

# Digital Signage System

## Linux Player Installation Guide



**Kazo Vision**

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# 1. System Installation

## 1.1 Prepare

If you don't get an install disk, please visit the website below, download the ISO file and make a disk yourself.

<http://www.kazovision.com/multimedia/pvsystem/download/>

Player Software - PVPLAYER		
<b>Player Installation CD (Linux)</b> 	<b>Version:</b> 0.09 <b>Date:</b> 2013.04 <b>Size:</b> 519.04 MB <b>Language:</b> English, 中文 <b>MD5:</b> 4d72757f3c2aa264b4c495accca41ebd	 pvplayer.iso (Should be burn to a CD for installation. You can also contact us to get this CD.)  <a href="#">+ Download Upgrade</a>

## 1.2 Boot from CD

Startup the computer, enter the BIOS menu, set the first boot as CD-ROM, then save & exit, put the disk into the cd driver;

If your PC has no cd driver inside, you can use an outside device as well.

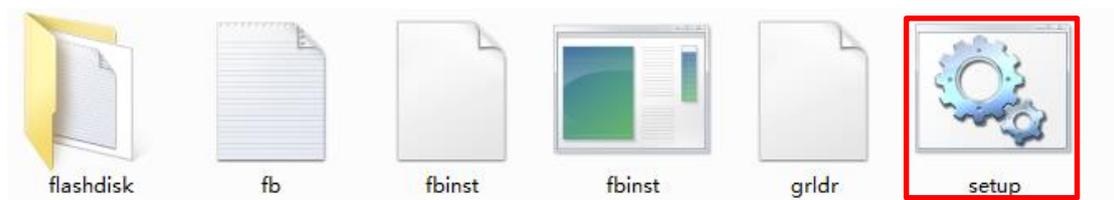
## 1.3 Make USB Install Disk

Prepare a USB disk (over 1 GB), please visit the website below, download the flash disk installation tool, and decompress it to local folder.

<http://www.kazovision.com/multimedia/pvsystem/download/>

<b>Flash Disk Installation Tool</b> (For Linux Edition Player)	<b>Date:</b> 2012.08 <b>Size:</b> 11.91 MB	 flashdisk_installation.zip
---	---	--

Insert the USB disk, run the decompressed file "Setup.bat", as shown in the figure.



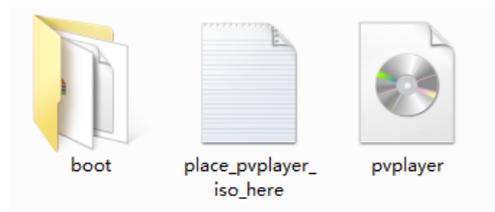
```

C:\Windows\system32\cmd.exe

E:\flashdisk_installation>fbinst.exe "<hd1>" format --force --zip --align
E:\flashdisk_installation>fbinst.exe "<hd1>" add-menu fb.cfg fb.txt
E:\flashdisk_installation>fbinst.exe "<hd1>" add grldr grldr
E:\flashdisk_installation>pause
Press any key to continue . . .

```

Press any key to continue, copy all the files in the decompressed folder “flashdisk” and the ISO file to the root directory of the USB disk.



