
▶ **Primare V20 DVD Player User Guide**

COPYRIGHT AND ACKNOWLEDGMENTS

Copyright © 2000 Primare Systems AB. All rights reserved.

Primare Systems AB
Idavägen 17D
SE-352 46 Växjö
Sweden

The information in this guide is believed to be correct as of the date of publication. However, our policy is one of continuous development and so the information is subject to change without notice, and does not represent a commitment on the part of Primare Systems AB.

Primare is a trademark of Primare Systems AB. Manufactured under license from Dolby Laboratories Dolby, Pro Logic, and the double-D symbol are trademarks of Dolby Laboratories. Confidential Unpublished Works. Copyright 1992-1997 Dolby Laboratories, Inc. All rights reserved. All other product names are trademarks or registered trademarks of their respective owners.

This product incorporates copyright protection technology that is protected by method claims of certain US 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 authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Class 1 Laser Product

The DVD player is classified as a CLASS 1 LASER product. Use of control adjustments or Performance of procedures other than those specified herein may result in hazardous radiation.

CAUTION – INVISIBLE LASER RADIATION WHEN OPEN AND INTERFLOCK DEFEATED. AVOID EXPOSURE TO BEAM.

FCC Warning: This equipment generates and can radiate radio frequency energy and if not installed and used correctly in accordance with our instructions may cause interference to radio communications or radio and television reception. It has been type-tested and complies with the limits set out in Subpart J, Part 15 of FCC rules for a Class B computing device. These limits are intended to provide reasonable protection against such interference in home installations.

EEC: This product has been designed and type-tested to comply with the limits set out in EN55013 and EN55020.

This guide was produced by Human-Computer Interface Ltd,
<http://www.interface.co.uk>

► Contents

Introduction

WELCOME TO THE V20 DVD PLAYER.....	①
USING THE V20 WITH OTHER PRIMARE PRODUCTS	②
TECHNICAL SPECIFICATION	③

Using the V20 DVD player

FRONT PANEL CONTROLS	③
FRONT PANEL DISPLAY	④
SWITCHING ON AND OFF	④
PLAYING A DISC	④
LOCATING A POSITION ON THE DISC	⑥

Advanced use

FAST FORWARD AND REVERSE PLAY	⑦
SLOW MOTION FORWARD AND REVERSE PLAY	⑦

SINGLE STEPPING	⑧
REPEATING PLAYBACK.....	⑧
DISPLAYING THE TITLE MENU.....	⑨
DISPLAYING SUBTITLES.....	⑨
SELECTING A CHAPTER, TITLE, OR TRACK BY NUMBER.....	⑩
PROGRAMMING A SELECTION OF CHAPTERS OR TRACKS	⑩
SAVING A PROGRAM.....	⑪
ZOOMING THE PICTURE.....	⑬
CHOOSING A CAMERA ANGLE.....	⑬

Connecting the V20 DVD Player

BACK PANEL CONNECTIONS.....	⑮
VIDEO OUTPUTS	⑮
AUDIO OUTPUTS	⑮
CONNECTING TO THE PRIMARE P30 PROCESSOR	⑮

Configuring the V20 DVD Player

USING THE SETUP MENU	17
CHOOSING THE DEFAULT LANGUAGES	18
SETTING THE DEFAULT SCREEN FORMAT	19
SETTING THE RATING LEVEL	19
SPECIFYING THE AUDIO OUTPUT	21
SPECIFYING ADDITIONAL SETUP OPTIONS	21
LANGUAGE CODES	23

Index

► Introduction

Welcome to the Primare V20 DVD Player! This chapter introduces you to its key features, and explains how you can use it to take advantage of any of the video and audio formats currently available.

WELCOME TO THE V20 DVD PLAYER

The V20 provides a comprehensive range of features to make it ideal as the heart of a superb home entertainment system.

Enjoy DVD movies at their best

The Primare V20 DVD Player will show all your favorite movies in DTS, Dolby Digital, or Dolby Pro logic surround. It supports both PAL and NTSC format, and if your television does not support both formats it can perform automatic conversion between them.

Play your existing music collection and Super CDs

The Primare V20 DVD Player can also play your entire CD music collection, as well as CDVs and 24/96 Super CDs. It will also play recordable CDs, as well as MP3 encoded music collections on CD-ROM.

No compromise design for superb sound and picture quality

The V20 DVD Player uses the best components available to ensure a trouble-free operation for many years. The video color section includes an additional video buffer for outstanding picture quality, and the D/A converters and audio electronics are located on separate boards, well away from the transport and power supply electronics, for the lowest possible distortion and noise. The

resulting sound quality is comparable to dedicated CD players in the same price range.

Careful mechanical design for long-life

As with all Primare units, the solid mechanical design further enhances the functionality and quality, and ensures that the V20 DVD Player will continue to provide trouble-free operation for years to come.

Intuitive user interface

In keeping with the philosophy of the Primare range of systems, the V20's powerful range of features can be controlled through a very simple and intuitive interface, designed so that it will not distract you from the pleasure of watching movies or listening to music on your system.

