Panasonic
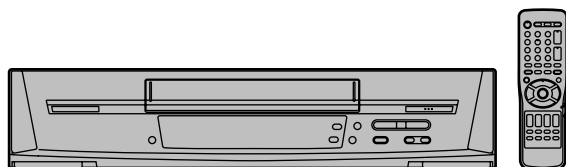
Video Cassette Recorder

NV-FJ620 Series
NV-FJ621 Series
NV-FJ616 Series
NV-SJ220 Series

Operating Instructions

Contents	Page

SHOWVIEW

Q Link

VHS PAL

SUPER DRIVE

Please read through all these operating instructions (especially the safety information) before connecting or operating the video cassette recorder, or adjusting any settings.

VQT9014

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.
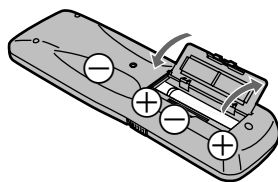
For your safety
Do not remove outer cover.
Touching internal parts of the VCR is dangerous, and may seriously damage it.
To prevent electric shock, do not remove cover. There are no user serviceable parts inside. Refer all servicing to qualified service personnel.

Inserting Remote Control Batteries
Insert the batteries with the polarity ($\oplus$ and $\ominus$) correctly aligned.

Notes:
– 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 ($\oplus$ and $\ominus$) 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.
– 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.

Conserve the environment
See [Power save] of page 18.

Disposal of old equipment
Batteries, packaging and old equipment should not be disposed of as domestic waste, but in accordance with the applicable regulations.

Cautions before you operate this VCR
Avoid:
– Humidity and dust.
– Extreme heat such as direct sunlight.
– Magnets or electromagnetic objects.
– Touching internal parts of the VCR.
– Water or some other liquid.
– Lightning. (Disconnect the aerial plug from the VCR during lightning storms.)
– Anything heavy on the VCR.
– Connecting or handling the equipment with wet hands.

Do:
– Wipe the VCR with a clean and dry cloth.
– Install the VCR in a horizontal position.
– Keep the VCR, TV and other equipment switched off until you have finished all connections.

Condensation may form in the following cases:
– 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.
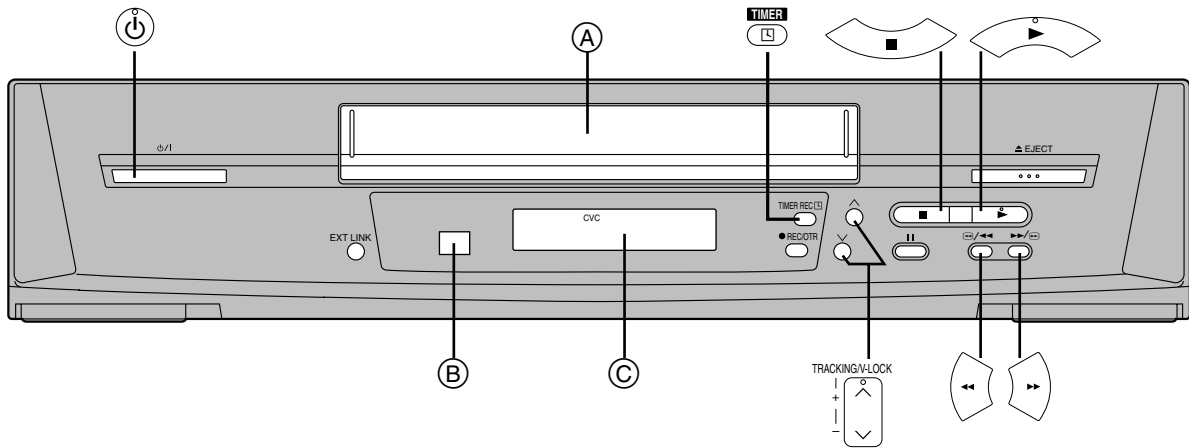
Note:
– In any of the above-mentioned conditions, do not operate the VCR for at least 1 hour.
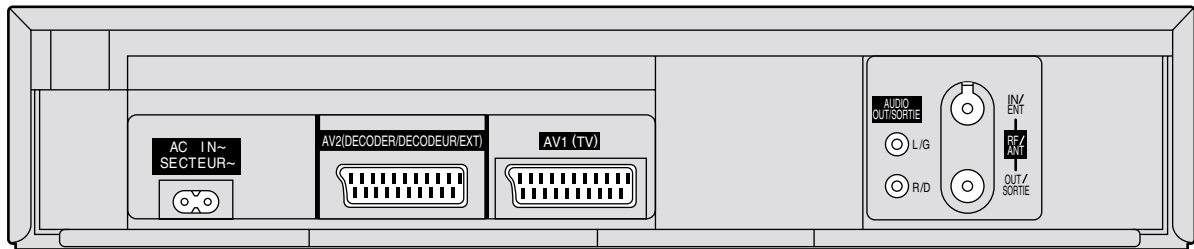 This VCR is not equipped with a dew sensor.

**Standard Accessories
1 pc. RF Coaxial cable
1 pc. Remote Control (N2QAKB000001)
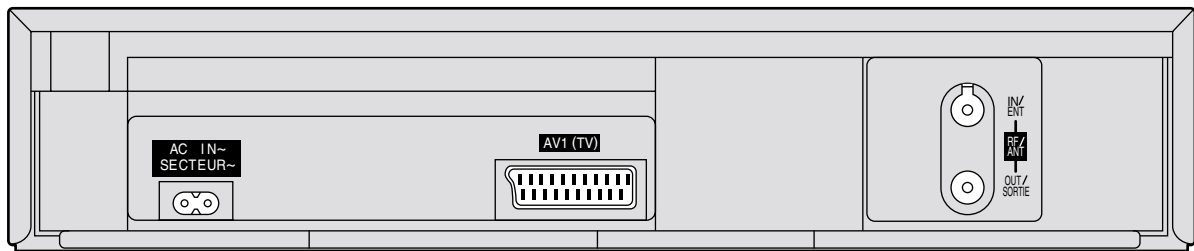2 pcs. R6 size batteries
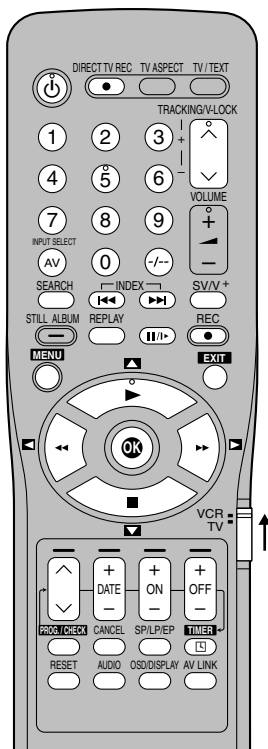1 pc. AC mains lead**

Controls and Components

Ⓐ Ⓑ Ⓒ

⏻

TIMER
🕐

■   ▶

⏻/l

EJECT ⏏

TIMER REC 🕐
● REC/OTR

EXT LINK

CVC

II

TRACKING/V-LOCK

◀◀   ▶▶

NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series

AC IN~
SECTEUR~

AV2(DECODER/DECODEUR/EXT)   AV1 (TV)