## 1.4 Install System

 **It will format the whole hard disk while install the system. Please backup your data on the disk before continue.**

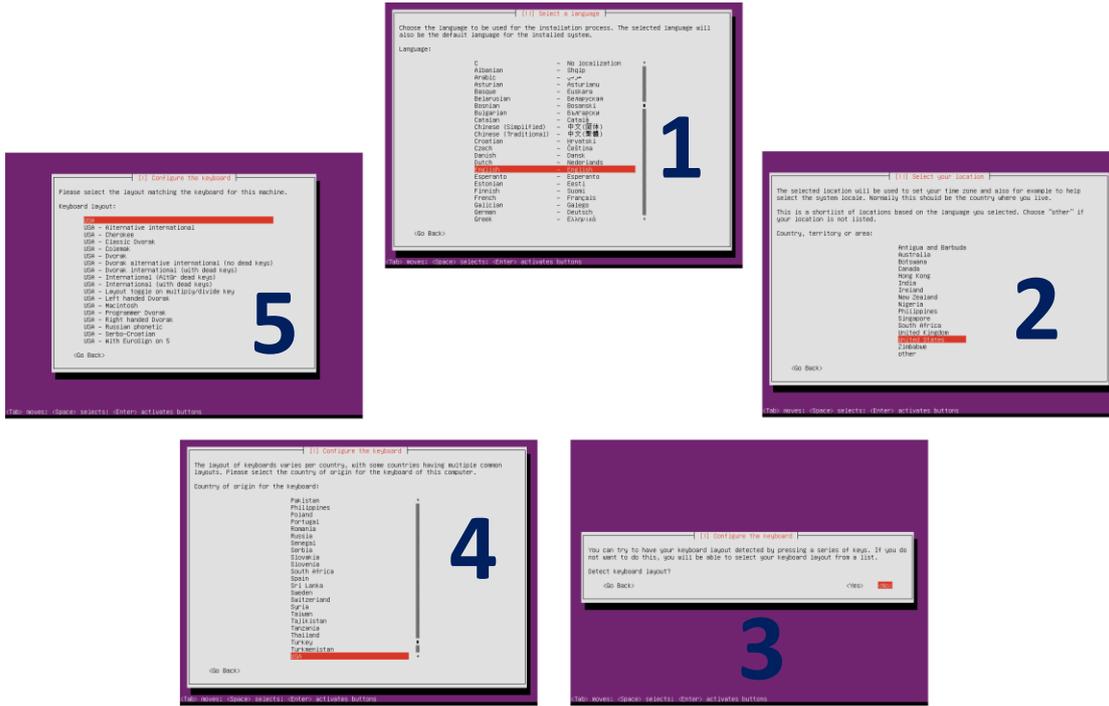
It is easy to install the system, with only few steps, the whole installation is automatic.



*Step.1 Select Language*



*Step.2 Install Ubuntu*



**Step.3 Modify Language & Keyboard Info**



**Step.4 Configure the Network**

If the PC is connected into the LAN while install the system, it'll configure the network automatically and show the left picture in step.4, require you to ensure the time zone; If the PC is offline while install the system, it show the right picture in step.4, you need to configure the network manually.

## 2. Resolution Configuration

After you finish the system installation, if the default screen resolution is not as big as you want. You may take the following steps to modify the screen resolution manually.

### 2.1 Login

```
Ubuntu 11.04 pvplayer tty1
pvplayer login: _
```

Press Ctrl+Alt+F1  
Enter command line mode

```
pvplayer login: root
Password:
.
.
.
root@pvplayer:~# _
```

Input ID: root press Enter  
Input password: pvplayer press Enter

### 2.2 Stop running player

```
root@pvplayer:~# /pvplayer/app/stop.sh_
```

Input /pvplayer/app/stop.sh press Enter

```
root@pvplayer:~# killall -9 Xorg_
```

Input killall -9 Xorg press Enter

### 2.3 Generate the screen configure file

```
root@pvplayer:~# Xorg -configure_
```

Input Xorg -configure press Enter

```
root@pvplayer:~# cp /root/xorg.conf.new /etc/X11/xorg.conf_
```

