

SPECIFICATIONS

Messages

Message storage medium:	1 * SD Flash Card
Maximum SD Card capacity:	4 Gbytes SD not HDSD
Maximum number of messages:	1 (up to 8 with an extender box)
Message encoding format:	Windows PCM (.wav)
Message sampling rate/type:	22.05 KHz/16 bit mono
Bit Rate	352kbps
Maximum total message length:	>27 hours

Message Output

Audio output:	1W into 8ohm speaker
Speaker connector:	2 * Screw Terminals SKR+/SKRPlay
Indicator:	Green LED

Button Input

Button connector:	2 screw terminals 0V/IN
Maximum number of buttons	8 ; extender box required
Button operating modes:	Interrupt/Non Interrupt whilst playing Random; Track-Up/ 1 button increment

PIR Operation

PIR connector:	3 * screw terminals 0V/IN/V+
PIR contacts:	normally open. Not alarm contacts
Programmable Delay from Power-Up	0 to 999 seconds
Programmable Delay between messages	0 to 999 seconds

Power Supply

External power supply	9 to 16V DC (12V nominal) / 500mA
Power supply connector	2.5mm Inner=V+, Outer=0V
Power Indicator	Red LED

Case Dimensions

With mounting flange	105 (W) * 109 (L) * 35 (D) mms
Case	– Gray ABS
Weight:	150G assembled

SB LITE CONNECTIONS

INPUT TERMINAL

A single button should be connected to the 0v and In terminal connection.
A single PIR movement sensor connects to the 0V In and V+,
If using an extender box 8 signals go to "in" with 8 connections to the 0v.

PLAY LED

The Green LED lights when the card is read at switch-on and also lights when a message is playing.

SPEAKER OUTPUT

The speaker (8ohms) should be connected between SKR- and SKR+ on the 2-way 'speaker output' (see below) terminal connector.
The unit also has a 3.5mm audio jack plug output which you can output from.
This is useful for handsets/ headphones.

ON LED

The Red LED indicates that power is applied to the unit.

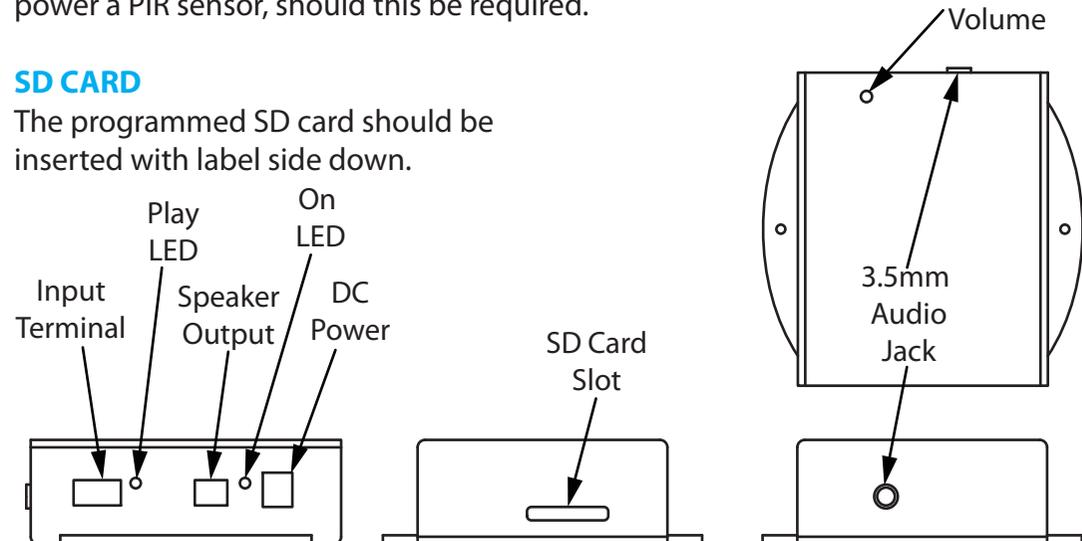
DC POWER

The power supply (9 – 12V, inner = +, outer = -) should be connected to the PSU connector.

The V+ terminal is connected to the power supply and can be used to power a PIR sensor, should this be required.

