 Connect Video Tuner with Portable VTR. Refer to page 4 – 5.
- 2 Insert battery pack into battery compartment.
Turn off POWER switch of Portable VTR.
- 4 Press CHARGE switch to "ON". When charging starts, the charge indicator will go on. When charging is complete, the indicator will go off to indicate that charging is complete.
Note: If you turn on the Portable VTR, the charging will stop.

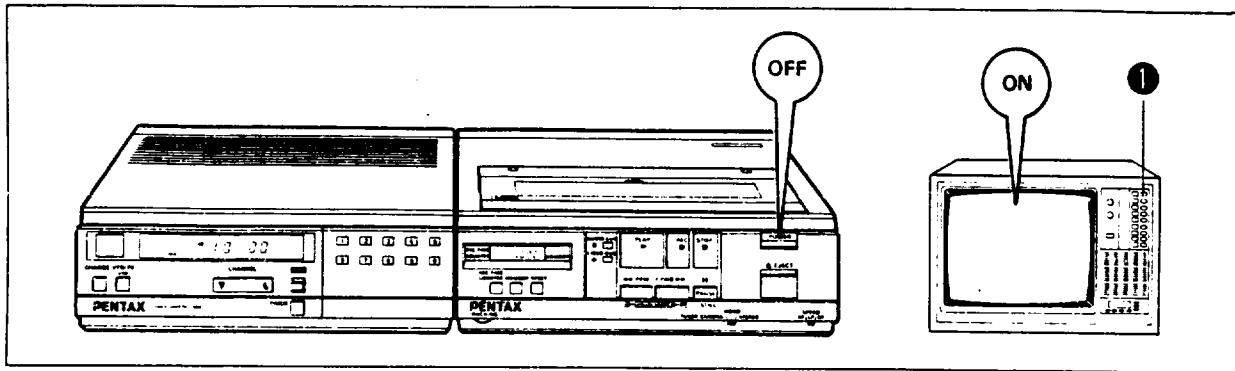
To charge a battery not installed in the VTR

- 1 Connect optional battery connector PV-BA01A to battery pack PV-BT01A.
- 2 Connect battery connector PV-BA01A to Auxiliary battery charge terminal of Video Tuner.
- 3 Press CHARGE switch to "ON". When charging starts, the charge indicator will go on. When charging is complete, the indicator will go off to indicate that charging is complete.
Note: The Video Tuner and Portable VTR need not to be connected when charging a battery at the auxiliary battery charge terminal.

Note:

- When 2 battery packs are connected (one in the battery compartment of VTR, the other connected to the Auxiliary battery charge terminal of tuner) simultaneously, the battery pack connected to Auxiliary battery charge terminal will be charged but built-in battery pack will not be charged.
- Power to VTR is "OFF" when battery is connected to auxiliary battery charge jack on Video Tuner.
- Exclusive Battery Pack PV-BT01A can be used repeatedly by recharging it, however, its service life depends upon the conditions of use.
The following are points to be remembered.
 1. Be sure to charge battery before using it.
 2. Be careful not to short the terminals of battery.
 3. The time required for charging is approx. 1 hour.
 4. Use the Video Tuner or PV-A1000A Adaptor/Charger to charge the battery pack. Using other equipment is dangerous.

