

BRIGHTBOARD Professional Series Digital Signage System (20.1"/32"/37"/42")

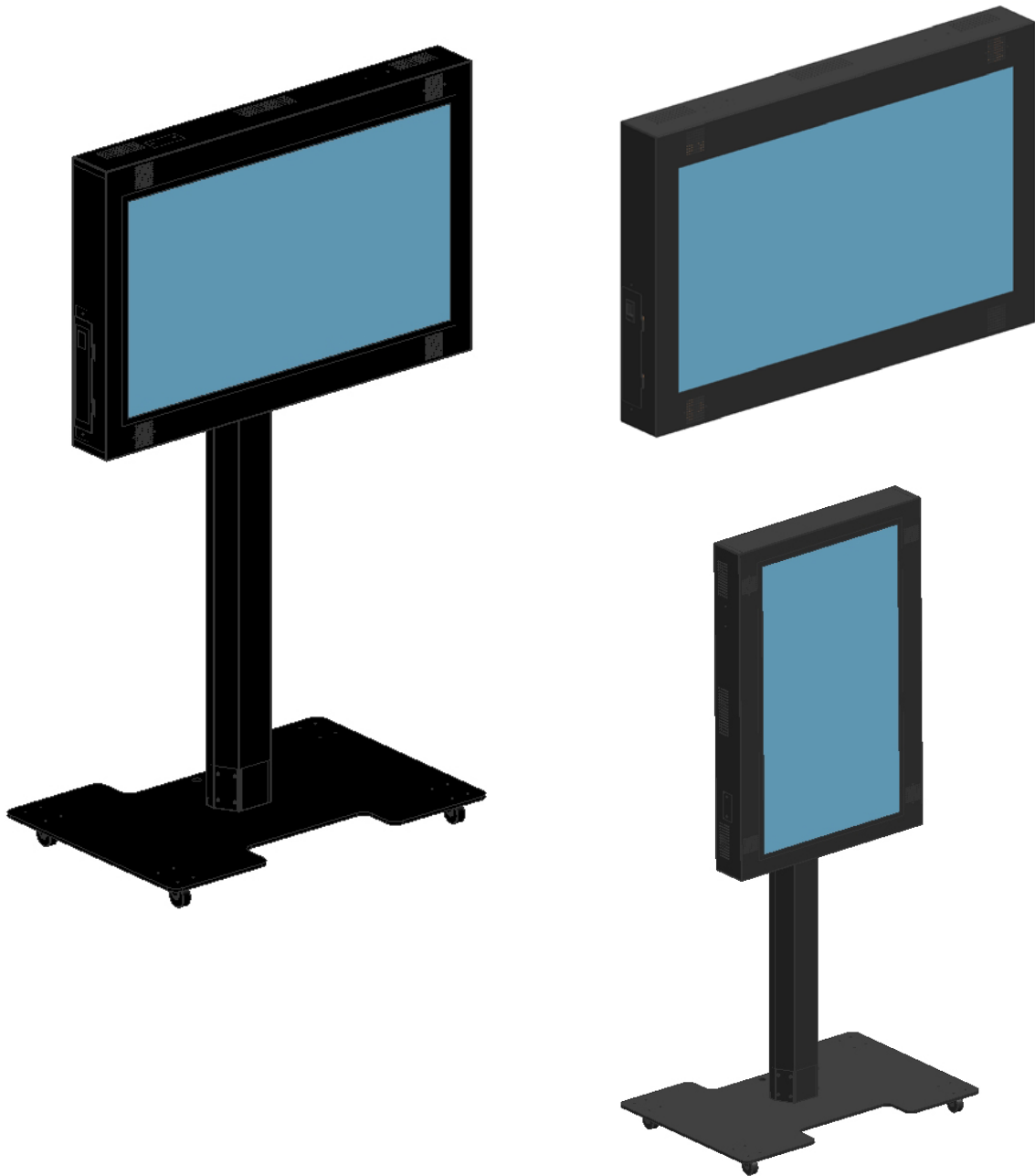


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About this Manual

This manual is designed to assist you in setting up and using your new Digital Signage System. Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. This document contains proprietary information protected by copyright. All rights are reserved. No part of this manual may be reproduced by any mechanical, electronic or other means, in any form, without prior written permission of the manufacturer.

Compliance Statement

This product has been assembled from FCC tested components. The complete system has not been tested. *For Home or Office Use Only!*



The tested components comply with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received including interference that may cause undesired operation.