AUDIO
OUT/SORTIE
L/G
R/D

IN/
ENT

RF/
ANT

OUT/
SORTIE

NV-SJ220 Series

AC IN~
SECTEUR~

AV1 (TV)

IN/
ENT

RF/
ANT

OUT/
SORTIE

VCR Operation

⏻   DIRECT TV REC ●   TV ASPECT   TV / TEXT

TRACKING/V-LOCK

1   2   3

4   5   6

VOLUME

7   8   9

INPUT SELECT
AV   0   -/--

SEARCH   ┌ INDEX ┐   SV/V +
          ▐◀◀ ▶▶▌

STILL ALBUM   REPLAY   REC
              (II/I▶)   ●

MENU   EXIT

▲

▶

OK

◀   ◀◀   ▶▶   ▶

■

▼

VCR
TV

∧
∨   + DATE −   + ON −   + OFF −

PROG./CHECK   CANCEL   SP/LP/EP   TIMER 🕐

RESET   AUDIO   OSD/DISPLAY   AV LINK

TV Operation

⏻   DIRECT TV REC ●   TV ASPECT   TV / TEXT

TRACKING/V-LOCK

1   2   3

4   5   6

VOLUME

7   8   9

INPUT SELECT
AV   0   -/--

SEARCH   ┌ INDEX ┐   SV/V +
          ▐◀◀ ▶▶▌

STILL ALBUM   REPLAY   REC
              (II/I▶)   ●

MENU   EXIT

▲

▶

OK

◀   ◀◀   ▶▶   ▶

■

▼

VCR
TV

∧
∨   + DATE −   + ON −   + OFF −

PROG./CHECK   CANCEL   SP/LP/EP   TIMER 🕐

RESET   AUDIO   OSD/DISPLAY   AV LINK
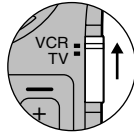
3

VCR Operation

When you want to operate the VCR,
set the [VCR/TV] switch to [VCR].

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

Numeric buttons
To select the programme positions (1–99) of the VCR.
Example: 9: (**9**)

19: (-/--) → (**1**) → (**9**)

To enter a ShowView number.

To enter numbers for various settings.

RESET **RESET button**
To reset the tape counter (elapsed time) to [0:00.00].
– The tape counter is automatically reset to [0:00.00]
when a video cassette is inserted.

Ⓐ **Cassette compartment**

Ⓑ **Infra-red Remote Control Receiver window**

Ⓒ **VCR display**

AUDIO **AUDIO button**
This button operates on NV-FJ620 Series, NV-FJ621
Series and NV-FJ616 Series.

AV LINK **AV LINK button**
This button operates on NV-FJ620 Series, NV-FJ621
Series and NV-FJ616 Series.

SP/LP/EP **SP/LP/EP button**
This button operates on NV-FJ620 Series, NV-FJ621
Series and NV-FJ616 Series.

STILL ALBUM **STILL ALBUM button**
This button does not operate on this VCR.

Child Lock Function buttons
([OK] and [OFF (+)] buttons)
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
Hold down the [OK] and the [OFF (+)] buttons
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
Hold down the [OK] and the [OFF (+)] buttons
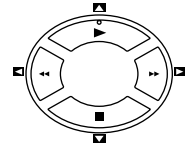simultaneously until the [⋈ hold] indication
disappears.
– If you disconnect the power cable, the Child Lock
function is automatically cancelled after the power
backup time of approximately 60 minutes has
elapsed.
– If you cannot cancel the Child Lock function, press
the [EXIT] button and perform the operation.

Menu Operation

Cursor buttons
To select items on the menu.

MENU **MENU button**
To display the Main menu.

EXIT **EXIT button**
To exit the menu.

OK **OK button**
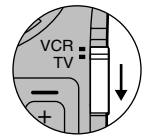To comfirm or store the selection.

TV Operation

Only Panasonic TVs can be operated with the provided
remote control.

The settings for operating the TV with the remote control
have already been made.

However, some Panasonic TVs cannot be operated using this
remote control.

When you want to operate the TV, set
the [VCR/TV] switch to [TV].

⏻ **TV-ON/OFF button**
To switch the TV on from standby mode or vice versa.
On some TVs it is only possible to switch the TV to
standby mode with this button, but not on. In this case,
try to turn the TV on with one of the following buttons:
Numeric buttons
AV button
Channel button

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

INPUT SELECT **AV button**
(AV) To select the desired AV input on the TV.

TRACKING/V-LOCK **Channel button**
To select the desired programme position (TV station)
on the TV.

TV ASPECT **TV ASPECT button**
To switch the screen format between the wide-screen
and other formats.

VOLUME **VOLUME button**
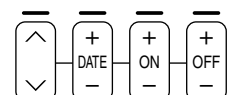To adjust the volume of the TV.

TV / TEXT **TV/TEXT button**
To switch between normal TV mode and teletext mode.

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.

Connecting and Setting up

(For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
If you are connecting your VCR to a TV equipped with the [Q Link]*1 function, then follow the steps.
For a TV equipped with the [DATA LOGIC]*2, [Easy Link]*3, [Megalogic]*4 or [SMARTLINK]*5 function and with a 21-pin Scart socket, also read from this page.
For details about the connections, also read TV's operating instructions.
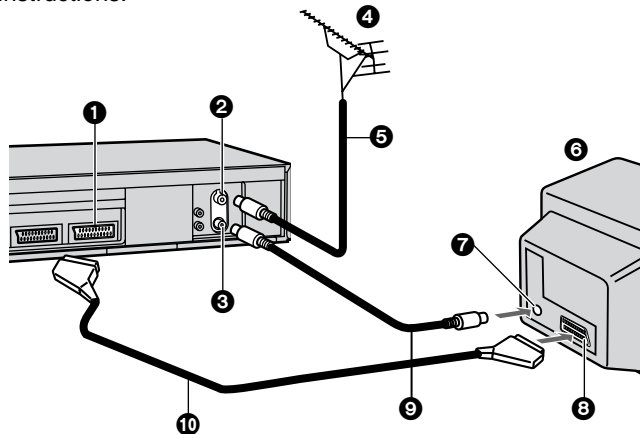
1 AV1 21-pin Scart socket
2 Aerial Input socket
3 Aerial Output socket
4 Aerial (not supplied)
5 Aerial lead (not supplied)
6 TV equipped with the Q Link (not supplied)
7 Aerial Input socket
8 21-pin Scart socket
9 RF Coaxial cable (supplied)
10 Fully-wired 21-pin Scart cable (not supplied)

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 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.

Preset Download
(To Simultaneously Set Up this VCR with a New TV)

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

Switch the TV on.
The TV starts to tune all available TV stations and to adjust the clock.

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. Press the [Cursor] buttons ▲▼◄► to select the desired country and the [OK] button.
The downloading automatically starts.
When the indication appears on the VCR display, the downloading is complete.

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.
   Wait until the Auto Setup is complete on both the TV and the VCR.
– [MENU] Press the [MENU] button to display the Main menu on the TV screen.

   Press the [Cursor] buttons ▲▼◄► to select [Tuning] and then [Download].

   Press the [OK] button twice. Downloading of the setup data from the TV to the VCR starts.

