

Operating Instructions

DVD PLAYER / VIDEO CASSETTE RECORDER

(DVD/CD Player with MP3 and Hi-Fi Video Cassette Recorder)

NV-VHD1 B



SUPER DRIVE

PDC



Accessories

- Remote Control
EUR7615KB0
- AC Mains lead
RJA0044-3C
- RF lead
VJA0728-A
- Remote Control Batteries
AA, UM3 or R6
- Operating Instructions
- Guarantee Card
- Quick Start Guide



Panasonic

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

OSD = On Screen Display
VCR = Video Cassette Recorder
TV = Television

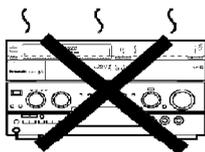


RQTD0021-B

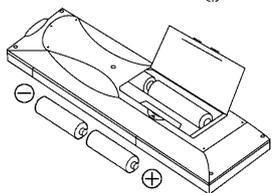
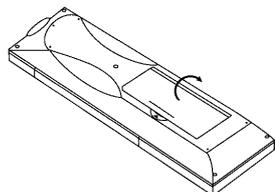
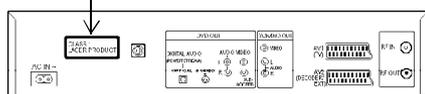
Warnings and Precautions

DANGER	- VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM. (FDA 21 CFR)
CAUTION	- VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. (IEC60825-1)
ATTENTION	- RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FASCEAU.
ADVARSEL	- SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNGDA UDSÆTTELSE FOR STRÅLING.
VARO!	- AVATTAESSA OLET ALLITINNA NÄKYVÄÄ JA NÄKYMÄTÖN LASERISÄTELYLLÄ. ÄLÄ KATSO SÄTEESEEN.
VARNING	- SYNLIG OCH ÖSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRÄKTA FÖR STRÅLEN.
ADVARSEL	- SYNLIG OG USYNLIG LASERSTRÅLING NÄR DEKSEL APNES. UUNGA EKSPONERING FOR STRÅLEN.
VORSICHT	- SICHTBARE UND UNSICHTBARE LASERSTRÄHLUNG. WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETZEN.
注意	- 打开时有可见及不可见激光辐射。避免激光束照射。
注意	- ここを開くと可視及び不可視のレーザー光が出ます。ビームを直接見たり、触れたりしないでください。

Inside of product
Produktets innside (Norwegian)



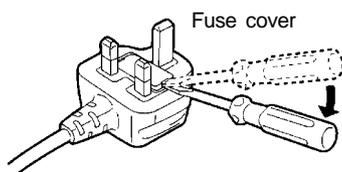
back of product



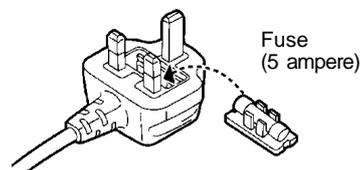
How to replace the fuse

Confirm the AC mains plug fitted and follow the instructions below. Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and attach the fuse cover.



2

- This unit is intended for use in moderate climates.
- Please observe copyright laws when recording sound tracks and film.

Caution !

- Do not install, or place this unit, in a bookcase, built-in cabinet or in another confined space. Ensure the unit is well ventilated. To prevent risk of electric shock or fire hazard due to overheating, ensure that curtains and any other materials do not obstruct the ventilation vents.
- Do not obstruct the unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.
- Do not place sources of naked flames, such as lighted candles, on the unit.
- Dispose of batteries in an environmentally friendly manner. Batteries, packaging and old equipment should not be disposed of as domestic waste, but in accordance with the applicable regulations.
- Do not remove outer cover to prevent electric shock. There are no user serviceable parts inside. Refer all servicing to qualified service personnel.
- Only transport and set up this equipment in a horizontal position and do not place anything heavy on it.
- Only connect leads when all the parts of this equipment, the TV and other equipment are switched off.
- Only clean the outside of this equipment, using a soft cloth and no cleaning fluid.
- The mains lead must not be used for other equipment.
- Do not connect or handle the equipment with wet hands.
- In case of rapid temperature changes, do not operate this equipment for minimum of 1 hour.
- Do not place the unit on amplifiers or equipment that may become hot. The heat can damage the unit.



CAUTION!

THIS PRODUCT UTILIZES A LASER. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

Warning!

To reduce the risk of fire, electric shock or product damage, do not expose this equipment to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the equipment.

This equipment, the remote control, the mains lead must not be used if it is damaged. Protect them from:

- Direct sunlight, heat, cold, rain, wetness, oil, soiling and dust
- Insertion of fingers or objects
- Shock, vibrations and mechanical stress (do not bend the mains lead)
- Electric and magnetic fields
- Lightning strikes during thunderstorms (disconnect mains and aerial plugs)

Instructions for inserting remote control batteries:

- The lifetime of the battery is about 1 year, depending on the frequency of use.
- Do not use one old and one new battery, or different types of batteries together (e.g. one alkali and one zinc-carbon battery).
- Only insert batteries which contain no toxic materials (such as lead, cadmium, mercury).
- Do not use rechargeable type batteries.
- If the remote control will not be used for a long time, remove the batteries and store them in a cool and dry place.
- Do not heat or short-circuit the batteries.
- Remove spent batteries immediately and replace them with type AA, UM3 or R6.
- Observe the \oplus and \ominus polarities when replacing the batteries.

Caution for AC Mains Lead (For United Kingdom)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug. Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that is approved by ASTA or BSI to BS1362. Check for the ASTA mark \diamond or the BSI mark \heartsuit on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced. If you lose the fuse cover the plug must not be used until a replacement cover is obtained. A replacement fuse cover can be purchased from your local dealer.

CAUTION!

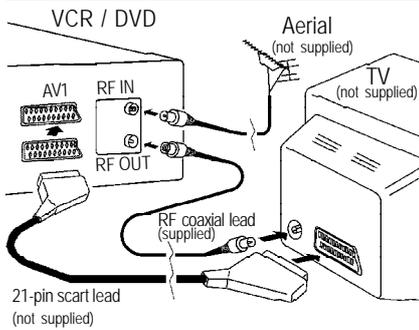
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET. If a new plug is to be fitted please observe the wiring code as stated below. If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code: Blue: Neutral, Brown: Live. As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows: The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue. The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL \perp OR COLOURED GREEN OR GREEN/YELLOW. THIS PLUG IS NOT WATERPROOF - KEEP DRY. Before use: Remove the connector cover.

Setting up

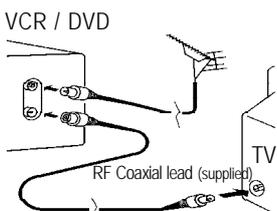
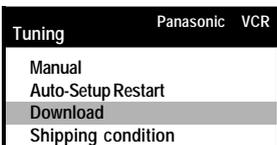
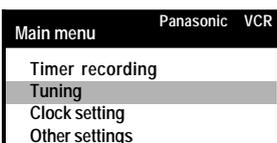
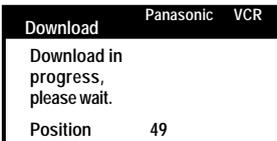
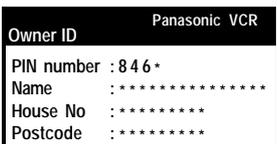
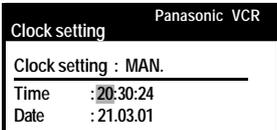


21-pin scart lead
(not supplied)

VCR display



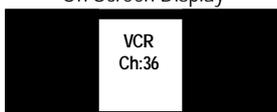
On Screen Display



VCR display

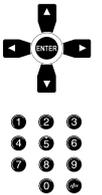


On Screen Display



Set up the connections shown here and connect the mains lead (supplied) to your AC IN.

- The RF (radio frequency) coaxial lead must be connected for TV reception, even if the video recorder is already connected with a 21-pin scart lead.
- For more information about the remote control buttons and cursors see pages 4-5.



Automatic Setting without Q Link

- Set the remote control to VCR TV
- Switch on the unit , all the TV stations which can be received will be tuned automatically.
- Adjust the TV to the RF channel which is displayed on the VCR display, after automatic tuning is finished. Please also read the operating instructions for your TV.
- If the menu [Clock setting] appears, use the cursors or the numeric buttons on the remote control to set the [Time] and [Date] manually.
- To end this procedure, press **|ENTER|**.
- To set the [Owner ID], use the cursor buttons or the numeric buttons and press **|ENTER|** on the remote control to fill in the information.
- Press **|EXIT|** to make the On Screen Display disappear.

Note: If the [Auto-Setup] or [Owner ID] menu does not appear after switching on the unit, you can restart the automatic setting and set the [Owner ID] manually; see page 9. An incorrect setting of time or date (observe summer- and wintertime) will influence the timer recording.

Automatic Setting with Q Link

If your TV is equipped with Q Link or with a similar function from other manufacturers (see note), the TV programme positions can be downloaded with a fully-wired 21-pin scart lead (not supplied). The programme positions must be tuned on the TV first.

- Connect the scart lead.
- Set the AV channel of the TV.
- Set the remote control to VCR
- Switch on the unit .
- Downloading of the TV data starts.
- Set the [Time], [Date] and [Owner ID], see Automatic Setting without Q Link.
- When the channel indication stops flashing on the VCR display, the downloading is complete.

Note about QLink: The following systems from other manufacturers have a similar function to Q Link from Panasonic. List of registered trademarks: Q Link (Panasonic), DATA LOGIC (Metz), Easy Link (Philips), Megalogic (Grundig), SMARTLINK (Sony)

Manual download start

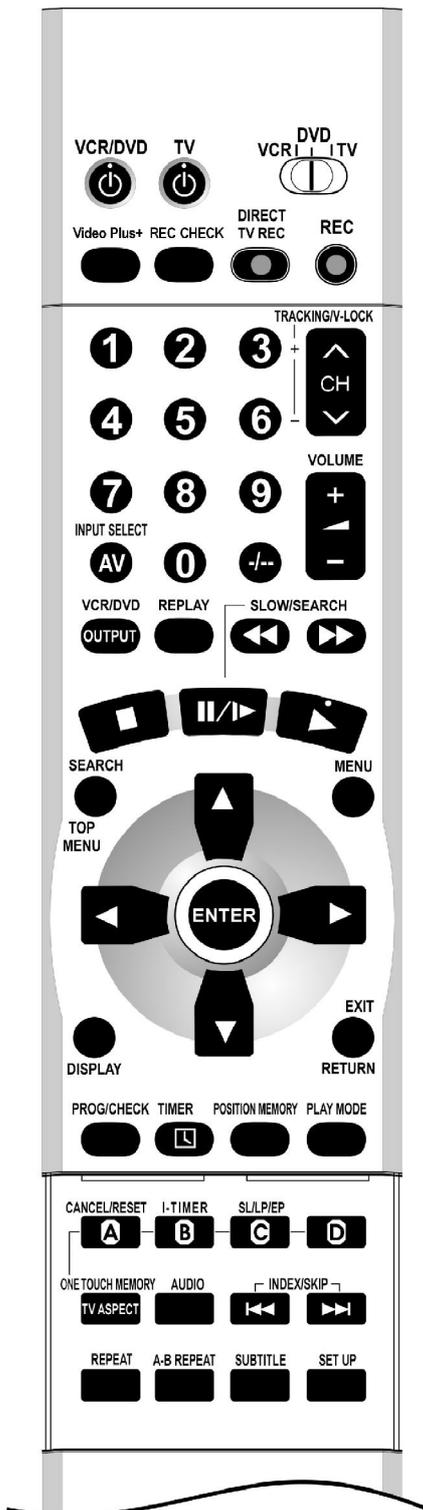
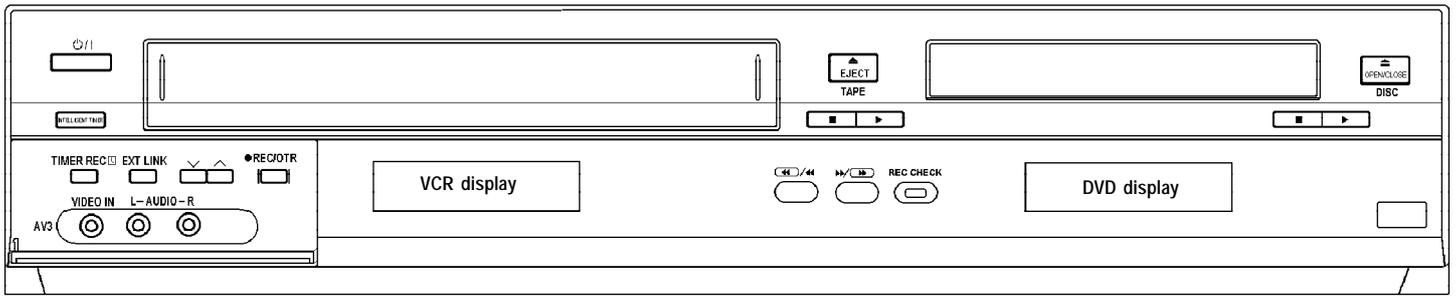
- Set the AV channel of the TV.
- Set the remote control to VCR
- Press **|MENU|**
- Select [Tuning]
- Access by pressing **|ENTER|**
- Select [Download]
- Press **|ENTER|**
- Confirm by pressing **|ENTER|**
- When the channel indication stops flashing on the VCR display, the downloading is complete.

