SoundClip Battery

Manual
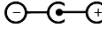
V1.1

Contents

Safety Guide

Please observe the following when installing this device

Warning

- This product is not designed to be resistant to moisture or excessive dirt/dust. When deciding on a suitable installation point ensure there is reasonable protection from environmental damage.
- If you require this unit to be installed outdoors or in a dusty or damp environment use a certified IP rated enclosure and seal any entry/exit holes of wiring etc. If the unit needs to be periodically updated or charged you will need to select an enclosure with an easy to remove lid and gasket seal. This product should not exceed its operating temperature
- ⊖─ⓒ─⊕ If there is damage to the power supply in any way, arrange for a replacement unit by contacting blackbox-av. They may require you to send the defective power unit back so in this case do not dispose of the power supply unless prompted to do so. If you wish to source your own power supply a CE or FC certified double insulated and regulated supply is required. The SC-B has an output rating of 6vDC and a minimum of 1A. Using a power supply with a higher voltage will irreparably damage the SoundClip Battery unit.
- Do not place the unit in direct sunlight for prolonged periods as this may cause the product to overheat.
- 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 point 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 item and dispose of them separately.

Precautions of Use

- Whilst the unit is connected to a mains outlet and the power is switched on it is providing energy for operating the device and charging the batteries. It is not recommended to keep the unit plugged in indefinitely if not being used.
- If storing the unit for long periods of time, it is recommended that you remove the batteries.
- Do not operate the unit below -10 or above 50 degrees Celsius. Battery performance will be affected by colder temperatures. Do not bring the unit from a very cold environment to a warm environment without allowing it time to acclimatise as condensation may affect its operation.
- When using different types of push buttons and other hardware connected to the button inputs and GPIO connections make sure they are compatible with the device. Please see the technical spec page for details on these connections. Failure to use care with these connections may result in damaging the device and subsequently affect the
- blackbox-av Warranty.

- When attaching headphones or speakers please use certified and good quality accessories. Failure to use care with these connections may result in damaging the device and subsequently affect the blackbox-av Warranty

Warranty

blackbox-av provides a 12 month warranty with this product

Your new SC Battery

In the Box:
1. SoundClip Battery unit
2. Micro SD Card to USB Reader
3. 128MB Micro SD Card
4. Four AA 2500mah Duracell© brand NimH Rechargeable Batteries
5. 6vDC Power Adapter
6. Manual

SoundClip Battery
The SoundClip-Battery player is designed for situations where a permanent mains supply is not available. It can be installed with speakers or headphones and triggered using a variety of buttons and sensors.

Batteries
The internal batteries can take between 4 to 6 hours to charge and once complete the charge indicator will flash.
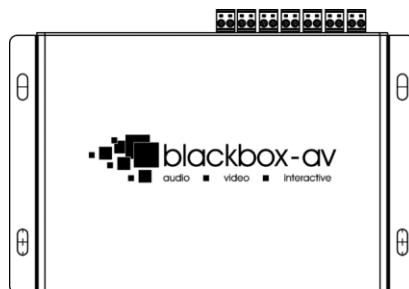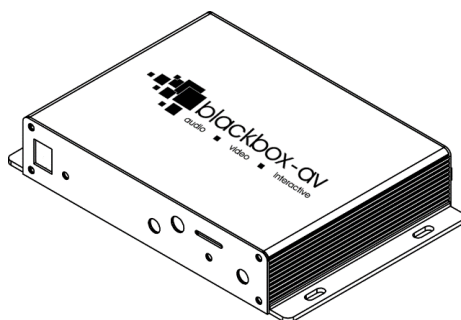
Charging the Batteries
Insert the DC plug into the power socket of the SoundClip Battery and the charge LED will switch on. When charging is complete the Charge LED will flash.

Power Adapter
Used for charging the internal batteries and to permanently power the device. Whilst the unit is connected to its DC power supply the charge indicator will illuminate.