   When the programme position and the current time appear in the VCR display, downloading is complete.

Hints:
– If you use a Panasonic TV, 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 other setting menu appears automatically to let you set [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 pressed on the VCR main unit, not with the remote control.

Preset Download
(To Set Up this VCR with a TV Already in Use)

Switch the TV on.

Select the AV input on your TV.
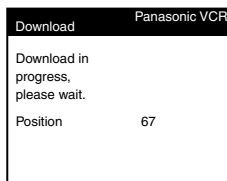
Set the [VCR/TV] switch to [VCR].

Press the [VCR-ON/OFF] button to switch the VCR on.
Downloading of the setup data starts automatically. (Applicable to TVs with [Q Link] or [DATA LOGIC] function)

```
                    Panasonic VCR
Download

Download in
progress,
please wait.

Position          67
```

If your TV is equipped with the [Easy Link], [Megalogic] or [SMARTLINK] function, the Country setting menu appears on the TV screen. Press the [Cursor] buttons ▲▼◄► to select the desired country and the [OK] button. The downloading automatically starts.
When the indication appears on the VCR display, the downloading is complete.

```
                    Panasonic VCR
Country
Belgien          Deutschland
Belgique         Österreich
België           Portugal
Danmark          Suomi
España           Sverige
Ελλάδα           Schweiz
France           Suisse
Italia           Svizzera
Nederland        others
Norge
```

```
 1      16:45
```

Hint:
– If you select [Schweiz], [Suisse] or [Svizzera] on the Country setting menu, the other setting menu appears automatically to let you set [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 pressed on the VCR main unit, not with the remote control.

If you are connecting your VCR to a TV using RF coaxial cable and 21-pin Scart cable, then follow the steps.
(AV Connection)
RF Coaxial cable must be connected to watch TV channels even if 21-pin Scart cable is used to connect VCR to TV.
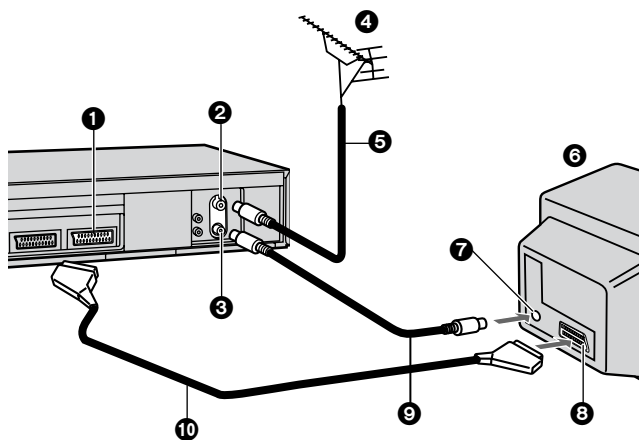
1 AV1 21-pin Scart socket
2 Aerial Input socket
3 Aerial Output socket
4 Aerial (not supplied)
5 Aerial lead (not supplied)
6 TV (not supplied)
7 Aerial Input socket
8 21-pin Scart socket
9 RF Coaxial cable (supplied)
10 Fully-wired 21-pin Scart cable (not supplied)

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.

Press the [VCR-ON/OFF] button to turn on the VCR.
The Country setting menu appears on the TV screen.

```
                    Panasonic VCR
Country
Belgien          Deutschland
Belgique         Österreich
België           Portugal
Danmark          Suomi
España           Sverige
Ελλάδα           Schweiz
France           Suisse
Italia           Svizzera
Nederland        others
Norge
```
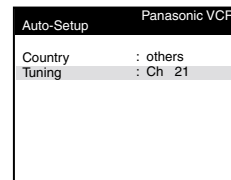
Press the [Cursor] buttons ▲▼◄►.
Select the country where you are using the VCR.

Press the [OK] button.
The VCR's Auto Setup automatically starts and tunes all available TV stations and also sets the clock. This takes about 5 minutes.
When the indication appears on the VCR display, the Auto Setup is complete.

```
                    Panasonic VCR
Auto-Setup

Country      : others
Tuning       : Ch  21
```

```
 1      16:45
```

Press the [MENU] button for more than 5 seconds.
The RF output channel number appears on the VCR display.
The initial setting is channel 36.

Press the [Numeric] button [0].
The displayed RF output channel number changes to [– –].

Press the [OK] button to conclude the setting.

To cancel the Auto Setup before it has finished
Press the [EXIT] button .

When the clock setting menu appears after Auto Setup has finished
Press the [Cursor] buttons ▲▼◄► to set the correct time and date.

Press the [OK] button to conclude the setting.

To confirm that the TV stations have been tuned correctly by the Auto Setup function
See page 15.

When no station has been set, confirm all connections of the VCR again and restart the Auto Setup
See page 16.

When the station names and/or channel numbers have not been set correctly
See page 15.

Hint:
– If you select [Schweiz], [Suisse] or [Svizzera] on the Country setting menu, the other setting menu appears automatically to let you set [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 pressed on the VCR main unit, not with the remote control.

If you are connecting your VCR to a TV using only RF coaxial cable, then follow the steps. (RF Connection)
RF Coaxial cable must be connected to watch TV channels.
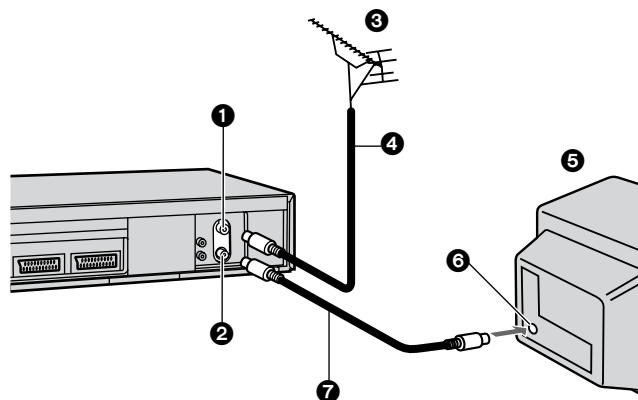
1 Aerial Input socket
2 Aerial Output socket
3 Aerial (not supplied)
4 Aerial lead (not supplied)
5 TV (not supplied)
6 Aerial Input socket
7 RF Coaxial cable (supplied)

Press the [VCR-ON/OFF] button to turn on the VCR and tune your TV until the Country setting menu appears on the TV screen.

Country	Panasonic VCR
Belgien	Deutschland
Belgique	Österreich
België	Portugal
Danmark	Suomi
España	Sverige
Ελλάδα	Schweiz
France	Suisse
Italia	Svizzera
Nederland	others
Norge	

Press the [Cursor] buttons ▲ ▼ ◄ ►.
Select the country where you are using the VCR.

Press the [OK] button.
The VCR's Auto Setup automatically starts and tunes all available TV stations and also sets the clock. This takes about 5 minutes.
When the indication appears on the VCR display, the Auto Setup is complete.

If, after setup, the picture on the video playback channel is distorted, change the RF output channel on the VCR to another number.
Press the [MENU] button for more than 5 seconds.
The RF output channel number appears on the VCR display.
The initial setting is channel 36.

Press the [Numeric] buttons.
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.

