

AudioSign Electronics Manual

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Safety Guide

Please observe the following when installing this device.

Warning



- For disposal of old electrical equipment please follow the guidelines associated with your country/territory or ship the unit back to blackbox-av and we will dispose/recycle the unit. The symbol on the left indicates that this product shall not be treated as household waste. Instead it shall be handed to applicable collection points for the recycling of electronic equipment. If you dispose of this unit correctly you will be helping prevent future harm to the environment which is caused by poor waste management of this type of equipment. Follow the battery removal guide before disposing of the items and dispose of them separately.

may have built up on the panels. You may use some mild soapy water to do this.

- When selecting a suitable installation location, please consider both the local wildlife or if in a residential area the local people from excessive noise pollution.
- The performance of your audiosign electronics is dependent on environmental factors (weather, season, time) & the type of content you have.

Precautions of Use

- If storing the unit for long periods of time, it is recommended that you remove the batteries.
- Do not operate the unit below -20 or above 60 degrees Celsius. Battery performance will be affected by colder temperatures.
- When deciding on a suitable installation point, please follow the installation guides for your particular product to protect it from environmental damage. The AudioSign electronics are waterproof but cannot be submerged in water so do not install in an area which is prone to flooding. We have designed our products to be tough and durable, but we cannot guarantee them against vandalism and this should be considered when selecting a suitable installation point.
- In order to maintain good charging, it's advisable to wash the solar panels periodically to remove any debris that

AudioSign Electronics

In the Box

1. Electronics Unit
2. User Manual
3. USB Stick
4. 2 or 4 x Solar Panels
5. 2 x Piezo Buttons

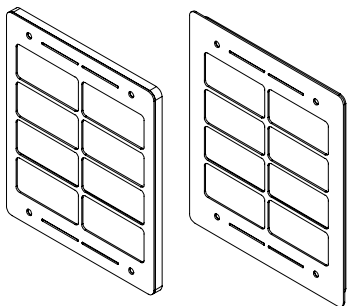
Installation

The AudioSign Electronics are designed for installation into a bespoke structure.

It is supplied with two or four solar panels of either recessed or a surface mounted type. When constructing your structure please ensure there is adequate drainage as the electronics are not designed to be submerged in water. We recommend a 10mm drainage hole as minimum.

When designing your own structure ensure you install the solar panels so they will be in direct sunlight for the maximum amount of time during the day.

To connect the Panel cables to the Electronic Unit simply attach each colour coded cable securely.



First Time Setup

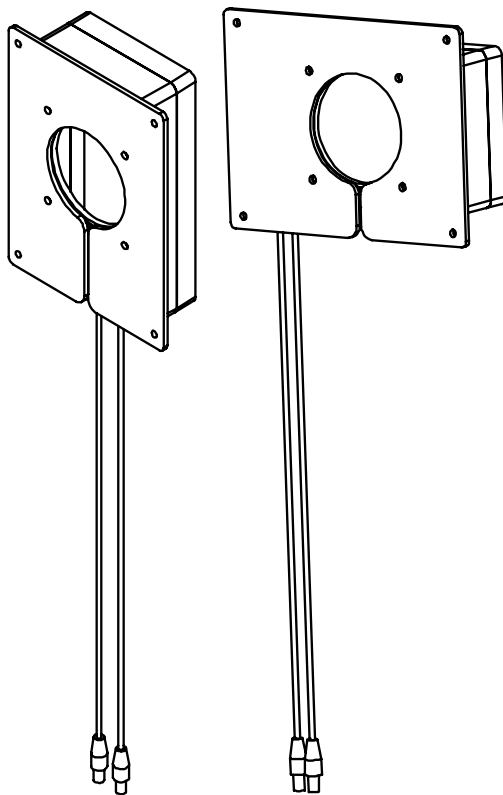
The AudioSign Electronics will be in 'Transit Mode' when it arrives. Pressing a

button will activate a blinking red light within the grill.

Transit Mode

To exit Transit Mode, simply insert your USB Stick into the USB Port cable. Press a button to activate a greeting message. The AudioSign electronics are now ready to use.

Note: You must always have a USB Stick attached to the USB port – even to access settings when not updating content.



Configuration

There are various configuration options for your AudioSign Electronics. To access these settings, ensure no messages are playing then insert the USB Stick into the USB port cable.

Now press a button and wait approximately 2 seconds for the AudioSign Electronics to take you through the settings.

