TOSHIBA





Blu-ray Disc™ Player



BDX2400KE BDX3400SE Owner's Manual

Contents

1	Important	3-4
	Safety and important notice	3
	Disposal of your old product and batteries	3
	Notice for Trademark	4
2	Your Product	5-7
	Regions Codes	5
	Product overview	6
	Remote control	7
3	Connections	8-9
	Connecting to a TV	8
	Connecting to the digital amplifier/receiver	8
	Connecting to network	8-9
	Connecting USB device	9
	Connecting Power	9
4	Preparation	.10
	Prepare the remote control	. 10
	Setting up the player	. 10
5	Playback11	-13
	Playback Functions	-13
6	Customizing14	-17
	Audio	. 14
	System	-15
	Network	5-16
	Language	. 16
	Security	. 16
	Information	. 16
	Playback	-17
	Display	. 17
7	Network functional description	-19
8	Specifications	.20
9	Troubleshooting21	-22
10	Glossary	-24
11	License Information	-51

1 Important

Safety and important notice

Warning:

- Risk of overheating! Never install the product in a confined space. Always leave a space of at least 10cm around the product for ventilation. Ensure curtains or other objects never cover the ventilation slots on the product.
- Never place the product, remote control or batteries near naked flames or other heat sources, including direct sunlight.
- Only use this product indoors. Keep this product away from water, moisture and liquid-filled objects.
- Never place this product on other electrical equipment.
- Keep away from this product during lightning storms.
- Where the mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

LASER CAUTION:

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

CAUTION:

VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. DO NOT STARE INTO BEAM.

LOCATION:

INSIDE, NEAR THE DECK MECHANISM.

CLASS 1 LASER PRODUCT APPAREIL À LASER DE CLASSE 1 PRODUCTO LASER DE CLASE 1

EU Conformity Statement



This product is labeled with the CE Mark in accordance with the related European Directives, notably Low Voltage Directive 2006/95/EC, Electromagnetic Compatibility Directive 2004/108/EC and RoHS Directive 2011/65/EU. Furthermore the product complies with the Ecodesign Directive 2005/32/EC (EuP) and 2009/125/EC (ErP) and its related implementing measures.



If this product has an integrated Wireless LAN feature, the Radio Equipment and Telecommunications Terminal Equipment Directive 1999/5/EC is also applicable.

Responsible for CE-marking is TOSHIBA EUROPE GMBH Hammfelddamm 8, 41460 Neuss, Germany

Disposal of your old product and batteries

Following information is only valid for EUmember States:

Disposal of products

The crossed out wheeled dust bin symbol indicates that products must be collected and disposed of separately from household waste. Integrated batteries and accumulators can be disposed of with the product. They will be separated at the recycling centres.

The black bar indicates that the product was placed on the market after August 13, 2005. By participating in separate collection of products and batteries, you will help to assure the proper disposal of products and batteries and thus help to prevent potential negative consequences for the environment and human health.

For more detailed information about the collection and recycling programmes available in your country, please contact your retailer where the product was purchased.



Disposal of batteries and/or accumulators

The crossed out wheeled dust bin symbol indicates that batteries and/or accumulators must be collected and disposed of separately from household waste. If the battery or accumulator contains more than the specified values of lead (Pb), mercury (Hg), and/or cadmium (Cd) defined in the Battery Directive (2006/66/EC), then the chemical symbols for lead (Pb), mercury (Hg) and/or cadmium (Cd) will appear below the crossed out wheeled dust bin symbol. By participating in separate collection of batteries, you will help to assure the proper disposal of products and batteries and thus help to prevent potential negative consequences for the environment and human health.

For more detailed information about the collection and recycling programmes available in your country, please contact your retailer where the product was purchased.

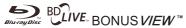


Pb, Hg, Cd

Notice for Trademark



AVCHD Related Logos are trademarks of Panasonic Corporation and Sony Corporation.



Blu-ray $Disc^{TM}$, $Blu-ray^{TM}$, $BD-Live^{TM}$, $BONUSVIEW^{TM}$, and the logos are trademarks of the Blu-ray Disc Association.



ABOUT DIVX VIDEO:

 DivX^{\otimes} is a digital video format created by DivX, LLC, a subsidiary of Rovi Corporation.

This is an official DivX Certified® device that plays DivX video. Visit divx.com for more information and software tools to convert your files into DivX videos.

ABOUT DIVX VIDEO-ON-DEMAND:

This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

 DivX^{\otimes} , DivX Certified $^{\otimes}$ and associated logos are trademarks of Rovi Corporation or its subsidiaries and are used under license.

DivX Certified® to play DivX® video up to HD 1080p, including premium content.



DLNA™ and DLNA CERTIFIED™ are trademarks or registered trademarks of Digital Living Network Alliance. All rights reserved. Unauthorized use is strictly prohibited.

DOLBY TRUEHD

Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

Master Audio Essential

Manufactured under license under U.S. Patent Nos: 5,956,674; 5,974,380; 6,226,616; 6,487,535; 7,392,195; 7,272,567; 7,333,929; 7,212,872 & other U.S. and worldwide patents issued & pending. DTS-HD, the Symbol, & DTS-HD and the Symbol together are registered trademarks & DTS-HD Master Audio | Essential is a trademark of DTS, Inc. Product includes software. © DTS, Inc. All Rights Reserved.



'DVD Video' is a trademark of DVD Format/Logo Licensing Corporation.



The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.



Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Picasa is a trademark of Google Inc.

YouTube is a registered trademark of Google Inc.



The Wi-Fi CERTIFIED Logo is a certification mark of the Wi-Fi Alliance. The Wi-Fi Protected Setup Identifier Mark is a mark of the Wi-Fi Alliance.

The Wi-Fi DirectTM is a mark of the Wi-Fi Alliance. The MiracastTM is a mark of the Wi-Fi Alliance.

Note:

- For BDX3400SE model only.

2 Your Product

Regions Codes

Both the Blu-ray Disc™ Player and the discs are coded by region. These regional codes must match in order to play the disc. If the codes do not match, the disc will not play.

The Region Number for this Blu-ray Disc[™] Player is described on the rear panel of the Blu-ray Disc[™] player.

Region	DVD discs that can be played
U.S.A. and Canada regions	
U.K., Europe regions and Japan	
Asia Pacific, Taiwan, Korea	
Australia, New Zealand, Latin America	
Russia and India regions	
China, Calcos Islands, Walls and Futuna Islands	

Region	Blu-ray™ discs that can be played	
North America, Central America, South America, Korea, Japan, Taiwan, Hong Kong and South East Asia	6 6	
Europe, Greenland, French territories, Middle East, Africa, Australia and New Zealand.		
India, China, Russia, Central and South Asia.	ôg ©	

Feature highlights

High-Definition entertainment

Watch high-definition content disc with HDTV (High Definition Television). Connect it through a high speed HDMI cable. You can enjoy excellent picture quality up to 1080p resolution with the frame rate of 24 frames per second with progressive scan output.

BD-Live™

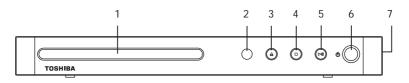
Connect this player to the movie studios website via the LAN jack to access a variety of up-to-date content (e.g. refreshed previews and exclusive special features).

Blu-ray Disc™ Java

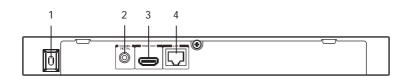
Blu-ray Disc™ Java(BD-J) Application the BD-ROM format supports Java for interactive functions. "BD-J" offers content providers almost unlimited functionality when creating interactive BD-ROM titles.

Product overview

Main unit



No.	Control	Function
1	Disc compartment	Load a disc into the disc drive.
2	IR Sensor	Point the remote control at the IR sensor.
3	_	Open or close the disc compartment.
4		Stop playback.
5	►II	Playback/pause.
6	ტ	Turn the power on (indicator grows green) or restores the unit to the standby mode (indicator is off).
7	USB jack	Connect a USB flash drive.



No.	Control	Function
1	AC power cord	Connect to a standard AC outlet.
2	COAXIAL DIGITAL jack	Output digital audio signals when connecting the coaxial digital cable.
3	HDMI OUT jack	Output video/audio signals to a connected TV, monitor or AV receiver/amplifier. Connect to a TV, monitor or AV receiver/amplifier equipped with HDMI input.
4	LAN jack	Use this to connect to a network with an always-on broadband connection. It is reserved for future usage of BD-Live™, bonus content, Media Server Search, Picasa, YouTube and Miracast™.

Remote control

▲ OPEN/CLOSE

· Open/Close the disc tray

Number Buttons

- · Press to enter track/chapter title numbers/password directly
- . To goto a title, chapter, track or playing time Clear
 - · To clear an entry or the bookmark and program you set

◄ REV/▶▶ FWD

- · Fast reverse/fast forward ►II PLAY/PAUSE
 - Start/Pause playback

HOME

- · Press to enter HOME screen SETTING
 - · To enter the setup screen **EXIT**
 - . To exit the current menu
- STEP/SLOW · Advance the picture frame by frame during pause mode
 - · Do a slow forward during normal playback

PROGRAM

- · To access program list DIGEST
- · To access JPEG thumbnail view during playback

ZOOM

To zoom out/in BOOKMARK

· To bookmark at any point during playback

SUB (Subtitle)

· To display subtitle; press repeatedly to select different subtitles available in your disc

REPEAT A-B

To repeat from A to B



REMOTE SIGNAL EMITTER

· Point remote control to the sensor on the front panel

小 POWER

 To switch the Blu-ray Disc™ Player to ON or standby mode

 To access On Screen Control menu

TOP MENU

· To display the disc title during playback

PIP (Picture in Picture)

· Switch on or off the secondary video

POP UP/MENU

 To display a menu included on many Blu-ray Disc™/DVD video

SKIP I≪√I

 Skip to previous/next chapter/ title/track

STOP

Stop playback

4/▶/**▲**/▼

- · Navigation/Cursor buttons for moving to the left/right/up/down
- Press ◀/▶ during JPEG playback to rotate the current photo track, but the JPEG playback will be paused.

