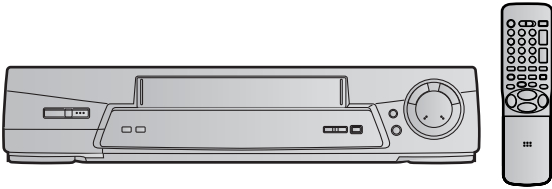


# Panasonic

Video Cassette Recorder

**NV-FJ710** Series

Operating Instructions



**SHOWVIEW**



***SUPER DRIVE***  
*MULTI-INTELLIGENT CONTROL II*

VQT8583

Before attempting to connect, operate or adjust this product, please read these instructions completely.

# Dear Customer

May we take this opportunity to thank you for purchasing this Panasonic Video Cassette Recorder. We would particularly advise that you carefully study the Operating Instructions before attempting to operate the unit and that you note the listed precautions.

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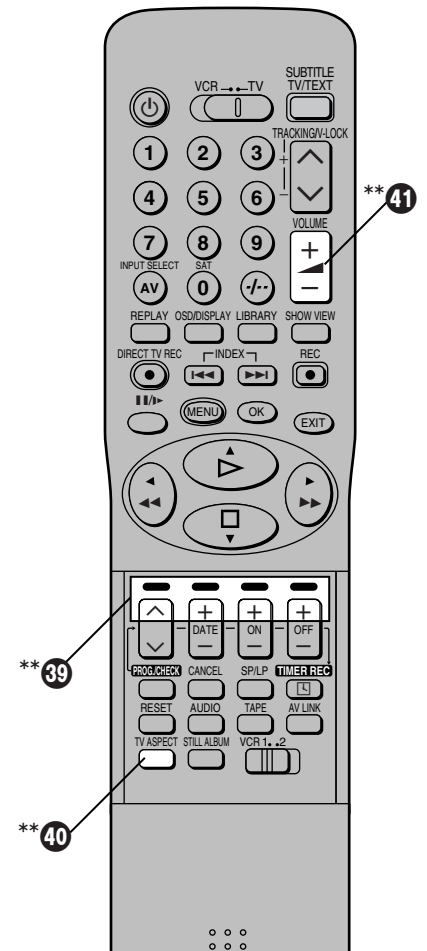
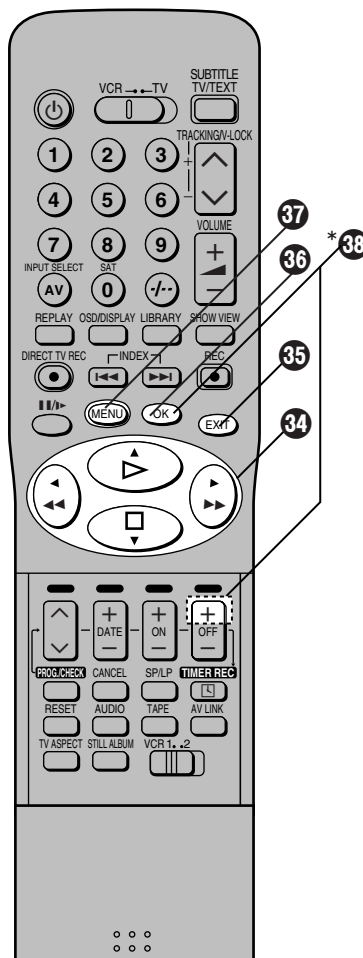
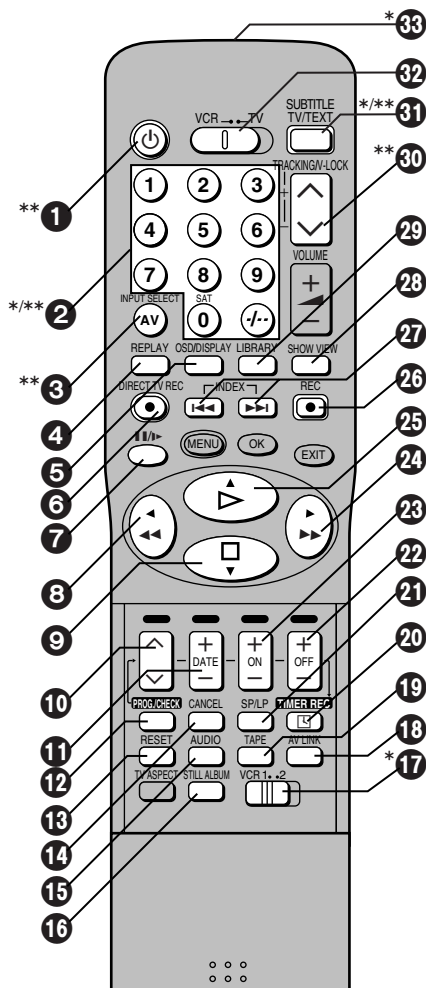
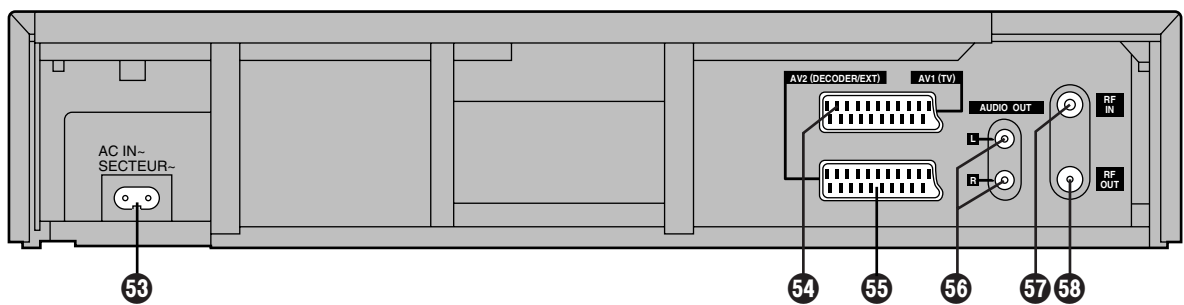
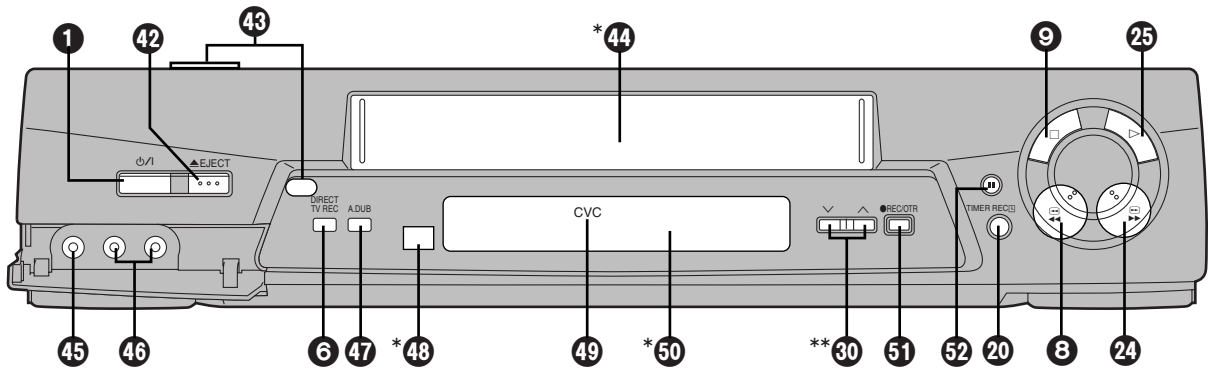
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# Controls and Components

Keep this page open as you read through the Operating Instructions. Refer to it for the control and component names and numbers which appear in the text.



\* See page 4. (VCR Operation)

\*\* See page 8. (TV Operation)

## VCR Operation




When you want to operate the VCR, set the VCR/TV switch **32** to "VCR".

### \***2** Numeric buttons

To select the programme positions (1–99) of the VCR.




Example:




9: 





19:  →  → 

To select the satellite programme positions

Example:

SAT 9:  →  → 

SAT19:  →  → 

SAT129:  →  →  → 

- 3-digit programme positions can be selected with this remote control only in case of a satellite receiver that is marked with (\*) on the enclosed list of compatible satellite receivers.

To enter a ShowView number.

To enter numbers for various settings.

### \***17** VCR 1/2 switch

Set to the "VCR 2" position when using two Panasonic VCRs. (See page 51.)

### \***31** SUBTITLE button

When receiving or playing back recordings of TV programmes that are broadcast with subtitles via Teletext, and also when playing back pre-recorded cassettes with "Closed Caption" subtitles, you can make the subtitles appear or disappear on the TV screen by pressing this button.

- Every time you press this button, the "☐:ON" indication or "☐:OFF" indication appears on the TV screen for a few seconds. When you press this button to display the "☐:ON" indication, the subtitles are displayed on the TV screen.
- After pressing this button so that the "☐:ON" indication appears, it may take a few moments until the subtitles are displayed on the TV screen.
- Pressing this button also changes the setting of "Subtitles" for "Display" on the Main menu accordingly. Therefore, turning the subtitle function on or off is also possible by changing the above setting on the Main menu. (See page 49.)

### \***33** Infra-red transmitter

### \***38** Child Lock Function buttons

**(Convenient function to prevent unauthorized use)**

This function deactivates all buttons on the VCR and the remote control. Use this function, when you do not want other people to operate the VCR.

#### To Activate the Child Lock Function:

**1** Hold down the OK and the OFF (+) buttons **38** simultaneously until the "☒ hold" indication appears in the VCR display.

- If you press a button while the Child Lock function is on, the "☒ hold" indication appears in the VCR display to inform you that no operation is possible.

#### To Cancel the Child Lock Function:

**1** Hold down the OK and the OFF (+) buttons **38** simultaneously until the "☒ hold" indication disappears.

- If you disconnect the power cable, the Child Lock function is automatically cancelled after the power backup time of approximately 60 minutes has elapsed.
- If you cannot cancel the Child Lock function, press the EXIT button **45** and perform the operation step **1**.

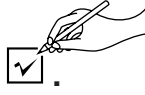
### \***44** Cassette compartment

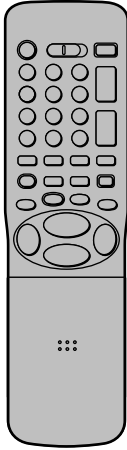
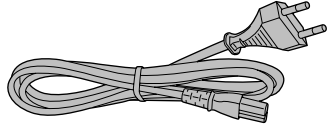
### \***48** Infra-red Remote Control Receiver window

### \***50** VCR display

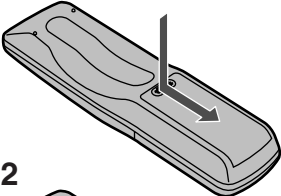
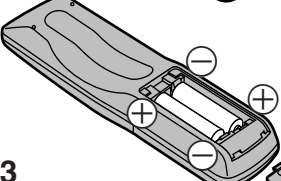
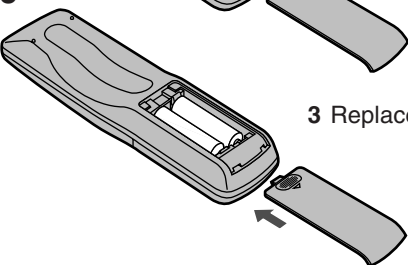
# Checking the Accessories/Preparing the Remote Control

Check that you have the accessories shown below  .



<input type="checkbox"/> Operating Instructions	<input type="checkbox"/> Remote Control	<input type="checkbox"/> Batteries for the Remote Control
<input type="checkbox"/> Satellite Receiver List		<input type="checkbox"/> AC Mains lead
<input type="checkbox"/> RF lead to connect VCR and TV		

## Inserting Remote Control Batteries

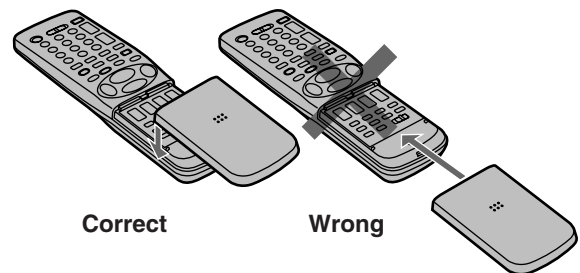
- 1  1 Slide off the battery cover.
- 2  2 Insert the batteries with the polarity (+ and -) correctly aligned.
- 3  3 Replace the battery cover.

- Do not heat or short-circuit the batteries.
- When you do not use the remote control for a long time, take out the batteries and store them in a cool, dry place.

## If the Sliding Cover of the Remote Control Becomes Detached

If the sliding cover of the remote control becomes detached accidentally, fit it securely in place by placing it on the top of the remote control at the position shown in the illustration below, and pushing it down until it clicks into position.

- It is not possible to fit the sliding cover in place by pushing or sliding it on from the bottom end of the remote control.



### Notes for Battery Replacement:

- The service life of the batteries is approximately 1 year. However, it varies considerably depending on the frequency of use.
- When they are exhausted, replace them with two AA, UM3, or R6 size batteries.
- When the batteries are exhausted, remove them immediately and dispose of them correctly.
- Make sure that the batteries are inserted with the polarity (+ and -) correctly aligned.
- Do not mix old battery with new battery.
- Do not mix different battery types, i.e. Alkaline and Manganese.
- Do not use rechargeable (Ni-Cd) batteries.

# Cautions

---

Be sure to read the cautions carefully before you operate this VCR.

---

## Avoid sudden changes in temperature

If the VCR is moved suddenly from a cold to a warm place, condensation may form on the tape surface and inside the VCR. If this happens, leave the VCR at room temperature for at least 1 hour before operating it.

---

## Avoid humidity and dust

Do not use the VCR in very humid or dusty places. This may cause damage to its internal parts.

---

## Do not cover the ventilation holes

The ventilation holes prevent excessive heat build-up inside the VCR during extended periods of use. Do not block these holes; especially avoid covering them with soft materials such as paper or cloth.

---

## Keep the VCR away from high temperatures

Keep the VCR away from extreme heat such as direct sunlight, heating radiators, or closed automobiles.

---

## Avoid magnets or magnetized objects

Never bring a magnet or magnetized object close to the VCR because this could adversely affect the performance of the VCR. When using the VCR together with other equipment, keep as much distance as possible between them to prevent them from adversely affecting each other's performance.

---

## No fingers or other objects inside

Touching internal parts of the VCR is dangerous, and may seriously damage it. Do not attempt to disassemble the VCR. There are no user serviceable parts inside.

---

## Keep water away

Keep the VCR away from flower vases, tubs, sinks, etc.  
**Caution:** If water or some other liquid is spilled into the VCR, serious damage could occur. If you spill any liquid into the VCR, consult qualified service personnel.

---

## Lightning

To avoid damage by lightning, disconnect the aerial plug from the VCR during lightning storms.

---

## Cleaning the VCR

Wipe the VCR with a clean, dry cloth. Never use any cleaning fluid or other chemicals. Also do not use compressed air to remove dust.

---

## Stacking

Install the VCR in a horizontal position and do not place anything heavy on it.

---

## Video head clogging

The video heads record the picture signals on the tape during recording and read picture signals from the tape during playback. They are, therefore, of critical importance for the picture quality. If the VCR is used for a very long time, these heads may become dirty and clogged with dust and fine particles from the tape coating. In such a case, the signals can no longer be recorded correctly, and the playback picture will be distorted accordingly. This is the case, for example, if during the playback of a tape, which you know to have excellent recording quality, the picture and sound quality are inferior. When such a symptom occurs, have the recorder checked by qualified service personnel.

**Head cleaning by a service center is not covered by warranty.**

---

## Condensation may form in the following cases:

- If the VCR is in a room that was very cold before the heater has just been turned on.
- If the VCR is in a room with steam or high humidity.
- If the VCR is brought from cold surroundings into a well-heated room.
- The VCR is suddenly brought from cool surroundings, such as an air-conditioned room or car, to a place which is hot and humid.

### Note:

- In any of the above-mentioned conditions, do not operate the VCR for at least 1 hour.  
This VCR is not equipped with a dew sensor.



# Warning and Important Information

---

**As this equipment gets hot during use, operate it in a well ventilated place; do not install this equipment in a confined space such as a book case or similar unit.**

## IMPORTANT

Your attention is drawn to the fact that the recording of pre-recorded tapes or discs or other published or broadcast material may infringe copyright laws.

## WARNING

**TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.**

## FOR YOUR SAFETY

### ■ DO NOT REMOVE OUTER COVER.

To prevent electric shock, do not remove cover. There are no user serviceable parts inside. Refer all servicing to qualified service personnel.

## Remarks

1. This VCR is also capable of receiving SECAM type broadcasting programmes (SECAM B/G) and recording/playing back its colour television signals.
2. When a cassette which has been recorded on this VCR is played back on a SECAM VCR, the picture may be reproduced in black and white. When it is played back on a PAL VCR without SECAM capability, the picture may not be reproduced in normal colour.
3. When cassettes recorded on a SECAM VCR or SECAM pre-recorded cassettes are played back on this VCR, the picture may be reproduced in black and white.
4. This VCR is not designed for use in France, where a SECAM VCR should be used instead.

Press the VCR-ON/OFF button ❶ to switch the VCR from on to standby mode or vice versa. In the standby mode, the VCR is still connected to the mains.

**SHOWVIEW is a trademark of Gemstar Development Corporation. The SHOWVIEW system is manufactured under licence from Gemstar Development Corporation.**

If you dub still pictures from a conventional analogue video movie camera or VCR, some picture distortion may occur in the recorded picture.

# Setting the Remote Control to Operate Your TV

This setting procedure allows you to operate the TVs of most brands using the remote control supplied with this VCR.

- Some TV models cannot be operated with this remote control.

- 1 Set the VCR/TV switch **32** to "TV".
- 2 Look up your TV's manufacturer in the list of TVs compatible with the VCR's remote control on the next page.
- 3 While keeping the TV-ON/OFF button **1** pressed, use the Numeric buttons **2** to enter the manufacturer's code. If there is more than one code listed for that manufacturer, try the first code. Be sure to enter the code in two digits. Example: 01
- 4 Check whether you can operate the TV correctly with the VCR's remote control.

## If the TV cannot be operated properly:

In step 3, enter the other code listed for that manufacturer and repeat step 4.

## TV Operation

The explanations below show you what functions individual buttons have when the VCR/TV switch **32** is set to "TV".

### \*\***1** TV-ON/OFF button

To switch the TV on from standby mode (OFF) or vice versa.

On some TVs it is only possible to switch the TV to standby mode (OFF) with this button, but not on. In this case, try to turn the TV on with one of the following buttons:

**Numeric buttons 2**

**AV button 3**

**Channel button 30**

### \*\***2** Numeric buttons

To select the programme positions (1–99) on the TV.

### \*\***3** AV button

To select the desired AV input on the TV.

### \*\***30** Channel button

To select the desired programme position (TV station) on the TV.

### \*\***31** TV/TEXT button

To switch between normal TV mode and teletext mode.

### \*\***39** Teletext buttons

If your TV is equipped for Teletext reception, you can use these buttons to change the teletext information displayed on the screen and select desired information. For details, refer to your TV's operating instructions.

### \*\***40** TV ASPECT button

To switch the screen format between the wide-screen and other formats.

### \*\***41** VOLUME button

To adjust the volume of the TV.

## The 3 Methods for Switching to the AV Input on Your Panasonic TV

Your Panasonic TV uses one of three different methods for switching between TV reception and the AV input(s). Perform the operations steps listed for the switching methods A, B and C below to determine which one your Panasonic TV uses.

- 
- A
- 1 Set the VCR/TV switch **32** to "TV".
  - 2 Press the AV button **3** to switch to the AV Input. Each press of the AV button **3** switches between "TV reception" and "AV Input(s)".
- 
- B
- 1 Set the VCR/TV switch **32** to "TV".
  - 2 Press the AV button **3**. Colour bars for selecting the AV Input appear on the TV screen.
  - 3 Follow the instructions displayed on the TV screen to select the desired AV Input from the displayed colour bars for the AV Input by pressing the corresponding colour button **10** (red), DATE+ (green) **11**, ON+ (yellow) **23** or OFF+ (blue) **22** on the remote control.
- 
- C
- 1 Set the VCR/TV switch **32** to "TV".
  - 2 Press the AV button **3**. The last previously selected AV Input indication appears on the TV screen. The indications for selecting another AV Input also appear, but they disappear a few seconds later.
  - 3 Before the indications for selecting another AV Input disappear, press the **10** button, DATE– button **11**, ON– button **23** or OFF– button **22** to select the desired AV input. With the following four buttons, you can move and select as follows:  
∨ **10**: Move left  
DATE– **11**: Move down  
ON– **23**: Move up  
OFF– **22**: Move right
-



## List of TVs Compatible with the VCR's Remote Control

Manufacturer	Code
Panasonic	01–04
AIWA	35
AKAI	27, 30
BLAUPUNKT	09
BRANDT	10, 15
BUSH	05, 06
CURTIS	31
DESMET	05, 31, 33
DUAL	05, 06
ELEMIS	31
FERGUSON	10
GOLDSTAR/LG	31
GOODMANS	05, 06, 31
GRUNDIG	09
HITACHI	22, 23, 31, 40, 41, 42
INNO HIT	34
IRRADIO	30
ITT	25
JVC	17, 39
LOEWE	07
METZ	28, 31
MITSUBISHI	06, 19, 20
MIVAR	24
NEC	36
NOKIA	25–27
NORDMENDE	10
ORION	37
PHILIPS	05, 06
PHONOLA	31, 33
PIONEER	38
PYE	05, 06
RADIOLA	05, 06
SABA	10
SALORA	26
SAMSUNG	31, 32
SANSUI	05, 31, 33
SANYO	21
SBR	06
SCHNEIDER	05, 06, 29, 30, 31
SELECO	06, 25
SHARP	18

Manufacturer	Code
SIEMENS	09
SINUDYNE	05, 06, 33
SONY	08
TELEFUNKEN	10–14
THOMSON	10, 15
TOSHIBA	16
WHITE WESTINGHOUSE	05, 06

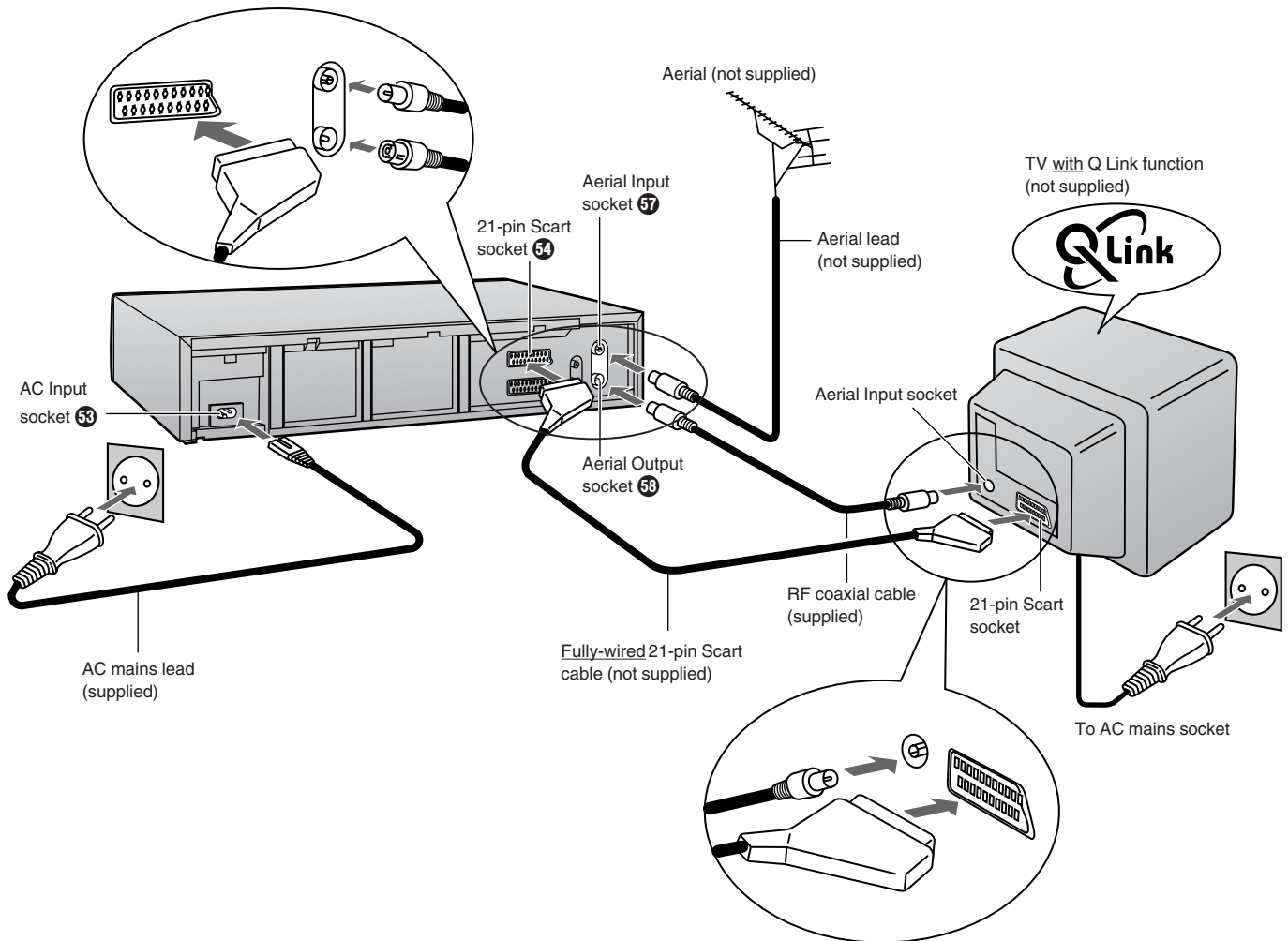
Before Use

# Connecting and Preparations for a TV Equipped with the Q Link Function

Connections and preparations for a TV equipped with the "Q Link"<sup>\*1</sup> function and equipped with a 21-pin Scart socket. For the connections and preparations for a TV equipped with the "DATA LOGIC"<sup>\*2</sup>, "Easy Link"<sup>\*3</sup>, "Megalogic"<sup>\*4</sup> or "SMARTLINK"<sup>\*5</sup> function and with a 21-pin Scart socket, also read from this page.