Connect the TV only with a RF Coaxial lead

You must ensure that the video output channel is adjusted to the input channel of the TV. For this purpose, please also read the operating instructions for your TV.

- Set the remote control to VCR
- Switch on the unit
- Press **|MENU|** for about 7 seconds until the number of the channel appears on the VCR display.
- Tune the TV until the test screen appears. A distorted picture on the **channel** can be reduced by adjusting the unit and the TV to another channel.
- Use the **|CH|** button or the numeric buttons to select the channel number.
- Tune the TV until the test screen appears.
- To store this adjustment, press **|ENTER|**.

VCR / DVD Controls



The functions of these buttons can be operated by the remote control or directly on the unit. In this description, the remote control symbols are used in most cases.

TV Operations

To set the remote control code to operate the TV, see page 23.

	Switch the TV on and off.
	Select TV or AV channel.
	Switch the screen format between the wide screen and other formats.
	Select the TV channel.
	Operate the TV volume.

General Operations

	VCR/DVD Standby/on switch Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
	Menu Operation (indicated by) These buttons are also used as cursors in order to select items on the menu. next line = , next page =
	ENTER Select or Store Operation
	EXIT EXIT a menu
	Direct input (indicated by) by pressing numeric buttons
	CANCEL/RESET Clear settings
	REPLAY Operate REPLAY Function. Press this button during playback.
	Switch the remote control to VCR, DVD or TV
	INPUT SELECT To select the input press this button repeatedly: VCR channel, A1, A2, A3 (front input) or dc (DVD)
	VCR/DVD OUTPUT Switch the common output from VCR to DVD or vice versa, see page 9.

VCR / DVD Operations

VCR Operations

		VCR display
	Playback (indicated by ▷)	
	Stop (indicated by □) • To stop winding a tape, recording or playback.	
	Still Playback (indicated by II/▶) • Press this button during playback. • Resume normal playback by pressing this button again or Playback ▷.	
	Slow Playback • Keep this button pressed down for more than 2 seconds during playback. • Resume normal playback by pressing Playback ▷.	
	Fast Forward and Forward Search Fast Rewind and Backward Search • To select Fast Forward or Fast Rewind, press these buttons when the video has stopped. • To briefly watch the picture during Fast Forward or Fast Rewind, hold down the corresponding button. • To search press these buttons briefly during playback, and the search will continue until Playback ▷ is pressed. Two times pressing increases search speed (JET SEARCH). • If you keep this button pressed, the search function will continue until you release the button.	
	VHS Index Search Function (see page 8)	
	Remove the cassette. Press the EJECT button on the unit or press Stop □ for more than 3 seconds on the remote control.	
	Change the Sound mode. Press this button repeatedly. Stereosound: OSD Display L R Left channel: OSD Display L Right channel: OSD Display R Mono sound: OSD Display - -	
	Display time, Tape counter or Remaining tape time. Press this button repeatedly.	
	Select the VCR channel and adjust the tracking, see page 23	
	Reset the Tape counter. Press this button. When inserting a cassette, the counter is reset to 0:00.00.	
	Select the channel or the Video Plus+ number Use the numeric buttons. Example: 18 =	
	Display the Main menu	
	VCR Timer Recording Function see page 7	
	VCR Recording Functions see page 6	
	VCR Timer Recording Functions see page 6, 7	
	VCR Timer Recording and Tape Speed Functions see page 6, 7	
	VCR Programme List and Intro-Jet Scan Function see page 8	

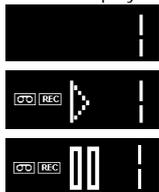
DVD Operations

		DVD display
	Playback (indicated by ▷)	
	Restart from the memorized position	
	Playback Stop Resume (press button 1x) Playback Stop (press button 2x) (indicated by □)	
	Playback Pause (indicated by II/▶)	
	Slow-motion playback • Keep this button pressed down while paused. • Slow playback forward • Slow playback backward • Resume normal playback by pressing Playback ▷.	
	Forward Search Backward Search	
	ADVANCED SURROUND: Playback if you are using 2 front speakers BASS PLUS: If you connected a subwoofer PICTURE: Enhances detail in dark scenes DIALOGUE ENHANCER: Increases the volume of the dialogue sound	
	Reselect or store this settings	
	Skip chapters or tracks	
	Remove the disc. Press the OPEN/CLOSE button on the unit or press Stop □ for more than 3 seconds on the remote control.	
	To change audio soundtrack / language. Press AUDIO during playback. The soundtrack changes each time you press the button (see page 19).	
	Call up the OSD-screens	
	Call up the top menu of a disc	
	Call up the menu of a disc	
	Return from DVD SETUP menu to playback	
	Select language of subtitles (see page 17)	
	Call up the PLAYLIST menu (see page 15)	
	Call up the DVD SETUP menu (see page 18)	
	Check the VCR recording status. For a moment the Timer recording menu or an Info box appears on the OSD (to record see page 7).	
	Repeat Playback (see page 16)	
	A-B Repeat Playback (see page 16)	

Note: To preserve the video heads, the following functions are switched off automatically after 5 - 10 minutes : Forward Search (Cue), Backward Search (Review), Jet Search, Still Playback, Slow Playback. (Distorted pictures and tape transport noises during these functions are not functional faults)

VCR Recording

VCR display



- Switch on and set the TV to the video output channel and insert a cassette with an intact erasure prevention tab into the VCR.
- Before **recording**, select the channel with the **[CH]** button. Select the AV channel **[INPUT SELECT AV]** if you want to record a programme from scart AV1, AV2, front input = A3 or Disc = dc.
- Switch the remote control to VCR .
- Press **[REC]** to start recording.
- Press **Stop**  to stop recording.
- Use **Pause II/▶** to pause recording.
- Restart recording by pressing this button again. To preserve the video heads, the function will be switched off after 5 minutes.



Direct TV Recording

The **[DIRECT TV REC]** button allows you to immediately start recording the same programme that you are viewing on the TV, if your TV is equipped with Q Link or with a similar function from other manufacturers (see page 3) and connected with a fully-wired 21-pin scart lead (not supplied).



OTR Function (OTR = One Touch Recording) • REC/OTR

To record for a specific length of time, press this button on the VCR. You can extend the recording time from **30, 60, 120, 180 to 240 minutes** by pressing the button repeatedly.

The selected length of recording time will appear on the VCR display. To stop in advance press **Stop** . If you want to watch **another TV programme at the same time** as you are recording, select the channel on the TV.

VCR Display



Tape Speed

- Press **[DISPLAY]** until **[REMAIN]** on the VCR display appears.
- Press **[SP/LP/EP]** before recording, in order to select the tape speed for the recording. Make sure that the remaining time on the cassette is longer than the time set for recording, otherwise the whole programme cannot be recorded.

The following information appears on the VCR display:

- [SP] standard recording time: optimum picture quality.
- [LP] double recording time: slightly reduced picture quality.
- [EP] (SUPER LP) triple recording time: slightly reduced picture quality.

Note: Distorted pictures produced when playing back some cassettes (e.g. type E300) after LP or EP recordings are not functional faults.

Timer recording with On Screen Menu

With the **On Screen Menu** you can programme Timer recordings (up to 16 programmes).

Switch on and set the TV to the video output channel and insert a cassette with an intact erasure prevention tab into the VCR.

- Switch the remote control to VCR .
- Press **[PROG/CHECK]** to display [Timer recording] menu and press **[ENTER]**.
- Set the channel [Pos].

You can use the cursors  on the remote control to move around the menu, in order to make changes.

- Set the recording [Date], day or week.

For example: Sa means that the programme will be recorded every Saturday, or Mo - Sa means that the programme will be recorded every day from Monday to Saturday.

- Set the [Start] time. If you keep this button pressed down , the time will change in 30 minute jumps.
- Set the [Stop] time.
- Set the Tape Speed [SP], [LP], [EP] or [A] (automatic).

- **In the setting A** (automatic), the VCR automatically switches (with a short picture distortion) from SP to the slow tape speed LP, to record the programme as long as possible, if the remaining tape time is not long enough.
- The preset [PDC] settings can be manually changed.

[ON] The broadcaster provides PDC signals. If the program is starting earlier or later than planned the timer recording will be synchronised to the actual broadcast start.

Important! The time and date settings must be exactly same as programme information (programme magazine). If there is a special PDC time noted, it must be used. (The recording can not start, if the settings are not exact.)

[- - -] The broadcaster does not provide PDC signals.

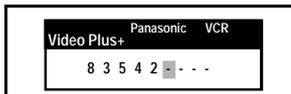
[OFF] The broadcaster provides PDC signals, but the function is turned off. With this setting you have to add to the start and stop time so that the whole film can be recorded completely, just in case the film is broadcasted out of the planned time.

- To store the programme, press **[ENTER]**.
- In order to preset other recordings, repeat this procedure.
- Press **[TIMER]** to switch the VCR to Standby mode for **Timer recording**. Make sure that in the VCR display  appears.

On Screen Display

Panasonic VCR 1/2						
Timer recording						
Pos	Name	Date	Start	Stop		PDC
1.....	-/-	-:-	-:-	-:-	-	-
2.....	-/-	-:-	-:-	-:-	-	-
3.....	-/-	-:-	-:-	-:-	-	-

Panasonic VCR 1/2						
Timer recording						
Pos	Name	Date	Start	Stop		PDC
1.***32	Mo-Sa	13:30	14:00	LP	ON	
2.***32	20/9	15:00	16:00	SP	OFF	
3.....	-/-	-:-	-:-	-:-	-	-



Timer recording						
Pos	Name	Date	Start	Stop	SP	PDC
1.	BBC1	20/4	15:00	16:00	SP	ON
2.	----	-/-	----	----	-	---
3.	----	-/-	----	----	-	---



INTELLIGENT TIMER						
Pos	Name	Date	Start	Stop	SP	PDC
1.	BBC1	20/04	15:00	16:00	SP	ON
2.	BBC2	21/04	15:00	16:00	SP	ON

Timer recording						
Pos	Name	Date	Start	Stop	SP	PDC
1.	BBC2	21/04	15:00	16:00	SP	ON
2.	----	-/-	----	----	-	---
3.	----	-/-	----	----	-	---

Timer recording with VIDEO Plus+

Switch on and set the TV to the video output channel, insert a cassette with an intact erasure prevention tab into the VCR and set the remote control to VCR operation.