OK

· Acknowledge/Confirm menu selection

RFTURN · Return to previous menu

HOME

· Press to enter HOME screen

AUDIO

· To select the sound stream: press repeatedly to select different audio streams available in your disc

2nd. AUDIO

- · Switch on/off the secondary audio of secondary video (PIP) **ANGLE**
- · Switch the camera angle during playback

REPEAT

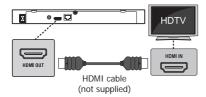
- · Selects various repeat mode DISPLAY
- Press to display operating status

3 Connections

Make the following connection to use this product.

Connecting to a TV

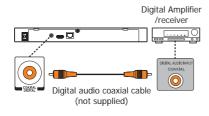
Connect a HDMI cable from the HDMI output jack on this product to the HDMI input jack on the TV. A HDMI cable carries both video and audio signals. If you wish to use TV speakers, you do not need to make an additional audio connection.



Connecting to the digital amplifier/receiver

Route the sound from this player to other device to enhance audio output.

Connect a coaxial cable from the COAXIAL jack on this product to the COAXIAL jack on the device.



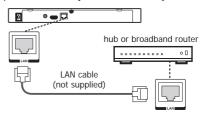
Connecting to network

Option 1: Connecting via wired router Option 2:

- Connecting via a Wi-Fi® adapter and wireless access point or router (for BDX2400KE model)
- Connecting via the built-in Wi-Fi® device and a wireless access point or router (for BDX3400SE model)

Option 1: Connecting via wired router

Connect the network cable from the LAN jack on the product to the LAN jack on the network system.



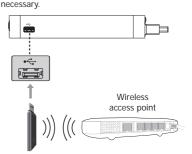
Notes:

- Do not connect a modular phone cable to the LAN jack.
- Follow the connection configurations instructions from your telecommunication carrier or Internet service provider.

Option 2:

 Connecting via a Wi-Fi[®] adapter and wireless access point or router (for BDX2400KE model)

Connect the TOSHIBA's USB Wi-Fi® adapter to the USB jack on the right side of the Blu-ray Disc™ player, and set the wireless network options. No physical connection to the wireless router is



TOSHIBA's Wi-Fi® adapter (not supplied)

- Configure your player to access the wireless access point or router.
- 2. The network configuration and connection method may vary depending on the equipment in use and the network environment. Your Blu-ray Disc™ player is equipped with an IEEE 802.11n wireless module, which also supports the 802.11a/b/g/n standards. For the best wireless performance, we recommend using an IEEE 802.11n certified Wi-Fi® network (access point or wireless router).

Notes:

- USB Wi-Fi® adapter is required for a wireless connection.
- This unit is compatible with TOSHIBA's USB Wi-Fi® adapter only (Model name:WLM-12EB1).
- For detailed information, please refer to the device's User's Guide for WLM-12EB1.
- Connecting via the built-in Wi-Fi® device and a wireless access point or router (for BDX3400SE model)

Your Blu-ray Disc™ player has an integrated Wi-Fi® device and antenna. No physical connection to the wireless router is necessary.



 Configure your player to access the wireless access point or router.

access point

2. The network configuration and connection method may vary depending on the equipment in use and the network environment. Your Blu-ray Disc™ player is equipped with an IEEE 802.11n wireless module, which also supports the 802.11a/b/g/n standards. For the best wireless performance, we recommend using an IEEE 802.11n certified Wi-Fi® network (access point or wireless router).

Notes:

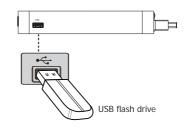
- You must use a wireless IP sharer that supports IEEE 802.11a/b/g/n. (n is recommended for stable operation of the wireless network.)
- Wireless LAN, in its nature, may cause interference, depending on the use condition (AP performance, distance, obstacle, interference by other radio devices, etc.).
- Set the wireless IP sharer to Infrastructure mode. Adhoc mode is not supported.
- When applying the security key for the AP (wireless IP sharer), only the following is supported.
 - 1. Authentication Mode: WPAPSK, WPA2PSK
 - 2. Encryption Type: WEP, TKIP, AES

Connecting USB device

The USB jack supports USB flash drive, TOSHIBA's USB Wi-Fi® adapter (Model name: WLM-12EB1) and 4 ports USB HUB.

A USB flash drive provides an additional memory to software upgrade and enjoy BD-Live $^{\text{TM}}$ bonus content.

You can also enjoy playing back MP3/JPEG/MPEG4/ DivX® files stored in the USB flash drive.



Connect the USB flash drive or TOSHIBA's USB Wi-Fi® adapter to the USB jack on this product.

Notes:

- To enjoy BD-Live™ bonus content, as your local storage, use a 1 GB or larger USB flash drive.
- For some Blu-ray[™] discs with BD-Live[™] feature, you may need to plug in the USB flash drive before loading the disc. Otherwise, the disc may not playback.
- TOSHIBA does not guarantee 100% compatibility with all USB flash drives.
- USB-HUB is used when using USB flash drive and TOSHIBA's USB Wi-Fi® adapter together.

Connecting Power

Connect the AC power cable to the wall socket.

• The product is ready to be set up for use.

Notes:

- Before connecting the AC power cord, ensure you have completed all other connections.
- Risk of product damage! Ensure that the power supply voltage corresponds to the voltage printed on the back of the unit.
- The type plate is located on the back of the unit.

4 Preparation

Always follow the instructions in this chapter in sequence.

Note:

- Use of controls or adjustments or performance of procedures other than herein may result in hazardous radiation exposure or other unsafe operation.

Prepare the remote control

1. Open the battery cover.



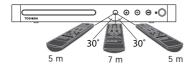
Insert two AAA batteries with correct polarity (+/-) as indicated.



3. Close the battery cover.

Notes:

- If you are not going to use the remote control for a long time, remove the batteries.
- Do not use old and new or different types of batteries in combination.
- Risk of explosion! Keep battery away from heat, sunshine or fire. Never discard battery in fire.
- The maximum operable ranges from the unit are as follows.
- Line of sight: approx. 7 m
- Either side of the centre: approx. 5 m within 30°
- Above: approx. 5 m within 30°
- Below: approx. 5 m within 30°



Setting up the player

Find the correct viewing input

- 1. Press **b** to turn on this product.
- Turn on the TV and switch to the correct video-in input (refer to the TV user manual on how to select the correct input).

Initial Setting

When you turn on this unit for the first time, or restore all settings to factory defaults, the system will prompt you to perform Easy Setup.

- 1. Follow the on-screen instructions to customize the following settings to your preference:
 - OSD Language Resolution
- Aspect ratio
- 2. After setting, press **OK** to confirm and exit.

Use the SETTING menu

 Press SETTING to display the setup screen in stop mode or no disc playback.

Use the HOME menu

 Press HOME to display the Home screen in stop mode or no disc playback.

5 Playback

Playback Functions

Basic Playback

- Press **也** on the front panel or the remote control, your Blu-ray Disc™ player will turn on.
- Turn on the TV, and then select the input setting on the TV that matches the connection method you used to connect your player.
- 3. Press OPEN/CLOSE to slide out the disc tray.
- 4. Place a disc on the disc tray with the label facing up, and then press ♠ OPEN/CLOSE to slide back and close the disc tray. The disc loading time depends on the types of

disc you are loading.

- After loading a disc, playback starts automatically.
- If a Blu-ray disc or DVD menu displays, use cursor buttons to select PLAY. Then, press OK to confirm.
- To eject the disc, press OPEN/CLOSE.

Pause playback

- Press I to pause playback. The sound will be muted.
- 2. Press ► to resume the playback.

Still Off

Press I to continue to playback at still off mode.

Stop playback

 Press ■ STOP once to go to resume mode, the TV screen will show the resume logo.
 Press ► to resume playback from the point

where playback is stopped.

 Press ■ STOP twice to stop the playback completely and the setup screen appears. Use ▲/▼ to select BD/DVD, and press OK to begin playback from the beginning of the disc. Not all Blu-ray™ discs support the resume feature.

Fast Forward and Fast Reverse

- Press >> to fast forward through the disc. The fast forward speed changes based on how many times you pressed the button.
- - The speed will increase through the following sequence: 2X, 4X, 8X, 16X, 32X.
- Press I to resume normal playback.

Instant Search and Instant Replay

- During playback, press and hold
 button, you can search 30 seconds forward.
- During playback, press and hold ◀ button, you can instant replay the content from 10 seconds before.

Previous and Next

- During playback, press ◄◄ button to skip back to the beginning of the current chapter or track or the previous chapter or track.
- Press of bt button during playback will allow you to skip the playback to next chapter or track.

Slow Forward

- Press STEP/SLOW during normal playback. The slow forward speed is 1/16 in default.
- To change slow forward speed, press STEP/ SLOW repeatedly, and the slow forward speed will be changed in the following sequence: 1/16, 1/8, 1/4, 1/2, normal.
- 3. To exit slow forward mode and return to normal playback, press ►■.

Step Forward

Use this feature to help you to enjoy the video frame by frame.

- Press I during normal playback, then playback will change to pause state.
- Press STEP/SLOW repeatedly to advance the picture frame by frame.
- Press ► to resume normal playback.

Advanced Playback

GOTO

During playback, press GOTO to edit Title, Chapter, and Time.

Press **﴿**/▶ and OK on the remote control to select Title, Chapter, or Time. Then press the numeric buttons or **▲**/♥ and then press OK. The playback will skip to the desired location.

For Time Search, press $\blacktriangle/\blacktriangledown$ to select TT (Title) or CH (Chapter) time search.

TOP MENU

You may press this button at any time, and the Bluray Disc™ or DVD video disc playback will pop up the disc menu.

POP UP/MENU

During Blu-ray Disc™ playback, press POP UP/ MENU to display the disc title, and the playback will not be stopped even the menu is on the screen.

RETURN

Press this button to return to the previous on-screen menu in Setting menu such as External Memory Information, Parental Control, etc.

During MP3/JPEG playback, press RETURN once, it will return back to Media Center page.

PROGRAM

During DVD/CD playback, you can press this button to edit the sequence of the playlist.

DIGEST

During playback of JPEG disc, press DIGEST to view a page of 12 thumbnail images.

- Use **◄/▶/▲/▼** to select an image.

Press OK to view the selected image in full-screen and subsequent images will be displayed one after another automatically.

 - Press ◄◄/►► to view the previous or next thumbnail screen.