For details about the connections, also read TV's operating instructions.

Be sure to keep both the TV and VCR switched off until all connections have been made. For your safety, be sure not to connect or handle the equipment with wet hands.



## Hints:

- Q Link is an advanced system that offers a range of convenient functions such as automatic copying of the tuning position of all available TV stations (in the same order as they are programmed on the TV) into your VCR's memory (this is called Download) if you connect the VCR to your TV with a fully-wired 21-pin Scart cable (not supplied). Depending on the manufacturer, the equivalent of the Q Link function has a different name and may not work exactly the same.

\*1 "Q Link" is a registered trademark of Panasonic.

\*2 "DATA LOGIC" is a registered trademark of Metz.

\*3 "Easy Link" is a registered trademark of Philips.

\*4 "Megalogic" is a registered trademark of Grundig.

\*5 "SMARTLINK" is a registered trademark of Sony.

For details, refer to your TV's operating instructions or consult your dealer.

- Unlike in most commercially sold 21-pin Scart cables, in fully-wired 21-pin Scart cables all 21 pins of one plug are connected to the matching pin of the plug on the other end of the cable. This type of cable is necessary for the Preset Download function to work.

## Preset Download Function

The Preset Download function automatically copies the tuning position of all available TV stations into the VCR's memory when you connect the VCR using a fully-wired 21-pin Scart cable to a TV equipped with the Q Link function.

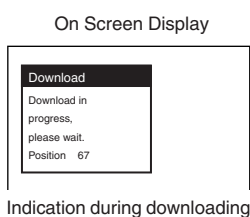
### To Simultaneously Set Up this VCR with a New TV

Perform the following operation steps exactly as described to ensure that the Preset Download function works correctly.

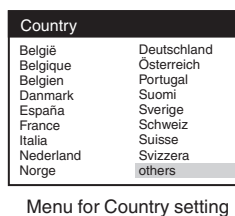
- ◆ First of all, make sure that the VCR is switched off.

- 1 Switch the TV on.  
The TV starts to tune all available TV stations and to adjust the clock.  
(This is called Auto Setup function.)

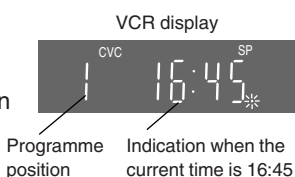
- ◆ When the TV has finished its own auto setup, the VCR is automatically switched on, and the downloading of the setup data from the TV to the VCR starts. (Applicable to TVs with "Q Link" or "DATA LOGIC" function)



If your TV is equipped with the "Easy Link", "Megalogic" or "SMARTLINK" function, the Country setting menu appears on the TV screen before downloading. Press the Cursor buttons (▲▼◀▶) 34 to select the desired country. Then, press the OK button 36 and the downloading automatically starts.



- ◆ The VCR's Auto Setup (Downloading) is complete when the programme position and the current time appear in the VCR display.



#### Note:

- If you accidentally switch on the VCR before the TV, downloading of the setup data from the TV may not be performed correctly. In this case, follow the operation steps below.

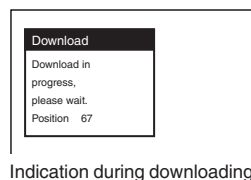
- 1 Wait until the Auto Setup is complete on both the TV and the VCR.
- 2 Press the MENU button 37 to display the OSD Main menu on the TV screen.
- 3 Press the Cursor buttons (▲▼◀▶) 34 to select "Tuning" and then "Download".
- 4 Press the OK button 36 twice. Downloading of the setup data from the TV to the VCR starts.
- 5 When the programme position and the current time appear in the VCR display, downloading is complete.

#### Hints:

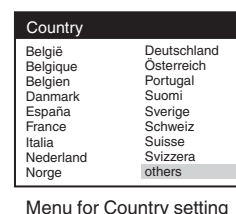
- If you use a Panasonic TV and perform the operation step 1, starting the downloading of the setup data will automatically display the "Download" indication. However, in case of a TV of another make, the "Download" indication may not appear. In this case, select the AV input on your TV if you want to see the "Download" indication.
- If you select "Schweiz", "Suisse" or "Svizzera" on the Country setting menu, the Display setting menu appears automatically to let you set the item "Power save" to "ON". In this setting, the VCR's power consumption is minimised when it is off (Standby mode). To turn the VCR on, keep the VCR-ON/OFF button 1 pressed on the VCR main unit. It is not possible to turn it on with the remote control.

### To Set Up this VCR with a TV Already in Use

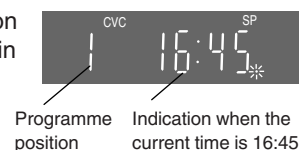
- 1 Switch the TV on.
- 2 Select the AV input on your TV.
- 3 Set the VCR/TV switch 32 to "VCR".
- 4 Press the VCR-ON/OFF button 1 to switch the VCR on. Downloading of the setup data starts automatically. (Applicable to TVs with "Q Link" or "DATA LOGIC" function)



If your TV is equipped with the "Easy Link", "Megalogic" or "SMARTLINK" function, the Country setting menu appears on the TV screen before downloading. Press the Cursor buttons (▲▼◀▶) 34 to select the desired country. Then, press the OK button 36 and the downloading automatically starts.



- ◆ When the programme position and the current time appear in the VCR display, the VCR's Auto Setup (Downloading) is complete.

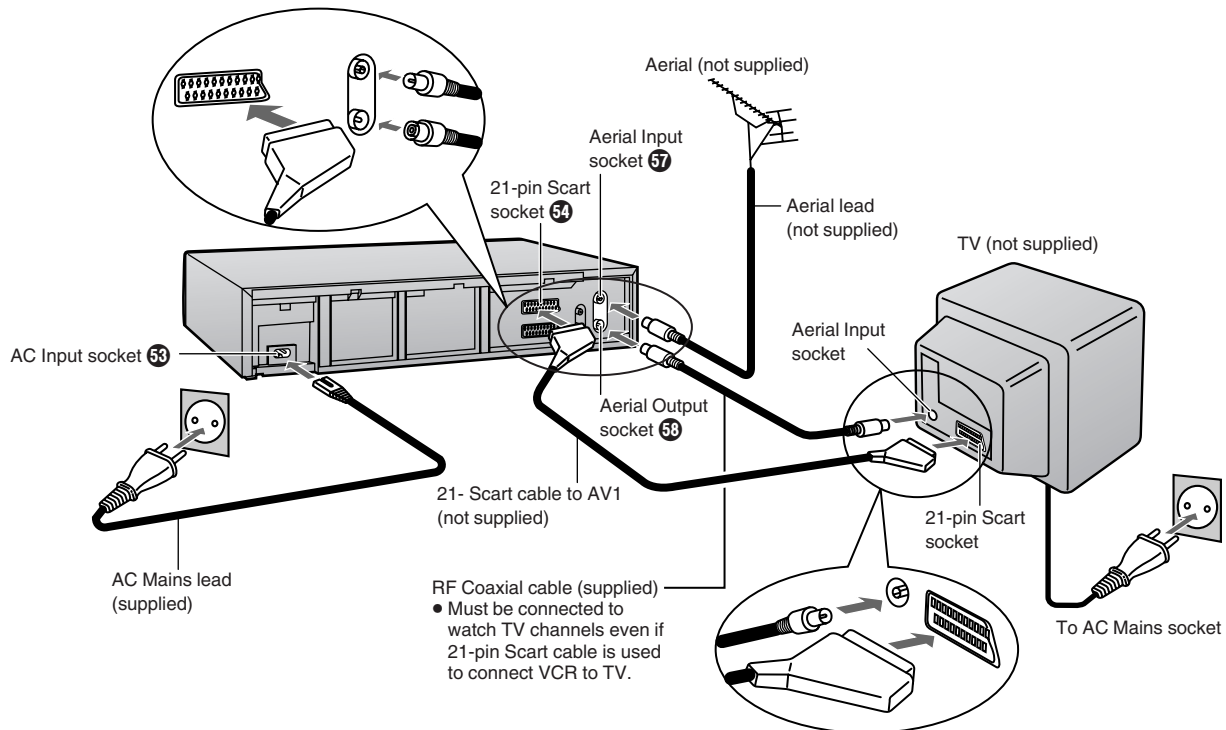


#### Hint:

- If you select "Schweiz", "Suisse" or "Svizzera" on the Country setting menu, the Display setting menu appears automatically to let you set the item "Power save" to "ON". In this setting, the VCR's power consumption is minimised when it is off (Standby mode). To turn the VCR on, keep the VCR-ON/OFF button 1 pressed on the VCR main unit. It is not possible to turn it on with the remote control.

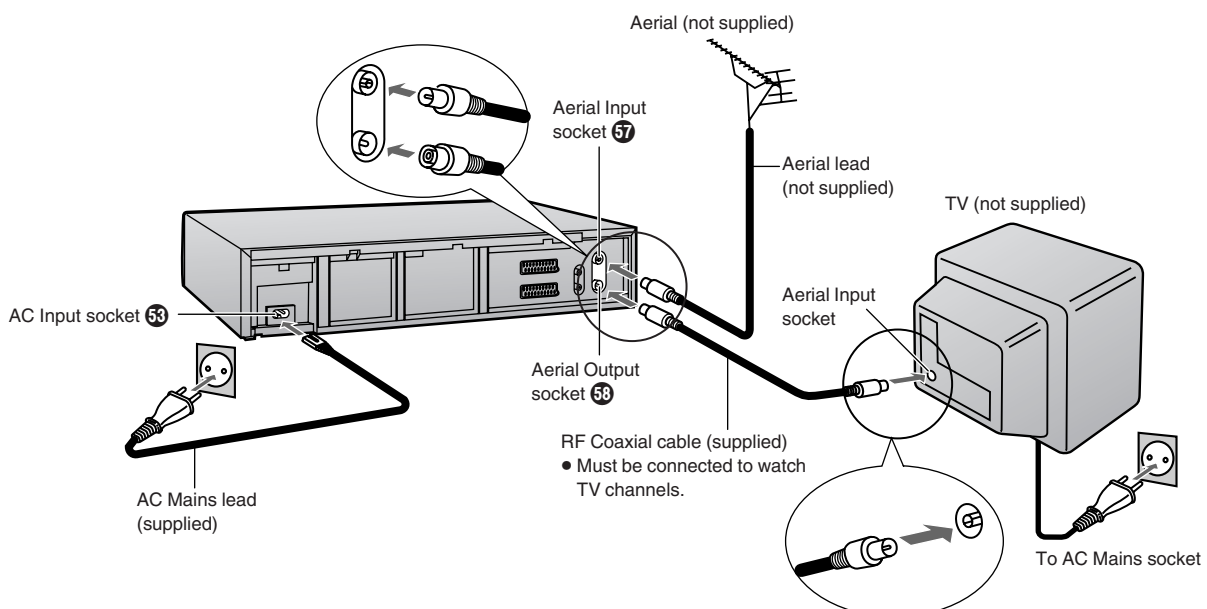
# Connecting and Preparations for a TV Not Equipped with the Q Link Function

**Method 1.** If you are connecting your VCR to a TV using RF coaxial cable and 21-pin Scart cable, then follow the steps below. (AV Connection)



After completing the above connections, proceed to the Auto Setup page (Page 13).

**or Method 2.** If you are connecting your VCR to a TV using only RF coaxial cable, then follow the steps below. (RF Connection)



After completing the above connections, proceed to the Auto Setup page (Page 14).

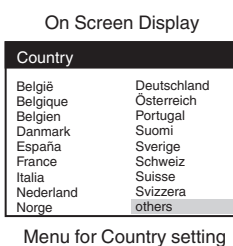
If you are connecting your VCR to a TV using Method 1, follow the operations explained below.

### Auto Setup Function

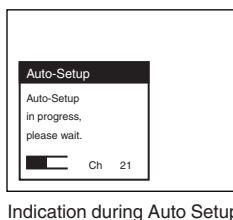
The Auto Setup function automatically tunes all available TV stations and sets the VCR's clock to the current date and time. If the tuning and time/date settings are not correct, performing timer recordings is not possible.

- 1 Switch the TV on.
- 2 Select the AV input on your TV.
- 3 Set the VCR/TV switch **32** to "VCR".

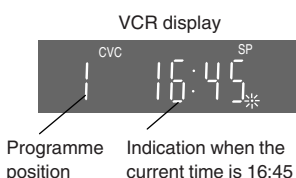
- 4 Press the VCR-ON/OFF button **1** to switch the VCR on. The Country setting menu appears on the TV screen.
- 5 Press the Cursor buttons (**▲▼◀▶**) **34** to select the country where you are using the VCR.



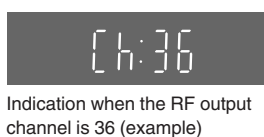
- 6 Press the OK button **36** and the VCR's Auto Setup automatically starts and tunes all available TV stations and also sets the clock. This takes about 5 minutes.



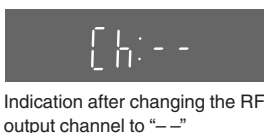
- 7 When the indication shown on the right appears on the VCR display, the Auto Setup is complete.



- 8 Press the MENU button **37** for more than 5 seconds so that the RF output channel number appears on the VCR display. The initial setting is channel 36.



- 9 Press the Numeric button "0" **2** so that the displayed RF output channel number changes to "--".



- 10 Press the OK button **36** to conclude the setting.

◆ **To Cancel the Auto Setup Before It Has Finished**  
Press the EXIT button **35**.

### Hint:

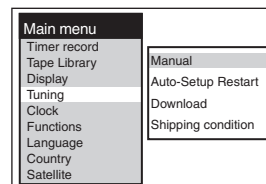
- If you select "Schweiz", "Suisse" or "Svizzera" on the Country setting menu, the Display setting menu appears automatically to let you set the item "Power save" to "ON". In this setting, the VCR's power consumption is minimised when it is off (Standby mode). To turn the VCR on, keep the VCR-ON/OFF button **1** pressed on the VCR main unit. It is not possible to turn it on with the remote control.

### When the clock setting menu appears after Auto Setup has finished:

- 1 Press the Cursor buttons (**▲▼◀▶**) **34** to set the correct time and date.
- 2 Press the OK button **36** to conclude the setting.
- 3 Press the EXIT button **35** to exit the On Screen Display.

### To Confirm that the TV Stations Have Been Tuned Correctly by the Auto Setup Function

- 1 Press the MENU button **37** to display the OSD Main menu on the TV screen.



- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Tuning" and "Manual" in this order.

Tuning

Pos	Name	Ch	Pos	Name	Ch
1	ARD	1	11	ORB	35
2	ZDF	2	12	RTL+	4
3	N3	19	13	SAT1	5
4	HR3	26	14	----	----
5	BR3	18	15	----	----
6	RB3	3	16	----	----
7	SFB3	36	17	----	----
8	SW3	29	18	----	----
9	WDR3	17	19	----	----
10	MDR3	32	20	----	----

- 3 Press the OK button **36** to display the list of tuned TV stations and confirm that all available TV stations have been set correctly.

List of tuned TV stations (example)

- 4 Press the EXIT button **35** to exit the On Screen Display.

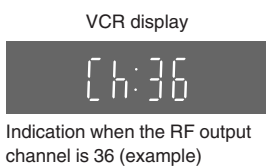
### When the station names and/or channel numbers have not been set correctly:

See page 41 for details.

If you are connecting your VCR to a TV using Method 2, follow the operations explained below.

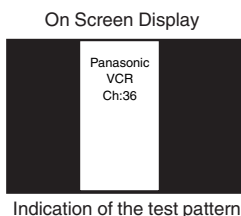
To be able to watch the VCR picture on the TV, RF connection requires the video playback channel to be set on the TV.

- 1 Switch the TV on.
- 2 Select an unoccupied programme position (which is not tuned to a TV station).  
If you are using a Panasonic TV, select programme position "0".
- 3 Set the VCR/TV switch **32** to "VCR".
- 4 Press the VCR-ON/OFF button **1** to switch the VCR on.
- 5 Press the MENU button **37** for more than 5 seconds.  
The number of the RF output channel appears on the VCR display.  
The initial setting is channel 36.

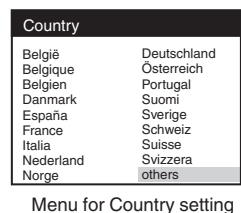


- 6 Tune your TV until the test pattern shown on the right appears on the TV screen.  
Now, the setting of the RF output channel is complete.

- As the tuning method differs depending on the TV you are using, refer to your TV's operating instructions for details about tuning.

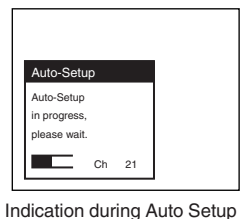


- 7 Press the OK button **36**.  
The Country setting menu appears on the TV screen.

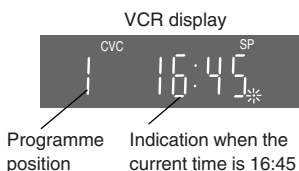


- 8 Press the Cursor buttons (▲▼◀▶) **34** to select the country where you are using the VCR.

- 9 Press the OK button **36** and the VCR's Auto Setup automatically starts and tunes all available TV stations and also sets the clock. This takes about 5 minutes.  
• If you select "Schweiz", "Suisse" or "Svizzera" on the Country setting menu, see page 13.



- 10 When the indication shown on the right appears on the VCR display, the Auto Setup is complete.



- ◆ **To Cancel the Auto Setup Before It Has Finished**  
Press the EXIT button **35**.

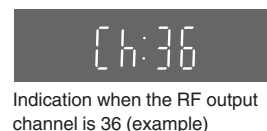
**When the clock setting menu appears after Auto Setup has finished:**  
See page 13.

**To Confirm that the TV Stations Have Been Tuned Correctly by the Auto Setup Function**  
See page 13.

**If the Picture on the TV's Video Playback Channel Is Distorted**

If, after setup, you select the video playback channel on the TV and view a TV programme on a programme position selected on the VCR, some interference may occur in certain cases. If this happens, you can minimise the distortion by changing the RF output channel on the VCR to another number. Follow the operations below.

- 1 Set the VCR/TV switch **32** to "VCR".
- 2 Press the MENU button **37** for more than 5 seconds.  
The number of the RF output channel appears on the VCR display.  
The initial setting is channel 36.



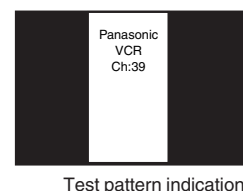
- 3 Press the Numeric buttons **2** to change the RF output channel.  
Enter a channel number which differs by 2 or 3 from the one initially set number. For example, as the original number is 36, enter 39.



- 4 Press the OK button **36** to conclude the setting.

**Note When You Have Changed the RF Output Channel:**  
After changing the RF output channel to a different number, be sure to retune your TV to the VCR's new RF output channel. (For details about tuning, refer to your TV's operating instructions.)

- 1 Press the MENU button **37** for more than 5 seconds.
- 2 When the test pattern shown on the right appears sharp and clear on the TV screen, the tuning is complete.

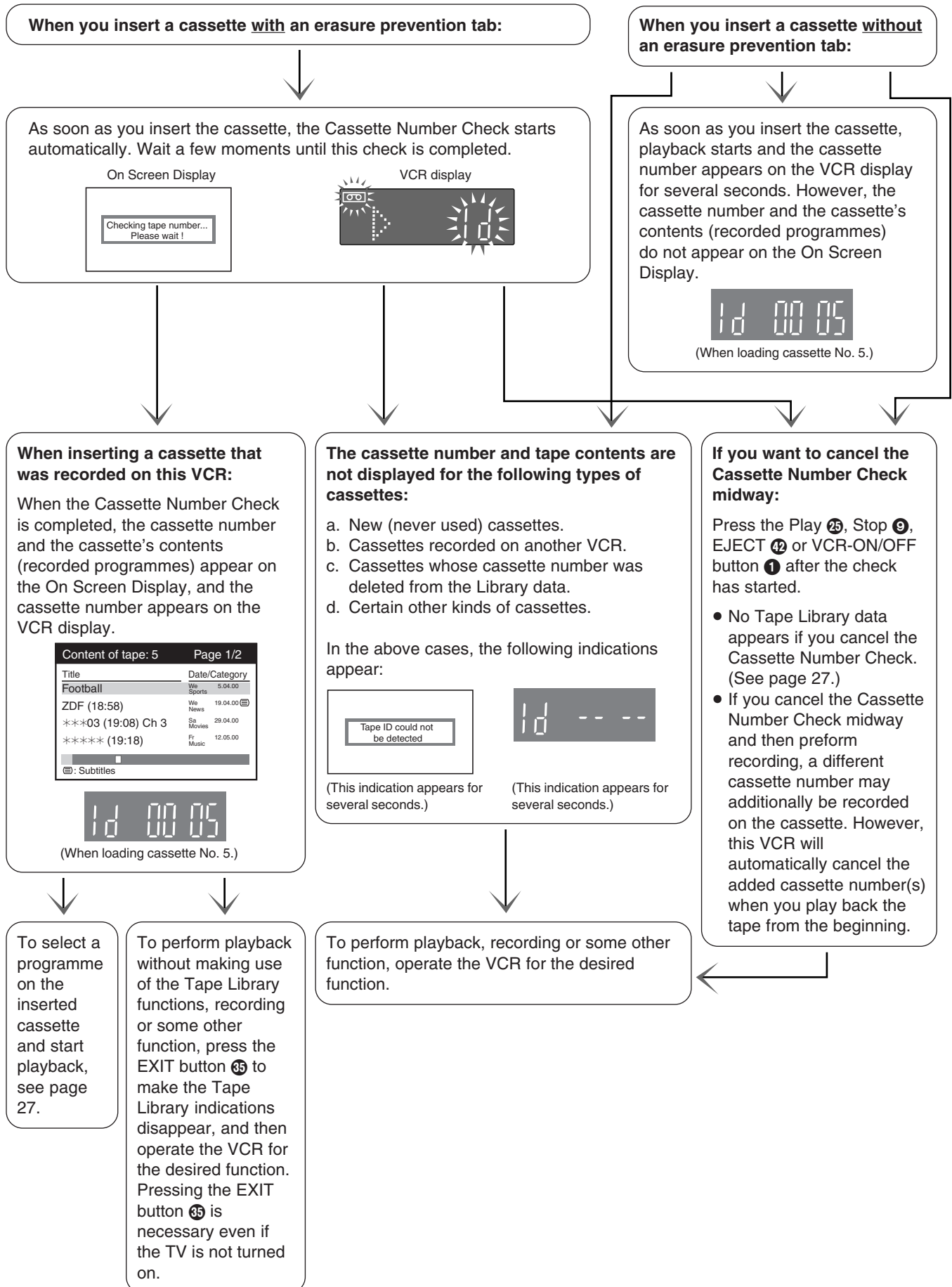


- 3 Press the EXIT button **35** to exit the On Screen Display.