- Press **[VIDEO Plus+]**
 - Enter the VIDEO Plus+ number. For correction use **◀**.
 - To access [Timer recording], press **[ENTER]**.
 - If the channel name is not set automatically, select the channel [Pos] **▲▼** and store with **[ENTER]**. The name of channel will be saved. To modify the [Name], see page 10.
 - Set the Tape Speed [SP], [LP], [EP] or [A] (automatic).
 - Check the Remaining tape time.
 - To store the programme, press **[ENTER]**.
 - To preset other recordings repeat the procedure.
 - Press **[TIMER]** to switch the VCR to Standby mode. Make sure that the VCR display **[]** appears.
- VIDEO Plus+ and PlusCode are registered trademarks of Gemstar Development Corporation. The VIDEO Plus+ system is manufactured under licence from Gemstar Development Corporation.

Recording with Intelligent Timer Function

To easily set the Timer for programmes often broadcasted on the same channel and time each day (for example series), the Intelligent Timer Function remembers the channel number along with the start and end times of the last 8 programmes that you have recorded using Timer recording.

- Press **[I-TIMER]**
- To select the programme **▲▼**
- Press **[TIMER]** to switch the VCR to Standby mode for **Timer recording**. If you want to modify the data first, follow the next steps.
- If more than 8 programmes are stored, the oldest data will be lost. To delete recording data manually, press **[CANCEL]**.
- To protect a programme press **▶** and the lock symbol **[]** will appear. To unlock a programme press **◀**.
- To modify the data, press **[ENTER]** and the [Timer recording] menu will appear.
- Change the data **▲▼◀▶**.
- Press **[TIMER]** to switch the VCR to Standby mode for **Timer recording**. For more information, see page 6.

Note: These functions can be also used with the VCR buttons: **[INTELLIGENT TIMER]**, **[TIMER REC []]** When [Shipping condition], [Auto - Setup Restart] etc. has been carried out, Intelligent Timer data will be lost. To use Intelligent Timer Function, at least one timer recording has to be done.

Cancel Standby mode for Timer recording

- Press **[TIMER]** and in the VCR display **[]** will disappear.
- Now you can playback a cassette or make a recording.
- After that, you must press the button again to switch the VCR to the Standby mode for Timer recording.

Check the Timer recording

- Press **[PROG/CHECK]** to display the [Timer recording] menu.
- Press **[EXIT]** to quit the menu.

Delete or change a Timer recording

- Press **[PROG/CHECK]** to display the [Timer recording] menu.
- Use **▲▼** to select the entry to be changed, press **[CANCEL]** to delete the Timer recording.
- Use **▲▼** to select the entry to be changed, press **[ENTER]**, change entry with **▲▼◀▶**.
- Press **[ENTER]** to store these changes.
- Press **[EXIT]** to quit the menu or press **[TIMER]** to switch the VCR to Standby mode.

Synchronous recording (DVD, VCD, CD, MP3)

To copy synchronous from the DVD, VCD, CD or MP3 to a VHS tape.

- Switch the remote control to DVD **[DVD]**.
- Set the beginning of the scene with **Playback ▶** and **Pause II/▶**
- Switch the remote control to VCR **[VCR]**.
- Select the **Disc channel (dc)** by pressing **[AV]**
- Set the beginning of the recording with **◀▶**, **Playback ▶** and **Pause II/▶**
- Press **[REC]**
- Start the recording, press **Pause II/▶** (disc will start the playback synchronous).

Note:

- Copying of copy protected material from disc is against copyright laws. If copying is attempted a warning message will appear on the screen. Although the unit will continue recording, the playback picture will be distorted and unwatchable.
- Recording of NTSC material from disc to tape is not possible because this unit is not designed to convert NTSC to PAL format.



VCR Playback / VCR Functions

VCR Playback

- When a cassette is inserted, the VCR switches on automatically.
- When a cassette without an erasure prevention tab is inserted, the VCR will automatically start playback.
- The cassette will automatically rewind when the tape end is reached.
- The CVC System (Crystal View Control) ensures optimum picture quality.

VCR display



Normal Playback

- Press this button to start Playback.

Stop Playback

- Press this button to stop winding a tape or to stop recording.

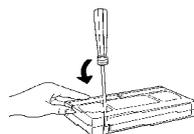
Still Playback

- Press this button during playback.
- Resume normal playback by pressing this button again or Playback ▷.

Slow Playback

- Keep this button pressed down for more than 2 seconds during playback.
- Resume normal playback by pressing Playback ▷.

Note: For search functions, see page 5.



Erasure prevention of a cassette

To prevent the accidental erasure of a cassette, remove the erasure prevention tab. If you want to record again on a cassette with erasure prevention, and this symbol  is flashing on the VCR display, then cover the hole with adhesive tape.

NTSC Playback Function

This function allows to playback tapes on PAL TV which were recorded in NTSC. On some TV pictures may be distorted during NTSC playback. Try to adjust your TV. For this purpose, please also read the operating instructions for your TV. Dubbing or recording of NTSC tapes with this VCR is not possible.

Repeat Playback Function

Press **Playback ▷** for more than 5 seconds when the VCR is on stop mode (the letter R will appear on the OSD). The VCR will keep replaying the cassette until the end of the recorded part. Press **Stop □** to exit this function.

Child lock Function

To deactivate the buttons on the unit and the remote control, press the **[ENTER]** and **[EXIT]** buttons at the same time until this display appears. This display will also appear if attempts are made to operate the unit when this function is activated, to inform that the unit cannot be operated. **To cancel the Child Lock Function**, press the same buttons until the display disappears.

If the power supply of the unit is disconnected, the Child Lock Function is cancelled after about 60 minutes.

Playback Off Timer Function (to stop Playback automatically)

To stop the playback after a preset time, press **Playback ▷** on the VCR for more than 3 seconds during playback. You can extend the playback time from **30, 60, 120, 180 to 240 minutes** by pressing the button repeatedly. To stop in advance press **Stop □**. The selected length of playback time will appear on the VCR display.

Intro-Jet Scan Function

You can playback the beginning of each recording with the **Intro-Jet Scan Function**. Press the **[SEARCH]** button. The VCR will rewind to the start of the tape, and play with high speed for 10 seconds the beginning of each recording (which is longer than 15 minutes). Once you have found the recording, press **Playback ▷**.

To cancel the search function, press the **Stop □**.

Note: For more explanation of the SEARCH button, see Programme List.

Programme List

The List of the Timer recordings are stored if the recordings are longer than 15 minutes (EP mode 25 minutes) and the cassette was not removed.

- Press **[SEARCH]** to display the [Programme List].
- Select the programme **▲▼**.
- By pressing the **[SEARCH]** button again, the VCR will wind the tape to the selected programme and start to playback.
- If you select another programme, press **[SEARCH]** again, the playback will stop and the [Programme List] will appear.
- Press **[EXIT]** to quit the menu.

Note: If you have removed the cassette, or the power supply was interrupted, the Intro-Jet Scan will be activated when pressing the **[SEARCH]** button.

VHS Index Search System

To quickly find the beginning of a programme, press forward **INDEX ►►**, or press backward **INDEX ◄◄**.

This function only works on playback mode or in stop mode. Depending on how many times you press these INDEX buttons (up to a maximum of 20 times), the VCR will search through the tape to find the start of the programme, and will automatically start playback (for each programme which is longer than 5 minutes).

For example, if you press the INDEX button three times, the VCR will search for the third programme.

To cancel the Index Search System, press **Stop □**.



Panasonic VCR 1/2			
Programme List			
Pos	Name	Date	Start
1.	***01	27/10	17:44
2.	***01	28/10	15:00

Panasonic VCR	
Main menu	
Timer recording	
Tuning	
Clock setting	
Other settings	

Setting the Audio playback

- Press [MENU]
- Select [Other settings] ▼
- Access by pressing [ENTER]
- Select [Audio playback] ▼
- Select the input field ►
- Select the settings ▲▼
- Store by pressing [ENTER]
- Press [EXIT]

Panasonic VCR	
Other settings	
Tape length	: AUTO (◀E-240)
Audio playback	: MIX

For tapes recorded with audio dubbing function, select [MIX] to hear the mono and Hi-Fi audio track together.

While playback you can select the sound track with the [AUDIO] button.

[NORMAL]	only original sound	OSD: L R
	only dubbing sound (mono)	OSD: - -
[MIX]	original sound and dubbing sound	OSD: L R
	only dubbing sound (mono)	OSD: - -

Panasonic VCR	
Main menu	
Timer recording	
Tuning	
Clock setting	
Other settings	

Tape length setting

- Press [MENU]
- Select [Other settings] ▼
- Access by pressing [ENTER]
- Select the input field ►
- Set [Tape length] ▲▼
- Store by pressing [ENTER]
- Press [EXIT]

Panasonic VCR	
Other settings	
Tape length	: E - 195
Audio playback	: NORMAL
SQPB	: AUTO

Panasonic VCR	
Main menu	
Timer recording	
Tuning	
Clock setting	
Other settings	

Clock setting

If the broadcaster is providing the time signal, the Time and Date is set automatically [Clock setting] is set on [AUTO].

To set the time manually:

- Press [MENU]
- Select [Clock setting] ▼
- Access by pressing [ENTER]
- Select [MAN.] ▲▼
- Access by pressing [ENTER]
- Set the Time and Date ▲▼◀▶
- Store these settings by pressing [ENTER]
- Press [EXIT]

Panasonic VCR	
Clock setting	
Clock setting	: MAN.
Time	: 20:30:24
Date	: 21.03.01

Panasonic VCR	
Main menu	
Timer recording	
Tuning	
Clock setting	
Other settings	

Remote Control setting

To use a second Panasonic VCR with one remote control in the same place:

- Press [MENU]
- Select [Other settings] ▼
- Access by pressing [ENTER]
- Select [Remote] ▲
- Select the input field ►
- Select the setting ▲▼
- Store by pressing [ENTER]
- Press [EXIT]

[VCR1] To use first VCR.

[VCR2] To use second VCR.

To operate both of them, adjust remote control:

- hold [ENTER] and press [1] to operate VCR1
- hold [ENTER] and press [2] to operate VCR2

Panasonic VCR	
Main menu	
Timer recording	
Tuning	

Owner ID

- Press [MENU]
- Select [Tuning] ▼
- Access by pressing [ENTER]
- Select [Owner ID] ▼
- Press [ENTER]
- use the cursors buttons ▲▼◀▶ and [ENTER] on the remote control to fill in the informations.
- Press [EXIT]

Panasonic VCR	
Tuning	
Manual	
Auto - Setup Restart	
Download	
Shipping condition	
Owner ID	

Panasonic VCR	
Main menu	
Timer recording	
Tuning	
Clock setting	
Other settings	

Setting of On Screen Displays (OSD)

- Press [MENU]
- Select [Other settings] ▼
- Access by pressing [ENTER]
- Select [OSD] ▼
- Select the input field ►
- Select the settings ▲▼
- Store by pressing [ENTER]
- Press [EXIT]

Panasonic VCR	
Other settings	
Tape length	: AUTO (◀E-240)
Audio playback	: NORMAL
SQPB	: AUTO
VCR/DVD OUTPUT	: AUTO
VCR display	: DIMMED
OSD	: 4:3

[4:3] displays are on the edge of the screen (the displays are not visible during playback in 16:9 format)

[16:9] displays are on the edge of the screen in 16:9 format (the displays are in the centre of the screen in 4:3 format)

[OFF] No On Screen Displays

Panasonic VCR	
Main menu	
Timer recording	
Tuning	
Clock setting	
Other settings	

Setting of SQPB (S-VHS Quasi Playback)

- Press [MENU]
- Select [Other settings] ▼
- Access by pressing [ENTER]
- Select [SQPB] ▼
- Select the input field ►
- Select the settings ▲▼
- Store by pressing [ENTER]
- Press [EXIT]

Panasonic VCR	
Other settings	
Tape length	: AUTO (◀E-240)
Audio playback	: NORMAL
SQPB	: AUTO

SQPB settings:

[AUTO] VCR automatically recognises types of recordings

[ON] Only S-VHS / S-VHS ET recordings should be played

[OFF] Only VHS recordings should be played

Note: Distorted pictures during these playback function are not functional faults.

