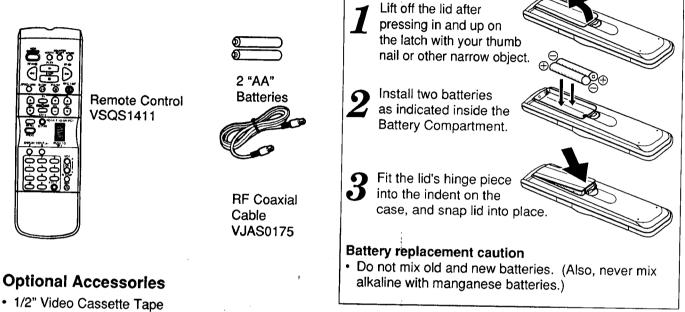


Things You Should Know

Unpacking Your VCR

The accessories shown below are provided to help you use or set up your VCR. Optional accessories are also listed.

Accessories



Load the batteries in the Remote Control

Safety Precautions

Warning: To prevent fire or shock hazard, do not expose this equipment to rain or moisture. This video recorder, equipped with the HQ (High Quality) System, is compatible with existing VHS equipment.

Only use those tapes with the WHS mark. It is recommended that only cassette tapes that have been tested and inspected for use in 2, 4, 6, and 8 hour VCR machines be used.

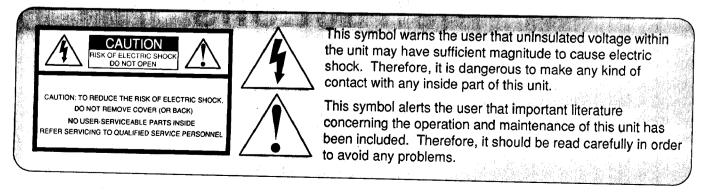


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Please see the separate, "Basic Connection Guide" which covers TV/VCR connections as well as optional Audio/Video and Cable connections.

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One Time VCR Setup

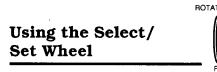
Blue numbers/ letters (ex. 1 ~ 23) correspond with fold-out Control Reference Guide (front page).

Check list before you begin

- All TV and VCR connections are made.
- (See separate Connection Guide.)
- TV and VCR are plugged in.
- TV is turned on and set to the VCR channel (the same channel you set on the back of the VCR, CH3 or CH4).
- □ VCR is turned on (VCR goes into VCR mode).

Using This Manual

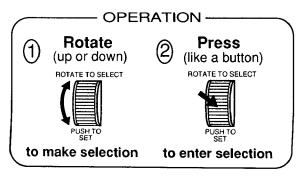
- Fold out the Control Reference Guide (front page)
- Read Operating Instructions carefully and in the order presented.
- Use the blue reference numbers and letters to locate controls on the Control Reference Guide.





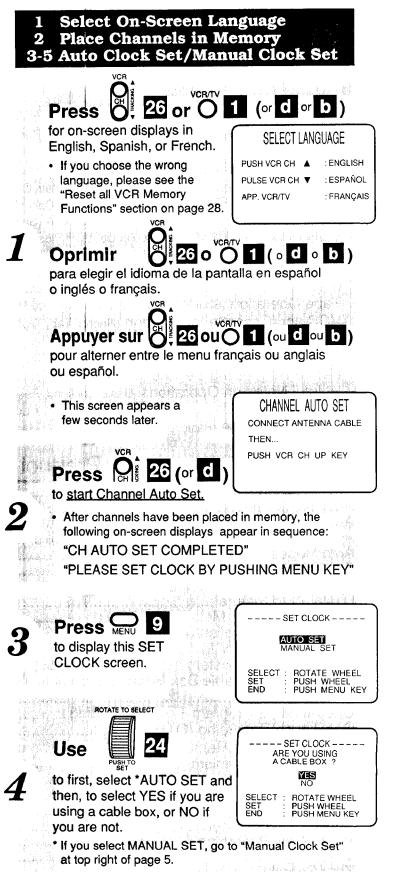
There are basically two types of Wheel operation.

- Selecting items from an on-screen display.
- Entering information, such as setting the clock.



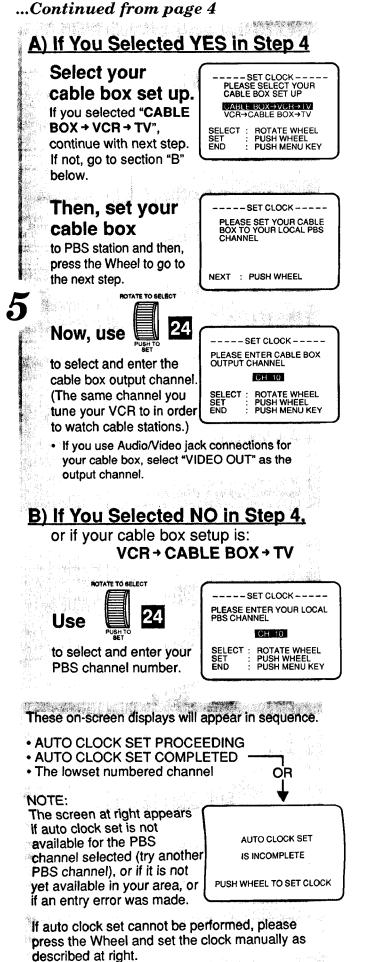
• By repeatedly pressing the Wheel, you can skip over already set items as desired.

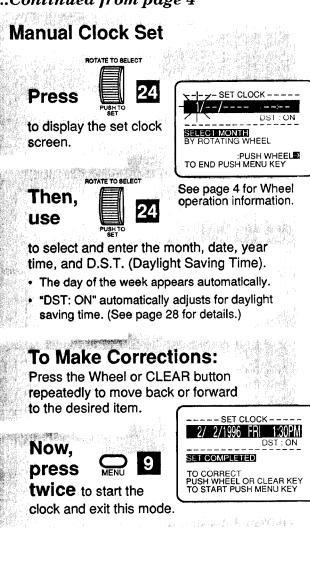
• When the VCR power is first turned on, the language select and channel auto set screen appear automatically followed by a prompt to set the clock.



Continued on the next page...

...Continued from page 4





IMPORTANT NOTE FOR AUTO CLOCK SET:

Auto clock set will be performed when the VCR is turned off the first time each day. If you use a cable box and you want auto clock set to be performed, the cable box must be left on at the time the VCR power is turned off. Also, if the cable box control steps on page 17 have not been completed, or your cable box is not remote controllable, the cable box must be tuned to your PBS channel.

See pages 6, 7 to change or re-enter **One Time Setup items**

You will find out how to:

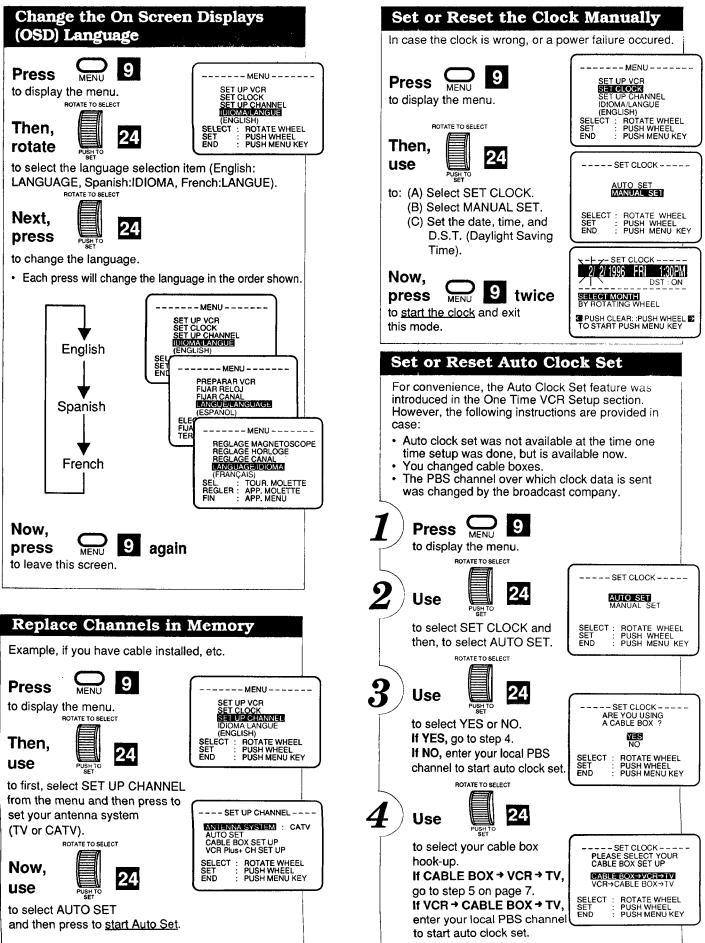
- · change the on screen display language.
- replace channels in memory.
- set or reset the clock manually. set or reset the Auto Clock Set feature.
- add or delete a channel from memory.