# When You Insert a Video Cassette

The Tape Library System makes it easy to check what programmes are recorded on the inserted tape and lets you quickly select a programme for playback. For further details about the Tape Library System, see page 26.



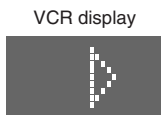
# Playback

## Preparations

- Confirm that the VCR is on.
- Confirm that the TV is on and the VCR viewing channel is selected.
- Insert a recorded video cassette.  
As soon as the cassette is inserted, the Cassette Number Check starts. Wait a few moments until it is completed. (See page 15.)

## For Normal Playback:

Press the Play button **25**.



## For Cue Playback:

During playback, tap the Fast Forward button **24**.

- To return to normal playback, press the Play button **25**.
- If you press and hold down the Fast Forward button **24**, cue playback continues for as long as you keep the button pressed.



## For Review Playback:

During playback, tap the Rewind button **23**.

- To return to normal playback, press the Play button **25**.
- If you press and hold down the Rewind button **23**, review playback continues for as long as you keep the button pressed.



## For Still Playback:

During playback, press the Pause/Slow button **7**.

- To return to normal playback, press the Play button **25** or the Pause/Slow button **7**.



## For Slow Playback:

During playback, keep the Pause/Slow button **7** pressed for 2 seconds or more.

- To return to normal playback, press the Play button **25**.



## Fast-forwarding or Rewinding the Tape:

To fast-forward the tape:

Press the Fast Forward button **24** in the stop mode.

To rewind the tape:

Press the Rewind button **23** in the stop mode.

- To stop fast-forwarding or rewinding, press the Stop button **9**.
- To briefly view the picture during fast-forwarding or rewinding, press and hold down the corresponding button.

## To Stop Playback

Press the Stop button **9**.

## Notes:

- Cue, review or slow playback will be automatically cancelled after 10 minutes, and still playback after 5 minutes.
- During playback function other than normal playback, horizontal noise bars may appear in the picture, the colour of the picture may be unstable, or the picture may be otherwise distorted.  
When you play back a tape recorded in the LP mode, the picture may be in black and white.  
When you play back a tape recorded in the EP mode, the picture and the sound may be distorted.  
However, these are not malfunctions.

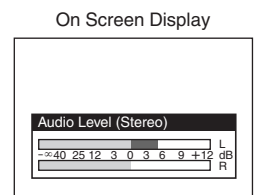
## To Play back S-VHS Cassette Tape (SQPB=S-VHS Quasi Playback)

It is also possible to play back tapes recorded in the S-VHS system.

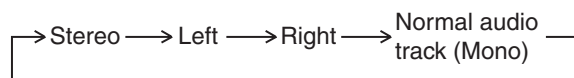
- Some picture noise may occur depending on the type of tape used.
- It is not possible to fully obtain the high resolution that S-VHS is capable of.
- It is not possible to record in the S-VHS system with this VCR.

## To Select the Desired Sound Mode during Playback

Press the AUDIO button **15** during playback.



Every time you press this button, the audio output mode changes as follows:

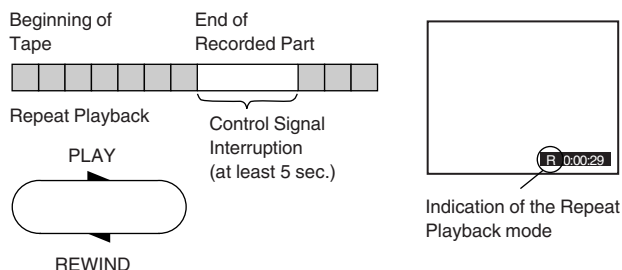


## To Play Back a Recorded Part Repeatedly

Press the Play button **25** on the remote control for more than 5 seconds.

The "R" indication appears on the On Screen Display.

- If "OSD" is set to "OFF" (See page 48), the "R" indication will not appear in repeat playback mode.



### To Cancel the Repeat Playback Mode:

Press the Stop button **9**.

## To rewind the tape a little to view the same scene again (Replay Function)

If you want to view the same scene again, for example because you could not catch clearly what a person said, simply press the REPLAY button **4**, to rewind the tape a little from its present position and play it back again.

The direction in which the tape is rewound depends on what playback mode the VCR is in when you press the REPLAY button **4**.

- If you press the REPLAY button **4** when the VCR is in the stop, rewind, fast-forward, slow playback, or standby (Off) mode, the Replay function does not work.

### During Normal Playback, Cue Playback and Still Playback:

When you press the REPLAY button **4**, the VCR switches over to the review playback mode for a few seconds and then resumes normal playback.

### During Review Playback:

When you press the REPLAY button **4**, the VCR briefly switches over to Cue playback and then plays back at normal speed in forward direction from the point where the REPLAY button **4** was pressed.

## To Stop Playback Automatically (Playback Off Timer Function)

If you set the playback duration, the playback will stop automatically.

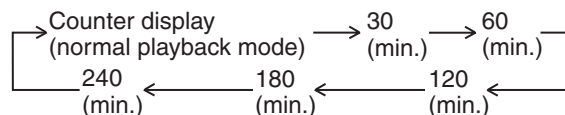
After the set playback time has elapsed, the VCR automatically stops playback and switches off.

### To Activate the Playback Off Timer Function:

During normal playback, press the Play button **25** on the VCR for more than 2 seconds to put the VCR in the Playback Off Timer mode.

After that, press the Play button **25** on the VCR repeatedly until the desired playback duration is displayed on the VCR display.

- Repeatedly pressing this button changes the indication in the following order:



### To Stop Midway:

Press the Stop button **9**.

## To Play Back NTSC Video Cassettes on Your PAL TV (Quasi-NTSC Playback Function)

This VCR allows playback of tapes recorded in the NTSC system on a normal PAL system TV with the same operations as usual.

On some TVs, however, the playback picture may roll up or down.

- If your TV has a V-HOLD control or equivalent adjustment function, use it to try to stop the picture movement.

## Convenient Automatic Functions

### VCR Auto Power On

When you insert a video cassette, the VCR switches on automatically.

### Auto Playback Start

When you insert a video cassette with a broken erasure prevention tab, playback start automatically without having to press the Play button **25**.

### VCR-off Playback

When the VCR is off, an inserted cassette can be played back by pressing the Play button **25**.

### Auto Rewind

When the tape reaches the end, the VCR automatically rewinds it to the beginning.

- This function does not work during timer recording and OTR.

### Automatic Switching Off and Ejection

When the VCR is switched off, and inserted cassette can be ejected simply by pressing the EJECT button **42**. The VCR will eject the cassette and automatically turn itself off again.

## To Eject the Video Cassette Using the Remote Control

Keep pressing Stop button **9** for at least 3 seconds.

# Recording

## Preparations

- Confirm that the VCR is on.
- Confirm that the TV is on and the VCR viewing channel is selected.
- Set the VCR/TV switch **32** to "VCR".

## Operations

### 1 Insert a video cassette with an intact erasure prevention tab.

- As soon as the cassette is inserted, the Cassette Number Check starts. Wait a few moments until it is completed. (See page 15.)
- If it has already been inserted, press the VCR-ON/OFF button **1** to turn the VCR on.

### 2 Select the TV station using the Channel buttons **30**.

- It is also possible to select by pressing the Numeric buttons **2**.



### 3 Press REC (REC/OTR) button **26** (**51**) to start recording.



### 4 Press the Stop button **9** to stop recording.

## To Select the Desired Tape Speed

Press the SP/LP button **21** before recording.

- SP provides standard recording time and optimum picture quality.
- LP provides double recording time with slightly reduced picture quality.
- EP provides triple recording time with slightly reduced picture quality.
- When recording starts in the EP mode, the "EP" indication on the VCR display blinks for about 8 seconds.



## To Pause Recording

Press the Pause/Slow button **7** during recording. Press it again to continue recording.



## To View One TV Programme while Recording Another TV Programme

After pressing the REC button **26** to start recording, select on your TV the programme position of the TV programme that you want to view.

### Notes:

- When playing back an E300 cassette recorded in the LP or EP mode, some picture distortion may occur. However, this is not a malfunction.
- The recording pause mode will be automatically cancelled after 5 minutes and return to the stop mode.
- The tape recorded in the EP mode on this VCR cannot be played back on the other VCR without EP mode function.
- On the other VCR (even with EP mode function), when you play back the tape recorded in the EP mode, the picture may be distorted. However, this is not a malfunction.

## To Immediately Record the Same TV Programme That You Are Viewing on the TV (Direct TV Recording)

This function allows you to immediately start recording the same programme that you are viewing on the TV. The programme position selected on the VCR automatically changes to that of the TV programme that you are viewing on the TV. When you stop the recording, the VCR automatically switches back to the previously selected programme position.

Conditions for correct operation of the Direct TV Recording function:

- Your TV must be equipped with the "Q Link" function.
- The VCR must be connected to the TV via a fully-wired 21-pin Scart cable.

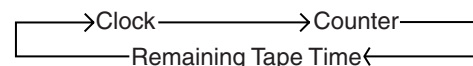
### To Perform Direct TV Recording:

- 1 Insert a video cassette with an intact erasure prevention tab.
- 2 Press the DIRECT TV REC button **6**.
  - Recording of the TV programme that you are viewing on the TV starts.
  - In some cases, it may not be possible to change the programme position on the TV during Direct TV Recording.
  - Do not press the AV LINK button **18** during Direct TV REC, otherwise the recording may not be performed correctly.
- 3 Press the Stop button **9**, to stop recording.

## To Display the Approximate Remaining Tape Time

The remaining tape time can be displayed in the VCR display.

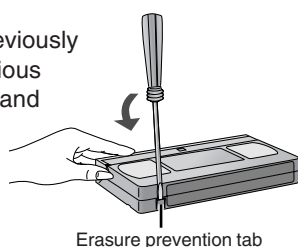
- 1 Press the TAPE button **19** and select the corresponding cassette tape length. See page 48.
- 2 Press the OSD/DISPLAY button **5** repeatedly until the Remaining Tape Time appears on the VCR display.
  - Pressing the OSD/DISPLAY button **5** once makes the On Screen Display appear; after that, pressing it repeatedly changes the indication in the following order:



For certain cassettes, the remaining tape time may not be displayed correctly.

## To Prevent Accidental Erasure of Recorded Contents

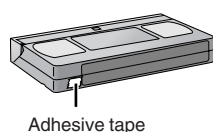
When you record again onto a previously recorded video cassette, the previous recording is automatically erased and replaced with the new recording. Therefore, to prevent accidental erasure of the recorded contents, break out the erasure prevention tab after recording.



Use a screwdriver or similar tool to break out the tab.

## To Record Again onto the Video Cassette with a Broken Out Erasure Prevention Tab:

If you insert a video cassette with a broken out erasure prevention tab and press the REC button **20**, the "00" indication flashes on the VCR display to indicate that recording is not possible. In this case, cover the tab hole with two layers of adhesive tape.



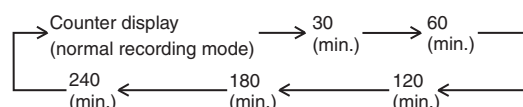
The adhesive tape substitutes for the prevention erasure tab and makes it possible to record again on this cassette.

## To Select the Recording Duration and Perform Timer Recording (OTR Recording)

OTR means One-Touch Recording and is called this way, because you can start recording and select the recording duration by repeatedly pressing a single button. This is very convenient, for example when you want to start recording immediately but need to go out or want to go to bed. After the selected recording duration has elapsed, recording stops and the VCR automatically switches off.

### To Perform an OTR Recording:

- 1 Display the VCR picture on the TV.
- 2 Insert a video cassette with an intact erasure prevention tab.
- 3 Press the Channel buttons **30** to select the programme position on which the TV programme to be recorded will be broadcast.
- 4 Press the REC/OTR button **51** to start recording.
- 5 Press the REC/OTR button **51** repeatedly to select the desired recording duration.
  - Every time you press this button, the recording duration indicated in the VCR display changes in the following order.
  - For example, if you select "30", the VCR records a programme from that moment on for 30 minutes.



### To Stop the OTR Recording Before the End:

Press the Stop button **9**.

#### Note:

- This function also works during Direct TV Recording.

## Linked Timer Recordings with a Digital Receiver

When the AV2 socket of this VCR is connected by a 21-pin cable to a Digital Receiver, it is possible to have timer recordings for a Digital Receiver execute automatically simply by switching the Digital Receiver into timer standby mode and then switching this VCR into timer recording standby mode.

- **Note that linked timer recordings may not work properly with some Digital Receivers.**

- 1 Make sure that "AV2" is set to "TIMER". (See page 50.)
- 2 Insert a video cassette with an intact erasure prevention tab into the VCR.
- 3 Switch the Digital Receiver over to the timer standby mode.
- 4 Press the TIMER REC button **20** to switch the VCR over to the timer recording standby mode.
  - This VCR does not require any further special timer recording operations.
  - The recording will start at the date and time programmed for the Digital Receiver.

#### Notes:

- Always connect the Digital Receiver to be used for timer recordings to the AV2 socket of this VCR using a 21-pin cable.
- Linked timer recordings are not counted in the total time of timer recording programmings.
- Make sure that the date and time of the linked timer recording does not conflict with that of a VCR. If programmed recordings do overlap, either linked timer recording or timer recording of VCR have the priority.

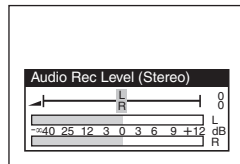
## To Manually Adjust the Audio Recording Level

This VCR adjusts the recording level automatically to prevent sound distortion due to excessive peaks.

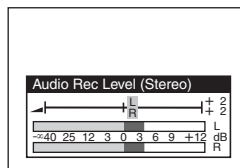
However, if you want to manually adjust the audio recording level, perform the operation steps below before you start the actual recording. We recommend you to adjust the level so that it peaks at approximately +4 dB on the recording level indicator.

- 1 Before recording, press the AUDIO button **15**.

On Screen Display



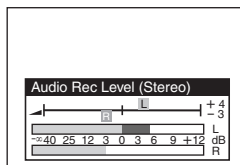
- 2-a To adjust the left (L) and right (R) channels simultaneously: Press the Cursor buttons (**◀▶**) **34** to adjust the audio recording level.



- 2-b To adjust the left (L) and right (R) channels individually, use either of the following two operation methods: Press the Cursor buttons (**▲▼**) **34** to select either the left (L) or right (R) channel and individually adjust their audio recording level with the Cursor buttons (**◀▶**) **34**.

Press the AUDIO button **15** repeatedly to select either the left (L) or right (R) channel and individually adjust their audio recording level with the Cursor buttons (**◀▶**) **34**.

Example:  
When the left (L) channel is selected.



- Adjusting the audio recording level of the normal audio track (mono) is only possible when recording from an external source (AV1, AV2 or AV3), but not when recording TV programmes via the VCR's built-in tuner.

- 3 Press the EXIT button **35** to exit the On Screen Display.



# Timer Recording

This function lets you programme the VCR for unattended automatic recording of desired TV programmes when you are not at home or sleeping.

You can programme timer recordings in two different ways:

- By entering the necessary information with the remote control while viewing the On Screen Display (OSD) on the TV screen (explained below) or;
- By entering the ShowView number published alongside the TV programme listings in newspapers and magazines (see page 22).

This VCR lets you programme up to 8 TV programmes (including weekly and daily programmes) for unattended recording up to one month in advance.

## To Programme with the On Screen Display (OSD)

This method offers easy step-by-step programming with the remote control while you view the prompts on the TV screen.

### Preparations

- Confirm that the VCR is on.
- Confirm that the TV is on and the VCR viewing channel is selected.
- Insert a video cassette with an intact erasure prevention tab.

As soon as the cassette is inserted, the Cassette Number Check starts. Wait a few moments until it is completed. (See page 15.)


- Set the VCR/TV switch  to "VCR".


### Example:

Programming the timer recording of a TV programme broadcast on programme position 2 (ZDF) from 20:00 to 21:30 on 27 October.

Follow the on screen operation guide.

### Operations







- 1 Press the PROG./CHECK button  to display the menu for programming timer recordings on the TV screen.**


- Alternatively, you can press the MENU button  and then select "Timer record".

On Screen Display

Timer recording											
Pos	Name	DATE	Start	Stop	ON	OFF	SP	LP	VPS	PDC	Min
ZDF		27/10	We 20:00	21:30	SP	ON					90

- 2 Press the Channel buttons  to select the programme position of the desired TV station.**

- As an alternative method, after pressing the Channel button , you can use the Cursor ()    .

- 3 Press the DATE button  to set the date on which the TV programme will be broadcast.**

- 4 Press the ON button  to set the starting time.**

- When it is kept pressed, the indication changes in 30-minute intervals.

- 5 Press the OFF button  to set the ending time.**

- 6 Press the SP/LP button  to set the desired tape speed.**

- SP provides standard recording time and optimum picture quality.  
LP provides double recording time with slightly reduced picture quality.  
EP provides triple recording time with slightly reduced picture quality.  
Regarding the "A" indication, refer to page 23.

- 7 Press the Cursor button ()    )  to set VPS/PDC to ON or OFF (---).**

- See page 23 for VPS/PDC recording.


- 8 Press the TAPE button  to select the corresponding cassette tape length.**  
(See page 48.)

- 9 Press the OK button  to conclude the settings.**



- To programme additional timer recordings, repeat operation steps 2–9.


Timer recording											
Pos	Name	DATE	Start	Stop	ON	OFF	SP	LP	VPS	PDC	Min
ZDF		27/10	We 20:00	21:30	SP	ON					90

- 10 Press the TIMER REC button  to switch the VCR over to the timer recording standby mode.**



- Check that  is lit on the VCR display.  
If it is flashing, check the timer recording details again. (See page 24.)

## To Suspend the Timer Recording Standby Mode

When you want to use the VCR for playback, normal recording or some other operation before the programmed timer recording will be performed, you can temporarily suspend the timer recording standby mode by pressing the TIMER REC button  so that the "" indication on the VCR display disappears.

However, after you have finished using the VCR, be sure to reactivate the timer recording standby mode by pressing the TIMER REC button  again, otherwise the programmed timer recording will not be performed.

### Note:

- If the VCR is not put in the timer recording standby mode at the latest 10 minutes before the programmed timer recording starting time, the "" indication flashes on the VCR display. In this case, press the TIMER REC button  to put the VCR in the timer recording standby mode.

# To Programme with the ShowView Function

The ShowView numbers assigned to each TV programme and published alongside the TV programme listings in newspapers and magazines make it extremely easy to set the VCR for timer recording.

The duration of a timer recording programmed with ShowView number may be slightly longer than the actual duration of the TV programme.

## Preparations

- Confirm that the VCR is on.
- Confirm that the TV is on and the VCR viewing channel is selected.
- Insert a video cassette with an intact erasure prevention tab.  
As soon as the cassette is inserted, the Cassette Number Check starts. Wait a few moments until it is completed. (See page 15.)
- Set the VCR/TV switch **12** to "VCR".

## Example:

Programming a timer recording of a TV programme with the ShowView number 920126

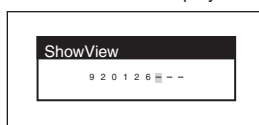
## Operations

**1** Press the **SHOW VIEW** button **23** to display the menu for entering the ShowView number on the TV.

**2** Press the **Numeric** buttons **2** to enter the ShowView number.

- If you have entered a wrong digit, press the **Cursor** button (**4**) and then enter the correct digit.

On Screen Display



**3** Press the **OK** button **36** to display the programmed content.

**4** Press the **SP/LP** button **21** to set the desired tape speed.

- SP provides standard recording time and optimum picture quality.
- LP provides double recording time with slightly reduced picture quality.
- EP provides triple recording time with slightly reduced picture quality.
- Regarding the "A" indication, refer to page 23.
- To extend the ending time or to make any corrections, use the **Cursor** button (**4**), the **Channel** buttons **10**, the **DATE** button **11**, the **ON** button **23**, the **OFF** button **22**, the **SP/LP** button **21**.
- See page 23 for VPS/PDC recording.

Timer recording									
Pos	Start		Stop		SP	VPS			
Name	DATE	ON	OFF	LP	PDC	Min			
ZDF	27/10	We	20:00	21:30	SP	ON	90		
----	----	----	----	----	----	----	----		
----	----	----	----	----	----	----	----		

**5** Press the **TAPE** button **19** to select the corresponding cassette tape length. (See page 48.)

**6** Press the **OK** button **36** again to conclude the settings.

- To programme additional timer recordings, repeat operation steps 1–6.

Timer recording									
Pos	Start		Stop		SP	VPS			
Name	DATE	ON	OFF	LP	PDC	Min			
ZDF	27/10	We	20:00	21:30	SP	ON	90		
----	----	----	----	----	----	----	----		
----	----	----	----	----	----	----	----		

**7** Press the **TIMER REC** button **20** to switch the VCR over to the timer recording standby mode.

- Check that "□" is lit on the VCR display. If it is flashing, check the timer recording details again. (See page 24.)

## If "--" Appears under "Pos/Name" after Entering a ShowView Number

Pos/Name stands for Programme Position/TV Station Name. Normally, the name of the TV station or the number of the programme position is displayed under "Pos/Name". However, if the TV station information was not automatically set during Preset Download or Auto Setup due to adverse reception conditions, the "--" indication appears instead. In such a case, follow the operation steps below to correct it.

Press the **Channel** buttons **10** repeatedly to select the programme position on which the TV programme to be recorded will be broadcast.

Timer recording										
Pos	Start		Stop		SP	VPS				
Name	DATE	ON	OFF	LP	PDC	Min				
----	----	----	----	----	----	----	15:00	17:00	SP	120
----	----	----	----	----	----	----	----	----	----	----
----	----	----	----	----	----	----	----	----	----	----

"--" indication

After you have entered the information of a TV station, it remains stored in the VCR's memory, and you do not need to enter it again in the future.

## To Suspend the Timer Recording Standby Mode

See the previous page.

## Note:

- If the VCR is not put in the timer recording standby mode at the latest 10 minutes before the programmed timer recording starting time, the "□" indication flashes on the VCR display. In this case, press the **TIMER REC** button **20** to put the VCR in the timer recording standby mode.

