

ZP-320
HD Multimedia Player
User's Manual

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Introduction

ZP-320 is the first media player which truly decodes, playback and outputs High Definition 1080i in the market. Through the USB 2.0 port and the HDMI interface, ZP-320 playbacks the HD MPEG2/MPEG4-ASP Xvid / DivX movie or transport stream from the USB flash drive or hard disk drive to HDTV screen. Not only plays HD movie smoothly, but also be capable to Zoom in, pan the picture, fast forward, fast reverse and slow-motion. The playback of photo and music is also great for enjoy the fun of high definition world.

Feature Highlight :

- Decode and output High Definition 1080i video and Photo.
- Various formats of HD video are supported.
- Within the next generation interface—HDMI output.
- High performance video playback. Experience fluent playback control like Zoom-in, Pan the picture, Fast Forward, Fast Reverse, Slow-motion.
- Fully supports the subtitle format. Dynamically change the subtitle display by remote control.
- Photo playback via HD. Supports Up to 4 mega-pixel photo files, 16X Zoom in, 3-direction rotation.
- Slide show mode with 8 kinds of transition effect. Background music playback is supported.
- Rich types of music file. The playback function includes Fast Forward, Fast Reverse, Repeat, Shuffle and Shuffle Repeat.
- Within USB 2.0 port, plug-and-play the USB Flash Drive, USB Mobile Hard Disk Drive and USB Card Reader.
- Supports all most all formats of HDD and has the most interchangeability.
- Easy to use and intuitive control. Change to setup menu at any time even in media playing to provide the fluent control.

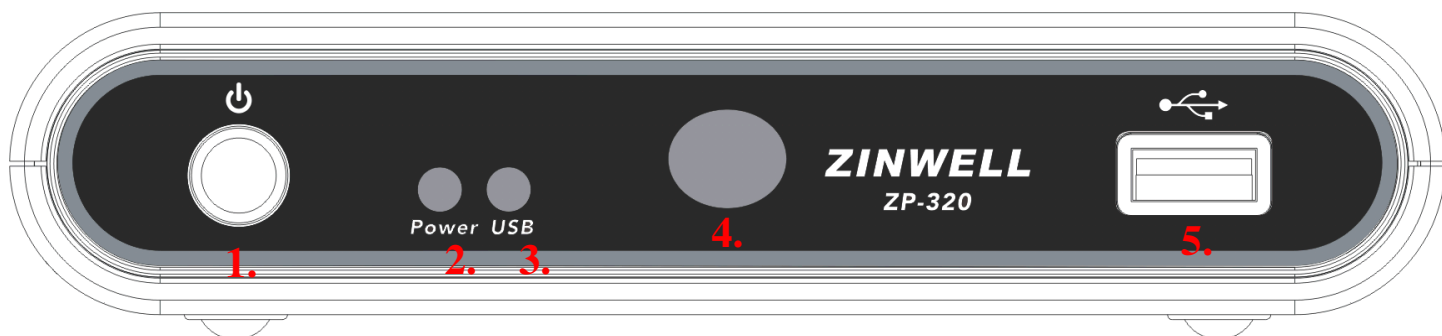
Package Contents

Please check the parts in the package. Contact the distributor if something is missing.

1. One ZP-320 HD Media Player
2. One power adapter
3. One remote control unit
4. Two AAA batteries
9. One user's manual
10. One warranty

5. One stand
6. One YPbPr cable
7. One RCA cable
8. One quick installation guide

Product Overview

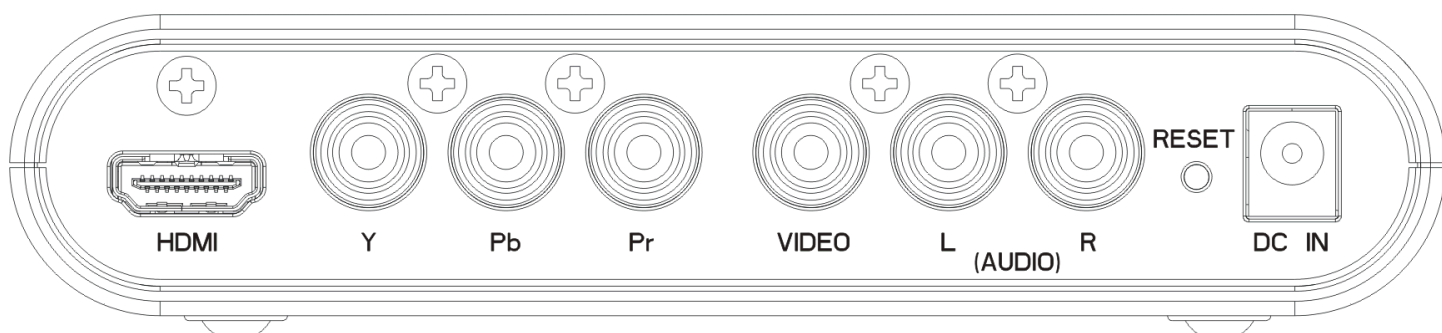


Panel Front side

LED/button/connector:

- (1) POWER STANDBY: Press it to power on the device or put it into standby mode.
- (2) POWER indicator: It lights on when the power is plugged in.
- (3) USB indicator: It lights when the USB Storage is plugged in and ready. It may take 5 seconds to get ready when the USB storage is plugged in.
- (4) IR sensor: It receives the command from remote control unit. Do not block the port.
- (5) USB: It is the USB 2.0 port. Connect the external USB Flash disk or USB Mass Storage into it.

Panel Back side



Video connection: Please select one below to connect the TV set.

HDMI output: Please connect the HDMI cable to the HDMI input of TV set.

YPbPr: They connect the component YPbPr to the input of TV set.