VIEWING TV ONLY

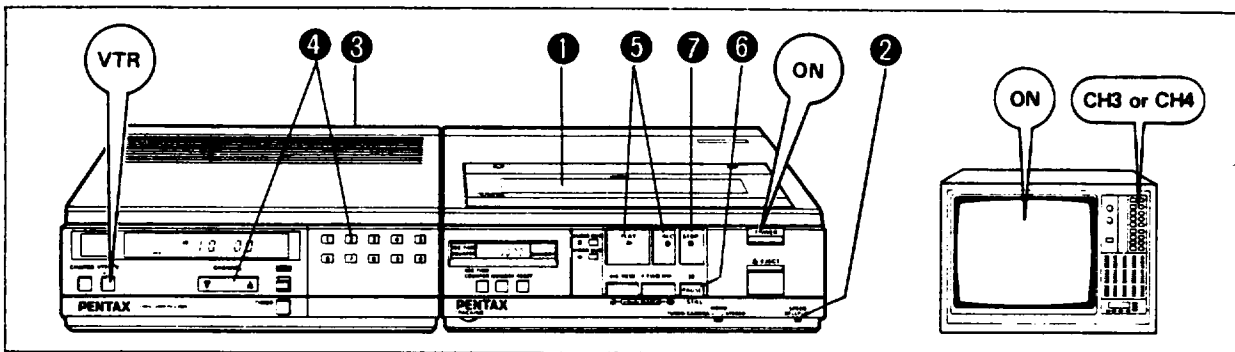


- 1 Set the channel selector to the program you wish to watch.

NOTE:

- When the VTR POWER Switch is turned off, the unit automatically reverts to the "TV" mode. The output selector will have no effect.
- Power cord must be plugged in AC outlet.

VIEWING AND RECORDING THE SAME TELEVISION PROGRAM



- 1 Insert Cassette.
- 2 Set speed selector on VTR to "SP", "LP" or "EP".
It is recommended to set this switch to "SP" when recording a music program.
- 3 Set the NORMAL/CATV select switch to the appropriate position.
Set to "NORMAL" when recording a UHF or VHF broadcast, or to "CATV" for CATV broadcast recording.
- 4 Select channel to be recorded.
- 5 Press RECORD button and while holding RECORD, press PLAY button.
- 6 Press PAUSE/STILL button to stop recording temporarily. Press again to release.
Note: To prevent tape damage, do not leave the unit in the pause mode for more than 5 minutes.
- 7 Press STOP button to stop recording.

To change the channel to be recorded while in record mode

During recording, the channel lock function operates and channel cannot be changed if the channel select button is pressed.

If you wish to change channel, proceed as follows.

1. Press the PAUSE/STILL button.
2. Change channel desired.
3. Press the PAUSE/STILL button to release record pause mode.

It is convenient to use the Instant recording feature when you go out during recording. The VTR will start recording at the preselected time. Follow the step 5 in "Instant recording" on page 13.

Note: The channel lock function is released when IRT button is pressed once ("0:00" is displayed by the timer), and it operates when the recording time is displayed by pressing the IRT button.