# Other Timer Recordings and Convenient Functions

## Setting the Recording Date/Day(s)

Perform this operation in operation step 3 when programming a timer recording with the On Screen Display, or in operation step 4 when programming with the ShowView number. (See pages 21 and 22.)

You can select the recording date (day of the month/day of the week) by pressing the DATE button **1**. If you repeatedly press the + side of the DATE button **1**, the indication changes in the order shown below. If you press the - side of the DATE button **1**, the indication changes in the opposite order.

- Programming a timer recording (setting the date) is possible up to one month ahead of the TV programme's broadcasting date and time. Daily and weekly timer recordings will continue until you cancel them.



## Ensuring that a TV Programme Will Be Recorded until Its End (Auto SP/LP Change Function)

If, at the start of a timer recording, the VCR determines that the remaining tape time is insufficient to record the whole programme, the Auto SP/LP Change function automatically selects LP mode to ensure that the whole programme will be recorded. However, if the remaining tape time is still not sufficient even in the LP mode, the programme cannot be recorded to its end.

- This function cannot change the recording speed to the EP mode.
- If you programme a daily or weekly timer recording, recording will be performed in the LP mode from the start regardless of the remaining tape time.
- In case of a timer recording programmed with the VPS/PDC function, if the TV programme continues past the programmed ending time, the VCR automatically switches over to the LP mode at that moment. However, in some cases it may not be possible to record the programme until its end.
- Use a video cassette on which a few minutes more than the total length of programmed timer recordings remain, otherwise the programmed timer recordings may be performed in the LP mode.
- Be careful that the broadcast times of the TV programmes set for timer recording do not overlap, otherwise the programmed timer recordings may be performed in the LP mode.
- If the recording speed changes from SP to LP during a timer recording, some brief picture distortion occurs at that point.

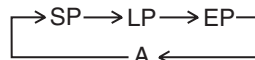
Condition for correct operation of the Auto SP/LP Change function:

- The tape length of the inserted cassette must be set correctly. (See page 48.)

### To Activate the Auto SP/LP Change Function:

In operation step 6 when programming a timer recording with the On Screen Display (see page 21), or in operation step 4 when programming with the ShowView number (see page 22), press the SP/LP button **21** to select "A".

- When you press this button repeatedly, the indication changes in the following order:



Timer recording											
Pos	Name	DATE	Start	Stop	SP	VPS	ON	OFF	LP	PDC	Min
ZDF	27/10	We	20:00	21:30	SP	ON	OFF	90			

Indication when "A" is selected

## Setting for Control of the Recording Starting and Ending Time by Special Signal Included in the Broadcasting Signal (VPS/PDC Function)

VPS stands for Video Programme System. PDC stands for Programme Delivery Control. If a TV programme, for example a football game runs longer than scheduled, is shortened or starts earlier or later, this function synchronises the recording start and stop with the actual broadcasting start and stop of the TV programme.

Conditions for correct operation of the VPS/PDC function:

- "ON" must be displayed under "VPS/PDC" on the On Screen Display.
- The TV station must broadcast VPS/PDC signals.
- The programme starting time must be set correctly to the starting time listed in the newspaper/magazine.

### To Activate the VPS/PDC Function:

In operation step 7 when programming a timer recording with the On Screen Display (see page 21), or in operation step 4 when programming with the ShowView number (see page 22), press the Cursor buttons (▲▼◀▶) **34** to make the ON indication appear.

See page 53 for details.

Timer recording											
Pos	Name	DATE	Start	Stop	SP	VPS	ON	OFF	LP	PDC	Min
ZDF	27/10	We	20:00	21:30	SP	ON	ON	90			

## Programming a Timer Recording of a Satellite Programme

The programming of a timer recording of a satellite programme can be performed in the same way as for normal (terrestrial) TV programmes.

For the connection to a satellite receiver and the necessary settings, refer to pages 38 to 40.

Conditions for correct operation of this function:

- When selecting the programme position, be sure to use the Numeric buttons **2** to select the satellite channel.

Example of selecting satellite programme positions 9, 19 and 129:

SAT 9: **0** → **0** → **9**

SAT 19: **0** → **1** → **9**

SAT 129: **0** → **1** → **2** → **9**

Timer recording											
Pos	Name	DATE	Start	Stop	SP	VPS	ON	OFF	LP	PDC	Min
AV2	SAT19				SP						

3-digit programme positions can be selected with this remote control only in case of a satellite receiver that is marked with (\*) on the enclosed list of compatible satellite receivers.

### Notes for Programming a Timer Recording of a Satellite Programme:

- When programming a timer recording of a satellite programme, it is not possible to activate the VPS/PDC function.
- On some satellite receivers, the power may be turned off for a few seconds before a timer recording is actually started and recording may not be performed for those first few seconds. To ensure recording from the beginning of the programme, we recommend that you set the recording start time about a minute earlier than that listed in the newspaper/magazine.
- After the timer recording has finished, some satellite receivers switch off automatically, but the recording has been performed as programmed.
- If a power failure occurs during the timer recording of a satellite programme, the timer recording may not resume when the power is restored.
- Timer recording of pay-per-view satellite programmes is not possible.
- Timer recording of satellite programmes from a satellite receiver or satellite receiver channel for which the PIN code has been entered is not possible.
- Timer recording of satellite programmes for which the parental control function has been activated is not possible.

## To Check the Contents of Timer Recording Programmings

- Display the VCR picture on the TV.
- Set the VCR/TV switch **32** to "VCR".

- 1 Press the PROG./CHECK button **12** to display the timer recording programmings on the TV screen.
  - When the VCR is in the timer recording standby mode for a VPS/PDC recording, the On Screen Display may be distorted.

- 2 Press the EXIT button **35** to exit the On Screen Display.

Timer recording											
Pos	Name	DATE	Start	Stop	SP	VPS	ON	OFF	LP	PDC	Min
ZDF	27/10	We	20:00	21:30	SP	ON					90
ARD	30/10	Sa	19:00	20:00	LP	ON					60
NS	Su		21:00	23:30	SP	ON					150
ZDF	Su-Sa		17:30	18:00	EP	ON					30

## To Change a Timer Recording Programming

It is not possible to change a programming while the timer recording is being performed.

- Display the VCR picture on the TV.
- Set the VCR/TV switch **32** to "VCR".

- 1 Press the PROG./CHECK button **12** to display the timer recording programmings on the TV screen.
- 2 Press the Cursor buttons (**▲▼**) **34** to select the programming that you want to change.
- 3 Follow the operations below to change the programmed contents.

To change the broadcasting station:

Use the Channel buttons **10**.

To change the date of the timer recording:

Use the DATE button **11**.

To change the recording starting time:

Use the ON button **23**.

To change the recording ending time:

Use the OFF button **22**.

To change the recording speed:

Use the SP/LP button **21**.

- 4 Press the OK button **36** to conclude the setting.
- 5 Press the EXIT button **35** to exit the On Screen Display.

Timer recording											
Pos	Name	DATE	Start	Stop	SP	VPS	ON	OFF	LP	PDC	Min
ZDF	27/10	We	20:00	21:30	SP	ON					90
ARD	30/10	Sa	19:00	20:00	LP	ON					60
NS	Su		21:00	23:30	SP	ON					150
ZDF	Su-Sa		17:30	18:00	EP	ON					30

## To Cancel the Programming of a Timer Recording

It is not possible to cancel a programming while the timer recording is being performed.

- Display the VCR picture on the TV.
- Set the VCR/TV switch **32** to "VCR".

- 1 Press the PROG./CHECK button **12** to display the timer recording programmings on the TV screen.

Timer recording											
Pos	Name	DATE	Start	Stop	SP	VPS	ON	OFF	LP	PDC	Min
ZDF	27/10	We	20:00	21:30	SP	ON					90
ARD	30/10	Sa	19:00	20:00	LP	ON					60
N3	Su		21:00	23:30	SP	ON					150
ZDF	Su-Sa		17:30	18:00	EP	ON					30

- 2 Press the Cursor buttons (**▲▼**) **34** to select the programming that you want to cancel.

- 3 Press the CANCEL button **14**.

Timer recording											
Pos	Name	DATE	Start	Stop	SP	VPS	ON	OFF	LP	PDC	Min
ZDF	27/10	We	20:00	21:30	SP	ON					90
ARD	30/10	Sa	19:00	20:00	LP	ON					60
ZDF	Su-Sa		17:30	18:00	EP	ON					30

- 4 Press the EXIT button **35** to exit the On Screen Display.

### Notes for Cancelling the Programming of a Timer Recording

In some cases, for example as listed below, the programming of a timer recording remains stored in the memory until 4 a.m. the next day. However, this is not a malfunction.

- When a timer recording was not performed up to the TV programme's ending time because the remaining tape time was not sufficient.
- When you have stopped the timer recording while it was being performed.

## To Check the Total Timer Recording Programming Time

The total time indication for timer recording programming lets you check how many programmes can be recorded by comparing with the remaining tape time in the VCR display.

----	----	----	----	----	----	----	----	----	----	----	----
6:07:30	16.10.05				Total (SP)						90

Indication for a total timer recording programming time of 90 minutes

- The total time is calculated in the SP mode.
- The total time cannot be calculated when setting Daily/Weekly timer recording.



# Tape Library System

This advanced system makes it quick and easy to check the contents of an inserted cassette. It can also be used to quickly find out which cassette in your collection contains a desired programme.

Whenever a cassette with an intact erasure prevention tab is inserted, the VCR first performs a brief check and then shows the number of the cassette and its contents on the On Screen Display. To start playback of the desired programme, simply select it on the On Screen Display and press the LIBRARY button **29**.

To index each recorded programme for the Tape Library System, this VCR automatically records the Library data (cassette number, title\*<sup>1</sup>, name of TV station\*<sup>2</sup>, recording time/date\*<sup>3</sup>, category\*<sup>4</sup>, etc.) and stores the data in the VCR's memory\*<sup>5</sup> when the recording is performed.

\*<sup>1</sup>In case of TV stations that broadcast with EPG (Electronic Programme Guide) information, the title of the TV programme is entered automatically. Otherwise, the name of the TV station or the programme position number is entered instead.

In case of a TV station without EPG information but with Teletext information, the title of the TV programme is entered automatically, provided the "Title page" is correctly set. (See page 44.)

\*<sup>2</sup>In case of a TV station with Teletext information, the name of the TV station is recorded automatically.

\*<sup>3</sup>The VCR's clock must be set correctly.

\*<sup>4</sup>In case of a TV station with EPG information, the programme category will be recorded automatically.

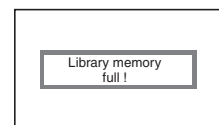
\*<sup>5</sup>The VCR's memory can hold a maximum of 600 programmes with titles of 8 characters (or up to 900 programmes with titles of fewer characters).

## Precautions for Recording:

- We recommend that you use new tapes for recording.
- Each recorded programme should have length of at least 15 minutes.
- Each recorded programme should have length of at least 25 minutes in the EP mode.
- If you copy a cassette with a cassette number, the tape library data may not be copied correctly. Therefore, the VCR's Tape Library System may not work correctly with such a copied cassette.
- When a new recording is made over existing recordings on a tape, the original programmes are deleted from the list.
- Before recording programmes, make sure that the tape length is set correctly on the On Screen Display. Otherwise, the tape position bar of the Tape Library data does not display the actual tape position. With some tapes, the bar indication is not accurate. (See page 48.)
- The VCR's power back-up system protects the Tape Library data in the memory in case of a power failure and stores it for up to 5 years when the VCR is not connected to an AC mains socket.
- When the recording is completed and you eject the cassette, the cassette number remains displayed on the VCR display for approximately 30 seconds. Be sure to write this number on the cassette label.



- When the VCR's entire memory area has been used up by the Tape Library data, or when cassette numbers 1 through 999 have all been used, the indication "Library memory full !" appears on the TV screen for several seconds when recording is completed. After this, recording is still possible but no new Tape Library data can be stored. In this case, delete the numbers of cassettes that you do not need any more before making further recordings. (See page 30.)



## How to Read the Tape Library Contents

Title:

For a programme from a TV station that provides EPG information; also from a TV station without EPG information but with Teletext information, provided the "Title page" is correctly set. (See page 44.)  
Manually adding or editing the title is also possible.

TV Station Name:

For a TV programme that was broadcast with Teletext information but without EPG information.

Programme Position Number:

For a TV programme that was broadcast with neither Teletext information nor EPG information.

Direct TV Rec:

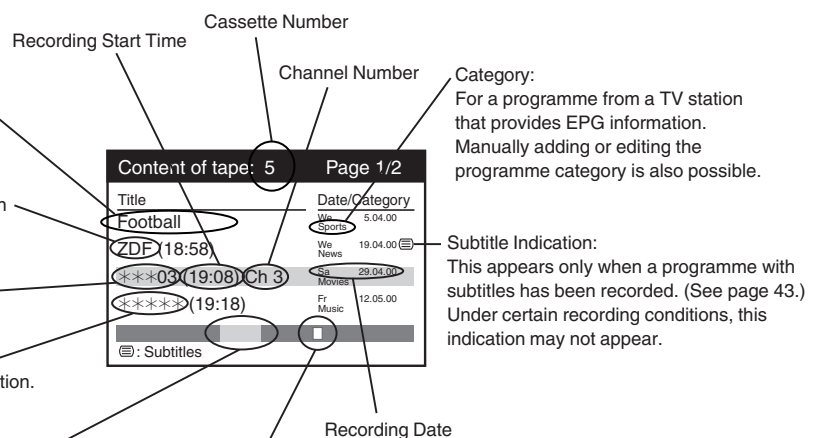
For a TV programme recorded with the Direct TV Recording function.

Programme Position Bar:

This shows the approximate position of the programme on the tape and its length.

Tape Position Bar:

This shows the approximate present tape position on the inserted cassette.





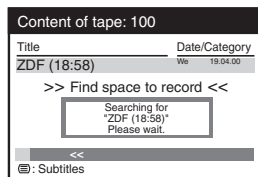
## To Check the Tape Library Data

### To Check What Programmes Are Recorded on the Inserted Video Cassette and To Play Back a Desired Programme

First, perform the operation steps explained on page 15.

Then press the Cursor buttons (▲▼◀▶) 34 to select the programme and then press the LIBRARY button 29.

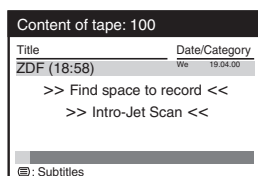
- After the selected programme has been found, the current tape contents list disappears and playback starts automatically.
- When you select the “Find space to record” indication at the bottom of the On Screen Display and press the LIBRARY button 29, the VCR automatically winds the tape to a position from which you can start recording.
- When you select the “Intro-Jet Scan” indication at the bottom of the On Screen Display and press the LIBRARY button 29, Intro-Jet Scan starts. (See page 32.)



### To Check the Cassette Number Again If the Cassette Number Check of a Cassette that Has a Cassette Number Did Not Work Correctly, or If You Cancelled the Cassette Number Check Midway:

- Rewind the tape to its beginning.

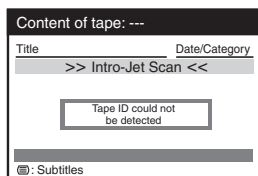
- 1 Press the LIBRARY button 29.
  - The Cassette Number Check starts automatically. Wait a few moments until the check is completed. When it is completed, the cassette number and its contents (recorded programmes) appear on the On Screen Display, and the cassette number appears on the VCR display.



(Example: When Cassette Number Check was completed successfully)

If the cassette number does not appear and the following indication is displayed:

Press the INDEX ►► button 27 once to start the search for a programme. When playback starts, wait a few moments and then press the LIBRARY button 29.



- If the cassette number still does not appear, repeat this process until it appears.

#### Hint:

- Even after you have pressed the Cursor buttons (▲▼) 34 to select the “Find space to record” and the VCR has located the tape position from which to make a new recording, we recommend you to confirm that this tape position is really suitable, before you start recording.

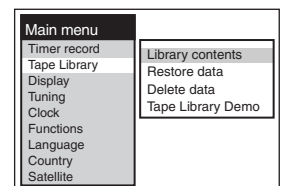
#### Note:

- In the case of certain cassettes, for example cassettes recorded on another NV-FJ710 model VCR or cassettes whose cassette number was deleted from the Tape Library data, the cassette number and contents (recorded programmes) are not displayed.

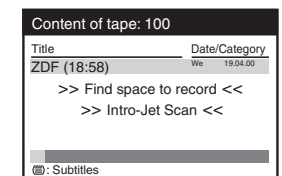
### To Check on Which Cassette a Desired Programme Is Recorded

If you press the LIBRARY button 29 when no cassette is inserted, operation steps 1 and 2 below are not necessary. In this case, start from operation step 3.

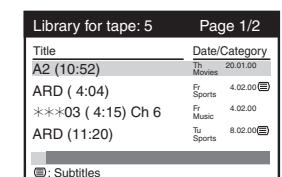
- 1 Press the MENU button 37 and then press the Cursor buttons (▲▼▶) 34 to select “Tape Library” and “Library contents” in this order.



- 2 Press the OK button 36.
  - If a cassette is already inserted, its cassette number and contents appear.



- If no cassette is inserted, the lowest cassette number and its contents appear.
- 3 Press the Cursor buttons (◀▶) 34 to display the contents of each cassette one after another, and search for the desired programme.



- 4 After you have found out which cassette contains the desired programme, insert that cassette into the VCR. (See page 15.)
- 5 To play back the desired programme, press the Cursor buttons (▲▼) 34 to select that programme and then press the LIBRARY button 29.
  - After the selected programme has been found, playback starts automatically.

## To Check the Tape Library's Contents by Cassette Number, Title, Category, or Recording Date

If you press the LIBRARY button **29** when no cassette is inserted, operation steps **1** and **2** below are not necessary. In this case, start from operation step **3**.

- 1 Press the MENU button **37** and then press the Cursor buttons (**▲▼▶**) **34** to select "Tape Library" and "Library contents" in this order.

- 2 Press the OK button **36**.

Library for tape: 5		Page 1/2
Title	Date/Category	
A2 (10:52)	20.01.00	Movies
ARD ( 4:04)	4.02.00	Fr Sports
*:*03 ( 4:15) Ch 6	4.02.00	Fr Music
ARD (11:20)	8.02.00	Tu Sports
Subtitles		

- 3 Press the Channel buttons (red) **10**, DATE button (green) **11**, ON button (yellow) **23** or OFF button (blue) **22**.

Pressing the above buttons displays a list of the recorded programmes as follows:

Channel (red) **10**:

By cassette number

DATE (green) **11**:

By title in alphabetical order.

ON (yellow) **23**:

The list of categories appears.

Press the Cursor buttons (**▲▼**) **34** to select the desired category and then press the OK button **36**.

The titles are now listed in alphabetical order.

OFF (blue) **22**:

By date (latest first)

Sorting by Tape Number		1/1
No.	Title	Date
Sorting in progress Please wait.		

Sorting by Tape Number		1/16
No.	Title	Date
1	ARD ( 9:07)	20.01.00
1	A3 ( 9:18)	20.01.00
1	A3 ( 9:23)	2.02.00
1	*:*04 ( 9:01) Ch 9	1.21.01
1	Football	1.02.01
1	ZDF (13:56)	10.02.00
1	BR3 (14:07)	10.02.00
2	*:*03 ( 9:30) Ch 6	20.01.00
2	*:*04 ( 9:42) Ch 9	20.01.00
3	ARD ( 9:38)	5.02.00
3	ARD (11:23)	3.02.00
3	ARD (12:11)	3.02.00
3	ARD ( 4:01)	4.02.00

(By cassette number)

- 4 Press the Cursor buttons (**▲▼◀▶**) **34** to select the desired programme (title).

Sorting by Tape Number		16/16
No.	Title	Date
96	*:*03 (15:05) Ch 6	10.02.00
97	*:*03 (15:27) Ch 6	10.02.00
98	ARD (15:53)	20.01.00
99	ARD (16:13)	20.01.00
100	ARD (19:35)	5.02.00
101	ARD (21:01)	20.01.00
101	ARD (17:18)	3.02.00
101	*:*04 (18:29) Ch 8	3.02.00
101	*:*04 (18:51) Ch 8	4.02.00

- 5 To play back the desired programme, insert the corresponding cassette.  
If the cassette that contains the desired programme is already in the VCR, this operation step **5** is not necessary.

- The Cassette Number Check starts immediately and the list of programmes disappears temporarily until the check is completed.
- If the cassette number does not appear on the VCR display, see page 27.

- 6 Press the LIBRARY button **29**.

- After the selected programme is found, the list of Library contents menu disappears and playback starts automatically.

Sorting by Tape Number		16/16
No.	Title	Date
96	*:*03 (15:05) Ch 6	10.02.00
97	*:*03 (15:27) Ch 6	10.02.00
98	ARD (15:53)	20.01.00
99	ARD (16:13)	20.01.00
100	ARD (19:35)	5.02.00
101	ARD	1.00
101	ARD	2.00
101	*:*04 (18:51) Ch 8	2.00
101		2.00

Searching for  
"\*:\*04 (18:51) Ch 8"  
Please wait.

### Hint:

- If you press the OK button **36** after performing operation step **4**, the menu for entering (or changing) a new title and category appears and you can enter (or edit) a new title and a category. (See page 29.)

## To Manually Enter or Editing a Title or Category

If you press the LIBRARY button 29 when no cassette is inserted, operation steps 1 and 2 below are not necessary. In this case, start from operation step 3.

- 1 Press the MENU button 37 and then press the Cursor buttons (▲▼▶) 34 to select "Tape Library" and "Library contents" in this order.
- 2 Press the OK button 36.
- 3 Press the Cursor buttons (◀▶) 34 to display the contents of each cassette one after another, and search for the programme whose title and/or category you want to enter (or change).

- 4 Press the Cursor buttons (▲▼) 34 to select the desired programme.

Library for tape: 1		Page 1/2
Title	Date/Category	
ARD ( 9:07)	Tu 20.01.00	
A3 ( 9:18)	Th 20.01.00	
A3 ( 9:23)	We 2.02.00	
***04 ( 0:01) Ch 9	Sa 1.01.00	

☰: Subtitles

- 5 Press the OK button 36.
  - The menu for entering (or changing) the title and/or category appears.

**Library Edit**

Tape 1

Old title: A3 ( 9:18)

Old category: News

New title: FOOTBALL

New category:

- 6 Press the Cursor button (▶) 34 to select the entry field for a new title and then press the Cursor buttons (▲▼◀▶) 34 and the OK button 36 to enter (or change) the title.

- Up to 22 characters can be entered for one title.
- To correct an input error, press the CANCEL button 14 and then enter the correct character.
- If you have entered a full 22 characters, you can skip operation step 7.

**Library Edit**

Tape 1

Old title: A3 ( 9:18)

Old category: News

New title: FOOTBALL

New category:

ABCDEFGHIJ  
 KLMNOPQRST  
 UVWXYZ  
 0123456789

- 7 After you have entered the title, press the MENU button 37. "New title" is now selected.

- 8 Press the Cursor button (▼) 34 to select "New category", and then press the Cursor button (▶) 34.

**Library Edit**

Tape 1

Old title: A3 ( 9:18)

Old category: News

New title: FOOTBALL

New category:

Category  
 Movies  
 News  
 Politics  
 Entertainment  
 Hobbies  
 Sports  
 Children's  
 Educational  
 Music  
 Arts/Culture  
 Series  
 Others-1  
 Others-2

- 9 Press the Cursor buttons (▲▼) 34 to select the desired category and then press the OK button 36.

**Library Edit**

Tape 1

Old title: A3 ( 9:18)

Old category: News

New title: FOOTBALL

New category:

Category  
 Movies  
 News  
 Politics  
 Entertainment  
 Hobbies  
 Sports  
 Children's  
 Educational  
 Music  
 Arts/Culture  
 Series  
 Others-1  
 Others-2

- 10 Press the MENU button 37.