Retune your TV to the VCR's new RF output channel.

Press the [OK] button to conclude the setting.

To cancel the Auto Setup before it has finished
Press the [EXIT] button .

When the clock setting menu appears after Auto Setup has finished
Press the [Cursor] buttons ▲ ▼ ◄ ► to set the correct time and date.

Press the [OK] button to conclude the setting.

To confirm that the TV stations have been tuned correctly by the Auto Setup function
See page 15.

When no station has been set, confirm all connections of the VCR again and restart the Auto Setup
See page 16.

When the station names and/or channel numbers have not been set correctly
See page 15.

Hint:
– If you select [Schweiz], [Suisse] or [Svizzera] on the Country setting menu, the other setting menu appears automatically to let you set [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 pressed on the VCR main unit, not with the remote control.

7

Playback

For Normal Playback

Press the [Play] button.

For Cue or Review Playback

During playback, tap the [Fast Forward] or [Rewind] button.

– To return to normal playback, press the [Play] button.
– Press and hold down the [Fast Forward] or [Rewind] button.
  Cue or review playback continues for as long as you keep the button pressed.

For High speed Cue or Review Playback (JET SEARCH)

(For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)

During playback, tap the [Fast Forward] or [Rewind] button twice.

For Still Playback

During playback, press the [Pause/Slow] button.

– To return to normal playback, press the [Play] button or the [Pause/Slow] button.

For Slow Playback

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

– To return to normal playback, press the [Play] button.

Fast-forwarding or Rewinding the Tape

Press the [Fast Forward] or [Rewind] button in the stop mode.

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

To Stop Playback

Press the [Stop] button.

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.
  (For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)

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 Play back a Recorded Part Repeatedly

Press the [Play] button on the remote control for more than 5 seconds.
The [R] indication appears on the TV screen.

– If [OSD] is set to [OFF] (See page 18), the [R] indication will not appear in repeat playback mode.

To Cancel the Repeat Playback Mode

Press the [Stop] button.

To Rewind the Tape a Little to View the Same Scene Again (Replay Function)

REPLAY Press the [REPLAY] button.
Rewind the tape a little from its present position and play it back again.

– During review playback, when you press this button, the VCR briefly switches over to cue playback and play it back again.
– When the VCR is in the stop, rewind, fast-forward, slow playback, or standby mode, the Replay function does not work.

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.

During normal playback, press the [Play] button on the VCR for more than 2 seconds to put the VCR in the Playback Off Timer mode.
After that, press this button 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.

  Counter display (normal playback mode)
  →30 (min.)→60 (min.)→120 (min.)
  →180 (min.)→240 (min.)
  →Counter display (normal playback mode)

To stop midway

Press the [Stop] button.

Recording

Insert a video cassette with an intact erasure prevention tab.
⏻ – If it has already been inserted, press the [VCR-ON/OFF] button to turn the VCR on.

TRACKING/V-LOCK Select the TV station using the [Channel] button. (Set the [VCR/TV] switch to [VCR].)
– It is also possible to select by pressing the [Numeric] buttons.

REC Press the [REC] button to start recording.

Press the [Stop] button to stop recording.

To Select the Desired Tape Speed
(For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
SP/LP/EP Press the [SP/LP/EP] button 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.

To Pause Recording
(II/I▶) Press the [Pause/Slow] button during recording.
Press it again to continue recording.

To View One TV Programme while Recording Another TV Programme
REC After pressing the [REC] button 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. (For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
– 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. (For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
– 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. (For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)

To Display the Approximate Remaining Tape Time
See page 17 to set the tape length.

OSD/DISPLAY Press the [OSD/DISPLAY] button repeatedly until the remaining tape time appears on the VCR display.
– Pressing the [OSD/DISPLAY] button 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.

Clock→Counter→Remaining Tape Time→Clock

To Select the Recording Duration and Perform Timer Recording (OTR=One-Touch Recording)
●REC/OTR Press the [REC/OTR] button to start recording.

●REC/OTR Press the [REC/OTR] button on the VCR 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.

Counter display (normal recording mode)
→30 (min.)→60 (min.)→120 (min.)
→180 (min.)→240 (min.)
→Counter display (normal recording mode)

To stop the OTR recording before the end
Press the [Stop] button.

Note:
– This function also works during Direct TV Recording. (For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)

To Prevent Accidental Erasure of Recorded Contents
Break out the erasure prevention tab after recording.

If you insert a video cassette with a broken out erasure prevention tab and press the [REC] button, the [⚙] 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.

9
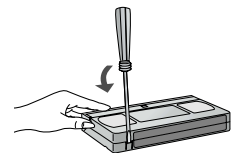
Recording from an external source

Recording from an external source, for example from a video movie camera, can be performed.

Video movie camera
Other VCR
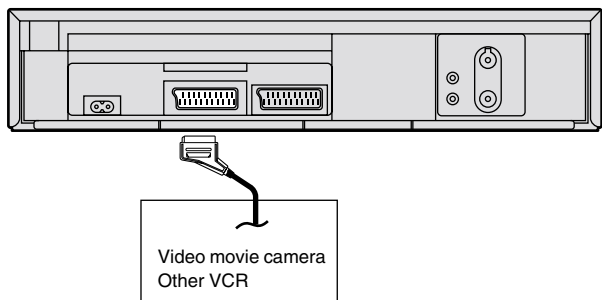
– Connect your VCR to a TV using only RF coaxial cable. (For NV-SJ220 Series) (See page 7.)
– Connect a video movie camera or a VCR to this VCR with a 21-pin Scart cable, as shown in the illustration.
– Press the [INPUT SELECT] button to select the AV Input according to the socket on the VCR to which the source unit has been connected.

(For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
A1: When connected to the AV1 21-pin Scart socket
A2: When connected to the AV2 21-pin Scart socket
   – Make sure that [AV2] is set to [EXT].
     (See page 18.)
(For NV-SJ220 Series)
AV: When connected to the AV1 21-pin Scart socket
   – Make sure that [AV] is set to [TV/EXT].
     (See page 18.)

Press the [Play] button to start playback.

At the point where you want to join a new scene, press the [Pause/Slow] button to put it in the still playback mode.

REC Press the [REC] button to put it in the recording pause mode.
   – If you leave the VCR in the recording pause mode for more than 5 minutes, the VCR automatically switches over to the stop mode to protect the video heads.

Start playback on the source unit and search for the point from which you want to record (copy) onto this VCR.

When that point is reached, press the [Pause/Slow] button again to start recording the new picture and sound from the playback unit.

To record (copy) additional scenes, press the [Pause/Slow] button to put this VCR in the recording pause mode and then perform above step again.

At the point where you want to stop recording, press the [Stop] button to finish recording.

Hint:
– 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. (For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)

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

(For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)

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.
– 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.

DIRECT TV REC Press the [DIRECT TV REC] button.
   – 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 during Direct TV REC, otherwise the recording may not be performed correctly.

Press the [Stop] button to stop recording.