VIDEO (CVBS): It connects the CVBS input of TV set.

AUDIO L/R: They connect the audio L/R to the input of TV set. If the HDMI is connected, then you don't need to connect AUDIO L/R.

Reset: Press the button to power off and on the device.

DC IN: It connects the DC input of the Power Adapter. The power requirement is 12Vdc, 1.5 A.

Remote Control

MUTE: Mute

POWER: Power on/Suspend

MUSIC: Hotkey to view the music file

PHOTO: Hotkey to view the photo file

MOVIE: Hotkey to view the movie file

RED / GREEN / YELLOW / BLUE: Special function

Function key	Video playback/DVD Menu	File browser
Red	Open DVD Menu	None
Green	Toggle audio track	None
Yellow	Switch the subtitle	None
Blue	Change the Angle	Go to root directory

▲: UP

◀: LEFT

▶: RIGHT

▼: DOWN

ENTER: ENTER

PAUSE/STEP: Pause and step in frame by frame

PLAY: Playback

STOP: Stop

RETURN: go up one folder/Exit the current menu

SLOW: Slow motion

PREV: Previous file / section

NEXT: Next file / section

MENU: open System Setup page

REPEAT: 1/ALL repeat

FR: Fast Reverse

FF: Fast Forward

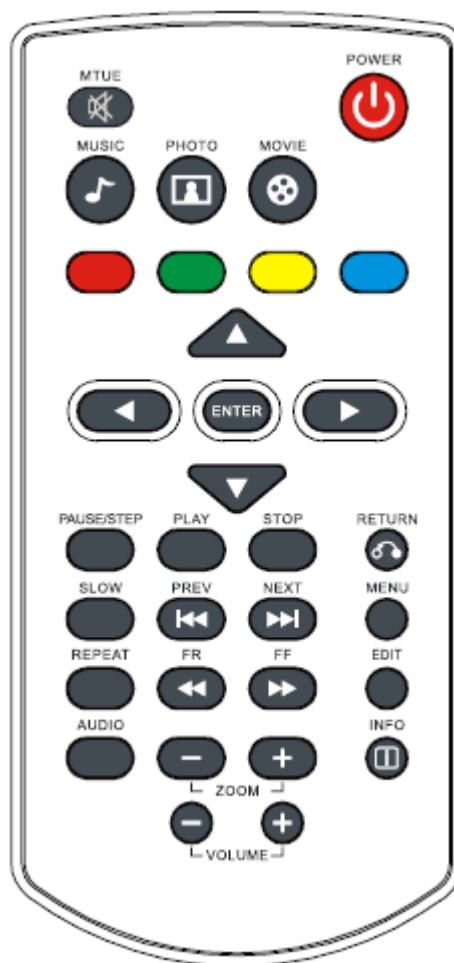
EDIT: Delete, Rename the folders and the files.

AUDIO: Change the audio track for VOB/ISO/IFO playback.

ZOOM +/-: Zoon In/Out

INFO: Display the information during playback

VOLUME +/-: increase/decrease volume



Connect

There are three ways shown below to connect this player to your TV set. Please choose one to apply.

Basic connection:

Power Cord: Connect the DC input in the device.

Audio cable output: Connect the cables to TV set.

CVBS video output (480i or 576i): Connect to TV set

Advanced connection:

Power Cord: Connect the DC input in the device.

Audio cable output: connect the cables to TV set.

Component video cable for HD video output (720p, 1080i): connect to TV set.

HDMI connection:

Power Cord: Connect the DC input in the device.

HDMI output (720p, 1080i): connect to HDMI input of TV set. The HDMI port sends digital video and audio signal through the cable.

Setup

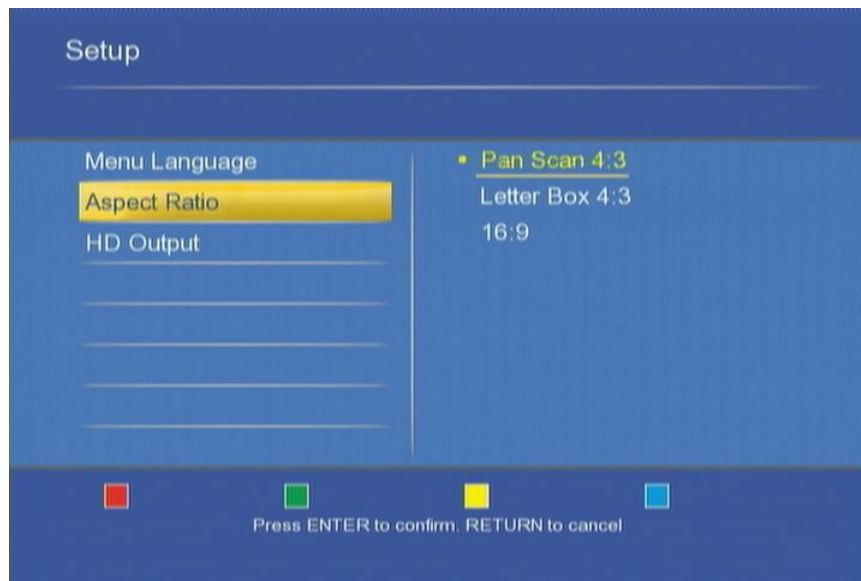
Please check the battery of Remote Control first, and then start the initial setup.

Initial setup

When plugged in the power at the first time, after the booting logo, the setup page should pop up to start the initial setting. The first item is the menu language. Please setup the menu language for OSD. Use ▲▼ button to select the language and press “ENTER” to confirm.