**Library Edit**

Tape 1

Old title: A3 ( 9:18)

Old category: News

New title: FOOTBALL

New category: Sports

Really store changes ?

- 11 Press the OK button 36.
  - When you enter (or change) the title, the recording start time, which was displayed before, disappears.

Library for tape: 1		Page 1/2
Title	Date/Category	
ARD ( 9:07)	Tu 20.01.00	
FOOTBALL	Th 20.01.00	
A3 ( 9:23)	We 2.02.00	
***04 ( 0:01) Ch 9	Sa 1.01.00	

☰: Subtitles

- 12 Press the EXIT button 35 to exit the On Screen Display.

# To Delete the Tape Library Data

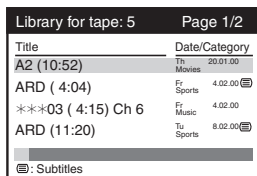
**Caution:**

The Tape Library system offers a convenient back-up option, in case you later regret having deleted the Tape Library data. To have this option available, make sure you know on which cassette you recorded last before the deletion. If that cassette is not available, record for at least 15 minutes on any cassette. (25 minutes in the EP mode)  
 Either of these two cassettes can then be used to restore the Tape Library that you have deleted.  
 (To restore the Tape Library data, see page 31.)

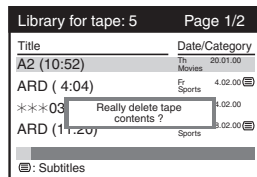
## To Delete the Tape Library Data of a Single Video Cassette

If you press the LIBRARY button 29 when no cassette is inserted, operation steps 1 and 2 below are not necessary. In this case, start from operation step 3.

- 1 Press the MENU button 37 and then press the Cursor buttons (▲▼▶) 34 to select "Tape Library" and "Library contents" in this order.
- 2 Press the OK button 36.
- 3 Press the Cursor buttons (◀▶) 34 to search for the cassette whose Tape Library data you want to delete.

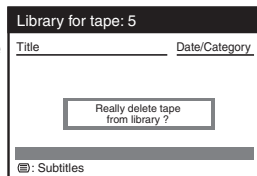


- 4 When you have found the desired cassette, press the CANCEL button 14.



- 5 If you are sure to delete the cassette's contents, press the OK button 36.

- The cassette's Tape Library data are now deleted from the VCR's Tape Library.



- If you also want to delete the cassette number from the VCR's Tape Library, press the OK button 36 again to delete the cassette number.  
 If you want to keep the cassette number, press the EXIT button 35 instead of the OK button 36.

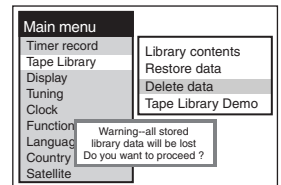
- 6 Press the EXIT button 35 to exit the On Screen Display.

**Hint:**

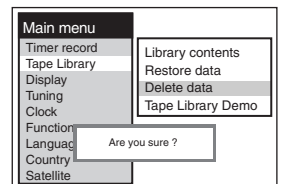
- Even if you delete a cassette's contents from the Tape Library while that cassette is in the VCR, this does not erase the actual programmes recorded on the cassette.

## To Delete All the Tape Library Data Stored in the VCR's Memory

- 1 Press the MENU button 37 and then the Cursor button (▲▼) 34 to select "Tape Library".
- 2 Press the Cursor buttons (▶▼) 34 to select "Delete data".
- 3 Press the OK button 36.



- 4 Press the OK button 36 again.



- 5 Press the OK button 36 again if you are sure that you want to delete all the stored data from the VCR's Tape Library.
  - If you do not want to delete the stored data from the VCR's Tape Library after all, press the EXIT button 35.
- 6 Press the EXIT button 35 to exit the On Screen Display.

## To Restore Deleted Tape Library Data

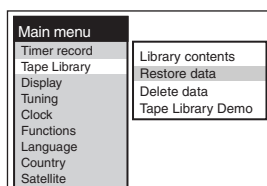
### Caution:

The Tape Library system offers a convenient back-up option, in case you later regret having deleted the Tape Library data. To have this option available, make sure you know on which cassette you recorded last before the deletion. If that cassette is not available, record for at least 15 minutes on any cassette. (25 minutes in the EP mode)

Either of these two cassettes can then be used to restore the Tape Library that you have deleted.

1 Press the MENU button **37** and then the Cursor buttons (▲▼) **34** to select "Tape Library".

2 Press the Cursor buttons (▶▼) **34** to select "Restore data".



3 Press the OK button **36**.

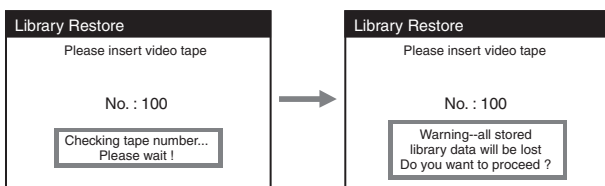
4 The number of the cassette which you need to restore the Tape Library data appears.

- Make a note of this cassette number.

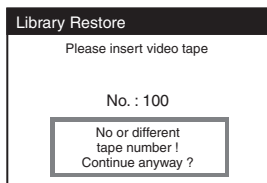


5 Insert the cassette which has the indicated cassette number.

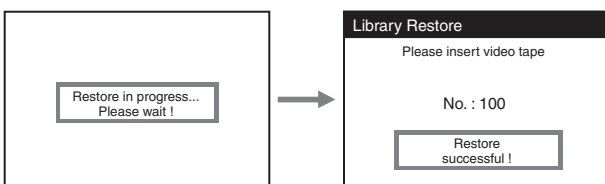
- The restoration of Library data now starts automatically. It takes some time for this process to be completed.



- If you insert a cassette with the wrong cassette number, the following indication appears. In this case, the data cannot be completely restored, even if you continue by performing operation step 6.



6 Press the OK button **36**.



7 Press the EXIT button **35** to exit the On Screen Display.

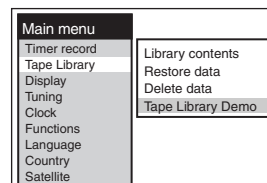
### Hint:

- If you press the Stop button **9** while the Tape Library Data is being restored, the warning indication "Restore not successful !" appears.

## To Demonstrate the Tape Library System

1 Press the MENU button **37** and then the Cursor buttons (▲▼) **34** to select "Tape Library".

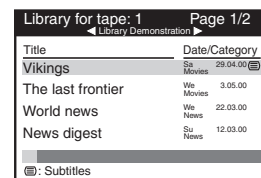
2 Press the Cursor buttons (▶▼) **34** to select "Tape Library Demo".



3 Press the OK button **36**.

4 Follow the operations on pages 27–30 to demonstrate checking, editing, or deleting the Tape Library data.

- Any changes (Library Edit, Delete) made to the data at this time are not actually reflected.



5 Press the EXIT button **35** to exit the On Screen Display.

# Search Functions

## To Quickly Find the Beginning of a Desired Programme (VISS=VHS Index Search System)

This VCR automatically records special index signals on the tape every time a recording is started. The Index search function makes use of these index signals to let you find the beginning of a desired programme quickly and easily.

Index signals are automatically recorded in the following cases:

- When you start a recording by pressing the REC button 26, REC/OTR button 51 or DIRECT TV REC button 6.
- When a timer recording starts.
- When you press the REC button 26 on the remote control during recording.

Conditions for correct operation of the Index search function:


- The VCR must be in the stop mode or in the playback mode.
- Each programme recorded on the tape must be at least 5 minutes long.

### Preparations

- Display the VCR picture on the TV.
- Insert a recorded video cassette.

As soon as the cassette is inserted, the Cassette Number Check starts. Wait a few moments until it is completed. (See page 15.)

### Operation

- 1 Press the INDEX button 27 (that corresponds to the direction from the current tape position in which the desired programme is located on the tape) to start the index search. For example, if you want to search for the 2nd recorded programme in forward direction, press the INDEX ►► button 27 twice.  

  - The VCR fast-forwards or rewinds the tape and searches for the specified index signal (the beginning of the desired recorded programme).  
When it has been found, playback starts automatically.

### To Cancel the Index Search or to Stop Playback:

Press the Stop button 9.

### Hints:

- Searching in either direction is possible up to the 20th index signal.
- If you press either of the INDEX buttons 27 too many times, simply press the other INDEX button 27 (indicating the opposite direction) to correct it. In this way, you can reduce the displayed figure down to 1.
- The figure on the VCR display decreases by 1 every time an index signal is located.

## To Search for a Desired Programme While Checking the Recorded Contents on a Cassette (Intro-Jet Scan)

This VCR automatically records special index signals on the tape every time a recording starts. The Intro-Jet Scan function makes use of these index signals to play back the beginning of each programme recorded on the cassette one after another at high speed. This lets you quickly and easily check the contents of a cassette and find a desired programme.

Index signals are automatically recorded in the following cases:

- When you start a recording by pressing the REC button 26, REC/OTR button 51 or DIRECT TV REC button 6.
- When a timer recording starts.
- When you press the REC button 26 on the remote control during recording.

Conditions for correct operation of the Intro-Jet Scan function:

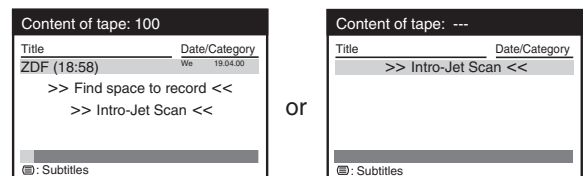
- The cassette must have been ejected after the timer recordings were performed.
- VCR must be switched on, be in the playback mode or be in the standby mode.
- Each programme recorded on the tape must be at least 15 minutes long.

### Preparations

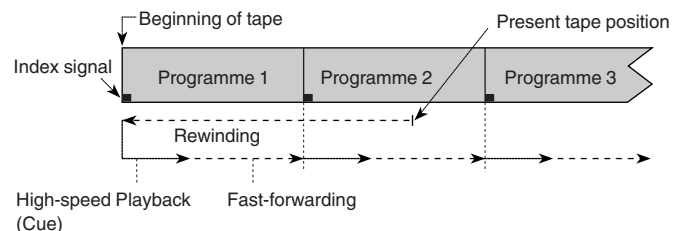
- Display the VCR picture on the TV.
- Insert a recorded video cassette.

### Operations

- 1 Insert a pre-recorded video cassette.  
If a cassette is already in the VCR, press the LIBRARY button 29.
  - As soon as the cassette is inserted, the Cassette Number Check starts. Wait a few moments until it is completed. (See page 15.)  
If the "Intro-Jet Scan" indication does not appear on the TV screen, press the LIBRARY button 29 to make it appear.



- 2 Press the Cursor buttons (▲▼) 34 to select the "Intro-Jet Scan" indication and then press the LIBRARY button 29 to start the Intro-Jet Scan.
  - After rewinding the tape to the beginning, the VCR plays it back at high speed for approximately 10 seconds. It then fast-forwards the tape to the next tape position marked by an index signal (beginning of a programme), and every time an index signal is found, the VCR switches over to high-speed playback (Cue) for about 10 seconds.



- 3 When you have found the programme that you want to view, press the Play button 25 to start normal playback.

### To Cancel the Intro-Jet Scan or to Stop Playback:

Press the Stop button 9.

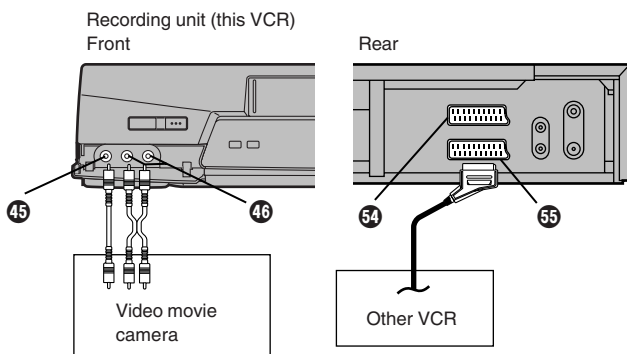


# Editing

## Assemble Editing

The assemble editing function makes it easy to record the picture and sound of virtually any number of scenes or programmes in succession.

Assemble editing from an external source, for example from a video movie camera, can be performed in the same way.



### Preparations

- Connect a video movie camera or a VCR to this VCR with an audio/video cable or a 21-pin Scart cable, as shown in the illustration.
- Display the VCR picture on the TV.
- Insert the cassette on which the assemble editing is to be performed, and make sure that its erasure prevention tab is not broken out.  
As soon as the cassette is inserted, the Cassette Number Check starts. Wait a few moments until it is completed. (See page 15.)
- Set the VCR/TV switch ⑫ to "VCR".
- Press the INPUT SELECT button ③ to select the AV Input (external input) "A1", "A2" or "A3" according to the socket(s) on the VCR to which the source unit has been connected.

A1: When connected to the AV1 21-pin Scart socket ⑤④

A2: When connected to the AV2 21-pin Scart socket ⑤⑤

- Make sure that "AV2" is set to "EXT".

(See page 50.)

A3: When connected to the Video Input socket ④⑤ and Audio Input sockets ④⑥ on the front panel of the this VCR

- Use the L connector for operations in the normal (monaural) mode.

### Operations

- 1 Press the Play button ②⑤ to start playback.
- 2 At the point where you want to join a new scene, press the Pause/Slow button ⑦ to put it in the still playback mode.
- 3 Press the REC button ②⑥ to put it in the recording pause mode.
- 4 Start playback on the source unit and search for the point from which you want to record (copy) onto this VCR.

- 5 When that point is reached, press the Pause/Slow button ⑦ again to start recording the new picture and sound from the playback unit.
- 6 To record (copy) additional scenes, press the Pause/Slow button ⑦ to put this VCR in the recording pause mode and then perform steps 4 and 5 again.
- 7 At the point where you want to stop recording, press the Stop button ⑨ to finish recording.

### Hints:

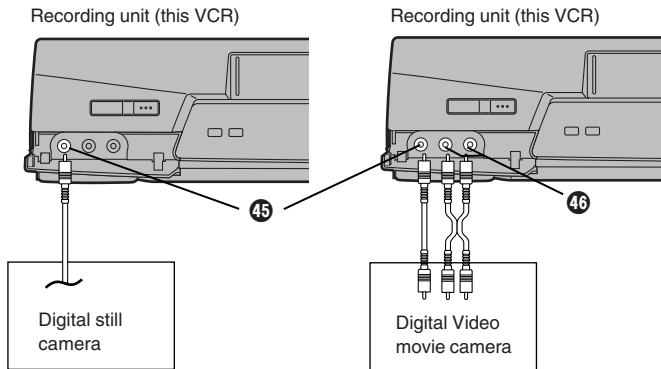
- The new sound is recorded on both the Hi-Fi audio tracks and the normal audio track. The sound recorded on the normal audio track is always in mono.
- If you want to change the audio recording level, adjust it. (See page 20.)

### Note:

- If you leave the VCR in the recording pause mode for more than 5 minutes in step 3 or 6, the VCR automatically switches over to the stop mode to protect the video heads.

# Album Function


The album function lets you collect desired scenes (both moving and still pictures) and create the equivalent of a photo album, but on video cassette. The pictures can be copied onto the cassette from a digital video movie camera, a digital still camera or a digital VCR for any desired time that you can preset.



## Preparations

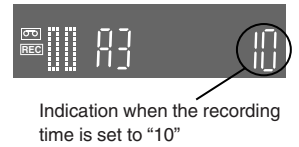
- Connect a digital still camera, a digital video movie camera or another external digital source to the Video Input socket 45 and Audio Input sockets 46 on the front panel of this VCR.
- Display the VCR picture on the TV.
- Insert a cassette with intact erasure prevention tab.  
As soon as the cassette is inserted, the Cassette Number Check starts. Wait a few moments until it is completed. (See page 15.)

## Operations

- 1 Press the STILL ALBUM button 16 on the remote control to put the VCR in the recording pause mode.
  - The VCR automatically selects the AV Input (external input) "A3" and then switches over to the recording pause mode. The figure for the preset recording time (seconds) appears on the VCR display. The initial setting is "05" (5 seconds).
- 2 Start playback on the source unit to search for the point from which you want to copy onto this VCR.
- 3 When that point is reached, press the STILL ALBUM button 16 on the remote control of this VCR again to start recording. The VCR records the picture (and sound) for 5 seconds and then automatically switches over to the recording pause mode.
 
- 4 Repeat above steps 2 and 3 to record other scenes in succession.
- 5 When you have recorded all desired scenes, press the Stop button 9 to finish recording.

## To Change the Recording Time:

After step 1 or 3, press the INDEX ►► or INDEX ◄◄ button 27 to change the recording time. You can set any time between "3" and "20" seconds.

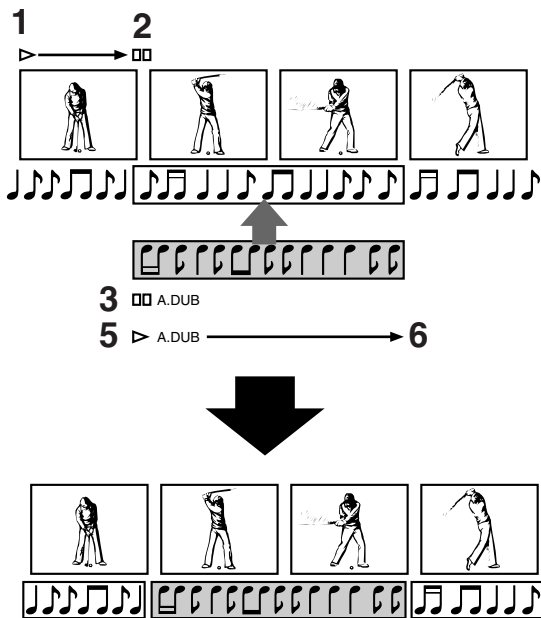
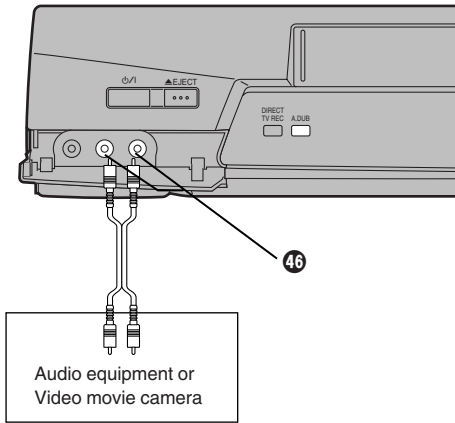


## Hints:

- If you connect a digital still camera, use a camera equipped with the video output socket. Use the cable supplied with the still camera to connect it. For details, also read the operating instructions of the equipment to be connected.
- If you leave the VCR in the recording pause mode for more than 5 minutes in step 1 or 3, the VCR automatically switches over to the stop mode to protect the video heads. In this case, press the STILL ALBUM button 16 again to put the VCR in the recording pause mode again.
- If you want to add background music or narration to the scenes recorded with the album function, perform Audio Dubbing as explained on the next page.
- Depending on the output system of the digital still camera, the pictures may not be recorded correctly.
- If you dub still pictures from a conventional analogue video movie camera or VCR, some picture distortion may occur in the recorded picture.

# Audio Dubbing

The audio dubbing function lets you record new sound onto the normal (mono) audio track. Although this erases the original sound on the normal audio track, the sound on the Hi-Fi audio tracks remains unchanged. Use this function to add narration or background music to a previously made recordings.

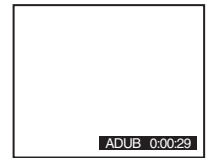


## Preparations

- Connect the audio equipment or a video movie camera to this VCR with an audio cable.
- Display the VCR picture on the TV.
- Insert the cassette on which the audio dubbing is to be performed, and make sure that its erasure prevention tab is not broken out.  
As soon as the cassette is inserted, the Cassette Number Check starts. Wait a few moments until it is completed. (See page 15.)
- Press the INPUT SELECT button (3) to select the AV Input (external input) "A1", "A2" or "A3" according to the socket(s) on the VCR to which you have connected the source unit.
  - A1: When connected to the AV1 21-pin Scart socket (54)
  - A2: When connected to the AV2 21-pin Scart socket (55)
    - Make sure that "AV2" is set to "EXT". (See page 50.)
  - A3: When connected to the Audio Input sockets (46) on the front panel of this VCR
    - Use the L connector for operations in the normal (monaural) mode.

## Operations

- 1 Press the Play button (25) on this VCR to start playback to search for the point from which you want to start audio dubbing.
- 2 At the point from which you want to perform audio dubbing, press the Pause/Still button (52) on this VCR to put it in the still playback mode.
- 3 Press the A.DUB button (47) on this VCR to put it in the recording pause mode.
- 4 Start playback on the source unit so that you can hear the sound.
- 5 When you reach the point from which you want to start audio dubbing, press the Pause/Still button (52) on this VCR again to start recording the new sound or start your narration.
- 6 At the point where you want to stop audio dubbing, press the Stop button (9) to finish recording.



## Hints:

- The new sound is recorded on the normal audio track. The original sound remains on the Hi-Fi audio tracks. The sound recorded on the normal audio track is always in mono.
- For audio dubbing with narration, you can use the built-in microphone of the connected video movie camera.
- If you want to change the audio recording level, adjust it. (See page 20.)
- To listen to the sound recorded with audio dubbing, press the AUDIO button (15) during playback to select the normal audio track. (For details, refer to page 16.)
- To listen to the sound recorded with audio dubbing together with the original sound, first set "Audio mode" to "MIX" (for details, refer to page 51) and then press the AUDIO button (15) during playback to select the mixed sound.

## Audio Dubbing on a Panasonic Hi-Fi VCR

### General

- The VHS format allows audio dubbing only on the normal (mono) audio track, as the Hi-Fi audio tracks cannot be re-recorded without erasing the video signal.

### A. Audio Dubbing and then Playing Back the Audio-Dubbed Mono Sound Alone

- 1 Press the INPUT SELECT button **3** to select the AV input terminal to which the audio dubbing source unit is connected.
- 2 Press the Play button **25** to search for the tape position at which the audio dubbing is to start.
- 3 Press the AUDIO button **15** repeatedly until the “—” indication appears.
  - The normal audio track is now selected.
- 4 Press the Pause/Still button **52** at this position.
- 5 Press the A.DUB button **47** to switch the VCR over to the audio dubbing mode.
- 6 Press the Pause/Still button **52** to start audio dubbing.
- 7 After audio dubbing has been completed, rewind the tape, play it back and make sure that the normal audio track is selected (see step 3 above).
- 8 Check if the audio dubbing was performed to your satisfaction.

### B. Audio Dubbing and then Playing Back the Audio-Dubbed Mono Sound and Original Hi-Fi Sound Together (Hi-Fi Mix Function)

- 1 Press the INPUT SELECT button **3** to select the AV input terminal to which the audio dubbing source unit is connected.
- 2 Press the Play button **25** to search for the tape position at which the audio dubbing is to start.
- 3 Press the AUDIO button **15** repeatedly until the “L R” indication appears.
  - The Hi-Fi audio tracks are now selected.
- 4 Press the Pause/Still button **52** at this position.
- 5 Press the A.DUB button **47** to switch the VCR over to the audio dubbing mode.
- 6 Press the Pause/Still button **52** to start audio dubbing.
- 7 After audio dubbing has been completed, rewind the tape, play it back and set “Audio mode” to “MIX”.  
(For details, refer to page 51.)
- 8 Check if the audio dubbing was performed to your satisfaction. The original sound and the new sound are heard simultaneously (mixed together).