ZOOM

Press ZOOM repeatedly to Zoom in/out playback in the video.

Zoom mode : Zoom 2x -> Zoom 3x -> Zoom 4x -> Zoom 1/2 -> Zoom 1/3 -> Zoom 1/4.

BOOKMARK

During playback, press the BOOKMARK button to add the bookmark; press and hold for a few seconds to display the list of bookmark which you added before on the screen, then you can press the OK button to select the bookmark or CLEAR button to delete the bookmark.

SUB

Press this button repeatedly and the screen will display "X/XX XXX" or "Off". The "X" indicates the current number of this language; "XXX" indicates the total number of language; "XXX" indicates the language.

The number of available languages depends on the disc.

AUDIO

Press AUDIO button on the remote control to select the audio streams that set within the Blu-ray[™] or DVD disc.

The screen will display:

AUDIO: X / XX XXX XXXX

"X" - The Current Audio Stream Number

"XX" - The total number of Audio Stream

"XXX" - Audio Language

"XXXX" - Audio Technology

ANGLE

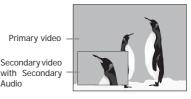
During playback, press this button to change the angle of the picture. The screen will display "Angle X/X." The first "X" indicates the current number of angle, and the second "X" indicates total number of angle.

Not all Blu-ray[™] or DVD has the multi-angle feature. The screen will take around 5 seconds to change.

PIP

Some Blu-ray™ discs have the PIP function enabling you to display the secondary video in the primary video. You can call up the secondary video by pressing the PIP button when the scene contains the secondary video. See the documentation that came with the disc for playback instructions.

- 1. Turn on secondary video by pressing the PIP button.
- 2. Press 2nd. AUDIO to turn on the audio for the secondary video (PIP).
 - In order to hear the secondary audio, the PIP feature on the disc must be turned on.
- 3. Press PIP again to turn off the secondary video.



This function is not available when the primary video is played in Search, Slow-Motion, or Frame-by-Frame or Fast Forward/ Reverse mode.

To listen to the secondary audio, the digital audio output must be set to "Bitstream", "Re-encode" or "PCM". Otherwise, only the primary audio can be heard.

Notes:

- Not all the Blu-ray™ discs can support this function.
- High Definition PIP (Secondary Video) is not supported.

REPEAT

Press REPEAT repeatedly to select different repeat modes.

Blu-ray Disc™: Repeat Chapter and Title. DVD: Repeat Chapter. Title and All.

CD-DA/JPEG/MP3: Repeat Track and All.

A-B

To play certain section within the video or song, press A-B button to set the start point. Then, press A-B button again to set the end point and complete the setting. The selected section will be played repeatedly.

Press A-B button the third time to cancel this function.

The end point cannot be set until 5 seconds of playback has elapsed from the start point.

Not all Blu-ray TM discs support the repeat A-B feature.

DISPLAY

Press this button and the screen will display some information about disc, such as: Title number, Chapter number, Track number, Elapsed Time, Audio, Angle, and Subtitle languages. Press this button again to turn off the information display.

osc

Press OSC to open the On Screen Control menu during playback. In this menu, you can make some playback-related control.

The on screen control contains following items:

[Title]: The title in current playback/titles in total. Select your desired title to playback.

[Chapter]: The chapter in current playback/ chapters in total. Select your desired chapter to playback.

[Time]: View the elapsed/remaining playback time of title/chapter. Use ▲/▼ to view: the elapsed playback time of title, the remaining playback time of title, the elapsed playback time of chapter, and the remaining playback time of chapter.

[Mode]: Select playback mode among shuffle, random, and normal.

[Audio]: The Blu-ray Disc™/DVD disc's soundtrack language. Use ▲/▼ to view the audio available in the disc and select your desired Audio type.

[Angle]: The angle view of current playback/the angles in total. Use ▲/▼ to select your desired angle view.

[Subtitle]: The Subtitle in current playback.

Use ▲/▼ to view the subtitles available in the disc and select your desired subtitle type or turn it off. *Note:*

- In accordance with the different discs, there would be different subtitles. Such as

Central Europe

Cvrillic

Latin I

Greek

Turkish Hebrew

[Subtitle Style]: When you play the Blu-ray Disc™ or DVD disc and if it has external subtitle, you will see it in OSC menu.

[Secondary Video]: To turn On/Off secondary video.

[Secondary Audio]: To turn On/Off secondary audio

[Bitrate]: Use $\blacktriangle/\blacktriangledown$ to select audio or video bitrate.

[Still Off]: Close the Still feature.

For some Blu-ray Disc™ or DVD discs, a certain video picture will be frozen as a still picture during the process of playback to let the user has a better view of certain picture. To continue playback, select Still Off.

[Instant Search]: Instant search 30 seconds forward.

[Instant Replay]: Replay the content from 10 seconds before.

Tips:

- The specified operation for each item will vary with disc types. And some items are available only when the disc is supportable.
- The DivX® subtitle filename(.sub) has to be saved under the same filename as the movie(.avi) in the same folder (e.a. Folder A: abc.avi and abc.sub).

Playing MP3/JPEG/MPEG4/DivX® files

You can play MP3/JPEG/MPEG4/DivX $^{\circ}$ files that have been recorded on a disc or a USB flash drive on the Blu-ray Disc $^{\intercal}$ player.

- Load a disc or insert a USB flash drive that contains MP3/JPEG/MPEG4/DivX® files.
- On the setup screen, press ▲/▼ to select Video, Music, or Photo, and then press OK.

The Media Center menu appears on the screen. e.g.



- Press ▲/▼ to select Data Disc or USB1, and press OK.
- Press ▲/▼ to select a file (or folder) and press OK or ►■ to start playback.

It should match the selection on the setup screen. (If you selected Video on the setup screen, you also should select Video here.)

Note:

- Not all media formats are supported.

Watermark

This product uses Cinavia technology to limit the use of unauthorized copies of some commercially-produced film and videos and their soundtracks. When a prohibited use of an unauthorized copy is detected, a message will be displayed and playback will be interrupted.

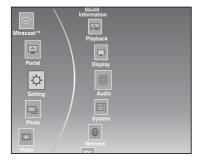
More information about Cinavia technology is provided at the Cinavia Online Consumer Information Center at http://www.cinavia.com. To request additional information about Cinavia by mail, send a postcard with your mailing address to: Cinavia Consumer Information Center, P.O. Box 86851, San Diego, CA, 92138, USA.

6 Customizing

This section describes the various setting option of this Blu-ray Disc[™] player.

If the setup option is greyed out, it means the setting cannot be changed at the current state.

- Press the SETTING button in stop mode to display the setup screen.
- 2. Press OK to enter the Setting menu.
- 3. Use ▲/▼ to select an option and press OK.
- 4. Press ◀ or the RETURN button to return to the previous menu.



Audio

- In Setting menu, use ▲/▼ to select Audio and press OK.
- 2. Press ▲/▼ to select an option and press OK.
- Use ▲/▼ to select the desired audio setting and press OK.
- Press

 or the RETURN button to return to the previous menu.

[SPDIF]

When you connect an audio system to the COAXIAL DIGITAL output jack, the options are:

{Bitstream} - Selects Bitstream output if your receiver SPDIF (Coaxial) IN supports Dolby or DTS or PCM audio signal.

{PCM} - Selects PCM output if your receiver SPDIF (Coaxial) IN only supports PCM stereo audio signal.

{Re-encode} - Selects Re-encode output if your receiver SPDIF (Coaxial) IN supports Dolby or DTS and you want to hear both PIP audio and the movie audio on Blu-rayTM video.

{Off} - No audio will be output via COAXIAL DIGITAL output jack.

[HDMI]

When you connected a HDMI device to the HDMI OUT jack, the available options are:

{Bitstream} - Selects Bitstream output if your receiver HDMI IN supports Dolby or DTS or PCM audio signal.

{PCM} - Selects PCM output if your receiver HDMI IN only supports PCM audio signal.

{Re-encode} - Selects Re-encode if your receiver's HDMI IN supports Dolby or DTS and you want to hear both PIP audio and movie audio on Blu-ray™ video.

{Off} - No audio will be output via HDMI OUT jack.

[Down_samp]

Select the digital audio signal sampling frequency. (Only Coaxial)

{48k} - For discs recorded at sampling rate of 48 kHz.

{96k} - For discs recorded at sampling rate of 96

{192k} - For discs recorded at sampling rate of 192 kHz.

[Dolby DRC]

Select the Dynamic Range Control mode which makes it available to listen to a movie at a low volume without losing sound clarity.

{Off} - Non-dynamic range compress.

{On} - Dynamic range compress.

{Auto} - Adjust the DRC according to input audio.

The setting of Auto is effective for Dolby TrueHD.

[Stereo Down Mix]

Select whether to downmix the multi-channel audio into fewer channels.

(Stereo) - Downmixes the multi-channel audio into two channel stereo. Choose when the Blu-ray Disc™ player is connected to equipment that does not support virtual surround function such as Dolby Pro Logic.

(Surround Encoded(Lt/Rt)) - Downmixes the multichannel audio into surround compatible stereo. Choose when the Blu-ray Disc™ player is connected to equipment that supports virtual surround function such as Dolby Pro Logic.

System

- In Setting menu, use ▲/▼ to select System and press OK.
- Use ▲/▼ to select an option and press OK.
- 3. Press ◀ or the RETURN button to return to the previous menu.

[Screen Saver]

Turn On or Off the screen saver mode. It helps to protect the TV screen.

{On} - Set the screen saver active after approximately 5 minutes without operation.

- The Blu-ray Disc™ player will switch to standby mode if there is no operation after the screen saver is engaged for approximately 20 minutes.

{Off} - Turn off the screen saver mode.

- The Blu-ray Disc[™] player will not switch to standby mode automatically.

[Disc Auto Play]

Turn On or Off the disc automatic playback switching mode.

{On} - The disc playback automatically after

{Off} - Turn off disc auto play mode.

[CEC]

This player supports REGZA-LINK which uses the HDMI CEC (Consumer Electronics Control) protocol. You can use one single remote control to control all REGZA-LINK-compliant devices that are connected through HDMI connectors.

{On} - Turns on REGZA-LINK features.

