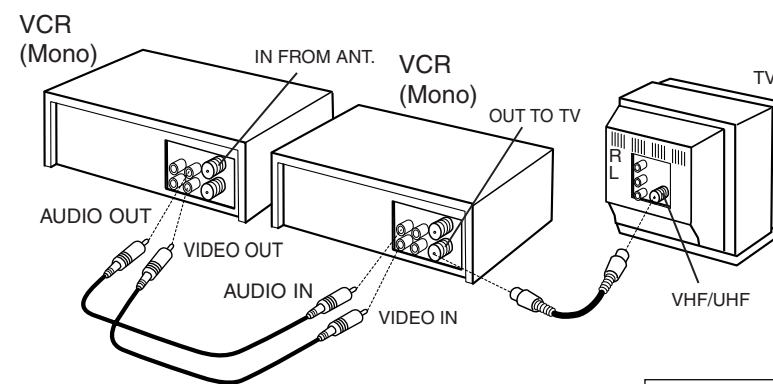


Copying Your Tapes (Dubbing)

Connection

(Rear connection shown.)



Front of VCR

(Front Audio/Video IN jacks are also provided)

- Connect VIDEO OUT jack on Playing VCR to VIDEO IN jack on Recording VCR. To monitor the dubbing, also connect a TV as shown.
- Connect AUDIO OUT jack on Playing VCR to AUDIO IN jack on Recording VCR.

In place of a Playing VCR, you can use other equipments, such as a Camcorder. Simply connect the unit's Audio/Video outputs to the Recording VCR.

Playing (Source) VCR

- Insert pre-recorded tape.

2

- Press **PLAY**, then **PAUSE/SLOW** immediately to enter **PLAY/PAUSE** mode.

The operation of steps 4 and 5 must be done on both playing and recording VCRs at the same time.

- Press **PLAY** to start dubbing. Playing VCR starts playback.

- Press **STOP** to stop dubbing.

To Monitor Dubbing on Your TV

- Turn your TV on and tune to the Recording VCR channel (CH3 or CH4).
- Set the VCR/TV Selector on the Recording VCR to "VCR."

Note • Dubbing tapes protected with Copy Guard will have poor quality results.

Recording (Editing) VCR

- Insert blank tape with record tab.

Press **INPUT*** to set VCR Input mode to LINE1 for Video Input (Rear) or to LINE2 for Video Input (Front). (See "Selecting the Input Mode" below.)

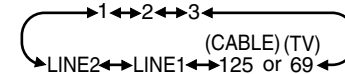
- Press **REC**, then **PAUSE/SLOW** immediately to enter **REC/PAUSE** mode.

- Press **PAUSE/SLOW** to start dubbing. Recording VCR starts recording.

- Press **STOP** to stop dubbing.

Selecting the Input Mode

- Method 1:**
Press **INPUT** repeatedly. Channel Number ↔ LINE1 ↔ LINE2
- Method 2:**
Press **CH ▲ / ▼**. Display will change as below.



- "L1" or "L2" lights on Multi-Function Display (about 4 sec.) when LINE1 or LINE2 is selected.
- LINE1: For rear audio/video connection.
- LINE2: For front audio/video connection.

Caution: Unauthorized exchanging and/or copying of copyrighted recordings may be copyright infringement.

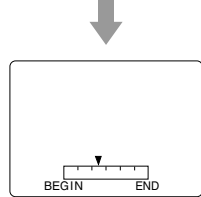
Special VCR Features

Tape Position Display Feature

To find out the present tape position. **Tape position is displayed for VHS-C Cassettes type, tapes under 30 minutes, and some other tapes, but the position is not correct.**

- Press **TAPE POSITION** to detect tape position.

DETECTING TAPE POSITION



"DETECTING TAPE POSITION" only appears the first time a cassette is inserted and it takes several seconds for correct indication to appear.

- The present tape position indication is displayed.

- Press **TAPE POSITION** to return to normal screen.

Remote Warning ON/OFF Feature

If Multi-brand feature is used (page 2), and this feature is set to on, a warning appears whenever an invalid key is pressed in TV mode.

- Press **ACTION** to display menu.

- Press **▲▼** to select **REMOTE WARNING** and press **▶** to set ON or OFF.
 - If "OFF" remote warning will not appear if invalid key is pressed.

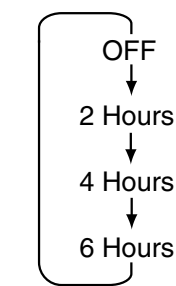
- Press **ACTION** to return to normal screen.

