



Broadcast Radio Ltd

# SMARTSIGN 2

User Manual v2.0

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## INTRODUCTION

Thanks for your interest in SmartSign 2.

SmartSign 2 is an advanced studio signage application designed to run on a standard Windows 10 (or 11) PC. It can be used to convey a variety of information to presenters, visitors or staff within your radio station or indeed within any other type of business.

The core information that SmartSign 2 can convey includes:

- Smart Display Tiles - Tiles that change colour, text and graphics when triggered by external events (hardware or virtual hardware (IP) inputs). These can also be interactive to trigger outgoing hardware or virtual events.
- Analogue or Digital Clocks - Display the time the way that is most useful for your presenters. You can also display the date and even the time as spoken phrase (ie Twenty two minutes to three).
- RSS Feeds - Display headlines and other key information from a wide range of external sources.
- Audio & Video - Show local video streams or YouTube videos. You can also stream an audio stream which is perfect for waiting areas, engineering or reception.
- Social Media & Analytics - Track how many followers you have on Twitter, display latest tweets or even website traffic from Google Analytics.
- Now Playing Information - Get key information from Myriad 5 and other compatible playout systems.
- Audio Levels - Display 'confidence' audio levels from virtually any audio source with the free audio monitor add-on application.

Although primarily designed for in-studio signage, SmartSign 2 is suitable for any application where information from multiple sources needs to be displayed in a prominent way.

Applications may include:

- Studio Clock & Tally Display
- Mic Live Warnings
- On Air Indication
- Newsroom Displays
- Reception Displays
- Door Entry Management

Because you design the layout, you can control the application!

## TAKE A VIDEO TOUR

In addition to this user guide, we would strongly recommend watching the introduction video below as it will help you learn your way around SmartSign 2 and guide you through setting up your first Smart Sign 2.



<https://youtu.be/ow7XeDMUIe0>

## INSTALLATION

If you have purchased SmartSign 2 online then you receive an email that includes a link to download the software as well as your unique license key.

It is also possible to install SmartSign 2 and evaluate the software free for up to 30 days. To try SmartSign 2, follow the installation steps below but skip the licensing stage. You will be able to run the application without a license for the first 30 days, after which you will need to purchase a license in order to continue.

To install SmartSign 2, click on the link below.

<https://broadrad.com/SS2Download>

Then click on the **Download** button.



# SmartSign v2 by Broadcast Radio

for Windows by Broadcast Radio

## Latest release

Version 2.0.32.0

Oct 25, 2021 at 12:06

27.51 MB

DOWNLOAD

**v2.0.32 22nd October 2021**

### Fixes

- A fix was made to the MediaTile when configured to open a network media file.

## Releases

Sort By: Version ▾

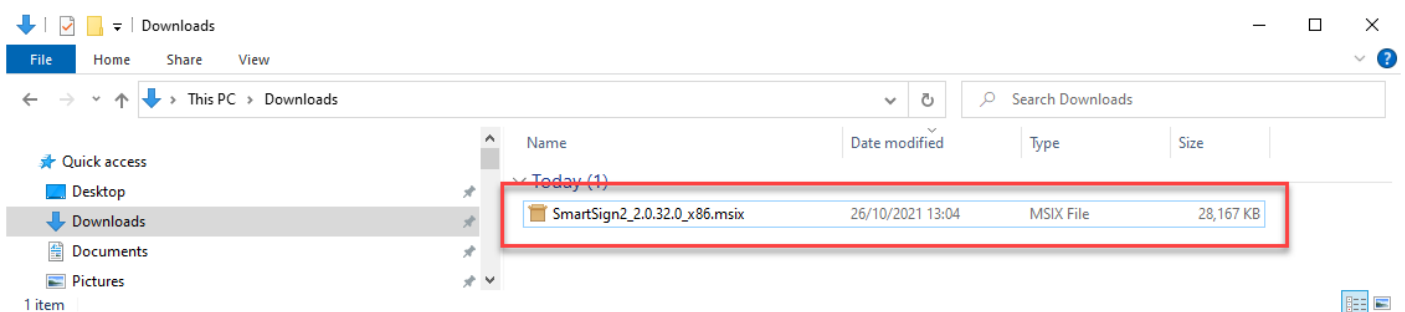
Version 2.0.31.0

Oct 20, 2021 at 11:34

Version 2.0.30.0

Oct 15, 2021 at 10:56

Once the installer file has finished downloading, open the folder and double click on the **.MSIX** file to begin the installation.



Click on the **Install** button. SmartSign 2 will now install.

# Install SmartSign v2 by Broadcast Radio?



Publisher: Broadcast Radio Ltd.

Version: 2.0.32.0

## Capabilities:

- Access your home or work networks
- Access your Internet connection
- Access your Internet connection and act as a server.

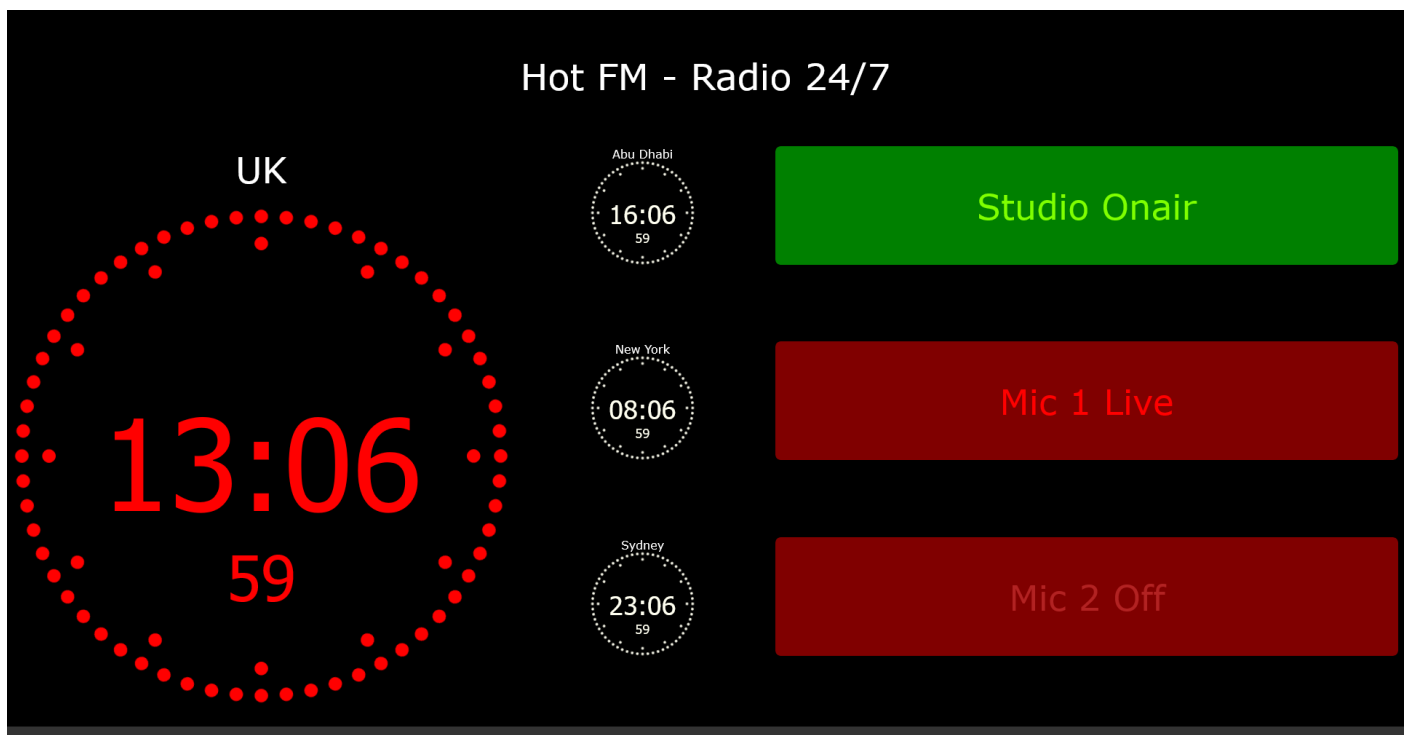
[More](#)

☒ Launch when ready

Install

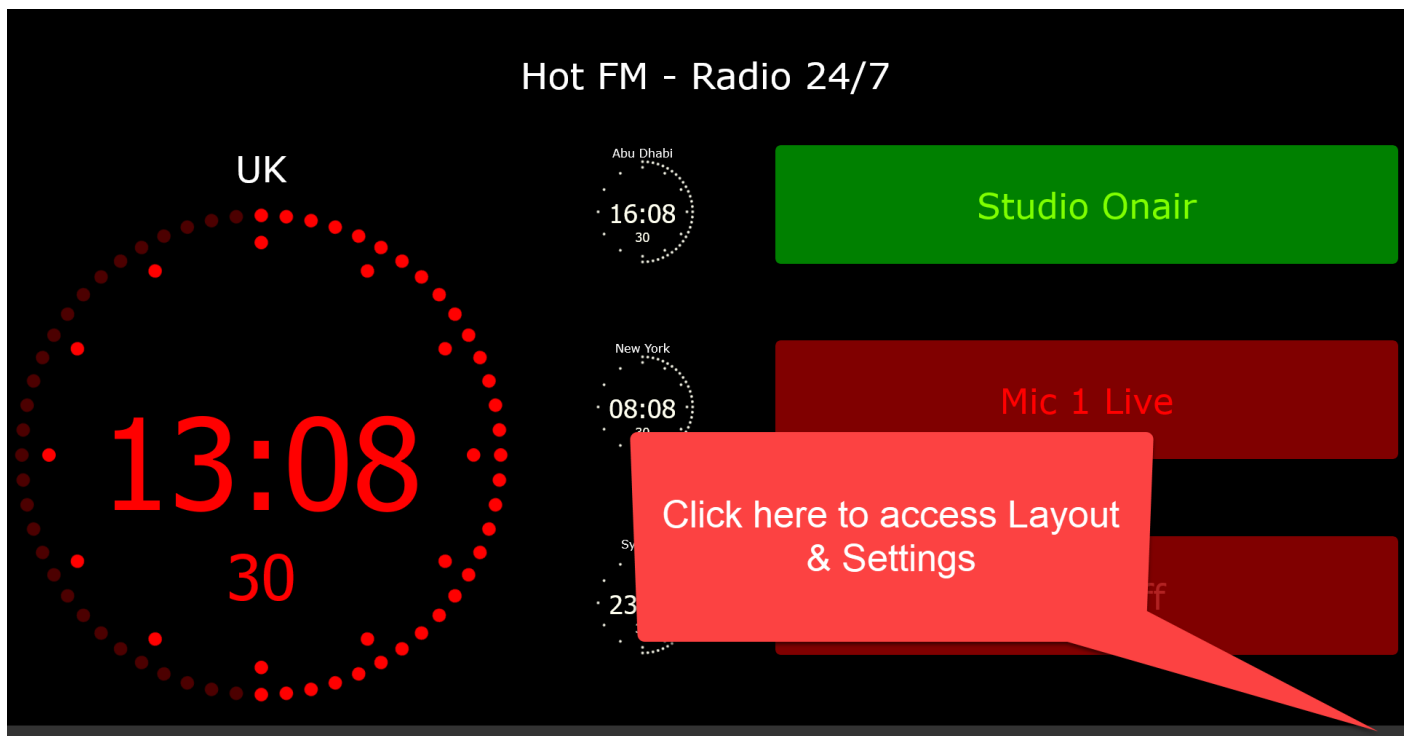


Once the installation process is complete, SmartSign 2 will launch automatically with the default layout.



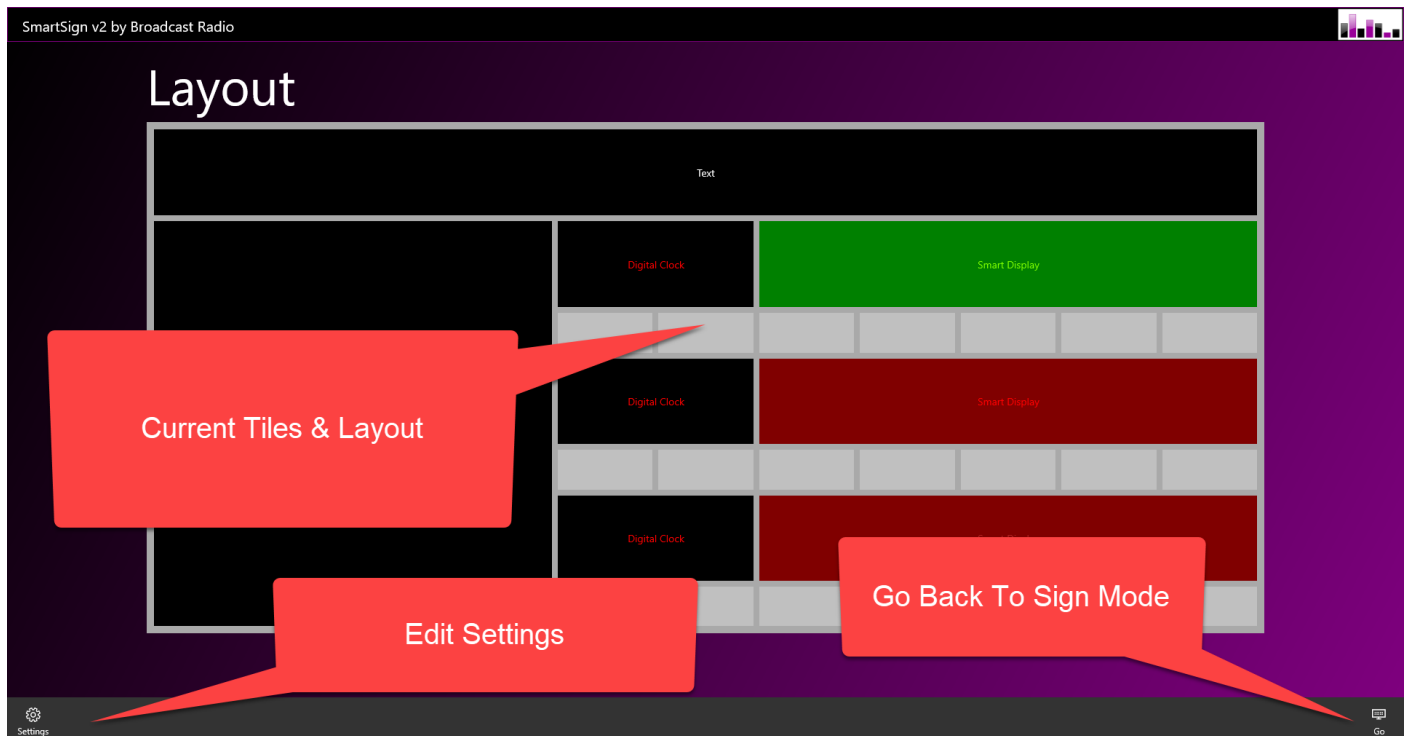
## SETUP & LICENSING

If you want to adjust the layout or settings for your SmartSign 2, click in the bottom right hand corner of the SmartSign 2 display area to enter Layout Mode.