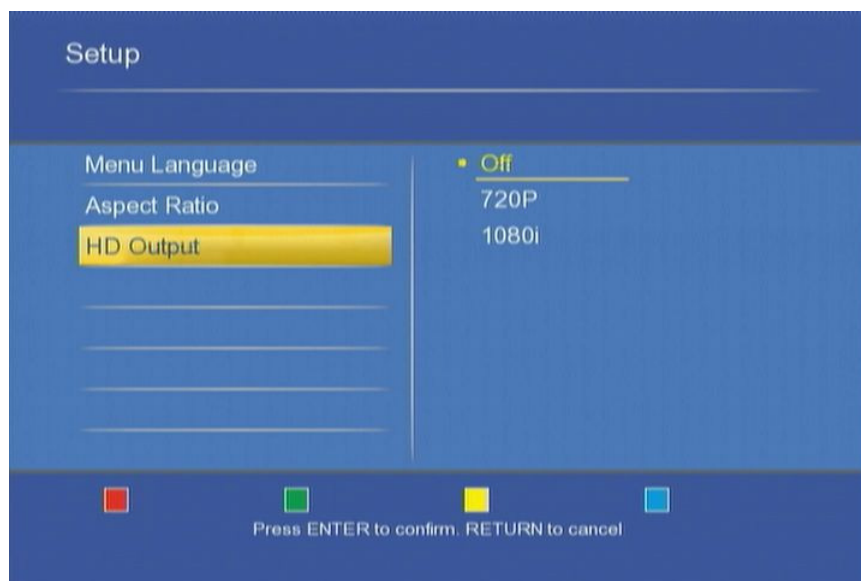


The second item is to setup the aspect ratio for your TV set. If your TV set is 4:3 then you can choose Pan Scan 4:3 or Letter Box 4:3. If you have wide-screen TV then you can choose 16:9. Use ▲▼ button to select one and press “ENTER” to confirm.



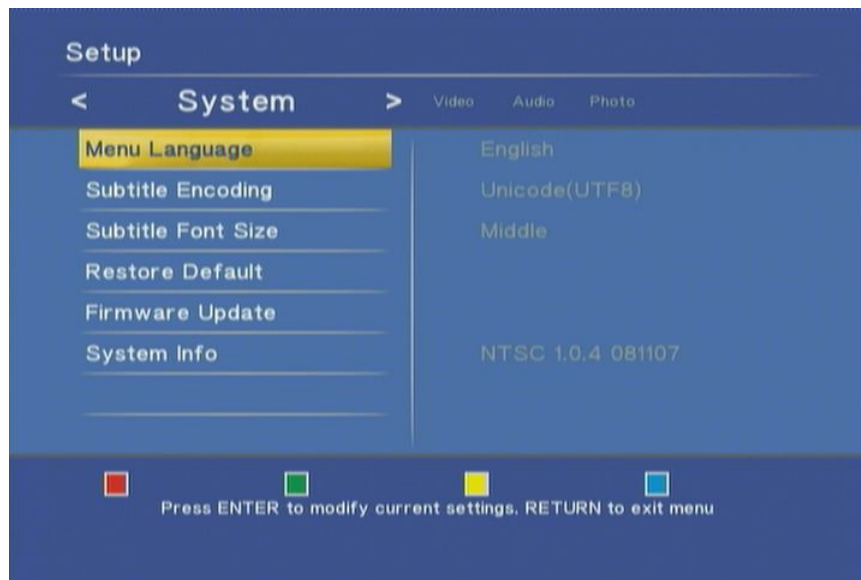
The final item is to choose whether using HDTV or not. If you want HD output, please make sure that you connect the component video from TV set to the device, and then choose 720p or 1080i according to the specification of your TV set.

The initial setting can be configured anytime in the setup menu. Please refer to the setup menu.



Setup Menu

You can press “MENU” to open the setup menu. Use ◀▶ key to select different pages among “System”, “Video”, “Audio” and “Photo”. Use ▲▼ key to select different item to setup. Press “ENTER” to open detail setting for configuration.



The menu structure and options are listed below.

1. System

Select this option to open the detail setting for the system.

Menu Language: Select the OSD language among English, Chinese Traditional, Español, Français, Deutsch, Italiano, Dutch and Chinese Simplified.

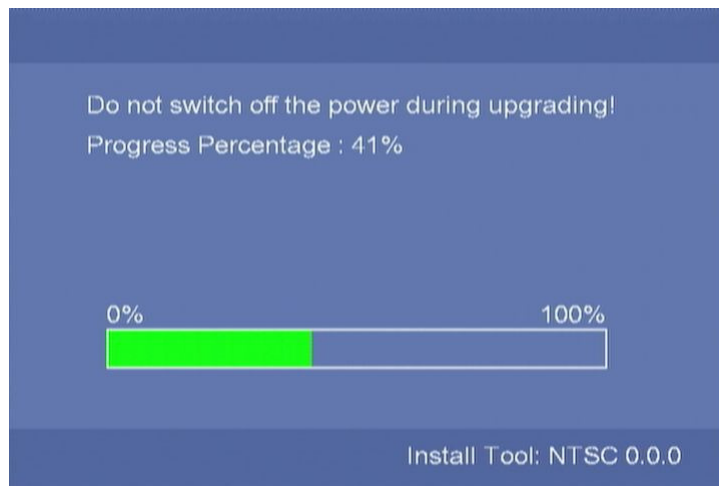
Subtitle Encoding: Select the encoding for subtitle file, file name and folder name display from Unicode (UTF8), Chinese Simplified (GBK), and Chinese Traditional (BIG5). Please select the right code to display or the garbage characters may appear on OSD.

Subtitle Font Size: Select the Font size for the subtitle. The available options are “Big, Middle, and Small”. The default setting is “Middle”. If the format of font is “idx + sub”, the font size option here won’t be applied.