Follow the audio instructions and press a button when you hear the function you require. Once you have completed editing a setting the AudioSign Electronics will restart with the setting saved, repeat this process to access

consecutive functions or to exit without changing a setting simply remove the USB. The settings are accessed in the following order;

1. Volume Adjustment
2. Update Media Content (Programming)
3. Playback Statistics
4. Erase Statistics
5. Battery / Solar Test / Delay / Serial Information
6. Activate Transit Mode
7. Exit the Menu

1. Volume Adjustment

The AudioSign Electronics will go through volume levels 1-10, when you get to the desired level press a button to select it and the unit will restart with this option saved.

2. Update Media Content (Programming)

Update your audio content. Select this setting with the USB attached and uploaded with your content. Please see the programming instructions section for more details on programming your USB.

3. Playback Statistics

This setting allows you to access the playback statistics of your AudioSign Electronics, select the Playback Statistics option and it will list a number of stats in the following order;

1. Total messages played for this period (can be reset in the Erase Statistics Option)
2. Total messages played for each track (1-6) (can be reset in the Erase Statistics Option)
3. Total messages played (this statistic cannot be erased)

Note: Removing the USB while these statistics are being listed will not affect them in any way

4. Erase Statistics

This setting allows you to reset the playback statistics for period & track plays.

You will receive 5 warning beeps before the statistics erase. To stop this, simply take the USB out before the beeps end.

5. Battery, Solar Test, Delay and Serial Information

This setting allows you to perform a battery and solar test for your AudioSign Electronics.

Select the Battery and Solar Test option and you will be informed of the battery voltage, solar power availability and the voltage used on each panel. It will also tell you if there is no power from a panel. It will then tell you any delay settings and the serial number of the unit.

Note: The AudioSign Electronics will inform you when the charge falls below 4V and no longer play messages.

6. Transit Mode

This setting is used to put the AudioSign Electronics into Transit Mode and effectively shut down for transportation

When in Transit Mode messages will not be activated, if a button is pushed you will just see a blinking red light inside the speaker grill.

To exit transit mode, simply insert the USB Stick and press a button, you will then be greeted by a message that only plays when exiting Transit Mode.

6. Exit the Menu

Select this option if you wish to exit the menu. If no selection is made within 2 loops of the setting options, it will automatically exit.

Programming

Programming the AudioSign Electronics couldn't be easier. You will need 3 things;

1. A Config.txt File
2. Audio Files (1-6) .mp3
3. The USB Stick provided.

Note: If provided USB stick is not available use a USB stick less than 1GB in size if possible, if you have issues uploading your files please first retry with a different USB stick. Files must be .MP3 format.

Windows OS

Windows OS is required to program your AudioSign Electronics using a PC or Laptop (Xp-10).

MacOS is not supported due to hidden files generated by the OS when adding files to the USB.

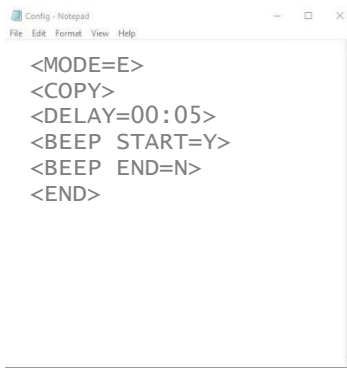
Step 1 – Config.txt

You must first create your config.txt file;

Note: We will send out your AudioSign Electronics already programmed and with a config.txt file on your USB stick. We suggest you keep the USB and config.txt file for future reference and use.

The config.txt file determines a number of settings on your AudioSign Electronics, including how your audio files are positioned on each button.

A standard config.txt file will look something like this;



```
Config - Notepad
File Edit Format View Help
<MODE=E>
<COPY>
<DELAY=00:05>
<BEEP START=Y>
<BEEP END=N>
<END>
```

All commands above must be written as shown, except for the mode. A full list of config modes are in step 2;

The above config.txt file will place the Electronics into Mode E;

Button 1 – Track 1 and 2

Button 2 – Track 3 and 4

Users will be able to interrupt play (push a button and start a new message mid play).

Every config.txt file must finish with the text <END>.

