

22" Video Screen

Manual v1.2



Jan 2016

Contents

1. What is the 22VS.....	4
2. Features	4
3. In the Box.....	6
4. Setup Instructions.....	7
4.1 Connect Speakers	8
4.2 Connect Buttons	8
4.3 Insert SD Card or USB	8
4.4 Mounting the screen	8
5. Formats.....	9
5.1 Optimal Playback	10
6. Remote Control	10
6.1 Remote Control Buttons.....	11
6.2 Screen Settings	11
7. Programming Content	12
8. Folder Volume Control	13
9. Automatic Power on/off.....	14
10. Slideshow Options	15
11. Reformatting Instructions.....	16
Update Notes.....	20

Thank you for purchasing the 22" Video Screen

The 22" Video Screen is one of a range of products we offer specific to the heritage marketplace. We are confident that we have other products you will find useful and look forward to dealing with you again soon.

T: +44 (0)1639 767007 | **W:** www.blackboxav.co.uk

1. What is the 22VS

22VS is an all in one digital media player and screen. It's used to display and distribute media communication, videos and images in a small compact manner. Thanks to the open frame design and inbuilt mounting wings it can be built into signage or other such installations. The 22VS supports a wide range of digital media files which are stored on an SD card. A remote is also supplied for easy player control; it can be looping or use up to 4 buttons to activate content not including 2 volume buttons.

2. Features

Media Format Compatibility	Image: Jpeg, BMP Audio: MP3, WMA, AAC, OGG Video: MPEG-1, MPEG-2, AVI
Media Storage and Playback Source	High Speed Compact Flash (CF) Card High Speed Secure Digital (SD) Card USB 2.0 Drive (Thumb Drive/Flash Drive)

<p>Playback Modes</p>	<p>Video Audio Picture with background music</p>
<p>On-Screen Display Languages</p>	<p>English Chinese Japanese</p>
<p>Image Slideshow Playback</p>	<p>Picture Rotation Portrait-Vertical or Landscape-Horizontal Slideshow Transitions 14 Different transition effects Slide intervals: 1 to 60 seconds</p>

If you need to reformat any files we recommend 'Format Factory'.
This can be downloaded for free here:

<http://www.pcfreetime.com/>

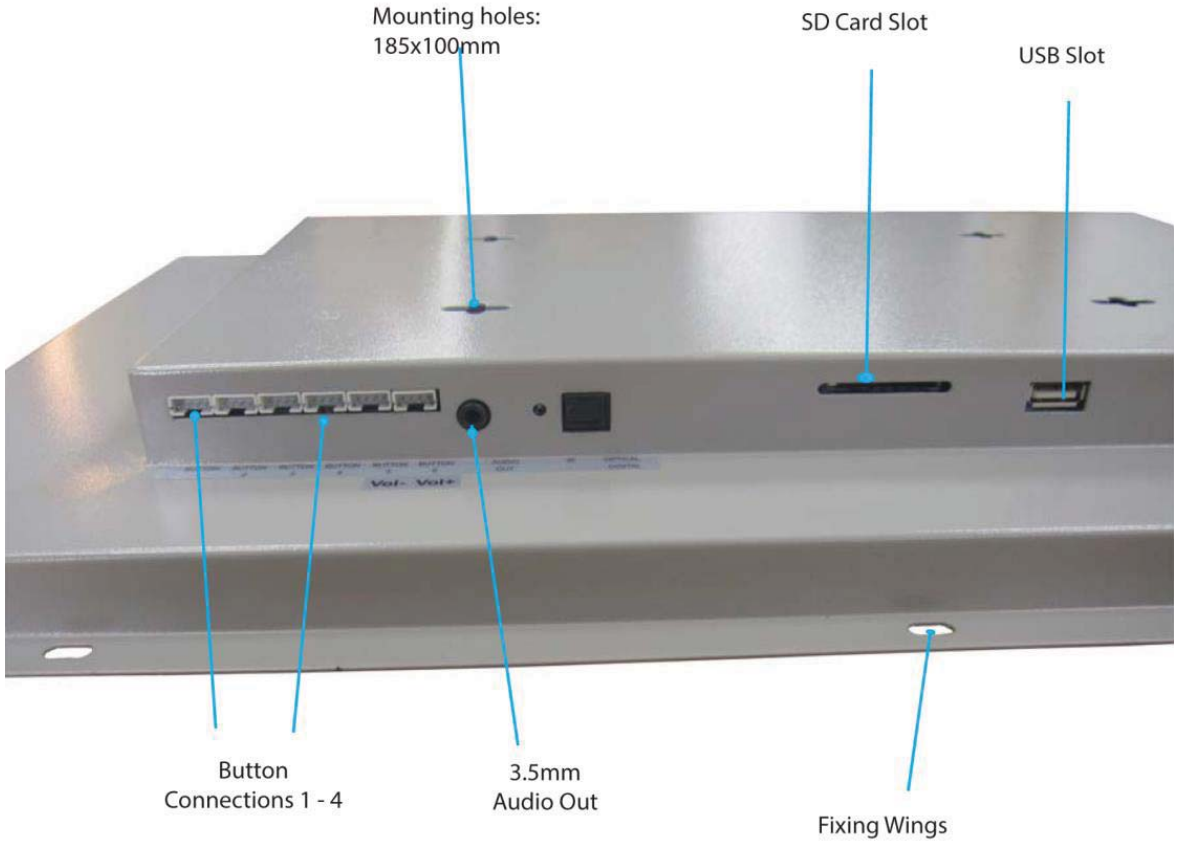
See more in the 'Reformatting Instructions' section.