Micro SD Card Reader
The media player is compatible with most MicroSD cards – with up to a maximum capacity of 32GB and needs to be formatted with a Microsoft Windows Computer - in either FAT or FAT32 file systems. On the card there is a config file as well as your MP3 fil

Connections

GPIO /
5V OUT

BUTTONS INPUTS

SC BATTERY

1   2   3   4   L   R

SERIAL NO:

SPEAKER OUTPUTS

VOLUME

HEADPHONE OUTPUT   HEADPHONE OUTPUT

POWER INPUT

MICRO SD

6vDC

www.interpretationshop.co.uk

CHARGE

STATUS LED
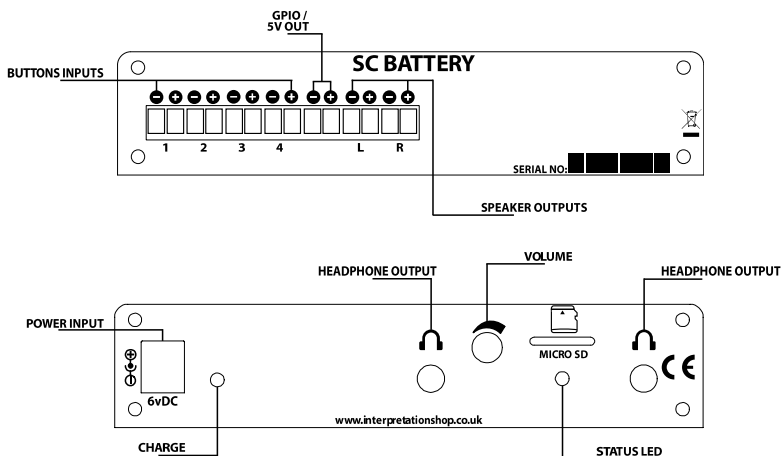
Overview

Power Input / Charge
Whilst the unit is connected to its DC power supply the charge indicator will illuminate. The internal batteries can take between 4 to 6 hours to charge. Once complete the charge indicator will flash. At medium volume with continuous playback the unit will play from fully charged for about 48 hours. (This however can greatly vary depending on your setup).

Headphone Output
This device has 2 x stereo high-quality 3.5mm jack outputs.

Volume
Headphone and Speaker outputs can be adjusted via the Volume control.

Status LED
The green LED indicates the player state.

Button Inputs
The SoundClip Battery can accept up to four buttons.

GPIO Out
This 5v (+/- 10%) is switched on during audio playback. It can be used to power LED's.

Speaker Output
The onboard amplifier as 2x1W RMS (+/- 10%) and can be connected to various speakers.

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Programming

Content for your SoundClip Battery is stored on a MicroSD card (supplied pre-programmed). We suggest you use this as a template for uploading your own content.

Should you need to use a different MicroSD card we suggest you format the new card first to 'FAT' or 'FAT32'

To program your content you will need;

1. A PC or laptop with Windows OS
2. Audio Content in .mp3 format (supports up to 99 files)
3. Your Config.txt file
4. MicroSD Card (supplied)
5. MicroSD to USB convertor (supplied)

1. Windows OS
Windows OS is required to program your SC-Battery using a PC or Laptop (Xp – 10). MacOS is not supported due to hidden files generated by the OS.

2. Audio Content
The SoundClip Battery can play up to 99 .mp3 tracks. These are stored in the root of the MicroSD Card. You must number your files 001 – 099.
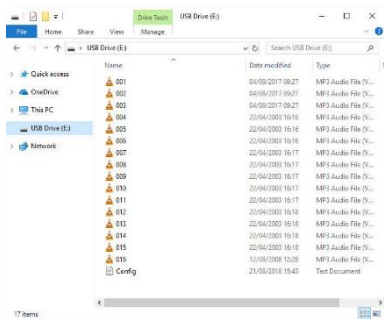
File 001 – Button 1 / 1st file played
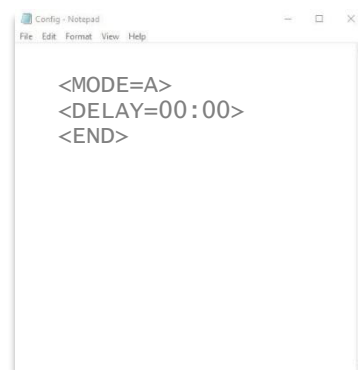File 002 – Button 2 / 2nd file played

File 003 – Button 3 / 3rd file played
File 004 – Button 4 / 4th file played….
Etc.