Panasonic VCR	
Main menu	
Timer recording	
Tuning	
Clock setting	
Other settings	

Setting the Brightness

of the VCR display (in standby mode)

- Press [MENU]
- Select [Other settings] ▼
- Access by pressing [ENTER]
- Select [VCR display] ▼
- Select the input field ►
- Select the settings ▲▼
- Store by pressing [ENTER]
- Press [EXIT]

Panasonic VCR	
Other settings	
Tape length	: AUTO (◀E-240)
Audio playback	: NORMAL
SQPB	: AUTO
VCR/DVD OUTPUT	: AUTO
VCR display	: ON

Adjust the Brightness of the VCR display:

[ON] The VCR display is brightly illuminated

[DIMMED] The VCR display is dimmed

Panasonic VCR	
Main menu	
Timer recording	
Tuning	
Clock setting	
Other settings	

Output control

- Press [MENU]
- Select [Other settings] ▼
- Access by pressing [ENTER]
- Select [VCR/DVD OUTPUT] ▼
- Select the input field ►
- Select the settings ▲▼
- Store by pressing [ENTER]
- Press [EXIT]

Panasonic VCR	
Other settings	
Tape length	: AUTO (◀E-240)
Audio playback	: NORMAL
SQPB	: AUTO
VCR/DVD OUTPUT	: MAN.

[AUTO] If a button is pressed, the output is connected automatically to corresponding part of the unit. For example: while watching a DVD the VCR playback button is pressed, the unit will switch to VCR playback.

[MAN.] It is necessary to switch manually with the [VCR/DVD OUTPUT] button from DVD to VCR or vice versa.

VCR Tuning

Setting the sound system

Panasonic VCR	
Main menu	
Timer recording	
Tuning	
Clock setting	
Other settings	

Panasonic VCR	
Tuning	
Manual	
Auto - Setup Restart	
Download	
Shipping condition	

Pos	: 33
Name	: ***33
Channel	: 37
NICAM	: AUTO

This system can receive transmissions which are broadcast with **NICAM sound**.

This is a sound system with two sound channels which broadcasts either stereo sound or two separate mono channels (M1 and M2).

- Press **[MENU]**
- Select **[Tuning]** ▼
- Access by pressing **[ENTER]**
- Access **[Manual]** by pressing **[ENTER]**
- Select the channel ▲▼
- Access by pressing **[ENTER]**
- Select **[NICAM]** ▲▼
- Select the input field ►
- Select the sound setting **[AUTO]** or **[OFF]** ▲▼
- Store by pressing **[ENTER]**
- Press **[EXIT]**

Select the setting **[NICAM]** to **[OFF]** if you want to record a normal mono sound on the Hi-Fi tracks of the VCR, for example, if the stereo sound is distorted through the reception conditions.

Panasonic VCR	
Main menu	
Timer recording	
Tuning	
Clock setting	
Other settings	

Panasonic VCR	
Tuning	
Manual	
Auto - Setup Restart	
Download	
Shipping condition	

Panasonic VCR		
Tuning		
Pos.	Name	Ch
1	BBC1	34
2	BBC2	39
3	ITV	22

Pos	: 1
Name	: BBC1
Channel	: 34
NICAM	: AUTO

Change the order of the Channel positions and the names of the TV station

- Press **[MENU]**
 - Select **[Tuning]** ▼
 - Access by pressing **[ENTER]**
 - Access **[Manual]** by pressing **[ENTER]**
 - Select the Channel to be changed ▲▼
 - Access by pressing **[ENTER]**
 - Select the input field for **[POS]** ►
 - **Input the Channel position** ▲▼
 - Store the setting by pressing **[ENTER]**
 - Select **[Name]** ▼
 - Select the input field ►
 - **Input the name of the TV station** selecting the first letter ▲▼
 - Select the next letter ►
 - Select the next letter ▲▼.
- To input an empty character, select the blank character between Z and * .
- Store the setting by pressing **[ENTER]**
 - Press **[EXIT]**

Panasonic VCR	
Main menu	
Timer recording	
Tuning	
Clock setting	
Other settings	

Panasonic VCR		
Tuning		
Pos.	Name	Ch
33	***33	37
34	-----	---
35	***35	23

Pos	: 34
Name	: -----
Channel	: 37
Nicam	: AUTO

Panasonic VCR		
Tuning		
Pos.	Name	Ch
33	***33	37
34	-----	---
35	***35	23
Delete	Add	Move
A	B	C

Setting a new Channel Add / Delete / Move a Channel on the list

- Press **[MENU]**
- Select **[Tuning]** ▼
- Access by pressing **[ENTER]**
- Access **[Manual]** by pressing **[ENTER]**
- Search for an unused Channel position ▲▼

(for rapid search, keep the cursor button pressed down), or **[Add]** between other Channels using the **[B]** button and add by pressing **[ENTER]**

- Access by pressing **[ENTER]**
- Select the **new Channel** ▲▼
- Store by pressing **[ENTER]**
- Select **[Tuning]** menu by pressing **[MENU]**

- Select the **Channel to be deleted** ▲▼
- Select **[Delete]** by pressing the **[A]** button
- Delete by pressing **[ENTER]**

- Select the **Channel to be moved** ▲▼
- Select **[Move]** by pressing the **[C]** button
- Move the Channel to the new position ▲▼
- Store this new position by pressing **[ENTER]**

- Press **[EXIT]**

Panasonic VCR	
Main menu	
Timer recording	
Tuning	
Clock setting	

Panasonic VCR	
Tuning	
Manual	
Auto - Setup Restart	

Panasonic VCR	
Main menu	
Timer recording	
Tuning	
Clock setting	

Panasonic VCR	
Tuning	
Manual	
Auto - Setup Restart	
Download	
Shipping condition	

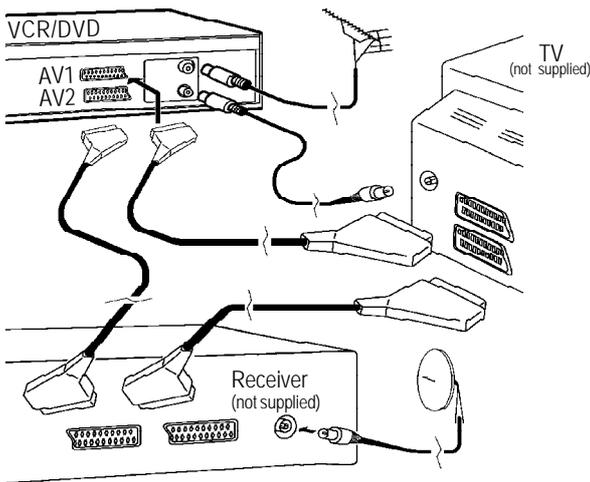
Restart Automatic settings

- Press **[MENU]**
- Select **[Tuning]** ▼
- Access by pressing **[ENTER]**
- Select **[Auto - Setup Restart]** ▼
- Press **[ENTER]**
- Confirm by pressing **[ENTER]**

Restoring the original settings of the VCR (Shipping condition)

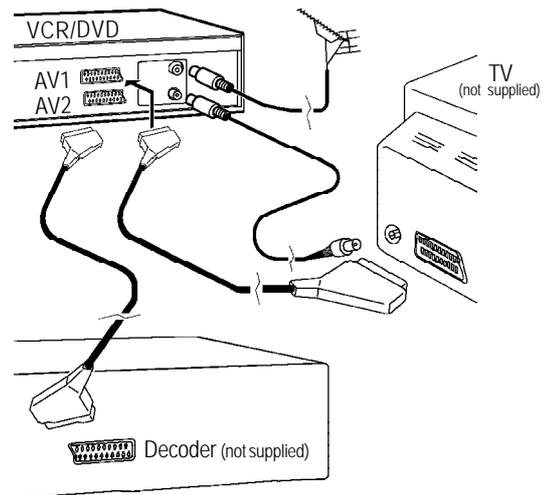
- Press **[MENU]**
- Select **[Tuning]** ▼
- Access by pressing **[ENTER]**
- Select **[Shipping condition]** ▼
- Press **[ENTER]**
- Confirm by pressing **[ENTER]**
- Disconnect the unit from AC mains for one minute.

Connecting External Equipment



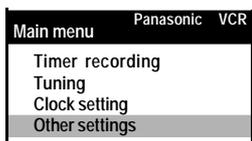
Connecting a Satellite Receiver

With some Satellite Receivers it is possible to start a Timer recording, with a 21-pin scart lead (not supplied) by using EXT LINK function. (Please read the operating instructions for your Satellite Receiver for further information).



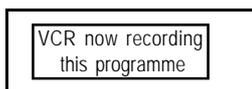
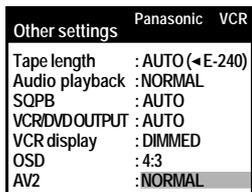
Connecting a Decoder

With a 21-pin scart lead connect a Decoder to AV2. This device is used to decode scrambled broadcasts (Pay TV).



Controls for external recordings with a Satellite Receiver

- Press [MENU]
- Select [Other settings] ▼
- Access by pressing [ENTER]
- Select [AV2] ▼
- Select the input field ▶
- Select the settings ▲▼
- Store by pressing [ENTER]
- Press [EXIT]

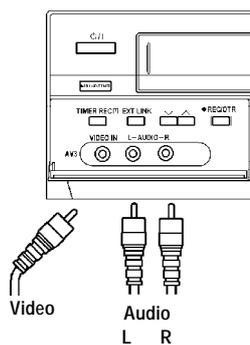


After you have preset the recording in the Satellite Receiver, set the VCR on Standby Recording by pressing [EXT LINK] on the VCR. As long as a video picture is being transmitted by the Satellite Receiver, the VCR will record it. This notice is displayed on the screen. In order to delete this notice, press [ENTER]. To stop the recording, press the EXT LINK button on the VCR.

Note: The programmes to be recorded on your VCR should not overlap with the recordings of the Satellite Receiver.

- [EXT LINK2] To control external recording with some Satellite Receiver (Videosignal).
- [EXT LINK1] For a Digital Receiver which transmits a special control signal for recordings, for example the F.U.N. Receiver (TU-DSF31).
- [NORMAL] To connect an external equipment (e.g. TV), the EXT LINK button on the VCR is not activated.
- [DECODER] To connect an external decoder

External source on AV3

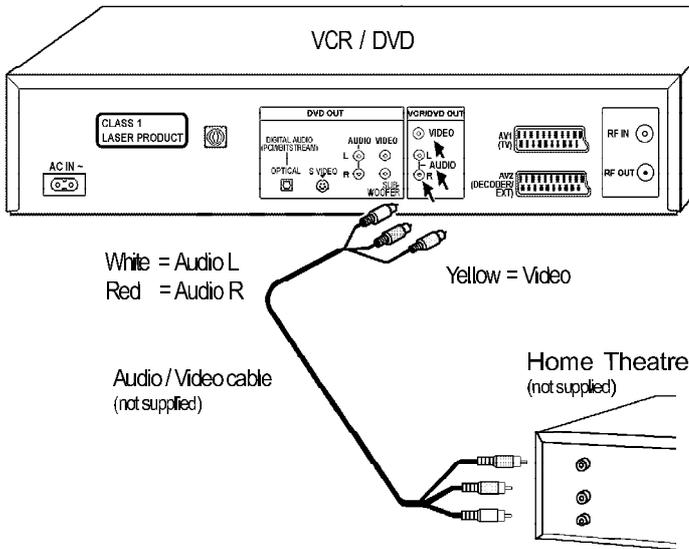


Connect your external source (for example: Video Camcorder) to the front input. To select A3 press [INPUT SELECT AV] repeatedly. The sound will be recorded on the HiFi audio tracks and the mono audio track. To record only mono use L-audio input.