Satellite or Digital Receiver

Connecting the VCR to a Satellite Receiver or Digital Receiver

If the satellite receiver is equipped with a 21-pin scart socket
– Connect your VCR to a TV using only RF coaxial cable.
  (For NV-SJ220 Series) (See page 7.)
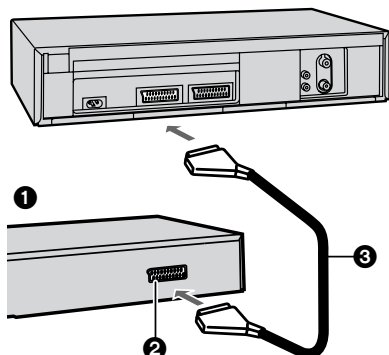
1 Satellite receiver (not supplied)
2 21-pin Scart socket
   – If your satellite receiver has a VCR socket, connect the cable to it.
3 21-pin Scart cable (not supplied)

Set [AV2] to [EXT], [EXT LINK 1] or [EXT LINK 2].
(For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
Set [AV] to [TV/EXT], [EXT LINK 1] or [EXT LINK 2].
(For NV-SJ220 Series)
For details, see page 18.

If the satellite receiver is not equipped with a 21-pin scart socket

1 Satellite receiver (not supplied)
2 Aerial Input socket
3 Aerial Output socket
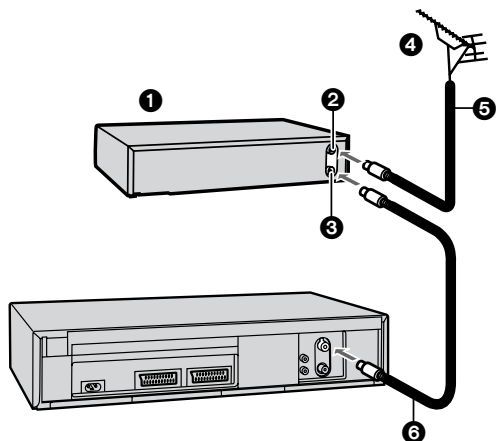4 Aerial (not supplied)
5 Aerial lead (not supplied)
6 RF coaxial cable (not supplied)

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.

Linked Timer Recordings by External Equipments (EXT LINK)

If an external equipment (for example a satellite receiver) with a timer function is connected to the AV socket of this VCR by a 21-pin cable, it is possible to control the recording of the VCR from this equipment.

Make sure that [AV2] is set to [EXT LINK 1] or [EXT LINK 2]. (For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
Make sure that [AV] is set to [EXT LINK 1] or [EXT LINK 2]. (For NV-SJ220 Series) (See page 18.)

Timer programming has to be done on the external equipment and switch to the timer recording standby mode, refer to its operating instructions.

EXT LINK ○ Press the [EXT LINK] button on the VCR to switch the VCR over to the timer recording standby mode.

As long as a video picture is being trasmitted by the Satellite or Digital Receiver, the VCR will record it.
This notice is displayed on the TV screen.
To delete it, press the [OK] button.

VCR now recording
this programme
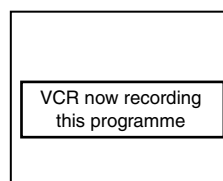
EXT LINK ○ To cancel the external control, turn off the timer recording standby mode of the VCR by pressing the [EXT LINK] button again.

Notes:
– To switch TV automatically to the picture from the VCR in playback mode, connect the AV1 socket of this VCR to the TV by a 21-pin cable. (For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
– Some external equipments may not work with this function, refer to its operating instructions.

Timer Recording

This VCR lets you programme up to 16 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.

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

PROG./CHECK 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 recording].

∧ ∨ Press the [Channel] button to select the programme position of the desired TV station.
– As an alternative method, after pressing the [Channel] button, you can use the [Cursor] buttons ▲▼◄►.

+ DATE – Press the [DATE] button to set the date on which the TV programme will be broadcast.

+ ON – Press the [ON] button to set the starting time.
– When it is kept pressed, the indication changes in 30-minute intervals.

+ OFF – Press the [OFF] button to set the ending time.

SP/LP/EP Press the [SP/LP/EP] button to set the desired tape speed. (For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
– Regarding the [A] indication, refer to page 13.

Press the [Cursor] buttons ▲▼◄► to set [VPS/PDC] to [ON] or [OFF] [–––].
– See page 13 for VPS/PDC recording.

OK Press the [OK] button to conclude the setting.

TIMER Press the [TIMER] 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 13.)

To Programme with the ShowView Function
The ShowView numbers 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.

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

Example:
Programming a timer recording of a TV programme with the ShowView number 721114

SV/V+ Press the [SV/V+] button to display the menu for entering the ShowView number on the TV.

Press the [Numeric] buttons to enter the ShowView number.
– If you have entered a wrong digit, press the [Cursor] button ◄ and then enter the correct digit.

OK Press the [OK] button to display the programmed content.

SP/LP/EP Press the [SP/LP/EP] button to set the desired tape speed. (For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
– Regarding the [A] indication, refer to page 13.
– To change timer recording programmings, use the [Cursor] buttons ▲▼◄►, the [Channel], [DATE], [ON] or [OFF] button.
– See page 13 for VPS/PDC recording.

OK Press the [OK] button again to conclude the settings.

TIMER Press the [TIMER] 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 13.)

To Suspend the Timer Recording Standby Mode
Press the [TIMER] button so that the [⏲] indication on the VCR display disappears.
After you have finished using the VCR, be sure to reactivate the timer recording standby mode by pressing the [TIMER] 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 [⏲] flashes on the VCR display. In this case, press the [TIMER] button to put the VCR in the timer recording standby mode.

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 [−−] indication appears, follow the operation steps below.

⌃⌄ Press the [Channel] button repeatedly to select the programme position on which the TV programme to be recorded will be broadcast.

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.

Setting the Recording Date/Day(s)

+ DATE − Press the [DATE] button to select the recording date (1 to 31), daily timer recording date (Su–Sa, Mo–Sa or Mo–Fr) or weekly timer recording date (Su to Sa).

– 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.

Auto SP/LP Change Function

(For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
If the VCR determines that the remaining tape time is insufficient to record the whole programme, LP mode is automatically selected to ensure that the programme will be recorded as long as possible.

SP/LP/EP Press the [SP/LP/EP] button to select [A].

– This function cannot change the recording speed to the EP mode.
– If the remaining tape time is still not sufficient even in the LP mode, the programme cannot be recorded to its end.
– If the recording speed changes from SP to LP during a timer recording, some brief picture distortion occurs at that point.

VPS/PDC Function

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.

Press the [Cursor] buttons ▲▼◄► to make the [ON] indication appear.

– [ON] must be displayed under [VPS/PDC] on the TV screen.
– 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 Check, Change or Cancel Timer Recording Programmings

PROG./CHECK Press the [PROG./CHECK] button 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.

Press the [Cursor] buttons ▲▼ to select the programming that you want to change or cancel.

To change or cancel timer recording programmings, use the [Cursor] buttons ▲▼◄►, the [Channel], [DATE], [ON], [OFF] or [CANCEL] button.

OK Press the [OK] button to conclude the setting.

EXIT Press the [EXIT] button to exit the On Screen Display.

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

<table>
<tr><td>

Search Functions

</td><td>

Connecting a Decoder

</td></tr>
</table>

Programme List Search
– Each timer recording programming on the tape must be at least 15 minutes long. (25 minutes in the EP mode)

SEARCH Press the [SEARCH] button to display the Programme List menu.