Auto Shut-Off Feature

The power shuts off at a preset time.

- Press **ACTION** to display menu.

- Press **▲▼** to select **AUTO SHUT-OFF**. Press **▶** repeatedly to change shutoff time as shown below.



- Press **ACTION** to return to normal screen.

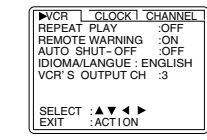
Note • The shut-off countdown will not function during Play or Record.

***Important:** If a remote control button does not work when pressed, press the VCR button on the remote and try the button again.

Weak Signal Display ON/OFF Feature

When set to "ON," picture is displayed regardless of signal strength.

- Press **ACTION** to display menu.

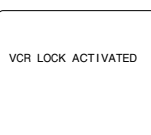


- Press **◀▶** to select and display **CHANNEL**. Press **▲▼** to select **WEAK SIGNAL DISPLAY**, and press **▶** to set ON or OFF.

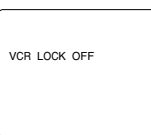
- ON: Picture is displayed despite signal condition an may have poor quality.
- OFF: Screen turns solid blue when signal is weak or non-existent.
- Selecting ON has no effect on connected equipment with blue back feature.

VCR Lock Feature

When set to ON, all operations except for timer record and tape eject are prohibited. Useful for households with small children.

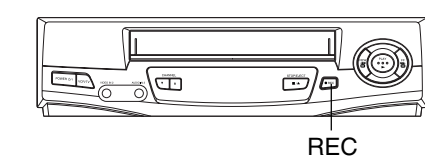


To turn on, hold down **REC** on the VCR in Stop mode with no tape inserted for 7 sec. (Please ignore the NO CASSETTE warning.)



To turn off, repeat above.

- VCR Lock cancels in 24 hours if clock is set.



Before Requesting Service

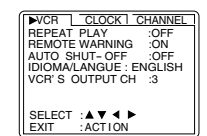
Check the following points once again if you are having trouble with your VCR. (BO : refers to "Basic Operations" Instruction book.) (AO : refers to "Advanced Operations" Instruction book.)

Power	Correction
No power...	<ul style="list-style-type: none"> Completely insert Power Plug into an AC outlet. Set POWER button to on. Make sure power source is active.
Recording & Playback	Correction
TV program cannot be recorded...	<ul style="list-style-type: none"> Check connections between VCR, external antenna, and TV. Check connections selection. (BO p. 4, AO p. 3) Make sure your antenna system (CABLE or TV) is correctly set. (Channels [AO p. 12]) Make sure cassette record tab is intact. (BO p. 3)
Timer recording cannot be performed...	<ul style="list-style-type: none"> Confirm that clock is set to current time and date. Make sure Cable/DSS box (if used) is left on and tuned to channel to be recorded. Set recording start/stop times correctly. (BO p. 6) Make sure VCR POWER button is pressed off. (BO p. 6) Timer recording may not be performed or continued if a power interruption occurs before or during a Timer Recording, even after power is restored.
There is no playback picture, or the playback picture is noisy or contains streaks...	<ul style="list-style-type: none"> Select channel 3 or 4 on TV to match VCR output channel (3 or 4) (BO p. 4) or select LINE. Set VCR/TV selector to "VCR." Adjust TRACKING control in either direction. (BO p. 3) Try Head Cleaning. (BO p. 3)
Special effects playback, picture may contain some vertical jitter when using a TV with an Automatic Vertical Hold Control...	<ul style="list-style-type: none"> Set TV's Vertical Hold Control to MANUAL, then adjust.
VCR cannot be controlled...	<ul style="list-style-type: none"> Make sure VCR power is on. Check Remote batteries. Make sure VCR LOCK is set to off. (AO p. 10) Make sure Timer Record is not in progress.
Remote Control	Correction
VCR cannot be remote controlled...	<ul style="list-style-type: none"> Make sure VCR power is on. Make sure Remote is in VCR mode. Aim Remote Control directly at remote sensor on VCR. (BO p. 7) Avoid any object blocking signal path. Check Remote batteries. (BO p. 3) Make sure VCR LOCK is set to off. (AO p. 10) Exposing VCR remote sensor to direct fluorescent or outdoor light may cause signal interference.
ACTION and PROG buttons do not respond...	<ul style="list-style-type: none"> Check connections between VCR, external antenna, and TV. Press VCR button for VCR mode. (AO p. 2) Check Remote batteries. (BO p. 3)
Miscellaneous	Correction
Programs cannot be viewed on TV...	<ul style="list-style-type: none"> Make sure TV power is on. Make sure TV is set to output of VCR. Check connections between VCR, external antenna, and TV. Set VCR/TV selector to "TV." (BO p. 5) Make sure proper signal source is selected.
Video cassette cannot be inserted...	<ul style="list-style-type: none"> Insert the cassette with window side up; record tab facing you. Check if a tape is already in the unit.
Video cassette cannot be removed...	<ul style="list-style-type: none"> Completely insert Power Plug into an AC outlet.
Video cassette ejects when a recording is started or the power is turned off for timer recording...	<ul style="list-style-type: none"> Make sure cassette record tab is intact. (BO p. 3)
In Stop mode, the motor (CYLINDER) continues to rotate...	<ul style="list-style-type: none"> To enable Quick play mechanism, the cylinder will rotate for about 3 minutes. This reduces response time from Stop to Play mode and from Play to Rewind Search mode.