Connecting External Equipment

Connecting with Audio / Video cable

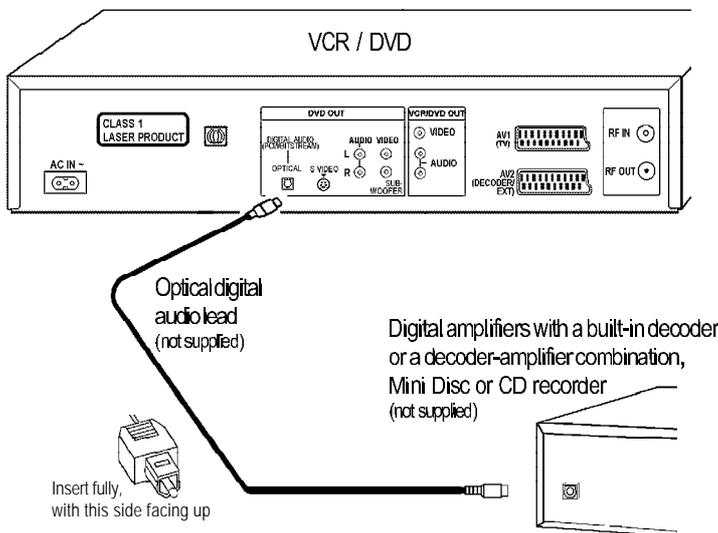
Connect the Audio / Video cable (white=L, red=R, yellow=video) according to the colours / markings of the terminals.



If your TV is supporting RGB, then connect a 21 pin scart lead with AV1 (TV) to reach the best picture quality for DVD playback, For RGB setting see page 18.

Analogue recording: You can record to a Mini Disc (MD) or audio cassette and connect to a Dolby Pro Logic amplifier.

Connecting with Optical digital audio lead



- Select [Yes] in [PCM Down conversion] (see page 18).
- Adjust the settings to suit the equipment you have connected.

Note: You cannot use DTS Digital Surround decoders not suited to DVD.

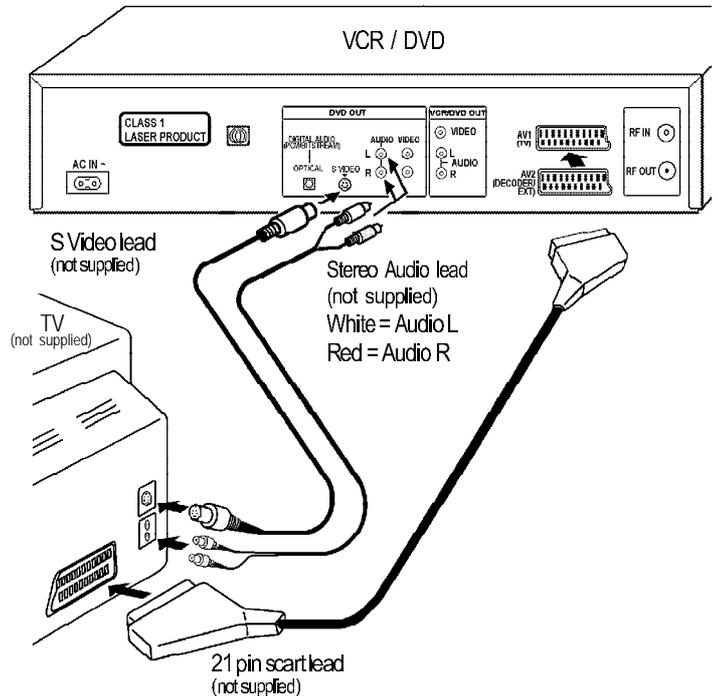
You can record the digital signal directly onto an MD. The recording equipment should handle a sampling frequency of 48 kHz/16 bit. Change the settings in the SETUP menu [AUDIO] as follows.

PCM Down conversion: [Yes] Dolby Digital: [PCM]
DTS Digital Surround: [Off] MPEG: [PCM]

Note: VCR audio signal is not connected to DVD OUT terminal.

Connecting with S-VIDEO lead

The S-VIDEO terminal achieves a more vivid picture than the VIDEO OUT terminal (only DVD out).



Note: Do not connect the unit through another video cassette recorder. Connect directly to the TV, otherwise the picture may not be displayed correctly due to the copy guard.

Connecting an Active subwoofer

You can enjoy more powerful bass by connecting an active subwoofer.

- Place the subwoofer as close as possible to the front of the center.
- Turn the BASS-function to [BASS PLUS ON] to boost the output from the subwoofer (see page 17).
- Adjust the volume of the subwoofer to suit your preference.

Note:

- If you connect an amplifier with Dolby Pro Logic decoder you will also need to connect center and surround speakers to enjoy surround sound.
- The Dolby Pro Logic decoder will not function correctly if [A.SRD] (ADVANCED SURROUND) and [BASS PLUS] is on. Turn [A.SRD] and [BASS PLUS] off.

Change of initial settings

PCM-Down conversion	[Yes]	connected an amplifier with an optical digital audiolead.
	[No]	connected an amplifier with audio leads.
Dolby Digital	[PCM]	connected an unit without a built-in Dolby Digital decoder.
	[Bitstream]	connected an unit with a built-in Dolby Digital decoder.
DTS Digital Surround	[Off]	connected an unit without a built-in DTS decoder.
	[Bitstream]	connected an unit with a built-in DTS decoder.
MPEG	[PCM]	connected an unit without a built-in MPEG decoder.
	[Bitstream]	connected an unit with a built-in MPEG decoder.

IMPORTANT

If the equipment you connected cannot decode the signal, the setting must be changed to default settings. If not, signals the equipment cannot process will be output by this unit, causing high levels of noise which can damage your hearing and the speakers.

Panasonic EASY SETUP	English	Deutsch
	Français	Italiano
	Español	Svenska
	Nederlands	Português

▲▼◀▶ to select **ENTER** to access

- Select DVD output 
- Switch remote control to DVD 
- Select desired language ◀▶▲▼
- Press **ENTER** to confirm
- Press **SETUP** or **RETURN** to exit the screen

Initial settings for the unit can be adjusted in a easy way in the shown succession.
Adjust the settings with the buttons on the remote control ◀▶▲▼.

Please select your TV type

TV screen formats

There are two types of TV format, 4:3 or 16:9. The 16:9 format corresponds to Widescreen.
When you select [Widescreen (16:9)], the following setting [Pan&Scan / Letterbox] will be skipped.

Note: This may not work with some discs.

How do you want the widescreen picture displayed on the normal (4:3) TV?





Pan&Scan

If you have a regular television (4:3 format) and wish to view 16:9 software in the Pan&Scan style, (if the disc supports this format). Expands the picture to fill the screen from top to bottom without distortion. However, the edges of the picture are cut off.

Letterbox

If you have a regular television (4:3 format) and wish to view 16:9 software in the Letterbox style. The whole picture is displayed, but black bands appear top and bottom of the screen.

Do you have a unit connected to the OPTICAL output?

OPTICAL (optical output)

If you have connected the player with an Optical digital audio lead to a digital amplifier or an amplifier with a built-in decoder to the OPTICAL output, select [Yes].

If you have selected [No] above, the next setting is [Child lock password]

Does the unit connected have a built-in DTS decoder?

DTS (Digital Theater Systems)

Method of coding multi channel audio signals. Realistic sound effects are possible.
Select [Yes] when you connect the player to a unit with built-in DTS decoder.

Does the unit connected have a built-in Dolby Digital decoder?

Dolby Digital

Method of coding and compression of more channel audio signals, developed by Dolby Laboratories. A large amount of audio information can be recorded on one disc. Dolby Digital is used in many cinema, digital television programmes, DVDs and video games around the world.
Select [Yes] when you connect the player to a unit with a built-in Dolby Digital decoder.

Does the unit connected have a built-in MPEG decoder?

MPEG

Select [Yes] when you connect the player to a unit with a built-in MPEG decoder.

Would you like to set a child lock password now?

Child lock password

You can prevent the play back of DVDs when you enter a password.

Please enter a 4- digit password

Password

Enter a 4-digit password.

Your DVD part is now ready to use.

If you want to cancel DVD EASY SETUP before it has finished, press the EXIT button.

DVD Operation

Reading disc information - please wait



Playback

- Switch remote control to DVD 
- Press **VCR / DVD OUTPUT** to select DVD output
- Press **▲ OPEN/CLOSE** on the unit
- Place the disc on the disc tray
- Press **Playback**  and playback begins automatically

Note: The procedure of reading disc information's can take longer time!

Playback Pause (DVD, VCD, CD)

- Press **Pause**  during playback
- Press **Playback**  restart of playback

Playback Stop (DVD, VCD, CD)

- Playback Stop Resume, press 1x **Stop**  during playback
- Playback Stop, press 2x **Stop**  during playback

Remove the disc

- Press the **OPEN/CLOSE** button on the unit or press **Stop**  for more than 3 seconds on the remote control.

Starting play from a selected track (VCD, CD)

While stopped, enter a track number using the remote control.

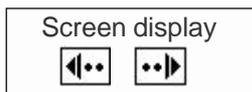
Example: To select track 18, by pressing the numeric buttons   
Playback starts from the selected track.

Note: This may not work with some discs.

Frame by frame viewing (DVD, VCD)

While paused, press  or  on the remote control. The frame changes each time you press the buttons. The frames change in succession if you press and hold the button. Pressing **Pause**  also activates forward frame-by-frame.

Note: You cannot move backwards frame by frame with VIDEO CD.



Slow-motion playback (DVD, VCD)

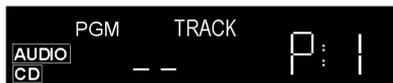
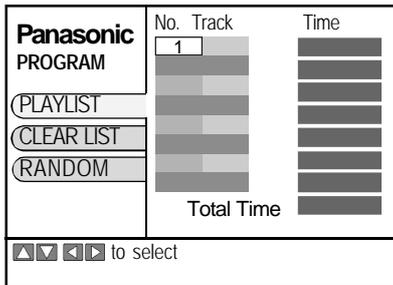
- Press **Pause**  during playback
- Press **SLOW**  , the speed of slow-motion increases by up to 5 steps by pressing the button repeatedly.
- Press **Playback**  to restart playback.

Note: You cannot move backwards with VIDEO CD during slow-motion.



Fast Forward and Rewind-SEARCH (DVD, VCD, CD)

- Press **SEARCH**   during playback, the speed of search increases by up to 5 steps by pressing the button repeatedly (for MP3 only 1 step possible).



MP3 menu

- Press **[MENU]**
- Press **SKIP** **◀▶** to select the page before or page after
- Select Folder (GROUP) **◀▶**
- Select MP3 Title **▲▼**
- Select **[PLAY MODE]** to add Title to [PLAYLIST]
- Press **[ENTER]** playback MP3 Title
- Press **Stop** **□** to stop playback (press **Playback** **▷** to continue playback)
- Press **Stop** **□**

Programme playback and Random playback (DVD, VCD, CD, MP3)

You can select up to 32 tracks to play in the order you choose.

- Press **[PLAY MODE]** while stopped, to display the screen [PROGRAM].
- Select the numbers of the tracks with the numeric buttons **1 2 3 ... +/-** or cursor buttons **▲▼◀▶** and press **[ENTER]**. (To clear an input, select [No.] and press **[CANCEL]** button.)
- Select **◀** [PLAYLIST]
- Press **[ENTER]**, now begins in the programmed sequence.

Exiting programme mode

- Press **Stop** **□** to Exit programme mode (press **Playback** **▷** to continue programme)
- Press **Stop** **□**
- Select **◀** [PLAYLIST]
- Press **[EXIT]** the programme is retained in memory.

Note: The programme is cleared when the unit is turned off, or the disc tray is opened.