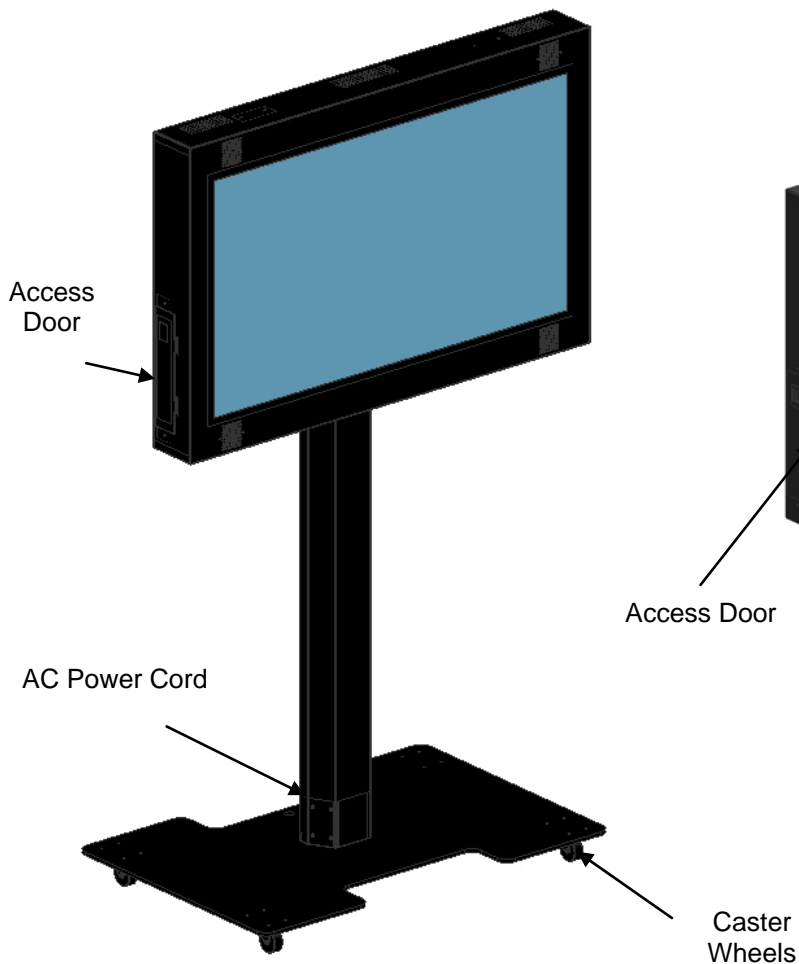
Important Safety Instructions

- Do not place your Digital Signage System near an open window. Exposing the Display to rain, water, moisture or sunlight can severely damage it.
- Do not place anything on top of the power cord. Make sure the cord is placed in an area where it will not be stepped on.
- To properly clean the Display screen, first, make sure the system is in the power off mode. Do not spray liquid cleaners directly onto the unit. Stand away from the Display and spray cleaning solution onto a scratch resistant cloth. Without applying excessive pressure, clean the screen with the slightly dampened scratch resistant cloth.
- It is recommended that the pedestal systems always be used with the installed casters. If the casters are removed, the pedestal systems should always be bolted to the floor.

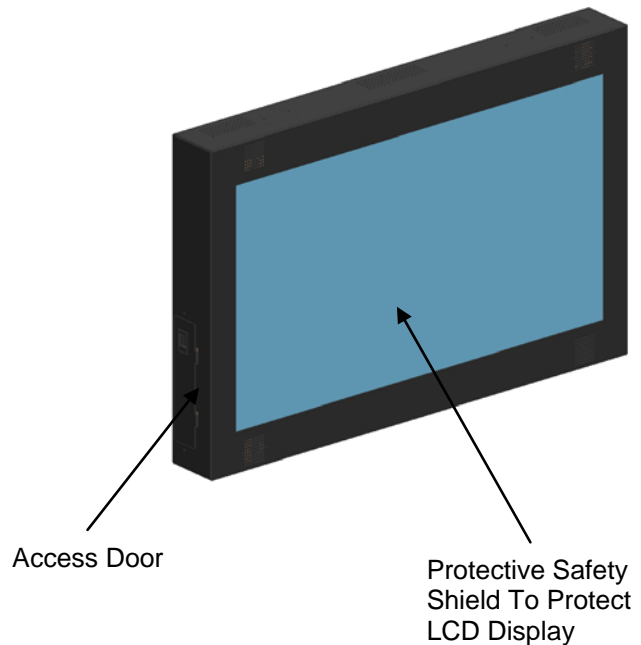
Chapter 1 – Your New Digital Signage System

Your new Digital Signage System has been designed to be versatile, ergonomic and user-friendly. A memory card has been installed in the media player with sample content already loaded (Please note that the sample content loaded is for the unit in a “Landscape” orientation. If you are using the unit in “Portrait” orientation*, you can download sample content from our website at www.popadvisions.com). The display has been configured at the factory and should not require any adjustments by the end user. The user controls for the display are located inside the enclosure to prevent patrons from making unnecessary adjustments.

Pedestal Configuration



Wall Mount Configuration



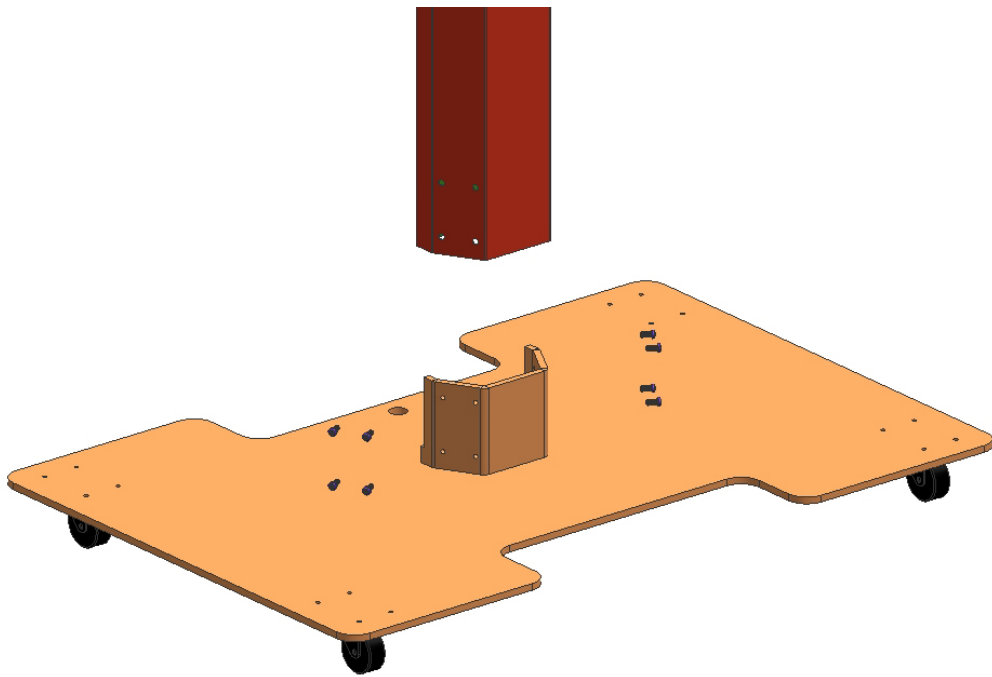
* Please note that only 32” and larger systems can be using in “Portrait” orientation