- With CEC on, during TV standby with the Blu-ray Disc[™] player on, pressing SETTING, PLAY/PAUSE will power on the TV. When you turn the TV off, this unit will automatically turn off.

{Off} - Disables REGZA-LINK features.

[Load Default]

Reset all settings of Blu-ray Disc™ player to initial default state

- Follow the instruction on the TV screen to confirm the default setting operation.

[Deactivate Setting]

To apply the deactivation, unplug the player after operating deactivation.

[Upgrade]

This option allows to update your product software via a Disc, USB Storage or Network.

[External Memory]

External Memory would be used in BD-LiveTM function. When you plug in the USB flash drive which has at least 1GB free space to play BD-Live™ function, the Blu-ray Disc™ system would make a directory named BUDA automatically.

Media Information will display the Free size.

- Press OK to select "Fmt buda", the data in the BUDA folder will be cleared.

[DivX(R) VOD DRM]

The DivX(R) VOD DRM means DivX(R) Video on Demand Digital Right Management.

DivX® is the name of a revolutionary new video codec which is based on the new MPEG-4 compression standard for video.

You will be able to play DivX® movies using this

You can only play DivX® videos that were rented or purchased with the DivX® registration code of this product.

Select the DivX(R) VOD DRM option, you can find this product's registration code.

To learn more please visit http://www.divx.com/ vod.

Network

- In Setting menu, use ▲/▼ to select Network and press OK.
- Press ▲/▼ to select an option and press OK.
- 3. Press or the RETURN button to return to the previous menu.

[Internet Connection]

To enable/disable the Internet connection.

[Interface]

Choose the way to connect network via Ethernet or Wireless.

[Connection Test]

Selecting the Connection Test will cause the player to attempt to communicate with your home network, and if successful, with a known Internet address. If both attempts are successful, your network connection should be good. If the player can successfully connect to your home network, but not to the known Internet address, your Internet service may be "down", or your security firewall may be blocking access of the player to the Internet.

[IP Settina]

{Auto} - Auto obtain network information. {Manual} - Manual setup network information.

[Wi-Fi Direct™]

It allows you to configure a secured wireless network between the Blu-ray Disc™ player and a Wi-Fi Direct[™] compatible device (e.g. smartphone) without using an access point (for BDX3400SE model only).

{Enable} - Turns on the Wi-Fi Direct[™] features.

{Disable} - Disables the Wi-Fi Direct™ features.

[Wi-Fi Direct™ Setting]

To scan and connect a Wi-Fi Direct™ compatible device, e.g. smartphone (for BDX3400SE model only).

[Information]

Display all Network Information.

[BD-Live Connection]

{Permitted} - During playback of BD-Live disc, the disc may automatically download all information from appointed network.

{Partial Permitted} - During playback of BD-Live™ disc, the disc may automatically download partial of the information from appointed network. **{Prohibited}** - Disable downloading information from network.

[Media Sever Search]

Media Sever Search function enables you to create an interoperability network with other devices for resource sharing based on a network.

See Media Server Search on page18 for details.

Language

- In Setting menu, use ▲/▼ to select Language and press OK.
- 2. Press ▲/▼ to select an option and press OK.
- 3. Use $\blacktriangle/\blacktriangledown$ to select the preferred language.
- Press

 or the RETURN button to return to the previous menu.

[OSD]

Select the on-screen menu language.

[Menu]

Select the disc menu language.

[Audio]

Select the audio language of your preference.

[Subtitle]

Select your preferred subtitle language.

Security

- In Setting menu, use ▲/▼ to select Security and press OK.
- 2. Press ▲/▼ to select an option and press OK.
- Press ◀ or the RETURN button to return to the previous menu.

[Change Password]

Follow the instruction on the TV screen to change the password for locked discs and play restricted Blu-ray TM discs/DVDs.

- Use NUMBER keys to enter four digit old password. The default password is "0000".
- 2. Enter the new password.
- 3. Enter the new password again to confirm.

If you forget the password, you can erase your current password by entering the default password.

[Parental Control]

Restricts access to discs that are unsuitable for children. These discs must be recorded with rating.

- 1. Use NUMBER keys to enter the password.
- 2. Select a rating level, then press OK.

Items	Description
1 [Kid safe]	Safe for kids
2 [G]	All children and general guidance
3 [PG]	Parental guidance
4 [PG-13]	Parental guidance for children under 13
5 [PG-R]	Parental guidance recommended
6 [R]	Restricted viewing
7 [NC-17]	No one 17 and under allowed
8 [Adult]	Adult only

Notes:

- Rated discs above the level you set in [Parental Control] require a password to be entered.
- The ratings are country-depended. To allow all discs to play, select 'Off'.

Information

- In Setting menu, use ▲/▼ to select Information and press OK.
- The current software version, MAC address and Netflix ESN will be displayed.
- Press ◀ or the RETURN button to return to the previous menu.

Playback

- In Setting menu, use ▲/▼ to select Playback and press OK.
- Press ▲/▼ to select an option and press OK.
- Use ▲/▼ to select On/Off, and press OK to confirm.

[Angle Mark]

Some Blu-ray™ discs/DVDs contain the scenes recorded with multiple angles, which allow you to enjoy the videos with your desired angles, therefore the angle mark is displayed only when the Blu-ray Disc™/DVD disc is supportable for multi-angle and Angle Mark is set to ON.

{On} - Display the angle mark.

{Off} - Hide the angle mark.

[PIP Mark]

The Picture -In- Picture (PIP) mode display two pictures on the TV screen at the same time, the full screen picture is called Main Window and the small inset window is called Sub Window. The PIP mark is displayed when in PIP mode and PIP Mark is set to ON.

(On) - Display the PIP mark.

{Off} - Hide the PIP mark.

[Secondary Audio]

{On} - Display Secondary Audio.

{Off} - Hide the Secondary Audio.

[Last Memory]

If you open the disc tray or switch this Blu-ray Disc™ player to standby state during normal playback, the Blu-ray Disc™ player can memorize the end playing point, the player will start playback from the memorized point next time.

{On} - Active Last Memory feature.

{Off} - Disable Last Memory feature.

Note:

- Not all the Blu-ray $^{\!\mathsf{TM}}$ discs can support this function.

Display

- In Setting menu, use ▲/▼ to select Display and press OK.
- 2. Press ▲/▼ to select an option and press OK.
- Use ▲/▼ to select the desired option, and press OK to confirm.
- Press ◀ or the RETURN button to return to the previous menu.

[TV Screen]

Select the screen format according to how you want the picture to appear on the TV.

{16:9 Full} - For a disc with the aspect ratio of 4:3, the output video is stretched into 16:9 full screen.

(16:9 Normal) - For a disc with the aspect ratio of 4:3, the output video is resized vertically to match what will be seen on the display.

{4:3 Pan&Scan} - For standard TV, it displays a wide picture on the entire screen and cuts off the redundant portions.

{4:3 Letterbox} - For standard TV, it displays a wide picture with two black borders on the top and bottom of 4:3 screen.

[Resolution]

Select a video output resolution that is compatible with your TV display capability.

{Auto} - Select the most suitable resolution according to the TV.

{480i/576i, 480p/576p, 720p, 1080i, 1080p}

- Select a video resolution setting that is best supported by the TV. See TV manual for details.

[Color Space]

Select a predefined Color Space of picture.

{RGB} - Select RGB Color Space.

{YCbCr} - Select YCbCr Color Space.

{YCbCr422} - Select YCbCr422 Color Space.

{Full RGB} - Select Full RGB Color Space.

[HDMI Deep Color]

This feature is available only when the display device is connected by a HDMI cable, and when it supports Deep Color feature.

{On} - Enable HDMI Deep Color.

{Off} - Disable HDMI Deep Color.

[HDMI 1080/24p]

(On) - Enable 1080/24p video resolution setting.

{Off} - Disable 1080/24p video resolution setting.

Notes about HDMI 1080/24p:

If you want the 1080/24p output, it should fulfill below 3 conditions:

- 1. TV supports the 1080/24p display;
- Player choose the 1080/24p option in the setting menu:
- 3. Media must be the 1080/24p video.

Note:

- This resolution becomes effective only when the playing Blu-ray Disc™ contents are Film source.

[Video Adjust]

{Brightness} - Press **◄**/**▶** to adjust the brightness of display, goes left means dark and right means bright.

{Contrast} - Press **∢/▶** to adjust the contrast of display, goes left means low contrast and right means high contrast.

{Hue} - Press **◄/**▶ to adjust the Hue of display, goes left means low hue and right means high hue.

{Saturation} - Press **∢/>** to adjust the saturation of display, goes left means low Saturation and right means high saturation.

[Sharpness]

Select the level of sharpness: Low, Middle, High.

{Low} - Select Low sharpness level.

{Middle} - Select Middle sharpness level.

{High} - Select High sharpness level.

7 Network Functional description

Media Server Search

With this player connected to network, you can play video, music and photo files from the server.

- 1. Connect this player to server network and set the Media Server Search to **Enable**.
 - See **Network** on page16 for details.
- Press SETTING to enter the setup screen and use ▲/▼ to select Video, Music, or Photo, then press OK.
 - The Media Center menu appears on the screen.

 Press A/▼ to select Media Server list and
- Press ▲/▼ to select Media Server list, and then press OK.
- Press ▲/▼ to a kind of media (Photo, Music, Video) and press OK.
 - It should match the selection on the setup screen. (If you selected Video on the setup screen, you also should select Video here.)
- Press ▲/▼ to select a file (or folder) and press OK or ►II to start playback.

Note:

- Not all media formats are supported.

Miracast™

Allows you to enjoy videos, music and photos on your Miracast™ compatible device (e.g. smartphone) by Wi-Fi Direct™ connection without using an access point (for BDX3400SE model only).

- Turn on your Miracast[™] compatible device (e.g. smartphone) and set the Wi-Fi Direct[™] to On.
- 2. To set this Blu-ray Disc™ player.
 - To enter the Network menu and set Wi-Fi Direct™ to Enable.
 - Then enter Wi-Fi Direct™ Setting to scan and select your Miracast™ compatible device, then press OK.

See Network on page15 for details.

