BrightSign™

HD110, HD210, HD410, HD810, and HD1010

QUICK START GUIDE

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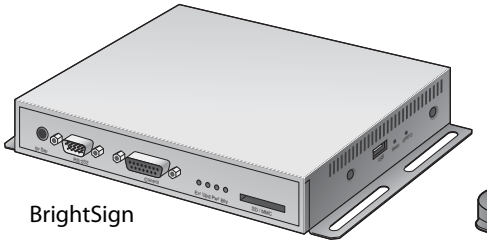
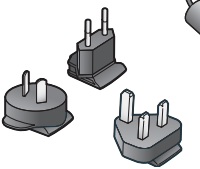
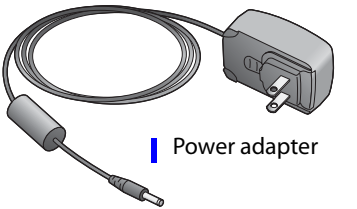
What's in the box?



BrightSign



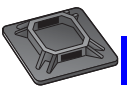
International prongs



Power adapter

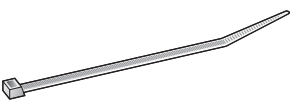
Rubber feet

SD slot cover

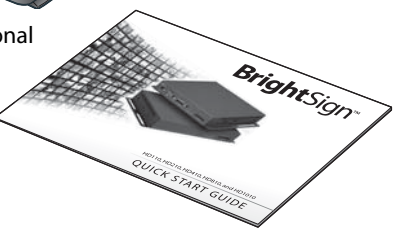


Cable mount

SD card



Cable tie



Quick Start Guide

TIP: *Use the cable mount and cable tie to keep the cables securely attached to your BrightSign.*

What is BrightSign?

Roku BrightSign is a standalone digital sign or kiosk controller. Because BrightSign is a non-PC device with no moving parts, it is durable, reliable, and an ideal solution for information kiosks, retail displays, museum exhibits, and other applications.

Benefits

- Easy to use
- Astonishing full HD quality
- Reliable solid state platform
- Custom interactivity and control
- Powerful zones and synchronization
- Versatile networking options

Capabilities

You can use BrightSign to do any combination of the following:

- Play content from a Secure Digital card (SD or SDHC card) or USB Flash drive
- Display content on a monitor or TV (standard or high-definition)
- Play looping video, images and music in HD
- Use zones to divide the display into separate content windows to playback video and images simultaneously
- Schedule content to play at a specific time (hour, day, month, year)
- Easily create looping displays using text based playlists
- Run interactive presentations that playback content based on inputs such as buttons, touch screens, mice, and more
- Update software and content remotely with BrightSign networking

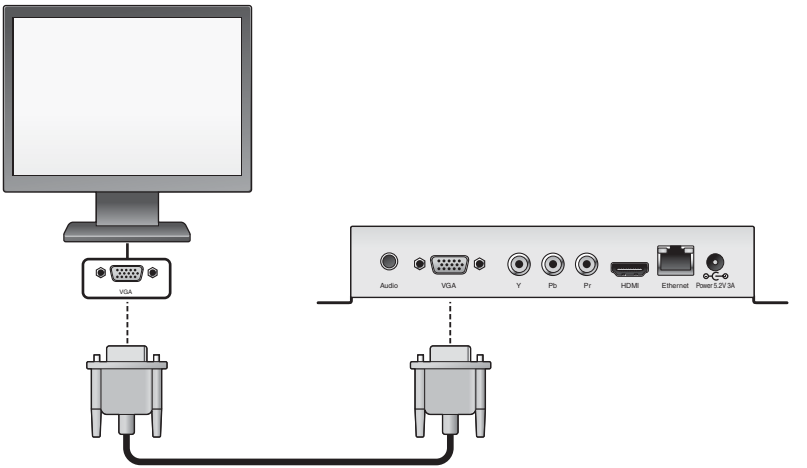
Models

Looping HD video playlists	Interactivity and control	Networking for remote content delivery and reporting
BrightSign HD110 • Simple looping video playback • Full HD • Playlists and zones	**BrightSign HD410** • All HD110 features • Basic interactivity via buttons and GPIO controls • Synchronization for video wall implementations	**BrightSign HD210** • All HD110 features • Networking support for remote content updates
	BrightSign HD810 • All HD410 features • Full interactivity including touch screens and USB devices • Live video feed • Support for A/V expansion module accessories	**BrightSign HD1010** • All HD810 features • Networking support