Clear the [PLAYLIST]

- Press **[PLAY MODE]** while stopped
- Select **◀▼** [CLEAR LIST]
- Press **[ENTER]**
- Press **[EXIT]**

RANDOM playback

- Press **[PLAY MODE]** while stopped
- Select **◀▼** [RANDOM]
- Press **[ENTER]** (to exit RANDOM mode press two times **Stop** **□**)

Chapter review (DVD, VCD, CD, MP3)

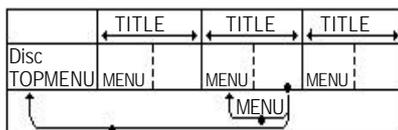
- Press **▷** for 5 sec. during playback of a DVD
The beginning of each chapter starts for some seconds.
Playback starts from the point where you stopped.

Note: Chapter Review feature works only within a title.

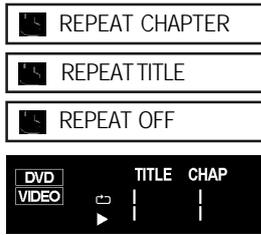
DVD menus

DVD's can have several menus. The menu is displayed when you press **[TOP MENU]** may be different from the menu displayed when you press **[MENU]**.

Note: The function of these buttons is different for every disc.
Read the disc's instructions for further details about operation.



DVD Playback



Repeat Playback (DVD, VCD, CD, MP3)

- Press **[REPEAT]** during playback.
The display changes as illustrated.

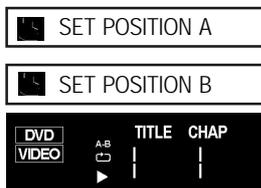
DVD		CHAPTER	→	TITLE	→	OFF
Video CD		TRACK	→	DISC	→	OFF
CD		TRACK	→	DISC	→	OFF
MP3		TITLE	→	FOLDER	→	OFF

Note: Repeat playback does not work if the elapsed playback time is not shown on the unit's display. There is no mode for repeating the whole DVD.



Repeat of a Video-CD (VCD)

- Press **Stop** during playback until PBC PLAY disappears from the display.
- Enter the number of the desired track.
- Press **[REPEAT]** (to Exit Repeat mode press **Stop**).



A-B Repeat Playback (DVD, VCD, CD, MP3)

You can repeat a section between points A and B within a title or track.

- Press **[A-B REPEAT]** during playback.
- Press **[ENTER]** at the starting point (A).
- Press **[ENTER]** at the finishing point (B).

To cancel this function, press **[A-B REPEAT]** and wait until the is switched off. The unit automatically determines the end of a title/track as point B, when the end of the title/track is reached.

Note: A-B repeat playback does not work if the elapsed playback time is not shown on the unit's display.

Resume function (DVD, VCD, CD, MP3)

- Press **Stop** during playback, the unit remembers the position.
- Press **Playback** while symbol in the DVD display is flashing.
Playback restarts from the position you stopped it.

Cancel the Resume function

- Press **Stop** during playback.
- Press **Stop** until disappears from the DVD's display.

Note: The resume function does not work if the playback time is not displayed. The position is cleared when the disc tray is opened or the unit is switched to standby.

Replaying a scene (DVD, VCD, CD, MP3)

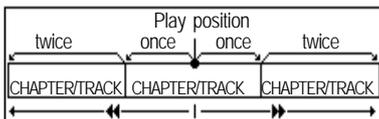
- Press **[REPLAY]** during playback.
The player skips back a few seconds each time, to replay parts of scenes.

Note: You cannot skip beyond the beginning of a track or title. This feature doesn't work with some discs.



Skipping chapters or tracks (DVD, VCD, CD, MP3)

- Press **SKIP** during playback or while paused.
Each press increases the number chapters or tracks skipped.



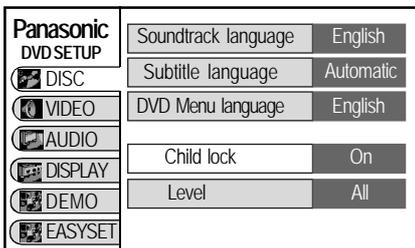
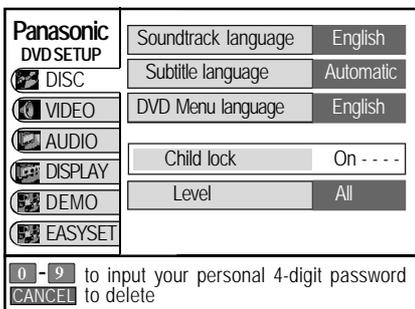
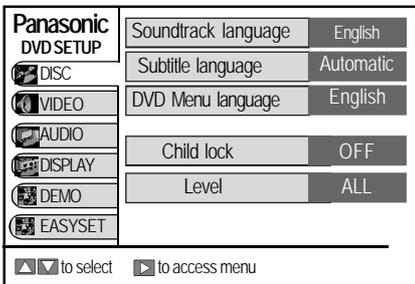
POSITION MEMORY function (DVD, VCD, CD, MP3)

This function allows you to memorise a position to start from even after switching the unit to standby or changing discs. You can memorise positions for up to five different discs at time.

- Press **[POSITION MEMORY]** during playback.
- Press **Stop** to clear the position before playback.

Start playback after switching to standby

- Press **Playback** to start playback from the memorised position and the position is cleared.



ADVANCED SURROUND (DVD) Dolby Digital, 2-channel or over only **A**

Makes it possible to have a surround-like effect during playback, if you are using 2 front speakers.

- [ADVANCED SURROUND NORMAL (1)]
 - [ADVANCED SURROUND EMPHASIZED (2)]
 - [ADVANCED SURROUND OFF] Factory preset
- Turn [ADVANCED SURROUND] off if it causes distortion.

BASS PLUS (DVD, VCD, CD) **B**

When you have connected an active subwoofer to the SUBWOOFER terminal on the rear of the unit.

- [BASS PLUS ON] Factory preset
- [BASS PLUS OFF]

PICTURE (DVD, VCD) **C**

- [CINEMA 1] Mellows images and enhances detail in dark scenes.
- [CINEMA 2] Sharpens images and enhances detail in dark scenes.
- [USER] Separate settings for colour, contrast and brightness.
- [NORMAL] Normal mode : Factory preset

DIALOGUE ENHANCER (DVD) Dolby Digital, 3-channel or over only **D**

Increase the volume and clarity of speech or dialogue during playback.

- [DIALOGUE ENHANCER ON]
- [DIALOGUE ENHANCER OFF] Factory preset

Recalling your settings with one button (DVD, VCD, CD)

This feature allows the settings that you made for ADVANCED SURROUND, BASS, CINEMA and DIALOGUE ENHANCER to be stored and recalled with just one button press.

- **Storing the settings in memory:** Press and hold the button [ONE TOUCH MEMORY] until [MEMORY ON] on the display appears. The settings remain in the memory even if you turn the unit off.
- **To cancel:** Press the button [ONE TOUCH MEMORY] to set the factory preset [MEMORY OFF] appears in the display.
- **Recalling the settings:** Press the button [ONE TOUCH MEMORY] [MEMORY ON] appears in the display.

Basic operation

- Press [SETUP] the [SETUP] screen appears
- Select the [SETUP] menu ▲▼ select Menu list ►
- Select the setting you want to change ▲▼ select Settings ►
- Select and change the setting ▲▼
- Press [ENTER] to confirm
- Press [SETUP] or [RETURN] to exit the screen

Subtitles (DVD)

- Press [SUBTITLE] during playback
- The language changes each time you press the button or ▲▼.
To switch subtitle display off, select [OFF] (see page 18, 19).

Child lock password (DVD)

only for DVD-VIDEO discs available

- Press [SET UP]
- Select [Child lock] ►▼
- Settings ►
- Select [On - - - -] ▲▼
- Input your 4-digit password, if you enter a wrong number press [CANCEL]
- Press [ENTER] to store the password
- Press [SETUP] to exit the SETUP screen

By choosing the rating level you can prohibit viewing certain scenes of a disc or complete discs. (This may not work with some discs.) Don't forget your password.

Note: If you have forgotten your password see page 23.

Sound and Picture DVD settings

- Press [DISPLAY] during playback
- Press [DISPLAY] the OSD menu appears

Note: Select the function direct with the buttons **A** - **B** - **C** - **D**, (see page 19)

DVD Settings

Panasonic DVD SETUP

- DISC
- VIDEO
- AUDIO
- DISPLAY
- DEMO
- EASYSET

▶▶ to select ▶ to access Menu

Soundtrack language	English
Subtitle language	Automatic
DVD Menu language	English
Child lock	Off
Level	All

SETUP DISC (DVD, VCD) Language codes see page 23.

- Press [SET UP] to call up the menus of the DVD-player

Menu list	Factory preset	Settings	
Soundtrack language	English	6978	Original
Subtitle language	Automatic	Off	----
DVD Menu language	English	6978	
Child lock	Off	On ----	
Level	All	1 - 8	

Panasonic DVD SETUP

- DISC
- VIDEO
- AUDIO
- DISPLAY
- DEMO
- EASYSET

▶▶ to select ▶ to access Menu

TV Aspect	4:3 Pan&Scan
AV1 Output (Scart)	Video
Still mode	Automatic
NTSC Disc output	PAL 60
ZOOM	Off

SETUP VIDEO (DVD, VCD)

Menu list	Factory preset	Settings	
TV Aspect	4:3 Pan&Scan	4:3 Letterbox	16:9
AV1 Output (Scart)	Video	RGB	
Still mode	Automatic	Field	Frame
NTSC Disc output	PAL60	NTSC	
ZOOM	Off	On	

- Use the Zoom function to expand widescreen pictures to fill more of the television screen (only for DVD-Video in [4:3 Letterbox] style).

Panasonic DVD SETUP

- DISC
- VIDEO
- AUDIO
- DISPLAY
- DEMO
- EASYSET

▶▶ to select ▶ to access Menu

PCM Down conversion	Yes
Dolby Digital	PCM
DTS Digital Surround	Off
MPEG Audio	PCM
Dynamic range compr.	Off

SETUP AUDIO (DVD, VCD)

Menu list	Factory preset	Settings	
PCM Down conversion	Yes	No	
Dolby Digital	PCM	Bitstream	
DTS Digital Surround	Off	Bitstream	
MPEG Audio	PCM	Bitstream	
Dynamic range compr. <small>only in the format Dolby Digital</small>	Off	On	

Panasonic DVD SETUP

- DISC
- VIDEO
- AUDIO
- DISPLAY
- DEMO
- EASYSET

▶▶ to select ▶ to access Menu

Menu language	English
On-screen messages	On
Player front display	Bright

SETUP DISPLAY

Menu list	Factory preset	Settings	
Menu language	English		
On-screen messages	On	Off	
Player front display	Bright	Dimmed	Auto

Panasonic DVD SETUP

- DISC
- VIDEO
- AUDIO
- DISPLAY
- DEMO
- EASYSET

▶▶ to select ▶ to access Menu

DEMO	Off
------	-----

SETUP DEMO

- A demonstration of the unit's On-Screen displays, select [Off] or [On].
Press any button to stop the DEMO mode.

SETUP EASYSET see page 13.

OSD-screens are menus that contain information about the disc or unit.

These menus allow you to perform operations by changing this information.

Note: For some DVD-VIDEO discs certain settings are not allowed by disc. Please use the DVD menu.