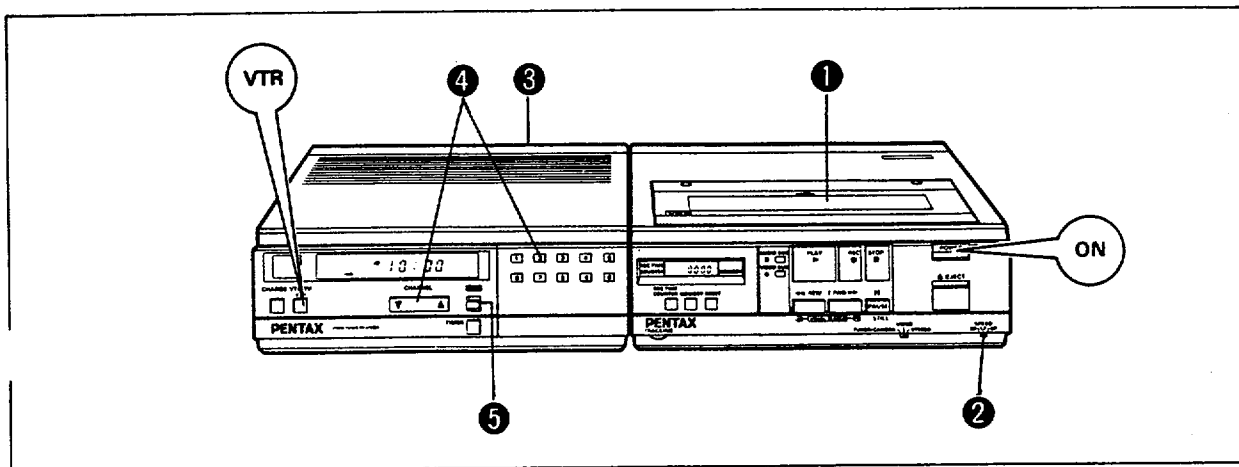
RECORDING ONE PROGRAM WHILE VIEWING ANOTHER

You can record one program while viewing another. The recorded program can be played back later at your convenience.

- 1 Follows the steps described in item 1 through 5 of the section "VIEWING AND RECORDING THE SAME TELEVISION PROGRAM".
Now recording begins.
- 2 Press Output select switch to set the unit to "TV" mode. (VTR indicator light will go off.)
- 3 Set the TV channel selector to the program you wish to view.
- 4 If you want to stop recording, press STOP button.

INSTANT RECORDING

The Instant Recording Timer (IRT) button allows you to start a recording and the video deck will stop recording at the preselected time.



Before operating, set the clock to the present time of day.

- 1 Insert the cassette.
- 2 Set the SPEED select switch to "SP", "LP" or "EP".
Note: It is recommended to set this switch to "SP" when recording a music program.
- 3 Set the NORMAL/CATV select switch to the appropriate position.
Set to "NORMAL" when recording a UHF or VHF broadcast, or to "CATV" for CATV broadcast recording.
- 4 Select the channel to be recorded.
- 5 Press the IRT button once to set the timer to 0:00.
Press IRT button once again to record for 30 minutes (0:30), two times for 60 minutes (1:00), three times for 90 minutes (1:30), four times for 2 hours (2:00), five times for 3 hours (3:00) and six times for 4 hours (4:00). Recording starts when 0:30 is displayed. During recording, the remaining IRT time appears on the TIMER display. During IRT recording you can check the present time of day by placing the Timer MODE select switch to "CLOCK". After checking, return it to "NORMAL".
- 6 At the end of recording the display reads 0:00; the video deck will automatically stop recording and the present time will be displayed.
Note: If the tape reaches the end before instant recording is completed, the PLAY, FAST FORWARD, REWIND, etc. buttons will have no effect. To cancel IRT operation during recording, or if the tape ends before the IRT display reads 0:00, press the IRT button until 0:00 is displayed by the timer. After approx. eight seconds, power is shut off and the video deck can be operated manually. Or press the EJECT button if the tape ends before IRT display reads 0:00; the IRT mode is cancelled and the video deck can be operated manually.

To extend the recording time during recording

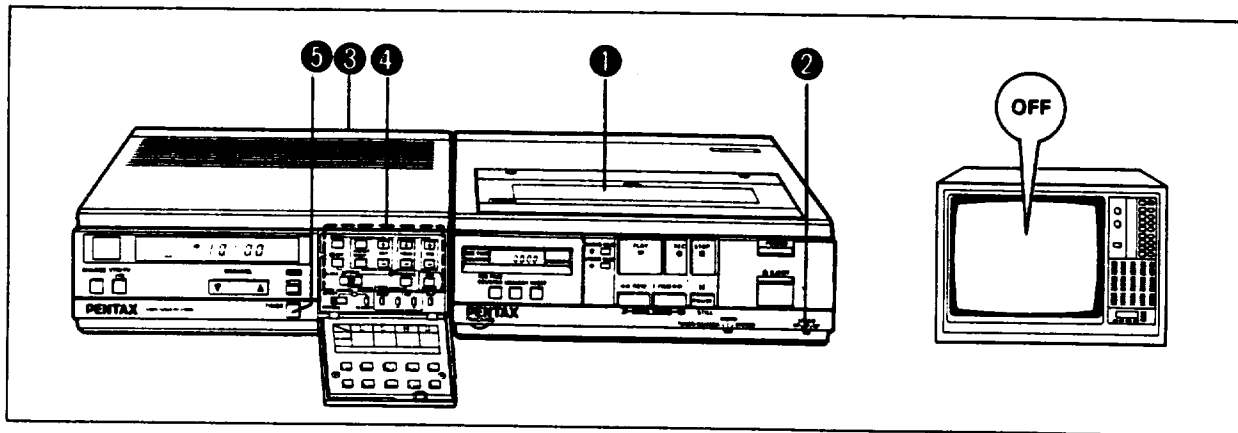
The recording time can be extended any time during Instant Recording by pressing the IRT button. The timer display will reset to 0:30, 1:00, 1:30, 2:00, 3:00 or 4:00 as selected.