How these files are played / triggered is dependent on the Config.txt file and the <MODE> set. See following page for <MODE> list.

3. Your Config.txt file
The manner in which your content is played / triggered is dependent on the Config.txt file.
The Config.txt file has only 2-3 lines;

<MODE=A> - Sets play mode - *required*
<DELAY=00:00> - Must be 00:00 - *required*
<END> - Ends the config file - *required*

To create a Config.txt file simply right-click on windows desktop > new > text document > label it Config.

4. Add Content
Once you have your audio files ready and correctly named, and your Config.txt file prepared you simply need to load this all on the supplied MicroSD card.
Insert the MicroSD card into supplied MicroSD - USB card reader. Plug into a spare USB socket on your PC and

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open the folder. Now simply drag and drop all the required files onto the MicroSD Card.

Insert the MicroSD Card into your SoundClip Battery and power on.

Configuration Modes

Depending how you configure the SoundClip Battery trigger inputs you will need to set the config file with the correct mode for your needs.

Default Delay

Configuration modes are built with an 8 second default delay that takes place after a track has played through.

The modes available with the SoundClip Battery are listed below;

<Mode=A>
Interruptible

Up to 4 buttons can be attached. An individual MP3 can be assigned to each button and playback is interruptible in this mode, so pressing a button will activate new playback.

- Button 1 – 001.mp3
- Button 2 – 002.mp3
- Button 3 – 003.mp3
- Button 4 – 004.mp3

<Mode=B>
Non-interruptible

Up to 4 buttons can be attached. An individual MP3 can be assigned to each button and playback is non-interruptible. Playback must finish before you press another button.

- Button 1 – 001.mp3
- Button 2 – 002.mp3
- Button 3 – 003.mp3
- Button 4 – 004.mp3

<Mode=D>
AutoPlay/Handset Mode

This mode is designed to accompany our AutoPlay headphone features. Button input 1 connects to the trigger of one of our AutoPlay devices, normally using a closed switch. Buttons 2, 3 and 4 can interrupt track 1 when pressed.

- AutoPlay/(commonly a)Closed Trigger – 001.mp3
- Button 2 – 002.mp3
- Button 3 – 003.mp3
- Button 4 – 004.mp3

<Mode=E>
AutoPlay/Handset with Next/Previous Playback

Operating the same as Mode D but allowing up and down track operation with buttons 2 and 3. Button 4 is not used. If the track stops playing the unit will reset its position.

- AutoPlay/(commonly a)Closed Trigger – 001.mp3
- Button 2 – Up Track
- Button 3 – Down Track

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<Mode=F>
Interruptible Next/Previous Playback

Navigate up and down using Buttons 1 and 2 through a maximum of 99 tracks.

- Button 2 - Up track
- Button 3 - Down track (from 002.mp3 to 099.mp3)

To change a mode, simply hold button 2 and wait 8 seconds. This will perform a unit reset, allowing the SC-Battery to read your changed mode (the MicroSD Card must be out of the unit).

Status LED

When a button has been pressed the Green status LED will illuminate whilst the file is being played. If the file ends the status LED will flash for 10 seconds. This flashing green led is not a delay, it is holding the unit powered for 10 seconds before it enters a power saving mode. If a button is pressed during this period, the file will play right away compared to if it was in power saving mode.

If a delay has been set, when the track ends the green LED will flash until the delay time has expired. You cannot play a different track during this time.

Trigger and Buttons

Connecting Buttons
Buttons are simply wired directly to the screw terminals at each of the four inputs. Pushbuttons work as standard with the player and are required to be the normally open type.

Piezo, vandal & water-resistant buttons can be purchased if your installation requires a more robust switch.