In fact most of the features of the V20 can be accessed through just six front panel push buttons. Alternatively the full set of functions, including menu selection and programmability, is available using the DVD remote control supplied with the V20.

USING THE V20 WITH OTHER PRIMARE PRODUCTS

Although the V20 DVD player is flexible enough to work with virtually any other equipment you have in your system, it is ideally suited for use with the Primare P30 Processor and Primare A30.5 multi-channel amplifier. The P30 Processor will decode the DTS or Dolby Digital output from the V20 to provide five discrete analogue outputs, and the A30.5 provides the amplification necessary to drive the five separate loudspeakers in a surround system.

TECHNICAL SPECIFICATION

Video section:	
Video signal systems	NTSC/PAL, color
Horizontal resolution	> 500 lines
Video output	1Vp-p, 75Ω RCA
S-video Y signal	1Vp-p, 75Ω
C-signal	0.286Vp-p, 75Ω
Video signal-to-noise	-70dB
Video DAC	10 BIT
Audio section:	
Frequency response	44.1kHz, 10Hz – 20kHz 48kHz, 10Hz – 22kHz 96kHz, 10Hz – 44kHz
THD	<0.05%
Signal-to-noise	-96dB
Analogue output level	1.9Vrms
Power consumption	<40W
Dimensions (WxDxH)	430 x 385 x 100mm
Weight	10kg
Formats supported:	DVD with DTS, Audio CD, CD-Video, Video CD, Recordable CD, Super Audio CD, and MP3 CD-ROM

► Using the V20 DVD Player

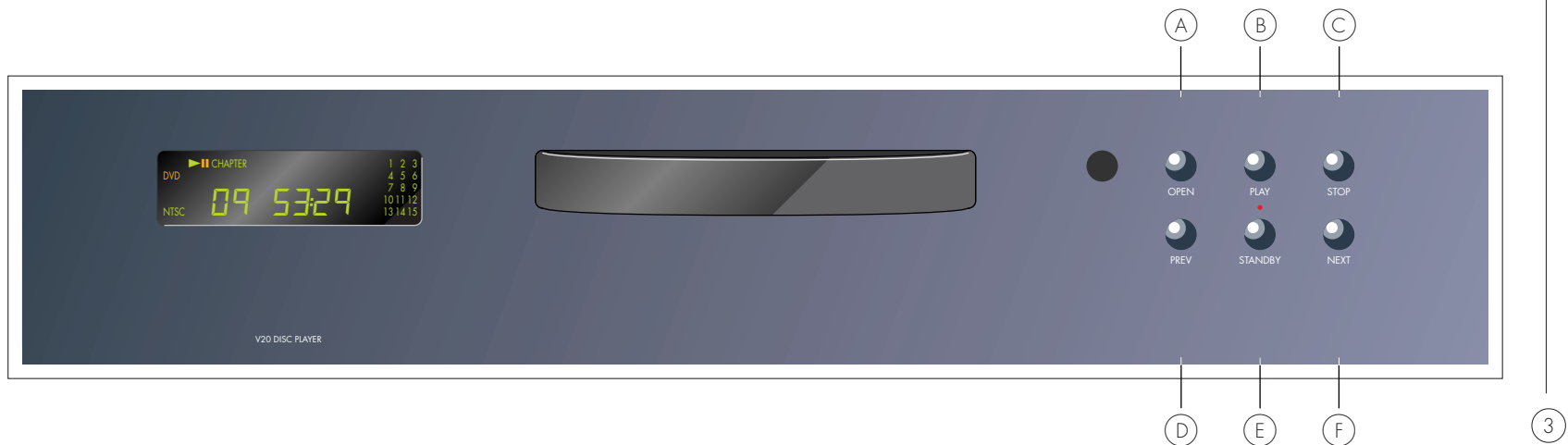
This chapter explains how to operate the basic functions of the V20 DVD Player, which are available using either the front panel controls or the remote control.

FRONT PANEL CONTROLS

The simplest functions of the V20 DVD player can be accessed using the six front panel push buttons, and information about its operation is displayed on the front panel display:

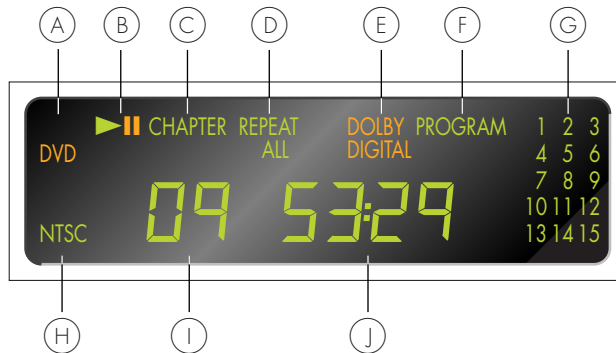
- (A) The **OPEN** button opens or closes the disc tray.
- (B) The **PLAY** button plays or pauses a disc.
- (C) The **STOP** button stops or resets a disc.