Helpful Note

 It takes about 10 seconds for the VCR to determine whether or not Auto Clock Set is available. Then, depending on your local broadcasting company, it takes from about 1 minutes to 10 minutes to set the clock. If you would rather not wait, please press the STOP button and set the clock manually.

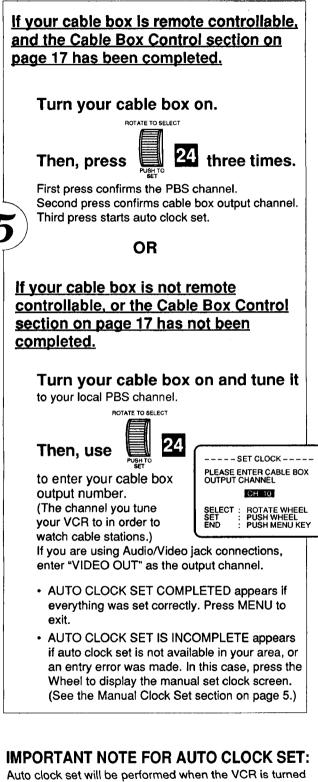
Change or Re-enter One Time Setup Items

Blue numbers/ letters (ex. 1 ~ 23) correspond with fold-out Control Reference Guide (front page).



Continued on the next page...

...Continued from page 6



off the first time each day. If you use a cable box and you want auto clock set to be performed, the cable box must be left on at the time the VCR power is turned off. Also, if the cable box control steps on page 17 have not been completed, or your cable box is not remote controllable, the cable box must be tuned to your PBS channel.

Add or Delete a Channel

Select a channel

using the NUMBERED keys on the remote control.





CHANNEL 08 DELETED ∫ or ADDED

to add or delete the channel.

 To select a deleted channel, use the NUMBERED keys on the remote control. Each time a deleted channel is selected, it will flash in the Multi Function Display.

Using the 100 key

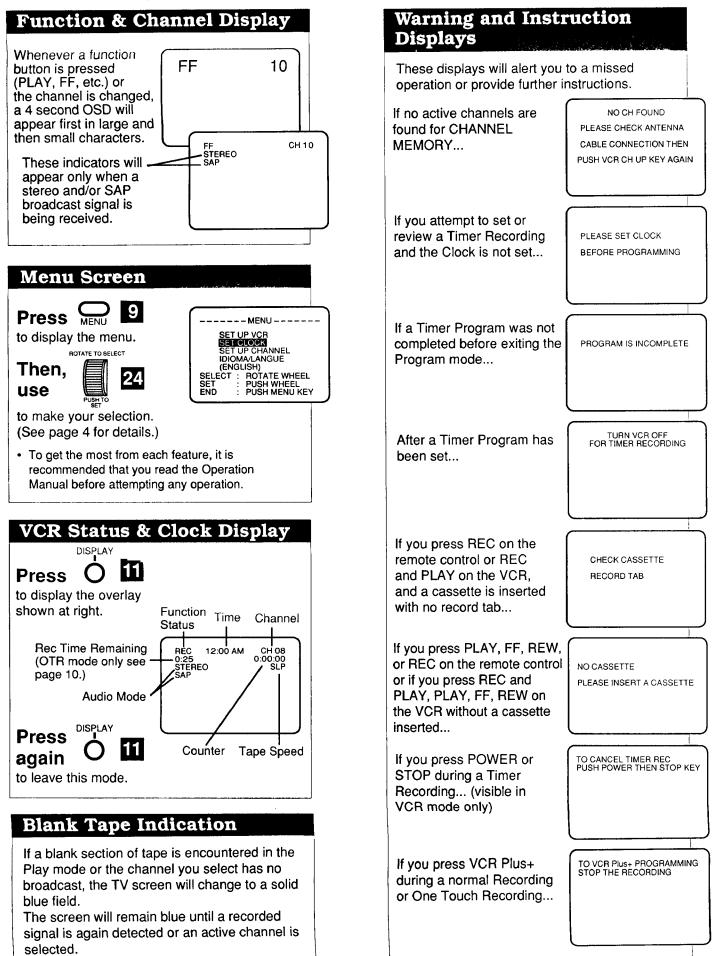
When selecting CATV channels 100 to 125 with the NUMBERED keys, first press the 100 key and then enter the remaining two digits. For example, for channel 125: Press NUMBERED keys 100-2-5.

Helpful Notes

- · This VCR will accurately maintain its calendar up to Dec. 31, 2013, 11:59PM.
- · Make entries within 5 minutes, or the VCR exits the Set Clock screen.
- · Normal TV or Cable channels are automatically selected and placed in memory depending on how your VCR is hooked up.
- · By pressing the Wheel or CLEAR button repeatedly, you can skip forward or backward over correct entries and go directly to a specific item.

On Screen Displays (OSD)

Blue numbers/ letters (ex. 1 ~ 28) correspond with fold-out Control Reference Guide (front page).



Play Back a Tape

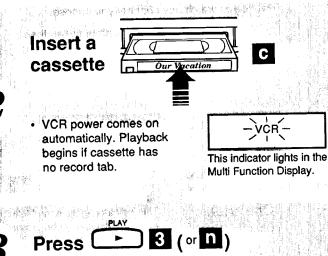
Check list before you begin All connections are made (see separate Connection Guide).

Your VCR is plugged in.

Turn TV on. Select it's VCR Channel

(CH3 or CH4). The TV channel is the same number you set on the

back of the VCR (see separate Connection Guide).

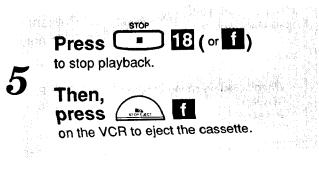


to start playback.

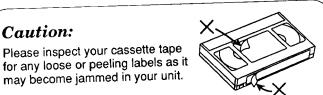


to quickly locate a scene during playback. Press PLAY to release search mode.

- SP mode tapes have a search speed of 9 times and SLP mode tapes 27 times the normal speed.
- Some noise bars will appear during search.



Caution: Please inspect your cassette tape



Playback Features

Special Effects During Playback

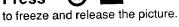
Th**ese features work best in SP or SLP mode.** Sound will be muted.

Slow Motion Playback

6 Æ Press PLAY **3** (or **n**) Then, press (to release.

Still (Freeze) Frame Picture





 To reduce picture noise: First, place the VCR in slow motion mode. Then, when the picture is clear using TRACKING \blacktriangle/Ψ , press PAUSE.

Frame by Frame Advance

While in Still mode,



hold down to advance the still picture one frame at a time. Press PAUSE to release.

Features for a Quality Picture

Digital Auto Picture

This feature automatically controls the video output signal for improved picture resolution or less noise depending on the tape condition.

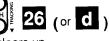
Digital Auto Tracking

This feature continuously analyzes the signal and adjusts for optimum picture quality.

Manual Tracking Control

Use during Playback and Slow Motion to reduce picture noise.

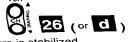
Press



until the picture clears up. To return to the Auto Tracking mode, press the VCR POWER button off and then on again.

V-Lock Control

Use during Still mode to reduce jitter.



until the picture is stabilized.

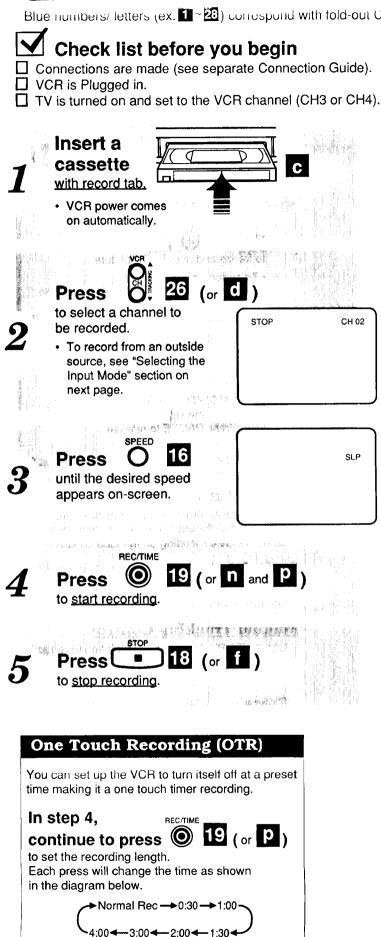
Press

DynAmorphous[™] Metal Head/ CNR (Color Noise Reduction)/ ANR (Advanced Noise Reduction)

DynAmorphous™ Metal Head increases playback and record picture quality. Color Noise Reduction reduces the color noise. Advanced Noise Reduction reduces the luminance noise.