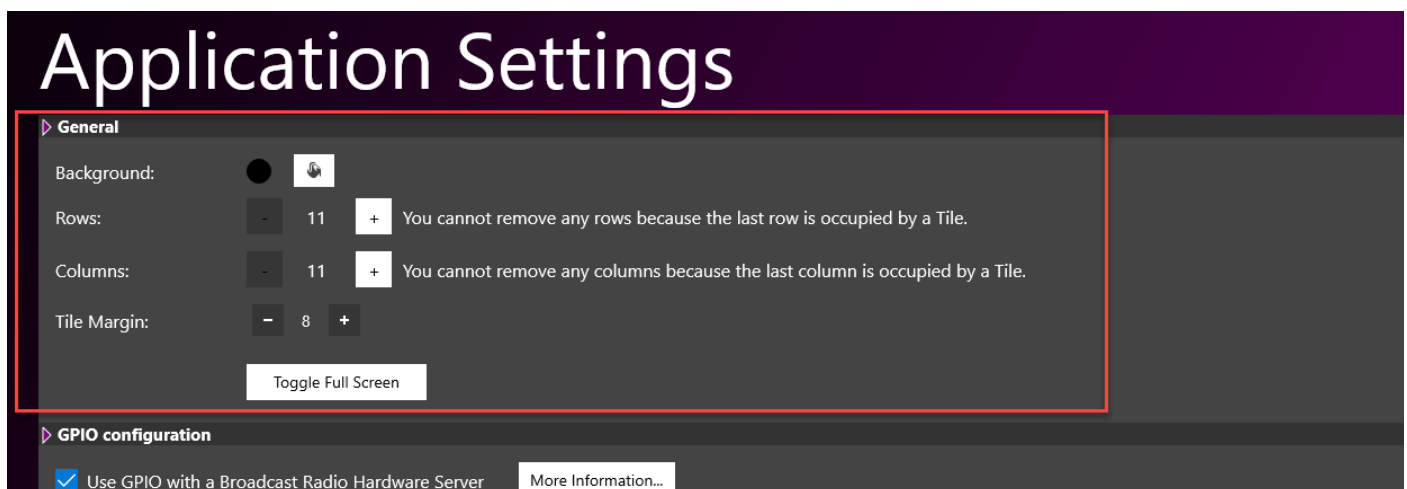
This will take you to Layout Mode which is used to alter the position and settings for Tiles or to add more Tiles to your sign. You can also access the Settings from Layout Mode.





## BACKGROUND COLOUR, COLUMN/ROW COUNT & MARGIN SIZE

The **General** section of the Settings page allows you to alter some of the basic settings for your SmartSign 2.



These include:

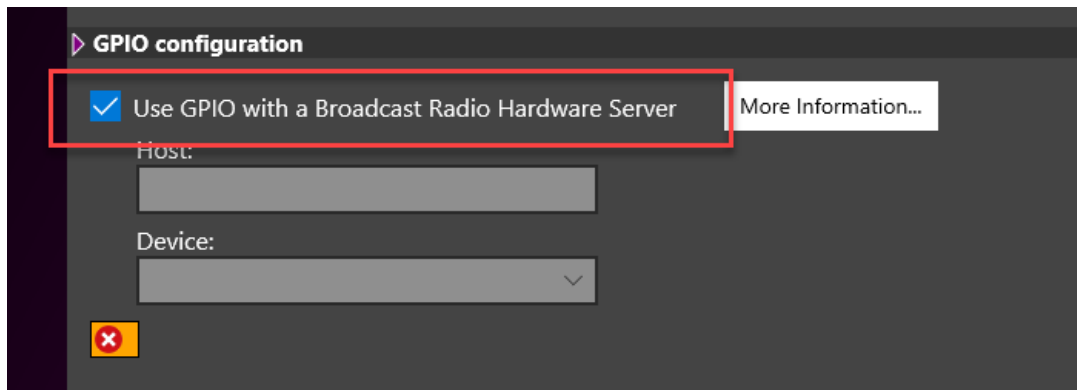
- Background – Set the background colour for your SmartSign 2.
- Rows / Columns – Set the number of Rows and Columns on the grid that you use to design your smart sign.
- Tile Margin – Adjust the gap between adjacent Tiles.

## GPIO CONFIGURATION

If you want to use the Broadcast Radio Hardware Service to interface physical devices with your SmartSign 2 then you need to know the location of the PC that is running the BR Hardware Service (name or IP address).

To set this follow these steps:

1. In the **Settings** page, scroll down to the **GPIO Configuration** section.
2. Tick the **Use GPIO with a Broadcast Radio Hardware Service** option.



3. Add the IP address of computer name in the **Host** section. Please note you can use 'localhost' if the BR Hardware Service is running on the same PC.
4. Once SS2 has connected to the Hardware Service, select the **Device** you want it to monitor from the drop down list.

*TIP – You may have multiple devices that are relevant (like hardware from ST1 and hardware from ST2), in this case we advice using the a Virtual Network Device then use the Patch Bay feature inside the BR Hardware Service itself to patch hardware from different devices to a common Virtual Device that all your SS2's can monitor.*

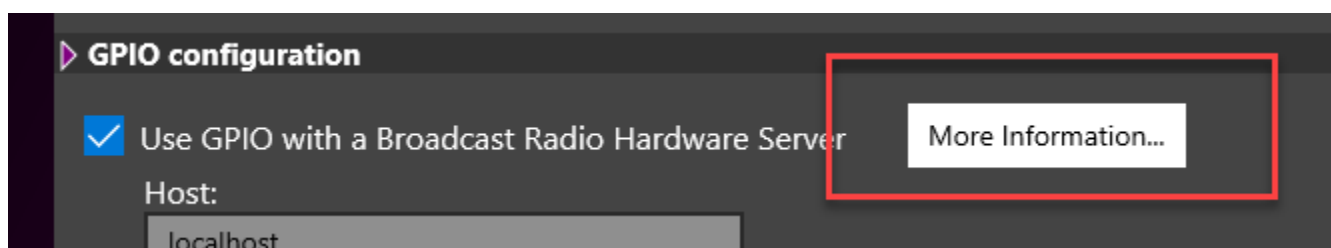
**Important Information:** Due to the security architecture of Windows 10, running the **BR Hardware Service & SmartSign 2 on the same PC will not work unless you also run the script below as an Administrator.**

To enable the BR Hardware Service and SmartSign 2 to run on the same physical PC, run a **Command Prompt (as Administrator)** and carefully type or paste in the command below, then hit <enter>.

```
CheckNetIsolation LoopbackExempt -a -n="BroadcastRadio.SmartSignv2_9aj7vab8x1m8a"
```

This will authorise SmartSign 2 to access the local resources needed to interact with the BR Hardware Service.

For more information click on the **More Information** button to access the appropriate article on our helpdesk.



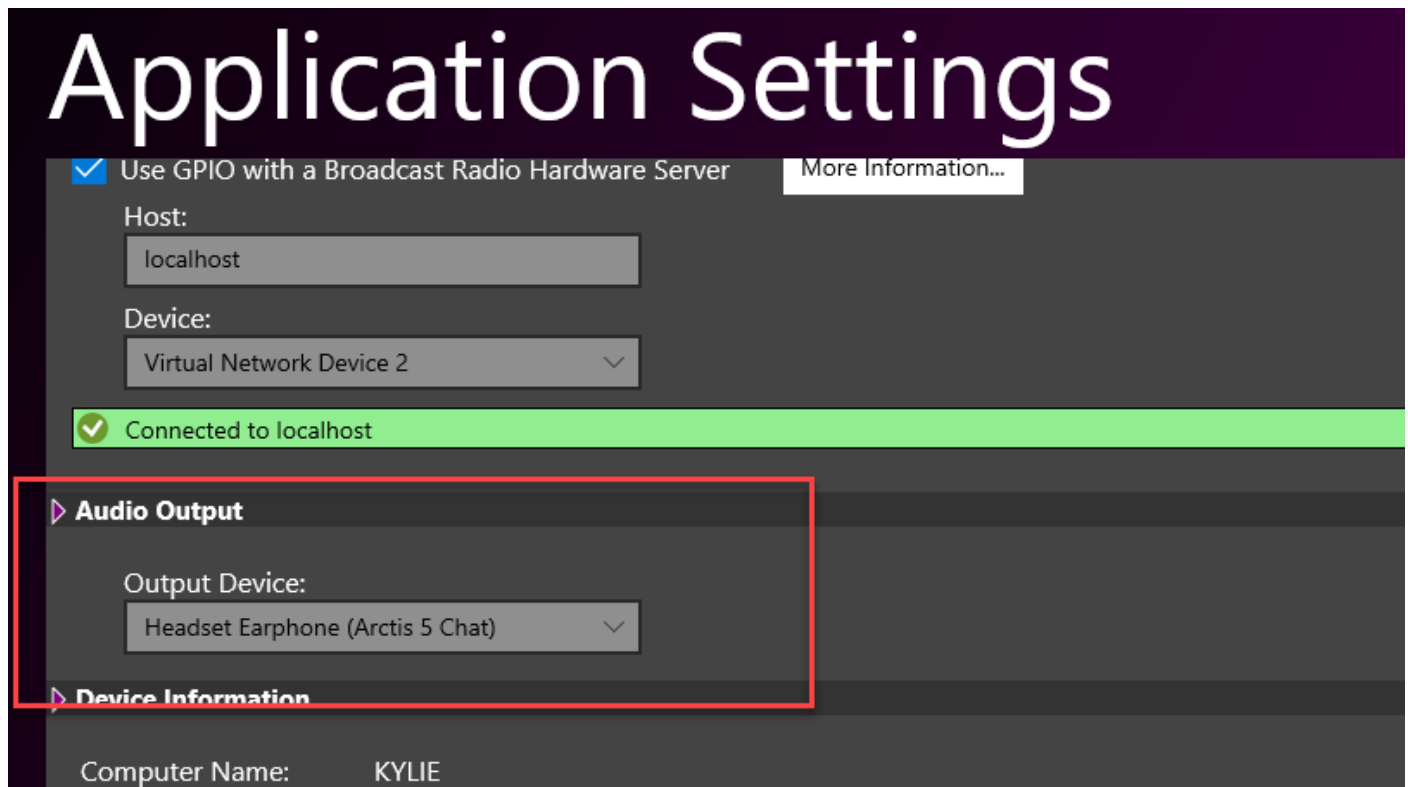
For information on setting up the BR Hardware Service, see the separate BR Hardware Service documentation.

[How Myriad 5 connects to the real world via the BR Hardware Service – Broadcast Radio Help](#)

## LOCAL SOUND DEVICE

Some of the Tiles in SmartSign 2 can output audio (Media and Youtube tiles for example).

You can set the sound device you want to use in the **Audio Output** section of the Settings page.



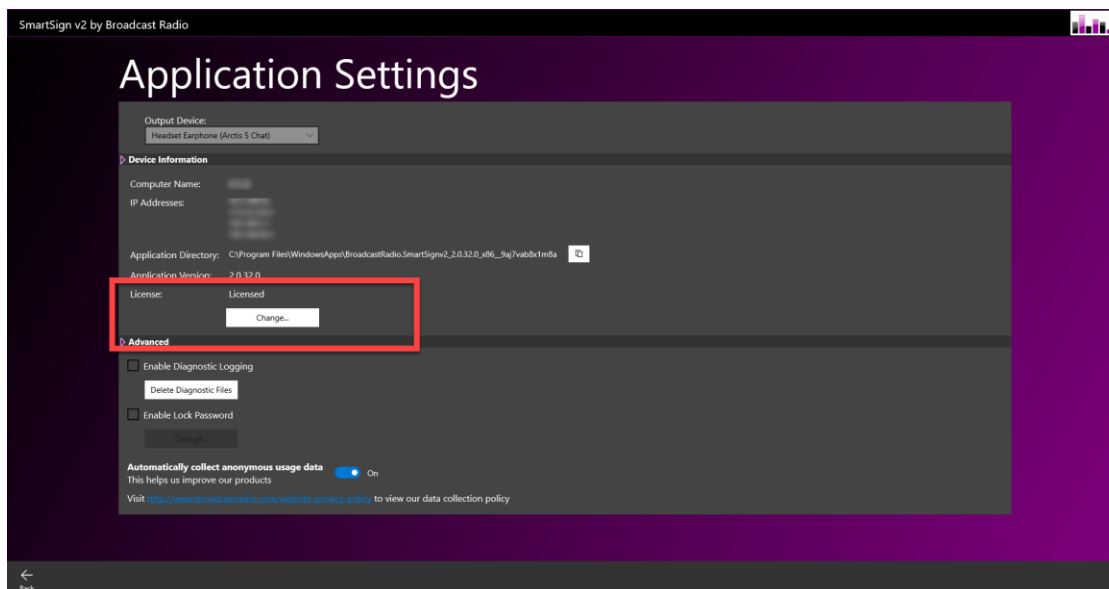
Use the drop down option to select the device you want.

## DEVICE INFORMATION & LICENSING

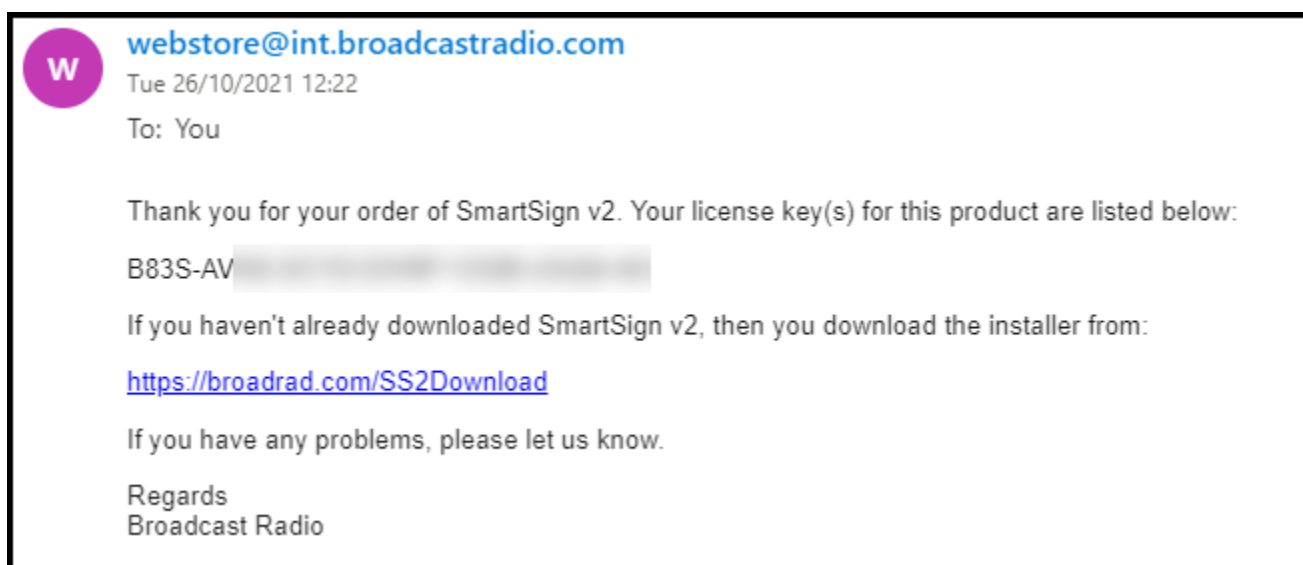
The **Device Information** section displays general information about your SmartSign 2 installation and the host device. It also allows you to enter or update a license code.