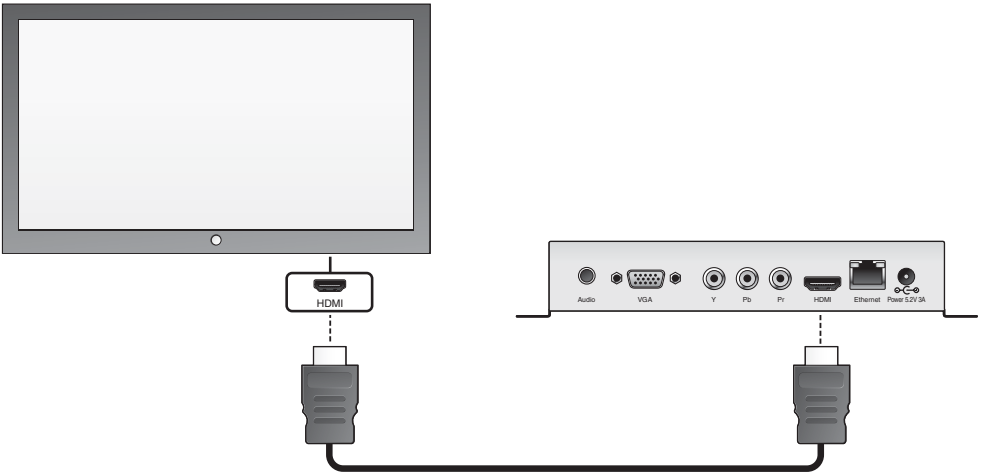
NOTE: *For details on the features of each BrightSign model, see "BrightSign HD Compact feature comparison" on page 22.*

Connecting a display

Using a VGA cable

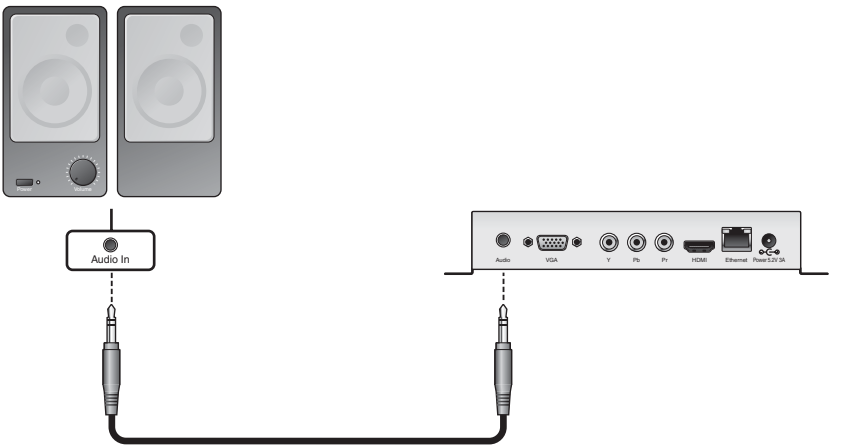


Using an HDMI cable



Connecting speakers

If your presentations include audio, you can connect powered speakers to your BrightSign.



Playing the demo

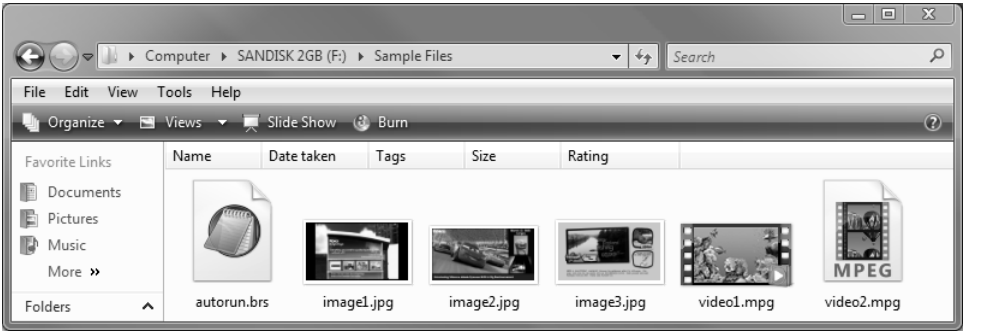
The included SD card contains a simple BrightSign demo that you can run on your BrightSign. Follow these steps to play the demo:

1. Connect a display and speakers to your BrightSign as described earlier in this guide.
2. Insert the included SD card into your BrightSign. (This SD card contains the demo content.)
3. Turn on the power.