Assembly Of Your New Digital Signage System

The Digital Signage System has been designed to provide easy assembly. All you need is a Phillips screwdriver and you will have your new system up and running within minutes. The Brightboard Professional Series products are available with a pedestal mounting kit and a wall mount mounting kit. The following figures and steps will help you assemble your new Digital Signage System based on the configuration that you purchased.

Assembling Pedestal Configurations:

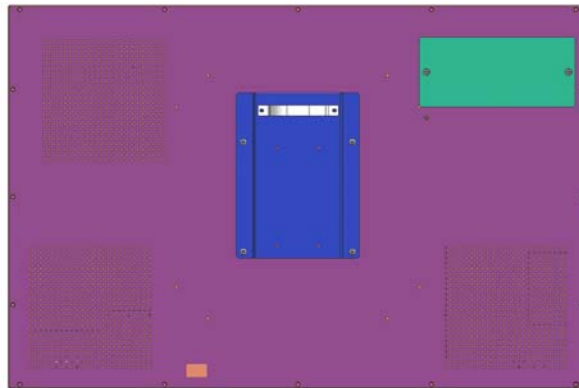
- Lay the Digital System Base on a flat surface. **The wheel kit is has been installed at the factory and must remain on unless this unit is bolted to a floor.**
- Carefully slide the Digital System Pedestal onto the base as shown.



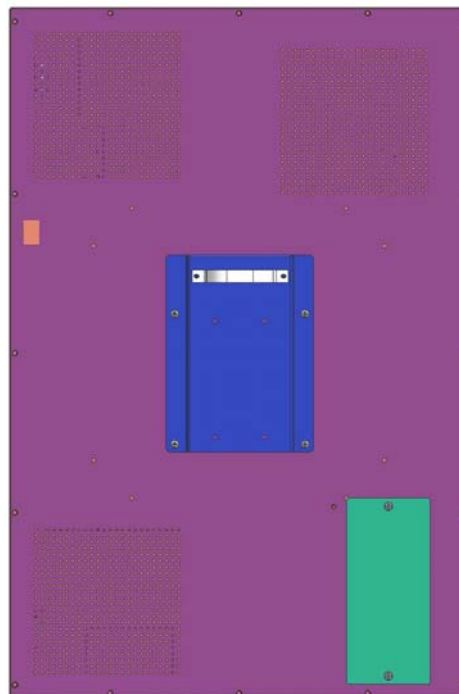
- Secure the assemblies together using the (8) provided 1/4-20 x 3/8" black screws.

- Install the Display mounting head to the back of the display using the (4) provided M4 screws. **(Please note: 32" and larger systems can be mounted in either Landscape or Portrait Orientation. See diagram for mounting hole locations)**

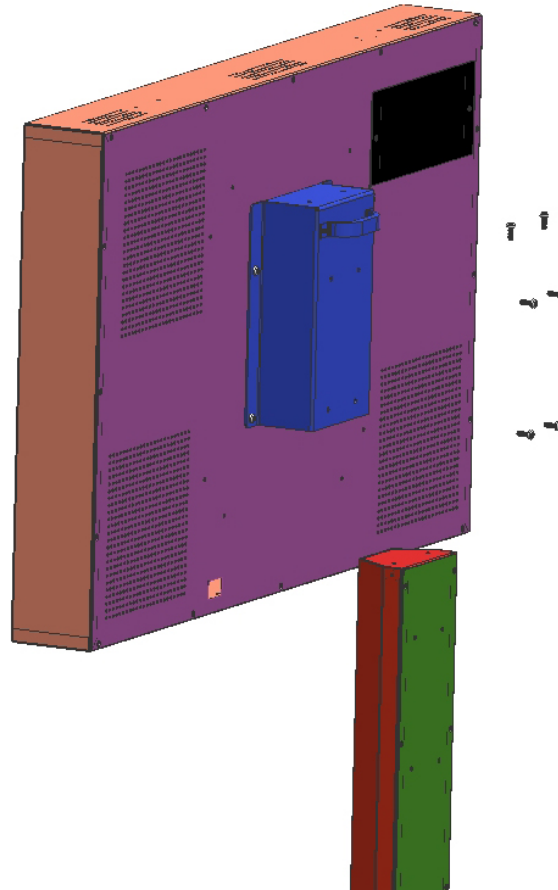
Landscape Orientation



Portrait Orientation (32" and larger systems)