Record On a Tape

Blue numbers/ letters (ex. 🔟 ~ 🔁) correspond with fold-out Control Reference Guide (front page).



The TIMER indicator lights in the Multi Function Display.

Record One TV Program While Watching Another

Press



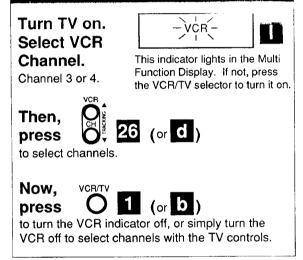
while the recording is in progress to turn off the VCR indicator in the Multi Function Display.

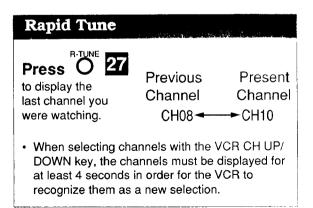
Then, use the TV channel controls

to select a program for viewing. The VCR will continue to record your program while you watch any channel you choose.

· You can switch back and forth between the channel being recorded and the channel you are viewing by using the VCR/TV selector.

Select Channels at the VCR for **Recording or Viewing**





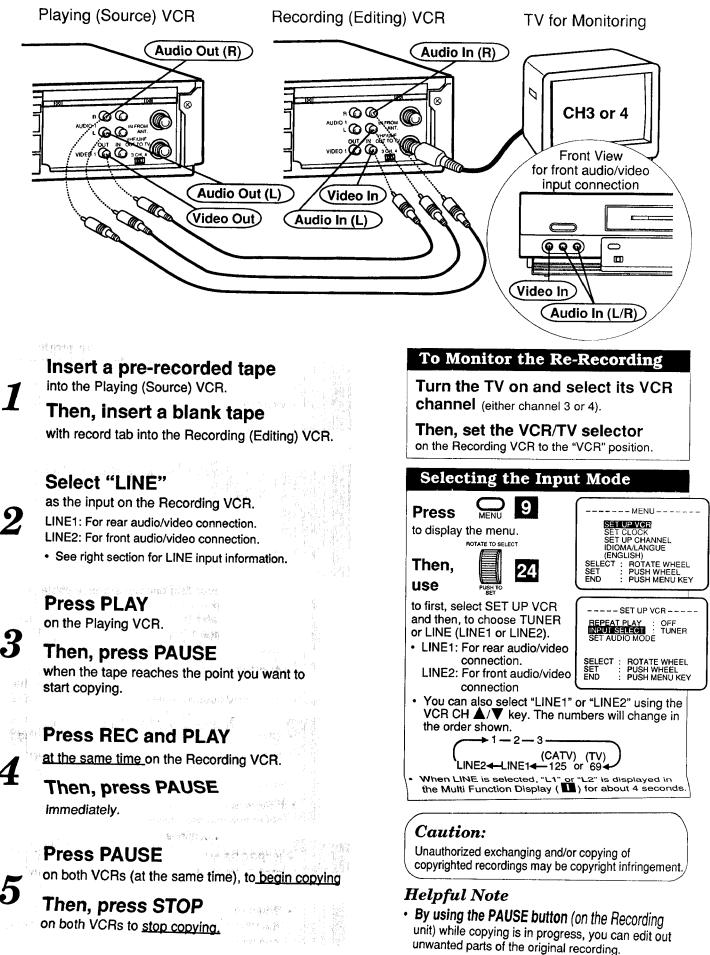
Helpful Notes

- Holding down the VCR CH ▲/▼ key will increase the channel search speed.
- · Press PAUSE to pause the recording in progress.
- · The recording time remaining will appear when the DISPLAY button is pressed during OTR mode (See page 8).

Copy Your Tapes (Dubbing)

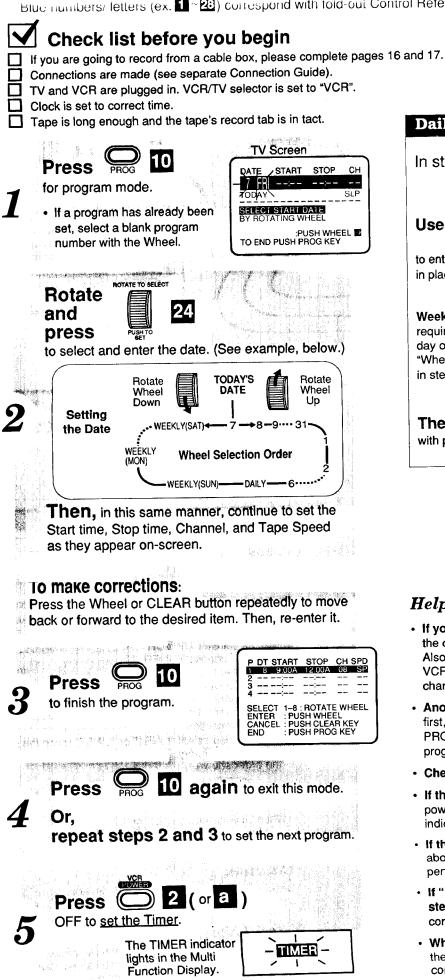
Connections you'll need to make.

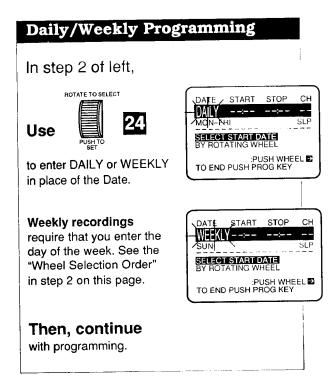
(Choose front or rear connection.)



Up a Timer Recordin

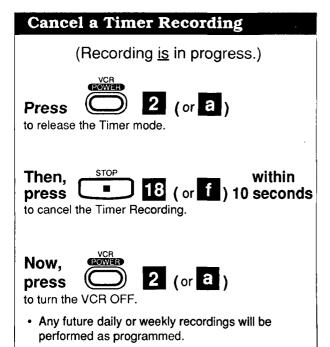
Blue numbers/ letters (ex. 🚺 ~ 🕮) correspond with fold-out Control Reference Guide (front page).



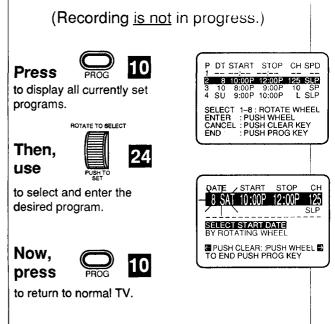


Helpful Notes

- · If you are recording channels from a cable box, the cable box must be left on for timer recording. Also, if the cable box cannot be controlled with the VCR (see page 17), you must manually select the channel to be recorded at the cable box.
- Another way to review program contents is to first, place the VCR in VCR mode. Then, press the PROGRAM button while a Timer Recording is in progress.
- Check your times carefully to avoid overlapping.
- · If the record tab is missing at the time the VCR power is turned off, the tape ejects and the Timer indicator IIMEE flashes.
- If there is a power interruption of more than about one minute, a timer recording cannot be performed or continue.
- If "PROGRAM IS INCOMPLETE" appears in step 3, check all entries carefully and make any corrections. Then, continue with step 3.
- When recording from an external source, rotate the Wheel until "L1 (Rear connection)" or "L2 (Front connection)" appears instead of the Channel.



Replace Program Contents



Review or Clear Program Contents (Recording is not in progress.) 10 Press P DT START STOP CH SPD 1 DAY 9.00A 12.00A 08 SP 2 8 10:00P 12:00P 125 SLP 3 10 8:00P 9:00P 10 SP 4 SU 9:00P 10:00P L SLP to display all programs. ROTATE TO SELECT SELECT 1-8 : ROTATE WHEEL ENTER : PUSH WHEEL CANCEL : PUSH CLEAR KEY END : PUSH PROG KEY Then, 24 rotate to select the desired program number. DT START STOP CH SPD b 2 8 10:00P 12:00P 125 SLP 3 10 8:00P 9:00P 10 SP 4 SU 9:00P 10:00P L SLP Next, 25 press SELECT 1-8 : ROTATE WHEEL ENTER : PUSH WHEEL to clear the program. END : PUSH PROG KEY Now, 10 press

to return to normal TV.