Restore Default: Select this option to reset the setting to factory default.

Firmware Update: Select this option to apply the new firmware. Please visit the web site <http://www.zintech.com.tw/> to check the latest firmware. When you find the new firmware, please check the “**System Info**” for current firmware version to see if the device needs to upgrade. If so, please download the firmware file for upgrade. The upgrade procedure is below.

1. Prepare an empty flash disk. Plug it into PC and copy all firmware files to its root directory.
2. Plug it into this device.
3. Open the “Firmware Update” option in the configure menu. Press it and select “OK” to continue.
4. Wait for 5 minutes. Do not unplug the power during the upgrade procedure. When the upgrade is completed, it will reboot and return to the main screen.



System Info: It displays the firmware version.

2. Video

Select this option to open the detail setting for video display.

Aspect Ratio: Select one among these options “Pan Scan 4:3, Letter Box 4:3, 16:9”.

Pan Scan 4:3: Select for a full-height picture with both sides cut.

Letter Box 4:3: Select for the “wide screen” display with black bands on the upper and lower parts of the TV screen.

16:9: Select this for a wide screen 16:9 TV.

***: When the video is in wider wide-screen-ratio such as 2.40:1, the both sides are still cut in 16:9.**

HD Output: Use ▲▼ key to adjust the relative lightness or darkness for the TV picture.

Off: This is the default value. If your TV set doesn't support HD, please select this option.

720P: If your TV set is HDTV 720p, and you connect to the box via component video, you can choose this option to get the 720p output.

1080i: If your TV set is HD-ready / Full-HD 1080i, and you connect to the box via component video, you can choose this option to get the 1080i output.

***: When connecting LCD monitor via DVI to HDMI converter, the player will detect if the LCD monitor can receive HD video; if not, the option of HD output will be locked and use SD output only.**

3. Photo

Select this option to open the detail setting for the photo display.

Slide Show Timing: Choose from these options “Off, 2 Seconds, 5 Seconds, 10 Seconds, 30 Seconds, 1 Minutes and 2 Minutes”. It decides the waiting time before changing to the next photo while viewing photos.

Transition Effect: Choose from these options “Off, Cross Fade, Left to Right, Top to Bottom, Waterfall, Snake, Dissolve, Strip Left Down and All Effect Shuffle”. It decides the transition effect for changing photos.

4. Audio

Select this option to open the detail setting for the audio playback.

Digital Output: Choose one between these options: “HDMI LPCM, HDMI RAW”. Select the correct format according to your decoding device. If your decoder doesn't detect the digital

automatically, you have to select “HDMI RAW” format for 5.1 channel audio playback and “HDMI LPCM” for the stereo audio playback.

Multimedia Jukebox

Playback the media files

You can playback the movies, music and photos in the connected USB storage via this device. Plug in the USB storage, and then press the three buttons “MUSIC, PHOTO, MOVIE” to enter the interface and playback the media files. In the interface, select “USB” and then press “ENTER” to browse the media files.

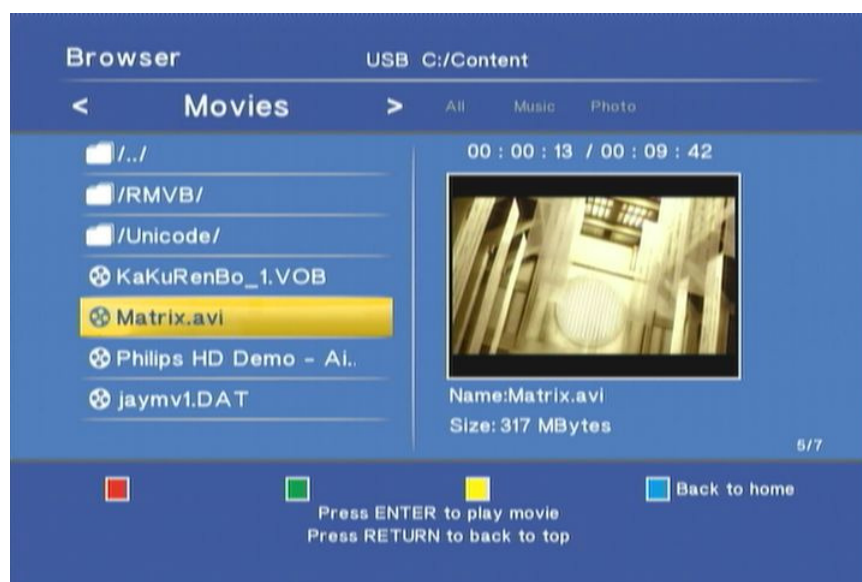
When plugging in the USB Mass Storage device, USB card reader or USB flash disk into this device, wait for 5 seconds, and you can see the message on screen “USB detected You can browse this device now.” Then you can continue to browse the USB device.

If the USB storage device is unplugged, the USB LED on the player will be off, and the following message will show on screen: “USB Removed: The USB device has been removed. You cannot browse it anymore.”

When selecting “USB”, the following message may pop up. Please follow the instructions to continue. “USB Storage is not detected. Please plug in the USB Storage and try again. Please wait about 5 seconds till the USB indicator lights if you already plug in the USB Storage.”

Movie

Press “MOVIE” button to enter the interface. In the interface, you can use ▲ ▼ arrow keys to move and highlight the file titles. Press “ENTER” to open the folder or file title, or press “RETURN” key to return to the previous folder. After entering this page, you can select the USB icon, folder, or files to browse. The right panel will show preview of the highlighted title.



Press the file title and it starts to playback the video. When the movie begins to play, the four key “Red, Green, Yellow, Blue” will be showed in the top of the TV screen.