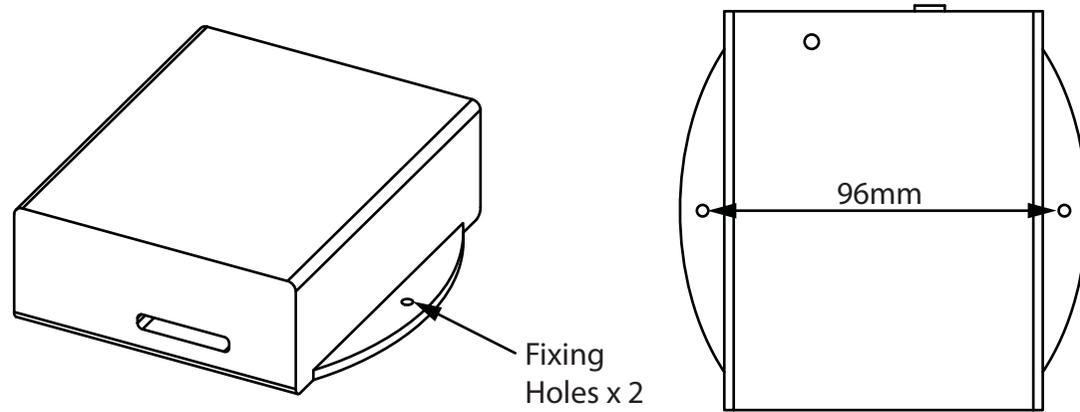
SD CARD

The programmed SD card should be inserted with label side down.



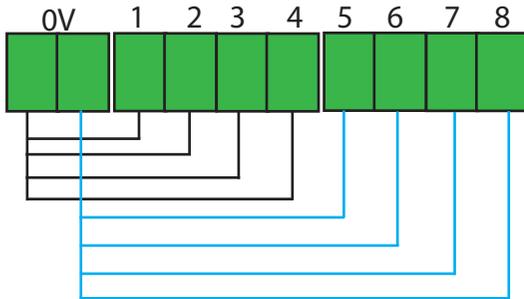
ATTACHING THE SB LITE

There are 2 holes on located base of the unit which can be screwed through to seal the SB LITE in place.



CONNECTING BUTTONS

To connect buttons to the SB lite using the extender board please follow the diagram below:



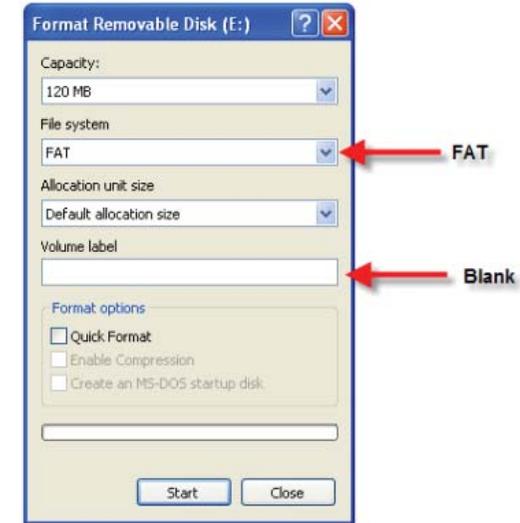
SD CARD

Reformatting the SD Card

Before uploading new content to the SD card you should always format the

Insert the SD card to your computer. Within the "my computer" window right click on the card and click format.

The SD card needs to be formatted as a FAT 16. (FAT not FAT 32) and the volume label must be blank. Then click start.



Please note you need to convert your audio files using the encoding guide and software

<http://www.blackboxav.co.uk/support>

AUDIO FILES

Audio Files

The SB LITE reads .wav audio files from an SD card. The files must be 16-bit mono sampling preferably at 44.1 KHz. The maximum number of .wav files you can use with the audio player is 8, with 1 button. If you would like 8 buttons you would need an extender which will give you 8 buttons. You will need to assign each .wav file a specific name.

The audio files MUST be named '01', '02' etc. Once transferred onto the SD card they must be positioned in the root directory.

Copying files to the SD card can take longer than the computer indicates i.e. the computer will show that copying is finished but there is still data to be transferred to the card. Please ensure all files have been copied to the SD card before it is removed. The best way to confirm this is to 'click' the 'Unplug or Eject Hardware' button in the 'System Tray' icons (bottom right of screen), and then select 'STOP xxxxxxxx' where xxxxxxxx represents the SD card drive. If all the data has been transferred then a message will indicate that you can remove the card, if not then wait a while and try stopping the device again.

Remember that you should not have 'My Computer' or 'Windows Explorer' accessing the SD card at this time otherwise the computer will assume the card is in use and will not allow it to be removed.

The programmed card should then be inserted into the SBLite with the label side down. By default, all messages are non-interruptible so if you have 3 button inputs that you want to be non-interuptable you will simply need to put the 3 audio files called 01, 02 and 03 onto the sd card. (This is useful if you are working with a PIR sensor.)

You may need to wait up to 30 seconds for the SB to power up.

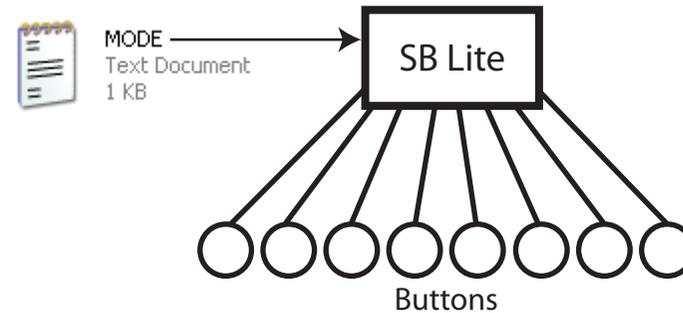
To programme the SB LITE to playback audio in different ways you will need to see the section on 'Operation with a MODE file' for further details.