Input cp /root/xorg.conf.new /etc/X11/xorg.conf  
And press Enter

## 2.4 Explorer the configure file

```

root@pvplayer:~# vim /etc/X11/xorg.conf_
Section "ServerLayout"
    Identifier "X.org Configured"
    Screen 0 "Screen0" 0 0
    Screen 1 "Screen1" RightOf "Screen0"
    InputDevice "Mouse0" "CorePointer"
    InputDevice "Keyboard0" "CoreKeyboard"
EndSection

Section "Files"
    ModulePath "/usr/lib/xorg/modules"
    FontPath "/usr/share/fonts/X11/misc"
    FontPath "/usr/share/fonts/X11/cyrillic"
    FontPath "/usr/share/fonts/X11/100dpi/unscaled"
    FontPath "/usr/share/fonts/X11/75dpi/unscaled"
    FontPath "/usr/share/fonts/X11/Type1"
    FontPath "/usr/share/fonts/X11/100dpi"
    FontPath "/usr/share/fonts/X11/75dpi"
    FontPath "/var/lib/defoma/x-ttcidfont-conf.d/dirs/TrueType"
    FontPath "built-ins"
EndSection

Section "Module"
    Load "extmod"
    Load "record"
    Load "dri2"
    Load "dri"
    Load "glx"
    Load "dbe"
EndSection
"/etc/X11/xorg.conf" 144L, 3347C          1,1    ??
    
```

Input `vim /etc/X11/xorg.conf`  
Press Enter

Explorer the file with VIM

## 2.5 Edit the configure file

```

Section "Screen"
    Identifier "Screen0"
    Device "Card0"
    Monitor "Monitor0"
    SubSection "Display"
        Viewport 0 0
        Depth 1
    EndSubSection
    SubSection "Display"
        Viewport 0 0
        Depth 4
    EndSubSection
    SubSection "Display"
        Viewport 0 0
        Depth 8
    EndSubSection
    SubSection "Display"
        Viewport 0 0
        Depth 15
    EndSubSection
    SubSection "Display"
        Viewport 0 0
        Depth 16
    EndSubSection
    SubSection "Display"
        Viewport 0 0
        Depth 24
    EndSubSection
EndSection
111,14-28    72c
    
```

```

Section "Screen"
    Identifier "Screen0"
    Device "Card0"
    Monitor "Monitor0"
    SubSection "Display"
        Viewport 0 0
        Depth 1
    EndSubSection
    SubSection "Display"
        Viewport 0 0
        Depth 4
    EndSubSection
    SubSection "Display"
        Viewport 0 0
        Depth 8
    EndSubSection
    SubSection "Display"
        Viewport 0 0
        Depth 15
    EndSubSection
    SubSection "Display"
        Viewport 0 0
        Depth 16
    EndSubSection
    SubSection "Display"
        Viewport 0 0
        Depth 24
        Modes "1920x1080"
    EndSubSection
EndSection
142,20-36    98c
    
```

Move to the place as shown in the figure with direction key

Press `I` to enter edit mode  
Add the code `Modes "1920x1080"`  
in it as shown in the figure

## 2.6 Save & Reboot

```

Section "Screen"
    Identifier "Screen0"
    Device "Card0"
    Monitor "Monitor0"
    SubSection "Display"
        Viewport 0 0
        Depth 1
    EndSubSection
    SubSection "Display"
        Viewport 0 0
        Depth 4
    EndSubSection
    SubSection "Display"
        Viewport 0 0
        Depth 8
    EndSubSection
    SubSection "Display"
        Viewport 0 0
        Depth 15
    EndSubSection
    SubSection "Display"
        Viewport 0 0
        Depth 16
    EndSubSection
    SubSection "Display"
        Viewport 0 0
        Depth 24
        Modes "1920x1080"
    EndSubSection
EndSection
:wq
    
```

```

Identifier "Screen0"
Device "Card0"
Monitor "Monitor0"
SubSection "Display"
    Viewport 0 0
    Depth 1
EndSubSection
SubSection "Display"
    Viewport 0 0
    Depth 4
EndSubSection
SubSection "Display"
    Viewport 0 0
    Depth 8
EndSubSection
SubSection "Display"
    Viewport 0 0
    Depth 15
EndSubSection
SubSection "Display"
    Viewport 0 0
    Depth 16
EndSubSection
SubSection "Display"
    Viewport 0 0
    Depth 24
    Modes "1920x1080"
EndSubSection
"/etc/X11/xorg.conf" 145L, 3367C    ???
root@pvplayer:~# reboot
    
```