To license your SmartSign 2, follow these steps:

1. Click on **Settings**.
2. Scroll down to the **Device Information** section.

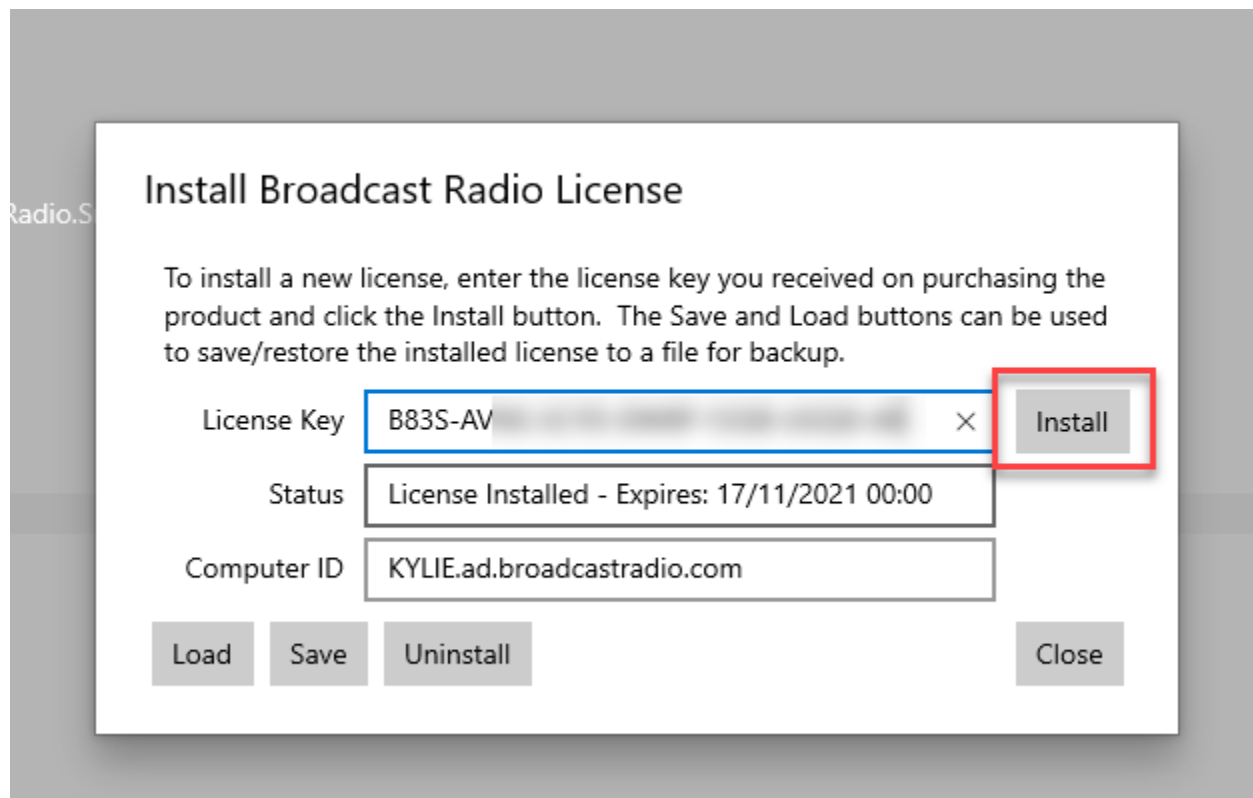


3. In the **License** section click on **Install License** (or Change if you already have a license you need to update).
4. Whether you purchased your SmartSign 2 directly online or via the Broadcast Radio sales team, you should have received an email similar to the one below.



Copy the license code so that you can add it to your SmartSign 2.

5. On the **License Window**, paste in your license key and then click on **Install**.

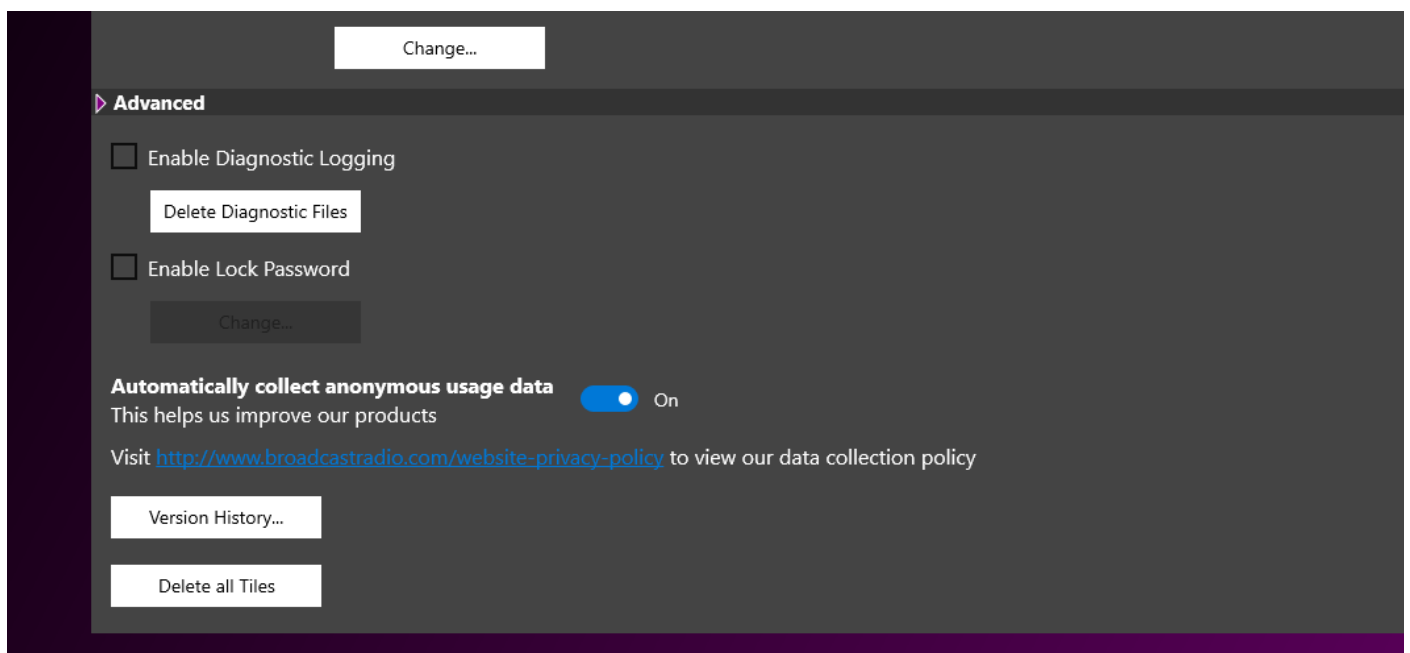


You can then close the License Window.

Your SmartSign 2 is now licensed and will automatically update the license periodically so you should not need to license the system again (even if you un-install and re-install).

## ADVANCED SETTINGS

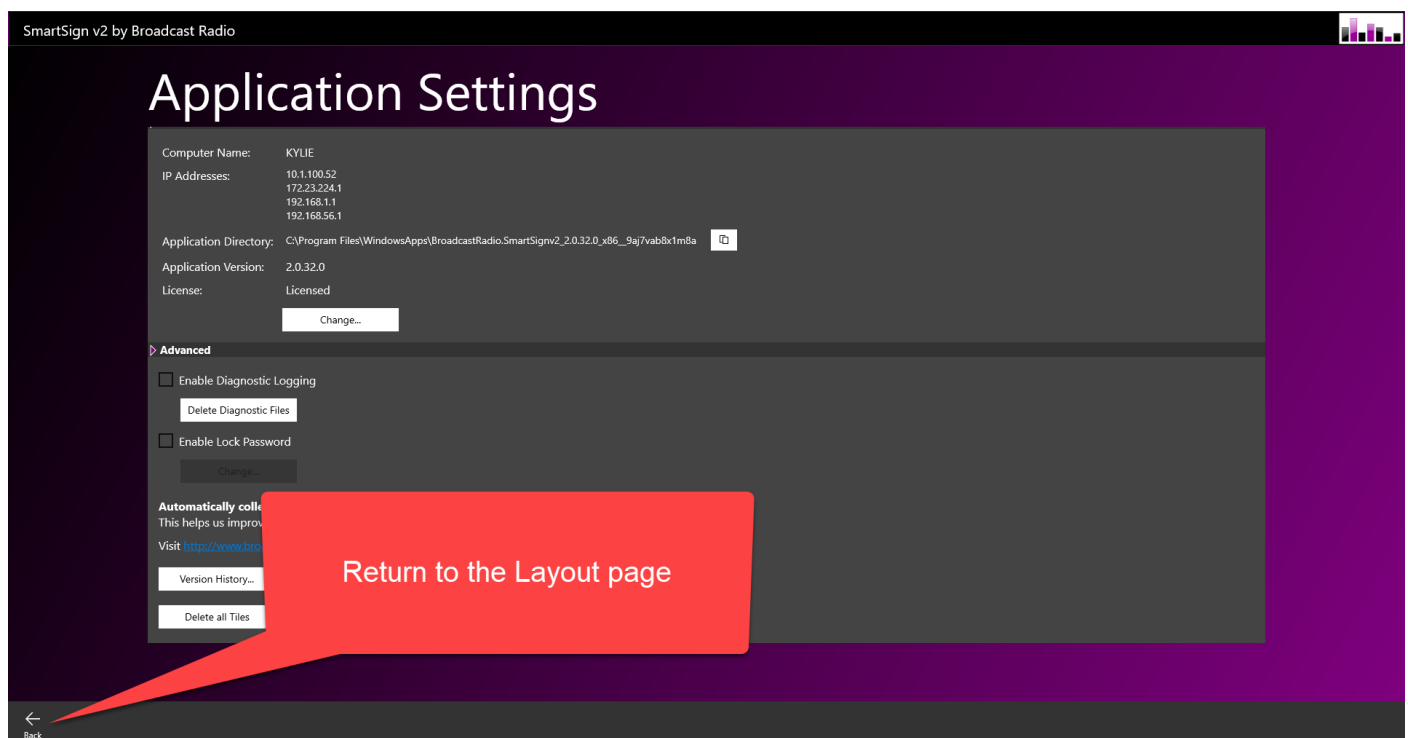
The **Advanced** section allows access to some more advanced options.



These include:

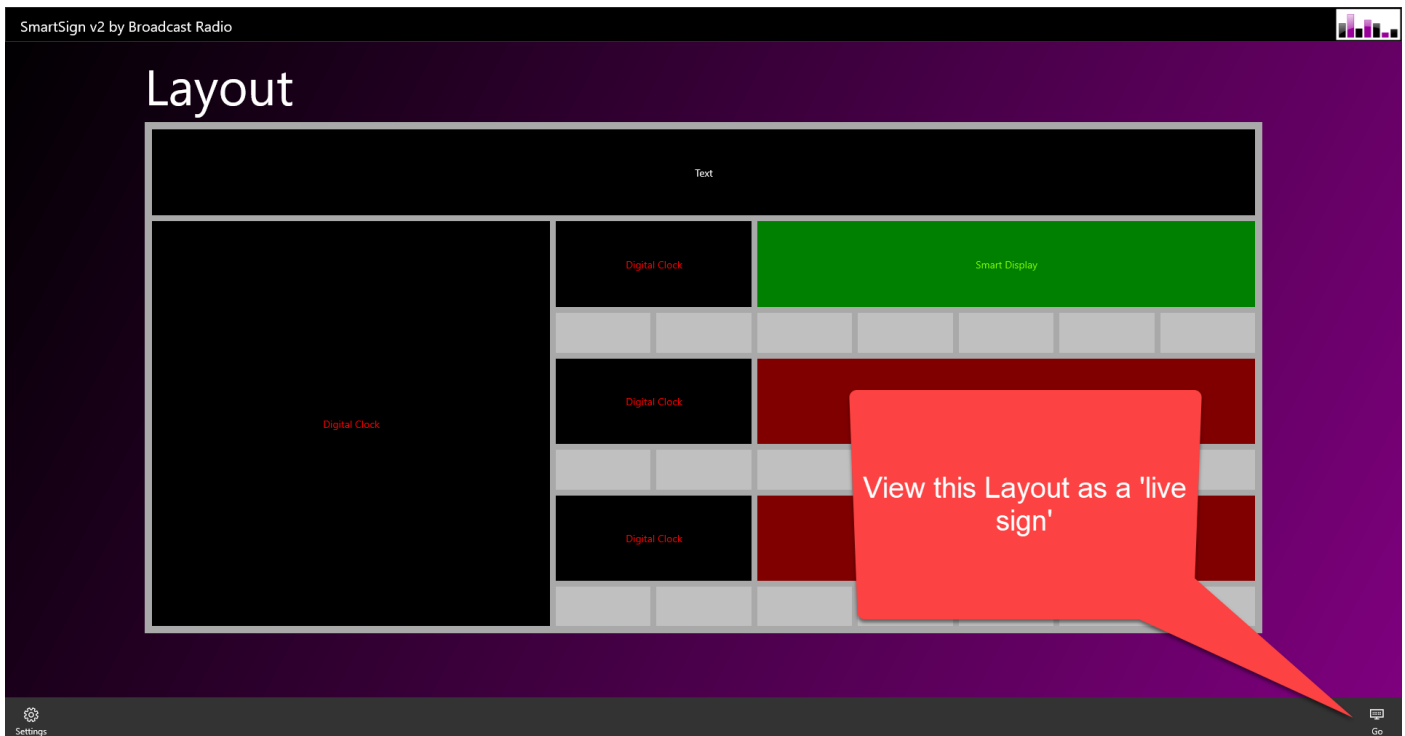
- Enabled Diagnostic Logging – If you are experiencing difficulties with your SmartSign, the BR support team may ask you to turn this option on to allow them to see what is happening in more detail. You can also delete the Diagnostic Files using the Delete Diagnostic Files button. This option should be disabled under normal operation.
- Enable Lock Password – This option allows you to add a simple password to prevent access to the Layout & Settings screens without a password.
- Automatically Collect Anonymous Usage Data – This option helps us to support and develop the product by sending us anonymous information. You can toggle this option on or off as per your preference.
- Version History – View a text log of the latest updates and fixes.
- Delete All Tiles – This option will remove all the currently configured Tiles from your SmartSign leaving a blank grid to build a new layout. **Caution – you cannot undo this so only click it if you really want to delete everything!**

When you have finished with the **Settings** page, click on the **Back button** to return to the Layout page.