### C. Externally Mixing the Sound from the Hi-Fi Tracks with the New Sound for Audio Dubbing and then Playing It Back (To produce audio-dubbed tapes for playback on mono VCRs)

- 1 Press the INPUT SELECT button **3** to select the AV input terminal to which the audio dubbing source unit is connected.
- 2 Press the Play button **25** to search for the tape position at which the audio dubbing is to start.
- 3 Press the AUDIO button **15** repeatedly until the “L R” indication appears.
- 4 Press the Pause/Still button **52** at this position.
- 5 Press the A.DUB button **47** to switch the VCR over to the audio dubbing mode.
  - Input both the original signals of the Hi-Fi tracks (from the AV1, AV2 or the Audio Output sockets) and the new sound into a mixing console (optional), and then input the mixed sound back into the VCR (via the AV1, AV2 or AV3 socket) for audio dubbing.
- 6 Press the Pause/Still button **52** to start audio dubbing.
- 7 After audio dubbing has been completed, rewind the tape, play it back and press the AUDIO button **15** repeatedly until the “—” indication appears.
  - The normal audio track is now selected.
- 8 Check if the audio dubbing was performed to your satisfaction. The original sound and the new sound are heard simultaneously (mixed together).

# Connecting the VCR to a Decoder/ Connecting the VCR to a Stereo Amplifier

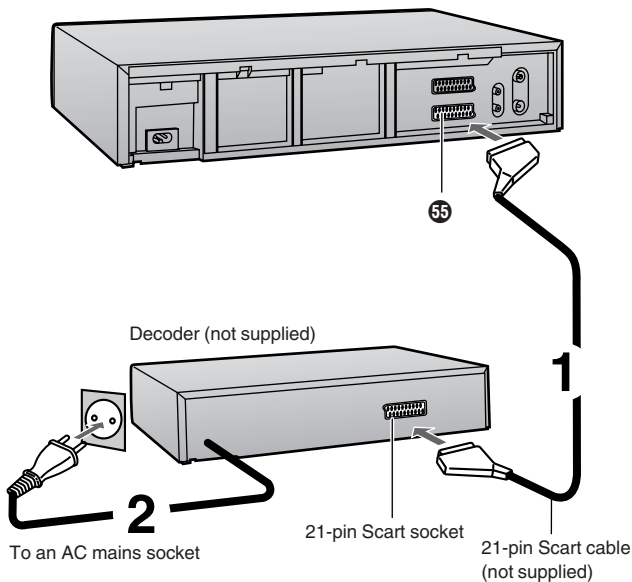
To connect this VCR to a decoder or a stereo amplifier, make the connections shown in the illustration below. For the connection to the TV, see pages 10 and 12.

For details about the connection, also read the operating instructions of the decoder or stereo amplifier.

Be sure to keep the VCR, TV and decoder or stereo amplifier switched off until you have finished all connections. For your safety, do not connect or handle the equipment with wet hands.

## To Connect the VCR to a Decoder

Decoder here refers to the device used to decode scrambled broadcasts (Pay TV).



- 1 Connect a 21-pin Scart cable (not supplied) to the AV2 21-pin Scart socket 55 on the VCR and to the 21-pin Scart socket on the decoder.
- 2 Connect the decoder's mains lead to an AC mains socket.
- 3 Set "AV2" to "DECODER".  
For details, see page 50.

## AV Link Function

If the VCR is connected to the TV via a 21-pin Scart cable, you can use the AV LINK button 46 to switch the TV from normal TV reception over to the video playback channel (AV input) (and vice versa). In the VCR mode (when the VCR indication in the VCR display is lit), the TV is switched to the video playback channel (AV input). In the TV mode (when the VCR indication is not lit), the TV is switched to TV reception.

	VCR	TV
<b>VCR Mode</b>	VCR indication is lit.	AV Input is selected.
<b>TV Mode</b>	VCR indication is not lit.	TV reception is selected.

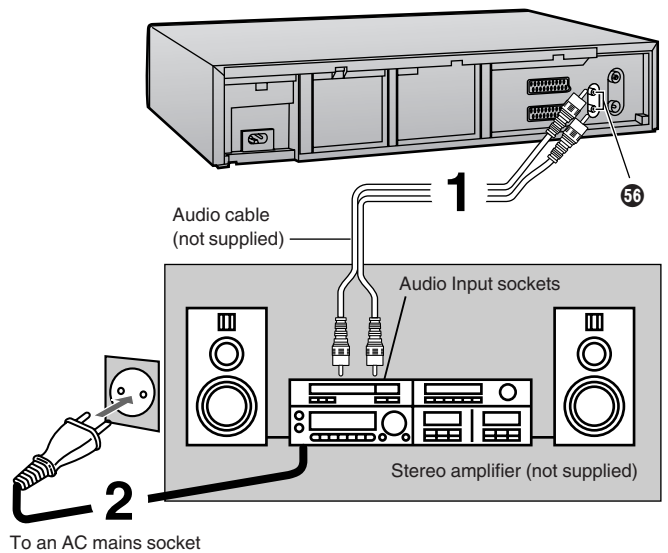
- When you press the MENU button 47 to display the menu on the TV screen, the TV is also automatically switched to the VCR mode, however, the VCR indication does not appear in this case.

- When you start playback on the VCR, the TV is automatically switched to the VCR mode. However, during playback, it is not possible to switch the TV back to the TV mode.
- If a Pay TV station has been selected on the VCR when you switch to the TV mode, the picture on the TV is scrambled when you select a Pay TV station on the TV. In this case, either switch to the VCR mode or select the AV input on the TV.

## Hint:

- "RGB" means separate Red/Green/Blue colour signals. If you connect a TV equipped with RGB input capability to the AV1 socket 54 on this VCR, and a decoder equipped with RGB output capability to the AV2 socket 55, the TV can receive RGB signal input from the decoder via the VCR.

## To Connect the VCR to a Stereo Amplifier



- 1 Connect an Audio cable (not supplied) to the Audio Output sockets 56 on the VCR and to Audio Input sockets on the stereo amplifier.
- 2 Connect the stereo amplifier's mains lead to an AC mains socket.

# Connecting the VCR to a Satellite Receiver or Digital Receiver

Satellite receiver here includes a digital receiver.

The connection method differs depending on the type of your satellite receiver.

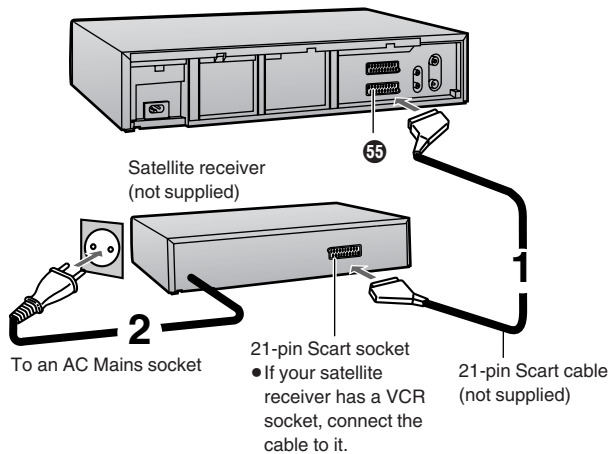
For details about the connection, also read the satellite receiver's operating instructions.

## If the Satellite Receiver is Equipped with a 21-pin Scart Socket

If your satellite receiver is equipped with a 21-pin Scart socket, use a 21-pin Scart cable to connect the VCR.

For the connection to the TV, refer to pages 10 and 12.

Be sure to keep the VCR, TV and satellite receiver switched off until you have finished all connections. For your safety, do not connect or handle the equipment with wet hands.



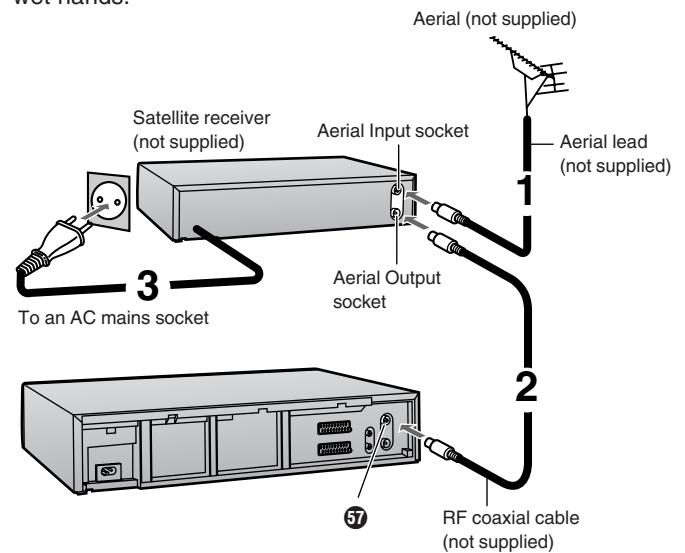
- 1 Connect a 21-pin Scart cable (not supplied) to the AV2 21-pin Scart socket 55 on the VCR and to the 21-pin Scart socket on the satellite receiver.
- 2 Connect the satellite receiver's mains lead to an AC mains socket.
- 3 Set "AV2" to "TIMER" or "EXT". For details, see page 50.

## If the Satellite Receiver Is Not Equipped with a 21-Pin Scart Socket

In case your satellite receiver is not equipped with a 21-pin Scart socket, use the RF coaxial cable to connect it to the VCR.

For the connection to the TV, refer to pages 10 and 12.

Be sure to keep the VCR, TV and satellite receiver switched off until you have finished all connections. For your safety, do not connect or handle the equipment with wet hands.



- 1 Connect the aerial lead to the Aerial Input socket on the satellite receiver.
- 2 Connect the RF coaxial cable to the Aerial Output socket on the satellite receiver and to the Aerial Input socket 57 on the VCR.
- 3 Connect the satellite receiver's mains lead to an AC mains socket.

### Hint:

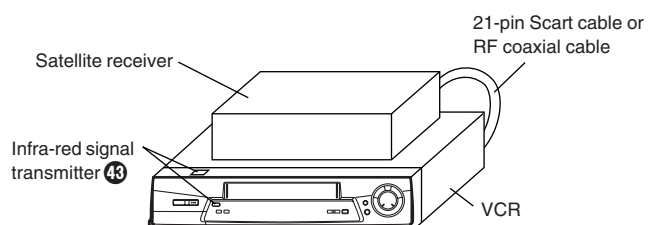
- The RF output channel of the satellite receiver should be adjusted away from channel 36, which is used by the VCR, e.g. re-adjust to channel 33.

### Note:

#### How to install the satellite receiver

Carefully observe the following points so that you can control the satellite receiver from the VCR.

- 1 Place the satellite receiver on top of the VCR.
- 2 Move the satellite receiver back a few centimetres so that infra-red signals emitted from the top of the VCR's front panel can be received by the satellite receiver.





## To Prepare the VCR for Remote-controlled Operation of the Satellite Receiver (Setting the Tuner Type)

This VCR lets you change the programme position on the satellite receiver and programme timer recordings of satellite programmes—all with this VCR's remote control. This is called "satellite control".

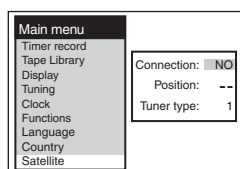
To enable the VCR to control the satellite receiver, you need to set the tuner type of your satellite receiver. You can find the tuner type numbers on the enclosed list of compatible satellite receivers. However, if your satellite receiver is not included in this list, it cannot be remote-controlled via this VCR.

### Preparation

- Set the VCR/TV switch **32** to "VCR".

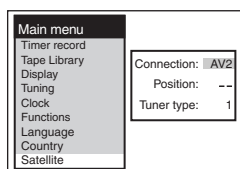
### Operations

- 1 Press the MENU button **37** to display the Main menu on the TV screen.



- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Satellite", "Connection" and "NO" in this order.

- 3 Press the Cursor buttons (**▲▼**) **34** to select the type of connection according to the type of socket on the VCR to which the satellite receiver is connected.



NO: When the satellite receiver is not connected to the VCR

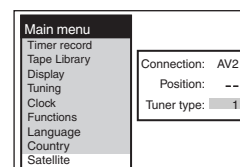
RF: When the satellite receiver is connected to the VCR's Aerial Input socket

AV1: When the satellite receiver is connected to the VCR's AV1 21-pin Scart socket

AV2: When the satellite receiver is connected to the VCR's AV2 21-pin Scart socket

- 4 Press the OK button **36**.
- 5 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Tuner type" and "1" in this order.

- 6 Find your receiver in the enclosed list of compatible satellite receivers and enter its tuner type number by pressing the Numeric buttons **2**.



- 7 Press the OK button **36** to conclude the setting.
- 8 Press the EXIT button **35** to exit the On Screen Display.

### Hint:

- If you select "RF" in step 3, "Satellite – Position" is set automatically and it is not possible to change the satellite programme position here. If you want to change it, refer to page 41.

### Note:

- If your satellite receiver is not included in the list of compatible satellite receivers, this VCR cannot control it.

## To Prepare the Satellite Receiver

To make it possible for the VCR to control the satellite receiver, the satellite receiver must be left in a certain condition. This condition is called standby type, and it differs depending on the make and model of satellite receiver. There are five standby types (A, B, C, D, E) as listed below. Find your satellite receiver in the enclosed list of compatible satellite receivers and note its standby type. Then look up this standby type in the chart below and determine which action(s) you need to take to prepare your satellite receiver so that this VCR can control it.

Standby Typ	A	B	C	D	E
Action 1	Yes	No	Yes	Yes	Yes
Action 2	No	No	No	Yes	Yes
Action 3	No	No	Yes	No	Yes

Action 1: Switch the satellite receiver on.

Action 2: Twin-tuner type satellite receiver: Select on the tuner which is connected to the VCR.  
(Please also refer to the satellite receiver's operating instructions.)

Action 3: Switch the satellite receiver's channel display to the 2-digit display mode.

- Some satellite receivers offer less than 99 channels. In this case, the number of the satellite channels that can be controlled from the VCR is the same.
- Some satellite receivers offer more than 99 satellite channels, but even in this case, only the satellite channels 1 through 99 can be controlled from the VCR.
- With some satellite receivers, it is necessary to wait a few seconds between selecting one channel and selecting another one with the remote control of the VCR.
- If the display on the satellite receiver does not indicate the channels, refer to its operating instructions and follow the procedure for displaying the channels.

## To Check that the Satellite Channels Can Be Selected Correctly




### Preparation

- Set the VCR/TV switch  to "VCR".



### Operations

- 1 Press the Numeric buttons  to select the satellite channel.

Example:

To select "SAT 9": Enter  →  →  .


To select "SAT 19": Enter  →  →  .

To select "SAT 129": Enter  →  →  →  .

3-digit programme positions can be selected with this remote control only in case of a satellite receiver that is marked with (\*1) on the enclosed list of compatible satellite receivers.

- 2 Check that the channel on the satellite receiver has been changed to the channel that you selected.

### Notes:

- After you have finished all settings and preparations, use the VCR's remote control to check that the satellite programmes can be selected correctly and timer recordings of satellite broadcast can be performed correctly.
- With some satellite receivers, correct control from the VCR may not be possible.
- There may be a slight delay between pressing the Numeric buttons  on the remote control and the changing of the channel on the satellite receiver. This is due to the need for signal conversion.
- The range of satellite channels available for selection is 1 through 99.

# Tuning and Assigning the TV Stations Available in Your Area to the Programme Positions (Manual Tuning)

This VCR has 99 programme positions that can be preset to receive TV stations.

Usually, if you switch the VCR on for the first time after making the necessary connections, the VCR will start the Download or Auto Setup function automatically so that all available TV stations in the area can be received.

However, if Auto Setup is not successful due to extraordinary transmission circumstances, or if you want to change the name of a TV station or change a TV station from its regular programme position to one of your preference, you can set it up manually. This is called Manual Tuning.

If Download from the TV occurs after you have performed Manual Tuning, the manually performed tuning may be cancelled.

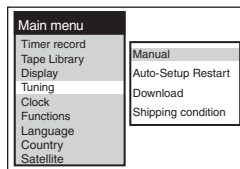
In that case, perform Manual Tuning again.

## Preparation

- Set the VCR/TV switch **32** to "VCR".

## To Change the Order in Which the TV Stations Are Assigned to the Programme Positions

- 1 Press the MENU button **37** to display the Main menu on the TV screen.
- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Tuning" and "Manual" in this order.



- 3 Press the OK button **36** to display the list of tuned TV stations.
- 4 Press the Cursor buttons (**▲▼**) **34** to select the TV station that you want to assign to a different programme position.

Tuning					
Pos	Name	Ch	Pos	Name	Ch
1	ARD	1	11	----	----
2	ZDF	2	12	----	----
3	N3	19	13	----	----
4	HR3	26	14	----	----
5	BR3	18	15	----	----
6	RB3	3	16	----	----
7	*:*:*07	39	17	----	----
8	----	----	18	----	----
9	----	----	19	----	----
10	----	----	20	----	----

- 5 Press the OK button **36** to display the Manual Tuning menu.
- 6 Press the Cursor buttons (**▲▼◀▶**) **34** to select the entry field for "Pos".

Tuning	
Pos	: 5
Name	: BR3
Channel	: 18
Fine tuning	: AUTO
Decoder	: OFF
Video system	: PAL
Subtitles	: 150
Title page	: 301

- 7 Press the Numeric buttons **2** to enter the number of the desired programme position.
- 8 Press the OK button **36** to conclude the setting.
- 9 Press the EXIT button **35** to exit the On Screen Display.

## To Enter or Change the Name of a TV Station

- 1 Press the MENU button **37** to display the Main menu on the TV screen.
- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Tuning" and "Manual" in this order.
- 3 Press the OK button **36** to display the list of tuned TV stations.

Tuning					
Pos	Name	Ch	Pos	Name	Ch
1	ARD	1	11	----	----
2	ZDF	2	12	----	----
3	N3	19	13	----	----
4	HR3	26	14	----	----
5	BR3	18	15	----	----
6	RB3	3	16	----	----
7	*:*:*07	39	17	----	----
8	----	----	18	----	----
9	----	----	19	----	----
10	----	----	20	----	----

- 4 Press the Cursor buttons (**▲▼◀▶**) **34** to select a programme position whose TV station name is indicated as \*□□□□.

- 5 Press the OK button **36** to display the Manual Tuning menu.

Tuning	
Pos	: 7
Name	: SFB3
Channel	: 39
Fine tuning	: AUTO
Decoder	: OFF
Video system	: PAL
Subtitles	: ---
Title page	: ---

A	B	C	D	E	F	G	H	I	J
K	L	M	N	O	P	Q	R	S	T
U	V	W	X	Y	Z	*	*	*	*
0	1	2	3	4	5	6	7	8	9

- 6 Press the Cursor buttons (**▲▼◀▶**) **34** to select the entry field for "Name".
  - The character list appears.
- 7 Use the Cursor buttons (**▲▼◀▶**) **34** and OK button **36** to enter the station name.
  - If the station name needs a blank space, select the blank between "Z" and "\*".
- 8 Press the EXIT button **35** to exit the On Screen Display.

## To Enter Newly Available TV Stations

- 1 Press the MENU button **37** to display the Main menu on the TV screen.
- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Tuning" and "Manual" in this order.
- 3 Press the OK button **36** to display the list of tuned TV stations.
- 4 Press the Cursor buttons (**▲▼◀▶**) **34** to select an unused programme position.
- 5 Press the OK button **36** to display the Manual Tuning menu.
- 6 Press the Numeric buttons **2** to enter the channel number of the desired TV station.
  - Wait a few moments until the desired TV station has been tuned.
- 7 Press the OK button **36** to conclude the setting.
- 8 Press the EXIT button **35** to exit the On Screen Display.

Pos	Name	Ch	Pos	Name	Ch
1	ARD	1	11	----	----
2	ZDF	2	12	----	----
3	N3	19	13	----	----
4	HR3	26	14	----	----
5	BR3	18	15	----	----
6	RB3	3	16	----	----
7	** *07	39	17	----	----
8	----	----	18	----	----
9	----	----	19	----	----

Tuning	
Pos	: 8
Name	: ***08
Channel	: 2
Fine tuning	: AUTO
Decoder	: OFF
Video system	: PAL
Subtitles	: ---
Title page	: ---

## To Obtain the Best Tuning Condition

- 1 Press the MENU button **37** to display the Main menu on the TV screen.
- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Tuning" and "Manual" in this order.
- 3 Press the OK button **36** to display the list of tuned TV stations.
- 4 Press the Cursor buttons (**▲▼◀▶**) **34** to select the TV station for which you want to obtain the best tuning condition.
- 5 Press the OK button **36** to display the Manual Tuning menu.
- 6 Press the Cursor buttons (**▲▼◀▶**) **34** to select the entry field for "Fine tuning".
- 7 Press the Cursor buttons (**▲▼**) **34** to obtain the best tuning condition.
  - If you do not want to change the tuning condition, press the Cursor button (**▶**) **34** to return to the original condition (AUTO).
- 8 Press the OK button **36** to conclude the setting.
- 9 Press the EXIT button **35** to exit the On Screen Display.

Tuning	
Pos	: 5
Name	: BR3
Channel	: 18
Fine tuning	: MAN
Decoder	: OFF
Video system	: PAL
Subtitles	: 150
Title page	: 301

## To Change the Channel Number of an Already Tuned TV Station:

You can change it in the same way as explained above. However, in step 4 select the programme position of the TV station that you want to change to another channel number, and after pressing the OK button **36** in step 5, use the Cursor buttons (**▲▼◀▶**) **34** to select the entry field for "Channel".

## List of TV Reception Channels

Channel Indication	TV Channel	
	Germany/Italy	Other Countries
2-12	*E2-E12	E2-E12
13-20	A-H (Only Italy)	—
21-69	21-69	21-69
74-78	S01-S05	S1-S5
80-82	S1-S3	M1-M3
83-89	S4-S10	M4-M10
90-99	S11-S20	U1-U10
121-141 Hyperband	**S21-S41	S21-S41

\* In Italy: H1...(11), H2...(12)  
\*\*Only for 8 MHz channel raster

## To Preset Pay TV Stations

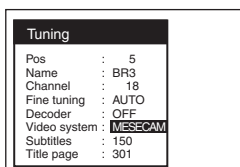
- 1 Press the MENU button **37** to display the Main menu on the TV screen.
- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Tuning" and "Manual" in this order.
- 3 Press the OK button **36** to display the list of tuned TV stations.
- 4 Press the Cursor buttons (**▲▼◀▶**) **34** to select the pay TV station.
- 5 Press the OK button **36** to display the Manual Tuning menu.
- 6 Press the Cursor buttons (**▲▼◀▶**) **34** to select the entry field for "Decoder".
- 7 Press the Cursor buttons (**▲▼**) **34** to select "ON".
  - ON: To preset pay TV stations.
  - OFF: To preset normal TV stations.
- 8 Press the OK button **36** to conclude the setting.
- 9 Press the EXIT button **35** to exit the On Screen Display.

Tuning	
Pos	: 5
Name	: BR3
Channel	: 18
Fine tuning	: AUTO
Decoder	: ON
Video system	: PAL
Subtitles	: 150
Title page	: 301

## To Change the Type of Video System (Colour TV system)

- 1 Press the MENU button **37** to display the Main menu on the TV screen.
- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Tuning" and "Manual" in this order.
- 3 Press the OK button **36** to display the list of tuned TV stations.
- 4 Press the Cursor buttons (**▲▼◀▶**) **34** to select the TV station for which you want to change the type of video system.
- 5 Press the OK button **36** to display the Manual Tuning menu.

- 6 Press the Cursor buttons (**▲▼◀▶**) **34** to select the entry field for "Video system".



- 7 Press the Cursor buttons (**▲▼**) **34** to change the type of video system "PAL" or "MESECAM".

PAL: For receiving PAL signals.  
 MESECAM: For receiving SECAM signals.