- (D) The **PREV** button steps to the previous chapter on a DVD, or the previous track on a CD.
- (E) The **STANDBY** button switches the V20 to standby, or brings it out of standby.
- (F) The **NEXT** button steps to the next chapter on a DVD, or the next track on a CD.



FRONT PANEL DISPLAY

The following illustration shows the information on the front panel display:



- (A) Disc format.
- (B) Play mode.
- (C) Display mode: CHAPTER OR TRACK.
- (D) Repeat mode: REPEAT 1, ALL, or A-B.
- (E) Audio format.
- (F) Program mode.
- (G) Chapters/tracks.
- (H) Video format: PAL or NTSC.
- (I) Currently selected chapter/track.
- (J) Current playing time.

To dim the front panel display

- Press the **DIM** button on the DVD or C30 remote control.

The display will dim to a single bar.

To restore the front panel display

- Press the **PLAY** button twice on the DVD or C30 remote control.

SWITCHING ON AND OFF

To switch on

- Use the switch under the left-hand edge of the front panel.

During normal operation you can leave the V20 switched on and in standby.

To switch to standby

- Hold down the **STANDBY** button on the front panel or the **STBY** button on the DVD or C30 remote control.

PLAYING A DISC

To insert a disc

- Press the **OPEN** button on the front panel or the DVD or C30 Remote Control to open the tray.

The on-screen display shows ◀▶.










- Place the DVD or CD in the tray. If it is a CD or a single-sided DVD the label should be uppermost.

- Press the **OPEN** button again to close the tray, or gently push the front of the tray.

The on-screen display shows .

The disc will start playing automatically.

As the disc starts playing the on-screen display identifies the type of disc as follows:

Symbol	Disc
	DVD movie.
	Audio CD.
	Video CD.
	CVD.
	Super Video CD.
	DTS music CD.
	CD-ROM containing MP3 files.
	PA disc.
	Unrecognised format or disc inserted incorrectly.

To stop play

- Press the **STOP** button on the front panel or the DVD or C30 Remote Control.


The front panel display and on-screen display show .

The DVD player remembers your current position on the disc and you can resume from the same position by pressing the **PLAY** button on the front panel or DVD or C30 Remote Control.

The on-screen display shows .

To pause play

- Press the **PLAY** button on the front panel or DVD or C30 Remote Control.

The on-screen display shows . You can then resume play by pressing the **PLAY** button again.

To reset play

- Press the **STOP** button on the front panel or DVD or C30 Remote Control while the disc is stopped.

The display shows  and the disc will be reset to the beginning.

LOCATING A POSITION ON THE DISC

DVD movies are normally divided into chapters corresponding to scenes in the movie, and you can step between chapters to choose the scene you want to watch. Audio CDs are divided into tracks.

To step between chapters on a DVD or tracks on a CD

- Press the **PREV** or **NEXT** buttons on the front panel, the **◀◀** or **▶▶** buttons on the DVD remote control, or the **◀** or **▶** buttons on the C30 Remote Control.

The on-screen display will show **◀◀** or **▶▶** as you step, and the front panel display shows the current chapter or track number.

If you step between chapters on a DVD while the disc is paused it will wait for you to press the **PLAY** button before playing from the chapter you have selected.

▶ Advanced use

This chapter explains how to use the more advanced features of the V20 DVD Player which you can access from the DVD remote control.

FAST FORWARD AND REVERSE PLAY

You can play back DVD movies or audio CDs at 2x or 8x the normal speed in forward or reverse. This is especially useful for locating a particular position on a disc.

When playing DVDs faster than normal the sound is muted, but with audio CDs you can hear the sound to help you locate the section you want to find.

To play faster than normal

- Press the **▶▶** or **◀◀** buttons on the DVD or C30 Remote Control to step between 2x, 8x, and then back to normal play.

Alternatively press the **PLAY** button to return to normal play.

The current speed is shown on the on-screen display:



SLOW MOTION FORWARD AND REVERSE PLAY

You can play back DVD movies in slow-motion, in forward or reverse, at one of four different speeds. Slow-motion playback is not available for audio CDs.

The current speed is shown on the on-screen display:



To play forward in slow motion

- Press the **SLOW** → button on the DVD remote control to step between 1/2, 1/4, 1/8, and 1/16 normal speed, and then back to normal play.

To play in reverse in slow motion

- Press the **SLOW** ← button on the DVD remote control.

This selects reverse playback at normal speed.

- Press the **SLOW** → button on the DVD remote control to step between 1/2, 1/4, 1/8, and 1/16 normal speed, and then back to normal speed in reverse.
- Press the **PLAY** button to revert to normal forward play.

SINGLE STEPPING

You can step forward from a position on a DVD a frame at a time, to allow you to locate a position exactly.

- Press the **STEP** button on the DVD remote control.

If the disc is playing it will automatically be paused, and you can then keep pressing the **STEP** button to step forward a frame at a time.

REPEATING PLAYBACK

You can choose to repeatedly play back the current chapter or title of a DVD, or the current track of a CD. You can also repeatedly play back a section of a DVD or CD between two specified positions.

To repeat the current title, chapter, or track

- Press the **REPEAT** button on the DVD or C30 Remote Control.