Creating a playlist

A playlist enables you to play one or more files in a loop. This section shows you how to create a playlist using the sample files provided with your BrightSign.

1. Connect an SD card reader (sold separately) to your computer.
2. Insert the SD card included with your BrightSign into the card reader.
3. Make a backup copy of the SD card to preserve the original contents of the card. As you complete steps 4 - 11 you will overwrite the contents of the demo on the SD card.
4. Open the **Sample Playlist Files** folder on the SD card, so you can see the names of the files in this folder as shown in Example 1.



EXAMPLE 1: *Sample Playlist Files folder (3 JPG images, 2 MPG videos, and 1 AUTORUN.BRS script)*

5 On your computer, open **Notepad** or a similar text editor.

6 On the first line of your Notepad file, set the video mode by entering one the following:

- If your BrightSign is connected to a VGA display, enter: **Videomode 1024x768x75p**
- If your BrightSign is connected to an HDMI display, enter: **Videomode 1280x720x60p**

7 On separate lines, type the name of each JPG file located in the Sample Playlist Files folder, as shown in Example 2.

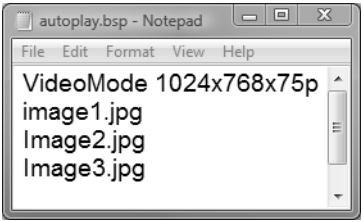
8 Save the text file with the name **AUTOPLAY.BSP**:

a Click **File > Save As**.

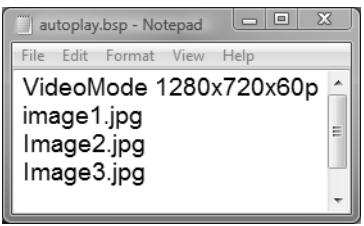
b In the **Save as type** field, select **All Files**.

c In the **File name** field, enter **AUTOPLAY.BSP**.

d Click **Save**. That's it. You just created a simple playlist that loops three images.



Example 2a: *Playlist for VGA display*

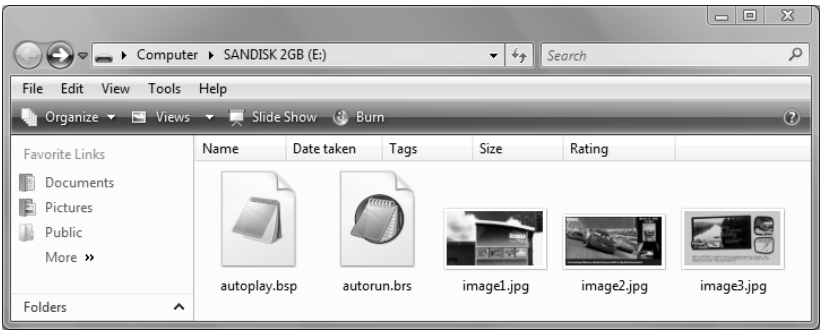


Example 2b: *Playlist for HDMI display*

9 Copy the following files to the root directory of the SD card, as shown in Example 3:

- Your AUTOPLAY.BSP file
- The three sample JPG images (from the Sample Playlist Files folder)
- The AUTORUN.BRS file (from the Sample Playlist Files folder)

NOTE: *Your new AUTORUN.BRS file overwrites the demo's AUTORUN.BRS file.*



EXAMPLE 3: *Root of SD card with playlist, 3 JPG images, and AUTORUN.BRS script*

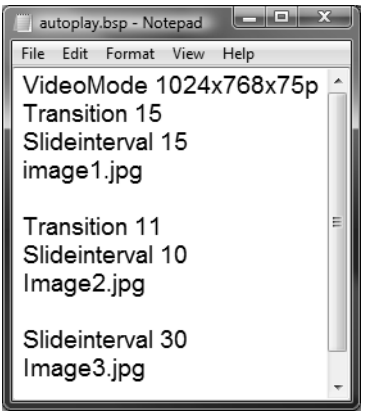
10 Remove the SD card from your card reader and insert the SD card into your BrightSign.