Programme List		Panasonic VCR
Pos		
Name	Date	Start
1. ZDF	27/10	17:46
2. ARD	28/10	15:00

Press the [Cursor] buttons ▲ ▼ to select the programme that you want to locate and play back.

SEARCH Press the [SEARCH] button to start the search for the beginning of the selected programme.
– After the desired recorded programme has been found, playback starts automatically.
– If, after playback has started, you want to search for the beginning of the same or another programme, press the [SEARCH] button. Playback stops, and the Programme List menu appears.

To Cancel the Programme List Search
EXIT Press the [EXIT] button.

Notes:
– If you take out the cassette after a timer recording has finished, pressing the [SEARCH] button activates the Intro-Jet Scan.
– If you programme linked timer recordings, Programme List Search function does not work.

VISS=VHS Index Search System
– Each programme recorded on the tape must be at least 5 minutes long.

INDEX Press the [INDEX] button to start the index search. If you want to search for the 2nd recorded programme in forward direction, press the [INDEX] ►► button twice.
– The VCR fast-forwards or rewinds the tape and searches for the specified index signal. When it has been found, playback starts automatically.

To Cancel the Index Search or to Stop Playback
Press the [Stop] button.

Intro-Jet Scan
– Each programme recorded on the tape must be at least 15 minutes long. (25 minutes in the EP mode)

SEARCH Press the [SEARCH] button 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.

When you have found the programme that you want to view, press the [Play] button to start normal playback.

To Cancel the Intro-Jet Scan or to Stop Playback
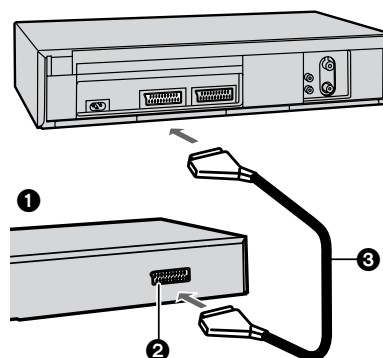Press the [Stop] button.

Note:
– If you press the [SEARCH] button after a timer recording has finished, but before ejecting that cassette, the Programme List Search will be activated.

(For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
Decoder here refers to the device used to decode scrambled broadcasts (Pay TV).

1 Decoder (not supplied)
2 21-pin Scart socket
3 21-pin Scart cable (not supplied)

Connect a 21-pin Scart cable (not supplied) to the AV2 21-pin Scart socket on the VCR and to the 21-pin Scart socket on the decoder.

Connect the decoder's mains lead to an AC mains socket.

Set [AV2] to [DECODER].
For details, see page 18.

AV Link Function
(For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
If the VCR is connected to the TV via a 21-pin Scart cable, you can use the [AV LINK] button 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.
– When you press the [MENU] button 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 on this VCR, and a decoder equipped with RGB output capability to the AV2 socket, the TV can receive RGB signal input from the decoder via the VCR.

Connecting a Stereo Amplifier

(For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
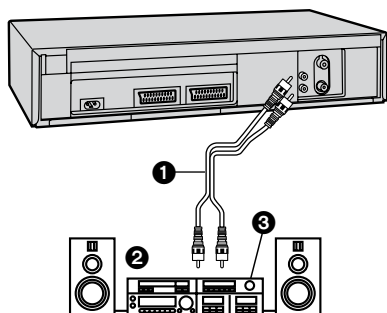
1 Audio cable (not supplied)
2 Stereo amplifier (not supplied)
3 Audio Input sockets

Connect an Audio cable (not supplied) to the Audio Output sockets on the VCR and to Audio Input sockets on the stereo amplifier.

Connect the stereo amplifier's mains lead to an AC mains socket.

Manual Tuning

This VCR has 99 programme positions that can be preset to receive TV stations.
If available TV stations are not received due to extraordinary transmission circumstances, or if you want to change the name of a TV station or change a TV station, you can set it up manually.

MENU Press the [MENU] button to display the Main menu on the TV screen.

Press the [Cursor] buttons ▲▼ to select [Tuning].

OK Press the [OK] button to display the Tuning menu on the TV screen.

Press the [Cursor] buttons ▲▼ to select [Manual].

OK Press the [OK] button to display the list of tuned TV stations.

Press the [Cursor] buttons ▲▼ to select the TV station that you want to tune manually.

OK Press the [OK] button to display the Manual Tuning menu.

Press the [Cursor] buttons ▲▼◄► to select the desired field.

| Pos: | To change the order in which the TV stations are assigned to the programme positions. |

– Press the [Numeric] buttons to enter the number of the desired programme position.

| Name: | To enter or change the name of a TV station. |

– Press the [Cursor] buttons ▲▼◄► and [OK] button to enter the station name.
– If the station name needs a blank space, select the blank between [Z] and [✳].

| Channel: | To enter newly available TV stations or change the channel number of an already tuned TV station. |

– Press the [Numeric] buttons to enter the channel number of the desired TV station.
– Wait a few moments until the desired TV station has been tuned.

15

Fine tuning: To obtain the best tuning condition.
– Press the [Cursor] buttons ▲ ▼ to obtain the best tuning condition.
– If you do not want to change the tuning condition, press the [Cursor] button ► to return to the original condition [AUTO].

Decoder: To preset pay TV stations.
(For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
– Press the [Cursor] buttons ▲ ▼ to select [ON].
If [Decoder] is set to [OFF], normal TV stations are preset.

Video system: To change the type of video system.
– Press the [Cursor] buttons ▲ ▼ to select [PAL] or [MESECAM].
PAL: For receiving PAL signals.
MESECAM: For receiving SECAM signals.

Mono: To select the type of sound to be recorded. (For NV-FJ620EC/ECM/ ECN/ECY Series, NV-FJ621EC/ECM/ ECN/ECY Series and NV-FJ616EC/ ECM/ECN/ECY Series)
– Press the [Cursor] buttons ▲ ▼ 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.

Press the [OK] button to conclude the setting.

Press the [EXIT] button to exit the On Screen Display.

To Delete, Add or Move a Programme Position

Press the [MENU] button to display the Main menu on the TV screen.

Press the [Cursor] buttons ▲ ▼ to select [Tuning].
Press the [OK] button to display the Tuning menu on the TV screen.

Press the [Cursor] buttons ▲ ▼ to select [Manual].
Press the [OK] button to display the list of tuned TV stations.

Press the [Cursor] buttons ▲ ▼ ◄ ► to select the desired TV station.

Follow the operations below.
To delete a programme position [Delete]:
Press the [Channel] button (∧, red).
To insert a blank programme position [Add]:
Press the [DATE] button (+, green).
To move a TV station to another programme position [Move]:
Press the [ON] button (+, yellow), and then use the [Cursor] buttons ▲ ▼ to select the new programme position to which you want to assign the TV station.

Press the [OK] button to conclude the setting.

Press the [EXIT] button to exit the On Screen Display.