Step 2 – Choosing your Mode

Mode	Button 1 Plays Tracks	Button 2 Plays Tracks	Playback
A	1	2	Int
B	1	2	Non-Int
C	1-6 (sequentially plays the next track each time a button is pressed)		Int
D	1-6 (sequentially plays the next track each time a button is pressed)		Non-Int
E	1,2	3,4	Int
F	1,2	3,4	Non-Int
G	1,2,3	4,5,6	Int
H	1,2,3	4,5,6	Non-Int

Int = Another button trigger will interrupt playback.

Non-Int = Another button trigger will not interrupt playback.

<MODE=> = The mode determines how your audio will be played.

<DELAY=00:00> = The delay is set in order of Minutes:Seconds up to a max time delay of 05:00. The delay will stop the next button trigger until the timer has elapsed.

<COPY> = Allows you to upload your audio tracks onto the AudioSign.

<BEEP START=Y> = This turns the beep on.

<BEEP END=N> = This turns the beep off.

<END> = Is always put on the last line at the end of all configuration files.

Note: The AudioSign does not support an unequal amount of tracks.

For example, if you had 3 tracks for button 1 and 2 tracks for button 2, you must either add an additional blank track or a duplicated track in order for them to be equal.

Step 3 – Audio Tracks

Your audio tracks must be in .MP3 format – the order you transfer them to your USB stick will determine what track number they are. For example, the first to be transferred will be Track 1, the second will be Track 2 and so on.

The name does not matter, just the order they are transferred to your USB stick.

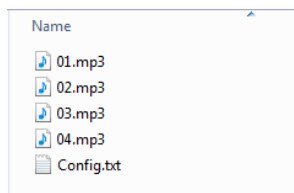
Place your audio onto your USB in the appropriate order. Lastly, drag and drop in your config.txt file.

Note: Make sure the transfer is complete between the moving of each file

Step 4 – Attach the USB

Attach your USB stick to the USB Cable. Then select the 'Update Media Content' option from the settings menu.

This is an example of how content should be displayed:



Step 5 – Uploading

The AudioSign Electronics will now tell you it's transferring your files or will inform you if there is an issue.

You will be asked to wait until it's finished. This could take a few minutes depending on the size and length of files you are transferring.

When finished, the AudioSign Electronics will inform you and ask you to remove the USB Stick.

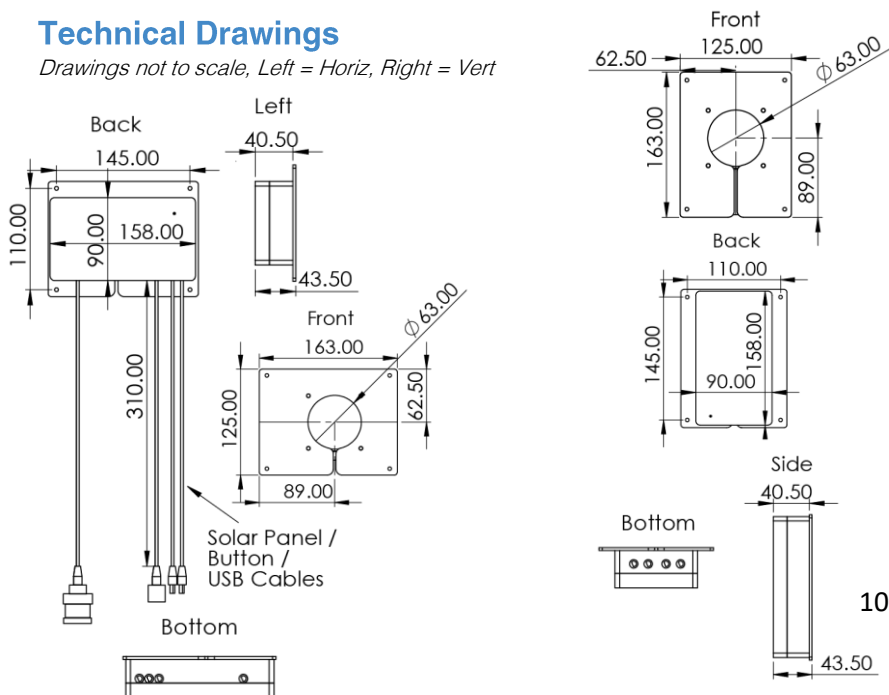
Your AudioSign Electronics is now ready to use with the updated messages. Test each message just to be sure and enjoy