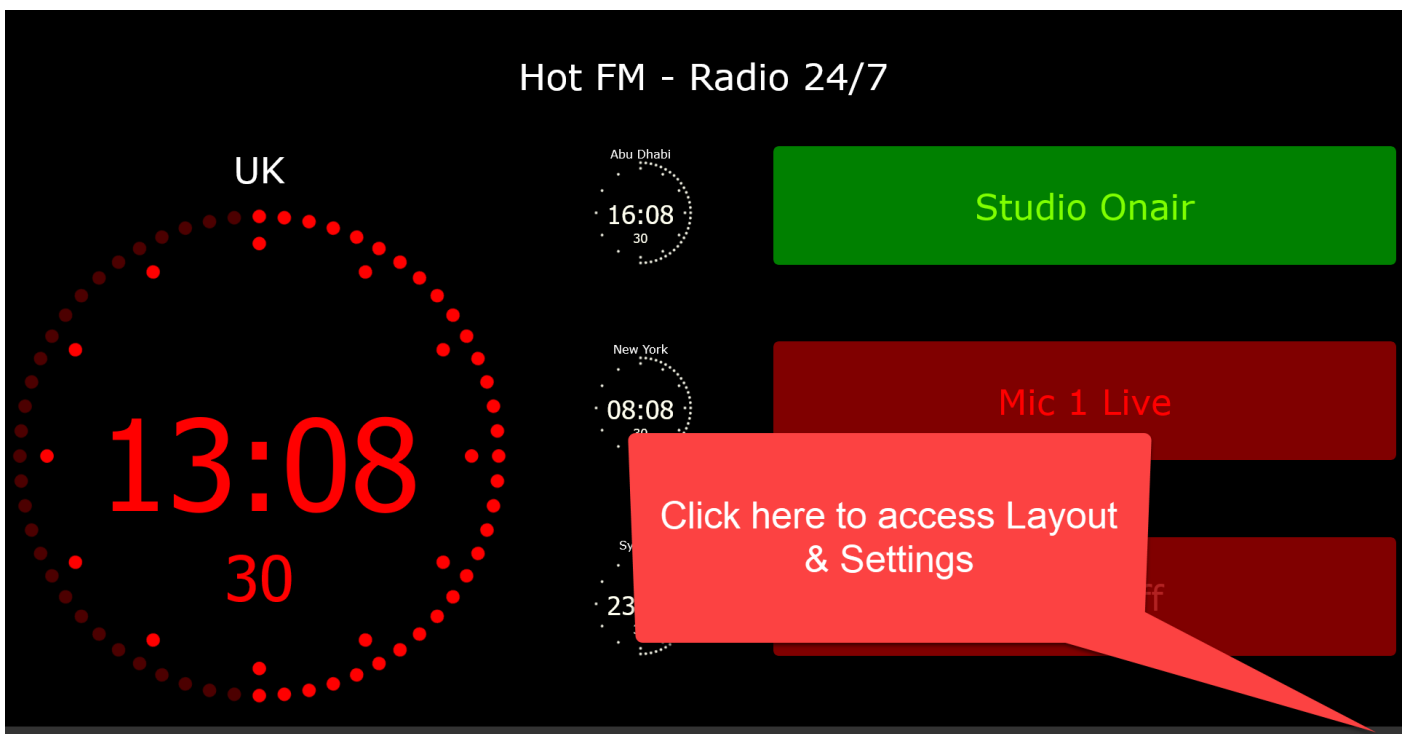
## SWITCHING BETWEEN LAYOUT PAGE AND LIVE SIGN PAGE

The Layout page is used to change the layout of your SmartSign 2, add new Tiles or edit the setting for the existing Tiles.



To switch back to the 'Live Sign' page and see the Tiles in action, click on the **Go** button on the bottom right hand side.

When you are in Live Sign page, to switch back to Layout mode, click in the bottom right hand corner of the SmartSign 2 display area to enter Layout Mode.

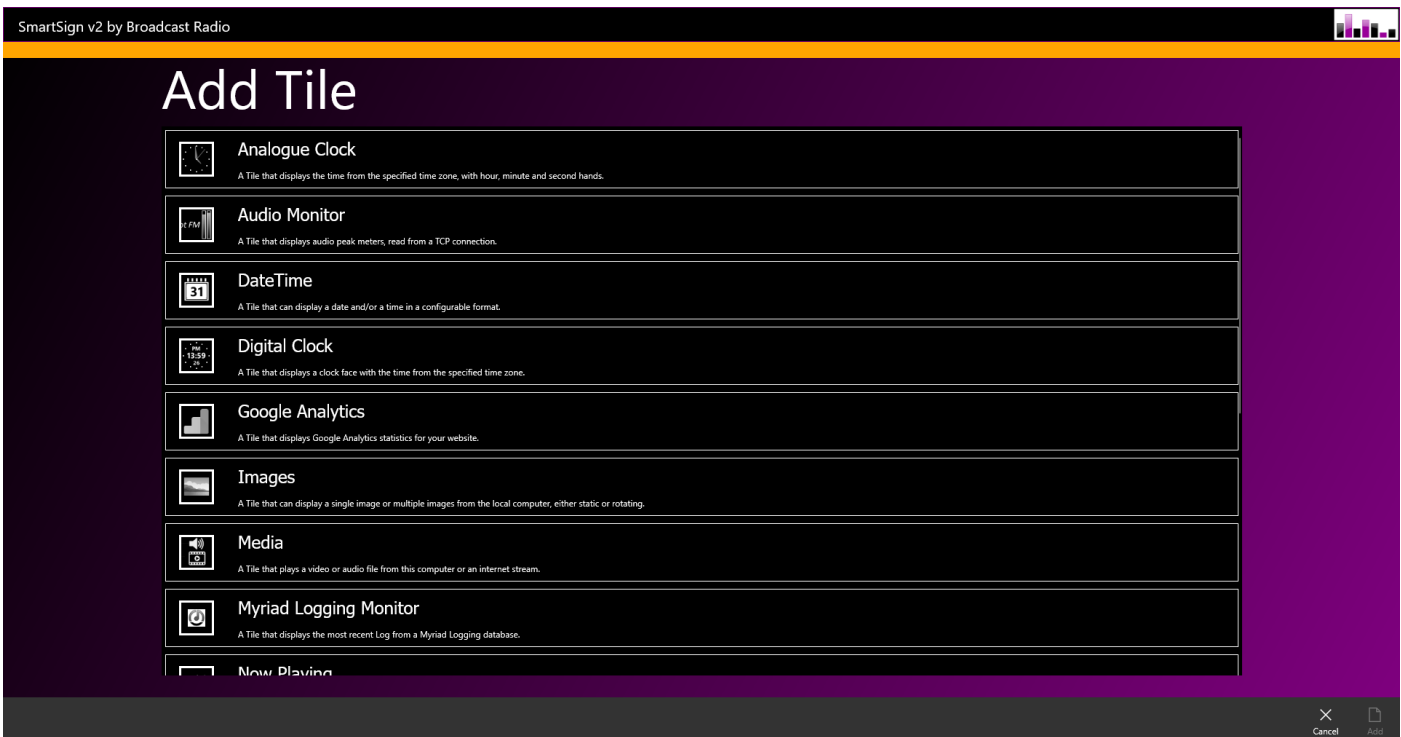




This will switch you back to the Layout page.

## ADDING TILES

When in the Layout page, left click on an empty tile and choose Add to bring up the list of available tiles.



Double click on your choice of tile or left click and choose Add from the bottom right. The selected Tile will be added to the place in the selected grid slot.

## MOVING TILES

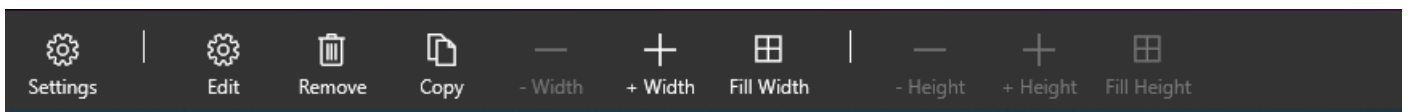
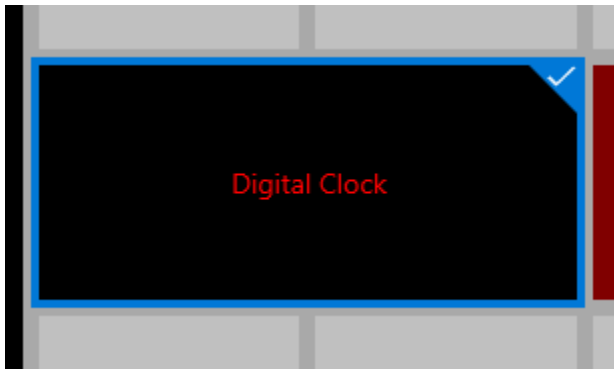
You can also move Tiles around on the grid but dragging them with your left mouse button, but you can only drag them to a position with enough empty space to accommodate the Tile!

*TIP – If you want to move Tile around to try different layouts, try using the Width / Height Minus options on the Options Bar (see below) to make the Tiles smaller as you position them, then increase the size back to their original size.*



## EDITING TILES

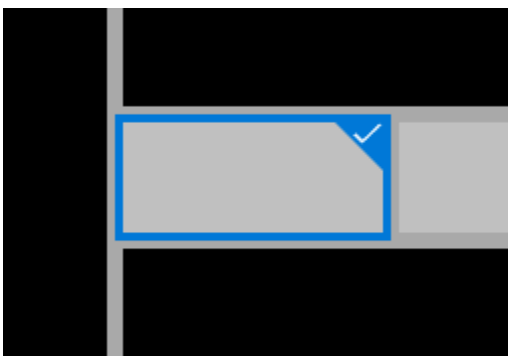
Once you have selected a Tile, the options bar along the bottom of the page is used to edit the settings for the Tile, change the size of the Tile, remove the Tile or duplicate it using the Copy option.



The options are:

- Settings – Access the Settings page.
- Edit – Edit the settings for the selected Tile.
- Remove – Remove the selected Tile from the layout.
- Copy – Copy the selected tile to the clipboard.
- Width +/- - This allows you to increase or decrease the width of the selected Tile.
- Fill Width – Will stretch the width of the selected Tile to fill all empty grid slots.
- Height +/- - This allows you to increase or decrease the height of the selected Tile.
- Fill Height – Will stretch the width of the selected Tile to fill all empty grid slots.

When you select an empty grid slot, you get a slightly different options bar.



The options are:

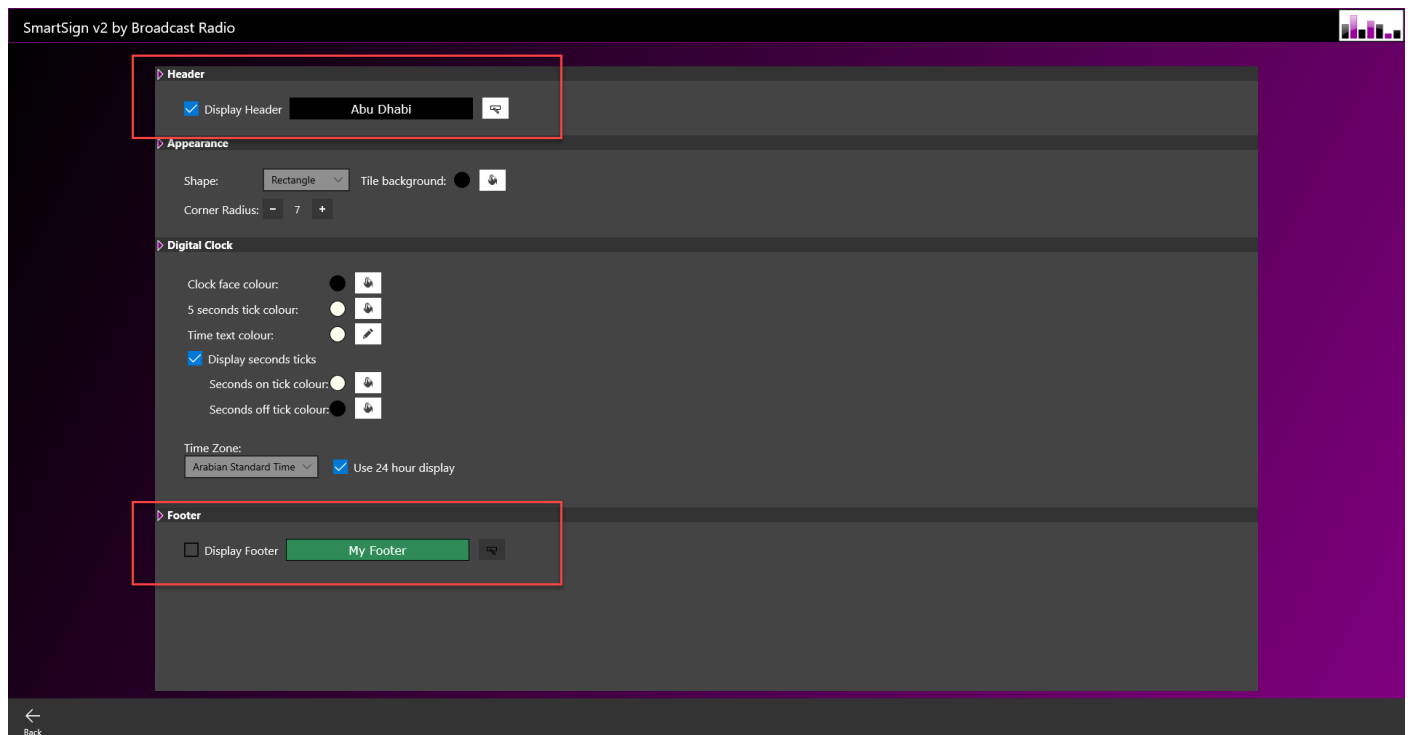
- Settings – Opens the Settings page.
- Add Tile – Adds a new Tile to the selected position. This will open the Add Tile page.

- Paste – This option is only available if you have previously Copied a Tile. This option will paste the copied Tile to the selected position.