To cancel Instant Recording

Press the IRT button until 0:00 is displayed by the timer. Display indication returns to 0:00 after 4:00 by pressing the button. After approximately 8 seconds, the video deck will stop recording.

TIMER RECORDING (UNATTENDED RECORDING)

The programmable electronic clock/timer permits the unattended recording of up to 7 preselected programs. It can be preset up to 14 days in advance to record your favorite programs. It turns the unit on and off and changes channels automatically.



- ① Insert the Cassette.
Be sure to check that the record safety tab is not missing. If the record safety tab is missing, recording will not begin.
- ② Set the SPEED select switch to "SP", "LP" or "EP".
Note: It is recommended to set to "SP" when recording a music program.
- ③ Set the NORMAL/CATV select switch to the appropriate position.
Set to "NORMAL" when recording a UHF or VHF broadcast, or to "CATV" for CATV broadcast recording.
- ④ Set the program timer.
"START (ON) TIME", "STOP (OFF) TIME", "DAY" etc. See next page.
- ⑤ Set TIMER record switch of video tuner to ON. Now recording will begin automatically at the start time.

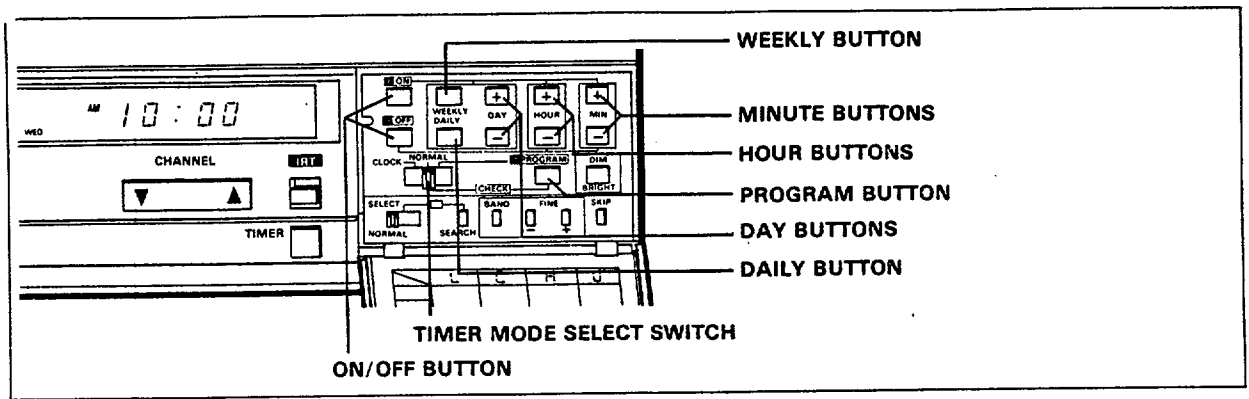
- Note:**
- It is not necessary to press the PLAY and RECORD buttons.
 - When the TIMER record switch is on, your video deck cannot be operated manually.
 - If the record safety tab is missing or the cassette is not inserted, the TIMER indicator will flash to warn you.
 - If you want to stop during recording with the timer, set the TIMER record switch to OFF.