Red, Green, Yellow, Blue: When playing the video files supporting DVD menu such as ISO/IFO file, you can press red key for “Menu”, green key for “Audio”, yellow key for “Subtitle” and blue key for “Angle”.

▶, ||▶: Press Play key to play file. Press Pause key to hold the playing. Press Play key again to continue playing.

REPEAT: When playing the media, press to switch the repeat modes among the following modes, “Repeat Title” to repeat the current file, “Repeat ALL” to repeat all files in the directory, “Repeat Chapter” to repeat current chapter in VOB/IFO/ISO file, or “Repeat Off” to turn off the repeat mode.

| ◀◀, ▶▶ |: Jump to the previous or next file. While playing VOB/ISO/IFO video files, press it to jump to the previous/next chapter. If there is no chapter in this file, the “Ban” sign will show on screen. Press it again



: Ban sign. When pressing the irrelevant button, it will be blocked and shows this sign on screen.

◀◀, ▶▶: Press to play fast forward or fast reverse. Press it again to switch the rate among “1.5X, 2X, 4X, 8X, 16X, and 32X”.

SLOW: While playing the video, press the button to play slow motion. Press again to toggle among the speeds 3/4X, 1/2X, 1/4X, 1/8X, 1/16X and 1X (normal speed) ◦

ZOOM +, -: Press “+” to enlarge the video to 2X, 3X, 4X, 8X. Press “-” to recover the video to 8X, 4X, 3X, 2X and 1X. When zoom the video, you can use the direction key to change the visible picture of the whole video.

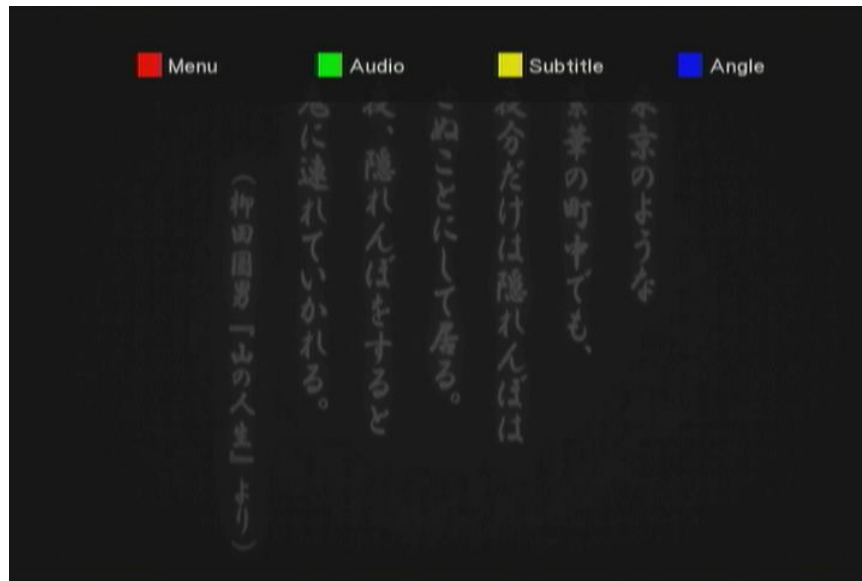
VOLUME +, -: Press volume keys to control the volume.

RETURN: Press it to go up one folder in the browse window.

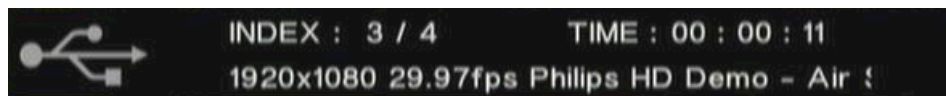
Blue key: In the browser, press it to go to the root directory.

Yellow key: While playing ISO/IFO file which supports DVD menu, you can press it to switch

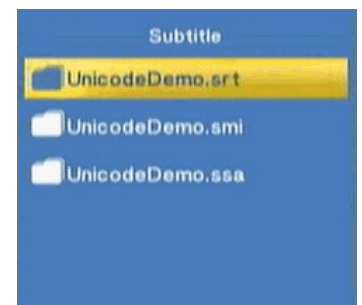
the language of the subtitle. When playing the other formats of video file, you can press it to change the subtitle code among “OFF” for turning off the subtitle, “BIG5” for the traditional Chinese, and “GBK” for the simplified Chinese.



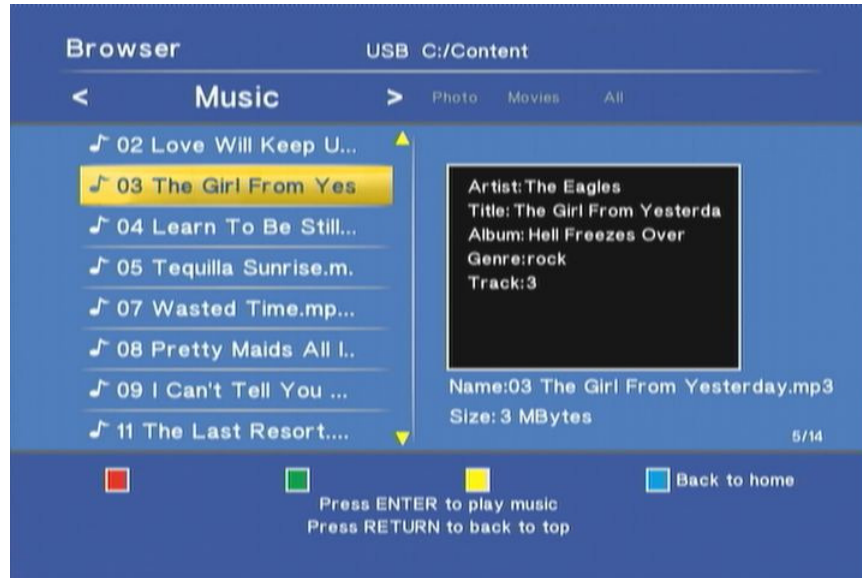
When finishing the current video file, it will continue to play the next file in the directory to the last file. You can also use REPEAT key (All, Chapter, Title) to repeat the current file or all files in the directory during the playback. You can also use the playback control while playing the video. If you press “INFO” key, the video information will show on screen.



