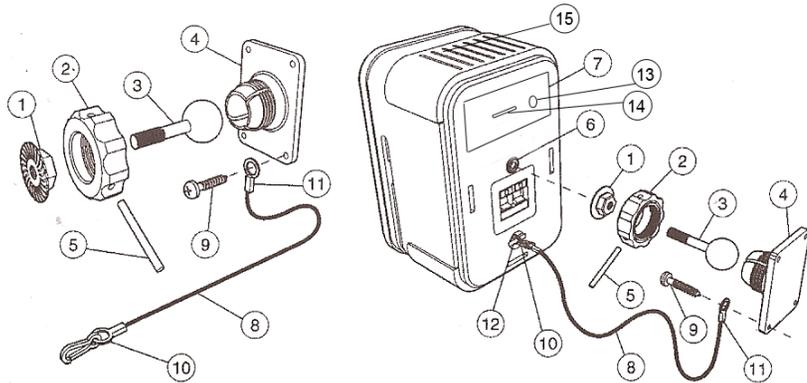


# BRACKET ASSEMBLY AND MOUNTING



**a.** Loosen and remove the molded nut @ by turning it counter clockwise. Use the 'supplied metal bar (2) if necessary by inserting it in one of the holes on the molded nut (5).

**b.** Pull the ball/shaft (3) out of the wall bracket (4).

**c.** Slide on the molded nut (2) onto the ball/shaft (3) with threaded opening facing the ball, and thread on the metal nut (1) all the way onto the ball/shaft (3) with the nut (1)'s "knurled" surface facing away from the ball.

**d.** Screw on the ball/shaft (3) into the threaded insert on the back of the speaker cabinet (6) until it is fully seated against the bottom of the insert.

**e.** Tighten the "knurled" nut (1) using a crescent wrench until it is firmly seated against the back of the speaker and has fully locked the ball/shaft (3) and the speaker cabinet together. Please note that once this nut is tightened, it may embed some marks on the back of the speaker where the attachment is made. However, these marks will be covered by the nut (1).

**f.** The back-up cord (8) provided as an additional measure to prevent the fall of the speaker in case the speaker becomes detached from the wall bracket. One of the two lower screws (9) that attach the wall bracket (4) to the wall, will need to go through the eyelet (11) at the end of the cord before going through the wall bracket hole. Mount the wall bracket (4) onto a wood stud on the wall, using #10, minimum 1 inch long, pan head wood screws. Make sure that all 4 screws are driven into the stud and not in drywall. If the bracket needs to be

mounted on drywall, the use of properly selected and installed wall-anchors and screws is essential. Make sure that the screw head is at least 0.36 inches (approximately 3/8 inches) or larger in diameter so that it can properly hold the backup cord eyelet (11).

**g.** Holding the speaker cabinet (7) with both hands, reinsert the ball portion of the ball/shaft (3) into the wall bracket (4).

**h.** Hand tighten the molded nut (2) while positioning the speaker for the intended orientation.

**i.** Once the orientation of the speaker is finalized, use the metal bar (5) in one of the holes on the molded nut (2) and tighten securely.

**j.** Securely attach the other end (10) of the backup cord (8) to the MIAS, by engaging it through the bar (12) on the back speaker.

**k.** Insert the programmed SD card label down into the SD card slot (14).

**l.** Connect the DC power cable to the power input point (13).

**m.** To adjust the volume, insert the terminal screwdriver into the volume control hole (15) turning it clockwise to increase the volume. Remove the screwdriver once have reached your desired volume.

**Safety note: Proper selection of mounting hardware not included herein and proper assembly and installation of brackets, including but not limited to selection of appropriate weight bearing support and bracket use with the specified speaker only is the exclusive responsibility of the customer. Manufacturer disclaims any liability for the selection of mounting hardware and or bracket installation.**

## SPECIFICATIONS

### Speaker

Driver Bass/midrange	100mm
Drivers Tweeter	12mm Titanium Laminate
Frequency Response	20Hz - 20kHz
Power Handling	200W - 50W
Sensitivity	89dB/2.83V/1m
Nominal Impedance	8 Ohms
Dimensions (H x W x D)	228 x 155 x 139mm
Weight	2.7kg
Colour	Silver

### Messages

Message storage medium	1 * SD Flash Card
Maximum SD Card capacity	4.3Gbytes
Maximum number of messages	8
Message encoding format	Windows PCM (*.wav)
Message sampling rate/type	22.05 KHz/16 bit mono
Maximum total message length	>27 hours
Power on load time	30 seconds

### Message Output

Playback sample rate/type	22.05 KHz/12 bit mono
Audio output	2W

### Power Supply

External power supply	9 to 16V DC (12V nominal) / 1000mA
Power supply connector	1.3mm Inner=V+, Outer=0V
Operating Voltage	110 - 240V AC 50/60Hz Indoor Use Only

### Connections

The power supply (9 – 16V DC, inner = +, outer = -) should be connected to the PSU connector.

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

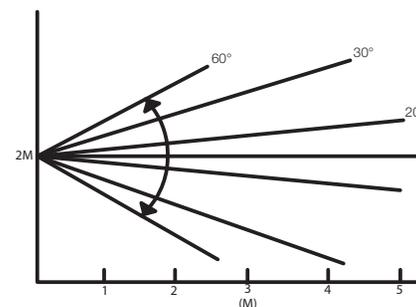
DO NOT connect an external amplifier into the input located on the rear of the speaker.