Note:
– If downloading of the setup data has been performed, only the instruction indication [Delete] appears.
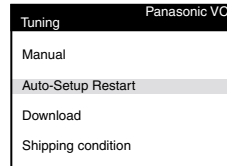
Hint:
– If you have performed Manual Tuning to enter TV stations, the [– –] indication may appear under [Pos/Name] on the On Screen Display when programming a ShowView timer recording.

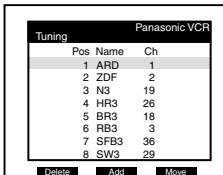## To Restart the Auto Setup, Restart the Download or Return the VCR to the Shipping Condition

Press the [MENU] button to display the Main menu on the TV screen.

Press the [Cursor] buttons ▲ ▼ to select [Tuning].
Press the [OK] button to display the Tuning menu on the TV screen.

	Panasonic VCR
Tuning	
Manual	
Auto-Setup Restart	
Download	
Shipping condition	

Press the [Cursor] buttons ▲ ▼ to select [Auto-Setup Restart], [Download] (For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series) or [Shipping condition].
Press the [OK] button to prepare for Auto Setup start, Download start or resetting the VCR to the shipping condition.
Press the [OK] button again to actually start the Auto Setup, start the Download or change the settings back to the shipping condition.
– After returning the VCR to the shipping condition, disconnect and reconnect the AC Mains Cable to re-tune the VCR.

16

Setting the VCR's Clock

To Manually Adjust the Clock

MENU Press the [MENU] button to display the Main menu on the TV screen.

Press the [Cursor] buttons ▲▼ to select [Clock setting].

OK Press the [OK] button to display the Clock setting menu on the TV screen.

```
                              Panasonic VCR
Clock setting

Clock setting    : MAN.

Time             : 20:30:24
Date             : 16.10.05
```

OK Confirm that [Clock setting] is set to [MAN.], and then press the [OK] button.

Use the [Cursor] buttons ▲▼◄► to set the date and time.
– Instead of the [Cursor] buttons ▲▼◄►, you can also use the [Numeric] buttons to set the date and time.

OK Press the [OK] button to conclude the setting.

EXIT Press the [EXIT] button 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.

MENU Press the [MENU] button to display the Main menu on the TV screen.

Press the [Cursor] buttons ▲▼ to select [Clock setting].

OK Press the [OK] button to display the Clock setting menu on the TV screen.

```
                              Panasonic VCR
Clock setting

Clock setting    : AUTO

Time             : 20:30:24
Date             : 16.10.05
```

Press the [Cursor] buttons ▲▼ to set [Clock setting] to [AUTO].

OK Press the [OK] button to conclude the setting.
– Under adverse reception conditions, etc., the Automatic time correction function may not work. In this case, the indication for [Clock setting] is automatically reset to [MAN.].
If the reception conditions improve later on, it may be possible to activate this function.

EXIT Press the [EXIT] button to exit the On Screen Display.

Hints:
– If [Clock setting] is set to [AUTO] when you open the Clock screen, do not set it to [MAN.], 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 approximate 60 minutes.
– When [Clock setting] is set to [AUTO], 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 [Clock setting] is set to [MAN.] and [Power save] to [ON] (see page 18), the time may not be maintained correctly. In this case, manually adjust the clock.

– If [Clock setting] is set to [AUTO] 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.

Various Settings

MENU Press the [MENU] button to display the Main menu on the TV screen.

Press the [Cursor] buttons ▲▼ to select [Other settings].

OK Press the [OK] button to display Other settings menu.

```
                              Panasonic VCR
Other settings
Tape length    : AUTO (◄ E-240)
SQPB           : AUTO
Power save     : OFF
VCR display    : DIMMED
OSD            : 4:3
AV2            : DECODER
TV system      : PAL
Language       : English
Country        : others
```

Press the [Cursor] buttons ▲▼◄► to select the desired field then desired position.

Tape length: To set the Tape length of the cassette being used to ensure correct indication of the remaining tape time.
– Set Tape length as follows:
[AUTO (◄ E-240)]:
                 The VCR automatically distinguishes E30, -60, -90, -120, -180 and -240 tapes.
[E-195]:   For E195 tape
[E-260]:   For E260 tape
[E-300]:   For E300 tape
– Even if you have selected the correct tape length, the remaining tape time may not be indicated correctly with certain kinds of cassettes.

SQPB: To play back tapes recorded in the S-VHS format (SQPB=S-VHS Quasi Playback).
– Set SQPB mode as follows:
[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.
[OFF]:   Use this setting when playing back a cassette tape recorded in the VHS format only.

Power save: To reduce the VCR's power consumption when the VCR is switched off.
– Set Power save mode as follows:
[ON]: The power consumption is greatly reduced when the VCR is turned off.
[OFF]: The power consumption is not reduced when the VCR is turned off.

Refer to the followings when [Power save] is set to [ON].
– [VCR display] is automatically set to [OFF].
– To turn the VCR on, keep the [VCR-ON/OFF] button pressed on the VCR main unit. It is not possible to turn it on with the remote control.
– The Power save function does not work 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. (For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)

VCR display: For automatic change of the brightness of the VCR display when the VCR is switched off.
– Set the brightness of the VCR display as follows:
[ON]: Indications are brightly lit.
[OFF]: Indications are not lit.
[DIMMED]: Indications are dimly lit.

OSD: For automatic display on the TV screen of the TV station information, type of sound system of the programme being watched and the sound playback mode. (See page 19.)
– Set OSD mode as follows:
[4:3]: Indications can be displayed on the TV screen.
[16:9]: Indications can be displayed on the TV screen when using wide type of TV screen and selecting the wide screen mode on the TV setting.
– Even if setting to [16:9], indications may be cut off depending on the TV.
[OFF]: No indications appears.

AV2: To select the type of external source equipment which is connected to the VCR's AV2 21-pin socket. (For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
– Set the external source equipment as follows:
[DECODER]: When a decoder is connected.
[EXT LINK 1]: When a digital receiver which transmits a special control signal recordings via the 21-pin Scart cable, for example the F.U.N. receiver (TU-DSF30/S3) is connected for the linked timer recordings. (See page 11.)
[EXT LINK 2]: When an external equipment with a timer function is connected for the linked timer recordings. (See page 11.)
[EXT]: When another VCR or a satellite receiver is connected.

AV: To select the type of external source equipment which is connected to the VCR's AV1 21-pin socket. (For NV-SJ220 Series)
– Set the external source equipment as follows:
[TV/EXT]: When TV, another VCR or a satellite receiver is connected.
[EXT LINK 1]: When a digital receiver which transmits a special control signal recordings via the 21-pin Scart cable, for example the F.U.N. receiver (TU-DSF30/S3) is connected for the linked timer recordings. (See page 11.)
[EXT LINK 2]: When an external equipment with a timer function is connected for the linked timer recordings. (See page 11.)

TV system: To select the type of colour TV system to be used during playback or during recording from an external source.
– Set the colour TV system as follows:
[PAL]: When PAL system is used.
[MESECAM]: When SECAM system is used.

Press the [OK] button to conclude the setting.

Press the [EXIT] button to exit the On Screen Display.

18

Language or Country Setting

MENU　Press the [MENU] button to display the Main menu on the TV screen.

Press the [Cursor] buttons ▲▼ to select [Other settings].