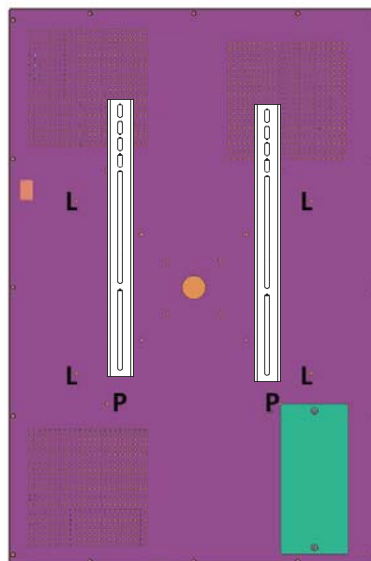
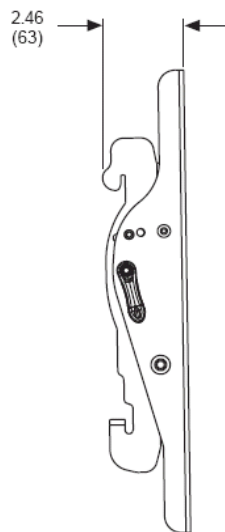
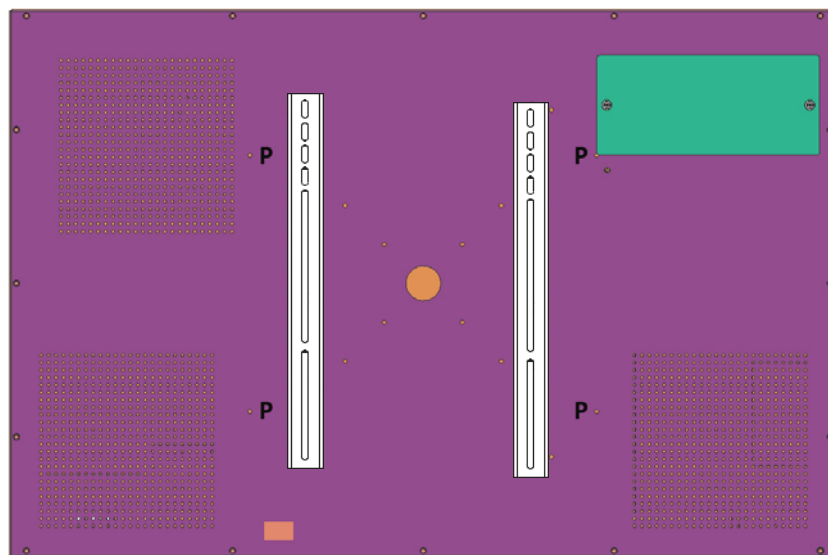
- Carefully install the Display onto the top of the Digital Signage System Pedestal. Secure the display using the (6) provided M4 screws.



- Plug the power cord into coming out of the back of the display enclosure into the AC extension cord that is coming out of the pedestal. **(Please note: Route any excess power cord into the opening in the pedestal.)** Plug the power cord that comes out of the bottom of the pedestal into any available 110 VAC outlet. You have successfully assembled your new Digital Signage System. It will automatically power on.

Assembling Wall Mount Configurations:

- Lay the Digital System on a flat protective surface. **(Please make sure that the area the display is placed is free of any objects that could damage or scratch the front protective screen.)**
- Remove the wall mount hardware from the packaging. Install the 2 wall mount brackets to the back of the system as shown using the provided M4x12 screws and flat washers. **(Please note: 32" and larger systems can be mounted in either Landscape or Portrait Orientation. See diagram for mounting hole locations)**



- Using the instructions included with the wall mount hardware, install the wall mount mounting plate to the wall.



- With 2 people, carefully install the Display onto the wall mount plate as shown above.



- Secure the display using the (2) pre-attached phillips screws and a Phillips screwdriver.



- Plug the attached power cord into any available 110 VAC outlet. You have successfully installed your new Brightboard Digital Signage System. It will automatically power on.

Turning the system on/off

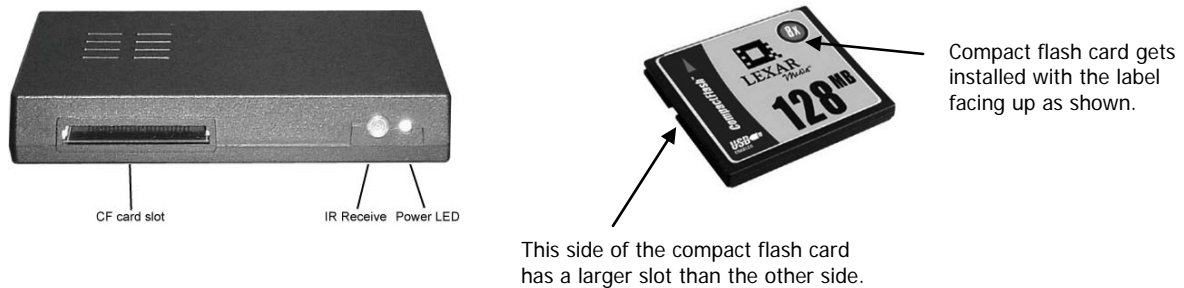
The Digital Signage System will automatically power on when the unit is plugged into a 110 VAC outlet. If the memory card was properly installed, your system will begin displaying your content automatically.

When you need to change cards, turn off the system using the main "on/off" switch located on the rear of the display enclosure and simply open the access door to the media player. It is not necessary to unplug the system from the 110 VAC outlet. The power indicator on the player will turn off. Insert your memory card and then turn the system using the main "on/off" switch located on the rear of the display enclosure. Within seconds, the display will come back on and begin displaying the content on the memory card.