To monitor the program to be recorded

1. Turn on the TV and set the channel of your TV to CH3 or 4 (for your video channel).
2. Turn off the TIMER record switch of the video tuner and turn on the POWER switch of the video deck.
3. Press the channel select button to set to the channel to be recorded.
4. After checking the program, turn off the TV and set the TIMER record switch of the video tuner to ON.

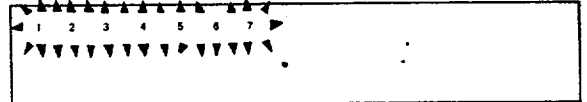
TO SET THE PROGRAMMABLE TIMER

For unattended recording the Timer needs to know what day to make the recording, the time to start, the time to stop, and the channel to be recorded.



- 1 Set Timer MODE select switch to "PROGRAM". Program indicators (1 through 7) flash to indicate which memory positions have not been programmed. If a memory has been programmed, the indicator will not flash.

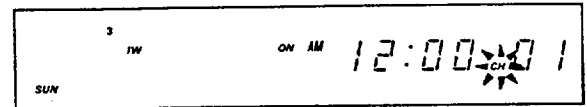
Note: You should determine which memory positions have not been programmed before entering new programming information. New information automatically erases previous programming.



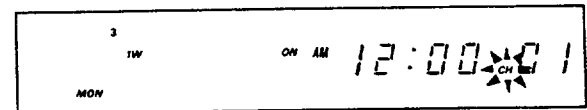
- 2 Press the PROGRAM button until desired Program indicator lights. Program indicators (1 through 7) light in sequence across the top of the Digital Display. The ON indicator flashes to tell you to press the ON button.



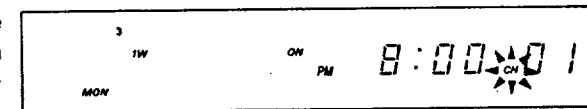
- 3 Press the ON button. The present day and 12:00 A.M. will appear on the display until you enter day and start time information.



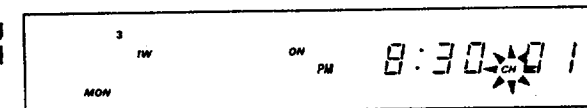
- 4 Select the day of recording by pressing the DAY button until desired Day indicator lights. Make sure desired Week indicator (1W or 2W) lights. Continuing forward will advance Timer to Week Two. For example, program memory 3, Monday, Week One will appear as shown:



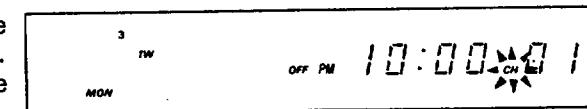
- 5 Select the hour for recording to start by pressing the HOUR button (forward or reverse). Hold down button to advance rapidly. Make sure AM/PM indicator is correct.



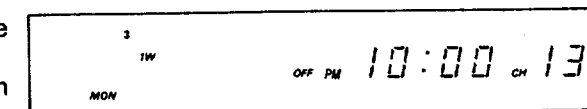
- 6 Select the minute for recording to start by pressing the MINUTE button (forward or reverse). Hold down button to advance rapidly.



- 7 Press the OFF button. "OFF" lights. Then set the stop time using the HOUR and MINUTE buttons. (Keep in mind that the maximum recording time without changing cassettes is 8 hours.)



- Choose the channel to be recorded by pressing the CHANNEL up/down button. Channel to be selected must previously have been preset for up/down channel selection.



- ⑨ To set the next program, repeat steps 2 through 8.
- ⑩ To show the present time of day on the Digital Display again, set the Timer MODE select switch to "NORMAL".
Timer MODE select switch must be in "NORMAL" position or clock will not show present time of day.
 Note: When Timer is on (red indicator light on), your video deck cannot be operated manually.