3. In the Box



1. 21.6" Screen and Player
2. Power Supply
3. Button Cables
4. Remote Control
5. SD Card

4. Setup Instructions



4.1 Connect Speakers

The 22VS is supplied with 2 inbuilt speakers located in the rear. There is also an audio out cable which can be connected in the base of the unit (see previous image).

4.2 Connect Buttons

If you wish to use button activated content or allow user volume control attach the required amount of buttons using the button wires supplied to the appropriate input. Wire the buttons as displayed below;



Note: illuminated buttons stay illuminated at all times

4.3 Insert SD Card or USB

See Programming Instructions for information on how to program your SD Card or USB. Once programmed place them in the appropriate slots as shown in image on previous page..

4.4 Mounting the screen

The Screen can be mounted via the fixing holes located around the frame or via the mounting holes located on the rear.

5. Formats

An SDHC Card or USB is used as the storage medium for the 22VS.
The card must be formatted to FAT32.

Media Requirements

Before putting the content onto the SD Card or USB it needs to be in the right format as listed below, for reformatting instructions see 'Reformatting' section.

Video	Category	Format	Max Res	Max Bitrate
	MP4	MP4/AVI	1920x1080 30fps	20Mbit/s
	MPG/MPEG	MPG,MPE	1920x1080 30fps	20Mbit/s
	MKV	H.264 MPEG1,2,4	1920x1080 30fps	20Mbit/s
Photo	Sub Type	Codec	Max Res	Size
	JPG Baseline	YUV400 YUV420 YUV422 YUV440 YUV444	8000x8000	No Limit
Audio	Category	Codec	Sample Rate	Bitrate
	MP2 MP3 PCM(wav) AC3 WMA	MP2 MP3 PCM(wav) AC3 WMA	8-320Khz	32Kbps - 448kbps

5.1 Optimal Playback

Image Playback

For optimal image playback we recommend images be 1920x1080 pixels at 300DPI and saved as a jpeg.

Video Playback

For optimal video playback it is recommended that your video is 1920x1080 pixels and runs at a frame rate of 30 frames per second in MP4 format.

Audio Playback

For optimal audio playback it is recommended that your audio file is of MP3 format with a bitrate of 44.1Khz.

6. Remote Control










A remote control is supplied with the 22VS, this enables you to set a range of functions which are explained over the next pages.

To access the menu press the 'Menu' button on the remote. Please note the IR sensor is located on the rear base of the unit next to the power cable.

To exit press the 'Exit' button.



6.1 Remote Control Buttons

POWER	Power on/off
MUTE	Mute /unmute audio
	Next item when playing
	Previous item when playing
	Play /Pause
	Navigation up/Pop up control menu when laying
	Navigation right
	Navigation left
	Navigation down
MENU	Enter settings menu
VOL+	Volume up
VOL-	Volume down
	Fast-forward
	Rewind

6.2 Screen Settings

If you would like to adjust the screen settings such as brightness, contrast, colour or backlight you can adjust these here:

Menu > Screen Set >

7. Programming Content

Once you have edited and converted your video or images into the correct format you will need to put them onto an SDHC card. The way you store content (in folders) will determine how it is activated.

1. The included SD Card is a pre-loaded template (it comes with each folder already set-up) If you are not using a button you must delete its folder. To use other SDHC cards make sure they are formatted to FAT32 first, then create the appropriate folders.