Unique AutoPlay functionality

The SoundClip Battery has been specifically designed to work with our AutoPlay range of handsets and headphones. These give the unique functionality of being able to lift the headphone or handset to automatically trigger Button 001 content. See the manual for your specific handset / headphone for connection instructions.
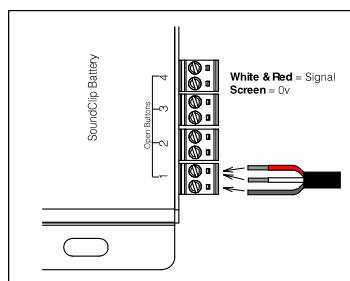
The drawing below demonstrates the wiring of one of our AutoPlay devices to a SoundClip Battery unit.

GPIO Connection

The GPIO port can be used to connect power to another circuitry like an LED's.

The SoundClip Battery is designed to be very efficient with power, using GPIO 5V (-/+ 10%) Output for other devices will affect the battery consumption. Small LED's are relatively low power consumption devices and will be fine to use with the player.

Between charges the internal batteries will drop in power and voltage. Upon reaching 4V, the device will power down and become ready for charging.

Normal operation on fully charged batteries:
5.5V

Normal operation whilst on charge:
5.3V

Low power operation:
4V

Troubleshooting

To perform a hard reset, connect a button to position 2 and hold down for 7 seconds, upon release the green Status LED and Charge LED will alternate. Once finished, the reset is complete.

Hard Reset

To perform a hard reset, simply hold down button 2 for 8 seconds. This will perform a reset (the MicroSD Card must be in the unit).

Changing the Batteries

It's **important** to purchase the same or similar rechargeable batteries. Never fit single use or Lithium cell batteries to the SoundClip Battery as it can cause permanent damage to the player.

1. Removing the Screws

Undo the four screws using a small 'Phillips' or pozi head screwdriver from the front panel as shown in the drawing to the right. It's important to keep these small screws in a safe place for any possible future uses.

### 2. Removing the Green Connectors

Remove the green connectors from the rear plate.

3. Accessing the Batteries

Slide out the PCB by holding the front panel, proceed to pull on it gently. The PCB is retained by two grooves in the side of the case. It is best to not fully remove the PCB; just remove it enough to gain access to the four internal batteries.

4. Replacing the Batteries

The batteries are covered with black plastic supports. Take these off and pull out the batteries. Replace with fresh batteries observing the correct polarity and replace the support covers. Slide the PCB back in and replace the four screws.
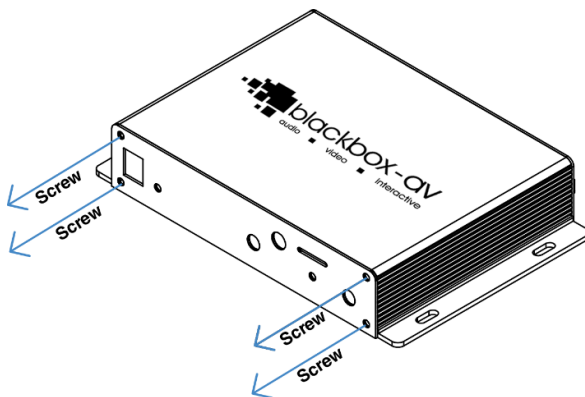
Technical Information

Weight	0.4Kg
Unpackaged Weight	0.6Kg
Dimensions	110 x 155 x 28mm
Message Storage Medium	MicroSD Card (32GB of Storage)
Maximum Number of Audio Files	99 Files
Number of Buttons/Trigger Inputs	Triggered by up to 4 Buttons
Message Encoding Format	.MP3
Speaker Audio Output	2 x 1W RMS into 4Ω Speakers (Stereo)
Frequency Response	30Hz - 22KHz
Headphone Audio Output	2 x 3.5mm audio jack (headphones / handsets etc.)
Speaker Output	Screw terminals (phoenix)
Battery Life Duration	48 Hours (with full charge)
Power Supply	External PSU 6V
Common Switch Output	Open Drain 50V
Batteries	4 x AA 2500mah Duracell© brand NimH Rechargeable Batteries

Technical Drawings

Drawings not to scale

28.50

60

156.60

21

146.60

113

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