Subtitle : This device supports the subtitle file including the formats of srt, sub, smi, idx+sub and ssa. Please change the file name of subtitle file as the same as the video file and put them in the same folder. This device detects and applies the subtitle file automatically. If you have multiple formats of subtitle file with the same file name in the same folder, this device will show the menu for you to select one to play. Use the direction key to select one and press “ENTER” to apply.



Music



Press the “MUSIC” button to enter the interface. Navigate to highlight the file and press enter to playback the file. When the file is highlighted, the right panel shows the detail information about the file including artist, title, album, genre and track. It will continue to play next file till the last file. You can also use the playback control while playing the video.

▶, ⏸: Press Play key to playback. Press Pause key to hold the playback. Press Play key again to continue playing.

REPEAT: When playing the media, press to switch the repeat modes among the following modes:

Repeat Off: turn off the repeat mode.

Repeat Track: repeat the highlighted music file.

Repeat All: repeat to play all music files in the folder.

Shuffle Repeat: repeat the randomly select music file in the folder to playback.

Shuffle Only: randomly select music file in the folder to playback.

| ◀◀, ▶▶ |: Press to leap forward or backward 6 files.

◀◀, ▶▶: Press to play fast forward or fast reverse. Press it again to switch the rate among “2X, 4X, 8X, 16X, and 32X”. When switching to FF 2X, the playback still comes with audio.

VOLUME +, -: Press volume keys to control the volume.

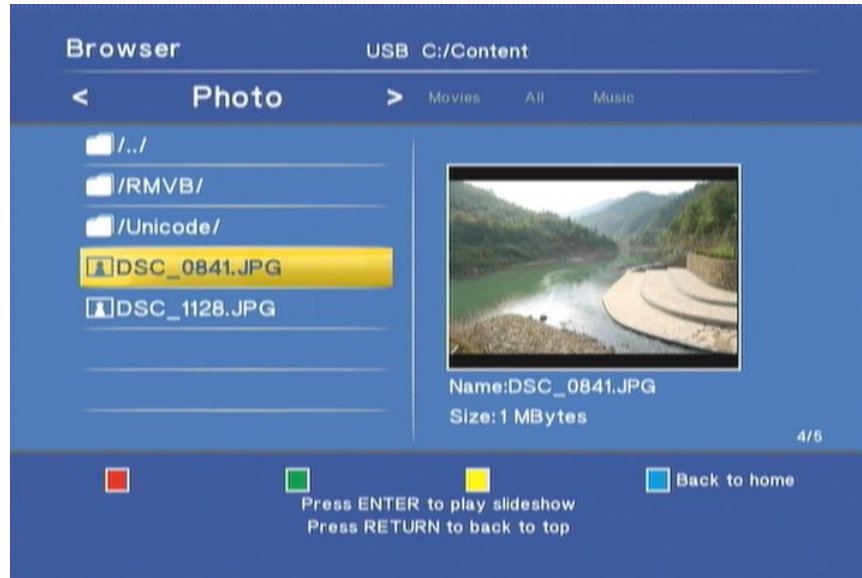
RETURN: Press it to go up one folder in the browse window.

Blue key: In the browser, press it to go to the root directory.



: Ban sign. When pressing the irrelevant button, it will be blocked and shows this sign on screen.

Photo



Press the “PHOTO” button to enter the interface. Navigate to highlight the file and press “ENTER” to playback the file. When the file is highlighted, the right panel shows the detail information about the file. It will continue to play next file till the last file. You can also use the playback control while viewing photo.

▶, ||▶: Press Play key to playback. Press Pause key to hold the playback. Press Play key again to continue playing.

REPEAT: When playing the media, press to switch the repeat modes among the following modes, “Repeat All” to repeat all files in the directory or “Repeat Off” to turn off the repeat mode.

VOLUME +, -: Press volume keys to control the volume.

RETURN: Press it to go up one folder in the browse window.

Blue key: In the browser, press it to go to the root directory.



: Ban sign. When pressing the irrelevant button, it will be blocked and shows this sign on screen.

Slide show with Music

Before viewing the photo, you can enter the Music interface to playback Music files first. Don't press “Stop” key but press “Photo” key to enter Photo interface and start viewing photo files. The photo will show and change with music playing in the background.

The second way is to put music files in the same folder with photo files. When playing photo files, the device will also play music files to start as slide show.

Zoom in and pan the focus

When viewing the photos, press “+” to zoom in and then “-” to change back. You can switch the rate between 2X, 4X, 8X and 16X. When zoom-in to the photo, press ▲▼◀▶ arrow keys to move the focus on the photo. You can see the overview window in the bottom right corner to indicate the current focus.



Rotating the photo

When viewing the photos, press ◀▶ arrow keys to rotate from 90 to 180 or 270 degree. However, if you zoom in the photo then you cannot rotate the photo.