## SETTINGS COMMON TO ALL TILES

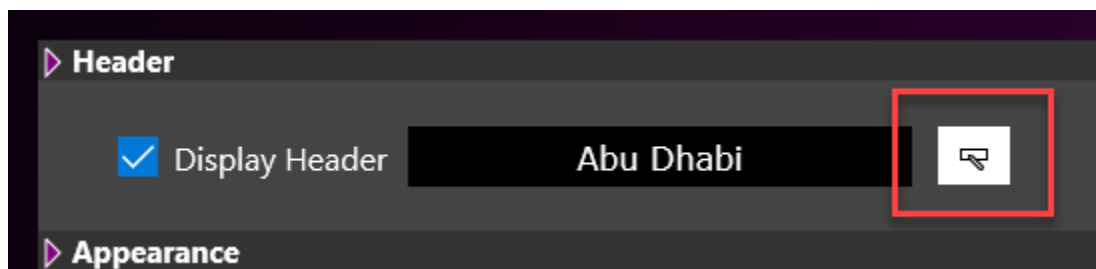
Whilst each Tile has it's own settings to allow you to customise the information displayed, there are some settings that are common to all Tiles so we will cover them in this section before looking at the details for each individual Tile type.

## HEADER & FOOTER



The Header & Footer allows you to set a label that will be displayed either above the Tile (header) or below the tile (footer).

To edit the text and colour options for a Header or Footer, click on the Edit button.



This will open the Header / Footer Configuration window which allow you to set the following information:

- Text – Text to be displayed.
- Font – Select the Font.
- Font Size – Set font size.


- Background – Set the background colour.
- Foreground – Set the text colour.
- Preview – See how it will look.


### Header configuration

Text:

Font: Verdana

Font size: A- 16 A+

Background: ● 

Foreground: ○ 

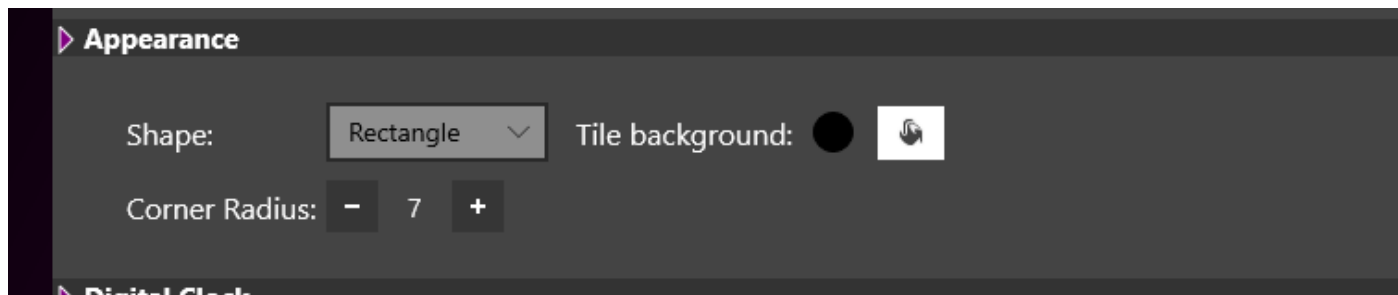
Preview:

Abu Dhabi

Close

When you view the SmartSign in Live mode, the Header / Footer will be displayed above or below the Tile.





The Appearance section allows you to set some general settings with respect to how the Tile will appear.

The options are:

- Shape – Choose Rectangle, Ellipse or Circle.
- Tile Background – Set the background colour for the Tile.
- Corner Radio – Set how many pixels the corner radius will be (set to zero for sharp corners).

## AVAILABLE TILES

There are a number of Tiles available to add to your SmartSign 2 to allow you to build your ideal studio display. Some of the options include:

- Smart Display Tiles - Tiles that change colour, text and graphics when triggered by external events (hardware or virtual hardware (IP) inputs). These can also be interactive to trigger outgoing hardware or virtual events.
- Analogue or Digital Clocks - Display the time the way that is most useful for your presenters. You can also display the date and even the time as spoken phrase (ie Twenty two minutes to three).
- RSS Feeds - Display headlines and other key information from a wide range of external sources.
- Audio & Video - Show local video streams or YouTube videos. You can also stream an audio stream which is perfect for waiting areas, engineering or reception.
- Social Media & Analytics - Track how many followers you have on Twitter, display latest tweets or even website traffic from Google Analytics.
- Now Playing Information - Get key information from Myriad 5 and other compatible playout systems.
- Audio Levels - Display 'confidence' audio levels from virtually any audio source with the free audio monitor add-on application.

The full list of Tiles include:

## ANALOGUE CLOCK



The Analogue Clock tile allows you to add one or more traditional analogue clock faces to your SmartSign 2.

You can customise the clock face colour, hand colours and numeral colours as well as add your own logo.

Each clock can also have it's own regional setting for different time zones so if you need your SmartSign to display the time in key cities around the world then you can!

---

## SETTINGS

## Analogue Clock

Numeral colour:



Clock face colour:



Hour hand colour:



Minute hand colour:



☒ Display second hand

Second hand colour:



Time Zone:

GMT Standard Time ▾

Font:

Verdana ▾

Font size:

A-

24

A+

Numeral Type:

Arabic ▾

☐ Display Image

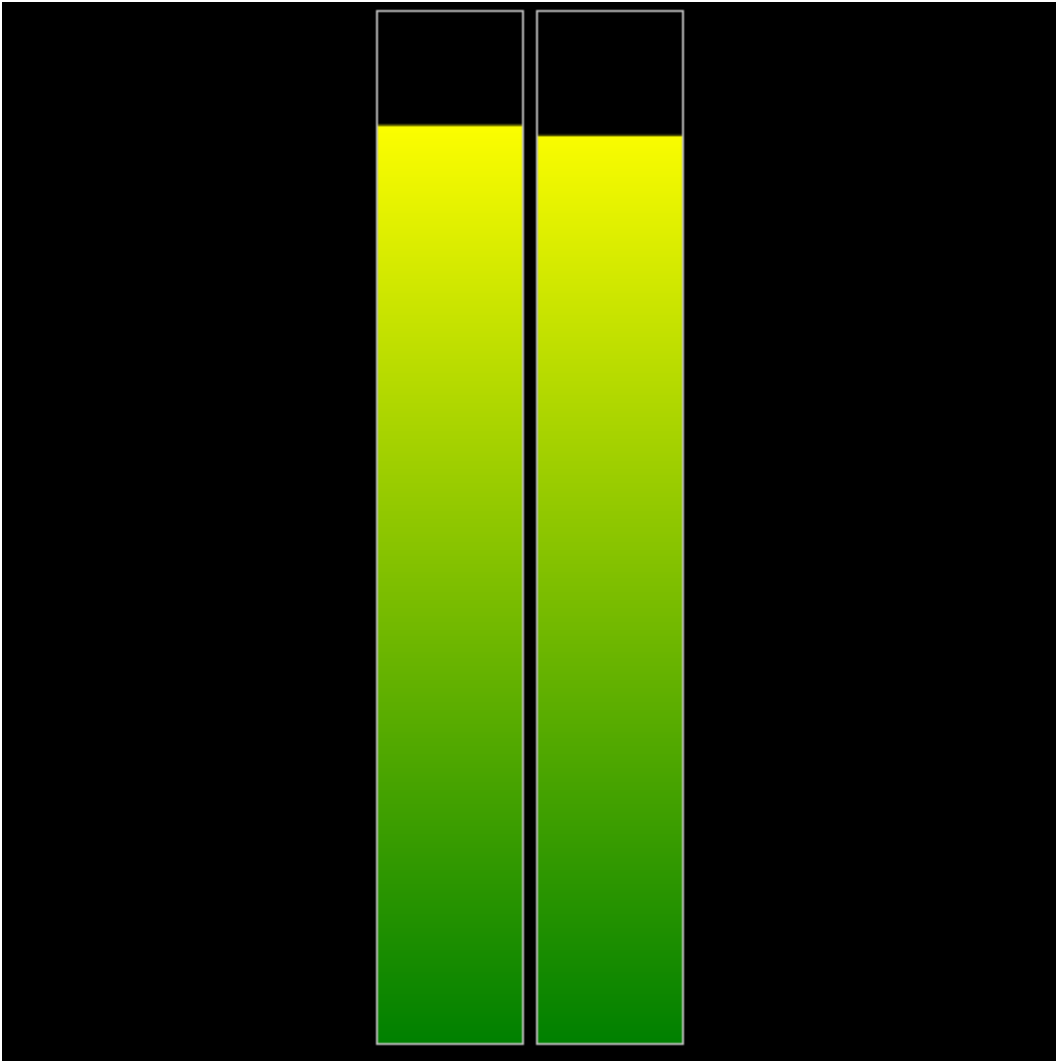
Image File:



Scale:



- Numeral Colour – colours of the numbers on the clock.
- Clock Face Colour – Colour of the background face of the clock.
- Hour Hand Colour – Set the colour of the hour hand.
- Minute Hand Colour – Set the colour of the minute hand.
- Second Hand Colour (optional) – Set the colour of the second hand.
- Timezone – Set the time zone you want to display for this clock.
- Font / Font Size – Set the Font and font size for the numbers on the clock.
- Numeral Type – Choose Arabic (1,2,3 etc) or Roman (I,II,III etc).
- Display Image (optional) – Set an image to be displayed in the top half of the clock.
- Scale – Change the size of the image displayed.



The Audio Monitor tile lets you add confidence audio level monitoring to your SmartSign 2.

SmartSign 2 will connect to our free Audio Monitor application which in turn can connect directly to selected mixing consoles (AEQ Capitol/Forum, SRM, D&R Webstation/Airlite) or use an audio input from a soundcard or usb device. Levels are then displayed in real time on your SmartSign 2,

---

SETTINGS

Text:

Font size:

A- 24 A+

Margin:

0

Server IP Address:

Server TCP Port:

0

Orientation:

- ☐ Horizontal
- ☒ Vertical

☒ Enable Silence Detector

Silence Start Trigger (seconds):

10

Silence End Trigger:

2

Silence Threshold (%):

10

☐ Set/clear a GPIO pin


▼

- Text – Text to display on VU bars.
- Font Size – Size of displayed text.
- Margin – Adjust the margin around the text and the VU.



- Server IP Address – Type in the IP address or name of the PC running the Audio Monitor application.
- Server TCP Port – Add the specific Port Number that the Audio Monitor has been configured to use.
- Orientation – Choose horizontal or vertical.
- Enable Silence (option) – This option enables silence detection and triggering and there are a range of additional options to configure this feature.
  - Silence Start Trigger – How long a silence before the warning triggers.
  - Silence End Trigger – How long to wait when audio returns before cancelling the alert.
  - Silence Threshold – The audio level below which the system will class as silence.
  - Set / Clear GPIO Pin – Select a hardware line to set when silence is detected and clear when audio returns.

DATE / TIME



Thursday  
21 October 2021

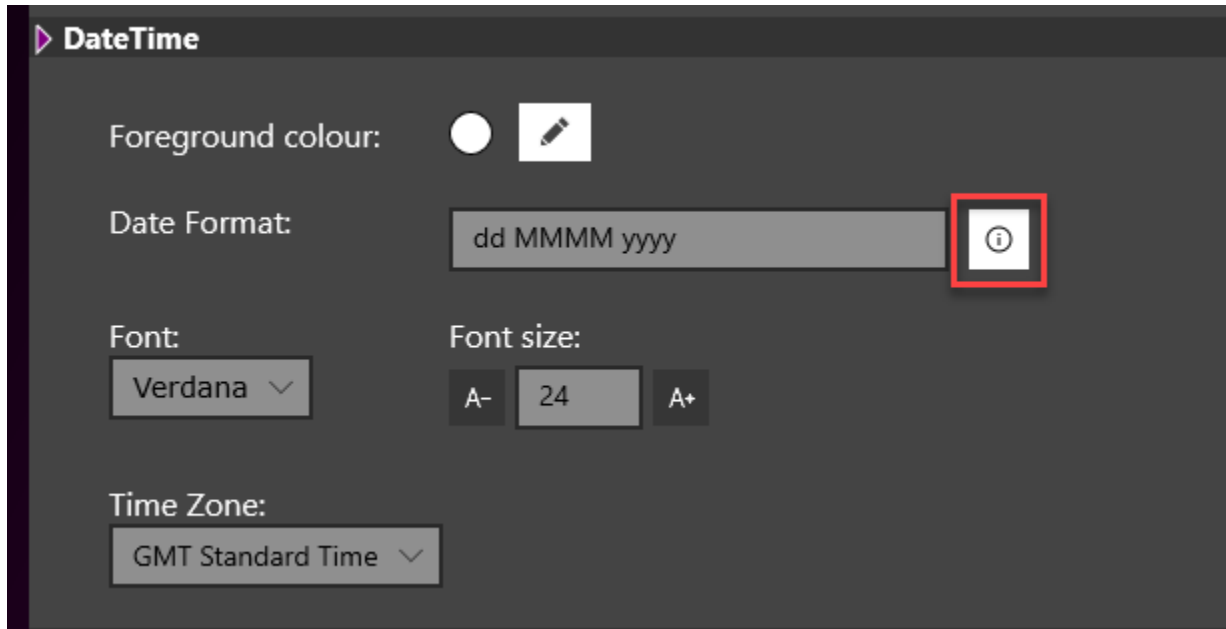
Add a formatted date information to your SmartSign 2. You can select from a wide range formatting options to suit the size / aspect of the tile as well as regional variation in how best to display dates.

You can also add digital time as well as 'text' characters to display the information however you like!

As with the Analogue Clock tile, you can set the timezone per tile and add multiple Date / Time tiles if you need to view time around the world.

---

## SETTINGS



- Foreground Colour – Set the text colour.
- Date Format – Set the format for the date / time you want to be displayed. Click on the 'i' button to view the format option.

d	The day of the month, from 1 through 31.
dd	The day of the month, from 01 through 31.
ddd	The abbreviated name of the day of the week.
dddd	The full name of the day of the week.
h	The hour, using a 12-hour clock from 1 to 12.
hh	The hour, using a 12-hour clock from 01 to 12.
H	The hour, using a 24-hour clock from 0 to 23.
HH	The hour, using a 24-hour clock from 00 to 23.
m	The minute, from 0 through 59.
mm	The minute, from 00 through 59.
M	The month, from 1 through 12.
MM	The month, from 01 through 12.
MMM	The abbreviated name of the month.
MMMM	The full name of the month.
s	The second, from 0 through 59.
ss	The second, from 00 through 59.
t	The first character of the AM/PM designator.
tt	The AM/PM designator.
y	The year, from 0 to 99.
yy	The year, from 00 to 99.
yyyy	The year as a four-digit number.
yyyyy	The year as a five-digit number.

Close

- Font / Font Size – Set the Font and Font Size for the displayed Date / Time.
- Timezone – Set the time zone you want to display for this clock.

## DIGITAL CLOCK



Our Digital Clock tile displays the time in digital format with the option to use AM/PM or 24h display.

The time is then surrounded by a circle of 'ticks' representing each second of the current minute. As each second passes, the 'ticks' change colour creating a 'sweep' counting down to the end of the current minute.