Inserting/Removing Memory Cards

The digital signage system should always be turned off before changing the compact flash card. The on/off switch is located at the rear of the display enclosure. There is a power indicator light on the front of the player in order to verify that on/off status. Once the player is off, simply remove the memory card from the player as shown below. Insert the memory in the same orientation as when it was removed.

***NOTE: DO NOT TRY AND FORCE THE COMPACT FLASH CARD IN AS THIS CAN DAMAGE THE PLAYER. WHEN THE COMPACT FLASH CARD IS ALIGNED PROPERLY, IT WILL SLIDE RIGHT IN.**



Adjusting the Volume Control

Your Digital Signage System has the ability to play audio that is incorporated into MPEG video files. The volume of the Digital Signage Player has been preset at the factory and cannot be changed.

The volume of the display has been set to low at the factory. To adjust it, simply use the long display remote that was included and use the volume up/down buttons on it. The menu will automatically disappear after a couple of seconds when you are done with the adjustment. ***NOTE: USING ANY OF THE OTHER BUTTONS ON THIS REMOTE MAY CAUSE UNDESIRE OPERATION.**

Adjusting the Display

The Digital Signage System display has been configured at the factory and should not require any adjustments by the end user. If for some reason, your content is not perfectly centered, check to ensure that it has been created following the content creation guidelines in the manual. If you are still experiencing problems, please contact us.

Chapter 2 – The Brain of the Digital Signage System



The Digital Signage System has a high resolution Digital Signage Player mounted behind an access door inside the display enclosure. This player accepts only compact flash type memory cards. A high speed compact flash card rated at 12x or higher is recommend, especially when playing high quality MPEG videos.

The “Auto Start” feature of this player has been enabled so that it will automatically play the content that is on the compact flash card after it is turned on. In this mode, the player will loop through all JPEG and MPEG files that are stored on the compact flash card. It will play the files by filename in alphanumeric order. Please contact us if you require an advanced manual for the other settings of this player.

Normally, no settings on the player need to be altered. The only two settings that should be altered are outlined below. Changes to any other settings may result in undesired results as well as make the system unusable. You will need to use the included small remote control to change these settings.

PHOTO SETUP – INTERVAL TIME

Level 1	Level 2	Level 3/Function
PHOTO SETUP AUDIO SETUP VIDEO SETUP PREFERENCES EXIT	THUMBNAIL DIGEST PHOTO DISPLAY SIZE SLIDESHOW MODE INTERVAL TIME TRANSITION MAIN PAGE	1 / 3 / 5 / 10 SECONDS Default slideshow interval timing last.

PHOTO SETUP – TRANSITION

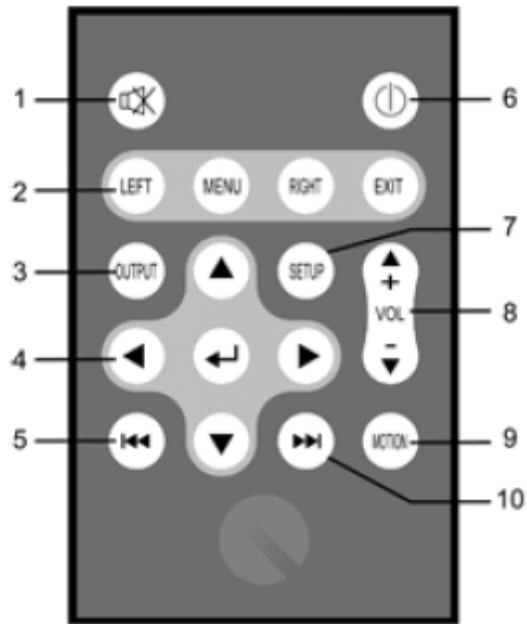
Level 1	Level 2	Level 3/Function
PHOTO SETUP AUDIO SETUP VIDEO SETUP PREFERENCES EXIT	THUMBNAIL DIGEST PHOTO DISPLAY SIZE SLIDESHOW MODE INTERVAL TIME TRANSITION MAIN PAGE	Top>>Bottom, Bottom>>Top, Left>>Right, Right>>Left,..... Determine the effect of change page between slides.

The Digital Signage Player Remote Control



The digital signage player ships with a small remote control and it should only be used to change the settings outlined on the previous page. Please note that some of the buttons have no function and this is normal. ***NOTE: DO NOT PRESS THE “OUTPUT” BUTTON ON THE REMOTE CONTROL AS THIS WILL GIVE UNDESIRE RESULTS. AFTER ACCESSING THE MENUS, THE SYSTEM WILL BE OUT OF “AUTO START” MODE SO**

TURN THE ENTIRE SYSTEM OFF THEN BACK ON USING THE MAIN "ON/OFF" SWITCH LOCATED ON THE REAR OF THE DISPLAY ENCLOSURE TO RESUME NORMAL OPERATION.



1	Mute (<i>Only used on 7" - 15" displays with embedded player</i>)
2	(<i>Only used on 7" - 15" displays with embedded player</i>)
3	Changes between 16:9/4:3/480p output modes (<i>Should not be changed</i>)
4	Navigation button (Pressing center button will bring up the media player menu)
5	Previous file
6	Power standby (<i>For use with 7" - 15" displays</i>) (<i>There is a hard on/off switch located on the rear of the player</i>)
7	NO FUNCTION ON THIS REMOTE
8	Adjust volume up and down (<i>Only used on 7" - 15" displays with embedded player</i>)
9	NO FUNCTION ON THIS REMOTE
10	Next file

Chapter 3 – Creating Content for your system

Your Digital Signage System does not normally ship with any content creation software. Our system is designed to simply play any “JPEG” images or “MPEG” videos that are placed onto the included memory card (in alphanumeric order by filename) via the included USB card reader/writer.