2. Each folder represents a button, except '00' - This is for looping content.

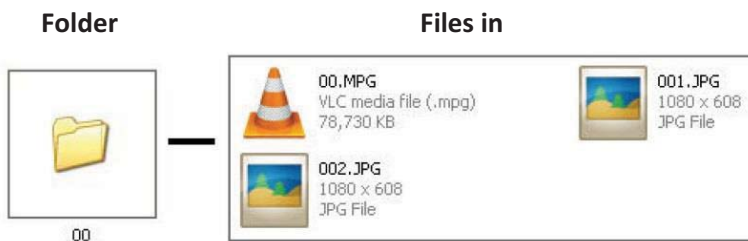
00 - Looping folder (content in here plays automatically on startup)

01 - Button 1

02 - Button 2

etc.

3. Put your converted video or images within each folder, **name them 00, 01, 02 etc. for the order you want them to play when the button is pressed** (for single files in each folder they can be named anything). Example looping folder (button folders are the same);



Within the above configuration the player will play: video 00.mpg, image 001, image 002 and then loop back video 00.mpg until somebody presses a button.

Note: The looping folder is designed to be used for creating an attractor screen (image/video).

When a button is pressed, every file in that folder will be played, then the 22VS will return to the looping folder.

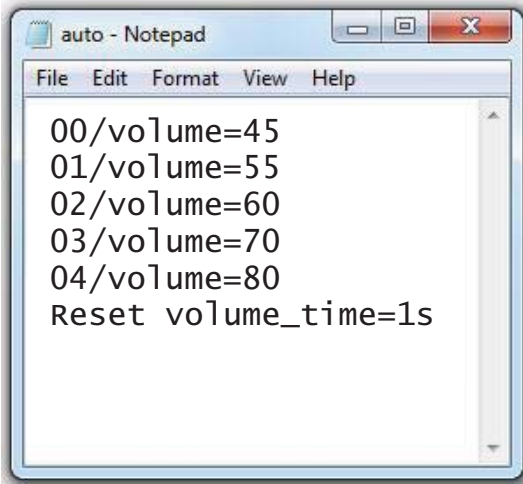
8. Folder Volume Control

Content in each folder (00, 01, 02, 03, 04) can be set to play at individual volume levels. For example the looping folder will play content with a volume of 45, whereas button 1 can be set to play content with a volume of 55 etc.

Note: with the use of volume +/- buttons, users can still change volume from this set level.

These volume levels are set using an 'auto.txt' file included on the programmable SD Card. As mentioned this will be included with a pre-loaded template, simply edit the template to change volumes if required.

The 'auto.txt' file appears as follows;



```

auto - Notepad
File Edit Format View Help
00/volume=45
01/volume=55
02/volume=60
03/volume=70
04/volume=80
Reset volume_time=1s

```

Looping folder volume = 45
 Button 1 folder volume = 55
 Button 2 folder volume = 60
 Button 3 folder volume = 70
 Button 4 folder volume = 80
 Sets reset time

The Reset volume_time function dictates how long after a new folder begins playback the current volume changes to that set for the folder.

1s means volume changes immediately to the level set when the folder is selected.

9. Automatic Power on/off

A useful feature of the 22VS is that you can programme it to power up and turn off at a set time each day. This is done with the following settings;

First you must set the right time;

Menu > Time Set > enter in the details using navigation buttons.

Then you can set automatic power on/off times;

Menu > Time Set > Timer 1 Set > Select the option e.g. every day / Mon-Fri / Sat-Sun. Set the on and off times.

It is possible to set multiple on/off times, for example;

Mon - Fri 9am on / 5pm off

Sat - Sun 10am on / 3pm off

Once confirmed click exit.

10. Slideshow Options

The player will play a slide show of images in name order.

Eg: Within the root of folder 00 put the files:

01.jpg, 02.jpg, 03.jpg, 04.jpg, 05.jpg

The player will scroll through these images and then loop back to the start.

Image Transitions/ Timings

Menu > Preferences > Photo Slide Mode > Select image transition

Menu > Preferences > Photo Show Time > Select image time.

Selections range between 5-150 seconds

You can set a slideshow to play via a button press by placing the slideshow images within that button folder (i.e 01, 02 etc.).