TO RECORD AT THE SAME TIME AND DAY EVERY WEEK

- ① Follow the steps 1–3 of "TO SET THE PROGRAMMABLE TIMER".
- ② Press the WEEKLY button,
 The weekly indicator "WLY" will light.
 Pressing the WEEKLY button repeatedly changes display "WLY" and "1W" alternately.
- ③ Select the day of recording by pressing the DAY button until desired Day indicator lights.
- ④ Follow the steps 5–10 of "TO SET THE PROGRAMMABLE TIMER".

TO RECORD AT THE SAME TIME EVERY DAY OF THE WEEK

- ① Follow the steps 1–3 of "TO SET THE PROGRAMMABLE TIMER".
- ② Press the DAILY button.
 The daily indicator "DLY" will light.
 Pressing the DAILY button repeatedly changes display "DLY" and "1W" alternately.
- ③ Follow the steps 5–10 of "TO SET THE PROGRAMMABLE TIMER".

Programming errors

If programs overlap, the video tuner will select the program with the earliest start time. When that program is over, the video tuner will switch to the next program. If the start times are the same, the video tuner will select the programs in numerical order.

To correct program errors

It is possible to correct the program information when you find an error before returning the Timer MODE select switch to "NORMAL". When the display indicates the stop time, stop time and channel for recording can be corrected. The start time and day for recording can be corrected when the start time is indicated. The start time and stop time indications are displayed alternately by pressing the ON and OFF buttons.

To clear a program

- ① Set Timer MODE select switch to "PROGRAM".
- ② Press PROGRAM button until desired Program indicator lights.
- ③ The program will be erased when the ON button is pressed.
- ④ Return Timer MODE select switch to "NORMAL".

To check program

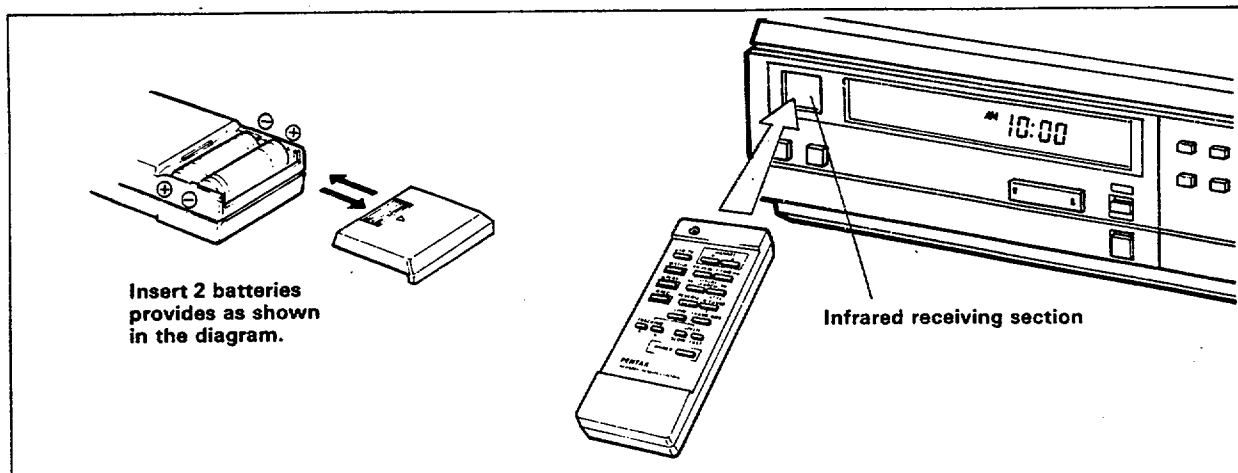
- ① Set Timer MODE select switch to "NORMAL/CHECK".
- ② Press PROGRAM button. Program indicator "1" lights. The ON indicator lights and the Digital Clock/Timer Display shows the start time. Then the OFF indicator lights and the display shows the stop time. The appropriate channel number lights. Display returns to present time of day.
- ③ Press the PROGRAM button again to check other programs.