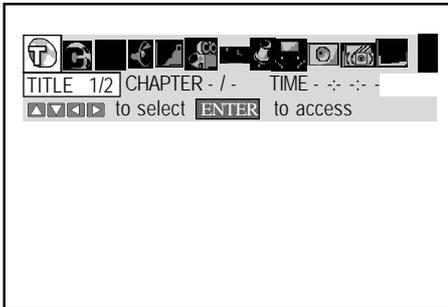
Progress Indicator

- Press **[DISPLAY]** during playback

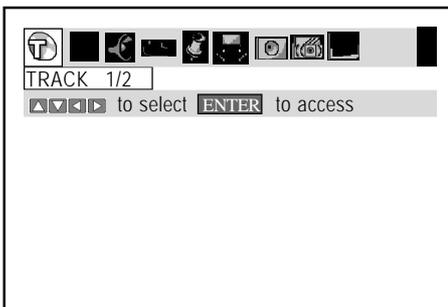
TITLE 1/17		
DVD-VIDEO	00:00:45	00:04:07
Dolby Digital	2 CH 48 KHz	CHAPTER 2/5

- Press **[DISPLAY]** the OSD menu appears

DVD-VIDEO



VCD



CD-DA



MP3



TITLE / TRACK	If there are several titles/tracks on a DVD, VCD or CD, use this menu item to select them.
CHAPTER	If there are several chapters on a DVD, use this menu item to select them.
TIME - - - - -	Enter time for DVD to start from this position. For VCD, CD switch REMAIN/ELAPSED TIME.
AUDIO	If the DVD offers alternatives you can select from the other soundtracks on the disc.
SUBTITLE OFF	When subtitles are available in several languages , you can select the language of choice.
ANGLE 1/2	Scenes which were filmed several times from different camera angles. You can select this different angles.
REPEAT OFF	Repeat of titles/tracks, chapters/folders or marked sections.
* * * * *	You can mark up to 5 scenes which you can select directly during playback.
ADVANCED SURROUND NORMAL (1)	Makes possible to have a surround-like effect if you are using only 2 front speakers. Turn Advanced Surround off if it causes distortion.
BASS PLUS ON	When you have connected an active subwoofer.
DIALOGUE ENHANCER OFF	Makes the dialogue in movies easier to hear.
PICTURE : NORMAL	[Normal], [Cinema], [User].
COLOUR 0	Adjust the colour level to suit your preference.
CONTRAST 0	Adjust the contrast to suit your preference
BRIGHTNESS 0	Adjust the brightness to suit your preference.
Bar position selection	Adjust the vertical position of OSD-bar on the screen.

Information about the player

This product incorporates copyright protection technology that is protected by the method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.



Region codes

Region numbers are allocated to DVD players and software according to where they are sold. You can playback DVD's if their region number is the same or includes the same number, or is marked **All**.



Disc-formats

DVD-Video, DVD-R (R4.7), CD-Audio (CD-DA), Video-CD, CD-R/CD-RW (CD-DA, Video-CD formatted discs)

Note: It may not be able to playback some CD-R/RW due to the condition of the recording.

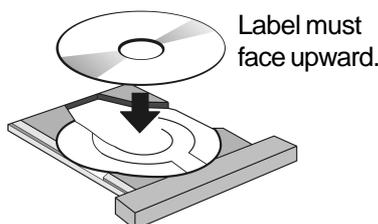
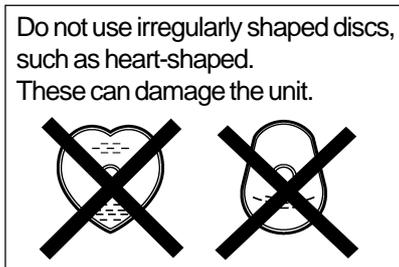
DVD-formats

This unit includes a 2-channel Dolby Digital decoder. Connect the analog outputs (Left and Right) to an external Dolby Surround Pro Logic decoder to enjoy 4 channel surround sound (Left, Center, Right and Surround) or connect the digital audio output of this unit to an external multi channel Dolby Digital decoder to enjoy programs in up to 5.1 channel surround sound. (Left, Center, Right, Left Surround, Right Surround, Subwoofer).

Manufactured under license from Dolby Laboratories.

"Dolby", "Pro Logic" and the double-D symbols are trademarks of Dolby Laboratories.

This unit does not have a DTS-decoder. Connect this unit to equipment that has a DTS-decoder to enjoy DVD's with this mark . "DTS" and "DTS Digital Surround" are trademarks of Digital Theater System, Inc.



DVD Glossary

Bitstream: This is the digital form of multiple channel audio data before it is decoded into its various channels.

Dolby Digital: A technology developed by Dolby Laboratories that allows audio (mono up through 5.1 channels) to be conveniently transmitted, stored and reproduced in high fidelity. Dolby Digital is used in many movie theatres, digital television programs, DVDs and video games around the world.

DTS Digital Surround: This surround system is used in many movie theatres around the world. There is good separation between the channels, so realistic sound effects are possible.

Dynamic range: Dynamic range is the difference between the lowest level of sound that can be heard above the noise of equipment and the highest level of sound before distortion occurs.

Field: One frame is made up of 2 fields.

A regular television shows these fields one after the other to create frames.

Field still: A field still is not blurred, but it has only half the information of a frame still so picture quality is lower.

Frame: Frames are the still pictures that go together to make a moving picture. There are about 25/30 frames shown each second.

Frame still: A still is shown when you pause a moving picture. A frame still is made up of 2 alternating fields, so the picture may appear blurred, but overall quality is high.

Letterbox: When a rectangular picture is displayed on a normal TV, with black bands top and bottom.

Optical digital audio lead: Electronic signals are converted to optical signals for output to an amplifier. This reduces noise caused by electronic interference.

Pan&Scan: Expands a 16:9 widescreen picture to fill a 4:3 normal TV screen. The edges of the picture are cut off, but there are no black bands or distortion to the picture.

PCM (pulse code modulation): PCM is the digital method used when recording music CDs. DVDs have a greater volume so they use linear PCM, which has a higher sampling rate.

Playback control: If a Video CD has "playback control" written on it or its jacket, it means that particular scenes or information can be selected for viewing interactively on the television, using the menu screen. This unit can playback Video CDs with playback control.

Title/Chapter: DVD's are divided up into large sections, titles and smaller sections, chapters. The numbers allocated to these sections are called title numbers and chapter numbers.

Track: Video CDs and CDs are divided up into sections called tracks, and the numbers allocated to these sections are called track numbers.

TV-screen formats: TVs have 2 different formats 4:3 (normal) or 16:9 (widescreen).

VCR Special Features

I-TIMER

page 7

Easy Guide OSD

SQPB

page 9

SUPER Long Play

page 6, 7

AUTO Long Play

page 6, 7

Intro-Jet Scan

page 7, 8

Jet Rewind

page 5

QLink

page 3, 6

External Link

page 11

NTSC Playback

page 10

REC/OTR

page 6

PDC

page 6

VIDEO Plus+

page 7

I-TIMER: Through this INTELLIGENT TIMER function the programming and the recording will be even easier than before. The INTELLIGENT TIMER is storing the programme data up to 8 timer recordings. For example, if you want to record the continuation of your favourite series, you need only to press the I-TIMER button and the stored programme data will be displayed with today's date. Now you can select the programme, and with the confirmation of the TIMER REC button the programming is ready. If your remote control is not at hand, you are also able to programme directly with the button on your VCR.

Easy Guide OSD: The Easy Guide OSD is directing you directly step by step to the destination. There is a big number of different individual settings and languages, with a quick overview of all functions.

Super VHS Quasi Play Back (SQPB): You want to watch from time to time tapes which are recorded with an S-VHS VCR? No problem anymore: This VCR can playback tapes in VHS quality, which are recorded with the S-VHS and S-VHS-ET format.

SUPER Long Play: The Super Long play (EP mode) gives you the possibility to record three times longer than in Standard Play mode (SP). You can record up to 720 minutes = 12 hours on a 240 minutes cassette.

AUTO Long Play: If the rest of the tape length is shorter than the needed tape time, this VCR is supporting a recording mode, that the VCR will automatically change from Standard Play (SP) to Long Play (LP) to complete the recording of the film.

Intro-Jet Scan: To check the content of the tape, you can use the Search button to playback 10 seconds of every recording. If you found the title, simply press the Play button to watch the film.

Jet Rewind: The Panasonic VCRs are equipped with a Jet Rewind Drive. To rewind a E180 cassette it will take only 60 seconds. For convenient winding and searching, the tape transportation speeding up extremely fast and is stopping softly in very short time.

Q Link: With an Euro AV connection and with the Q Link function the VCR is able to communicate with the TV:

- copying automatically the tuning positions of the TV
- after finishing the playback, the VCR will switch automatically into Standby mode if you switch of the TV
- one touch on DIRECT TV REC and the VCR will record the film you are watching on the TV
- if you insert a tape into your VCR, the TV in Standby mode will be switched automatically on.

External Link: With External Link the timer recording from the Satellite- or Digital Receiver is now very simple. Set your programme in the receiver and switch your VCR with the External Link function into the Standby mode and in the stated time the recording will start automatically.

NTSC Playback: In Europe colour system PAL is mainly used, but some other country using NTSC colour format. With the NTSC Playback function of the VCR you can watch a NTSC VHS tape (for example: from overseas) on your PAL TV.

REC/OTR: When you want to record manually you can easily set the recording time to 30, 60, 120, 180 or 240 minutes, only by pressing the REC/OTR button repeatedly. The selected recording time will be displayed.

PDC: Some stations broadcasting this signal to control the start and stop time of a timer recorded programme. The VCR can interpret this signal to record correctly the beginning and end of the film also if the broadcasting time is shifted (for example if a live show is running longer than scheduled).

VIDEO Plus+: The VIDEO Plus+ numbers make it extremely easy to set the VCR for timer recording. Only by typing the numeric code (for example out of the TV magazine) and the VCR will translate this number into the timer recording data. After the data are confirmed (by pressing the TIMER REC button) the recording is already programmed.

Troubleshooting

The display is not illuminated:

The mains lead is not connected.

- Check the connection.

Safety devices are operating.

- Disconnect the unit from AC mains for one minute, then check if the unit can be operated.

The display is illuminated, but the unit cannot operate:

The unit is in Timer recording Standby mode.

- Cancel Standby mode by pressing the TIMER button.

The child lock is activated.

- Settings can be changed (see page 8).

Tape transport noise

During JET SEARCH the tape transport noise will increase.

- This is not a functional fault.

The recording function does not work correctly

The VCR display  is flashing when you try to record.

- In order to record, use a video cassette with an intact erasure prevention tab (see page 6).

The Programmed recording function does not work.

- The time and date must be set correctly (see page 6).

The VCR does not record, even though the recording has been programmed.

- Set the start time and the time to stop recording correctly, and set the VCR on Standby Recording by pressing the TIMER button (see pages 6-7).
- The PDC function was used to set the recording, but the Start time input was incorrect (see page 6-7)

Automatic Clock correction is not working correctly

[Clock setting] is on manually [MAN.]

- Set clock to [AUTO] (see page 9).

There is no programme with clock signal available.

Set the clock manually (see page 9).

The picture or the sound is distorted

The TV reception is not adjusted.

- Readjust the reception (see page 3).

The sound is distorted.

- Set the sound system (see page 10).

The tracking is not set correctly.

- Adjust the VCR tracking manually (see page 23).

Picture distortion can be caused by using E300 cassettes which were recorded with a slow tape speed (LP or EP).

- You are advised not to use E300 cassettes.

The aerial lead or scart lead is not correctly connected or is defective.

- Check the connections, aerial signal and leads (replace leads if necessary).

Setting for SQPB (S-VHS Quasi Playback) is not correct.

- Setting can be changed (see page 10).

The video heads are soiled or worn out.

- Please contact service center for assistance. Head cleaning by a service center is not covered by warranty.

This product may receive radio interference caused by mobile telephones during use.

- In such interference is apparent, please increase separation between the product and the mobile telephone.

The cassette is recorded in a tape speed, colour or video standard which is not corresponding to the VCR setting.

- Check which standard was used when the video cassette was recorded.

The remote control does not work correctly

The signal from the remote control does not reach the unit's window, or the distance is too long.

- Point the remote control in direction to the unit.
- Remove obstructions between the unit and the remote control (its transmitting distance is about 7 metres).

The batteries in the remote control are exhausted, or the batteries have not been inserted with the correct polarity.

- Check the batteries and if necessary insert new batteries (see page 2).

No response when buttons are pressed

- Check if the remote control is operating VCR1 or VCR2 by holding [ENTER] and pressing [1] or [2] (see page 9)

Some operations may be prohibited by the disc or tape.

The unit may not be operating properly due to lightning or static electricity.