OK　Press the [OK] button to display Other settings menu.

```
                                    Panasonic VCR
Other settings
Tape length    : AUTO (◄ E-240)
SQPB           : AUTO
Power save     : OFF
VCR display    : DIMMED
OSD            : 4:3
AV2            : DECODER
TV system      : PAL
Language       : English
Country        : others
```

Press the [Cursor] buttons ▲▼◄► to select [Language] or [Country] and the entry field for [Language] or [Country] in this order.

Press the [Cursor] buttons ▲▼ to select the desired language or country.

OK　Press the [OK] button to conclude the setting.

EXIT　Press the [EXIT] button to exit the On Screen Display.

Other Function

Indications that Can Be Displayed on the TV Screen

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

1 TV station name

2 STEREO or BILINGUAL Indicator
(For NV-FJ620EG/EGY Series, NV-FJ621EG/EGY Series and NV-FJ616EG/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
(For NV-FJ620EC/ECM/ECN/ECY Series, NV-FJ621EC/ECM/ECN/ECY Series and NV-FJ616EC/ECM/ECN/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.

3 Sound mode during playback (L/R)
(For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
AUDIO　At each press of the [AUDIO] button, the selected playback sound is indicated with L (Left) and R (Right).
Stereo playback:
　The L and R indications are displayed.
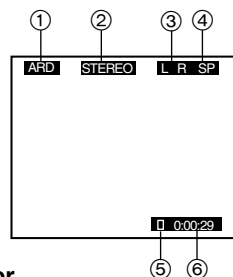Left audio channel playback:
　The L indication alone is displayed.
Right audio channel playback:
　The R indication alone is displayed.
Playback of normal audio track:
　Neither L nor R indication is displayed.

4 Tape speed indicator
(For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)

5 Tape running display

6 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 and 2 do not appear.
– Some of the above indications do not appear when using NTSC tapes.

To Play Back NTSC Video Cassettes on Your PAL TV
(Quasi-NTSC Playback Function)
(For NV-FJ620 Series, NV-FJ621 Series and NV-SJ220 Series)
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.

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 is always displayed to show that the Crystal View Control is activated.

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.

VCR-off Playback

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

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. The VCR will eject the cassette and automatically turn itself off again.

VCR-off Search

When the VCR is off, the VCR starts Intro-Jet Scan of an inserted cassette by pressing the [SEARCH] button.

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

During normal or slow playback, press the [Channel] button ∨ (−) or ∧ (+) 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

Press the [Channel] buttons ∨ (−) and ∧ (+) simultaneously to return to Auto Tracking.

If the still picture scrolls up or down, perform the following operation.

During still playback, keep the [Channel] button ∨ (−) or ∧ (+) 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.

NICAM Broadcasting System

(For NV-FJ620EC/ECM/ECN/ECY Series, NV-FJ621EC/ECM/ECN/ECY Series and NV-FJ616EC/ECM/ECN/ECY Series)
NV-FJ620EC/ECM/ECN/ECY Series, NV-FJ621EC/ECM/ECN/ECY Series and NV-FJ616EC/ECM/ECN/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.
– 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 16.

Before Requesting Service

On Screen Display Messages
The error messages are given in brackets [   ].

[Please insert video tape!]
– You pressed the [REC] button, [REC/OTR] button, the [DIRECT TV REC] button*, the [Play] button, the [Fast Forward] button, the [Rewind] button or the [SEARCH] button when no cassette was inserted in the VCR.
  You pressed the [TIMER] button 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, [REC/OTR] button or the [DIRECT TV REC] button* when a cassette with a broken out erasure prevention tab was inserted in the VCR.
  You pressed the [TIMER] button 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.

* For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series

[This action is not possible before time and date are set]
– You pressed the [SV/V+] button or the [PROG./CHECK] button, 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] button even though no timer recording has been programmed.
  Programme a timer recording before pressing the [TIMER] button.

[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 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 18.)
– Power save setting is [ON]. (See page 18.)

[The VCR display is illuminated, but the VCR cannot be
operated.]
– The VCR is in the timer recording standby mode.
  Press the [TIMER] button 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 7.)

[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.
  (For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616
  Series)

Playback Does Not Work Properly
[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 20.)
– 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. (For NV-FJ620 Series, NV-FJ621 Series and
  NV-FJ616 Series)
– 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.
  (For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616
  Series)
– SQPB setting is not correct.
  Set SQPB setting correctly. (See page 17.)
– During high speed cue and review playback (JET
  SEARCH), the tape transport noise will increase.
  However, this is not a malfunction. (For NV-FJ620 Series,
  NV-FJ621 Series and NV-FJ616 Series)

Recording Is Not Possible or Does Not Work Properly
[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 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] 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 is not selected.
  Select the correct AV input.
– The connections from the external source are not made
  correctly. Correct them. (See page 10.)

The Remote Control Does Not Work Correctly
[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
  (⊕ and ⊖).
  Insert the batteries correctly. (See page 2.)
– Power save setting is [ON]. (See page 18.)

Index

Specifications

Power Source:	220–240 V AC 50/60 Hz
Power Consumption:	21 W (NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
	19 W (NV-SJ220 Series)
Power Consumption When in Standby Mode:	Approx. 3 W (When Power save function is activated)

Video Recording System:	2 rotary heads, helical scanning system
Video Heads:	4 heads (NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
	2 heads (NV-SJ220 Series)
Audio Heads*:	2 heads (Hi-Fi)
Tape Speed:	SP; 23.39 mm/s
	LP*; 11.7 mm/s
Tape Format:	VHS tape
Record/Playback Time:	SP; 240 min with NV-E240
	LP*; 480 min with NV-E240
FF/REW Time:	approx. 60 s with NV-E180

VIDEO

Television System:	CCIR; 625 lines, 50 fields, PAL colour signal		
Modulation System:	Luminance; FM azimuth recording		
	Colour signal; converted subcarrier phase shift recording		
Input Level:	AV1/AV2*;	1.0 Vp-p,	75 ohm, terminated
Output Level:	AV1/AV2*;	1.0 Vp-p,	75 ohm, terminated
	RF Modulated;	UHF channel (21–69),	75 ohm

AUDIO

Input Level:	AV1/AV2*;	−6 dBV,	more than 10 kohm
Output Level:	AV1/AV2*;	−6 dBV,	more than 10 kohm
	AUDIO OUT (PHONO)*;	−6 dBV,	less than 1 kohm

Video Horizontal Resolution:	Colour; more than 240 lines (SP)
Signal-to-Noise Ratio:	Video; more than 43 dB (SP)
	Audio; more than 43 dB (SP)
Dynamic Range*:	Audio; more than 90 dB (Hi-Fi audio track)
Audio Frequency Response:	20 Hz–20 kHz/Hi-Fi (NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series)
	80 Hz–8 kHz (NV-SJ220 Series)
Operating Temperature:	5°C–40°C
Operating Humidity:	35%–80%
Weight:	3.3 kg
Dimensions:	430 (W)×87 (H)×282 (D) mm

* For NV-FJ620 Series, NV-FJ621 Series and NV-FJ616 Series

Weight and dimensions shown are approximate. Specifications are subject to change without notice.

http://www.panasonic.co.jp/global/