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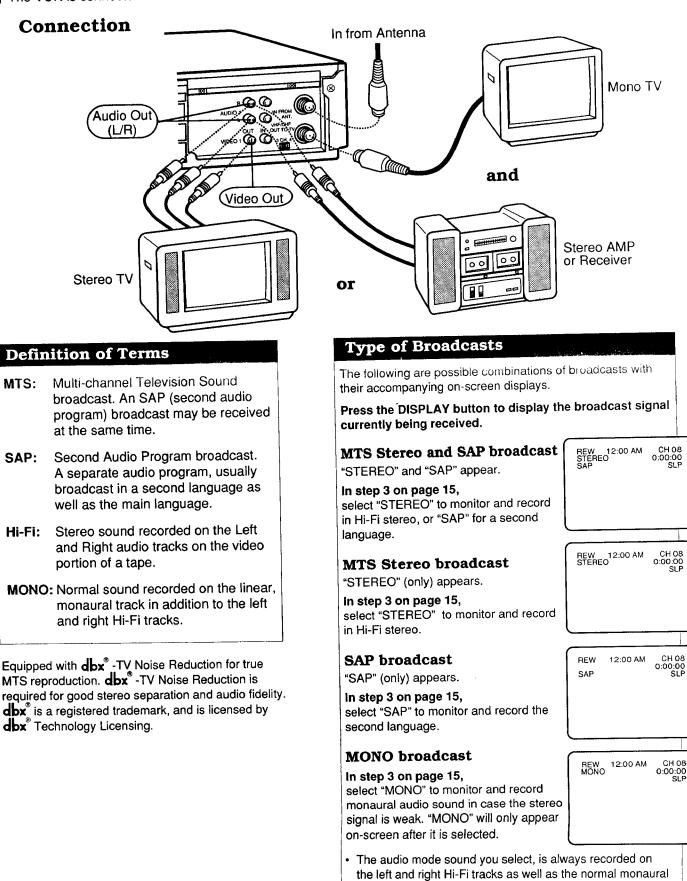
13

MTS Broadcast/VHS Hi-Fi Stereo System

Blue numbers/ letters (ex. 12~23) correspond with told-out Control Reference Guide (front page).

Check list before you begin

The VCR is connected to a stereo TV, or a mono TV and stereo amp or receiver with speakers.



track. This means that your tapes can be played back on

Hi-Fi as well as non-Hi-Fi VCR's.



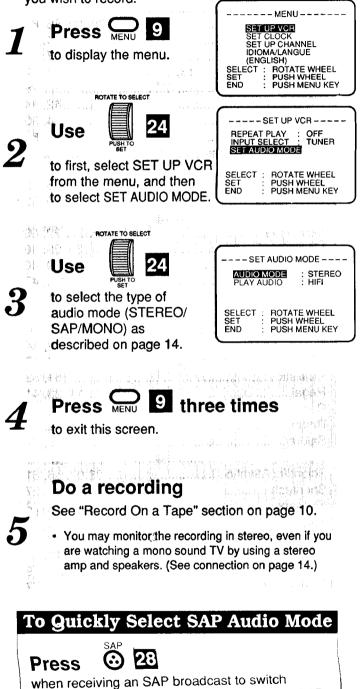
With the proper audio mode setting, your VCR can:

- 1) record and playback an MTS stereo broadcast (main language) in stereo Hi-Fi.
- 2) record and playback a monaural broadcast (main language) or a Second Audio Program (second language) on the Hi-Fi tracks for better quality monaural sound.

playback non-Hi-Fi tapes in monaural.

Select Audio Mode for Recording

Select the type of broadcast and sound track you wish to record.



instantly from STEREO to SAP, or MONO to SAP audio mode.

SAP appears for a few seconds if an SAP broadcast is being received at the time the SAP button is pressed.

- · Pressing the SAP button again will switch the audio mode to the previously selected mode.
- The SAP button is specially designed so that it can be easily recognized by touch.

.

Select Audio Mode for Playback

Select the type of sound you desire for playback.

Do steps 1 and 2 (left).

Thon In ston 2	ante de la colocia
Then, in step 3,	SET AUDIO MODE
	AUDIO MODE : STEREO PLAY AUDIO : HIFI
to select Hi-Fi to listen to	SELECT : ROTATE WHEEL SET : PUSH WHEEL END : PUSH MENU KEY
your stereo recordings with stereo sound or MONO for me • Other settings in this screen ar	

playback and can be left as is.

Now, playback the tape.

See the "Play Back a Tape" section on page 9.

Spatializer Feature

This feature allows you to enhance the stereo sound so that it seems to completely surround you.

Note: Your VCR needs to be hooked up to a stereo TV or stereo amp/receiver with speakers (see page 14). For playback, tapes must be recorded in Hi-Fi stereo. For TV viewing, programs must be broadcast in stereo.

Set	© SPATIALIZER	k	to:	•	, or	••	
for me	edium, or	[.] maxi	mum e	ffect.			
		© SPATIAL	IZER	-			

Then, set 🛄 🔣 to OFF when not using this feature.

Portions of this product manufactured under a license from Desper Products, Inc. SPATIALIZER, and the circle-in-square device are trademarks owned by Desper Products, Inc.

Helpful Notes

- · When purchasing or renting prerecorded tapes, remember that only those recorded in Hi-Fi stereo will play back with true stereo sound. Standard stereo tapes will play back with monaural sound.
- If "STEREO" is selected in the SET AUDIO MODE screen, the MONO indicator will not appear on-screen regardless if a mono broadcast is being received.
- If the Stereo broadcast is weak and display flickers, you may get better results if you select MONO as the AUDIO MODE in step 3, left.
- · In order to listen to Hi-Fi stereo playback, the VCR AUDIO (L/R) jacks must be connected to a stereo TV or stereo amp and speakers. (See page 14.)
- When adjusting the tracking during playback, the Hi-Fi audio sound may revert to normal audio sound. This is normal.
- · There may be a difference in audio level between Hi-Fi and normal audio playback.

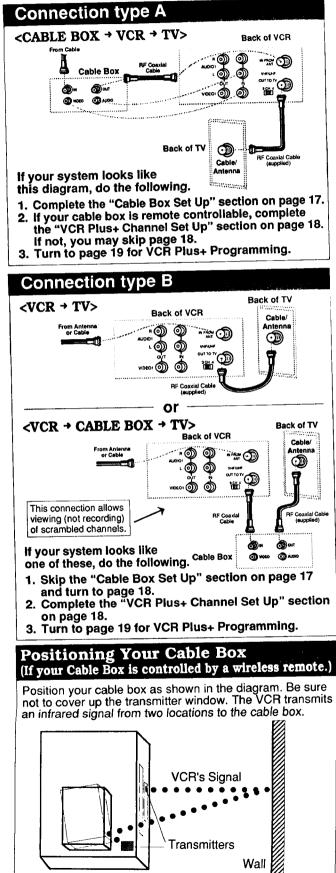
This setup is for VCR Plus+ and timer programming only. For TV/Cable Box Universal Remote Control operation, please see page 21.

VCR Plus+ Set Up

Blue numbers/ letters (ex. 12~23) correspond with fold-out Control Reference Guide (front page).

In order for your VCR to do a VCR Plus+ recording (see top of page 18 for explanation of VCR Plus+), or a timer recording of cable stations, some setup is required. At first, find the antenna or cable connection that matches yours. Then, follow the instructions below your connection.

Choose your Connection Type (Then, follow the instructions under the diagram.)

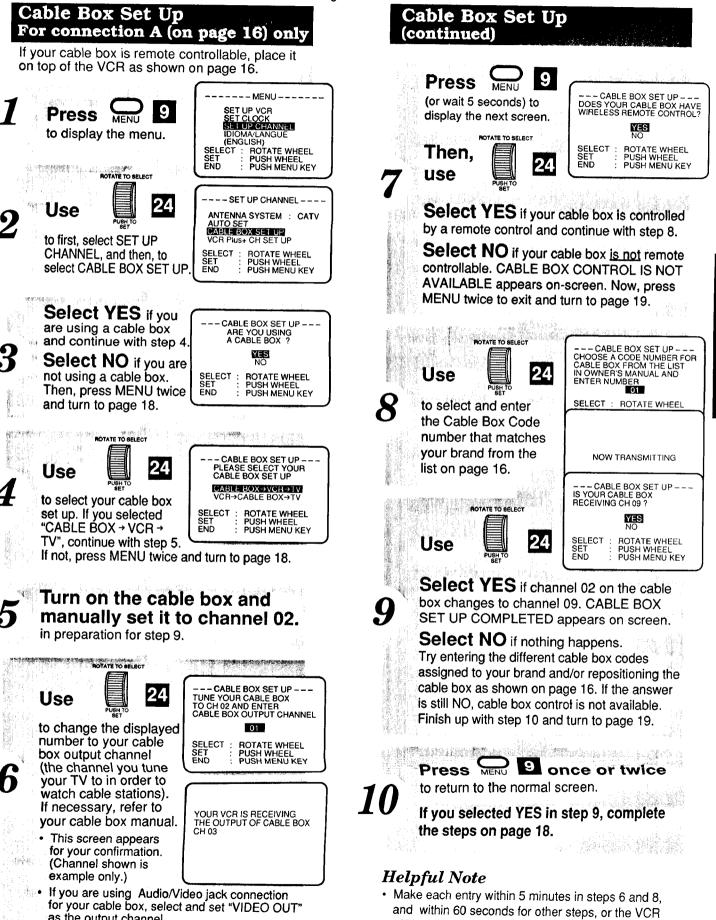


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This setup is for connection A on page 16 only.