11. Reformatting Instructions

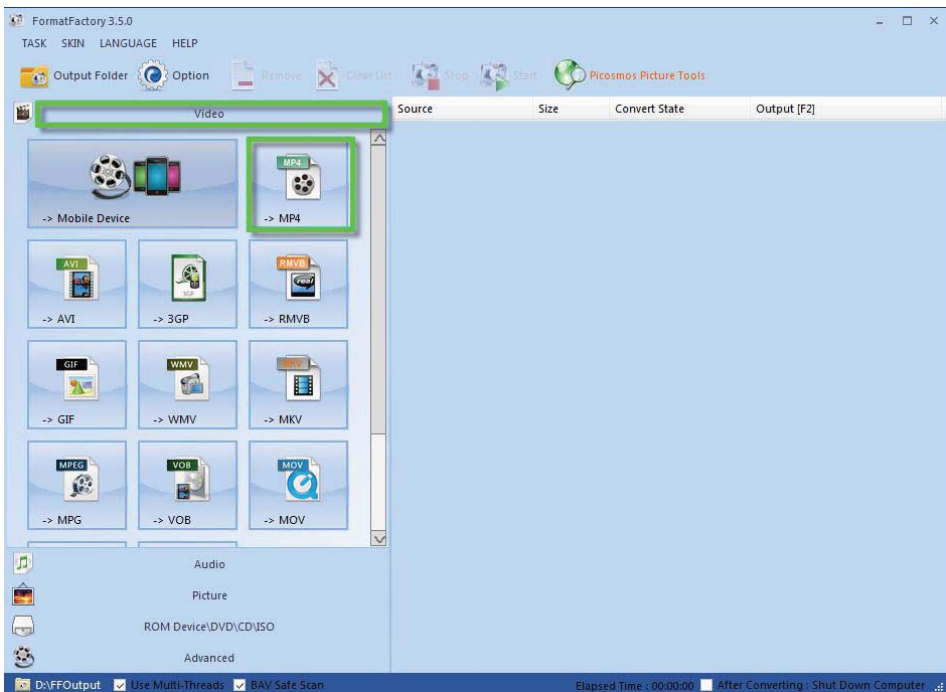
If your video content isn't in the correct format to play on the 22VS then you will need to reformat it as follows;

Step 1) Download Format Factory

Format Factory is a free convertor tool for Windows - it can be downloaded from here;

<http://www.pcfreetime.com/>

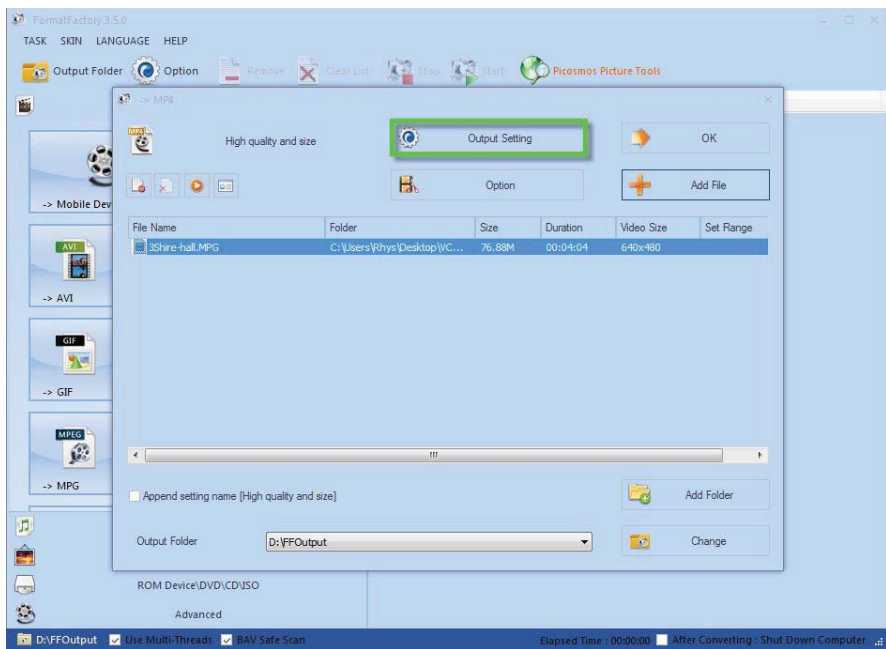
Step 2) Run the program and select 'Video -> MP4'