- On your Miracast™ compatible device, search for the "TOSHIBA BDPL" from the list of discovered devices and select it.
 - It may take the unit and Miracast™ compatible device a few seconds to connect.
- After connected successfully, you can now enjoy videos, music and photos on your Miracast™ compatible device from the unit.

Using Portal Menu

A new cloud based service, where content (csp, video, photo, music, setting, etc) can be viewed and shared across the web through a simple user interface.

NOTE: You need to configure a home network before using this feature.

- Press HOME or select Portal in the setup screen to display the Home screen.
- Press ▲/▼ to select the desired icon and press OK.

Notes:

- Some features require an always-on broadband internet connection, firmware update and/or additional bandwidth dedicated to this product. Third party internet services may change or be dicontinued or restricted at any time. Toshiba makes no warranties, representations, or assurances about the content, availability or functionality of thirdparty content or servics. Use of third party internet services may require registration by a computer and/or payment of charges and membership. Not all services or content may be available on this product, in your country or with your language. In order to experience the full capabilities of this product, fully compatible devices may be required. For more information, visit http://www.toshiba.eu/ cloudtv-bluray
- This service may be Forcibly blocked according to the situation of CSP service.

Watching movies with YouTube

- Press HOME or select Portal in the setup screen to display the Home screen.
- Use ◀/▶/▲/▼ to select YouTube, and then press OK to confirm.
- 3. Please enjoy any contents.

Browsing photos with Picasa

Signing in with your account

To display photos in your web album on the screen, you need to sign in with your Picasa account.

- Press HOME or select Portal in the setup screen to display the Home screen.
- Use ◀/►/▲/▼ to select Picasa, and then press OK to confirm.
- Enter your user name using the virtual keyboard, a nd press the OK button while [OK] is selected on the screen.

4. Enter the password using the virtual keyboard, and press the OK button while [OK] is selected on the screen.

Your web album is displayed on the screen.

Creating a new Picasa account on your PC

Visit $\mbox{\sc http://picasa.google.com/}\ \mbox{\sc to}\ \mbox{\sc create}\ \mbox{\sc a}\ \mbox{\sc new}\ \mbox{\sc account.}$

8 Specifications

Playable media

This product can play:

- Blu-ray Disc™-Video, BD-ROM Ver 2.0 Profile1.1 (True BD Player and PinP, Virtual File System Support), BD-R Ver 1.1/1.2/1.3 - BD-ROM mode (BDMV Recording), BD-RE Ver 2.1 - BD-ROM mode (BDMV Recording)
- DVD, DVD-ROM (Single/Dual Layer), DVD-R (Single/Dual Layer at Finalized disc), DVD-RW (Single Layer at Finalized disc),
- · Audio CD, DTS-CD, CD-R/CD-RW
- · USB flash drive

Video

Signal system: PAL/NTSC

HDMI Output: 480i/576i, 480p/576p, 720p, 1080i,

1080p, 1080/24p.

Audio

- · Digital output (Coaxial): 0.5 Vp-p (75 ohm)
- · HDMI output

LAN

LAN terminal 100BASE-T

USB

- USB terminal: 5V === 500mA
- USB 1.1 / USB 2.0 Full-speed/USB 2.0 High-speed
- Supporting range: USB Mass Storage Class Device, TOSHIBA'S USB Wi-Fi[®] adapter (Model name: WLM-12EB1), 4 ports USB HUB, Card reader, Flash disk.
- · Supported file system: FAT32
- Maximum size supported: 2000GB (HDD needs self-powered)
- · Does not support unpowered HDD

Main Unit

- · Power supply rating: 220V-240V 50Hz
- Power consumption: 12W
- Power consumption in standby mode: <0.5W
- Dimensions (w x h x d): 290 × 36 × 180 (mm)
- · Net Weight: 0.82 kg
- · Operating temperature: 5°C to 35°C
- Operating humidity: Less than 80 % (no condensation)

Accessories supplied

- · Remote control
- · Two AAA size batteries
- · Simple IB

Compatible file formats

MP3 tracks

- Supported file extension: '.mp3'
- Supported audio codec : MP3
- Supported corresponding bitrate: 8kbps-320 kbps
- Supported sampling frequencies: 32kHz, 44.1kHz, 48kHz

JPEG

- Supported file extension: '.jpg' or '.jpeg'
- HD JPEG Output in their source native resolution (720p and 1080p)
- · JPEG/ISO format
- · Does not support Picture CD

DivX®

- · Supported file extension: '.DIVX'
- DivX HD

MKV

- · Supported file extensions: '.MKV'
- Supported video codecs: H264 MP/HP, DivX, MPEG4 SP/ASP, MPEG2
- Supported audio codecs: AAC 2ch & 5.1ch, MP3, AC3, DTS, LPCM
- Supported subtitles: Text/UTF8, SSA, SMI, SUB, SRT, ASS
- Playback of MKV files in CD-R/RW may not be compatible
- Some MKV format discs may not play, depending on the video resolution and frame rate condition

Other formats

MP4 ('.mp4', '.mov'), AVI ('.avi'), MPEG ('.mpg', '.mpeg')

9 Troubleshooting

If you experience any of the following difficulties while using this unit, check the list below before consulting your nearest TOSHIBA dealer.

	Problem	Tip
	No reaction to the remote control.	Connect the product to the power outlet.
		Point the remote control at the product.
		Insert the battery correctly.
		Insert new battery in the remote control.
	No video signal on the display device.	Turn on the TV.
		Set the TV to the correct external input.
		Select the correct video resolution.
		Set TV System of TV correctly.
	Incorrect or no audio / video signal on the amplifier/display device via HDMI cable.	If the unit is connected to the unauthorized display device with an HDMI cable, the audio/video signal may not be output.
		Ensure the amplifier/display devices setting match the Blu-ray Disc™ player.
	No high-definition video signal on the TV.	Does the disc contain high-definition video? High- definition video is not available when the disc does not contain it.
		Does the TV support high-definition video? High- definition video is not available when the TV does not support it.
	No audio signal from the loudspeakers of the audio system.	Turn on the audio system.
		Set the audio system to the correct external input.
		Increase the volume level of the audio system.
	Cannot play back a disc.	Make sure that the Blu-ray $Disc^{TM}$ player supports the disc.
		Make sure that the Blu-ray Disc™ player supports the region code of the DVD or Blu-ray Disc™.
		For DVD+RW/+R or DVD-RW/-R, make sure that the disc is finalized.
		Clean the disc.
	Cannot play back JPEG files from a disc.	Make sure that the disc was recorded in the JPEG/ISO format.
	Cannot play DivX® files.	Make sure that the file was recorded in the H.264 or MPEG-4 format.

Cannot play MP3 files from a disc.	Make sure that the disc was recorded in the ISO format.
	Make sure that the bit rate of the MP3 files is between 8 and 320 kbps.
	Make sure that the sample rate of the MP3 files is 32kHz, 44.1kHz or 48kHz.
Cannot find a JPEG file.	Make sure that the selected group (folder) does not contain more than 9,999 files for DVD and 999 files for CD.
	Make sure that the file extension is .jpg, .JPG, .jpeg or .JPEG.
Cannot find a MP3 file.	Make sure that the selected folder does not contain more than 9,999 files for DVD and 999 files for CD.
	Make sure that the file extension is .mp3 or .MP3.
Cannot upgrade SW.	When you upgrade the system with USB flash drive, you should make a new folder named UPG_ALL, and copy the upgrade file into this folder.
	When you upgrade the system by network, please make sure the player is connected to the internet when upgrading the SW.
Sometimes the options of setup menu cannot be selected.	When playing a DVD disc or Blu-ray Disc™, press STOP button once, the player will go into stop resume mode, meanwhile you cannot change some settings in setup menu such as language subitem menu, audio, subtitle etc. If you want to change that, press STOP button twice, the player will go into full stop mode, then you can do it.
Cannot connect to the network	Check that the LAN cable connection is properly made. Check that the broadband router and/or modem is correctly connected. Check the Network Connection Setting.

10 Glossary

Aspect ratio

Aspect ratio refers to the length to height ratio of TV screens. The ratio of a standard TV is 4:3, while the ratio of a high definition or wide TV is 16:9. The letterbox allows you to enjoy a picture with a wider perspective on a standard 4:3 screen.

AVCHD™

 $\mathsf{AVCHD^{TM}}$ is a new format for high definition video camcorders which can record and play high-resolution HD images.

AVI

Audio Video Interleave, known by its acronym AVI, is a multimedia container format. AVI files can contain both audio and video data in a file container that allows synchronous audio-with-video playback.

BD-Java™

With some Blu-ray Disc™ which support Java™ applications, you can enjoy the interactive functions such as games or interactive menus.

BD-Live™

BD-Live™ is a BD-video (BD-ROM version 2 Profile 2.0/Profile 1.1) which contains new functions (e.g. Internet connection), in addition to the BONUSVIEW™ function.

Blu-ray Disc™

Blu-ray Disc™ is a next generation optical video disc capable of storing five times more data than a conventional DVD. The large capacity makes it possible to benefit from the features such as high-definition videos, multichannel surround sound, interactive menus and so on.

BONUSVIEW™

This is a Blu-ray Disc™-Video (Final Standard Profile or Profile 1.1) that supports interactive content encoded on the disc, such as picture-in-picture. This means you can play the primary video and secondary video simultaneously.

Chapter

Just as a book is split up into several chapters, a title on a Blu-ray Disc™-video or DVD-video is usually divided into chapters.

Digital Audio

Digital Audio is a sound signal that has been converted into numerical values. Digital sound can be transmitted through multiple channels. Analogue sound can only be transmitted through two channels.

DivX®

ABOUT DIVX VIDEO:

DivX® is a digital video format created by DivX, LLC, a subsidiary of Rovi Corporation. This is an official DivX Certified® device that plays DivX video. Visit divx.com for more information and software tools to convert your files into DivX videos.

ABOUT DIVX VIDEO-ON-DEMAND:

This DivX Certified* device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

DivX®, DivX Certified® and associated logos are trademarks of Rovi Corporation or its subsidiaries and are used under license.

For HD Test Kit 1080p v1.1 and later:

DivX Certified® to play DivX® video up to HD 1080p, including premium content.

Dolby® Digital

The system to compress digital sound developed by Dolby Laboratories. It offers you sound of stereo (2ch) or multichannel audio.