If you cannot resolve the problem, please call the Customer Call Center for product assistance at 1-800-211-PANA (7262). To locate an authorized servicer, please call toll free 1-800-211-PANA (7262), or send e-mail to : consumerproducts@panasonic.com

***Important:** If a remote control button does not work when pressed, press the VCR button on the remote and try the button again.

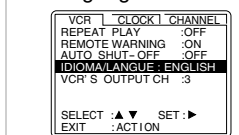
Reset Language, Channels, Clock, VCR's Output Channel



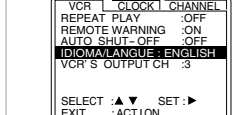
Press **ACTION*** to display **MENU**.

Language

- Press **▲▼** to select language item.



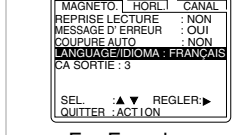
- Press **▶** repeatedly.



For English



For Spanish



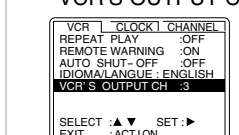
For French



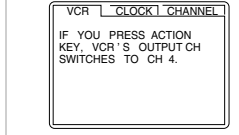
- Press **ACTION** to exit.

VCR's Output Channel

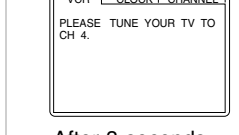
- Press **▲▼** to select "VCR'S OUTPUT CH."



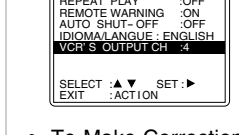
- Press **▶**.



- Press **ACTION**.



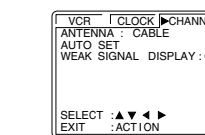
After 3 seconds



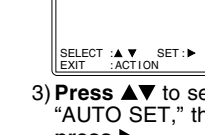
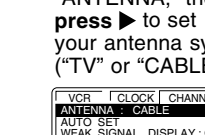
- To Make Corrections, repeat steps 1) - 3).

Channels

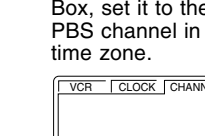
- Press **◀▶** to select CHANNEL.



- Press **▲▼** to select "ANTENNA," then press **▶** to set your antenna system ("TV" or "CABLE.")



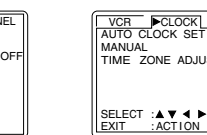
- Press **▲▼** to select "AUTO SET," then press **▶**.



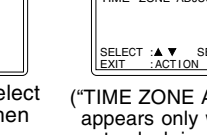
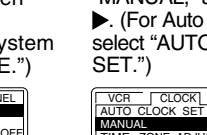
After Channel Auto Set is finished, Auto Clock Set will be performed.

Clock

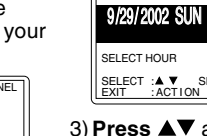
- Press **◀▶** to select CLOCK.



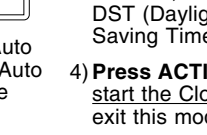
- Press **▲▼** to select "MANUAL," and press **▶** (For Auto Clock Set, select "AUTO CLOCK SET.")



- Press **▲▼** and **◀▶** to select and set the date, time, and DST (Daylight Saving Time).



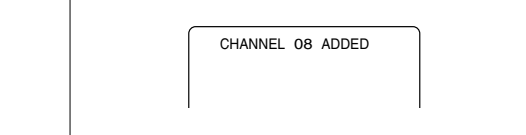
- Press **ACTION** to start the Clock and exit this mode.