11 Turn on your BrightSign.

Changing BrightSign settings

You can also use a playlist to customize BrightSign settings. Try customizing any of the following settings in your playlist:

- **Set the delay between images.** The default delay between images is 3 seconds. You change this setting by adding one or more **Slideinterval** keywords followed by the number of seconds you want the image to display. In Example 4, image1 plays for 15 seconds, image2 plays for 10 seconds, and image3 plays for 30 seconds.
- **Set PowerPoint style image effects.** When displaying images, you can choose from 20+ transition effects. To add a transition, insert one or more **Transition** keywords in your playlist. Insert the keyword before the image to which you want to apply the transition. In Example 4, there is a horizontal venetian blind effect before images 2 and 3, and image 3 fades into image 1. For a full list of transition effects, see the *User Guide at:* www.brightsign.biz/support/userguide.php.



Example 4: *Change settings*

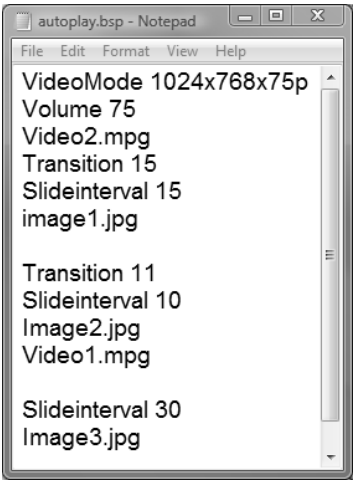
Adding videos to a playlist

In addition to playing images, you can use a playlist to play one or more videos. Just add the names of the videos to your playlist. Try adding the two sample videos to your playlist:

1. Open your **AUTOPLAY.BSP** file in Notepad or a similar text editor.
2. On separate lines, add the names of the 2 MPG files from the Sample Playlist Files folder on the SD card.

   TIP: *The images and videos play in the same order as they appear in the playlist, so enter the video file names where you want them to appear.*

3. (Optional) Set the volume level by entering the **Volume** keyword followed by a volume setting. The default volume level is 100 (the maximum).
4. Save the changes to your **AUTOPLAY.BSP** file.
5. Copy your revised **AUTOPLAY.BSP** file and the two **MPG** files to the root of the SD card.
6. Remove the SD card from your card reader and insert the SD card into your BrightSign.
7. Turn on your BrightSign.



Example 5: *Change settings*

Playing your own presentations

Playing a video loop

1. Copy your video file (MPEG-1, MPEG-2, H.264) into the root directory of an SD card and name it **AUTOPLAY.VOB** or **AUTOPLAY.MPG**.
2. Copy **AUTORUN.BRS** from the demo SD card to the root directory of your SD card.
3. Insert your SD card into your BrightSign.
4. Turn on your BrightSign. After a few moments, BrightSign plays the video and repeats it automatically to create a loop.

Example 6: *SD card with video loop*

Playing a series of files using playlists

To play a series of files one after the other, you need to create a playlist that describes the items you want to play.

1 Using a text editor, such as Notepad, enter the names of the files you want to play in the order you want them to play. A playlist can include the following types of files:

- **Video:** MPG **(**MPEG-2 transport streams with MP3 audio)
- **Image:** BMP, PNG, JPG (JPEG)
- **Audio:** MP3

NOTE: *We're adding support for more file formats. Visit* www.brightsign.biz/support *for a current list of supported file types.*

2 Use the **Save As** command to name the file **AUTOPLAY.BSP**.

NOTE: *Most text editors save files with a TXT extension, so be sure to override the extension.*

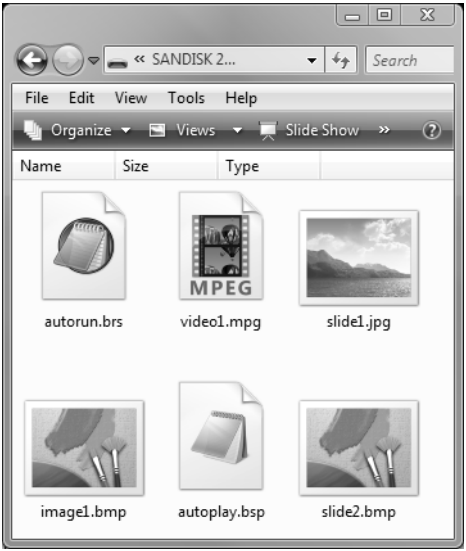
3 Copy the following files to the root directory of your SD card:

- **AUTOPLAY.BSP** (the playlist you just created)
- Media files referenced in your playlist
- **AUTORUN.BRS** (copy this file from the demo SD card)