Recommended JPEG Image Resolution

The digital signage player outputs JPEG files in a 1920 x 1080 resolution (which is a 16:9 wide screen aspect ratio resolution). Any other file resolution will be automatically scaled if possible. If the image file is not created in a 16:9 ratio resolution, you will notice black areas at either the top or bottom of the image or on the sides. This is normal operation when displaying images that were not created in a 16:9 aspect ratio resolution. *The recommended image size is 1920 x 1080 at a minimum of 72 dpi.*

Recommended MPEG Video Size

The digital signage player outputs MPEG files in a 720 x 480 resolution (which is standard DVD quality). Any other file resolution will be automatically scaled to 720 x 480 if possible. If the video file was not created in a 720 x 480 resolution, you will notice black areas at either the top or bottom of the video or on the sides. This is normal operation when displaying images that were not created in a 720 x 480 video size. *The recommended video size is 720 x 480 at a minimum of MPEG1 quality. The system can also play MPEG2. For correct geometry, simply create the video using a 16:9 layout setting (this setting is internal to the software application being used) but still output it as 720 x 480. Any video with a resolution higher than 720x480 will not be able to be played on this system.*

Creating JPEG Image Files

You can create your static messages (JPEG image files) using any software that is capable of creating a JPEG file. A couple examples of software that you can create a JPEG file in include Microsoft Paint and Adobe Photoshop. The recommended file size is 1920 x 1080 at a minimum of 72 dpi. *RGB format is required. CMYK format can not be used and will give errors on our system.*

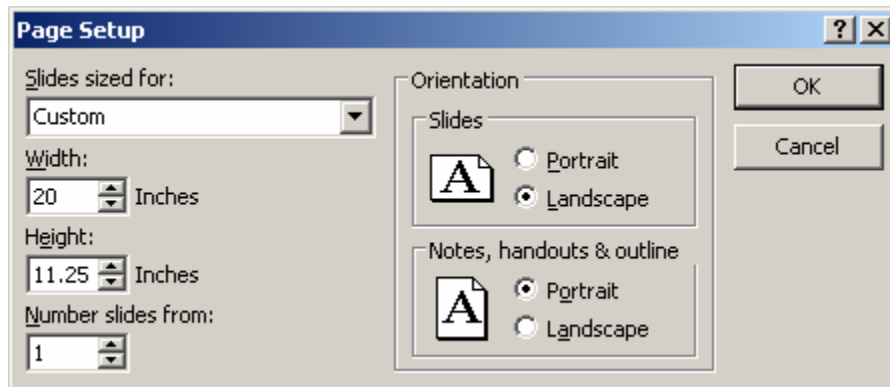
Another way you can quickly create JPEG files is by using Microsoft PowerPoint™. Many people already have PowerPoint™ and are very familiar with using it. Microsoft PowerPoint™ has the ability to quickly and easily convert all the slides that were created in a presentation to static JPEG images. It is important to note that PowerPoint™ is strictly being used to create static slides and all transitions and animation functions will be ignored. ***THE JPEG EXPORT OF MICROSOFT POWERPOINT IS FIXED AND IS NOT AS HIGH A QUALITY AS IF YOU USE A PROGRAM SUCH AS ADOBE PHOTOSHOP. THERE IS A THIRD PARTY PLUG-IN FOR MICROSOFT POWERPOINT (VERSIONS 2003 AND 2007 PRIOR TO SERVICE PACK 1) THAT CAN ALLOW YOU TO ACHIEVE A HIGHER EXPORT. IT IS CALLED “PPTOOLS” AND MORE INFORMATION CAN BE FOUND ON OUR WEBSITE OR AT WWW.PPTOOLS.COM.**

Creating JPEG Image Files Using Microsoft PowerPoint

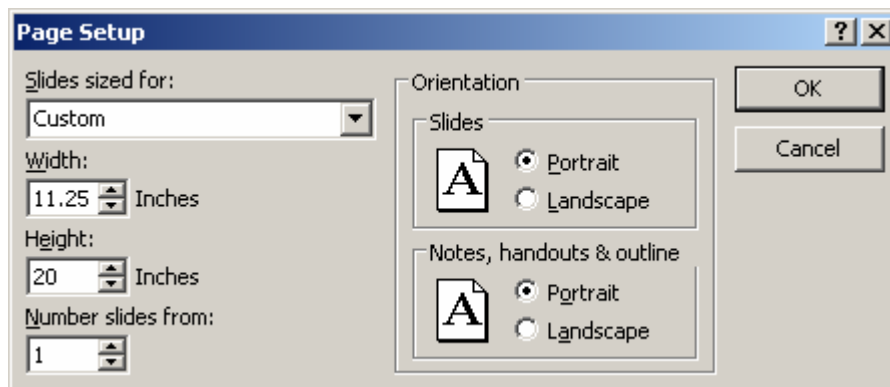
Following is the procedure on how to convert Microsoft PowerPoint™ slides to JPEG files using the “Standard” Microsoft export feature. ***NOTE: IT IS NOT NECESSARY TO ADD ANY TRANSITIONS OR ANIMATIONS TO THE SLIDES AS THESE WILL BE IGNORED WHEN THE SLIDES ARE EXPORTED TO JPEG FILES.**

- Start a new blank presentation in Microsoft PowerPoint™. You will need to alter the page setup as follows depending on your mounting configuration so that the JPEG output will result in 1920x1080 files.

