

# Solar Audio Post



**Manual v2.0**  
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## Thank you for purchasing the Solar Audio Post

The Solar Audio Post is one of a range of products we offer specific to the heritage marketplace. We are confident that we have other products you will find useful and look forward to hearing from you again soon.

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

## 1. Standard Operation

Operation of the Solar Audio Post couldn't be easier, users simply...



**Push** button 1 to hear audio track(s)

**Push** button 2 to hear audio track(s)

(How many tracks are played via each button can be configured via programming your config.txt file)



- USB Programming Dongle.

## 2. First Time Setup

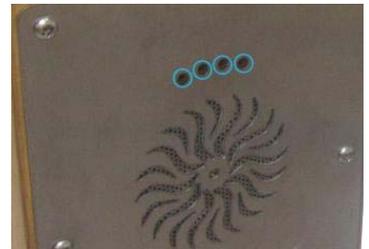
The Solar Post will be in 'Transit Mode' when it arrives and pressing a button should activate a blinking red light within the grill.

To get out of Transit Mode simply place your included Programming Dongle with USB attached in the 4 slots above the grill and press a button. This will activate a greeting message and you can begin to use your Solar Audio Post. See the 'Programming' section for instructions on how to upload your audio.

*Note: You must have a USB attached to the programming dongle at all times - even just to access settings even when not updating content.*

## 3. Configuring your Solar Post

There are various configuration options for your Solar Post. To access these settings ensure no messages are playing then insert the Dongle with USB attached (supplied) into the required 4 slots above the grill.



Now press a button and wait approximately 2 seconds for the Solar Post 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 Solar Post will restart with the saved setting, repeat this process to access consecutive functions or to exit without changing a setting

simply remove the dongle. The settings are accessed in the following order;

1. Volume Adjustment
2. Update Media Content (Program)
3. Night Time Configuration
4. Playback Statistics
5. Erase Statistics
6. Battery and Solar Test plus delay info and serial number
7. Put Unit into Transit Mode

### 3.1 Adjust Volume

Select the Adjust Volume Settings option - the Solar Post will now 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.

### 3.2 Update Media Content (Program)

Here you update the audio messages available on your Solar Post. 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.

### 3.3 Playback Statistics

This setting allows you to access the playback statistics of your Solar Post, select the Playback Statistics option and it will list a number of statistics 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)

Removing the dongle while these statistics are being listed will not affect them in any way.

### 3.4 Erase Statistics

This setting allows you to erase the playback statistics for;

1. Total messages played for this period
2. Total messages played for Track 1-6

Select the option you require, you will then be warned that the statistics are about to be reset, to cancel this remove the dongle before the 5 beeps end.

### 3.5 Battery, Solar Test and Delay information / serial

This setting allows you to perform a battery and solar test for your Solar Post.

Select the Battery and Solar Test option and you will then be informed of the battery voltage, whether you have solar power available and the voltage on each panel. It will also tell you if there is no power from a panel (Bank1 & Bank2) it will then tell you any delay settings and the serial no. of the unit.

*Note: The Solar Post will inform you when the charge falls below 4v and no longer play messages.*

### 3.6 Put Unit Into Transit Mode

This setting is used when the Solar Post is in transit and effectively shuts it down for travel. Remove the dongle at the Transit Mode option then replace the dongle when instructed.

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 Settings Dongle and press a button, you will then be greeted by a message that only plays when exiting transit mode.

## Programming

Programming the Solar Audio Post couldn't be easier. You will need 4 things;

*Note: Files must be .mp3 format*

1. Config.txt
2. Audio files (1-6)
3. A Programming Dongle - included
4. The USB stick provided with the Programming Dongle.

Please 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.

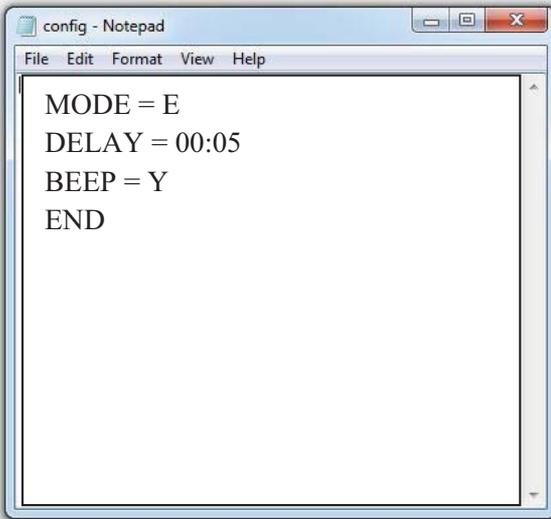
### Step 1 - Config.txt

You must first create your config.txt file;