All



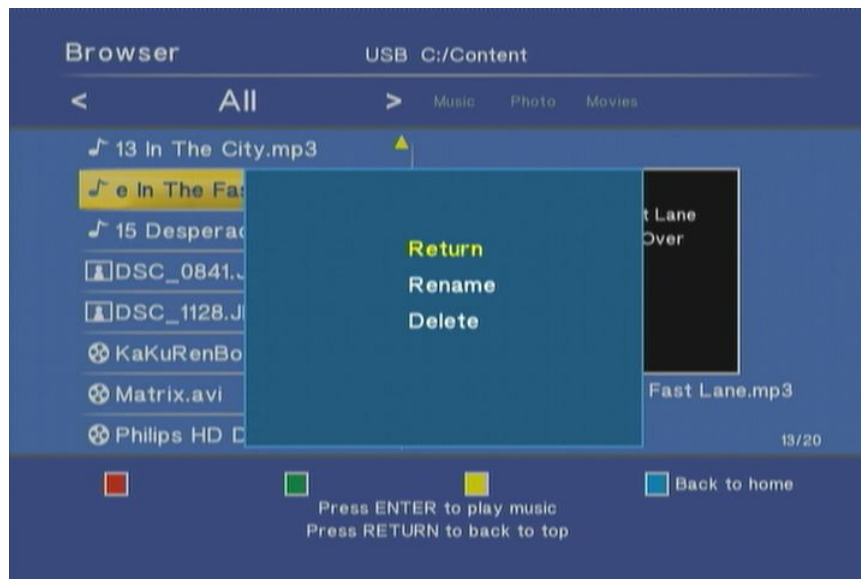
If the browse interface is already opened, press ◀▶ keys to navigate to “All” category to browse all files including Movies, Music and Photo. Navigate to highlight the file and press “ENTER” to playback the file. When the file is highlighted, the right panel shows the detail

information about the file. It will continue to play next file which is in the same kind of media till the last file. You can also use the playback control while playing the media files. Please refer to the section of video, music and photo playback.

Edit the media files

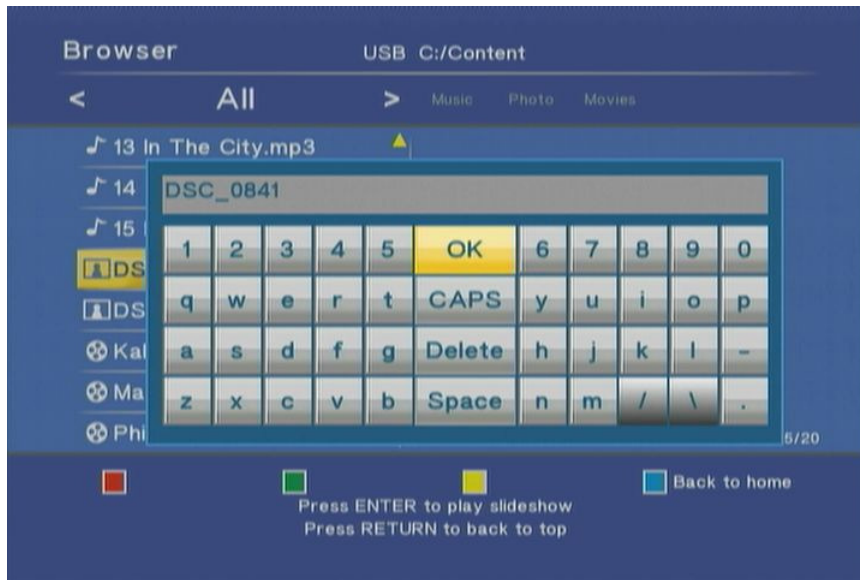
In the browser window, press the “EDIT” key to open the edit window. You can rename or delete the files in the browser. If you don’t want to continue, select “Return” or press “Return” key on the remote control.

Note: The edit function of the disk format “NTFS” is not supported by this device. If the connected USB storage is in NTFS format, press the “EDIT” key and the warning message shows up “NTFS not supported.”



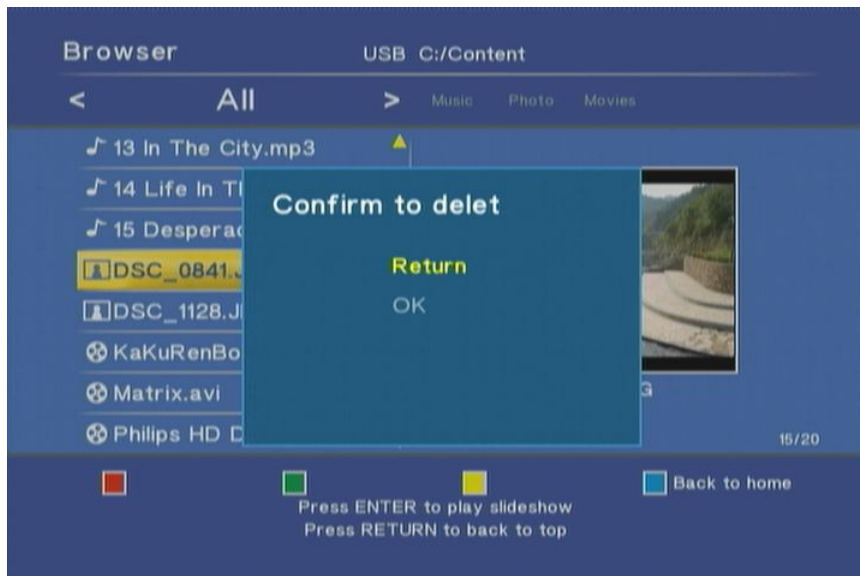
Rename

Choose “Rename” and the keyboard will be pop-up for entering new name. Use the arrow key to highlight the key and press “ENTER” to input the character. When the input is complete, navigate to highlight the “OK” button and then press “ENTER”.



Delete

Choose the "Delete" and the confirm window will pop up. Select "OK" to delete the file or "Return" to cancel.



Maintenance

Reset the device

You can press “MENU” to open the setup menu. To Reset the device, navigate to Setup menu and select “Restore Default” and press “ENTER”. Please refer to setup section for the details.