The repeat symbol in the on-screen display bar will show **C** (chapter):



- Press the **REPEAT** button again to select **T** (title repeat), or **OFF** (no repeat):



- On an audio CD press the **REPEAT** button to select between the options: **T** (track repeat), **D** (disc repeat), or **OFF** (no repeat).

- Press the **DISPLAY** button to hide the on-screen display.

The front panel display shows **REPEAT 1** for chapter or track repeat, or **REPEAT ALL** for title or disc repeat.

To repeat a specific section of a disc

- Press the **A-B** button on the DVD remote control, or the **A/B** button on the C30 Remote Control, at the start of the section you want to repeat.

The repeat symbol in the on-screen display bar shows **A-**:



- Press the **A-B** button again at the end of the section you want to repeat.

The repeat symbol in the on-screen display bar shows **AB**:



The DVD player will then automatically return to the start of the section you have marked and play it back repeatedly.

To turn off repeat

- Press the **REPEAT** or **A-B** button again.

The repeat symbol in the on-screen display bar shows **OFF**:



DISPLAYING THE TITLE MENU

Most DVD movies provide a title menu to allow you to choose between the different options provided by the disc, such as special features, extra scenes, and theatrical trailers.

To display the title menu

- Press the **MENU** or **TITLE** button on the DVD remote control, or the **MEM** button on the C30 Remote Control.
- Use the arrow buttons on the DVD remote control, or the **VOL ▼** (left), **VOL ▲** (right), **SEL ▲** (up), and **SEL ▼** (down) buttons on the C30 Remote Control, to highlight an option on the title menu.
- Press the **SELECT** button on the DVD remote control, or the **MENU** button on the C30 Remote Control, to select the item you have highlighted.

DISPLAYING SUBTITLES

DVD movies can contain audio soundtracks in up to eight languages, and subtitles in up to 32 different languages. You can choose which languages are selected by default using the **SETUP** menu; for more information see *Using the Setup menu*, page 17.

You can also turn subtitles on or off, and choose the audio and subtitle languages, while a disc is playing.

To choose the subtitle language

- Press the **SUBTITLE** button on the DVD remote control.

The on-screen display bar identifies the current subtitle language as a three-letter code; for example **SPA** is Spanish, followed by the total number of alternative subtitle languages:



To turn subtitles on or off

- Press the **ON/OFF** button on the DVD remote control.

When subtitles are turned off the on-screen display bar shows **OFF**:



To choose the soundtrack

- Press the **AUDIO** button on the DVD remote control to step through the alternative audio soundtracks.

The on-screen display bar identifies the current soundtrack language (eg **FRE** is French), and recording system (Dolby Digital/5.1, LPCM, MPEG, or DTS).



SELECTING A CHAPTER, TITLE, OR TRACK BY NUMBER

You can play a specific chapter or title of a DVD movie, or a specific track of an audio CD, using the number buttons on the DVD remote control.

To go to a specific chapter

- Use the number buttons to enter the chapter number.

The **C** symbol in the on-screen display bar shows the number you have entered. For example, to go to chapter 12 press **1**, **2**:



- Press the **SELECT** button to go to the chapter you have specified.

To go to a specific title

- Press the **GOTO** button, and then use the number buttons to enter the title number.
- Press the **SELECT** button to go to the title you have specified.

To go to a specific track on an audio CD

- Use the number buttons to enter the number of the track you want to play.

The **T** symbol in the on-screen display bar shows the number you have entered:



- Press the **SELECT** button to go to the track you have specified.

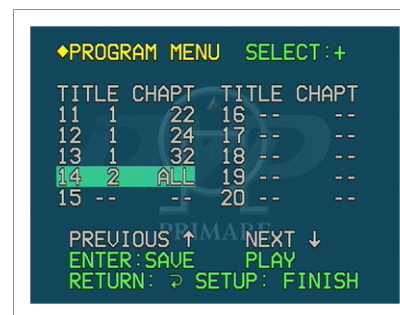
PROGRAMMING A SELECTION OF CHAPTERS OR TRACKS

The V20 DVD Player allows you to program your own selection of titles and chapters on a DVD movie, or tracks on an audio CD. You can then play the sequence you have programmed.

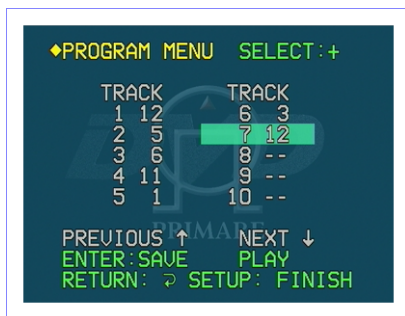
To program a selection of chapters or tracks

- Press the **PROGRAM** button on the DVD remote control.

If you are programming a DVD movie the **PROGRAM MENU** allows you to specify a sequence of titles and chapters:



If you are programming an audio CD the **PROGRAM MENU** allows you to specify a sequence of tracks:



To program an entry

- Use the number buttons to enter the title or track number of the entry, and press the **SELECT** button to confirm your entry.
- On the DVD remote control use the number buttons to enter the chapter number of the entry or press the **SELECT** button to play all chapters, and press the **SELECT** button to confirm your entry.
- Press the ↓ button to highlight the next entry.
- Repeat until you have specified all the chapters or tracks you want to play.