4 Insert your SD card into your BrightSign.

5 Turn on your BrightSign. After a few moments, BrightSign plays the playlist and repeats it automatically.

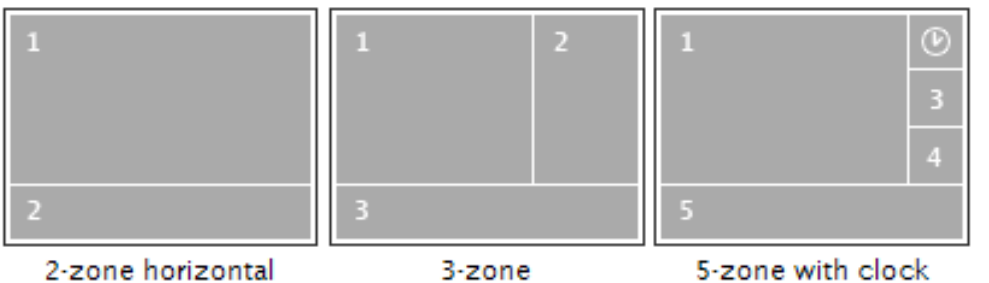
TIP: *You can also add commands to your playlist to control playback of the files or to play the playlist at a scheduled time. For details, see the* User Guide *at:* www.brightsign.biz/support/userguide.php.



Example 7: *SD card with playlist files*

Displaying items simultaneously using BrightSign Zones

With BrightSign zones you can divide the screen into windows and play different types of content in each window, including video, images, ticker feeds (RSS or text), or a clock. You can also control the background color, background image, font, text color, and transitions. See the *User Guide* for details on adding zones to your presentations.



Example 8: *BrightSign Zones examples*

Playing an interactive presentation

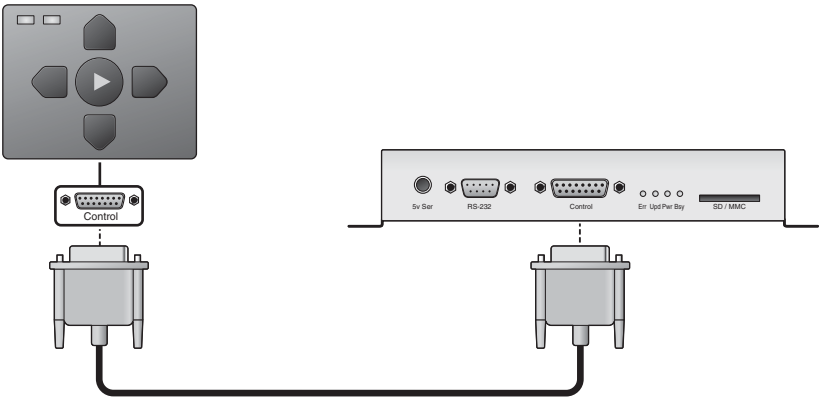
With BrightSign HD410, HD810, and HD1010 you can create an interactive presentation that responds to user input from buttons or any other GPIO device that is connected to the RS232 port and generating serial commands. The HD 810 and HD1010 also support input for interactivity from USB devices such as touch screens, mice, keyboards, and barcode scanners, and the HD1010 also supports input for interactivity via the Ethernet port.

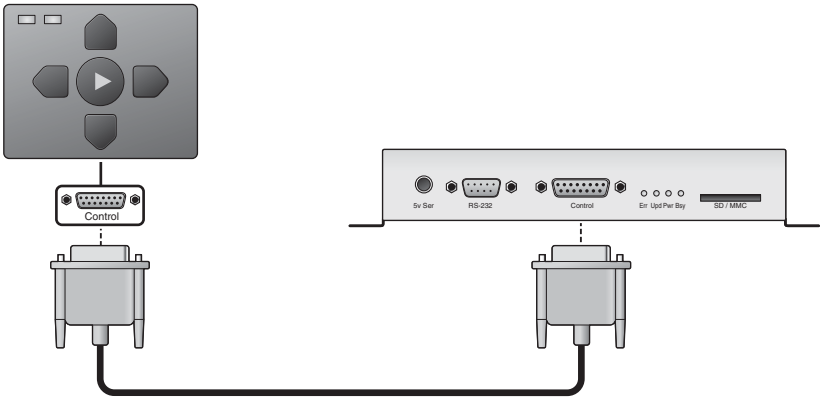
To play an interactive presentation, you need an interactive playlist. An interactive playlist is a spreadsheet file that contains a list of information separated by commas (CSV file). The interactive playlist describes which media files to playback based on the user's input. For a complete list of supported devices and instructions on creating an interactive playlist, see the *User Guide* at: www.brightsign.biz/support/userguide.php.