Dolby® Digital Plus

Dolby Digital Plus is the next generation digital audio compression technology developed as an extension to Dolby Digital. Blu-ray Disc $^{\text{TM}}$ supports 7.1 multi-channel surround sound output.

Dolby® TrueHD

Dolby TrueHD is a lossless coding technology developed for next generation optical discs. Blu-ray DiscTM supports 7.1 multi-channel surround sound output.

DTS®

DTS is a multi-channel surround sound system. By connecting to DTS decoder, you can enjoy movie dynamic and realistic sound like movie theater. DTS surround sound technologies were developed by DTS, Inc.

DTS-HD®

DTS-HD is a lossless coding technology developed as an extension of the original DTS Coherent Acoustics format. Blu-ray Disc™ supports 7.1 multichannel surround sound output.

DTS-HD Master Audio™

A disc encoded with DTS-HD Master Audio delivers ALL of the information from the original master recording — bit-for-bit, it's identical to what the sound engineers laid down. Audio doesn't get any better than this.

HDCP

High-bandwidth Digital Content Protection. This is a specification that provides a secure transmission of digital contents between different devices (to prevent unauthorized copyright.)

HDMI®

High-Definition Multimedia Interface (HDMI) is a high-speed digital interface that can transmit uncompressed high definition video and digital multichannel audio. It delivers high quality picture and sound quality. HDMI is fully backward compatible with DVI. As required by the HDMI standard, connecting to HDMI or DVI products without HDCP (High bandwidth Digital Content Protection) will result in no Video or Audio output.

IP Address

A set of numbers which are assigned to devices participating in a computer network.

IPFG

A very common digital still picture format. A still-picture data compression system proposed by the Joint Photographic Expert Group, which features small decrease in image quality in spite of its high compression ratio. Files are recognized by their file extension '.jpg' or '.jpeq'.

LAN (Local Area Network)

A group of linked devices in a company, school or home. Indicates the boundaries of a particular network.

Local storage

This storage area is used as destination for storing additional contents from BD-Live™ enabled Blu-ray Disc™-Video

MKV

The Matroska Multimedia Container is an open standard free container format, a file format that can hold an unlimited number of video, audio, picture or subtitle tracks inside a single file. It is intended to serve as a universal format for storing common multimedia content, like movies or TV shows.

MP3

A file format with a sound data compression system. MP3 is the abbreviation of Motion Picture Experts Group 1 (or MPEG-1) Audio Layer 3. With the MP3 format, one CD-R or CD-RW can contain about 10 times more data than a regular CD.

MP4

MP4 file format is a multimedia container format standard specified as a part of MPEG-4. It is most commonly used to store digital video and digital audio streams, especially those defined by MPEG (MPEG4, H264...) but can also be used to store other data such as subtitles and still images.

PCM

Pulse Code Modulation. A digital audio encoding system.

Region code

A system that allows discs to be played only in the region designated. This unit only plays discs that have compatible region codes. You can find the region code of your unit on the product label. Some discs are compatible with more than one region (or ALL regions).

Sampling Frequency

The rate which sound is measured by a specified interval to turn into digital audio data. The numbers of sampling in one second defines as sampling frequency. The higher the rate, the better the sound quality.

Title

A collection of chapters on Blu-ray Disc™-video or DVD-video.

Track

Audio CD use tracks to divide up the content of a disc. The Blu-ray Disc™-video or DVD-video equivalent is called a chapter. See also "Chapter".

Wi-Fi

Wi-Fi or Wifi, is a mechanism for wirelessly connecting electronic devices.

License Information on the Software Used in This Product

This document is statement purpose only. Not concerned with operation of this product.

The software pre-installed in this product consists of multiple, independent software components. Each software component is copyrighted by a third party. This product uses software components that are distributed as freeware under a third-party end-user license agreement or copyright notice (hereinafter referred to as a "EULA"). Some EULAs require that the source code of the applicable component be disclosed as the condition for distributing the software component in executable format. You can check the software components subject to such EULA requirements on the following e-mail address: E-mail address: linux@toshiba-dme.co.jp

TOSHIBA provides a warranty for this product you have purchased under conditions set forth by TOSHIBA. However, some of the software components distributed under an EULA are made available for use by the user on the assumption that they are not copyrighted or warranted by a third party. These software components are licensed to the user free of charge and therefore not covered by any warranty within the scope of the applicable laws. These software components are not subject to any copyrights or other third-party rights and are provided in "as is" condition without any warranty, whether express or implied. "Warranty" here includes, but not limited to, an implied warranty for marketability or fitness for specific uses. All risks associated with the quality or performance of these software components are assumed by the user. TOSHIBA shall not be liable whatsoever for any cost of repair or correction or other incidental expense incurred in connection with a defect found in any of these software components. Unless specified under the applicable laws or in a written agreement, a party who changes or redistributes the software with consent from the copyright holders or based on the aforementioned licenses shall not be held liable whatsoever for any loss arising from the use of or inability to use such software components. The same applies even when the copyright holders or relevant third parties have been informed of the possibility of such loss, "Loss" here includes normal, special, incidental and indirect loss (including, but not limited to, the loss of data or its accuracy; loss incurred by the user or any third party; and interface incompatibility with other software). Please read each EULA for details on the use conditions and items that must be observed regarding these software components.

The table below lists the software components pre-installed in this product, which are subject to EULAs. The user should read the applicable EULAs carefully before using these software components. The EULAs are exhibited in their original text (English) as exactly written by the respective parties.

OSS name	OSS license
Linux kernel	GPLv2
gcc libgcc	GPLv3.txt and gcc-exception.txt (GPLv3 with GCC Runtime Library Exception)
gcc libstdc++	GPLv3.txt and gcc-exception.txt (GPLv3 with GCC Runtime Library Exception)
glibc	LGPLv2.1
SquashFS	GPLv2
iputils	GPLv2
udhcpc	GPLv2
net-tools	GPLv2
sysvinit	GPLv2
module-init-tools	GPLv2
util-linux-ng	GPLv2

procps (ps, top)	LGPLv2
psmisc	GPLv2
coreutils	GPLv2
gawk	GPLv2
grep	GPLv2
findutils	GPLv2
bash	GPLv2
tar	GPLv2
sed	GPLv2
gzip	GPLv2
inetutils	GPLv2
ncurses	ncurses.txt
gdb (gdbserver)	GPLv2
Das U-Boot	GPLv2
International Components for Unicode	ICULicense.txt
OpenSSL	openssl.txt
dibbler	GPLv2
FreeType	FreeType.txt
Expat	expat.txt
libcurl	libcurl.txt
libjpeg	libjpeg-7.txt
c-ares	c-arse.txt
mtd-utils	GPLv2
libmtp	LGPLv2.1
libusb	LGPLv2.1
libusb-compat	LGPLv2.1
wpa_supplicant	WPASupplicant.txt
libnl	GPLv2
Wireless Tools	GPLv2
DirectFB	LGPLv2.1
Fusion	GPLv2
SaWMan	LGPLv2.1

libpng	libpng.txt
libxml2	libxml.txt (MIT License)
David M. Gay's dtoa and strtod	DMG's dtoa and strtod.txt
Bison generated parser	bison_parser.txt
Doug Lea's malloc	dmalloc.txt
EMX sprintf and scanf	EMX_sprintf_sscanf.txt
JSON_Parser	JSON_Parser.txt
XZ	
cpio	
mcr-tcpdump	BSD
zlib	zlib.txt
lighttpd	BSD License
nmbd	GPLv2
ntp	
live555 (for BDX3400SE only)	LGPL V2

GNU GPLv2

GNU GENERAL PUBLIC LICENSE Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301

USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/ or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

O. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

- You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an

announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

- 3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:
- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred

form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

- 4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.
- 5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.
- 6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.
- 7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not

permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

- 8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.
- 9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems orconcerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation: we sometimes make

exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE. THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND. EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING GENERAL. SPECIAL. INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS). EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

GNU GPLv3

GNU GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. http://fsf.org/>

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software

for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps:

(1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents

applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS

0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or generalpurpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example. Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for

you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

3. Protecting Users' Legal Rights From Anti-Circumvention Law

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement

modifies the requirement in section 4 to "keep intact all notices".

- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
- c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if

you received the object code with such an offer, in accord with subsection 6b.

- d) Convey the object code by offering access from a designated place (gratis or for a charge). and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.
- e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a

transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License: or

- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks: or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any

patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing

them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such

14. Revised Versions of this License.

The Free Software Foundation may publish

revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED. INCLUDING. BUT NOT LIMITED TO. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAMS, EVEN IF SUCH HOLDER OR OTHER PARTY HAS

BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>

Copyright (C) < year > < name of author >

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see http://www.gnu.org/licenses/>.

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.

This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the

General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary.

For more information on this, and how to apply and follow the GNU GPL, see http://www.gnu.org/licenses/>

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read http://www.gnu.org/philosophy/why-not-lqpl.html.

GCC-EXCEPTION

GCC RUNTIME LIBRARY EXCEPTION

Version 3.1, 31 March 2009

Copyright (C) 2009 Free Software Foundation, Inc. http://fsf.org/>

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

This GCC Runtime Library Exception ("Exception") is an additional permission under section 7 of the GNU General Public License, version 3 ("GPLv3"). It applies to a given file (the "Runtime Library") that bears a notice placed by the copyright holder of the file stating that the file is governed by GPLv3 along with this Exception.

When you use GCC to compile a program, GCC may combine portions of certain GCC header files and runtime libraries with the compiled program. The purpose of this Exception is to allow compilation of non-GPL (including proprietary) programs to use, in this way, the header files and runtime libraries covered by this Exception.

0 Definitions

A file is an "Independent Module" if it either requires the Runtime Library for execution after a Compilation Process, or makes use of an interface provided by the Runtime Library, but is not otherwise based on the Runtime Library.

"GCC" means a version of the GNU Compiler Collection, with or without modifications, governed by version 3 (or a specified later version) of the GNU General Public License (GPL) with the option of using any subsequent versions published by the FSF.

"GPL-compatible Software" is software whose conditions of propagation, modification and use

would permit combination with GCC in accord with the license of GCC.