You can enter a total of 20 entries. Highlight **NEXT** ↓ and press the **SELECT** button to display the second page of entries. Highlight **PREVIOUS** ↑ and press the **SELECT** button to display the previous page of entries.

To change a selection

- Use the ↑ and ↓ buttons to highlight it, and then press the **SELECT** button to edit it.
- Edit the entry in the same way as for programming a new entry.

To remove an entry

- Use the ↑ and ↓ buttons to highlight it, and then press the **CLEAR** button to clear it.

To play the selection you have programmed

- Press the **PLAY** button while the **PROGRAM MENU** is displayed.

When you are playing a programmed selection, the program icon in the on-screen display bar shows the number of the current entry:



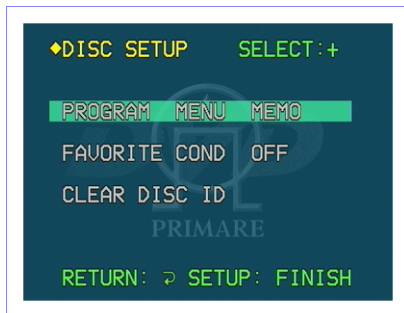
SAVING A PROGRAM

Once you have programmed a favorite selection for a disc, the V20 DVD Player allows you to save it with a name of your choice. It will then be available whenever you reinsert the same disc. You can save programs for up to 30 discs.

To save the programmed selection permanently

- Display the **PROGRAM MENU** with the program you want to save.
- Press the **RETURN** button.

The **DISC SETUP** menu will be displayed:



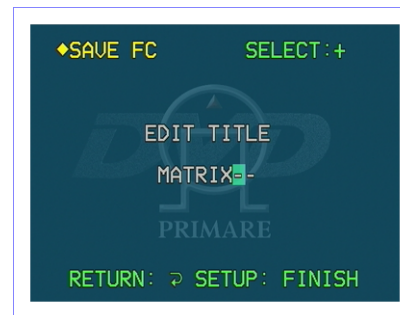
- Highlight **FAVORITE COND** and press the **SELECT** button to display the **FAVORITE COND** menu:



- Highlight **SAVE FC** and press the **SELECT** button to save the program.

You will be prompted to enter a title for the program to identify the disc.

- Use the ↓ and ↑ buttons to change the letter you are entering, and the → button to move to the next letter:



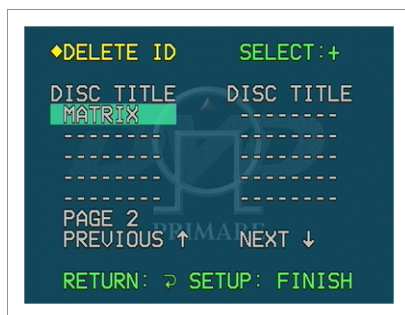
- Press the **SELECT** button to save the program with the name you have specified.

The **DISC SETUP** menu will show **FAVORITE COND ON** to indicate that the program is saved.

To delete a program

- Highlight **CLEAR DISC ID** on the **DISC SETUP** menu and press the **SELECT** button to select it.

The **DELETE ID** menu shows a list of the programs you have created:



- Highlight the program you want to delete and press the **CLEAR** button to delete it.
- Press the **SETUP** button to exit from the **DELETE ID** menu.

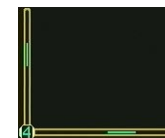
ZOOMING THE PICTURE

The V20 DVD Player includes a zoom function that allows you to magnify a section of the video image to either 2x or 4x normal scale.

To zoom in

- Press the **ZOOM** button on the DVD remote to step between 2x normal scale, 4x normal scale, and then revert to normal scale.

When the zoom function is active a cursor is displayed on the screen, with horizontal and vertical bars representing the section of the whole video image being magnified:



- Use the arrow buttons to move the section you are magnifying.

You can use the **ZOOM SETUP** option on the **CUSTOM SETUP** menu to specify the default zoom settings; see *To set up the zoom options*, page 18.

CHOOSING A CAMERA ANGLE

Some DVD movies allow you to choose between one of several alternative camera angles to give you a different view of the scene.

To change the camera angle

- Press the **ANGLE** button on the DVD remote control.

The camera symbol in the on-screen display bar shows the number of the camera angle you have selected, together with the total number of alternative angles:



▶ Connecting the V20 DVD Player

This chapter explains how to connect the V20 to the other components in your system, using the connections on the back panel.

BACK PANEL CONNECTIONS



(A) S-Video output.

(B) Composite video output.

(B) RGB video output.

(D) Stereo phono audio output.

(E) Digital optical TOSlink output.

(F) Digital SPDIF output.

(G) Mains power input.

VIDEO OUTPUTS

The V20 provides a choice of either composite video or S-Video outputs. If your source or monitor provides both composite and S-Video connections we recommend using the S-Video connections, as these provide higher quality.