You may connect a second speaker to the input located on the rear of the speaker. Not less than 8Ω.

### PIR Operation

Programmable Delay from Power-Up	0 to 999 seconds
Programmable Delay between messages	0 to 999 seconds

### PIR Detection Range



## For Your Safety

Please read carefully and use in accordance with our safety instructions below:

1. Note; The adaptor may become warm during use or emit a slight buzzing sound, this is quite normal.
2. Remove the adaptor from the mains supply before connecting the MIAS.
3. If you use a different power adaptor DO check polarity, or damage could result to your MIAS. (Manufacturer takes no responsibility for damage caused if using another power supply)
4. DO NOT attempt to open the adapter housing as there are no serviceable parts inside.
5. For indoor use only.

Notice: The socket-outlet shall be installed near the equipment and shall be easily accessible.

## PROGRAMMING THE SD CARD

The audio file format for the MIAS is Windows PCM file format (i.e. .wav files). The audio must be mono, 16 bit samples at 22.05 KHz sampling. The audio should be normalized to 100% amplitude to ensure best audio quality when played back on the MIAS. The SD card MUST be formatted as FAT with a blank volume name before copying the 'wav' files. This is done by right clicking the SD drive icon from 'My Computer' and selecting FORMAT.

The audio files on the PC hard disc MUST be named '01.wav', '02.wav' etc. up to the last file to be copied. There should be no break in the file name sequence i.e. the name of the last file should be equivalent to the total tracks to be on the card. There can be a maximum of 8 audio files on the SD card. You then copy each file in turn from the PC hard disc to the SD card root directory. Do not put any other files on the SD card (except the 'MODE.txt' file if required – see below).

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 MIAS with the label side down.

By default, all messages are non-interruptible. This can be changed using an additional 'Mode' file on the SD card. See the section on 'Operation with a MODE file' below for further details.

## OPERATION WITH A 'MODE' FILE

The MODE file allows additional options to be programmed, which modify the way the SBLite responds to the button inputs. This feature is available on SBLites with firmware version SBLITE1.2 or later. By default, all the messages are non-interruptible, i.e. once started the message cannot be interrupted by another message button. However some (or all) messages can be assigned as interruptible by programming a mode type for the particular message in a text file identified as 'MODE.txt'. In addition some messages (and consequently button inputs) can be assigned as randomly selectable. Additional features available with the MODE file are programmable delays. One from power-on to checking the button for the first message; and also a delay between the end of a message and checking the button to allow a new message to start. These delays are primarily intended to allow operation with a PIR movement sensor.

The MODE file is a simple text file, which can be created using any simple text editor on a PC. Alternatively blackbox-av can provide a 'Visual Basic' programme, which can assemble the MODE file using a simple 'click-the-box' user interface.

Each text line in the MODE file is a command, which sets either a time delay value or a mode type for a particular message number. If a time delay is required then it should be entered on the first and/or second line of the MODE file. The line begins with the letter 'D' followed by either 'X' or 'Y' followed by a 3-digit number.

DXzzz = Time from power-on to accepting the 1st button (zzz = seconds) N.B. all 3 digits must be entered e.g. DX030 is 30seconds delay from power-on.

DYzzz = Time from end of message to accepting the next button (zzz = seconds) N.B. all 3 digits must be entered e.g. DY010 is 10seconds delay between messages.

The command for setting the message mode type begins with 'M' followed by a number (1-8) representing the message, then '=' then a letter identifying the mode type for the message. The mode type letters are as follows:

N = Non interruptible

I = Interruptible

R = Random selection Non interruptible

r = random selection Interruptible

P = Play whilst the button is pressed.

E.g. M2=I means that message 2 can be interrupted.

If a message is identified as random then, whenever a random message button is pressed, any of the messages set as random could be played. The actual message played will be chosen at random from the list of all random selections. Once a random message has been played, then it will not be available for re selection until all random selections have been played. The system will also ensure that there will not be a repeat of the last message played when all selections become available again. The 'R' and 'r' cases allow for both interruptible and non-interruptible types of random messages.

The 'P' mode type allows for a message to be played only while its message button is pressed, i.e. if the button is released then the message stops playing.

The 'MODE.txt' file should be copied to the SD card root directory similarly to the audio files.

A typical complete MODE file could be as follows:

```
DX030
DY010
M1=N
M2=I
M3=R
M4=R
M5=R
M6=R
M7=R
M8=R
```

This has the following mode arrangement:

Time from power-up to checking the button input = 30seconds  
 Time from message end to checking the next button input = 10seconds  
 Message1 is Non-interruptible  
 Message2 is Interruptible  
 Message3 is random Non-interruptible  
 Message4 is random Non-interruptible  
 Message5 is random Non-interruptible  
 Message6 is random Non-interruptible  
 Message7 is random Non-interruptible  
 Message8 is random Non-interruptible

Using this mode file, the MIAS will wait 30seconds after power on before checking the buttons. Then, if Button1 is pressed then message1 will play and cannot be interrupted. At the end of the message, then the MIAS will wait 10 seconds before checking the buttons again. This delay will occur at the end of all messages that end normally, however should a message be interrupted by a different message button then the MIAS will play the new message immediately, without waiting the end-of-message delay time.

For a full list of FAQ's visit our website  
[www.blackboxav.co.uk/message-in-a-speaker/](http://www.blackboxav.co.uk/message-in-a-speaker/)