*Note: we will send out your Solar Post already programmed and with a config.txt file on your USB stick (if you pre-sent your requirements and content to us) we suggest you keep the USB and config.txt file for future use.*

The config.txt file determines a number of settings on your Solar Post, 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
DELAY = 00:05
BEEP = Y
END
```

B1 = 1,2 B2 = 3,4  
Delay = 5 seconds  
Beeps = on  
END = end of mode file

The above config.txt file will place Audio Track 1 and 2 on Button 1, and Audio Track 3 and 4 on Button 2.

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

There will be a delay of 5 seconds once a button has been triggered before users can trigger another.

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

A full list of Config options are as follows;

## Config Settings

### Available Modes;

MODE	BUTTON 1 PLAYS TRACK	BUTTON 2 PLAYS TRACK	PLAYBACK
A	1	2	Int
B	1	2	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

### Delay=01:10

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. For example 1min 10seconds.

### Beep=Y or N

This Turns the beep on or off at the beginning and end of the track.

### END

Is always put on the last line at the end of all configuration values.

## Step 2 - 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 'n' drop your config.txt file.

## Step 3 - Attach USB

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

## Step 4 - Uploading

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

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

When finished the Solar Post will inform you and ask you to remove the Dongle.

The Solar Post is now ready to use with the updated messages. Test each message just to be sure and enjoy!

## Maintenance

### Battery - Oak

Each Solar Post uses 1 rechargeable 6v sealed lead acid battery which needs to be replaced approximately every 2 years.

### Battery - Metal

Each Solar Post uses 4 rechargeable AA 2900mAH nickel metal hydride batteries which need to be replaced approximately every 2 years. *Do not use normal Alkaline Batteries.*

### Tools

T20H Torque Bit (security bit)

Cross head Screwdriver

5.5mm Spanner

### Procedure

1. Unscrew the 6 security screws from the front panel using the T20H pin torque screwdriver.
2. Pull the front panel forwards **slowly**; do not exceed the solar cable.
3. Unplug the solar cable and remove the solar electronics from the pot.
4. You will need to open the electronics box by removing the 6 cross head screws and nuts.
5. Locate the black battery box inside and remove the small cross head screw from the back.
6. Slide the box cover open.
7. Replace the old batteries with the new. It's a good idea to push a button to ensure the batteries are connected and the audio player is working.
8. Replace cover and screw to secure the battery box.

9. Replace the 6 cross head screws and nuts to seal the electronics.
10. Re-connect the solar panel cable.
11. Replace the 6 screws to secure the front panel in place.
12. Test by pressing a button. We advise checking after replacing batteries that charge is being received by the electronics (you will need a sunny day for this).

At the end of each message a red light located in the lower half of the grill will blink if the electronics are receiving charge.

### Cleaning

We advise cleaning the Solar Posts and panels annually. Mild soap and water is best for general cleaning. Rinse with clean water after washing. All surfaces should be cleaned using a soft cloth or sponge, using nothing harsher than natural bristle brushes; do not scour painted surfaces.

### How can you tell if your Solar Post is charging?

At the end of each message a red light located in the lower half of the grill will blink if the electronics are receiving charge.

## Installation Guide

The Solar Post can be supplied with a stand or in-ground mount.

### Metal/Oak - With Stand

The tall metal post is installed into a solid surface (usually cement) via 4 x M8 fixing bolts through 4 holes available in the stand.

### Oak -In Ground

When supplied with an in-ground mount the Solar Audio Post can be installed directly into the ground.

**IMPORTANT:** *The wooden body of the post must not be sunk into the ground; this will result in decay over time.*

1. Dig hole of appropriate size. Refer to qualified structural engineer to ensure area is safe for digging and hole is sufficient in size for purpose.
2. Place post in hole and fill with cement, ensure you leave a 20mm Top Gap between body of post and cement. Allow cement to harden.
3. Fill Top Gap with top soil, wood chippings or gravel etc. This allows water to escape away from the body of your post.

## Specifications

Message Storage Medium	64 Mbit Flash Memory (on board)
Maximum number of messages	6 (3 on each button)
Message encoding format	.mp3
Maximum total audio length	>16 minutes @ 64kbs
Recommended message length	< 2 minutes per message
Audio output	1w into 8ohm speaker
Freq. range	75Hz-20kHz
Power	4 built in Solar Panels charging long life battery(ies) at up to 100mA per hour.
Weight	Tall Oak: 15Kg Metal: 10Kg

The total audio length is dependent upon the audio bitrate, use the following link to determine the optimal bitrate for your audio;

<http://www.blackboxav.co.uk/bitrate-time-converter>

**For additional help please contact us:**

**www.blackboxav.co.uk/support**

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