If you receive channels through a cable box, it is necessary to establish a link with the VCR. This is done by entering the cable box output channel (the channel that you tune your TV to in order to watch cable stations) into the VCR's memory. If your cable box is remote controllable, it may be possible for the VCR to automatically change cable box channels for VCR Plus+ and Timer recordings.

VCR Plus+ Set Up



will leave this mode.

as the output channel.

ře

You

Can

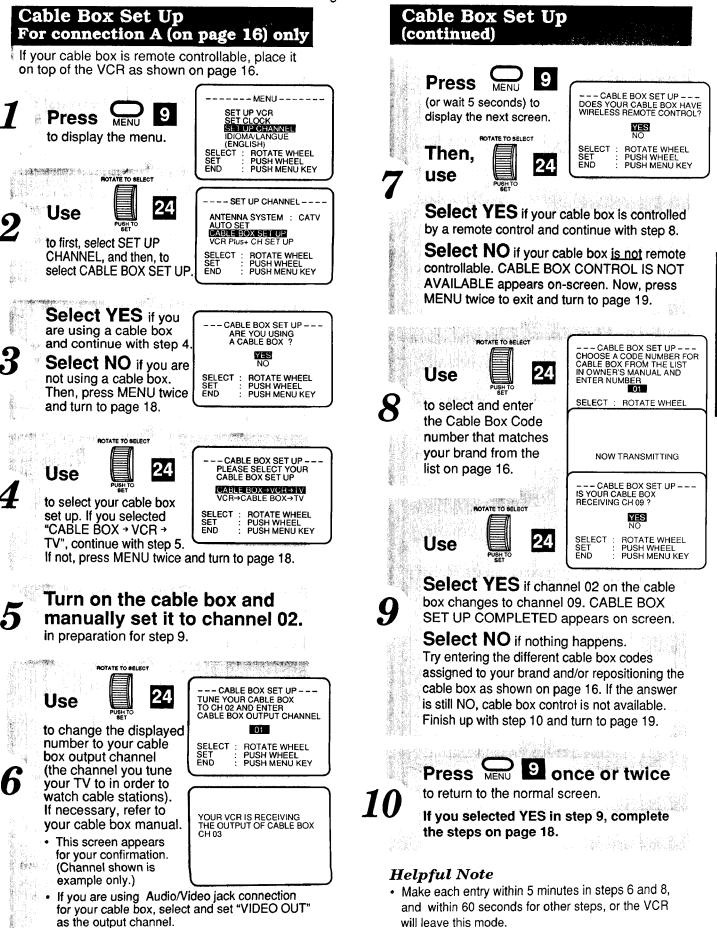
Do

VCR Plus+ Set Up

If you receive channels through a cable box, it is necessary to establish a link with the VCR. This is done by entering the cable box output channel (the channel that you tune your TV to in order to watch cable stations) into the VCR's memory. If your cable box is remote controllable, it may be possible for the VCR to automatically change cable box channels for VCR Plus+ and Timer recordings.

16 only.

This setup is for connection A on page

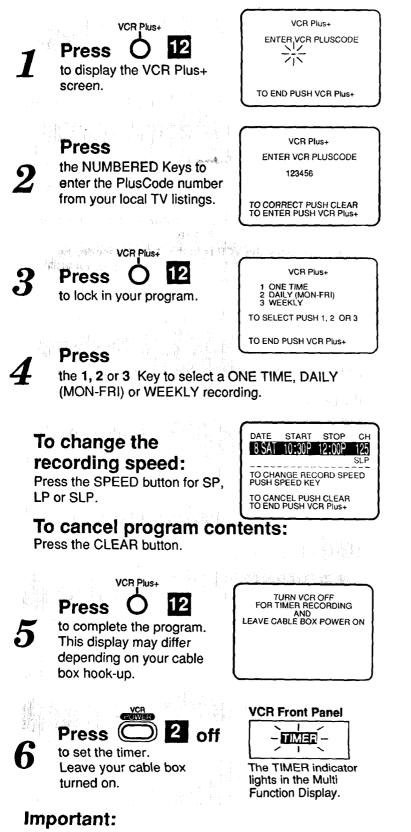


re You Can Do

VCR Plus+ Programmin

🖌 Before you begin, make sure ...

The clock is set.
 VCR Plus+ Set Up is complete (See pages 16, 17, 18).



- Whether or not your cable box can be controlled by the VCR, be sure to leave the cable box turned on for VCR Plus+ or timer recording.
- If your cable box cannot be controlled with the VCR, make sure it is tuned to the desired channel for VCR Plus+ or timer recording.

То Ма	ke Corrections
In step	2,
	CLEAR 25 repeatedly the PlusCode number.
Then, of the corre	enter ect number.

Use normal Timer Recording steps if:

- the PlusCode for a program is not listed.
- you anticipate the program, such as a sporting event, to run over the scheduled stop time.

See pages 12 and 13 to:

- · Cancel a timer recording in progress
- · Review or Clear program contents once set
- · Replace program contents

Helpful Notes:

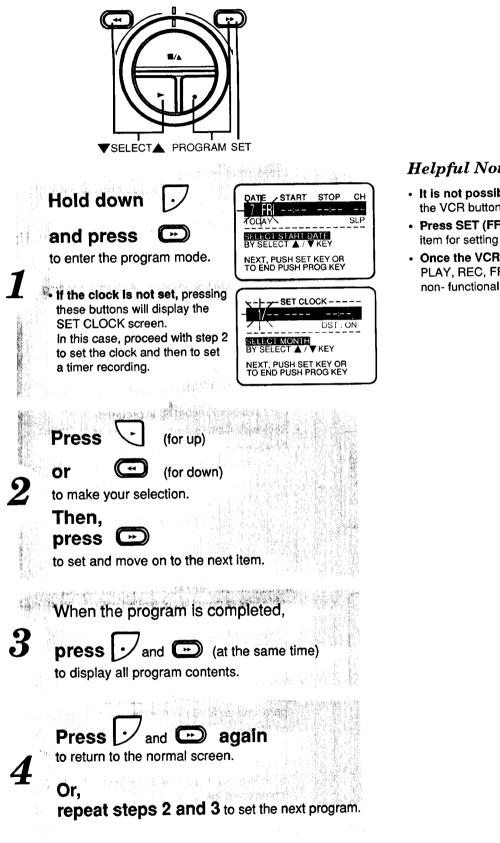
- If you use "A" connection on page 16, but your cable box cannot be controlled with the VCR, the channel shown in the on-screen display in step 4 will always be the cable box output channel number.
- For a list of publications that carry the PlusCode numbers in your area, call 1 800 258 4827.
- You can obtain unlisted PlusCode numbers by calling 1 900 454 -7587. Call costs approximately \$.95 per minute.
- Avoid overlapping program times.
- An on-screen display will indicate if an invalid PlusCode number has been entered.
- An on-screen display will indicate when all timer programs are full.

VCR Plus+ and PlusCode are trademarks of Gemstar Development Corporation. VCR Plus+ system is manufactured under license from Gemstar Development Corporation.

Set a Timer Recording at the VCR

Blue numbers/ letters (ex. 1 ~ 28) correspond with fold-out Control Reference Guide (front page).

A timer recording can be set up using the buttons on the VCR. If necessary, the clock can also be set.



Helpful Notes

- · It is not possible to clear a timer program using the VCR buttons. Please use the Remote Control.
- Press SET (FF) repeatedly to move to a particular item for setting or correction.
- Once the VCR is in the Program mode, the PLAY, REC, FF, and REW buttons on the VCR are non-functional.

Multi-Brand Control Feature

The Remote Control may be set up to control some of the functions on your TV or Cable Box.

Find your TV Brand Code Numbers from the chart below or Cable Box Brand Code Numbers from the chart at right. Hold down (On this remote.) 8 Öľ and enter your TV or Cable Box brand code number using the NUMBERED keys. Due to changes in infra-red commands used by some manufacturers, some TV or Cable Box brands are listed more than once. If your TV or Cable Box does not respond in step 3 with the first code, please try entering the next code. namen 🕴 😳 Try each of the following functions with this remote control. Some TV and Cable Box brands require you to turn on the power manually. (Cable Box) (TV) POWER ON/OFF **POWER ON/OFF CHANNEL UP/DOWN CHANNEL UP/DOWN VOLUME UP/DOWN** Depending on your TV or Cable Box model, not all functions listed may be controlled by this remote. **TV Brand Code Numbers**

01, 02
01, 02
03
03
04
05
05
06, 07
08
09
10
10
11
12
13
16, 17

Helpful Notes

- · Please repeat the TV/ Cable Box Set Up procedure when you replace the remote's batteries.
- The remote control is designed to control the brands listed. However, it will not operate all TVs or Cable Boxes made by these manufacturers. If you get no results, your particular product brand cannot be controlled by this remote.