As with the Analogue Clock and Date / Time tiles, you can customise all of the colours on the Digital Clock tile, set the time zone and have multiple Digital Clock tiles on screen for different time zones.

---

## SETTINGS

▶ Digital Clock

Clock face colour:

5 seconds tick colour:

Time text colour:

☒ Display seconds ticks

Seconds on tick colour:

Seconds off tick colour:

Time Zone:

GMT Standard Time

☐ Use 24 hour display

- Clock Face Colour – Set the background colour for the Clock.
- 5 Second Tick Colour – Set the colour for the inner circle of Ticks what are spaced every 5 seconds.
- Time Text Colour – Set the colour for the text on the main clock display.
- Display Second Ticks (option) – Once enabled, this displays a outer circle of Ticks with one for each second of a minute.
- Tick Colour On / Off – Set the colour for the second Ticks in both the on and off states.
- Time Zone – Set the time zone to be displayed in this clock.
- Use 24 Hour Display (option) – Toggles between using 24 hour clock (16:00) and 12 hour clock (4 PM).



The Google Analytics tile allows you to connect directly to your Google Analytics account (with your usually Google account details) and display key, real-time information displayed regarding a selected website.

---

#### SETTINGS

## Google Analytics

Font:

Verdana ▾

Foreground:



Sign in with Google



Not authenticated

Account:

▾

Refresh

Property:

▾

Refresh

Metric:

RealtimeActiveUsers ▾

Refresh interval:

10

minutes

Data period:

0

days

6

hours

Collation period:

1 Hour ▾

Display Type:

Numeric ▾

Graph Type:

Line ▾

Horizontal axis labels rotation angle:

−

20

+

Data point labels:



X axis labels:



Chart Fill:

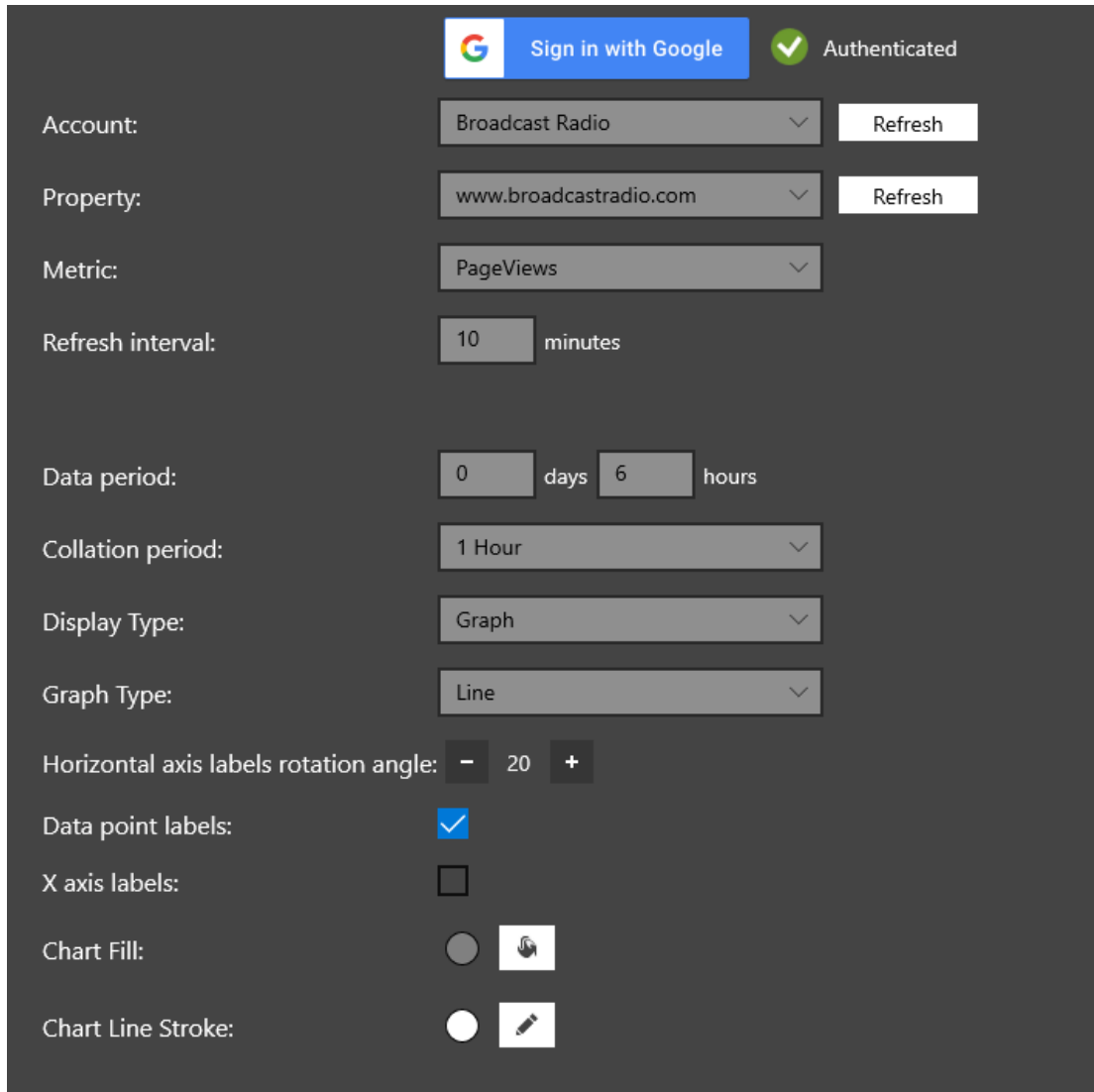


Chart Line Stroke:



- Font – Set the font you want to use.
- Foreground – Set the font colour you want to use.
- Sign in with Google – You will need to sign into your Google Analytics account and authorise SmartSign 2 access when prompted.
- Account – Select the account you want to use.

- Property – Select the property (website) to use.
- Metric – Select the information you want to display from the dropdown.
- Refresh Interval – Set how often you want to update the information.
- Additional Settings – The other settings on the page are enabled or disabled depending on what Metric you are using. This is because some metrics produce a graph over time while other are instantaneous information only.



The screenshot shows a configuration interface for a dashboard. At the top right, there is a 'Sign in with Google' button and a green checkmark indicating the user is 'Authenticated'. The main settings are organized into several rows:

- Account:** A dropdown menu showing 'Broadcast Radio' and a 'Refresh' button.
- Property:** A dropdown menu showing 'www.broadcastradio.com' and a 'Refresh' button.
- Metric:** A dropdown menu showing 'PageViews'.
- Refresh interval:** A text input field with '10' and a label 'minutes'.
- Data period:** Two text input fields, '0' for 'days' and '6' for 'hours'.
- Collation period:** A dropdown menu showing '1 Hour'.
- Display Type:** A dropdown menu showing 'Graph'.
- Graph Type:** A dropdown menu showing 'Line'.
- Horizontal axis labels rotation angle:** A control with minus, '20', and plus buttons.
- Data point labels:** A checked checkbox.
- X axis labels:** An unchecked checkbox.
- Chart Fill:** Two circular color swatches, one grey and one white.
- Chart Line Stroke:** Two circular color swatches, one white and one grey.

In the example above we are tracking Page Views over 6 days with collation points set to one hour. The graph will be a line with a grey background and a white chart line.

These options should be self-explanatory once you start experimenting.

## IMAGES



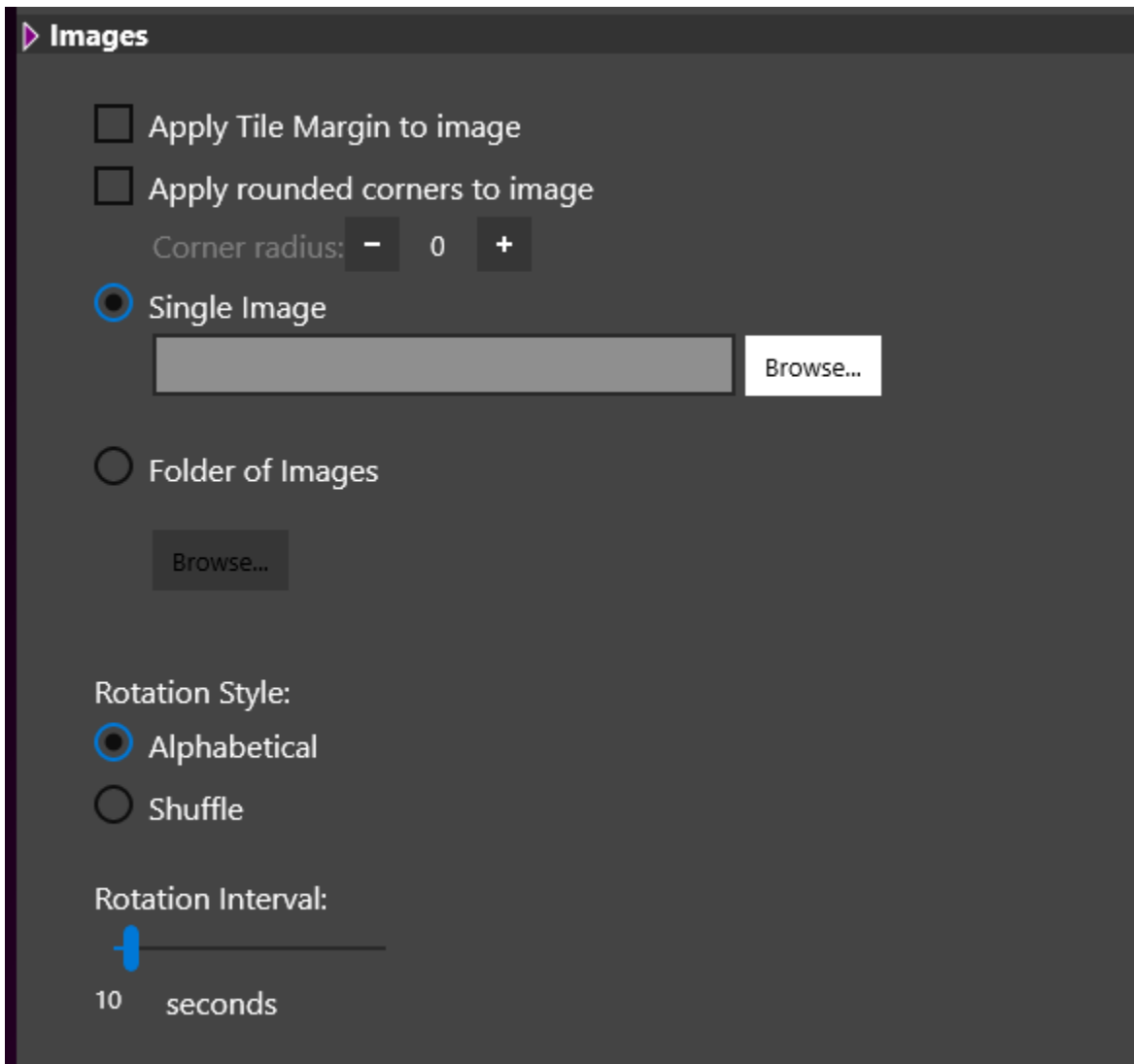


Personalise your SmartSign 2 with the Images tile.

Add static images or allow SmartSign to cycle through list of images in a selected folder.

---

## SETTINGS



- Apply Tile Margin To Image – Choose whether the image should have the margin applied or cover the full Tile.
- Apply Rounded Corners – Choose whether to round the corners of your Tile and by how much.
- Single Image – Browse to the location of a single image to display.
- Folder Of Images – Display all the images in a selected folder in rotation.
- Rotation Style – If displaying images in a folder, choose whether to display them alphabetically or randomly.
- Rotation Interval – If displaying images in a folder, how many seconds should each image be displayed?



Adding a Media tile to your SmartSign 2 allows you to play an audio or video file from a local or network source. So you can have video on loop or play and audio file as background music for your sign (with a static image if you like).

In addition, the Media tile can also play a stream of audio and video from a local or web based source. So you can listen to your station's web stream or play an RTSP video stream from a webcam.

---

## SETTINGS

Media

*Note: Mapped drives are not supported (use UNC syntax).*

Media Location:  [Browse...](#)

*Note: Can also be a URL e.g. http://server/stream*

Background Image (if no video):  [Browse...](#)

*Note: Can also be a URL e.g. http://server/image.jpg*

☐ Mute Audio

Please note that SmartSign 2 cannot work with mapped network drives so you will need to use UNC syntax for file locations.

- Media Location – Add the location of the file (UNC syntax) or stream (audio or video) that you want to be displayed.
- Background Image – Add the location (UNC format) for an image that should be displayed if no video is displayed (usually used for audio streams).
- Mute Audio – Tick if you do not want SmartSign to play audio through the set audio device.

#### MYRIAD LOGGING MONITOR



If your station used Myriad 5 Logging for audio and data logging, you can add the Myriad Logging Monitor tile to your SmartSign 2 to display the status of each of your 'logs' along with the latest metadata captured by your logging system.

**Myriad Logging Monitor**

Log ID:  0

Sql Server Instance:

Sql Server Username:

Sql Server Password:

☒ Show Metadata

Metadata Type:

Font Size:  12

Prefix:

- Log ID – Choose the Log ID to monitor (the first Log in your Myriad logging system will be ID 1).
- SQL Server Instance – Set the location of the SQL server your Myriad Logging system is using.
- SQL Server Username – Set the SQL username.
- SQL Server Password – Set the SQL password to allow access.
- Show Metadata (option) – In addition to monitoring your Log Status, the Tile can also show the most recently captured metadata.
- Metadata Type – Select the metadata to display.
- Font Size -Set the font size.
- Prefix – Add text to be displayed before the metadata (eg Now Playing: )

NOW PLAYING

# The Boy Does Nothing by Alesha Dixon

If your station uses Myriad 5 Playout (or Myriad 4 Playout) then OCP can send Now Playing information directly to SmartSign 2 to allow you to display the name of the currently playing song along with the Artist.

---

## SETTINGS



The screenshot shows a settings window titled 'Now Playing' with a purple arrow icon. It contains five configuration options:

- Font:** A dropdown menu showing 'Verdana'.
- Font size:** A control with 'A-' and 'A+' buttons and a central input field showing '24'.
- Text justify:** A dropdown menu showing 'Left'.
- Foreground:** A color selection area with a white circle and a pencil icon.
- Listen Port:** A text input field containing '8001'.

- Font – Set the font to use.

- Font Size – Set the font size to use.
- Text Justify – Set the alignment for the text.
- Foreground – Set the text colour.
- Listen Port – Set the Port that SmartSign 2 will listen on. This will need to match the port OCP 5 is sending data to.

## RSS FEEDS



The RSS Feeds tile allows you to add the latest headlines from a wide range of sources, to your SmartSign 2 displays.