"Target Code" refers to output from any compiler for a real or virtual target processor architecture, in executable form or suitable for input to an assembler, loader, linker and/or execution phase. Notwithstanding that, Target Code does not include data in any format that is used as a compiler intermediate representation, or used for producing a compiler intermediate representation.

The "Compilation Process" transforms code entirely represented in non-intermediate languages designed for human-writtencode, and/or in Java Virtual Machine byte code, into Target Code. Thus, for example, use of source code generators and preprocessors need not be considered part of the Compilation Process, since the Compilation Process can be understood as starting with the output of the generators or preprocessors.

A Compilation Process is "Eligible" if it is done using GCC, alone or with other GPL-compatible software, or if it is done without using any work based on GCC. For example, using non-GPL-compatible Software to optimize any GCC intermediate representations would not qualify as an Eligible Compilation Process.

1. Grant of Additional Permission.

You have permission to propagate a work of Target Code formed by combining the Runtime Library with Independent Modules, even if such propagation would otherwise violate the terms of GPLv3, provided that all Target Code was generated by Eligible Compilation Processes. You may then convey such a combination under terms of your choice, consistent with the licensing of the Independent Modules.

2. No Weakening of GCC Copyleft.

The availability of this Exception does not imply any general presumption that third-party software is unaffected by the copyleft requirements of the license of GCC.

<html>

<head>

<title>Runtime Error</title>

<stvle>

body {font-family:"Verdana";font-weight:normal; font-size:.7em:color:black:}

p {font-family:"Verdana";font-weight:normal; color:black;margin-top:-5px}

b {font-family:"Verdana";font-weight:bold; color:black;margin-top:-5px}

H1 {font-family:"Verdana";font-weight:normal; font-size:18pt;color:red }

H2 {font-family:"Verdana";font-weight:normal; font-size:14pt;color:maroon}

pre {font-family:"Lucida Console";font-size:.9em}
.marker {font-weight:bold;color:black;text-

.marker {font-weight:bold;color:black;text
decoration:none;}

.version {color:gray;}

.error {margin-bottom:10px;}

.expandable {text-decoration:underline;font-weigh t:bold;color:navy;cursor:hand;}

</style>

</head>

<body bgcolor="white">

<H1>Server Error in '/' Application.<hr
width=100% size=1 color=silver></H1>

<h2> <i>Runtime Error</i> </h2>

 Description: An application error occurred on the server. The current custom error settings for this application prevent the details of the application error from being viewed remotely (for security reasons). It could, however, be viewed by browsers running on the local server machine.

>

>

<code>

<!--Web.Config Configuration File-->

<configuration>

<system.web>

<customErrors mode="Off"/>

</system.web>

</configuration></code>

>

Notes: The current error page you are seeing can be replaced by a custom error page by modifying the "defaultRedirect"

attribute of the application's <customErrors> configuration tag to point to a custom error page URL.

br>

· (1 /

>

<code>

<!--Web.Config Configuration File-->

<configuration>

<system.web>

<customErrors mode="RemoteOnly"defaultRedirect="mycustompage.htm"/>

</system.web>

</configuration></code>

</body>

</html>

LGPLv2.1

GNU LESSER GENERAL PUBLIC LICENSE Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries -- of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such

linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries.

In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License. In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

O. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you". A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means

either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

- 1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library. You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.
- You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its

purpose remains meaningful. (For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library.

To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software

interchange. If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License. However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6.Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications. You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
- b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface compatible with the version that the work was made with.
- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy. For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

- a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
- b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.
- 8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.
- 9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.
- 10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.
- 11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or

unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

- 12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.
- 13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE. THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16 IN NO EVENT LINIESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES. INCLUDING ANY GENERAL. SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE). EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

ICU License - ICU 1.8.1 and later

COPYRIGHT AND PERMISSION NOTICE

Copyright (c) 1995-2011 International Business Machines Corporation and others

All rights reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, provided that the above copyright notice(s) and this permission notice appear in all copies of the Software and that both the above copyright notice(s) and this permission notice appear in supporting documentation.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR

HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization of the copyright holder.

openssl

LICENSE ISSUES

The OpenSSL toolkit stays under a dual license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit. See below for the actual license texts. Actually both licenses are BSD-style Open Source licenses. In case of any license issues related to OpenSSL please contact openssl-core@openssl.org.

OpenSSL License

Copyright (c) 1998-2008 The OpenSSL Project.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/ or other materials provided with the distribution.
- 3. All advertising materials mentioning features or use of this software must display the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)"
- 4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.
- Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.
- 6. Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes software developed by the OpenSSL

Project for use in the OpenSSL Toolkit (http://www.openssl.org/)"

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS: OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Original SSLeay License

Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)

All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com). The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and noncommercial use as long as the following conditions are adhered to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, Ihash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.

- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/ or other materials provided with the distribution.
- 3. All advertising materials mentioning features or use of this software must display the following acknowledgement: "This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)" The word 'cryptographic' can be left out if the routines from the library being used are not cryptographic related :-).
- 4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

zlib

z lib.h -- interface of the 'zlib' general purpose compression library

version 1.2.3, July 18th, 2005

Copyright (C) 1995-2005 Jean-loup Gailly and Mark Adler

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote

the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.

- 2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
- 3. This notice may not be removed or altered from any source distribution.

Jean-loup Gailly jloup@gzip.org Mark Adler madler@alumni caltech edu

The FreeType Project LICENSE

2006-Jan-27

Copyright 1996-2002, 2006 by David Turner, Robert Wilhelm, and Werner Lemberg

Introduction

The FreeType Project is distributed in several archive packages; some of them may contain, in addition to the FreeType font engine, various tools and contributions which rely on, or relate to, the FreeType Project.

This license applies to all files found in such packages, and which do not fall under their own explicit license. The license affects the FreeType font engine, the test programs, documentation and makefiles, at the very least.

This license was inspired by the BSD, Artistic, and IJG (Independent JPEG Group) licenses, which all encourage inclusion and use of free software in commercial and freeware products alike. As a consequence, its main points are that:

We don't promise that this software works. However, we will be interested in any kind of bug reports. (`as is' distribution) You can use this software for whatever you want, in parts or full form, without having to pay us. (`royalty-free' usage)

You may not pretend that vou wrote this software. If you use it, or only parts of it, in a program, you must acknowledge somewhere in your documentation that you have used the FreeType code. (`credits')

We specifically permit and encourage the inclusion of this software, with or without modifications, in commercial products. We disclaim all warranties covering The FreeType Project and assume no liability related to The FreeType Project.

Finally, many people asked us for a preferred form for a credit/disclaimer to use in compliance with this license. We thus encourage you to use the following text:

Portions of this software are copyright © <vear> The FreeType Project (www.freetype.org). rights reserved.

Please replace <year> with the value from the FreeType version you actually use.

Legal Terms

_____ Definitions

Throughout this license, the terms 'package', `FreeType Project', and `FreeType archive' refer to the set of files originally distributed by the authors (David Turner, Robert Wilhelm, and Werner Lemberg) as the 'FreeType Project', be they named as alpha, beta or final release.

'You' refers to the licensee, or person using the project, where using is a generic term including compiling the project's source code as well as linking it to form a `program' or `executable'.

This program is referred to as `a program using the FreeType engine'.

This license applies to all files distributed in the original FreeType Project, including all source binaries and documentation. otherwise stated in the file in its original, unmodified form as distributed in the original archive.

If you are unsure whether or not a particular file is covered by this license, you must contact us to verify this.

The FreeType Project is copyright (C) 1996-2000 by David Turner, Robert Wilhelm, and Werner Lemberg. All rights reserved except as specified below.

1. No Warranty

THE FREETYPE PROJECT IS PROVIDED 'AS IS' WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED. INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL ANY OF THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE DAMAGES CAUSED BY THE USE OR THE INABILITY TO USE, OF THE FREETYPE PROJECT.

2. Redistribution

This license grants a worldwide, royalty-free, perpetual and irrevocable right and license to use, execute, perform, compile, display, copy, create derivative works of, distribute and sublicense the FreeType Project (in both source and object code forms) and derivative works thereof for any purpose; and to authorize others to exercise some or all of the rights granted herein, subject to the following conditions:

Redistribution of source code must retain this license file (`FTL.TXT') unaltered; any additions, deletions or changes to the original files must be clearly indicated in accompanying documentation. The copyright notices of the unaltered, original files must be preserved in all copies of source files.

Redistribution in binary form must provide a disclaimer that states that the software is based in part of the work of the FreeType Team, in the distribution documentation. We also encourage you to put an URL to the FreeType web page in your documentation, though this isn't mandatory.

These conditions apply to any software derived from or based on the FreeType Project, not just the unmodified files. If you use our work, you must acknowledge us. However, no fee need be paid to us.

3. Advertising

Neither the FreeType authors and contributors nor you shall use the name of the other for commercial, advertising, or promotional purposes without specific prior written permission.

We suggest, but do not require, that you use one or more of the following phrases to refer to this software in your documentation or advertising materials: 'FreeType Project', 'FreeType Engine', 'FreeType library', or 'FreeType Distribution'.

As you have not signed this license, you are not required to accept it. However, as the FreeType Project is copyrighted material, only this license, or another one contracted with the authors, grants you the right to use, distribute, and modify it.

Therefore, by using, distributing, or modifying the FreeType Project, you indicate that you understand and accept all the terms of this license.

4. Contacts

There are two mailing lists related to FreeType: freetype@nongnu.org

Discusses general use and applications of FreeType, as well as future and wanted additions to the library and distribution.

If you are looking for support, start in this list if you haven't found anything to help you in the documentation.

freetype-devel@nongnu.org

Discusses bugs, as well as engine internals, design issues, specific licenses, porting, etc.

Our home page can be found at http://www.freetype.org

Expat

Copyright (c) 1998, 1999, 2000 Thai Open Source

Software Center Ltd and Clark Cooper

Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006 Expat maintainers.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the Software), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

libcurl

COPYRIGHT AND PERMISSION NOTICE

Copyright (c) 1996 - 2011, Daniel Stenberg, <daniel@haxx.se>.

All rights reserved.