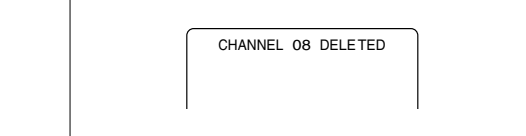
After Channel Auto Set is finished, Auto Clock Set will be performed.

Add or Delete a Channel

To add channel: Select channel with **NUMBER** keys and press **ADD/DLT**.



To delete channel: Select channel with **CH ▲▼** or **NUMBER** keys and press **ADD/DLT**.



DST (Daylight Saving Time)

VCR auto adjusts clock for DST. **Spring (First Sunday in April)** DST:ON → Sets clock ahead one hour. **Autumn (Last Sunday in October)** DST:ON → Turns clock back one hour. • If your area does not observe Daylight Saving Time, select DST:OFF. • Keep these time changes in mind when programming VCR for timer recordings.

Panasonic

Video Cassette Recorder Operating Instructions (Advanced Operations)

For Basic operations, see the separate "Basic Operations" instruction book.

Model No. PV-V402



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As an ENERGY STAR® Partner, Matsushita Electric Corporation of America has determined that this product or product model meets the ENERGY STAR® guidelines for energy efficiency.



Please read these instructions carefully before attempting to connect, operate or adjust this product. Please save this manual.

Multi-Brand Control Feature

Multi-Brand Control Setup

The Remote Control can be set to control some TV functions.

1 Find your TV Brand Code Number from those shown below.

2 Setup for TV control,

- > hold down **TV** button,
- > enter code with **NUMBER** keys.

3 Confirm code entry,

- > press **POWER** to turn your TV on or off.
- See table below for controllable functions in each mode.

- Notes**
- Repeat setup after remote battery replacement.
 - Remote will not control every TV made by the manufacturer listed. If you get no response, your particular unit cannot be controlled. There are NO additional codes for the products listed. If your product is not listed, then the remote is not compatible with that product.

Using Multi-Brand Control

After remote is set up, you can select VCR or TV for the desired function.

Press **VCR** or **TV** on the remote.

(Table below shows available unit buttons for each mode.)

Unit Mode	VCR	TV
VCR	All	VOL UP/DOWN
TV	VCR/TV, PLAY, STOP, EJECT, SAP/Hi-Fi, DISPLAY, FF, REW, PAUSE/SLOW, REC, SPEED, CM/ZERO, RESET COUNTER, TAPE POSITION	POWER, INPUT, ENTER, NUMBER keys, CH UP/DOWN, VOL UP/DOWN

- Notes**
- Not all functions listed may be controllable.
 - In TV mode, it may be necessary to press ENTER after pressing NUMBER keys for channel selection.

TV Brand Code Numbers

Panasonic	01, 02	Sylvania	05	JVC	11
Quasar	01, 02	Sharp	06, 07	Hitachi	12
RCA	03	Sony	08	Mitsubishi	07, 13
GE	03	Toshiba	09	Samsung	14
Zenith	04	Sanyo	10	Gold Star	15, 16, 17
Magnavox	05	Fisher	10		

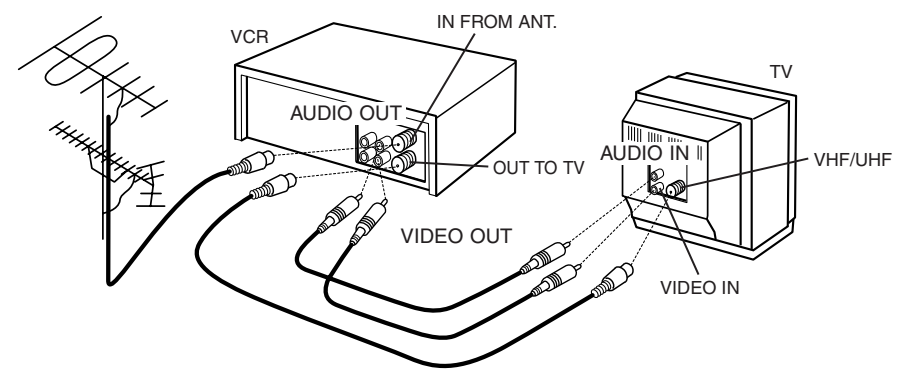
Important Notes

- Due to changes in infra-red commands used by manufacturers, some brands have several codes. If your unit does not respond to the first code, please try the next one.
- Some TV brands require you to turn on the power manually.