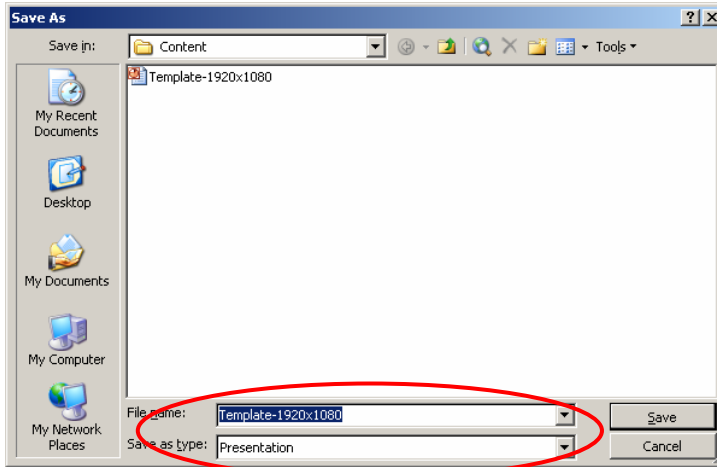
Landscape Orientation: **Set the width to 20” and the height to 11.25” as shown below.**



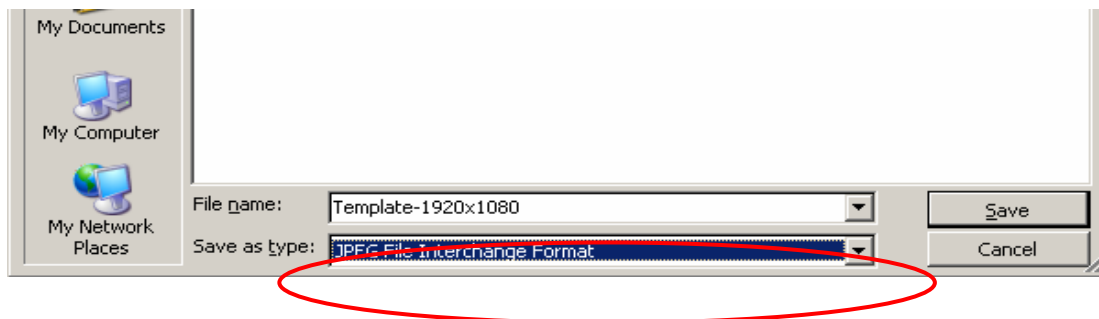
Portrait Orientation: **Set the width to 11.25” and the height to 20” as shown below. (Please Note: The resulting JPEG files will then need to be rotated 90 degrees clockwise in Windows Explorer or your graphics creation program to display properly on the system.)**



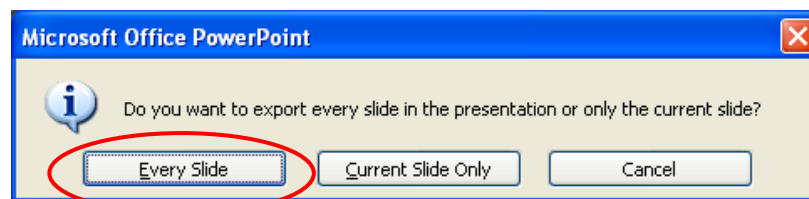
- Save your presentation on your hard drive. You can save the presentation by selecting “File” then “Save” from the top menu or by pressing “ctrl+s” on the keyboard. For this example, we will call the file “Template-1920x1080” and we will save it onto our desktop in a sub-folder called “Content”. **Please note that you are saving the main PowerPoint presentation so that it can be changed or updated later.**



- Now, you must save the slides in your presentation out as JPEG image files. To do so, go up to the menu at the top and select “File” and then “Save As” from the menu. It will bring up the “Save as” dialogue. *Notice that it automatically defaults to the same folder that you saved the presentation to.*
- You must now change the “Save as type” from “Presentation” to “JPEG File Interchange Format”. *Note: It automatically names the file the same name as the presentation. This is OK because it will actually create the JPEG slides to a new sub-folder which will be located in the “Contents” folder called “Template-1920x1080”).



- Click on “Save” and it will bring up the following dialogue window as shown.



- Click on “Every Slide” and it will automatically create the JPEG files and name them Slide1, Slide2, etc. When it is done, you will receive a message stating that they have been created and where they were stored.
- The process is now complete. If you open up that folder, you can drag and drop those files to an empty compact flash card. ***Please Note: If you have the system mounted in “Portrait Orientation”, you must rotate the JPEG files 90 degrees clockwise using windows explorer or your graphics software.**
- If you chose “Current Slide Only”, it will only export the slide on the screen to that folder and it will name it the filename that is in the dialogue box. In this tutorial, it would have created a JPEG file called “Template-1920x1080.jpg” in the “Contents” folder on your desktop. This feature can be useful if you edit one slide in a presentation later and don’t want to export them all out again.
- Below are examples of the “Landscape” and “Portrait” orientation exports.



Landscape Orientation:



Portrait Orientation (***Please Note: This is how the file looks after it is rotated 90 degrees**):

Creating MPEG Video Files

You can create custom videos (MPEG video files) using any software that is capable of creating a MPEG file. A couple examples of software that you can create a MPEG file in include Adobe Premiere and Pinnacle Studio. The recommended file size is 720 x 480 at a minimum of MPEG1 quality.