- Press [O/I] to switch the unit to standby mode, disconnect the AC mains lead, then reconnect it.

Condensation has formed.

- Wait 1 to 2 hours for it to evaporate.

Playback does not start even when Playback  is pressed

- You can only playback DVD discs if the region number is the same as, or includes the same region number as the unit, or if the DVD is marked [All].
- The disc may be dirty.
- Ensure that the disc is inserted with the label on the side to be played facing upwards.
- For some Disc it needs time to read the disc information (this is not a functional fault).

Alternative DVD languages cannot be selected

- An alternative language cannot be selected if the disc does not contain more than one language.
- With some discs, the alternative language must be selected in a disc menu.

No DVD subtitles

- Subtitles only appear if they are recorded on the disc.
- Subtitles are switched off. Display the subtitles.

Soundtrack or subtitle language is not the one selected in the DVD setup menu

- The language is not recorded on the disc.

Angle cannot be changed

- Only one angle is recorded on the disc.

DVD SOUND

No sound, distorted sound

- Check the connections. Check the volume on the equipment you have connected. If the DVD is recorded in DTS, no sound will be output. Try selecting another soundtrack.
- Turn ADVANCED SURROUND off, if it causes distortion.

Piercing noise comes from the speakers

- Ensure you have selected the correct setting for [Dolby Digital], [Digital Surround] and [MPEG] in the SETUP screen's AUDIO menu.

DVD PICTURE

Picture distorted during search

- The picture will be somewhat distorted at times. This is normal.

No picture

- Ensure that the equipment is connected properly.
- Ensure that the equipment is turned on.
- Ensure the television's video input setting is correct.

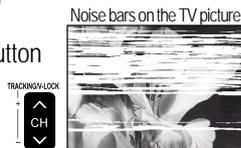
The picture shown on the television is not normal

- Go to the VIDEO menu in the SETUP screen and change [TV Aspect] to suit your TV.
- Ensure that the unit is connected directly to the television and is not connected through a video cassette recorder. Ensure the [AV1 Output (Scart)] selection is correct for the TV input.

Troubleshooting

Adjusting the VCR Playback picture

If the picture is distorted with noise bars, press the TRACKING / V-LOCK button in the (+) or (-) direction during Playback, Still Playback or Slow Playback.



For automatic adjustment, press (+) and (-) at the same time.

- The tracking cannot be adjusted on certain cassettes.
- This is not a functional fault of the VCR.

The meaning of some VCR On Screen Displays

Please use tape with unbroken recording tab !

The REC button or REC/OTR button was pressed to record, but the cassette's erasure prevention tab has been broken off.

- In order to record, use a video cassette with an intact erasure prevention tab (see page 6).

This action is not possible before time and date are set

The PROG./CHECK button, REC CHECK or ShowView button was pressed without a date and time being set on the VCR.

- Set the date and time (see page 9).

No timer programmes to be done !

The TIMER button was pressed, but no timer recording was programmed.

- Programme a timer recording (see pages 6-7).

Please put VCR into stop mode first

An attempt was made to change the programmed data while a timer recording was still in progress.

- You must stop the recording first by pressing the TIMER button before you can change the programming.

The meaning of some DVD On Screen Displays

[NO PLAY] appears on the unit's display

A disc was inserted that the unit cannot play.

- Insert one that it can.

[No] on-screen menu.

- Go to the DISPLAY menu in the SETUP screen and select [On-screen messages On].

OSD- screens not displayed or only partially on the television

- Move the OSD downwards using the bar position selection.

[H□□] appears on the unit's display:

Trouble is likely to have occurred. The number following [H] depends on the status of the unit.

- Press [C/I] to switch the unit to standby mode and then back to ON, disconnect the AC mains lead, and then reconnect it.

The signal is copy protected. Copying is not allowed.

- Please observe copyright laws when recording sound tracks and film.

If you have forgotten your password

- While DVD is stopped press and hold down on the unit

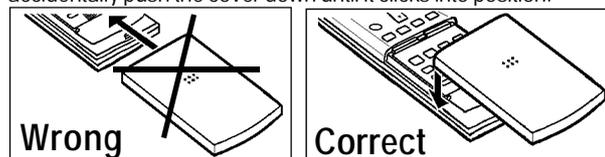


until [Initialized] appears on the television screen.

- Turn the unit off then on again. All of the settings will return to the factory default values. You will have to set the initial settings by using EASY SETUP, see page 17.

Remote control sliding cover

If the sliding cover of the remote control becomes detached accidentally push the cover down until it clicks into position.



Language codes

Abkhazian	6566	Fiji	7074	Lingala	7678	Singhalese	8373
Afar	6565	Finnish	7073	Lithuanian	7684	Slovak	8375
Afrikaans	6570	French	7082	Macedonian	7775	Slovenian	8376
Albanian	8381	Frisian	7089	Malagasy	7771	Somali	8379
Ameharic	6577	Galician	7176	Malay	7783	Spanish	6983
Arabic	6582	Georgian	7565	Malayalam	7776	Sundanese	8385
Armenian	7289	German	6869	Maltese	7784	Swahili	8387
Assamese	6583	Greek	6976	Maori	7773	Swedish	8386
Aymara	6588	Greenlandic	7576	Marathi	7782	Tagalog	8476
Azerbaijani	6590	Guarani	7178	Moldavian	7779	Tajik	8471
Bashkir	6665	Gujarati	7185	Mongolian	7778	Tamil	8465
Basque	6985	Hausa	7265	Nauru	7865	Tatar	8484
Bengali	6678	Hebrew	7387	Nepali	7869	Telugo	8469
Bhutani	6890	Hindi	7273	Norwegian	7879	Thai	8472
Bihari	6672	Hungarian	7285	Oriya	7982	Tibetan	6679
Breton	6682	Icelandic	7383	Pashto	8083	Tigrinya	8473
Bulgarian	6671	Indonesian	7378	Persian	7065	Tonga	8479
Burmese	7789	Interlingua	7365	Polish	8076	Turkish	8482
Byelorussian	6669	Irish	7165	Portuguese	8084	Turkmen	8475
Cambodian	7577	Italian	7384	Punjabi	8065	Twi	8487
Catalan	6765	Japanese	7465	Quechua	8185	Ukrainian	8575
Chinese	9072	Javanese	7487	Rhaeto-Rom	8277	Urdu	8582
Corsican	6779	Kannada	7578	Romanian	8279	Uzbek	8590
Croatian	7282	Kashmiri	7583	Russian	8285	Vietnamese	8673
Czech	6783	Kazakh	7575	Samoan	8377	Volapük	8679
Danish	6865	Kirghiz	7589	Sanskrit	8365	Welsh	6789
Dutch	7876	Korean	7579	Scots Gaelic	7168	Wolof	8779
English	6978	Kurdish	7585	Serbian	8382	Xhosa	8872
Esperanto	6979	Laotian	7679	Serbo-Croat	8372	Yiddish	7473
Estonia	6984	Latin	7665	Shona	8378	Yoruba	8979
Faroese	7079	Latvian	7686	Sindhi	8368	Zulu	9085

Remote Control codes

This remote control setting allows you to operate many functions of TVs from different brands.

If the TV cannot be operated properly, enter the other code listed. (If it is still not working try other buttons to operate your TV.)

Please also read the operating instructions for your TV.

- While keeping button pressed, set the two digits code.

Brand	Code	Brand	Code	Brand	Code
Panasonic	01,04,44	ITT	25	SALORA	26
AIWA	35	JVC	17,39	SAMSUNG	31,32,43
AKAI	27,30	LOEWE	07	SANSUI	05,31,33
BLAUPUNKT	09	METZ	28,31	SANYO	21
BRANDT	10,15	MITSUBISHI	06,19,20	SBR	06
BUSH	05,06	MIVAR	24	SCHNEIDER	05,06,29-31
CURTIS	31	NEC	36	SELECO	06,25
DESMET	05,31,33	NOKIA	25-27	SHARP	18
DUAL	05,06	NORDMENDE	10	SIEMENS	09
ELEMIS	31	ORION	37	SINUDYNE	05,06,33
FERGUSON	10	PHILIPS	05,06	SONY	08
GOLDSTAR/LG	31	PHONOLA	31,33	TELEFUNKEN	10-14
GOODMANS	05,06,31	PIONEER	38	THOMSON	10,15
GRUNDIG	09	PYE	05,06	TOSHIBA	16
HITACHI	22,23,31,40-42	RADIOLA	05,06	WHITE WESTINGHOUSE	05,06
INNO HIT	34	SABA	10		
IRRADIO	30				

Note: If your Panasonic TV can be operated with Code 44 the remote control can operate some additional TV functions with the buttons:

A = red, **B** = green, **C** = yellow, **D** = blue
for example select the Panasonic TV input with: [INPUT SELECT AV] and the A,B,C or D button.

Safety information

This equipment complies with European conformity requirements, in accordance with the conditions of electromagnetic compatibility and product safety.

This equipment complies with the requirements of protection class 2.

This equipment complies with the safety requirements of the BEAB.

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Specifications

Power source	220-240 V AC, 50/60 Hz	Matsushita Electric Industrial Co., Ltd.
Power consumption	28W (in operation) / approx. 7W (in standby mode)	http://www.panasonic.co.uk
Controls	multifunctional remote control (VCR, DVD and TV) / VCR / DVD direct controls (main functions)	
VCR Playback functions	PAL and NTSC Playback on PAL TV / S-VHS Quasi Playback (SQPB)	
Disc Playback functions	DVD-Video, DVD-R (R4.7), CD-Audio (CD-DA), Video-CD, CD-R/CD-RW, (CD-DA, Video-CD formatted discs), MP3	
Video and Audio heads	Helical scanning system: 4 heads (Super Ferrite Head) / 2 heads Hi-Fi	
Tape speed / Record and playback time	SP: 23.39 mm/s, 240 min / LP: 11.7 mm/s, 480min (E240 cassette)	
VCR Fast forward or fast rewind time	approx. 60 s (E180 cassette)	
Video TV Colour system	VCR: PAL 625/50 / DVD: PAL 625/50, PAL 525/60, NTSC	
Video input and output level Pin jack/AV	1.0 V p-p (75 Ohm)	
DVD S video output	Y output level: 1 Vp-p (75 Ohm) / C output level: Pal: 0.300 Vp-p (75 Ohm) NTSC: 0.286 Vp-p (75 Ohm)	
DVD RGB video output	Output connector: S terminal	
VCR RF modulated	R G B output level: 0.7 Vp-p (75 Ohm) / Output connector: AV1	
VCR Horizontal resolution	UHF channel (21-68), 75 Ohm	
VCR Signal-to-noise ratio video	more than 240 lines (SP)	
Audio Input level	more than 43 dB (SP)	
Audio Output level	0.5Vrms, more than 10 kOhm	
VCR Dynamic range audio	VCR: 0.5Vrms, less than 1 kOhm / DVD: 2Vrms. (1 kHz, 0 dB) Output connector: Pin jack/AV, 2 ch (L/R), Subwoofer	
DVD Dynamic range audio	more than 90 dB (Hi-Fi sound tracks)	
VCR Audio frequency response	DVD (linear audio): 96 dB / CD audio: 96 dB / Total harmonic distortion CD audio: 0.0025 %, S/N ratio: 115dB	
DVD frequency response (linear audio)	80 Hz to 8 kHz / 20 Hz to 20 kHz (Hi-Fi sound tracks)	
DVD Optical digital output	4 Hz to 22 kHz (48 kHz sampling) / 4 Hz to 44 kHz (96 kHz sampling) / CD audio: 4 Hz to 20 kHz	
Laser Pick up	Optical terminal	
Operating temperature / humidity	Wave length: 658 nm/790 nm / Laser power: Class 2 / Class 1	
Weight and Dimensions	5°C to 40°C / 35-80% relative humidity	
	Approximate value: 5.2 kg / 430 (width) x 89 (height) x 345 mm (depth)	

These specifications are subject to change without notice.