Advanced Connections

Audio/Video connection

If your TV has AUDIO IN and VIDEO IN terminals, you can connect your VCR to them to receive higher quality picture and sound.

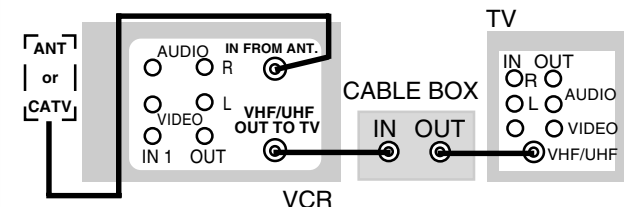


1 Connect the VCR's VIDEO OUT jack to the TV's VIDEO IN jack.

2 Connect VCR's AUDIO OUT jack to the TV's AUDIO IN jack.

3 Set the VIDEO/TV selector of your TV (Monitor/Receiver) to "VIDEO."

With a Cable Box (VCR → Cable Box)



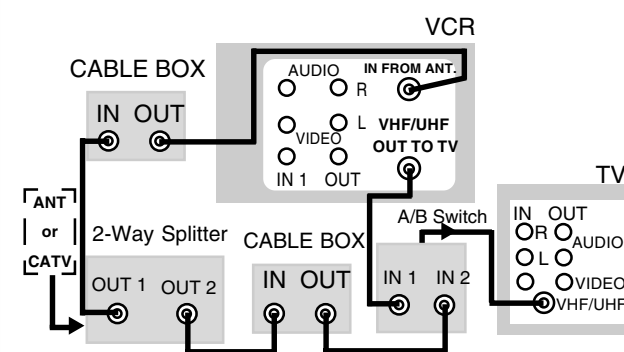
You Can

- view any (including scrambled) channel.
- use VCR Remote Control to select channels without using Multi-brand control feature.

You Cannot

- record scrambled channels.

Connect With Two Cable Boxes



You Can

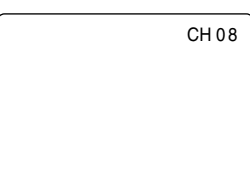
- record and view both scrambled and unscrambled channels if additional equipment is added. This connection requires: two converter boxes, an A/B switch, and a 2-way splitter.

You Cannot

- view channel other than the one selected for any type of recording.
- do a Timer recording of a channel unless you select it at the cable box.

On-Screen Displays (OSD)

Function & Channel Displays



When a function button is pressed, e.g. PLAY, or you change channels, a 5 second display appears.

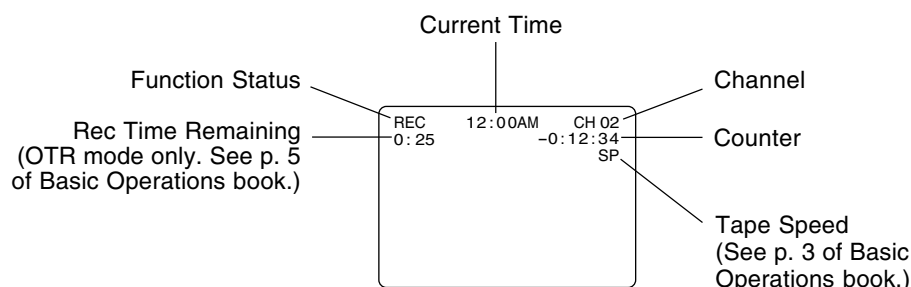
Blank Tape/No Video Signal Indications

When blank tape is detected during play, or the current channel has no signal (with Weak Signal Display feature (p. 10) set to OFF), the TV screen will turn solid blue.

VCR Status & Clock Displays

To display or remove overlay at right,

-> press **DISPLAY***.



Warning and Instruction Displays

These displays will alert you to a missed operation or provide further instructions.