---

## SETTINGS

**RSS Feed**

Font:

Font size:

Foreground: ☐ ☐

RSS feed url:

Text casing:

Scroll type:

Tile image:

Headline image:

Marquee speed %:

- Font – Select the font to use.
- Font Size – Set the font size to display.
- Foreground – Set the text colour.
- RSS Feed URL – Type or paste in the URL for the RSS feed.
- Text Casing – Choose normal, lower or upper case text.
- Scroll Type – Choose between Marquee (headlines scroll across screen) and Teletype (each headline appears character at a time). *Tip – slower PC's will struggle with Marquee!*
- Tile Image – Display a RSS Feed image to the left of the RSS feed (is usually included as part of the feed).
- Headline Image – Include an image with each Headline. Choose between none, Feed or Headline depending.
- Marquee Speed – Set how fast headlines scroll when using marquee.

## SMART DISPLAY





Smart Display tiles in SmartSign 2 are information tiles that can change status based in external stimuli such as physical hardware inputs or IP commands.

The most common use for Smart Displays are for displaying events such when a microphone is 'live' which studio is 'on air' or if the phone is ringing.

You can even setup Smart Display tiles to control external equipment by making them 'clickable' which can trigger or control external equipment.

---

## SETTINGS

The Smart Display Tile settings are divided into two sections. The top section deals with the status when the Smart Display Tile is in it's inactive (off) state.

**Smart Display**

Text:

Font: Verdana

Font size: A- 24 A+

Foreground:

☐ Flash Background - 0 + milliseconds

☐ Display Image

Filename:

Text Placement: ToRight

- Text – Type in the text (if any) you want to be displayed when the Tile is ‘off’.
- Font – Set the font you want to use.
- Font Size – Set the font size you want to use.
- Foreground – Set the text colour to use.
- Flash Background (option) – When enabled, the tile will switch between the background colour for the Title and the background colour for the SmartSign 2. You can also set the interval in milliseconds.
- Display Image (option) – Select an image to display when the Tile is in the ‘Off’ state. Please note that the Filename list of images comes from your Camera Roll folder (in Pictures) so to add more options you will need to copy your image to the Camera Roll folder.
- Text Placement – Use the drop down to select the placement of the Text in relation to the Image. If you want to use the image as a background then choose In Front from the drop down menu.

In addition to these sections, the lower portion of the window deals with the state of the Smart Display Tile when one or more hardware ‘pins’ are active.

Display Change Type:

☒ On only while Pin is high

☐ On when Pin goes high and stay on

☐ On when Pin goes high and time out

Timeout:  seconds

GPIO notifications:

☐ User Interactive

Output Line to set:

Action:

Pulse Length:  milliseconds

- **Display Change Type** – You can set the type of hardware ‘pin’ change that will trigger the Smart Display Tile to change it’s status.
  - Only when pin goes high – this is the standard setting. The Smart Display will change whenever the pin changes state.
  - Only when pin goes high and stays on – with this option, SmartSign will ignore brief changes to ‘pin’ status and only trigger a change if the ‘pin’ switches high and stays in that state.
  - Only when pin goes high and time out (set time in seconds) – This option will respond to a pin going high but will reset after a set time so the Smart Display will only remain in that state for the set time period.
- **GPIO Notification** – This section allows you to set the Smart Display tile to respond to a specific hardware pin as well as what the Smart Display Tile should display when that pin is high. To add a new state, click on the **Add Line** button.

GPIO notifications:

This will open the Add Input Line window which is used to change the status of the Smart Display Tile when the selected hardware pin is ‘on’.


### Add Input Line


Line Number:

Text:

Font:

Font size:

Background: ☒ 

Foreground: ☐ 

Preview:  

Mic Is On

☐ Flash Background    milliseconds

☐ Display Image

Filename:

- Line Number – Select the hardware ‘line’ that this state change will react to. In this example we are looking at ‘Line 1’.
- Text – Set the text that should be displayed when ‘Line 1’ is on.
- Font – Set the font to display.
- Font Size – Set the font size to use.
- Background – Set the background colour to use for the Tile.
- Foreground – Set the text colour to use for the Tile.
- Preview – See how the Tile will look.
- Flash Background (with time interval) – When active, alternate the background colour between the on and off states. Change every X milliseconds.

- Display Image – Display an image when Line 1 is on. As before, the Filename drop down will display the images in the Camera Roll folder so you will need to copy images you want into that folder. The text placement setting from the 'off' state is used.
- Add – Add the line to the Smart Display tile.

So in this example, when 'Line 1' becomes active (on), the Smart Display Tile will change to have red background and white text with the caption changed to Mic Is On!




You can continue to add more GPIO notifications to the Smart Display Tile so you could have it display something different when 'Line 2' is active!

- User Interactivity (option) – This option enables the ability for a user to manually activate a Smart Display tile by clicking on it (useful for desktop displays or touchscreens). In that scenario you can set the following:
  - Output Line To Set – Which hardware line should be set when a user manually triggers the Smart Display Tile.
  - Action – Choose to Set On (turn line on), Set Off (turn line off), Toggle On Off (switch line on and then off again), Pulse (same as on/off but much quicker), Set Flash (repeatedly turn on then off), Toggle Flash (cancel the Set Flash).
  - Pulse Length – Set the pulse length in milliseconds.

Smart Display Tiles are extremely flexible making them suitable for a wide range of uses.

TEXT



You can add text  
to your SmartSign 2

Add text to your SmartSign 2 in any size or colour and using a selection of fonts.

---

## SETTINGS

**Text**

☒ Text to display:

Enter text

☐ Display plain Text from a webpage:

Justification

☐ Left


☒ Centre

☐ Right

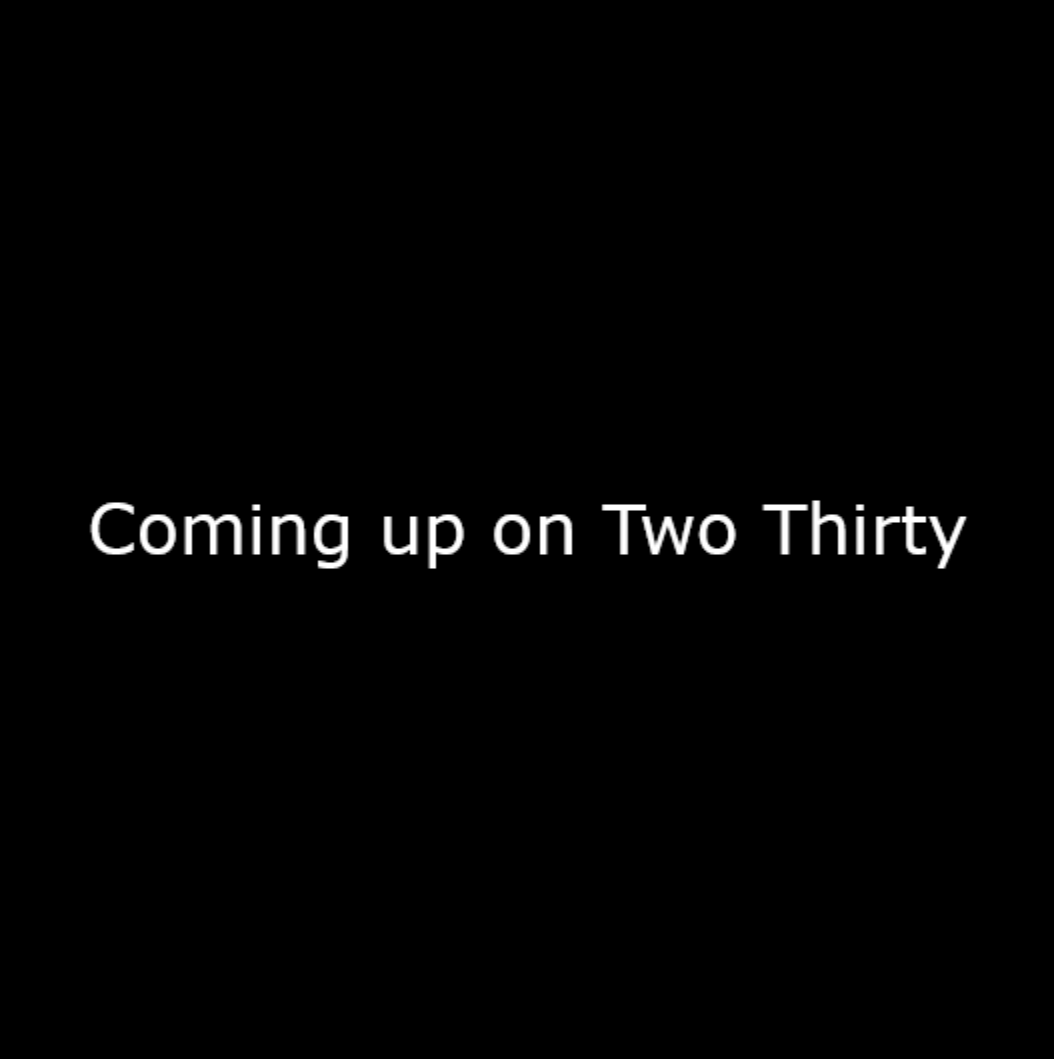
☐ Force

Font: Verdana ▾

Font size: A- 24 A+

Foreground: ☐ 

- Text To Display – Type in the text you would like to be displayed.
- Display Plain Text From A Webpage (option) – If selected, you can set a webpage URL and SmartSign 2 will attempt to strip the text from the page and display it. This works best if you are setting the URL to a webpage you control like a simple page that contains weather summary etc).
- Justification – Set the alignment for the text.
- Font – Set the font to use.
- Font Size – Set the font size to use.
- Foreground – Set the font colour.



# Coming up on Two Thirty

In addition to the various clock options (analogue, digital, date/time) you can also add the Time As Words tile to your SmartSign 2 to display the current time in a human readable format that's perfect for 'on air' use.

The time might be 2:28pm but a human is more likely to round this to 'coming up to two thirty' which is exactly what SmartSign 2 will also do!

---

## SETTINGS



## Time As Words

Justification

- ☐ Left
- ☒ Centre
- ☐ Right
- ☐ Force

Font:

Verdana ▾

Font size:

A-

24

A+

Foreground:



- Justification – Set the alignment of the text.
- Font – Set the font to use.
- Font Size – Set the font size.
- Foreground – Set the font colour.

## TWITTER FOLLOWS



Track and display your Twitter follower count in real time on your SmartSign 2.

---

## SETTINGS

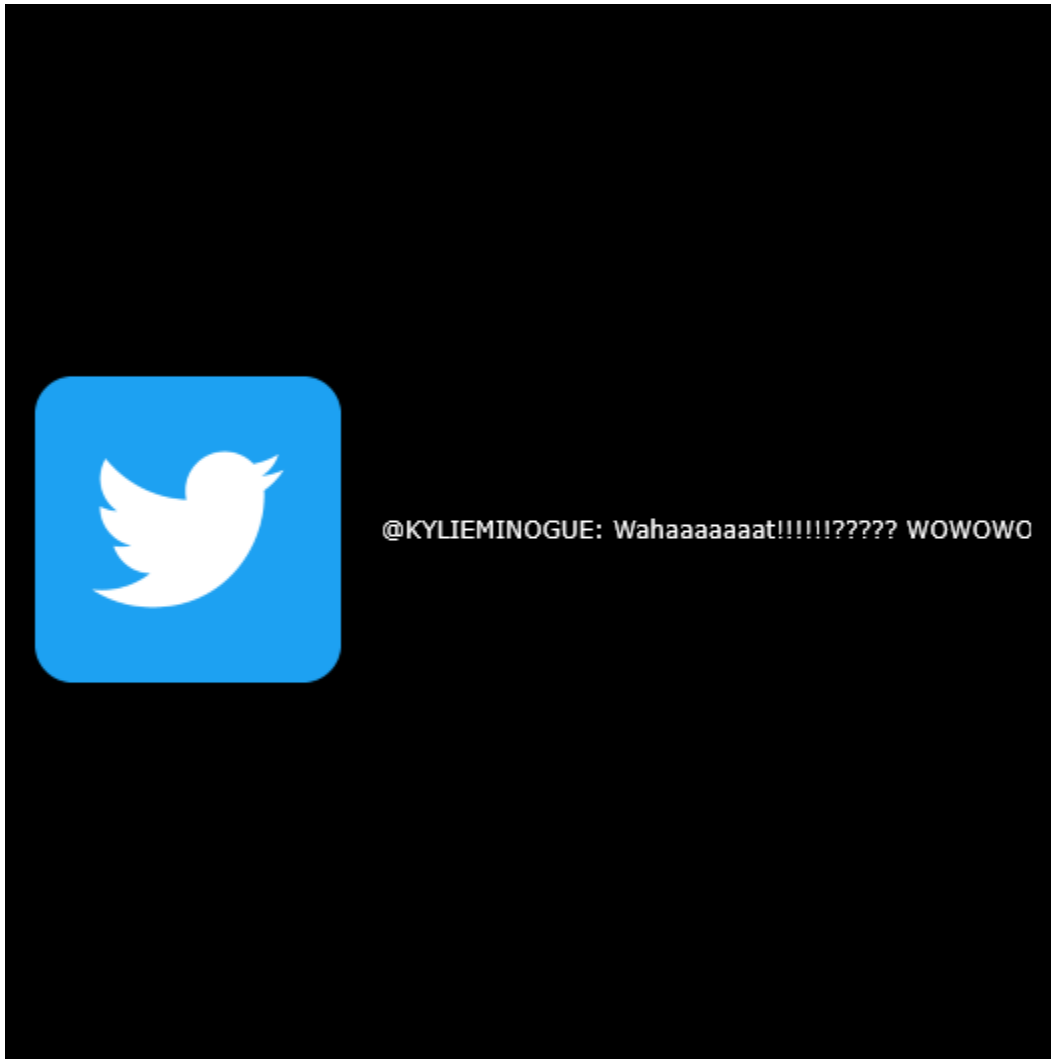
► **Twitter Followers**

Font:

Foreground: ☐ ☐

Twitter Account:

- Font – Set the font you want to use.
- Foreground – Set the font colour.
- Twitter Account – Set the Twitter account that you want to display the follower count for (eg @broadradUK)



As well as displaying the follower number for a Twitter account, you can also display the latest Tweets from an account. Perfect for keeping up with what your favourite celebrity had for breakfast!

---

## SETTINGS

► **Twitter Latest Tweet**

Font:  ▼

Font size:

Foreground: ☐ ☒

Twitter Account:

- Font – Set the font to use.
- Font Size – Set the font size to use.
- Foreground – Set the font colour to use.
- Twitter Account – Set the Twitter Account you want to follow (e.g. @KylieMinogue)


## YOUTUBE



The YouTube tile allows you to display a video or live feed directly from Youtube. Whether that is a welcome video from your own YouTube account or the live feed from a rolling news service, the YouTube tile offers a great way to enhance your SmartSign.

---

## SETTINGS

A screenshot of a dark-themed interface for configuring a YouTube SmartSign. At the top left is the YouTube logo. Below it, the text "YouTube video ID:" is followed by an empty rectangular input field. Underneath the input field is a checkbox labeled "Mute Audio".