Power on/Standby time

The device needs sometime to power on. The time costs are listed below.

Plug in the power -> power on and ready to use: it takes about 15 seconds.

Power on status -> Standby mode by pressing the power button: it takes about 15 seconds.

Standby mode -> power on mode by pressing the power button: it takes about 8 seconds.

In this short time, the remote control unit and the power button are not functional.

Battery

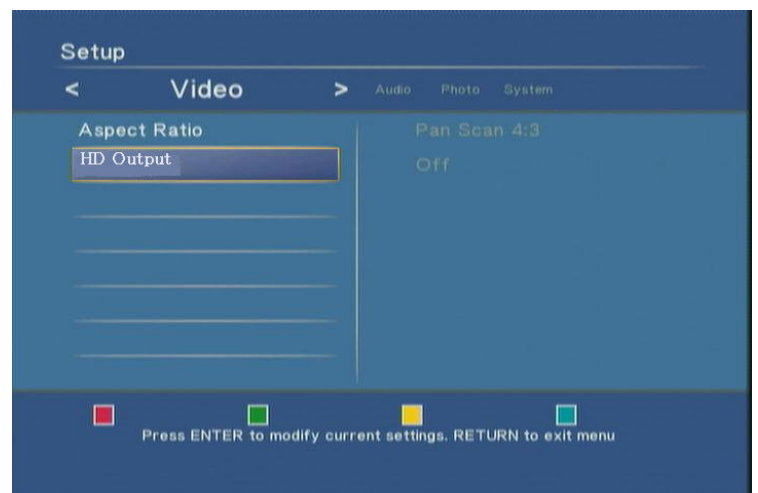
When the distance of remote control is dropped dramatically, please replace the new battery for the remote control.

Black screen

If you get black screen while starting to play Movie or Photo files, please check the connection from TV to the device. If the HD output is enabled, the video connection should be component YPbPr. In case of not connecting YPbPr but CVBS, you can press “MENU” button to open the menu. It should show menu picture via CVBS, so you should be able to see the setup menu. Then select Video, HD output to turn off the HD output.

Connect DVI to HDMI converter

When using the DVI to HDMI converter to connect the player, some LCD monitors could only accept the SD video. This player detects the support format of the LCD player and locks the HD option if the monitor doesn't support it. In this case, the player output SD video to the monitor.



Video/Audio codec support

	Codec	Feature	Others	File container
Video	MPEG-1	MPEG-1		DAT MPG MPEG
	MPEG-2	<u>MP@HL / MP@ML</u>	480i/480p/576i/576p/720p/1080i	ISO IFO VOB MPG MPEG TS TP
	Divx 3/4/5/6 Xvid	DivX 3.11 DivX 4.12 DivX 5 DivX 6 DivX HD Xvid	480i/480p/576i/576p/720p/1080i Xvid: GMC not supported	AVI MKV
	Real Video	Real Video 9 Real Video 10	640x480, 30fps, Average 450Kbps, Maximum 900Kbps, 2-pass video encoding*, No RPR**	RM/RMVB
	MPEG4 MJPEG	MJPEG unsupport AAC, MPEG-Audio, u-law		MP4 AVI
	Audio	MPEG-1 Layer 3	2 channels 8~320kbps, VBR	M3U (MP3 list) supported
WMA		WMA ver. 9.1 CBR up to 320kbps, VBR up to 256kbps		ASF wma
WAV		Microsoft PCM only		wav
AAC		MPEG-2/4 LC/HE profile AAC+ ver 1/2 UP to 288 kbps		aac mp4 m4a
OGG Vorbis				ogg
Dolby Digital AC3		AC3 5.1		Included in the video only
DTS		DTS 5.1		Included in the video only

*: The Real Video 9 &10 compressed with 2-pass Video encoding option are supported .

** : The RPR (Reference Picture Resampling) option isn't supported. When playing the Real video

compressing with RPR option, the alert message will pop for notify the unsupported format.

Specification

Specification	Model name	ZP-320
	Disc format	FAT16/FAT32/NTFS (Read only)/UDF/EXT3
	Subtitle	Chinese Traditional/Chinese Simplified/UTF8
	Aspect ratio	Pan Scan 4:3 / Letterbox 4:3 /16:9
Interface	Video	1x CVBS composite RCA Video 480i 1x Y/Pb/Pr Up to HD 720P/1080i 1x HDMI Up to HD 720P/1080i
	Audio	1x AUDIO L/R RCA
	USB	1x USB 2.0, 5V~1000mA
Playback	Video format	MPEG1 (DAT / MPG / MPEG) MPEG2 (MPG / MPEG / VOB / ISO / IFO / TS / TP) MPEG4, MJPEG (MP4 / AVI) DivX 3/4/5/6/HD, Xvid (AVI / MKV) Real Video 9/10 (RM / RMVB)
	Audio format	MP3, WMA, WAV,ASF, AAC, OGG Vorbis, MP4, M4A(AAC), M3U(Playlist), Dolby Digital AC3/DTS, Real Audio(RM)
	Photo format	jpg(JPEG), bmp(BMP), jpg(40-mega pixel)
	Subtitle format	srt, sub, smi, *idx+sub, ssa, DVD subtitle, DivX subtitle
Housing	Power rating	12V $\overline{=}$ 1.5A
	Power consumption	Operation: 4.8W (USB device consumption not included) Standby: 1W
	Size	101x146x30.6 mm (L x W x H)
	Operation temperature	40 Celsius

*: When playing the HD video, the display position of the subtitle could be in the higher part of the TV picture. Only the subtitle format “idx + sub” can maintain the same position as playing in the SD video. We recommend using this kind of subtitle format.