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS". WITHOUT WARRANTY OF ANY KIND. EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY. FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings

in this Software without prior written authorization of the copyright holder.

libjpeg-7

- 1. We don't promise that this software works. (But if you find any bugs, please let us know!)
- 2. You can use this software for whatever you want. You don't have to pay us.
- You may not pretend that you wrote this software. If you use it in a program, you must acknowledge somewhere in your documentation that you've used the IJG code.

In legalese:

The authors make NO WARRANTY or representation, either express or implied, with respect to this software, its quality, accuracy, merchantability, or fitness for a particular purpose.

This software is provided "AS IS", and you, its user, assume the entire risk as to its quality and accuracy.

This software is copyright (C) 1991-1998, Thomas G. Lane.

All Rights Reserved except as specified below.

Permission is hereby granted to use, copy, modify, and distribute this software (or portions thereof) for any purpose, without fee, subject to these conditions:

- (1) If any part of the source code for this software is distributed, then this README file must be included, with this copyright and no-warranty notice unaltered; and any additions, deletions, or changes to the original files must be clearly indicated in accompanying documentation.
- (2) If only executable code is distributed, then the accompanying documentation must state that "this software is based in part on the work of the Independent JPEG Group".
- (3) Permission for use of this software is granted only if the user accepts full responsibility for any undesirable consequences; the authors accept NO LIABILITY for damages of any kind.

These conditions apply to any software derived from or based on the IJG code, not just to the unmodified library. If you use our work, you ought to acknowledge us.

Permission is NOT granted for the use of any IJG author's name or company name in advertising or publicity relating to this software or products derived from it. This software may be referred to only as "the Independent JPEG Group's software".

We specifically permit and encourage the use of this software as the basis of commercial products, provided that all warranty or liability claims are assumed by the product vendor. ansi2knr.c is included in this distribution by permission of L. Peter Deutsch, sole proprietor of its copyright holder, Aladdin Enterprises of Menlo Park, CA. ansi2knr.c is NOT covered by the above copyright and conditions, but instead by the usual distribution terms of the Free Software Foundation; principally,that you must include source code if you redistribute it. (See the file ansi2knr.c for full details.) However, since ansi2knr.c is not needed as part of any program generated from the IJG code, this does not limit you more than the foregoing paragraphs do.

The Unix configuration script "configure" was produced with GNU Autoconf. It is copyright by the Free Software Foundation but is freely distributable. The same holds for its supporting scripts (config.guess, config.sub,ltconfig, Itmain. sh). Another support script, install-sh, is copyright by X Consortium. but is also freely distributable.

The IJG distribution formerly included code to read and write GIF files. To avoid entanglement with the Unisys LZW patent, GIF reading support has been removed altogether, and the GIF writer has been simplified to produce uncompressed GIFs. This technique does not use the LZW algorithm; the resulting GIF files are larger than usual, but are readable by all standard GIF decoders.

We are required to state that "The Graphics Interchange Format(c) is the Copyright property of CompuServe Incorporated. GIF(sm) is a Service Mark property of CompuServe Incorporated."

c-ares

Copyright 1998 by the Massachusetts Institute of Technology.

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of M.I.T. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. M.I.T. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

libpng

This copy of the libpng notices is provided for your convenience. In case of any discrepancy between this copy and the notices in the file png.h that is included in the libpng distribution, the latter shall prevail.

COPYRIGHT NOTICE, DISCLAIMER, and LICENSE:

If you modify libping you may insert additional

notices immediately following this sentence.

This code is released under the libpng license.

libpng versions 1.2.6, August 15, 2004, through 1.5.7, December 15, 2011, are Copyright (c) 2004, 2006-2011 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-1.2.5 with the following individual added to the list of Contributing Authors

Cosmin Truta

libpng versions 1.0.7, July 1, 2000, through 1.2.5 - October 3, 2002, are Copyright (c) 2000-2002 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-1.0.6 with the following individuals added to the list of Contributing Authors

Simon-Pierre Cadieux Eric S. Raymond Gilles Vollant

and with the following additions to the disclaimer:

There is no warranty against interference with your enjoyment of the library or against infringement. There is no warranty that our efforts or the library will fulfill any of your particular purposes or needs. This library is provided with all faults, and the entire risk of satisfactory quality, performance, accuracy, and effort is with the user.

libpng versions 0.97, January 1998, through 1.0.6, March 20, 2000, are Copyright (c) 1998, 1999 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-0.96, with the following individuals added to the list of Contributing Authors:

Tom Lane Glenn Randers-Pehrson Willem van Schaik

libpng versions 0.89, June 1996, through 0.96, May 1997, are Copyright (c) 1996, 1997 Andreas Dilger Distributed according to the same disclaimer and license as libpng-0.88, with the following individuals added to the list of Contributing Authors:

John Bowler Kevin Bracey Sam Bushell Magnus Holmgren Greg Roelofs Tom Tanner

libpng versions 0.5, May 1995, through 0.88, January 1996, are Copyright (c) 1995, 1996 Guy Eric Schalnat, Group 42, Inc.

For the purposes of this copyright and license, "Contributing Authors" is defined as the following set of individuals:

Andreas Dilger Dave Martindale Guy Eric Schalnat Paul Schmidt Tim Wegner

The PNG Reference Library is supplied "AS IS". The Contributing Authors and Group 42, Inc. disclaim all warranties, expressed or implied, including, without limitation, the warranties of merchantability and of fitness for any purpose. The Contributing Authors and Group 42, Inc. assume no liability for direct, inclirect, incidental, special, exemplary, or consequential damages, which may result from the use of the PNG Reference Library, even if advised of the possibility of such damage.

Permission is hereby granted to use, copy, modify, and distribute this source code, or portions hereof, for any purpose, without fee, subject to the following restrictions:

- 1. The origin of this source code must not be misrepresented.
- 2. Altered versions must be plainly marked as such and must not be misrepresented as being the original source.
- 3. This Copyright notice may not be removed or altered from any source or altered source distribution.

The Contributing Authors and Group 42, Inc. specifically permit, without fee, and encourage the use of this source code as a component to supporting the PNG file format in commercial products. If you use this source code in a product, acknowledgment is not required but would be appreciated.

A "png_get_copyright" function is available, for convenient use in "about" boxes and the like:

printf("%s",png_get_copyright(NULL));

Also, the PNG logo (in PNG format, of course) is supplied in the files "pngbar.png" and "pngbar.jpg (88x31) and "pngnow.png" (98x31).

Libpng is OSI Certified Open Source Software. OSI Certified Open Source is a certification mark of the Open Source Initiative.

Glenn Randers-Pehrson glennrp at users.sourceforge.net December 15, 2011

libxml (MIT License)

Open Source Initiative OSI - The MIT License (MIT):Licensing

The MIT License (MIT)

Copyright (c) < year > < copyright holders >

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABLITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEAL INGS IN THE SOFTWARE.

DMG's dtoa and strtod

The author of this software is David M. Gay.

Copyright (c) 1991, 2000, 2001 by Lucent Technologies.

Permission to use, copy, modify, and distribute this software for any purpose without fee is hereby granted, provided that this entire notice is included in all copies of any software which is or includes a copy or modification of this software and in all copies of the supporting documentation for such software.

THIS SOFTWARE IS BEING PROVIDED "AS IS", WITHOUT ANY EXPRESS OR IMPLIED WARRANTY. IN PARTICULAR, NEITHER THE AUTHOR NOR LUCENT MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND CONCERNING THE MERCHANTABILITY OF THIS SOFTWARE OR ITS FITNESS FOR ANY PARTICUL AR PURPOSE

bison_parser

The distribution terms for Bison-generated parsers permit using the parsers in nonfree programs. Before Bison version 2.2, these extra permissions applied only when Bison was generating LALR(1) parsers in C. And before Bison version 1.24, Bisongenerated parsers could be used only in programs that were free software.

The other GNU programming tools, such as the GNU C compiler, have never had such a requirement. They could always be used for non free software. The reason Bison was different was not due to a special policy decision; it resulted from applying the usual General Public License to all of the Bison source code.

The output of the Bison utility the Bison parser file contains a verbatim copy of a sizable piece of Bison, which is the code for the parser's implementation. (The actions from your grammar are inserted into this implementation at one point, but most of the rest of the implementation is not changed.) When we applied the GPL terms to the skeleton code for the parser's implementation, the effect was to restrict the use of Bison output to free software.

We didn't change the terms because of sympathy for people who want to make software proprietary. Software should be free. But we concluded that limiting Bison's use to free software was doing little to encourage people to make other software free. So we decided to make the practical conditions for using Bison match the practical conditions for using the other GNU tools.

This exception applies when Bison is generating code for a parser. You can tell whether the exception applies to a Bison output file by inspecting the file for text beginning with "As a special exception....

The text spells out the exact terms of the exception.

dmalloc

This is a version (aka dlmalloc) of malloc/free/realloc written by Doug Lea and released to the public domain, as explained at http://creativecommons.org/licenses/publicdomain. Send questions, comments, complaints, performance data, etc to dl@cs.oswego.edu.

EMX_sprintf_sscanf

The emx libraries are not distributed under the GPL. Linking an application with the emx libraries does not cause the executable to be covered by the GNU General Public License. You are allowed to change and copy the emx library sources if you keep the copyright message intact. If you improve the emx libraries, please send your enhancements to the emx author (you should copyright your enhancements similar to the existing emx libraries).

JSON_Parser

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in allcopies or substantial

portions of the Software. The Software shall be used for Good, not Evil.

ncurses

THE SOFTWARE IS PROVIDED "AS WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY. FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Copyright (c) 1998-2000,2006 Free Software Foundation. Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, distribute with modifications, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS". WITHOUT WARRANTY OF ANY KIND, EXPRESS IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE ABOVE COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE, Except as contained in this notice. the name(s) of the above copyright holders shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization.

WPASupplicant

Alternatively, this software may be distributed, used, and modified under the terms of BSD license: Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the

- above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/ or other materials provided with the distribution.
- 3. Neither the name(s) of the above listed copyright holder(s) nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS: OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE

BSD

Copyright (c) <YEAR>, <OWNER>

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of the <ORGANIZATION> nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR

CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

BSD License

Copyright (c) 2004, Jan Kneschke, incremental All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/ or other materials provided with the distribution.
- Neither the name of the 'incremental' nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT. INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS: OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.