Cable Box Brand Code Numbers
Archer 01, 29, 44, 88, 91
Cableview4, 30, 42, 44, 52, 63, 85, 88
Citizen4, 30, 42, 44, 52, 63, 85, 88
Curtis
Diamond01, 29, 44, 88, 91
Eagle
Eastern
GC Brand4, 30, 42, 44, 52, 63, 85, 88
Gemini04, 85
General Electric57
General Instruments
01, 02, 03, 04, 34, 55, 83, 85, 91, 93, 95
Hamlin14, 15, 28, 41, 97
Hitachi
Jerrold 01, 02, 03, 04, 34, 55, 83, 85, 91, 93, 95
Macom
Magnavox
Matsushita
Movietime
Movietime
NSC
Oak
Panasonic
Philips
Pioneer
Pulser
RCA
Realistic
Regal 14, 41
Regency
Rembrandt
Samsung
Scientific Atlanta
Sheritech
SL Marx
Sprucer
Stargate
Stargate
Svlvania
Telecaption77, 92
Teleview
Texscan
Tocom01, 33, 34, 42, 48, 49, 91
Toshiba
Unika01, 29, 44, 88, 91
Universal
Viewstar
Videoway07, 23, 50
Zenith07, 23, 50

1

Tape Operation

Blue numbers/ letters (ex. 1 ~ 28) correspond with fold-out Control Reference Guide (front page).

Shuttle Search

Turn the SHUTTLE Ring 🖸

on the VCR while in Play or Still mode to place the VCR in Shuttle mode and start a forward or reverse search.

- The Shuttle indicator lights.
- · The more you turn the Ring, the faster the search speed will be.

化原料酸气化 Press a function button

such as: PLAY, STOP, etc. on the VCR or remote to release the Shuttle mode.

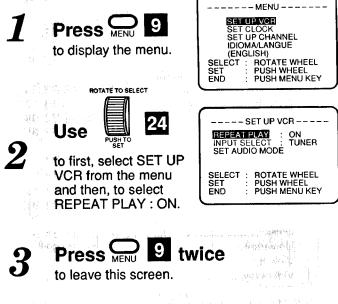
- The VCR performs the function of the button pressed.
- · The Shuttle indicator goes out.

Notes

- · When the SHUTTLE Ring is turned more than half way in Stop mode, normal Fast Forward or Rewind will begin.
- Some noise bars are normal during Shuttle operation.
- After 3 minutes in Still or Slow, the VCR will go into Stop mode.
- When the SHUTTLE Ring is released, the VCR goes into Still mode.

Repeat Play

You can set your VCR up to play a recording over and over.



To Cancel Repeat Play, repeat steps

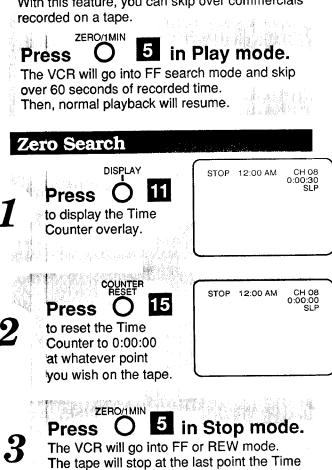
1 and 2, and select REPEAT PLAY : "OFF". Then, press MENU to exit.

Notes

- When REPEAT PLAY : "ON" is selected, the VCR will play to the end of a tape, or until it reaches a blank portion 30 seconds or more. (Erased portions of tape are not considered blank.) Then, the VCR will automatically rewind the tape and play it again and again until you cancel repeat play.
- All function buttons (REW, FF, etc.) are operational during Repeat Play.

One Minute Skip

With this feature, you can skip over commercials recorded on a tape.



Counter was set to 0:00:00.

Auto Operation Functions

Auto Playback

When a tape is inserted, the power comes on (Auto). If the record tab* is removed, playback begins (Auto).

Auto Rewind

After a tape reaches its end during playback, fast forward or manual record, the VCR will rewind it and go into Stop mode.

Playback Auto Eject

After a tape without a record tab* is played to its end, the VCR will rewind and then eject the tape.

Memory Rewind Off

When the POWER button is pressed during rewind, the VCR will turn off after rewind is complete.

Eject Cassette

A cassette may be ejected with power on or off.

* For record tab information, see page 23.

VCR and Cassette Information

Erase Protection (Record Tab)

Cassettes have a record tab to ensure that recordings are not accidentally erased.

Break off the tab with a screwdriver



to prevent accidental erasure.

Cover the hole with cellophane tape to record again.



Only use tapes with the **VHS** mark in this unit.

Maximum Record/Playback Time

Tape Speed	Type of Video Cassette			
Position	T60 T120		T160	
SP (Standard Play)	1 Hour	2 Hours	2 Hours 40 Minutes	
LP (Long Play)	2 Hours	4 Hours	5 Hours 20 Minutes	
SLP (Super Long Play)	3 Hours	6 Hours	8 Hours	

Cleaning Care for Video Heads



Clogged Video Head Picture

Clogged Video Heads

Your VCR will not normally require head cleaning, however the heads may become clogged when playing an old or damaged tape. If the image on your screen resembles the image shown above during playback, the heads probably require cleaning.

Cleaning the Heads

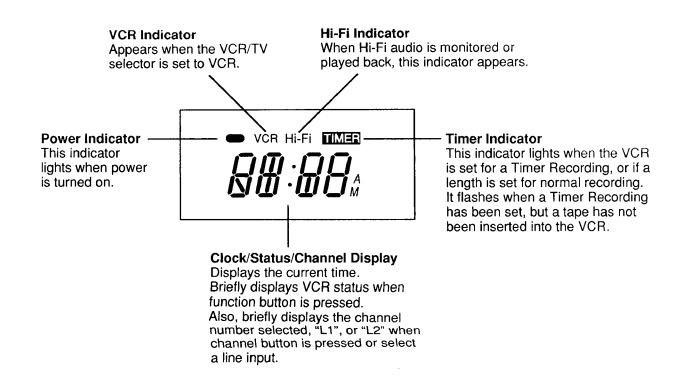
It is recommended that head cleaning be performed by a qualified service technician. Please contact your nearest Panasonic Service Center. An alternate solution is to obtain a head cleaning cassette. Be sure to follow the cleaning instructions carefully. Excessive use of a cleaning cassette could shorten head life. Use this cassette only when symptoms occur.

Product Specifications

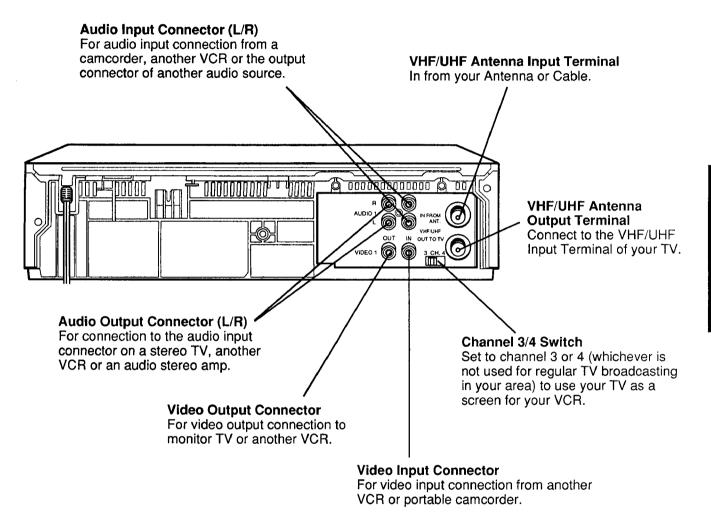
Power Source: Power Consumption: Video Signal: Video Recording System: Audio Track:	120V AC, 60 Hz Approx. 23 watts EIA Standard NTSC color 4 rotary heads helical scanning system 1 track (Normal) 2 channels (Hi-Fi Audio Sound)
Tuner:	
Broadcast Channels:	VHF 2~13, UHF 14~69
CATV Channels:	Midband A through I (14~22)
	Superband J through W (23~36)
	Hyperband AA~EEE (37~64)
	Lowband A-5~A-1 (95~99)
	Special CATV channel 5A (01)
	Ultraband 65~94, 100~125
Operating Temperature:	41°F~104°F (5°C~40°C)
Operating Humidity:	10%~75%
Weight:	8.4 lbs. (3.8 Kg)
Dimensions:	14-15/16" (W) X 3-1/2" (H) X 11-1/4" (D)
	380 (W) X 89 (H) X 285 (D) mm

Note: Designs and specifications are subject to change without notice.