- 8 Press the OK button **36** to conclude the setting.
- 9 Press the EXIT button **35** to exit the On Screen Display.

## To Change the Subtitle Teletext Page Number (Subtitles)

TV stations broadcast subtitles for certain programmes on special subtitle Teletext pages. This VCR automatically selects the correct subtitle Teletext page number of each terrestrial TV station. However, TV stations may change this Teletext page number for technical reasons. In such a case, you need to change the setting for the subtitle Teletext page to the new number as explained below, otherwise recording the subtitles and displaying them on the screen is not possible.

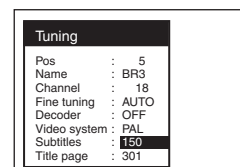
If a satellite receiver or a decoder is connected to the VCR, the subtitle Teletext page number must be entered manually before recording a satellite TV programme, as explained at the bottom of this page.

- From the Teletext service on your TV, make note of the page number of the "Subtitles" service for the required broadcaster.

- 1 Press the MENU button **37** to display the Main menu on the TV screen.
- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Tuning" and "Manual" in this order.
- 3 Press the OK button **36** to display the list of tuned TV stations.

- 4 Press the Cursor buttons (**▲▼◀▶**) **34** to select the TV station whose subtitle Teletext page number you want to change.

- 5 Press the OK button **36** to display the Manual Tuning menu.



- 6 Press the Cursor buttons (**▲▼◀▶**) **34** to select the entry field for "Subtitles".

- 7 Press the Numeric buttons **2** or the Cursor buttons (**▲▼**) **34** to select the correct Teletext page number.

- 8 Press the OK button **36** to conclude the setting.

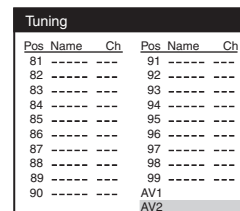
- 9 Press the EXIT button **35** to exit the On Screen Display.

## To Set the Subtitle Teletext Page Number When Recording a Satellite TV or Pay-TV Programme:

The subtitle Teletext page number must be entered manually every time before you record a satellite or pay-TV programme, if you want to include the subtitles in the recording.

After performing operation steps **1** to **3**, perform the following steps:

- 4 If the satellite receiver (or decoder) is connected via 21-pin Scart cable: Press the Cursor buttons (**▲▼◀▶**) **34** to select AV2.

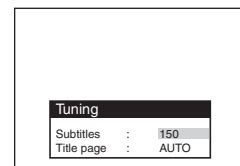


If the satellite receiver is connected via RF coaxial cable: Press the Cursor buttons (**▲▼◀▶**) **34** to select the desired TV station.

- 5 Press the OK button **36** to display the Manual Tuning menu.

- 6 Press the Cursor buttons (**▲▼◀▶**) **34** to select the entry field for "Subtitles".
  - This step is not necessary, if the satellite receiver (or decoder) is connected via 21-pin Scart cable.

- 7 Press the Numeric buttons **2** or the Cursor buttons (**▲▼◀▶**) **34** to select the correct Teletext page number.



- 8 Press the OK button **36** to conclude the setting.

- 9 Press the EXIT button **35** to exit the On Screen Display.

### Note:

- Depending on broadcast signal conditions, subtitles may not be got correctly.

## To Change the Title Teletext Page Number (Title page)

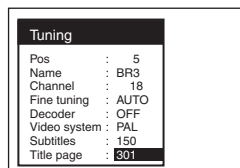
TV stations broadcast the titles of their TV programmes on special title Teletext pages. If a station does not broadcast EPG (Electronic Programme Guide) information, this title information can automatically be registered by the Tape Library for recorded programmes.

This VCR automatically selects the correct title Teletext page number of each terrestrial TV station. However, TV stations may change this Teletext page number for technical reasons. In such a case, you need to change the setting for the title Teletext page to the new number as explained below, otherwise the titles of recorded programmes cannot automatically be registered in the VCR's Tape Library.

For satellite TV stations, however, the title Teletext page numbers cannot be set. Therefore, the titles of recorded satellite TV programmes cannot automatically be registered by the Tape Library from the Teletext pages. In this case, enter the title manually after recording.

- From the Teletext service on your TV, make note of the page number of the "Title page" service for the required broadcaster.

- 1 Press the MENU button **37** to display the Main menu on the TV screen.
- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Tuning" and "Manual" in this order.
- 3 Press the OK button **36** to display the list of tuned TV stations.
- 4 Press the Cursor buttons (**▲▼◀▶**) **34** to select the TV station whose title Teletext page number you want to change.
- 5 Press the OK button **36** to display the Tuning menu.
- 6 Press the Cursor buttons (**▲▼◀▶**) **34** to select the entry field for "Title page".
- 7 Press the Numeric buttons **2** or the Cursor buttons (**▲▼**) **34** to select the correct Teletext page number.
- 8 Press the OK button **36** to conclude the setting.
- 9 Press the EXIT button **35** to exit the On Screen Display.

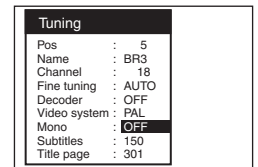


### Note:

- Depending on broadcast signal condition, the titles may not be got correctly.

## To Select the Type of Sound to Be Recorded (NV-FJ710EC/ECM/ECY Series)

- 1 Press the MENU button **37** to display the Main menu on the TV screen.
- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Tuning" and "Manual" in this order.
- 3 Press the OK button **36** to display the list of tuned TV stations.
- 4 Press the Cursor buttons (**▲▼◀▶**) **34** to select the desired TV station.
- 5 Press the OK button **36** to display the Manual Tuning menu.
- 6 Press the Cursor buttons (**▲▼◀▶**) **34** to select the entry field for "Mono".
- 7 Press the Cursor buttons (**▲▼**) **34** to select "OFF".
  - Select "ON" if you want to record the normal (mono) sound on the Hi-Fi audio tracks during a stereo, bilingual or NICAM broadcast, or if the stereo sound is distorted due to inferior reception conditions.
- 8 Press the OK button **36** to conclude the setting.
- 9 Press the EXIT button **35** to exit the On Screen Display.





## To Facilitate the Following Operations with the Instruction Indications on the On Screen Display

- To delete a programme position
- To insert a blank programme position
- To move a TV station to another programme position

Use the coloured instruction indications displayed below the list of tuned TV stations and the corresponding coloured buttons.

If downloading of the setup data has been performed, only the instruction indication “Delete” appears.

1 Press the MENU button **37** to display the Main menu on the TV screen.

2 Press the Cursor buttons (**▲▼◀▶**) **34** to select “Tuning” and “Manual” in this order.

3 Press the OK button **36** to display the list of tuned TV stations.

4 Press the Cursor buttons (**▲▼◀▶**) **34** to select the desired TV station.

6	RB3	3	16	POS16	83
7	SFB3	36	17	-----	---
8	SW3	29	18	-----	---
9	WDR3	17	19	-----	---
10	MDR3	29	20	-----	---

Indications for Delete, Add and Move

5 Follow the operations below.

To delete a programme position (Delete):

Press the Channel button (**^**, red) **10**.

To insert a blank programme position (Add):

Press the DATE button (**+**, green) **11**.

To move a TV station to another programme position (Move):

Press the ON button (**+**, yellow) **23**, and then use the Cursor buttons (**▲▼**) **34** to select the new programme position to which you want to assign the TV station.

6 Press the OK button **36** to conclude the setting.

7 Press the EXIT button **35** to exit the On Screen Display.

### Hint:

- If you have performed Manual Tuning to enter TV stations, the “--” indication may appear under “Pos/Name” on the On Screen Display when programming a ShowView timer recording.

# Restarting the Auto Setup or Download/ Resetting the VCR to the Shipping Condition

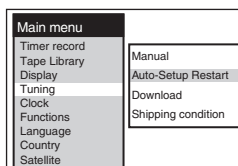
Performing Auto Setup or Download automatically tunes all TV stations available in your area for the VCR.

Restarting this function is convenient when you move to another area and may need to set up the VCR again.

## To Restart the Auto Setup

To perform the Auto Setup again, follow the operation steps below.

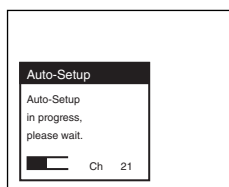
- 1 Press the MENU button **37** to display the Main menu on the TV screen.



- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Tuning" and "Auto-Setup Restart" in this order.

- 3 Press the OK button **36** to prepare for Auto Setup start.

- 4 Press the OK button **36** again to actually start the Auto Setup.

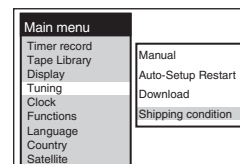


## To Return the VCR to the Shipping Condition

If you want to reset the VCR to the factory preset condition, follow the operation steps below.

- 1 Press the MENU button **37** to display the Main menu on the TV screen.

- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Tuning" and "Shipping condition" in this order.



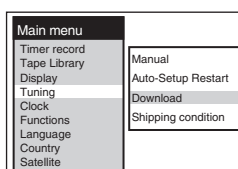
- 3 Press the OK button **36** to prepare for resetting the VCR to the shipping condition.

- 4 Press the OK button **36** two more times to actually change the settings back to the shipping condition.
  - To re-tune the VCR, disconnect and reconnect the AC Mains Cable.

## To Restart the Download

To perform the Download again, follow the operation steps below.

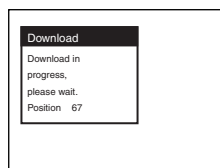
- 1 Press the MENU button **37** to display the Main menu on the TV screen.



- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Tuning" and "Download" in this order.

- 3 Press the OK button **36** to prepare for Download start.

- 4 Press the OK button **36** again to actually start the Download.

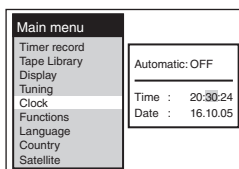
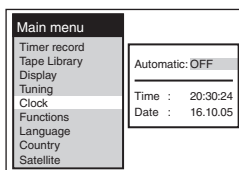


# Setting the VCR's Clock

Usually, the VCR's Auto Setup or Download function automatically adjusts the clock to the correct time. Under some reception conditions, however, the VCR cannot set the clock automatically. In this case, follow the operation steps below to manually set the clock.

## To Manually Adjust the Clock

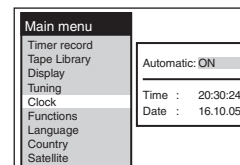
- 1 Press the MENU button **37** to display the Main menu on the TV screen.
- 2 Press the Cursor buttons (**▲▼**) **34** to select "Clock".
  - The Clock setting menu appears on the TV.
- 3 Use the Cursor button (**▶**) **34** to move to the Clock setting menu, confirm that "Automatic" is set to "OFF", and then press the OK button **36**.
- 4 Use the Cursor buttons (**▲▼◀▶**) **34** to set the date and time.
  - Instead of the Cursor buttons (**▲▼◀▶**) **34**, you can also use the Numeric buttons **2** to set the date and time. (Set the VCR/TV switch **42** to "VCR".)
- 5 Press the OK button **36** to conclude the setting.
- 6 Press the EXIT button **35** to exit the On Screen Display.



## To Activate the Automatic Time Correction Function

If a TV station transmits a signal for time setting, performing the operation steps below activates the Automatic time correction function and the time is corrected automatically.

- 1 Press the MENU button **37** to display the Main menu on the TV screen.
- 2 Press the Cursor buttons (**▲▼**) **34** to select "Clock".
  - The Clock setting menu appears on the TV.
- 3 Use the Cursor button (**▶**) **34** to move to the Clock setting menu, and then use the Cursor buttons (**▲▼**) **34** to set "Automatic" to "ON".
- 4 Press the OK button **36** to conclude the setting.
  - Under adverse reception conditions, etc., the Automatic time correction function may not work. In this case, the indication for "Automatic" is automatically reset to "OFF". If the reception conditions improve later on, it may be possible to activate this function.
- 5 Press the EXIT button **35** to exit the On Screen Display.



### Hints:

- If "Automatic" is set to "ON" when you open the Clock screen, do not set it to "OFF", otherwise, the automatic time correcting function is deactivated.
- The built-in clock employs the 24-hour system.
- In case of a power failure, an automatic back-up system automatically maintains the operation of the clock for at least 60 minutes.
- When "Automatic" on the Clock setting menu is set to "ON", the automatic time correction function checks and if necessary adjusts the time several times every day. The automatic time correction function only works when the VCR is switched off; it does not work in the timer recording standby mode.
- If "Automatic" is set to "OFF" and "Power save" to "ON" (see page 49), the time may not be maintained correctly. In this case, manually adjust the clock.
- If "Automatic" is set to "ON" and "Power save" to "ON", the Automatic time correction function does not work while the VCR is turned off. However, as soon as it is turned on, the Automatic time correction function is activated and the clock is set correctly.

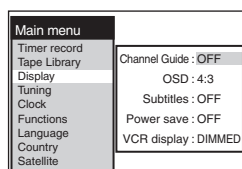
# Other Convenient Functions (Various Settings)

## Settings for the Main Menu Item "Display"

### For Automatic Display of the Channel Guide on the TV Screen Each Time You Change the Programme Position

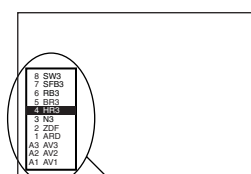
1 Press the MENU button **37** to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼◀▶) **34** to select "Display", "Channel Guide" and the entry field for "Channel Guide" in this order.



3 Press the Cursor buttons (▲▼) **34** to select "ON".

- Each time you change the programme position with the Channel buttons **30**, the Channel Guide indication appears for a few seconds. Set the VCR/TV switch **32** to "VCR".



Channel Guide indication

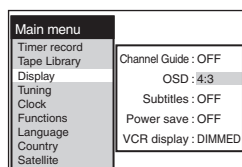
4 Press the OK button **36** to conclude the setting.

5 Press the EXIT button **35** to exit the On Screen Display.

### For Automatic Display on the TV Screen of the TV Station Information, etc.

1 Press the MENU button **37** to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼◀▶) **34** to select "Display", "OSD" and the entry field for "OSD" in this order.



3 Press the Cursor buttons (▲▼) **34** to select "4:3", "OFF" or "16:9".

- Normally set to "4:3".
  - When using wide type of TV screen and selecting the wide screen mode on the TV setting, indications do not appear. Therefore, set to "16:9".
  - Even if setting to "16:9", indications may be cut off depending on the TV.
- OFF: No indicators appear.

4 Press the OK button **36** to conclude the setting.

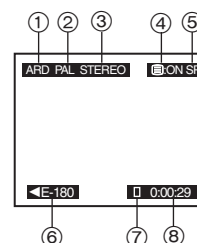
5 Press the EXIT button **35** to exit the On Screen Display.

### Indications that Can Be Displayed on the TV Screen with This Function:

At a press of the OSD/DISPLAY button **5**, the following indications appear on the TV screen.

- TV station name
- Video system (colour TV system)
- STEREO or BILINGUAL Indicator (NV-FJ710EG/EGY Series)**

When receiving a TV programme, the type of sound system in which it is broadcast is automatically indicated.



### STEREO, M1 and M2 Indicator (NV-FJ710EC/ECM/ECY Series)

When receiving a TV programme with the Stereo, Bilingual or NICAM sound system, the type of sound system in which it is broadcast is automatically indicated.

**STEREO:** When receiving a Stereo/NICAM stereo broadcast.

**M1/M2:** When receiving a Bilingual/NICAM dual-sound broadcast.

**M1:** When receiving a NICAM monaural broadcast.

### 4 Subtitle indication

When you press the SUBTITLE button **31**, either of the following indications appears.

**ON:** Subtitles are displayed on the TV screen.

**OFF:** Subtitles are not displayed on the TV screen.

### 5 Tape speed indicator

### 6 Tape length indicator

At each press of the TAPE button **19**, the selected tape length is indicated.

◀E-180: For E30, -60, -90, -120 and -180 tapes

E-195: For E195 tape

E-240: For E240 tape

E-260▶: For E260 and -300 tapes

- Even if you have selected the correct tape length, the remaining tape time may not be indicated correctly with certain kinds of cassettes.

### 7 Tape running display

Stop	□
Rewind	◀◀
Fast Forward	▶▶
Playback	▷
Recording	●
Recording pause	□□
Repeat Playback	R
Audio Dubbing	ADUB

⑧ **Present time/Tape counter/Remaining tape time/Index Search/One-Touch Recording (OTR)/Playback Off Timer Function**

Present time	17:24:31
Tape counter	-2:35.47
Remaining tape time	REMAIN: 2:34
Index Search	▶▶ 02
One-Touch Recording (OTR)	OTR 60
Playback Off Timer Function	30

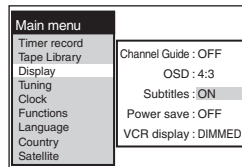
**Notes:**

- If “OSD” is set to “OFF”, none of the above indications appear.
- None of the above indications appear during special playback.
- During playback and when the AV input for the external source is selected, indications ①, ② and ③ do not appear.
- Some of the above indications do not appear when using NTSC tapes.

**For Automatic Display of Subtitles or Closed Caption on the TV Screen**

1 Press the MENU button ②⑦ to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼◀▶) ②④ to select “Display”, “Subtitles” and the presently selected Subtitle mode (“ON” or “OFF”) in this order.



3 Press the Cursor buttons (▲▼) ②④ to select “ON”.

ON: When a TV programme with subtitles is being received, or when playing back a cassette with a recording of a subtitled TV programme, the subtitles are displayed.

OFF: Subtitles or closed caption cannot be displayed on the TV screen.

- Turning the subtitles on or off is also possible by pressing the SUBTITLE button ②① on the remote controller. This also changes the setting of “Subtitles” for “Display” on the Main menu accordingly.
- If a TV station’s subtitle Teletext page number is not set correctly, subtitles cannot be recorded or played back. (See page 43.)
- When playing back damaged tapes and certain kinds of tapes, as well as in case of scrolled or rapidly moving subtitles, the subtitles or Closed Caption may not be displayed properly.
- In some older films (either broadcast or on tape), the subtitles may be part of the picture signal. In such a case, the subtitles cannot be turned off.
- When playing back a copy of a Close Captioned tape, the Closed Caption may not be displayed properly.

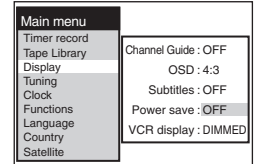
4 Press the OK button ②⑥ to conclude the setting.

5 Press the EXIT button ②⑤ to exit the On Screen Display.

**For Reduced the VCR’s Power Consumption When the VCR Is Switched Off**

1 Press the MENU button ②⑦ to display the Main menu on the TV screen.

2 Press the Cursor buttons (▲▼◀▶) ②④ to select “Display”, “Power save” and the entry field for “Power save” in this order.



3 Press the Cursor buttons (▲▼) ②④ to select “ON” or “OFF”.

ON: In this setting, the power consumption is greatly minimised when the VCR is turned off (Standby mode). In this case, the following happens:

- The item “VCR display” is automatically set to “OFF”.
- To turn the VCR on, keep the VCR-ON/OFF button ① pressed on the VCR main unit. It is not possible to turn it on with the remote control.
- The Power save function works only when the VCR is turned off (Standby mode). It does not operate in the timer recording standby mode. After all programmed timer recordings have been made, and after all programmed data have been erased, the VCR switches over to the Power save mode.
- When the VCR is off, Pay TV programmes cannot be watched on the TV because the signal from the connected decoder is not looped through. To watch them, turn on the VCR.

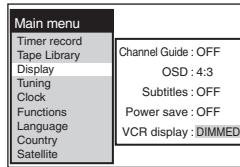
OFF: In this setting, the power consumption is not reduced when the VCR is turned off (Standby mode).

4 Press the OK button ②⑥ to conclude the setting.

5 Press the EXIT button ②⑤ to exit the On Screen Display.

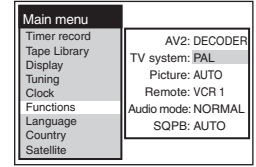
## For Automatic Change of the Brightness of the VCR Display When the VCR Is Switched Off

- 1 Press the MENU button **37** to display the Main menu on the TV screen.
- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Display", "VCR display" and the entry field for "VCR display" in this order.
- 3 Press the Cursor buttons (**▲▼**) **34** to select the desired condition.
  - When the VCR is switched off, the brightness of the VCR display is as follows:  
 ON: Indications are brightly lit.  
 OFF: Indications are not lit.  
 DIMMED: Indications are dimly lit.
- 4 Press the OK button **36** to conclude the setting.
- 5 Press the EXIT button **35** to exit the On Screen Display.



## To Set the Colour TV System Used During Playback or Recording from an External Source

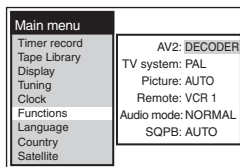
- 1 Press the MENU button **37** to display the Main menu on the TV screen.
- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Functions", "TV system" and "PAL/MESECAM" in this order.
- 3 Press the Cursor buttons (**▲▼**) **34** to select the type of colour TV system (PAL or MESECAM) to be used during playback or during recording from an external source.
- 4 Press the OK button **36** to conclude the setting.
- 5 Press the EXIT button **35** to exit the On Screen Display.



## Settings for the Main Menu Item "Functions"

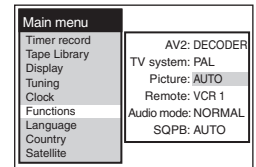
### To Set the Type of External Source Equipment that Is Connected to the AV2 21-pin Scart Socket

- 1 Press the MENU button **37** to display the Main menu on the TV screen.
- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Functions", "AV2" and "DECODER", "TIMER" or "EXT" in this order.
- 3 Press the Cursor buttons (**▲▼**) **34** to select the type of external source equipment which is connected to the VCR's AV2 21-pin socket.
  - Set the external source equipment as follows:  
 DECODER: When a decoder is connected.  
 TIMER: When a digital receiver is connected.
    - When this is set, it is possible to have timer recordings for a Digital Receiver execute automatically simply by switching the Digital Receiver into timer standby mode and then switching this VCR into timer recording standby mode. (See page 19.)
 EXT: When another VCR or a satellite receiver is connected.
- 4 Press the OK button **36** to conclude the setting.
- 5 Press the EXIT button **35** to exit the On Screen Display.



## To Set the Playback Picture Sharpness (Sharper or Softer)

- 1 Press the MENU button **37** to display the Main menu on the TV screen.
- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Functions", "Picture" and the presently selected Sharpness mode ("AUTO", "SHARP" or "SOFT") in this order.
- 3 Press the Cursor buttons (**▲▼**) **34** to the desired picture sharpness for playback. Although the VCR adjusts the picture sharpness automatically, you can change it, if necessary.  
 AUTO: To select automatic sharpness adjustment of the playback picture  
 SHARP: To make the playback picture sharper  
 SOFT: To make the playback picture softer
- 4 Press the OK button **36** to conclude the setting.
- 5 Press the EXIT button **35** to exit the On Screen Display.

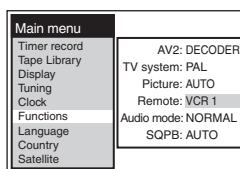




## To Set the Remote Control Mode

- 1 Press the MENU button **37** to display the Main menu on the TV screen.

- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Functions", "Remote" and "VCR 1/VCR 2" in this order.



- 3 Press the Cursor buttons (**▲▼**) **34** to select the desired remote control mode.

VCR 1: Select this setting on both the VCR and the remote control for normal use with one VCR.

VCR 2: Select this setting on both the VCR and the remote control when using this VCR and another Panasonic VCR in the same place. This ensures that you can operate both VCRs independently with their respective remote control.

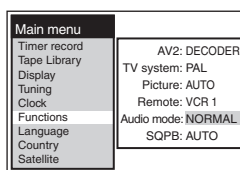
It also allows you to operate both VCRs with a single remote control, simply by changing the remote control mode on the remote control.