OSD	Caution	Page
PLEASE SET CLOCK BY PRESSING ACTION KEY	If you attempt to set or review a Timer Recording and the Clock is not set...	See page 6 of Basic Operations book
TURN VCR OFF FOR TIMER RECORDING	After a Timer Program has been set...	See page 6 of Basic Operations book
CHECK CASSETTE RECORD TAB	If you press REC on the remote control or VCR, and a cassette is inserted with no record tab...	See page 3 of Basic Operations book
NO CASSETTE	If you press PLAY, FF, REW, or REC on the remote control or VCR without a cassette inserted...	See page 5 of Basic Operations book
TO CANCEL TIMER REC PRESS POWER THEN STOP KEY	If you press POWER or STOP during a Timer Recording... (visible in VCR mode only)	See page 6 of Basic Operations book
VIDEO HEADS MAY NEED CLEANING PLEASE INSERT HEAD CLEANING CASSETTE OR REFER TO MANUAL	If head cleaning becomes necessary while playing back a tape...	See page 3 of Basic Operations book
END :PLAY		
VCR LOCK ACTIVATED	If you press a function button other than STOP/EJECT or POWER while the VCR is in VCR Lock mode...	See page 10
REMOTE CONTROL IS SET TO TV MODE	If you press an invalid key on the remote while in TV mode...	See pages 2, 10
USE VCR : VCR KEY		

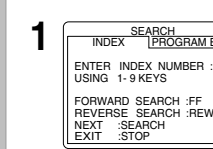
***Important:** If a remote control button does not work when pressed, press the VCR button on the remote and try the button again.

Tape Operation

Search System

For each recording, an invisible index mark is placed on the tape. A program index and information are also included for timer recordings. These marks are used to access or scan recordings.

Index Search



1 Press **SEARCH*** to display SEARCH in Stop or Play mode, and then press **NUMBER** keys to select recording number.

- To calculate number, see below.

Press FF or REW on the remote to start search.

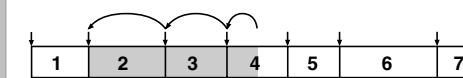
2 Play begins at search end. To search forward or back 1 index, press **FF** or **REW** on the remote or VCR while screen left is displayed (10 sec.).

- To cancel, press **STOP** or **PLAY**.

To Calculate Index Number

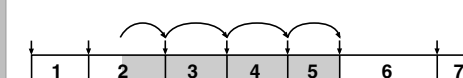
Example 1:

To go to rec. 2 from rec. 4, enter 3 and press REW.



Example 2:

To go to rec. 6 from rec. 2, enter 4 and press FF.



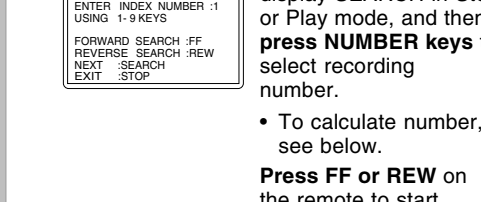
NOTE: ↓ indicates start points of each recording.

Note

- If Index Search is started very close to an index mark, that index mark may not be counted in the search.

Program End Search

Locates end point of recording for continuity.

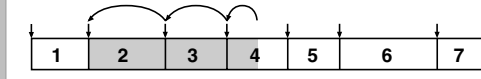
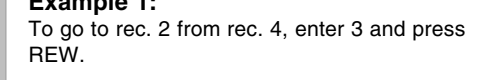


1 Press **SEARCH** twice to display SEARCH in Stop or Play mode.

2 Press **FF** on the remote to start PROGRAM END SEARCH.

- To cancel, press **STOP** or **PLAY**.

Examples of Program End Search.



Upon locating end point,

- > search continues 7 sec. past end point,
- > tape rewinds to 10 sec. before end point,
- > tape plays to end point and stops.

Notes

- If Program End Search is started very close to an index mark, that mark may be skipped over.
- To cancel, press PLAY or STOP.

Note

- If Index Search is started very close to an index mark, that index mark may not be counted in the search.

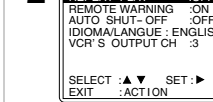
Tape Operation

Repeat Play

Set to playback a recording over and over.

1 Press **ACTION** to display menu.

2 Press **▲▼** to select REPEAT PLAY and press **▶** to set ON or OFF.



3 Press **ACTION** to return to normal screen.

Zero Search

To quickly return to a specified tape location.

1 Press **DISPLAY** during play to display Counter.

2 Press **RESET COUNTER** at desired position to reset to "0:00:00".



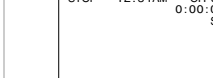
3 Continue to record, playback, etc.

4 Press **STOP**.

5 Press **CM/ZERO** in Stop mode to start ZERO SEARCH.



• Unit will go into FF or REW mode and stop at the last point the Counter was set to 0:00:00.



Note

- If Program End Search is started very close to an index mark, that mark may be skipped over.
- To cancel, press PLAY or STOP.

***Important:** If a remote control button does not work when pressed, press the VCR button on the remote and try the button again.