Download our encoding software and guide:

<http://www.blackboxav.co.uk/support>

OPERATION WITH A MODE FILE SB LITE AUDIO PLAYER AUDIO PRODUCT MANUAL

The MODE file allows you to programme how the SB lite responds to input signals. It is a basic text file that can be edited with any text editor such as notepad.

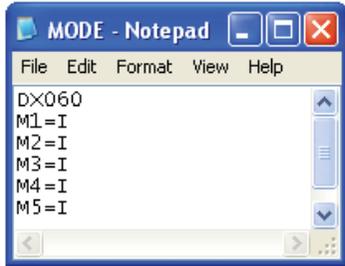


The default SB LITE setting (No Mode File needed) is messages are non-interruptible, i.e. once started the message cannot be interrupted by another message button.

SB LITE Mode Code Guide (code is case sensitive)

- N = Non interruptible messages
- I = Interruptible messages
- R = Random selection Non interruptible messages
- r = random selection Interruptible messages
- P = Play whilst the button is pressed
- DX030 = Time from power-on to accepting the 1st button input is 030 seconds. (Maximum delay is 999sec = 16.65 mins)
- DY030 = Time from end of message to accepting the next button is 030 seconds. (Maximum delay is 999sec = 16.65 mins)
- PD030 = Pause the audio file. After 030 seconds the pause will reset so on next press the audio will start from the beginning. (Maximum delay is 999sec)

Sample Mode File



This MODE file tells the SB Lite to have a 60 second delay at start up and that all 6 button messages are interruptible.

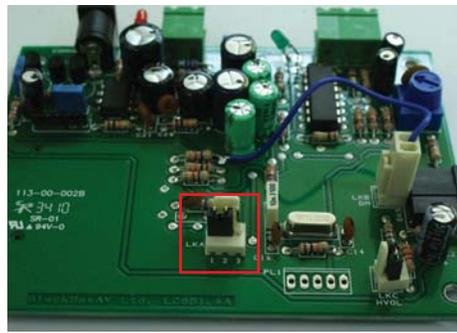
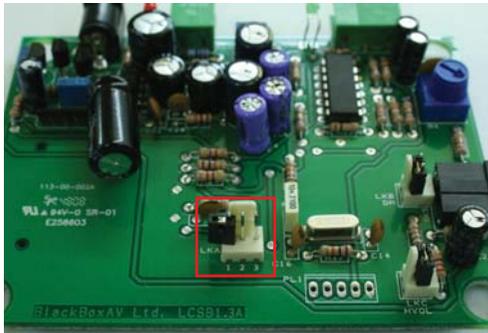
Track up / Subsequential Playback

The SB Lite has the ability to play subsequentially. (ie press the button to play track 1, press again to hear track two etc) To do this you will need to move a jumper link which can be found inside the SB Lite on the PCB.

Firmware version SBLite1.8 onwards:

Internally link pins labelled as 1&2 of the connector labelled LKA.

This is best achieved using the jumper link found linked to one pin already.



Firmware version 'SBLite1.3 -> 1.7':

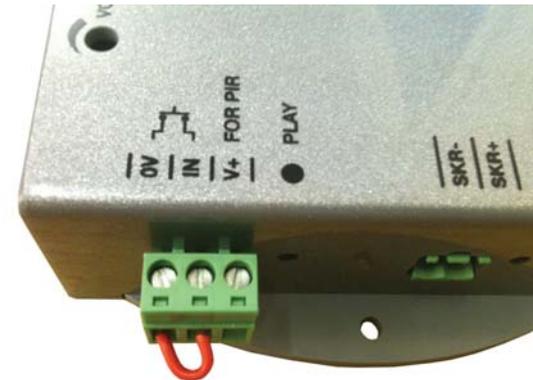
Internally link the 2 pins of the connector labelled PL3, closest to the PL3 label. This is best achieved using the jumper link found linked to pin 1 already.

For best results in 'TrackUp' mode, all the messages should be configured as Interruptible using the MODE file option.

Looping Playback

To get the SB to loop you will need to:

1. SD Card should have track 01.wav and a mode file - M1=N.
2. You need to join the button connections (0V / In) on the 3 way green connector - you can use a paperclip or piece of wire to join in the screw terminals as indicated in the picture below.



Paused Playback

To get the SB to pause you will need the following on your SD card.

SD Card should have track 01.wav and a mode file - PD060

M1=I