- 4 Press the OK button **36**.
- 5 Press the OK button **36** again.
- 6 To change the remote control mode on the remote control itself, change the position of the VCR 1/2 switch **17** to match the setting made in step 3 above. If these settings are not matched, the remote control cannot be used to operate the VCR.
- 7 Press the EXIT button **35** to exit the On Screen Display.

## To Set the Audio Mode to Be Used During Playback

- 1 Press the MENU button **37** to display the Main menu on the TV screen.

- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Functions", "Audio mode" and "NORMAL/MIX" in this order.



- 3 Press the Cursor buttons (**▲▼**) **34** to select the type of audio mode to be used during playback.

NORMAL: Normally set to this position.

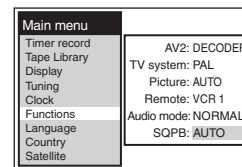
MIX: Use this setting when playing back a cassette tape on which audio dubbing has been performed. The Hi-Fi sound track with the original sound and the normal sound track (mono) with the audio-dubbed sound are played back together.

- 4 Press the OK button **36** to conclude the setting.
- 5 Press the EXIT button **35** to exit the On Screen Display.

## To Play back Tapes Recorded in the S-VHS Format (SQPB=S-VHS Quasi Playback)

- 1 Press the MENU button **37** to display the Main menu on the TV screen.

- 2 Press the Cursor buttons (**▲▼◀▶**) **34** to select "Functions", "SQPB" and "AUTO/ON/OFF" in this order.



- 3 Press the Cursor buttons (**▲▼**) **34** to select "AUTO", "ON" or "OFF".

Normally set to "AUTO".

VCR automatically detects the format in which the recording was made and selects the same format for playback. However, picture distortion may appear. Therefore, set to "ON" or "OFF".

- ON: Use this setting when playing back a cassette tape recorded in the S-VHS format.
- Noisy playback pictures may appear depending on the type of tape used.
  - It is not possible to fully obtain the high resolution that S-VHS is capable of.
  - It is not possible to record in the S-VHS format with this VCR.

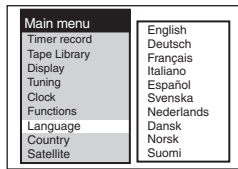
OFF: Use this setting when playing back a cassette tape recorded in the VHS format only.

- 4 Press the OK button **36** to conclude the setting.
- 5 Press the EXIT button **35** to exit the On Screen Display.

## Language Setting

1 Press the MENU button **37** to display the Main menu on the TV screen.

2 Press the Cursor buttons (**▲▼◀▶**) **34** to select “Language” and the entry field for “Language” in this order.



3 Press the Cursor buttons (**▲▼**) **34** to select the desired language.

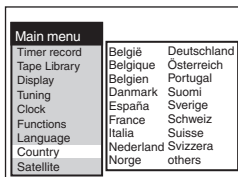
4 Press the OK button **36** to conclude the setting.

5 Press the EXIT button **35** to exit the On Screen Display.

## Country Setting

1 Press the MENU button **37** to display the Main menu on the TV screen.

2 Press the Cursor buttons (**▲▼◀▶**) **34** to select “Country” and the entry field for “Country” in this order.



3 Press the Cursor buttons (**▲▼◀▶**) **34** to select the desired country.

4 Press the OK button **36** to conclude the setting.

5 Press the EXIT button **35** to exit the On Screen Display.

# Glossary

## VPS (Video Programme System)/ PDC (Programme Delivery Control)

The Video Programme System (VPS) or the Programme Delivery Control (PDC) is a very convenient system which assures that the TV programmes you have programmed for timer recording will be recorded exactly from beginning to end, even if the actual broadcasting time differs from the scheduled time due to delayed start or extension of the programme duration. Also, if a programme is interrupted and, for example, some special news is inserted, the recording will also be interrupted automatically and resumed when the programme continues.

Depending on the signals sent from the TV stations, the VPS/PDC system may not operate properly even when "VPS/PDC" has been set to "ON".

Please check with the broadcasters in your area for details.

- In the case of VPS/PDC recording, use the correct time (VPS/PDC time) for recording the TV programmes. Set "VPS/PDC" to "OFF" when the recording time is not the correct time (VPS/PDC time). VPS/PDC recording is not performed when the time (VPS/PDC time) is incorrect, even if only by one minute. To find out the correct time (VPS/PDC time), consult Teletext, a newspaper or magazine, or other source.
- If the actual broadcasting times of timer recordings overlap (regardless of whether they are VPS/PDC controlled), the recording that starts first always has priority, and the recording of the later beginning programme will start only after the first timer recording has finished.
- When the VPS/PDC signal drops out because the broadcast signal is weak, or when a TV station does not transmit a regular VPS/PDC signal, the timer recording will be performed in the normal mode (without VPS/PDC) even if it was programmed for VPS/PDC. In this case, even if the timer recording is performed, whatever has been programmed will not be cancelled at that particular time but at 4 a.m. on the following day.
- The start times of scheduled programmes listed in the newspaper or magazine may be changed at a later date. Set "VPS/PDC" to "OFF" when programming a programme whose start time has been subsequently changed. Particular care must be taken in this respect with ShowView programming since "VPS/PDC" is automatically set to "ON" in some countries.
- If a programme listed in a newspaper or magazine has two ShowView numbers, use the ShowView number for VPS/PDC if you wish to proceed with VPS/PDC recording using ShowView programming.
- The default settings for "VPS/PDC" differ depending on the country concerned. Refer to the table on the right.

Programming method	ShowView programming	Changes in ShowView programming start time	Non-ShowView programming
Selected Country			
France, Belgium, Netherlands, Sweden, Denmark, Finland, Norway	ON	OFF	OFF
Germany, Switzerland, Austria, Other Countries	ON	ON	ON
Italy, Spain, Portugal	OFF	OFF	OFF

- If the broadcasting station is not transmitting VPS/PDC signals, "----" appears in the menu for timer programming under "VPS/PDC".

## NICAM Broadcasting System (NV-FJ710EC/ECM/ECY Series)

NV-FJ710EC/ECM/ECY Series feature the NICAM digital sound system, a 2-channel sound broadcast system that provides either 2 high-quality stereo sound tracks or 2 independent mono sound tracks, M1 and M2. NICAM programmes are always accompanied by standard (mono) sound broadcasts, and during playback, you can select the desired sound with the AUDIO button **15**.

- The NICAM stereo sound can only be recorded on the Hi-Fi audio tracks.
- If, for some reason, you want to record a stereo, bilingual or NICAM TV programme intentionally in mono on the Hi-Fi audio tracks, set "Mono" to "ON" for the programme position on which the desired programme is broadcast, as described on page 44.

### Important Note on the NICAM System

When NV-FJ710EC/ECM/ECY Series are switched on, the tuner automatically switches to a NICAM broadcast if NICAM is being transmitted. During test transmissions, it is possible that the sound received does not correspond to the picture being viewed. In order to receive synchronised sound and picture, select monaural sound with the AUDIO button **15** or setting "Mono" to "ON". This applies only until NICAM transmissions are fully operational.

Even if the sound track is in mono, the STEREO indication will appear.

## Q Link Function

This function works only if the VCR is connected via a fully-wired 21-pin Scart cable to a TV featuring the Q Link or similar function.

Q Link offers the following functions:

- (1) Download from the TV  
When you connect the VCR to a TV, the station list data is automatically copied from the TV to the VCR, and the TV stations are assigned to the programme positions on the VCR in the same order as on the TV.
- (2) Direct TV Recording  
By simply pressing the DIRECT TV REC button **6**, you can at once record the same programme that you are watching on the TV.
- \* (3) TV/VCR Auto Power On  
Even if the TV and the VCR are off (standby mode), pressing the Play **25**, SHOW VIEW **28** or PROG./CHECK button **12** automatically turns on both the TV and the VCR.
  - When a cassette with a broken erasure prevention tab is in the VCR, it turns on and starts playback. The TV also turns on.
- \* (4) VCR Auto Power Off  
When you turn the TV off, the VCR is turned off as well. However, this function only works during rewinding, in the stop mode, or when no cassette is inserted. If the VCR receives the Auto Power Off command while it is rewinding the tape, it turns off after the rewinding has been finished. This function does not work during the following operations:  
Preset Download, Auto Setup, Auto Clock Setting and Manual Tuning.
- \* (5) On Screen Display Messages  
When you are watching a TV programme, the following VCR messages appear on the TV screen to inform you of the VCR's condition:

Message	Message appears when:
This programme has already started	A timer recording has just started.
Set VCR to timer standby mode	The VCR is not in the timer standby mode 10 minutes before the programmed recording start time of a timer recording (message appears every minute during these 10 minutes).
VCR is in timer standby mode	The VCR-ON/OFF <b>1</b> , Play <b>25</b> , EJECT <b>42</b> or LIBRARY button <b>29</b> was pressed, although the VCR is in the timer standby mode.
VCR is in timer recording mode	The VCR-ON/OFF <b>1</b> , Stop <b>9</b> , REC/OTR <b>51</b> , Pause/Still <b>52</b> (Pause/Slow <b>7</b> ), SHOW VIEW <b>28</b> , AUDIO <b>15</b> or SUBTITLE button <b>31</b> was pressed while the VCR is in the timer recording mode.

- Depending on the type of TV used, the above messages may not appear correctly.

\*The operations marked with asterisk are only available if the VCR is connected to a TV featuring the Q Link or the DATA LOGIC function.

### Note:

- If "Power save" is set to "ON", the Q Link functions do not work when the VCR is switched off (standby mode).

## Crystal View Control (CVC)

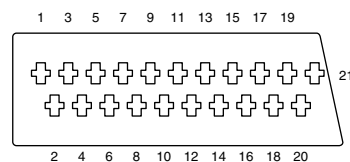
The crystal view control function ensures that you always obtain the optimum picture quality so that you get the best picture automatically.

While the VCR is turned on, the CVC indication **49** is always displayed to show that the Crystal View Control is activated.

## 21-pin Scart Socket

The 21-pin Scart socket transmits both input and output signals for picture and sound. TVs equipped with the same type of socket can be connected here.

This type of socket is also called Peritel, Euro Connector and Euro AV.



### AV1 Scart Socket (for Q Link connection)

- |                        |                        |
|------------------------|------------------------|
| 1 Audio output CH2 (R) | 12 No connection       |
| 2 Audio input CH2 (R)  | 13 Red ground          |
| 3 Audio output CH1 (L) | 14 Blanking ground     |
| 4 Audio ground         | 15 Red                 |
| 5 Blue ground          | 16 Blanking            |
| 6 Audio input CH1 (L)  | 17 Video output ground |
| 7 Blue                 | 18 Video input ground  |
| 8 Switching voltage    | 19 Video output        |
| 9 Green ground         | 20 Video input         |
| 10 Q Link data         | 21 Ground              |
| 11 Green               |                        |

### AV2 Scart Socket

- |                        |                        |
|------------------------|------------------------|
| 1 Audio output CH2 (R) | 12 Reserved            |
| 2 Audio input CH2 (R)  | 13 Red ground          |
| 3 Audio output CH1 (L) | 14 Blanking ground     |
| 4 Audio ground         | 15 Red                 |
| 5 Blue ground          | 16 Blanking            |
| 6 Audio input CH1 (L)  | 17 Video output ground |
| 7 Blue                 | 18 Video input ground  |
| 8 Switching voltage    | 19 Video output        |
| 9 Green ground         | 20 Video input         |
| 10 Control signal      | 21 Ground              |
| 11 Green               |                        |

The Red, Green and Blue (RGB) video signals are looped through only from an external source unit, for example from a connected a pay-TV decoder, i.e. they are not from tape playback.

# Before Requesting Service

Before requesting service, please check the following points.

## ◆ On Screen Display Messages

The error messages are given in brackets [ ].

[Please insert video tape!]

- ☞ You pressed the REC button 26 (REC/OTR button 51), the DIRECT TV REC button 6, the Play button 25, the Fast Forward button 24 or the Rewind button 3 when no cassette was inserted in the VCR.  
You pressed the TIMER REC button 20 when no cassette was inserted in the VCR with a timer recording programmed.  
Insert a video cassette.

[Please use tape with unbroken recording tab!]

- ☞ You pressed the REC button 26 (REC/OTR button 51) or the DIRECT TV REC button 6 when a cassette with a broken out erasure prevention tab was inserted in the VCR.  
You pressed the TIMER REC button 20 when a cassette with a broken out erasure prevention tab was inserted in the VCR with a timer recording programmed.  
Insert a video cassette with an intact erasure prevention tab on which recording is possible.

[This action is not possible before time and date are set]

- ☞ You pressed the SHOW VIEW button 28 or the PROG./CHECK button 12, even though the time and date have not yet been set on the VCR.  
Set the time and date.

[No timer programmes to be done!]

- ☞ You pressed the TIMER REC button 20 even though no timer recording has been programmed.  
Programme a timer recording before pressing the TIMER REC button 20.

[Please put VCR into stop mode first]

- ☞ You attempted to change the contents of the timer programming while a timer recording was being performed.  
Put the VCR into the stop mode first.

Other messages may also appear.  
Follow the instructions given on the TV screen.

## ◆ The VCR Does Not Work Correctly

The symptom descriptions are given between quotation marks “ ”.

“The VCR display is not illuminated.”

- ☞ The AC mains lead is disconnected.  
Connect the AC mains lead securely.
- ☞ VCR display setting is “OFF”. Set “VCR display” to “ON” or “DIMMED”. (See page 50.)
- ☞ Power save setting is “ON”. Set “Power save” to “OFF”. (See page 49.)

“The VCR display is illuminated, but the VCR cannot be operated.”

- ☞ The VCR is in the timer recording standby mode.  
Press the TIMER REC button 20 to cancel the standby mode.
- ☞ Safety devices are operating.  
Disconnect the AC mains lead and wait approximately 1 minute before reconnecting.  
Then check if the VCR can be operated.

“The VCR picture does not appear on the TV screen.”

- ☞ The RF output channel is set to [–].  
Change the RF output channel to a channel other than [–]. (See page 14.)

“Auto clock setting does not work correctly.”

- ☞ Teletext information is not available or cannot be read.  
Set the clock manually.

“Download cannot be performed.”

- ☞ The VCR is not connected to a TV equipped with the Q Link (or a similar) function via a fully-wired 21-pin Scart cable.  
Be sure to use a fully wired 21-pin Scart cable to connect the VCR to a TV with the Q Link (or a similar) function.

## ◆ Playback Does Not Work Properly

The symptom descriptions are given between quotation marks “ ”.

“The playback picture is distorted or in black and white.

Or, horizontal noise bars appear in the picture or horizontal lines move up and down.”

- ☞ The tracking adjustment is not correct.  
Adjust the tracking. (See page 57.)
- ☞ The TV’s video playback channel has not been tuned correctly.  
Re-tune the video playback channel.
- ☞ The video heads are clogged or worn.  
Consult your dealer for advice.
- ☞ The playback picture is distorted when using an E300 type video cassette that was recorded in the LP or EP mode.  
We recommend that you use video cassettes other than type E300.
- ☞ The playback picture is distorted when you record the tape in the EP mode using MESECAM system.  
However, this is not a malfunction.  
We recommend PAL system for recording in the EP mode.
- ☞ SQPB setting is not correct.  
Set SQPB setting correctly. (See page 51.)



## ◆ Recording Is Not Possible or Does Not Work Properly

The symptom descriptions are given between quotation marks “ ”.


“When recording is attempted, the  indication flashes.”

- ☞ A video cassette with a broken out erasure prevention tab is used.  
Use a cassette with an intact tab, or if you want to erase the previously recorded contents on the cassette, cover the tab hole with two layers of adhesive tape.

“The playback picture of a recorded programme is distorted or no picture can be seen.”

- ☞ The aerial or aerial lead connection is defective.  
Check the connections. If the picture displayed on the TV is also distorted, there is something wrong with the installation of the aerial.
- ☞ No programme was recorded because the VCR is not tuned correctly.  
Tune it correctly.
- ☞ No programme was recorded because the AV input (A1, A2 or A3) was selected on the VCR.  
Select the programme position of the desired TV programme.

“Timer recording does not work correctly.”

- ☞ Time and date are not set or they are set incorrectly.  
Set the time and date correctly.
- ☞ The starting time or ending time of the timer recording were not programmed correctly.  
Set the starting time or ending time correctly.
- ☞ The VCR was not put in the timer recording standby mode.  
After programming a timer recording, press the **TIMER REC** button  to put the VCR in the timer recording standby mode.



“Recording from an external source connected to the VCR’s AV input cannot be made.”

- ☞ The correct AV input (A1, A2 or A3) is not selected.  
Select the correct AV input (A1, A2 or A3).
- ☞ The connections from the external source are not made correctly. Correct them. (See page 33.)

## ◆ The Remote Control Does Not Work Correctly

The symptom descriptions are given between quotation marks “ ”.

“The remote control does not work correctly.”

- ☞ The remote control signal cannot reach the VCR.  
Aim the remote control at the VCR and make sure that the infrared beam’s path is not obstructed.
- ☞ The distance to the VCR is too long.  
Use the remote control within 7 metres from the VCR. If you are using it within this range but the remote control still cannot operate the VCR, replace the batteries.
- ☞ The batteries are exhausted.  
Replace with new batteries.
- ☞ The batteries have been inserted with reversed polarities (/).  
Insert the batteries correctly. (See page 5.)
- ☞ Power save setting is “ON”. Set “Power save” to “OFF”. (See page 49.)
- ☞ The wrong remote control mode has been selected.  
Set the correct control mode. (See page 51.)

## ◆ The Satellite Receiver Cannot Be Controlled Correctly

The symptom descriptions are given between quotation marks “ ”.

“The Satellite Receiver cannot be controlled.”

- ☞ The Satellite Receiver is not connected correctly to the VCR. Connect the Satellite Receiver correctly.
- ☞ The settings on pages 38–40 for receiving satellite broadcasts are not correct. Perform the settings on pages 38–40 again correctly.
- ☞ The receiver in use is not on the attached list of compatible satellite receivers. These settings are supported only by the satellite receivers found on the attached list of compatible satellite receivers.

## ◆ The Tape Library System Does Not Work Correctly

The symptom descriptions are given between quotation marks “ ”.


“The Cassette Number Check has failed.”

- ☞ The Cassette Number Check was cancelled midway.  
Try to perform the Cassette Number Check again. (See page 27.)
- ☞
  - The inserted cassette is new (unrecorded).
  - The inserted cassette was recorded on another VCR and does not have a cassette number.
  - The inserted cassette was recorded on a model NV-FJ710 VCR other than this unit.
  - The cassette number of the inserted cassette has been deleted from the Tape Library data.  
→ The Cassette Number Check is designed to fail whenever one of the above conditions applies; this is not a malfunction.

“The recorded programme has not been registered in the Tape Library data.”

- ☞ The length of the recorded programme is less than 15 minutes.  
Record for more than 15 minutes.
- ☞ The length of the recorded programme is less than 25 minutes in the EP mode.  
Record for more than 25 minutes in the EP mode.

## ◆ The Subtitles or Closed Captions Do Not Appear On the TV Screen

- ☞ The subtitle Teletext page number was not set or it was set incorrectly.  
Set the subtitle Teletext page number correctly. (See page 43.)
- ☞ The subtitles setting is “OFF”.  
Set “Subtitles” to “ON” or press the **SUBTITLE** button  on the remote control. (See page 49.)
- ☞ The programme was broadcast without subtitles.  
This is not a malfunction.



## ◆ The Titles of the TV Programmes Are Not Entered Correctly in the Tape Library Data

- ☞ The "Title page" Teletext page number was not set correctly.  
Set it correctly. (See page 44.)

### Adjusting the Playback Picture

Under normal conditions, the VCR automatically adjusts the playback picture for optimum quality. However, in some cases it may be necessary to adjust it manually.

#### If the Picture Contains Noise Bars and It Is Not Clear to See (Tracking adjustment):

If noise bars appear during normal playback, slow playback or still playback, follow the operations below.

During normal or slow playback, press the Channel button **CH**  $\vee$  (-) or  $\wedge$  (+) until the bars noise disappear.

- If the noise bars appear during still playback, switch the VCR over to the slow playback mode and then adjust the tracking as explained above.



TV screen  
Playback picture containing noise bars

#### To Return to Auto Tracking:

Press the Channel buttons **CH**  $\vee$  (-) and  $\wedge$  (+) simultaneously.

#### If the Still Picture Scrolls Up or Down (V-Lock Adjustment):

If the still picture scrolls up or down, perform the following operation.

During still playback, keep the Channel button **CH**  $\vee$  (-) or  $\wedge$  (+) pressed until the picture stops scrolling.

#### Precautions:

- With certain TV models and tapes, it may not be possible to adjust the tracking.
- If you play back a cassette that was recorded on another VCR, the picture quality may be inferior and it may be necessary to adjust the tracking. Also, on some TVs, the picture may scroll up and down in the special playback functions.  
However, these are not malfunctions.

# Specifications

## NV-FJ710 Series

<b>Power Source:</b>	220–240 V AC 50/60 Hz
<b>Power Consumption:</b>	23 W
<b>Power Consumption When in Standby Mode:</b>	Approx. 3 W (When <b>Power save</b> function is activated)

<b>Video Recording System:</b>	2 rotary heads, helical scanning system
<b>Video Heads:</b>	4 heads
<b>Audio Heads:</b>	2 heads (Hi-Fi)
<b>Tape Speed:</b>	SP; 23.39 mm/s LP; 11.7 mm/s
<b>Tape Format:</b>	VHS tape
<b>Record/Playback Time:</b>	SP; 240 min with NV-E240 LP; 480 min with NV-E240
<b>FF/REW Time:</b>	approx. 60 s with NV-E180

### VIDEO

<b>Television System:</b>	CCIR; 625 lines, 50 fields, PAL colour signal
<b>Modulation System:</b>	Luminance; FM azimuth recording Colour signal; converted subcarrier phase shift recording
<b>Input Level:</b>	AV1/AV2; 1.0 Vp-p, 75 ohm, terminated VIDEO IN (AV3) (PHONO); 1.0 Vp-p, 75 ohm, terminated
<b>Output Level:</b>	AV1/AV2; 1.0 Vp-p, 75 ohm, terminated RF Modulated; UHF channel (21–69), 75 ohm

### AUDIO

<b>Input Level:</b>	AV1/AV2; –6 dBV, more than 10 kohm AUDIO IN (AV3) (PHONO); –6 dBV, more than 10 kohm
<b>Output Level:</b>	AV1/AV2; –6 dBV, less than 1 kohm AUDIO OUT (PHONO); –6 dBV, less than 1 kohm
<b>Audio Track:</b>	1 track (Normal-mono only), 2 channels (Hi-Fi sound-stereo)

<b>Video Horizontal Resolution:</b>	Colour; more than 240 lines (SP)
<b>Signal-to-Noise Ratio:</b>	Video; more than 43 dB (SP)
<b>Dynamic Range:</b>	Audio; more than 90 dB (Hi-Fi audio track) (SP)
<b>Audio Frequency Response:</b>	20 Hz–20 kHz/Hi-Fi (SP)
<b>Wow and Flutter:</b>	0.005% Wrms/Hi-Fi (SP)
<b>Operating Temperature:</b>	5°C–40°C
<b>Operating Humidity:</b>	35%–80%
<b>Weight:</b>	4.1 kg
<b>Dimensions:</b>	430 (W)×87 (H)×303 (D) mm
<b>Standard Accessories:</b>	1 pc. RF Coaxial cable 1 pc. Remote Control (EUR571750) 2 pcs. R6 size batteries 1 pc. AC mains lead

Weight and dimensions shown are approximate.  
Specifications are subject to change without notice.