Press Esc and input `:wq`  
Press Enter return to command line mode

Input `reboot` press Enter

## 2.7 Modify Current Resolution

If the resolution is still not correct after made this configure file. You can flow the bellow instruction to find out the largest resolution that your system supports.

```
VERSION: 0.09 (2013-04-11)
TERMINAL NAME:
WEB SERVER: http://pvmanager.kazovision.com

MAC: 08:00:27:08:19:CB
RESOLUTION: 1024 X 768
COMMUNICATE STATUS:

Please input the password:
```

Press F2 to enter the configure menu  
The default password is empty.

```
VERSION: 0.09 (2013-04-11)
TERMINAL NAME:
WEB SERVER: http://pvmanager.kazovision.com

MAC: 08:00:27:08:19:CB
RESOLUTION: 1024 X 768
COMMUNICATE STATUS: SUCCESS

Main menu:
(0). Modify Terminal Name
(1). System status
(2). Modify WEB server address
(3). Modify running mode
(4). Modify system time
(5). Delete content
(6). Modify password
(7). Shutdown
(8). Reboot
(9). Reset

99
```

Input 99 press Enter  
Go to the command line mode

```
VERSION: 0.09 (2013-04-11)
TERMINAL NAME:
WEB SERVER: http://pvmanager.kazovision.com

MAC: 08:00:27:08:19:CB
RESOLUTION: 1024 X 768
COMMUNICATE STATUS: SUCCESS

Enter the command line here:

xrandr
```

Input xrandr press Enter

```
VERSION: 0.09 (2013-04-11)
TERMINAL NAME:
WEB SERVER: http://pvmanager.kazovision.com

MAC: 08:00:27:08:19:CB
RESOLUTION: 1024 X 768
COMMUNICATE STATUS: SUCCESS

Enter the command line here:

Screen 0: minimum 640 x 480, current 1024 x 768, maximum 1024 x 768
default connected 1024x768+0+0 0mm x 0mm
1024x768 61.0*
800x600 61.0
640x480 60.0
```

According to the largest resolution  
Reference to 2.4, 2.5, 2.6 to configure it again

## 3. SSD Optimization

### 3.1 Download the Upgrade File

Visit the follow website to download the optimization file for SSD:

Special Edtion “optimize\_ssd.upgrade”.

[http://www.kazovision.com/multimedia/pvsystem/download/upgrade\\_linux/](http://www.kazovision.com/multimedia/pvsystem/download/upgrade_linux/)

Special Edition	
<b>Date:</b> 2013.04 <b>Size:</b> 915 B <b>Description:</b> * Reduce the disk write operation by save unimportant runtime data into RAM. * Set the file system into "elevator=deadline" mode to improve the SSD disk performance. * Close the SWAP function.	optimize_ssd.upgrade

### 3.2 Upgrade System

Prepare a USB disk, create a new folder called “import” in the root directory of it, put the upgrade file into the folder.

Startup the system, insert the USB disk while the pvplayer is running.

It'll upgrade and reboot the system automatically.

### 3.3 Instruction

The upgrade file is aimed at SSD, configure the system and improve the performance.

Details:

- # Put the system log, temp and some player data files into RAM, reduce the disk operation.
- # Change the file system scheduler mode as elevator=deadline, improve the SSD performance.
- # Close the SWAP function on the disk.

## 4. About Kazo Vision

Kazo Vision is a solution provider who focuses on the LED/LCD display and visual effects, serving for advertisement, exhibition, and sports field.

Kazo Vision has two mature lines of products including sports information and multimedia display which were developed independently. In addition, the company also provides customization service to meet the client's individual needs.

Since its inception, the company built a professional design team to keep on developing new products of software and hardware. Now we have gained profound experience in the field of LED display and sport information as well as had a large grasp of advanced technology including more than ten software copyright and thirty items of the patent right for invention.

With several years' market expanding, we have friendly cooperated with many solution providers in the world wide. Our products are being used in different industries around the world successfully.

It is believed that quality and innovation is the power source of products. So Kazo vision keeps on creating high quality visual effect to the customer through as always strict quality management and self-challenge.

We are looking forward to cooperating with you sincerely.