Connecting to a television or monitor

- Connect the appropriate output to your television or monitor.

AUDIO OUTPUTS

The V20 provides three alternative audio outputs.

Analogue output

The analogue output provides stereo phono connections for connection to a conventional stereo preamplifier. To use these outputs you should set the **AUDIO OUTPUT** option on the **SETUP** menu to **LPCM**. For more information see *Specifying the audio output*, page 21.

Digital outputs

The V20 DVD player provides an optical Toslink digital output and an SPDIF digital output for connection to a digital surround processor. To use these outputs you should set the **AUDIO OUTPUT** option on the **SETUP** menu to **BITSTREAM**. For more information see *Specifying the audio output*, page 21.

CONNECTING TO THE PRIMARE P30 PROCESSOR

The Primare P30 Processor is an ideal digital sound processor for use with the Primare V20 DVD player to give superb quality video and 5.1 channel digital surround.

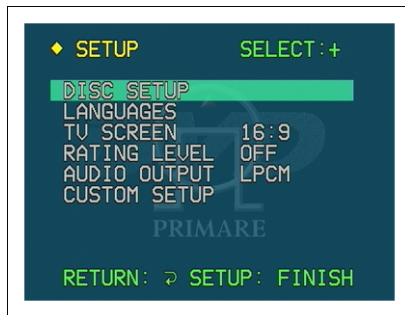
- Connect the S-Video output from the DVD player to S-Video input 1 on the P30.
- Connect the digital RCA output from the DVD player to digital input 2 on the P30.
- Set the **AUDIO OUTPUT** option on the **SETUP** menu to **BITSTREAM**. For more information see *Specifying the audio output*, page 21.

► Configuring the V20 DVD Player

This chapter explains how to use the **SETUP** menu to configure the operation of the V20 DVD Player.

USING THE SETUP MENU

The **SETUP** menu provides a series of options which allow you to customize different aspects of the operation of the V20 DVD Player:



To display the **SETUP** menu

When the DVD is stopped:

- Press the **SETUP** button on the DVD remote control.

To step between options

- Press the ↑ or ↓ buttons on the DVD remote control to step between options until the one you want to change is highlighted.
- Press **SELECT** to select the option you have highlighted.

For more information about each of the options refer to the following sections.

To return to the previous menu

- Press the **RETURN** button.

To exit from the **SETUP** menu

- Press the **SETUP** button.

CHOOSING THE DEFAULT LANGUAGES

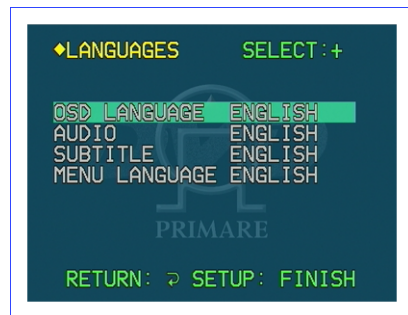
Most DVD movies include a selection of audio tracks, subtitles, and menu languages which you can choose between while playing a disc. The

LANGUAGES menu allows you to specify which language should be selected by default for each option.

To display the **LANGUAGES** menu

- Highlight **LANGUAGES** on the **SETUP** menu and press the **SELECT** button:

The **LANGUAGES** menu allows you to choose the language you want to use:



- Highlight the option you want to change and press the **SELECT** button.

A menu of the available languages will be displayed:



- Use the ↑ and ↓ buttons to highlight the language you want to select as the default and press the **SELECT** button to select it.

Alternatively to choose a language not on this list highlight **OTHERS**, use the number buttons to enter the four-digit number identifying the language you want to use, and press the select button to select it.

For a full list of languages together with their codes see *Language codes*, page 19.

The **AUDIO** menu provides an additional **ORIGINAL** option, which selects the original soundtrack language for the movie.

The **SUBTITLE** menu provides an additional **AUTO** option, which automatically displays subtitles in the specified audio language if no soundtrack is available for that language.

SETTING THE DEFAULT SCREEN FORMAT

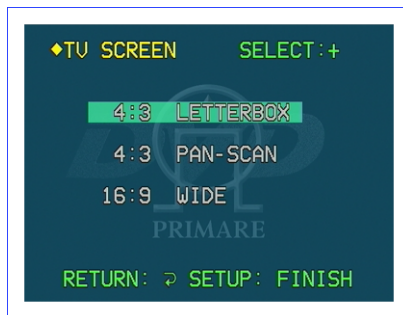
Some DVD movies allow you to choose between a normal or widescreen version of the movie.

If you have a standard 4:3 television you also have the choice of displaying widescreen pictures cropped to fill your television screen (Pan-Scan), or with black bars above and below the picture (Letterbox).

To set the default screen format

- Highlight **TV SCREEN** on the **SETUP** menu and press the **SELECT** button.

The **TV SCREEN** menu allows you to choose the screen format you want to use:



- Highlight the option you want to use and press the **SELECT** button to select it.

The currently selected option is displayed in the **SETUP** menu.