Additional timer programming information

- Daily and weekly repeat programs are held in memory after 14 days unless the program is otherwise cleared.
- Insert the pin etc. into the hole on the left side of the OFF button and push when the indication or operation of the display becomes abnormal for some reason. The display indication will be cleared and the timer reset.

REMOTE CONTROL OPERATION

You can operate the VTR from a distance using the Infrared Remote Control Unit which performs the same functions as the corresponding buttons, on the VTR and video tuner — except for the REVERSE, SLOW, FRAME ADV, SLOW TRACKING and SPEED buttons.



REVERSE button

First press PLAY button then press this button to view video in the reverse direction.

SLOW button

Press then use SPEED control buttons to vary the speed from 1/5 normal speed to stopped action in the EP mode, or 1/10 normal speed to stopped action in SP mode.

Press PLAY button to return to the normal playback mode or STOP button to enter the stop mode.

Notes: • The playback picture will have some amount of noise in the picture.

- Press forward or reverse slow TRACKING button to minimize noise bands that may appear when using the slow, still or frame advance feature. You will be able to move the noise band to either the top or bottom of the picture.

The slow tracking controls can only move the noise during slow or frame advance. To minimize noise in still, set the slow tracking during slow, then activate still.

FRAME ADV button

To advance the picture a few frames at a time during playback, press the PAUSE/STILL button, then the FRAME ADV button. The picture will be advanced a few frames at a time each time this button is pressed. The frames will be advanced continuously when this button is kept in the depressed position.

To release, press the PAUSE/STILL button again.

Notes: • This function is effective only during the playback of tapes recorded in the SP or EP mode.

- The playback picture will have some amount of noise in the FRAME ADVANCE mode.
- Noise area will vary (Between SP and EP modes).

NOTES:

- The infrared rays used for operation travel in a straight line. When there is an obstacle between the remote control unit and the tuner, operation may not be possible.
- As the batteries are used up, the operation distance is reduced. When operation is not possible or when the distance becomes too small, replace the batteries.
- Remove the batteries from battery compartment when the unit is not to be used for a long time.
- When using the Infrared Remote Control unit to operate the various functions, a slight delay in the reaction time is normal. When depressing the function buttons, please make certain that each function is activated before releasing the button.
- Infrared light bounces from nearby objects, so remote operation may be possible when no direct path to the tuner exists. Such operation may not be consistent, so we do not recommend using reflected rays for operation.

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 fully charged? 	<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 with sound" engaged? 	<ul style="list-style-type: none"> • Set "sound with sound" to off.

Refer servicing to qualified personnel.

SPECIFICATIONS

Video Signal:	NTSC color signal
Tuning Range:	VHF LOW, CH2-6 (54 MHz — 88 MHz) VHF HIGH, CH7-13 (174 MHz — 216 MHz) UHF CHANNELS, 14-83 (470 MHz — 890 MHz) EXT MID band CH A-5-A-1 (90 MHz — 120 MHz) CATV MID band CH A-1 (120 MHz — 174 MHz) CATV SUPER band CH J-W (216 MHz — 300 MHz) CATV HYPER band CH W+1-W+23 (300 MHz — 438 MHz) CATV
Antennas:	VHF 75 ohm external terminals UHF 300 ohm external terminals
Power Consumption:	40W
Power Input:	AC 120V 60 Hz
Dimensions:	3-3/8"(H) x 9-15/16"(W) x 10-3/8"(D) 85 (H) x 253 (W) x 263 (D) mm
Weight:	7 lbs (3.2 kg)
Accessories:	1 — UHF twin lead 1 — Remote control unit 2 — "AA" batteries 1 — Channel sheet

Design and Specifications subject to change without notice.



PENTAX

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