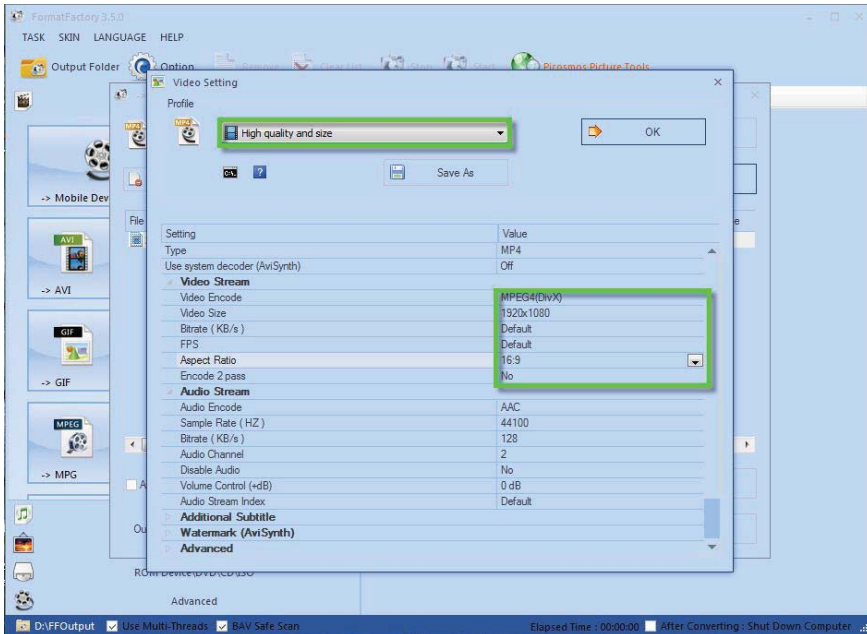
This will convert your video files to MP4.

Step 3) Load in your files

Drag and drop the files you wish to convert then select 'Output Settings'.



Step 4) High Quality and Size - 1920x1080



Select 1920x1080 from the dropdown then set the other options;

Video Encode: MPEG4(Xvid)

Video Size: 1920x1080

Bitrate: Default

FPS: Default

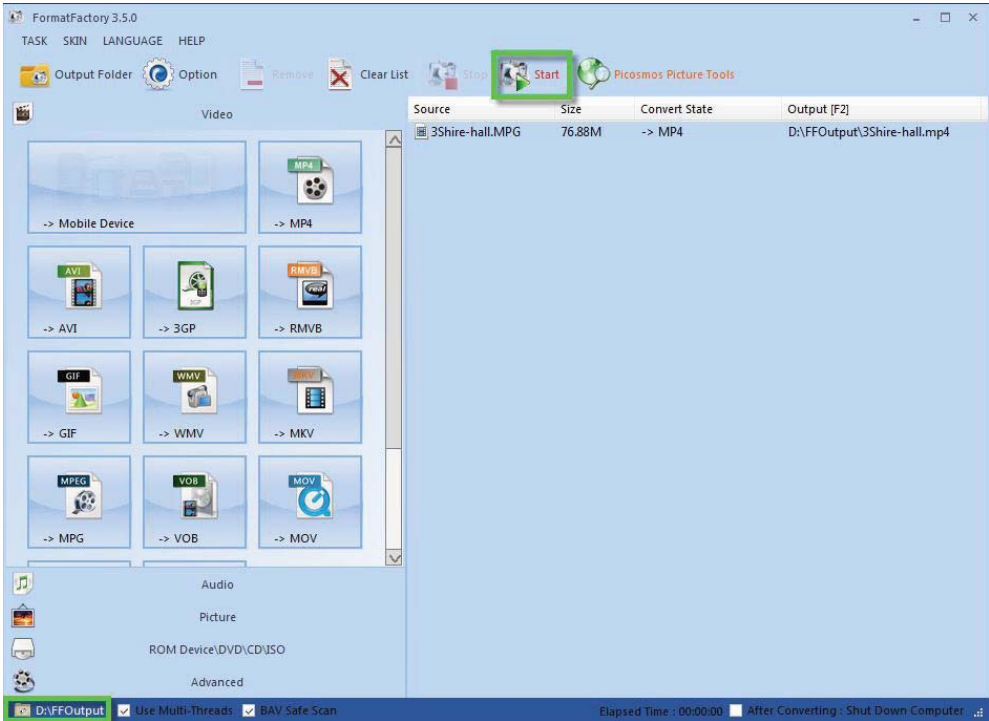
Aspect Ratio: 16:9

Encode 2 pass: No

Click 'OK' then 'OK' again on the next screen.

Step 5) Start the Conversion

To begin conversion click 'Start' as shown below;



The converted files will be stored in the folder where the original files are located unless otherwise set - click bottom left output folder to change this.

Use these converted files as explained in section 7. Programming Content.

Update Notes

V1.2 07/01/2016

- Added Folder Volume Control Function
- Illuminated button behaviour description