NOTE: *If you're outside the United States, check the regional settings in Excel and make sure the list separator is a comma and the decimal separator is a period.*

Connecting an input device

To play interactive presentations, you need to connect an input device to your BrightSign.





Adding BrightSign to a network

When you add your BrightSign HD1010 to a network, you can update your content and the BrightSign software remotely and securely. You can use Simple Networking software to update content from a BrightSign folder on your web server or an RSS feed, or you can use BrightSign Network Manager, a web-based solution that is designed for enterprise environments. For details on adding your BrightSign to a network, see the *User Guide at:* www.brightsign.biz/support/userguide.php.

Next steps

To get the most from your BrightSign, download the latest software, read the latest documentation, and play other demonstrations.

- **Documentation:** Get the latest User Guides, Release Notes, Scripting references, Hardware reference manuals, and Regulatory Guide at: www.brightsign.biz/support/userguide.php
- **Demos:** Get an overview of what Brightsign is capable of: interactivity, looping, high definition, and multiple content zones on a single screen. Download demos at: www.brightsign.biz/support/demos
  and use the following login information:
  - **username:** brightsign
  - **password:** Demos246
- **Downloads:** Get the latest BrightSign software, Autoplay script, scripts for manually setting the date & time, and scripts for testing button boards at: www.brightsign.biz/support/download.php
- **Support:** Get answers to your questions on the support website: www.brightsign.biz/support
  —or—
  Contact technical support at: www.brightsign.biz/support/contact_form.php

BrightSign HD Compact feature comparison

Features	HD110	HD210	HD410	HD810	HD1010
Looping playlist support	X	X	X	X	X
Basic interactivity (via GPIO port supporting buttons and LEDs)			X	X	X
Advanced interactivity (buttons, touch screens, LEDs, and any USB device such as speakers, keyboards, mice, more)				X	X
Playback scheduling		X		X	X
Synchronization (video sync of multiple displays)			GPIO	GPIO	GPIO or ethernet
Zones (multiple content windows on single screen)	X	X	X	X	X
Text ticker feed and subtitles	X	X	X	X	X
RSS ticker feed		X			X
Networking for remote content delivery		X			X
Media formats[a]	**HD110**	**HD210**	**HD410**	**HD810**	**HD1010**
Video: MPEG-2 transport streams with MP3 audio (MPG)	X	X	X	X	X
Image: BMP, PNG, JPEG (JPG)	X	X	X	X	X
Audio: MP3	X	X	X	X	X
Display resolutions	**HD110**	**HD210**	**HD410**	**HD810**	**HD1010**
1080p (HDMI)	X	X	X	X	X
1080i, 720p, 576p, 480p (HDMI & component)	X	X	X	X	X
1360x768, 1024x768 (HDMI & VGA)	X	X	X	X	X

Connectors	HD110	HD210	HD410	HD810	HD1010
SDHC slot	X	X	X	X	X
VGA out	X	X	X	X	X
Component video out				X	X
HDMI out (DVI via adaptor)	X	X	X	X	X
GPIO control port (8 bi-directional)			X	X	X
RS232			X	X	X
5V serial mini jack			X	X	X
Reset button				X	X
USB host port				X	X
Ethernet 10/100		X			X
Analog stereo audio out (stereo 1/8″ jack line)	X	X	X	X	X
Miscellaneous	**HD110**	**HD210**	**HD410**	**HD810**	**HD1010**
Dimensions (without mounting brackets or connectors)	168mm (W) x 149mm (D) x 30mm (H) or 6.6″ (W) x 5.9″ (D) x 1.2″ (H)				
Weight	630 grams or 20.3 oz.				
Power	5V / 3.0A				
International power supply & regulatory approvals	X	X	X	X	X
Wall mounting brackets	X	X	X	X	X
1 year warranty (parts and labor)	X	X	X	X	X

a We're adding support for more media formats. Visit www.brightsign.biz/support for a current list of supported formats.

Federal Communications Commission (FCC) Interference Statement

The device complies with Part 15 of FCC rules. Operation is subject to the following two Conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operations.

This device has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio/television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1 Reorient or relocate the receiving antenna.
2 Increase the separation between the equipment and the receiver.
3 Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4 Consult the dealer or an experienced radio/TV technician for help.

Note:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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www.brightsign.biz

DOC-005-01