▶ YouTube

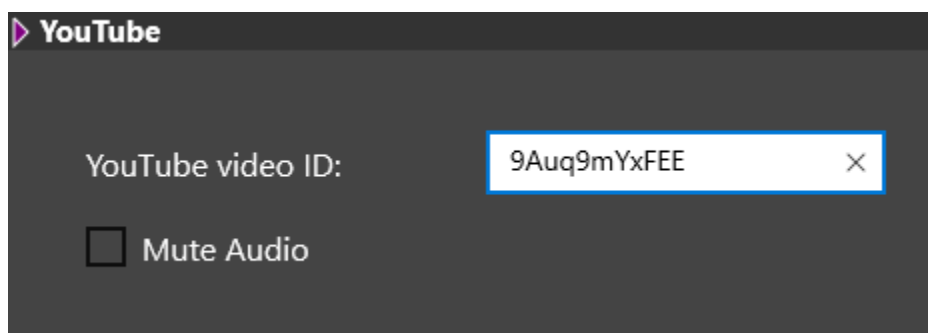
YouTube video ID:

☐ Mute Audio

- YouTube Video ID – Enter the unique Youtube ID for the video you want to be played. Please note SmartSign only needs the number so if the YouTube share link for Sky News Live is:

<https://youtu.be/9Auq9mYxFEE>

The then reference you need to put into SmartSign would be 9Auq9mYxFEE.

A screenshot of the same YouTube SmartSign configuration interface as above, but now the input field for the YouTube video ID contains the text "9Auq9mYxFEE". The input field has a blue border and a small 'x' icon in the top right corner. The "Mute Audio" checkbox remains unchecked.

▶ YouTube

YouTube video ID:

☐ Mute Audio

- Mute Audio – Tick to prevent SmartSign from playing audio from the YouTube Video through the set sound device.

## GETTING MORE HELP

Now that you know the basics of setting up a SmartSign to, we would recommend you also watch our video guide to installing and setting up your first Smart Sign 2.



<https://youtu.be/ow7XeDMUIe0>

Or check out our helpdesk for more information.

[SmartSign FAQ – Broadcast Radio Help](#)

Click on the link below.

[Myriad 5 Playout Support \(broadcastradio.com\)](https://broadcastradio.com)

Scroll down to the **Related Software** section and select **Hardware Service** from the options.

browse and download more options from our [Dynamic Layouts](#)

## Related Software Downloads

### Broadcast Radio Software

**Broadcast Radio Hardware Service**

**Broadcast Radio Audio Monitor**

**Broadcast Radio Bootstuff**

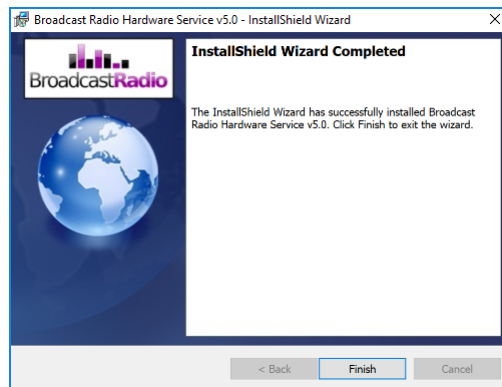
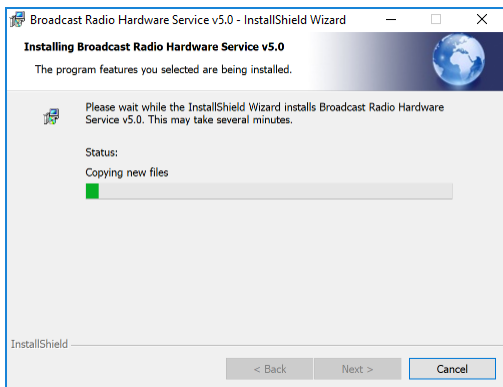
**Broadcast Radio Audio Loop Thru Utility**

**Broadcast Radio WMP Manager Pack**

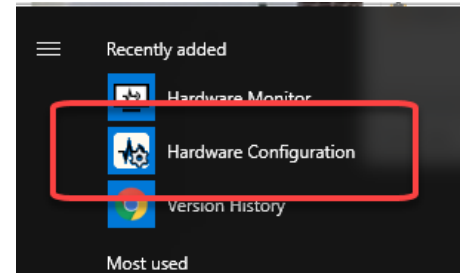
[View WMP Manager Pack Setup Instructions](#)

### 3rd Party Software

**Microsoft SQL Express 2019**

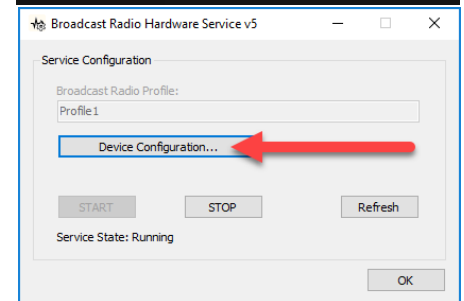


Next, press the Windows Start button on your keyboard and locate the **Hardware Configuration** option which should be listed under **Broadcast Radio Tools** (and in the Recently Added list).



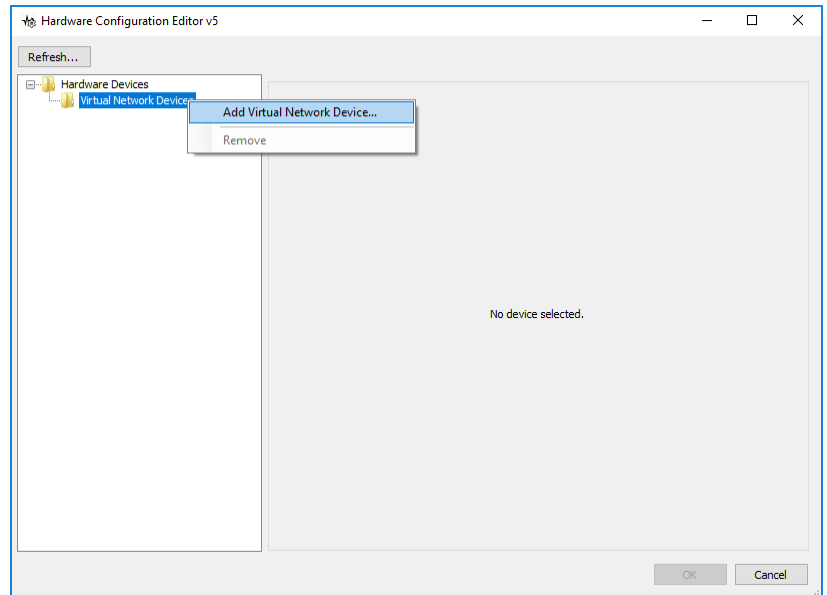
As the software starts, you may be asked to allow the software to configure a hardware device by Windows (depending on your user account access), if you are, just click 'yes'.

This window shows you the status of the Hardware Service and allows you to configure the devices. In this case you want to click on the **Device Configuration** button.



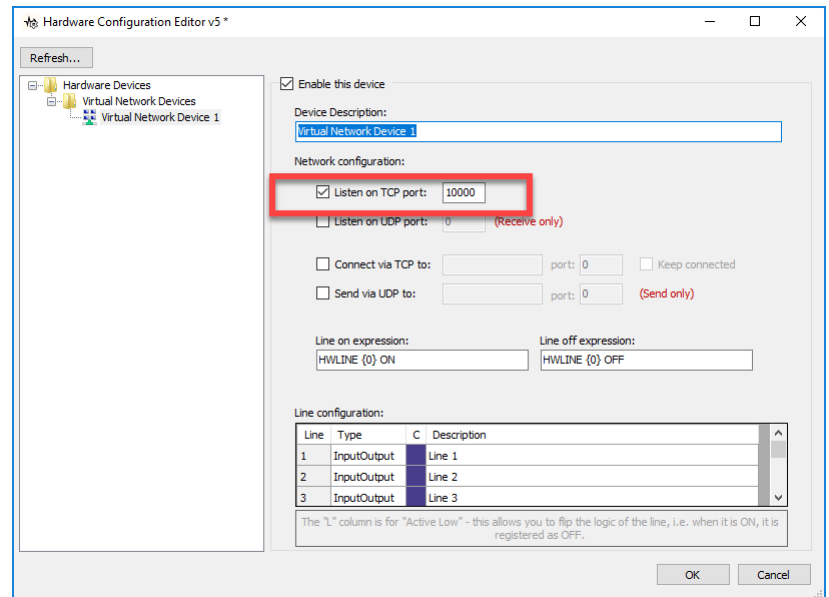
Next you will see an empty screen with 'No Device Selected' in the centre because we have not setup a device yet. Obviously if you have previously setup a device (physical or virtual) then it will be displayed here.

Right Click on the **Virtual Network Devices** folder and select **Add Virtual Network Device**.

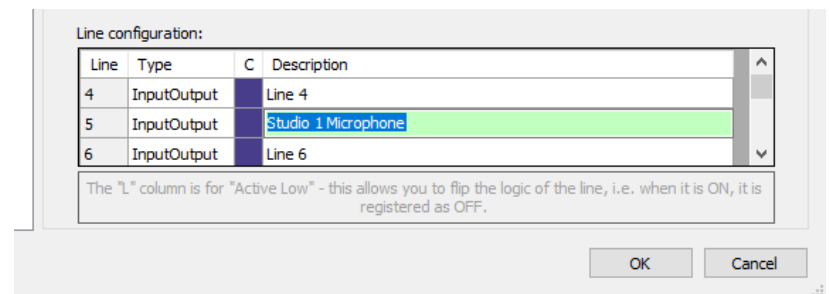




This will create a new Virtual Network Device with the default settings. The settings are covered in separate documentation but in most cases you can leave the defaults in place. You will need to make note of the **Listen on TCP port** number which is set to **10000** by default. You will need that number when we come to configure the SmartSigns.



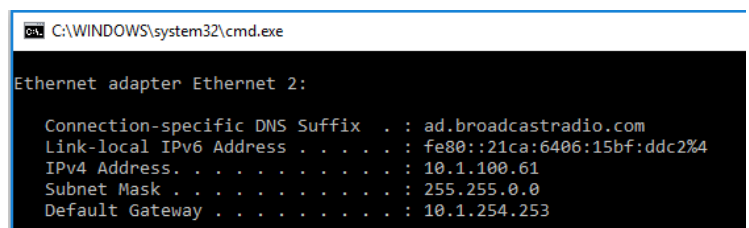
You can change the hardware line descriptions if you like to make testing easier. In this example we are going to use line 5 for the 'mic live' indicator in Studio 1 so I have altered the description for line 5.



Click on **OK** to close the window, you will be asked to confirm you wish to overwrite the previous settings. Once you have done that, you can click on **OK** on the Service Configuration window to close it. At this stage it will disappear but don't worry, the Hardware Service runs as a **Service** which means that it is running in the background all the time but you will not be able to see it working unless you run the **Hardware Monitor** application.

Now the Hardware Service is running and configured, you need to find out one more thing before you can configure your SmartSigns, you need to find out the IP address of the computer you have just installed onto. The quickest way is:

1. Windows Key + R (this opens the Run box)
2. Type in CMD and press the <Enter> key on your keyboard (this opens a command line window).
3. Type in **ipconfig** and press <Enter> (this will list your IP address).
4. Write down the IP Address on the **IPv4** line. This will be in the format xxx.xxx.xxx.xxx (in the example above it is 10.1.100.61).
5. Type **Exit** and press <Enter> to close the window.



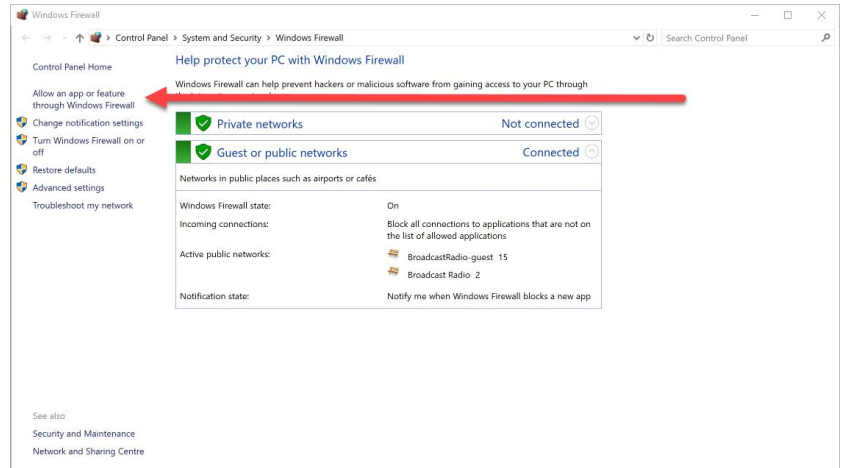
You now have everything ready to setup SmartSign Lite to work with the Hardware Service.



## Important: You Need To Update Your Windows Firewall

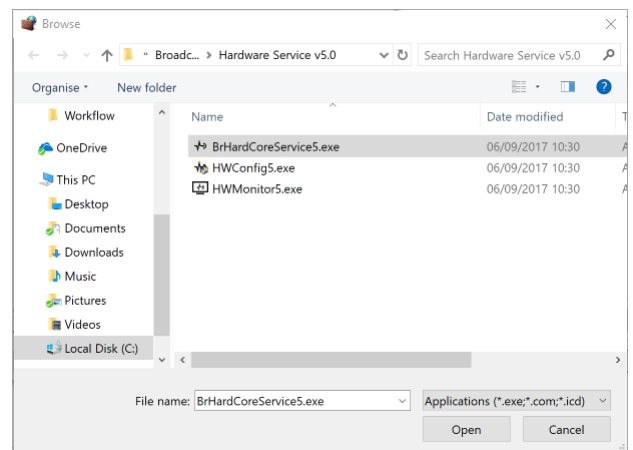
**IMPORTANT:** Whilst not technically part of the Hardware Service installation process, by default, your **Windows Firewall** will block your Hardware Service from communicating with the SmartSigns. You need to add in an 'exception' to allow the service to safely send and receive data from other connecting systems.

1. Press the Windows key on your keyboard and type in Firewall. You should see an option called **Windows Firewall**, run that option.
2. Click on the **Allow an app or feature through Windows Firewall** option on the left hand list.
3. Click on the **Change Settings** button (top right) and then the **Allow Another App** button (lower right).



4. You now need to browse to the location where the Hardware Service is installed and select **BrHardCoreService5.exe**. The default location is:

C:\Program Files (x86)\Broadcast Radio\Hardware Service v5.0\BrHardCoreService5.exe



5. Now click on the **Add** button to add the app to the Firewall exceptions list. You should see it listed in the list of allowed applications.

Your Hardware Service should now be able to communicate with the other Broadcast Radio software and systems on your network.