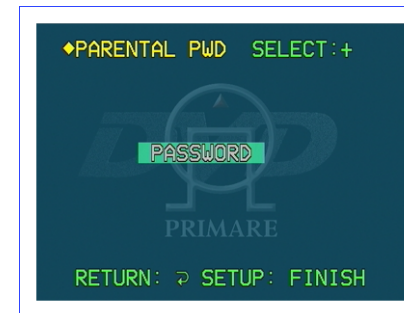
SETTING THE RATING LEVEL

The V20 DVD Player allows you to set a parental lock which will prevent playback of discs whose content exceeds a specified rating level. Note that not all DVDs support this function.

To set a parental lock

- Highlight **RATING LEVEL** on the **SETUP** menu and press the **SELECT** button.

The following screen prompts you to enter the parental password:



- Enter your four-digit password and press the **SELECT** button.

Initially the password is set to 7890, but you can change it to any password you choose as described in *To change the password*, page 20.

The following screen then allows you to set the rating level:



- Press ↑ and ↓ to highlight the rating level you want to set, or highlight **OFF** to turn the parental lock off, and press **SELECT** to select it.

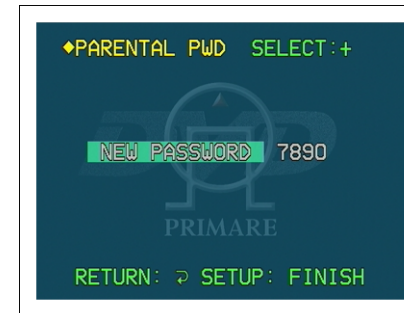
Level 1 corresponds to general viewing, level 3 is equivalent to the USA movie rating PG, and level 8 corresponds to adult viewing.

The rating level you have set will be displayed in the **SETUP** menu.

To change the password

- Highlight **CHANGE PWD** on the **RATING LEVEL** screen and press the **SELECT** button to select it.

The following screen allows you to specify the new password:



- Enter the four-digit password you want to use and press the **SELECT** button to select it.

Note that the password cannot start with a zero.

If you forget your password contact your Primare dealer who will be able to reset it for you.

SPECIFYING THE AUDIO OUTPUT

The **AUDIO OUTPUT** menu allows you to specify whether the V20 DVD Player should perform Dolby Pro Logic decoding internally, or whether it should provide a 5-channel encoded output for a separate surround decoder.

To specify the audio output

- Highlight **AUDIO OUTPUT** on the **SETUP** menu and press the **SELECT** button to select it.

The following menu allows you to specify the output format:



- Highlight **BITSTREAM** to provide a multi-channel bitstream on the digital output, suitable for decoding by an external digital surround processor such as the Primare P30.
- Highlight **LPCM** to specify that you want the V20 DVD Player to perform decoding internally, and provide a stereo LPCM digital output.

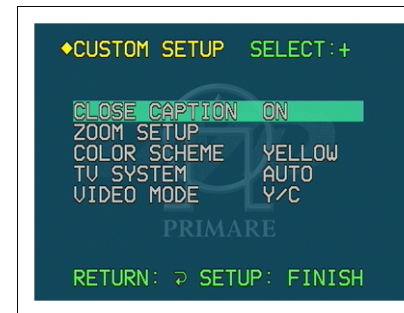
To use the analog phono outputs select **LPCM**.

SPECIFYING ADDITIONAL SETUP OPTIONS

The **CUSTOM SETUP** menu allows you to specify additional more advanced options affecting the configuration of the V20 DVD player.

To display the CUSTOM SETUP menu

- Highlight **CUSTOM SETUP** on the **SETUP** menu and press the **SELECT** button to select it:



To select close caption subtitles

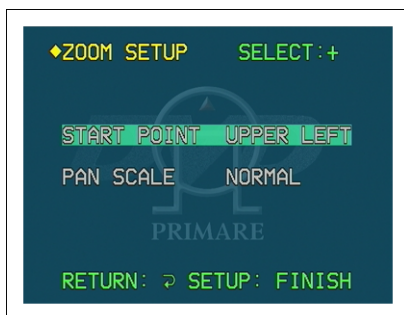
Some DVD videos include close caption subtitles, which provide a description of sound effects for the hard of hearing; for example, "clock chimes".

- Highlight **CLOSE CAPTION** on the **CUSTOM SETUP** menu and press the **SELECT** button to select it.
- Highlight **ON** or **OFF** as required and press the **SELECT** button to select it.

To set up the zoom options

These determine the operation of the **ZOOM** button on the DVD remote control.

- Highlight **ZOOM SETUP** on the **CUSTOM SETUP** menu and press the **SELECT** button to select it:



The **ZOOM SETUP** menu allows you to select between the following options:

Option	Choices
START POINT	UPPER LEFT, CENTRE, LAST POINT
PAN SCALE	NORMAL, ROUGH, FINE

To choose the color scheme for on-screen displays

- Highlight **COLOR SCHEME** in the **CUSTOM SETUP** menu and press the **SELECT** button to select it.
- Choose between **YELLOW**, **GREEN**, **BLUE**, or **RED**, and press the **SELECT** button to select the option you have highlighted.