Multi Function Display



Rear View of the VCR



Before Requesting Service

Check the following points once again if you are having some trouble with your VCR.

Power	Correction
No power	 Check that the Power Plug is completely connected to an AC outlet. Check that the POWER button is set to on.
Recording & Playback	Correction
TV program can't be recorded	 Check the connections between the VCR, the external antenna, and your TV. Check that the band selected matches your antenna or cable TV system. (P.6) Make sure that the record tab on the back of the cassette is still intact. (P.23)
Timer recording can't be performed	 Set the recording start/stop times correctly. (P.12) Make sure that the POWER button is set to off. (P.12) Timer recording may not be performed or continued if a power interruption of more than 1 minute occurs before, or during, Timer Recording, even if power resumes thereafter.
There is no playback picture, or the playback picture is noisy or contains streaks	 Select the same channel on your TV as that of the Channel 3/4 switch located on the rear panel of the VCR. (Separate Connection Guide) Set the VCR/TV selector to "VCR". (P.9) Check that channel 3 or 4 of the TV is properly adjusted Adjust the TRACKING control slowly in either direction. (P.9)
During special effects playback, the picture may contain some vertical jitter when using a TV which has an Automatic Vertical Hold Control	 Set the TV's Vertical Hold Control to "MANUAL" and then adjust it.
If the top of your playback picture waves back and forth excessively	 Because the VCR playback signal is not as stable as an off-the-air TV signal, the top of your TV screen may be bent or unstable during playback. To solve this problem, slowly turn the horizontal hold control on your TV to correct the wavy picture. If your TV does not have a horizontal hold control or adjusting the control does not help, please contact your local TV service center.

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Remote Control	Correction	
VCR can't be remote controlled	 Aim the Remote Control directly at the remote sensor on the VCR. (Refer to Control Reference Guide.) Avoid all obstacles which may interfere with the signal path. Inspect or replace the batteries (P.2). 	
Miscellaneous	Correction	
You can't view programs normally on TV	 Set the VCR/TV selector to "TV". (P.10) 	
Video cassette can't be inserted	 Insert the cassette with the window side up and the record tab facing you. 	
Video cassette can't be removed	 Check that the power plug is completely connected to an AC outlet. 	
Video cassette ejects when the REC and PLAY buttons are pressed or when the POWER button is pressed off to set the Timer	 Make sure the record tab on the back of the cassette is still intact. (P.23) 	
In the stop mode, the motor (CYLINDER) continues to rotate	 To enable the quick play mechanism, the cylinder will rotate for about 5 minutes. The quick play mechanism reduces response time from stop to PLAY mode from PLAY to REWIND search mode. 	

Helpful Notes on Operations

Special Playback Features

- During search playback, horizontal noise bars will appear on the TV screen.
- After the VCR is in the Still or Slow mode for 3 minutes it will go into the Stop mode automatically to protect the tape and video head.
- The special effects playback feature is intended for tapes recorded in SP or SLP speed.
 Tapes recorded in LP mode can also be viewed in special effects playback, but the picture may be completely snowy.

Basic Recording

- While it is possible to change the tape speed when you are recording, there will be some distortion on the tape where the change occurred.
- After the VCR has been in Pause mode for 5 minutes, it will stop automatically to protect the tape and video head.

Timer Recording

- Timer recording may not be performed or continue if a power interruption of more than about 1 minute occurs before or during timer recording, even if power resumes thereafter.
- If the start times of 2 preset programs overlap, the preset time of the lower numbered program will have priority.
- If the preset time for a timer recording comes up during a normal recording or One Touch Recording, the timer recording will not be performed.

Cable Box Control Note

 After completing the cable box control section on page 17, the VCR will automatically select the cable box input number as the channel when doing a timer or VCR Plus+ recording. If you later decide to disconnect the cable box, you need to remove the input number from memory. To do this, simply repeat steps 1, 2, and 3 of the cable box control section on page 17. In step 3, select NO in the on-screen display and then press MENU to exit the screen.

Reset all VCR Memory Functions

This operation is convenient when moving the VCR to a new location, or if a mistake was made in the One Time VCR Setup section. Make sure a tape is not inserted in the VCR.

- 1) Turn VCR Power on.
- Press and hold both Play and Rewind buttons on the VCR. (For more than 5 seconds)
 - The power will shut off.
- 3) Complete the One Time VCR Setup section on pages 4, 5.

D.S.T (Daylight Saving Time)

Spring

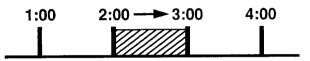
First Sunday in April (minus 1 hour)

Because the clock automatically changes from 2:00AM to 3:00AM, keep in mind that any part of a scheduled timer recording which falls between these two times will not be performed.

Examples:

A recording set to begin at 1:30AM and end at 2:30AM will actually record for 30 minutes.

A recording set to begin at 1:30AM and end at 3:30AM will actually record for 1 hour, and so on.



Autumn

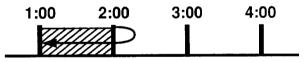
Last Sunday in October (plus 1 hour)

The clock automatically changes from 2:00AM back to 1:00AM and therefore affects your recording length.

Examples:

A recording set from 12:50AM to 2:30AM, will actually record for 2 hours and 40 minutes. A recording set from 1:00AM to 1:30AM, will actually record for 30 minutes. (Not affected.) A recording set from 1:30AM to 2:30AM, will actually record from 1:30AM to 2:00AM and then go into the Stop mode until it becomes 1:30AM again.

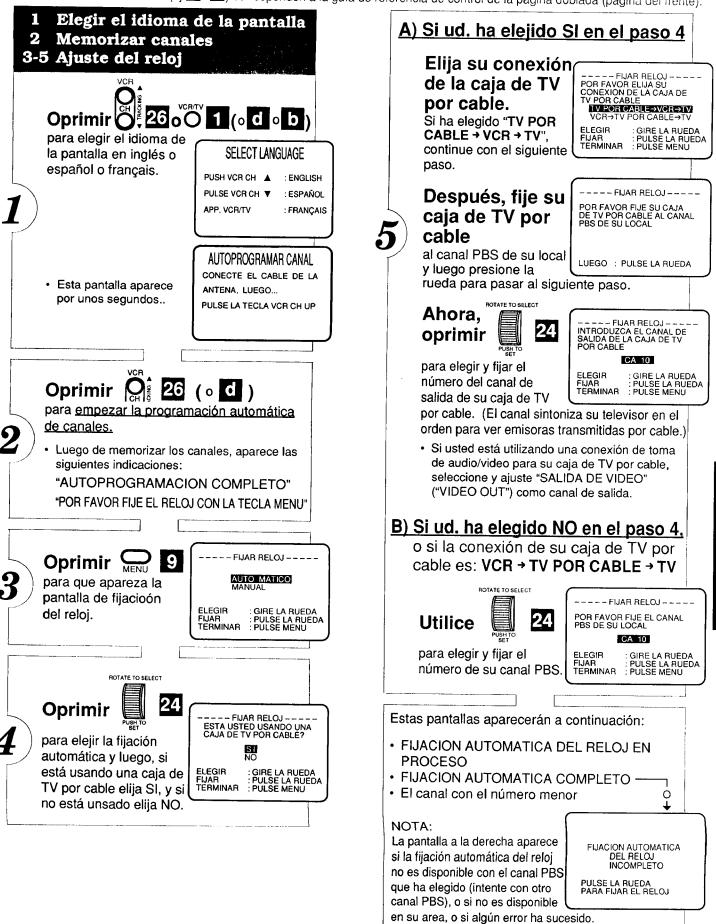
The recording will then continue until 2:30AM for a total recording time of 1 hour and 30 minutes.



• Even if a recording of a daily or weekly series is affected, other recordings of the series will be performed as programmed.