Moving content to the Digital Signage System

Moving content to the digital sign is very easy. Simply attach the included USB reader/writer to any available USB port on your computer. No drivers or software is necessary to use this device for Windows XP or 2000. Turn off the digital signage system and remove the memory card. Insert it into the appropriate slot on the USB reader/writer. This device will look like another removable hard drive in Windows explorer.

Open up the removable drive labeled "BRIGHTBOARD" (this is what we label all cards from the factory). You can just delete all the content on the card just like you would delete any file on your computer.

Then simply navigate to where you stored the created files. Highlight them and then copy them. Go back to the "BRIGHTBOARD" drive and paste the files to it. Now just remove the card and put it back into the digital signage player and turn it back on.

Chapter 4 – Care of your System

The Digital Signage System is virtually maintenance free. Periodic cleaning of the exterior of this system is all that needs to be done.

Cleaning the Display Screen

When cleaning the display screen, it is recommended that you follow the following guidelines:

- Use one of the following liquids: water, vinegar (mixed with water), isopropyl alcohol (mixed 50/50 with water), window/glass cleaner.
- Always use a soft scratch resistant cloth. Some materials, such as paper towels or old rags could cause scratches and damage the protective screen.
- Do not spray any liquids on the screen directly. Always apply the solution to your cloth first, not directly to the parts you are cleaning.

Cleaning the Enclosure

The enclosure is constructed of power coated steel. Maintaining the initial appearance of a powder coated product is a simple matter.

- Do not spray any liquids directly onto the enclosure. Always apply the solution to your cloth first, not directly to the parts you are cleaning.
- Use soapy water to clean the enclosure (using a neutral detergent).
- Wipe away the soapy water using clean water on your cloth.

Appendix A – Specifications

Listed below are the specifications for the Brightboard Professional Series Digital Signage System.

System Enclosure	PS20	PS32	PS37	PS42
Display Type	Active Matrix Color TFT LCD			
Display Colors	16.7M Colors			
Display Diagonal	20.1"	32"	37"	42"
Display Area (visible)	17.06 (H) x 10.66 (V) (in)	27.47 (H) x 15.44 (V) (in)	32.27 (H) x 18.14 (V) (in)	36.62 (H) x 20.59 (V) (in)
Brightness	300cd/m2	450cd/m2	450cd/m2	450cd/m2
Contrast Ratio	1000:1	2500:1	3500:01:00	2500:1
Viewing Angles	170 / 160 (H/V)	178 / 178 (H/V)	178 / 178 (H/V)	178 / 178 (H/V)
Power Source	110VAC Standard Outlet			
Memory Cards Supported	Compact Flash Card: 8MB ~ 8GB			
File Formats Supported	JPEG, MPEG 1, MPEG 2			
Enclosure	Powder Coated Steel			
Audio (Optional)	8 Ohm 5-Watt Speakers			
Operating Temperature	0° to 40° C			
Storage Temperature	-10° to 50° C			
Operating Humidity	20% to 90%			
Dimensions *	22.2 x 17.2 x 4.2 In	33 x 22.7 x 5.2 In	37.5 x 25.1 x 5.2 In	41.9 x 27.7 x 5.2 In

* Note: Above dimensions are (WxHxD) in inches for "Display Enclosure" only. Width and Height dimensions are also reversed when systems are mounted in "Portrait Orientation". Also, dimensions do not include wall mount bracket which adds approximately 2.5" to the total depth.

Pedestal Systems**	PS20 (Landscape)	PS32 (Landscape)	PS37 (Landscape)	PS42 (Landscape)
Dimensions ***	22.2 x 62.6 x 19 In	36.0 x 65.4 x 24 In	37.5 x 66.6 x 24 In	41.9 x 67.8 x 24 In

** Note: Dimensions shown are with the casters installed. Deduct 2.8" in the overall height if the casters are removed and the product is bolted to the floor.

*** Note: Above dimensions are (WxHxD) and are in inches.

Pedestal Systems**	PS20 (Portrait)	PS32 (Portrait)	PS37 (Portrait)	PS42 (Portrait)
Dimensions ***	NOT AVAILABLE	36.0 x 71.0 x 24 In	36.0 x 72.8 x 24 In	36.0 x 74.5 x 24 In

** Note: Dimensions shown are with the casters installed. Deduct 2.8" in the overall height if the casters are removed and the product is bolted to the floor.

*** Note: Above dimensions are (WxHxD) and are in inches.

Appendix B – Troubleshooting

The Digital Signage System has been pre-adjusted at the factory for optimum settings. This unit will generally not require any adjustment. Should you experience problems with your system, follow the procedures below for help.

PROBLEM: No Image On Display

- *Check if “Digital Signage Player” power indicator light is on.*
- *Check to make sure unit is plugged into 110 VAC outlet.*
- *Check to make sure that the compact flash card has been inserted into the systems media player.*

PROBLEM: Display Says “No Media” or similar message

- *Check to make sure that memory card is fully inserted.*
- *Check to make sure that memory card is inserted in proper orientation.*
- *Check to make sure that you have placed your JPEG or MPEG files onto the memory card.*

PROBLEM: Image is not displayed full screen

- *Make sure that the JPEG image is 1920 x 1080 in size or in a ratio of (16:9). Make sure that the MPEG files are created in an overall resolution of 720 x 480.*

If you are still experience problems with your system, visit the “FAQ” or “SUPPORT” sections of our website www.popadvisions.com or contact us at 772-221-0537.



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