Technical Information

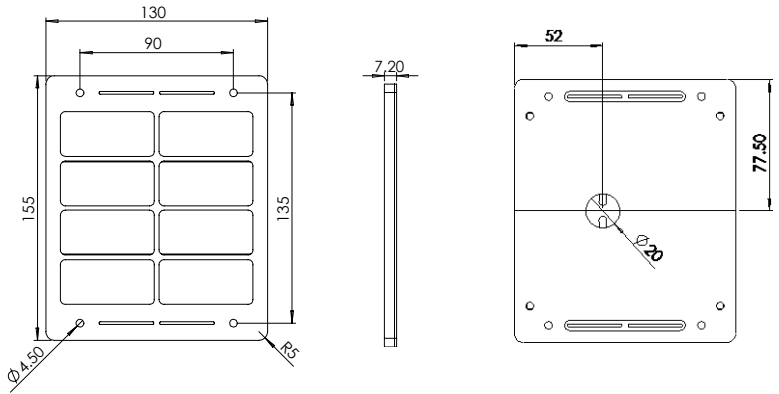
Weight	1.5Kg
Weight (Solar Panel)	0.25Kg
Dimensions of Unit	140 (W) x 47.90 (D) x 220 (H)
Dimensions of Solar Panels	Surfaced: 130 (W) x 7.20 (D) x 155 (H) Recessed: 140 (W) x 7.20 (D) x 165 (H)
Power	2 built-in Solar Panels charging 4 x 1.2V long life batteries at up to 200mA per hour (+/- 10%)
Message Storage	16MB Flash Memory (on board)
Maximum No. of Messages	6
Message Encoding Format	.MP3
Maximum Total Message Length	16 minutes @ 128kbs
Programming Transfer Rate	Approx. 20 Seconds per MB of message
Audio Output	1W into 8Ω Speaker
Frequency Range	75Hz – 20KHz

Technical Drawings

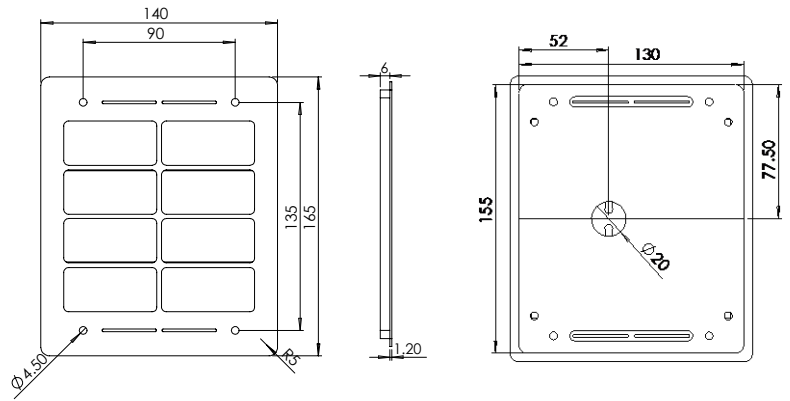
Drawings not to scale, Left = Horiz, Right = Vert



Surfaced Solar Panels



Recessed Solar Panels



Maintenance

Changing Batteries

Your AudioSign Electronics uses 4 rechargeable AA 1.2V 2500mAh (Ni-MH) batteries which depending on numerous factors will need to be replaced every 2-5 years.

Note: Do not use non-rechargeable alkaline or zinc batteries.

Tools

1. Cross head Screwdriver

Procedure

1. Unplug the solar panel connections and remove the solar electronics. Each cable is marked with a number.
2. You will need to open the electronics box by removing the 4 cross head screws.
3. Replace the old batteries with the new. If three beeps are heard the player is ready to be used again. Hearing a continuous number of beeps could mean that the SD Card was accidentally ejected during this

process. Please be sure to put it back in.

4. Replace 4 cross head screws to seal the electronics.
5. Re-connect the solar panel connections.

Troubleshooting

If you have any issues with the AudioSign Electronics, please contact support@blackboxav.co.uk

The logo for blackbox-av features a cluster of squares in various shades of blue and black to the left of the text. The text "blackbox-av" is in a lowercase, sans-serif font. Below the text, the words "audio", "video", and "interactive" are listed, each preceded by a small blue square.

blackbox-av
audio video interactive

The logo for the interpretationshop features a stylized graphic of a semi-circle with a gradient from light blue to dark blue/black on the left side. The text "the interpretationshop" is in a lowercase, sans-serif font, with "the" in a smaller size above "interpretationshop".

the
interpretationshop