Spanish Quick Use Guide/Guia para rápida consulta

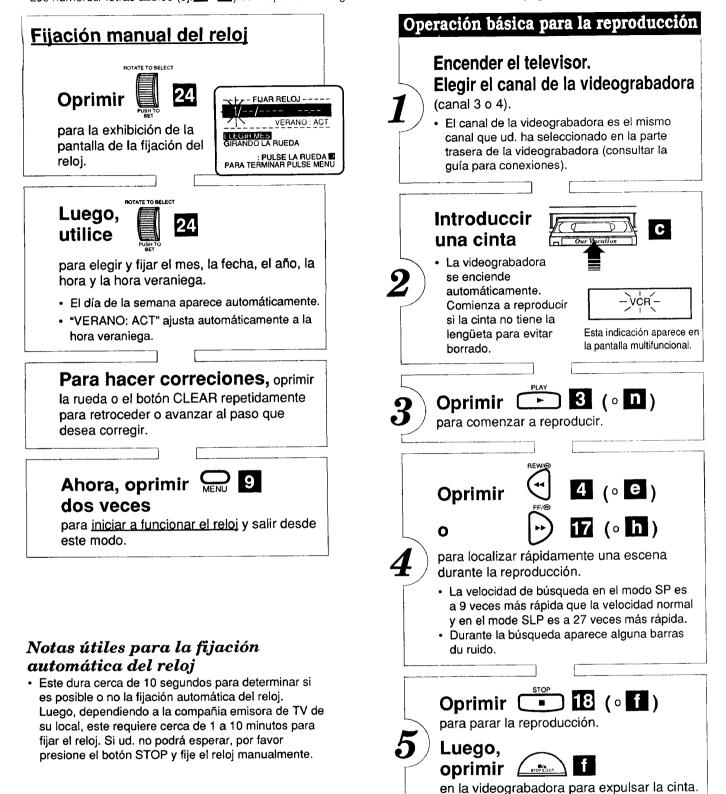
Los números/ letras azules (ej. 11~28) corresponden a la guia de referencia de control de la pagina doblada (página del frente).

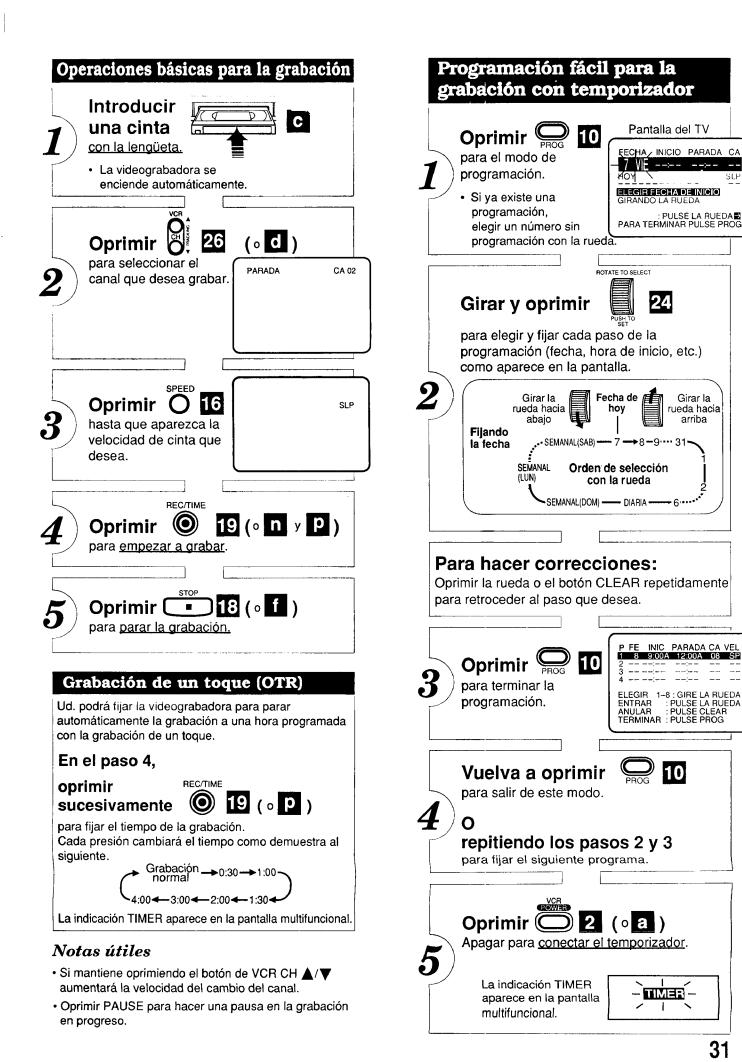


Si no se puede ajustar el reloj automáticamente, por favor fije el reloj como se describe de la siguiente página. Other Information

Spanish Quick Use Guide/Guía para rápida consulta

Los números/ letras azules (ei, 1 ~28) corresponden a la guía de referencia de control de la página doblada (pagina del frente).





24

Girar la

rueda hacia

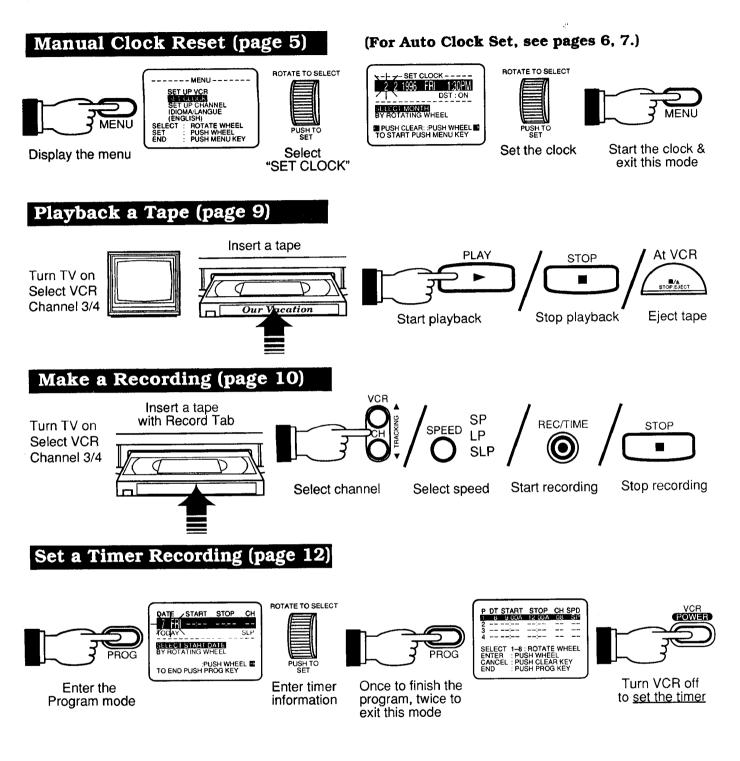
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Quick Use Guide

This guide should only be used once you are familiar with the operations inside this manual. If you have any problems or need more information, please refer to the page listed.

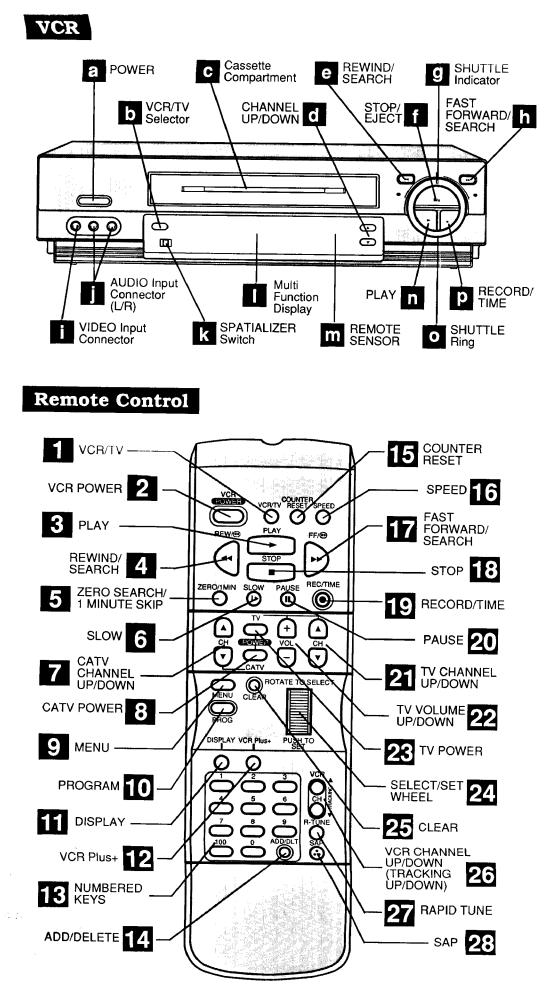


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Control Reterence Guide



The numbers and letters above correspond with those used in the operating instructions. Please keep this page folded out when using the manual.

Congrutulations

on your purchase of one of the most sophisticated and reliable products on the market today. Used properly, we're sure it will bring you and your family years of enjoyment. Please take time to fill in the information below. The serial number is on the tag located on the back of your VCR. You'll want to keep this manual handy as your convenient VCR information source.

Date of Purchas	e	
Dealer Purchase	ed From	
Dealer Address		
Dealer Phone N	0	
Model No	PV-4564	
Serial No.		

Open this flap to reveal the Control Reference Guide