To specify the TV system

DVD movies are produced in both PAL and NTSC television formats. The V20 DVD Player is capable of converting between formats, to allow you to view DVD movies in either format even if your television is not capable of displaying that format. However the conversion process introduces some picture degradation.

- Highlight **TV SYSTEM** in the **CUSTOM SETUP** menu and press the **SELECT** button to select it.
- Choose **AUTO** if your television can display both PAL and NTSC video, or choose the option corresponding to the format supported by your television.

If your television is capable of displaying both formats the recommended setting is **AUTO**, which supplies the unconverted video signal to the television.

To specify the video mode

The **VIDEO MODE** option determines the format of video on the discrete video outputs, when available.

- Highlight **VIDEO MODE** on the **CUSTOM SETUP** menu and press the **SELECT** button to select it.

The following options are available:

Option	Description
Y/C	S-Video format.
RGB	Red, Green, and Blue signals.
YUV	Y, Pr, and Pb signals.

LANGUAGE CODES

Language	Code	Language	Code	Language	Code
Abkhazian	6566	Hausa	7265	Romanian	8279
Afar	6565	Hebrew	7387	Russian	8285
Afrikaans	6570	Hindi	7273	Samoan	8377
Albanian	8381	Hungarian	7285	Sanskrit	8365
Ameharic	6577	Icelandic	7383	Scots Gaelic	7168
Arabic	6582	Indonesian	7378	Serbo-Croat	8372
Armenian	7289	Intelingua	7365	Serbian	8382
Assamese	6583	Irish	7165	Shona	8378
Aymaran	6588	Italian	7384	Sindhi	8368
Mzerbaijani	6590	Japanese	7465	Singhalese	8375
Bashkir	6665	Javanese	7487	Slovak	8375
Basque	6985	Kannada	7578	Slovenian	8376
Bengali; Bangla	6678	Kashmiri	7583	Somali	8379
Bhutani	6890	Kazakh	7575	Spanish	6983
Bihari	6672	Kirghiz	7589	Sudanese	8385
Breton	6682	Korean	7579	Swahili	8387
Bulgarian	6671	Kurdish	7585	Swedish	8386
Burmese	7789	Laotian	7679	Tajik	8471
Byelorussian	6669	Latin	7665	Tagalog	8476
Cambodian	7577	Latvian, Lettish	7686	Tamil	8465
Catalan	6765	Lingala	7678	Tatar	8484
Chinese	9072	Lithuanian	7684	Telugu	8469

Language	Code	Language	Code	Language	Code
Corsican	6779	Macedonian	7775	Thai	9472
Croatian	7282	Malagasy	7771	Tibetan	6679
Czech	6783	Malay	7783	Tigrinya	8473
Danish	6865	Malayalam	7776	Tonga	8479
Dutch	7876	Maori	7773	Turkish	8482
English	6978	Maltese	7784	Turkmen	8475
Esperanto	6979	Marathi	7782	Twi	8487
Estonian	6984	Moldavian	7779	Ukrainian	8575
Faroese	7079	Mongolian	7778	Urdu	8582
Fijian	7074	Nauru	7865	Uzbek	8590
Finish	7073	Nepali	7869	Vietnamese	8673
French	7082	Norwegian	7879	Volapük	8679
Frisian	7089	Oriya	7982	Wolof	8779
Galician	7176	Punjabi	8065	Welsh	6789
Georgian	7565	Pashto, Pushto	8083	Xhosa	8872
German	6869	Persian	7065	Yiddish	7473
Greek	6976	Polish	8076	Yoruba	8979
Greenlandic	7576	Portuguese	8084	Zulu	9085
Guarani	7178	Quechua	8185		
Gujarati	7185	Rhätö-Romanic	8277		

► Index

A		front panel display	4	Primare P30 Processor	
angle	10	dimming	4	connecting to	16
audio output, specifying	21	I		PROGRAM MENU	10
audio soundtrack	9	introduction	1	programming a selection	10
B		L		R	
back panel connections	15	LANGUAGES menu	18	rating level	19
C		choosing default languages	18	repeat play	8
chapters		displaying	18	resetting play	5
selecting	10	P		S	
stepping between	6	parental lock	19	screen format	19
colours for on-screen displays	22	pausing play	5	setting the default	19
connections	15	playing a disc	4	SETUP menu	17
CUSTOM SETUP menu	21	pausing	5	slow motion	7
F		repeating	8	soundtrack language, choosing	9
fast forward	7	resetting	5	specification	2
FAVORITE COND	12	stopping	5	standby, switching to	4
front panel controls	3			stepping between chapters or tracks	6

SUBTITLE LANGUAGE menu	18
subtitles	9
choosing the language	9
selecting close caption	21
turning on and off	9
switching on and off	4
switching to standby	4

T

title menu, displaying	9
title, specifying	10
tracks	
specifying	10
stepping between	6
TV system, specifying	22

V

video mode, specifying	22
------------------------------	----

Z

zooming	13
setting up options	22