



British Audio



BLACKAIR 1 TWEETER

- BA1TW-V4

BLACKAIR 3 MIDRANGE

- BA3M-V4

BLACKAIR 6 COAXIAL

- BA6-V4

BLACKAIR 6 MIDWOOFER

- BA6MW-V4

black air

Speaker Range

Owners Manual

Congratulations on purchasing your VIBE speakers. Please read this manual in order to fully understand how to get the best results from this product and ensure that all advice on how to look after the product is followed.

Thank you for buying VIBE, we hope you enjoy listening to your product as much as we enjoyed creating it.

WARNING



DO NOT EXPOSE THIS PRODUCT TO DAMP OR MOISTURE - doing so may result in fire, shock or damage to the product.

BEFORE WIRING DISCONNECT THE CABLE FROM THE POSITIVE BATTERY TERMINAL - failure to do so may result in electric shock or injury.

ENSURE GOOD AND CORRECT CONNECTIONS - failure to make the correct connections may result in fire or damage to the product.

DO NOT USE ANY FUNCTIONS OF THIS EQUIPMENT THAT MAY TAKE YOUR CONCENTRATION AWAY FROM DRIVING YOUR VEHICLE - do not set up your amplifier whilst driving, doing so may result in an accident. For prolonged setting up, make sure that your vehicle is stationary and in a safe location.

KEEP THE VOLUME AT A LEVEL SO YOU CAN STILL HEAR OUTSIDE NOISE - failure to do this may result in an accident. VIBE equipment is capable of producing sound levels that can permanently damage your hearing. VIBE recommends caution when listening at high volume. For safe and enjoyable listening the sound should be comfortable and clear without distortion.

CAUTION

Never connect any speaker lead to the car chassis. This can cause severe damage to your speaker /car radio /amplifier.

Before drilling or cutting any holes, investigate the layout of your vehicle thoroughly. Use caution when working near the fuel / hydraulic lines and electrical wiring.

Observe the correct polarity when wiring, improper phasing may cause a loss of bass response.

Ensure that no moving parts catch on the speaker or grill (e.g. window or door handles, or window glass inside the door)

Limited Warranty

All VIBE products carry a full 12 month warranty, valid from the date of the original receipt and proof of purchase (UK only). The online warranty card should be completed within seven days of the original purchase date. The original receipt and packaging should be retained for this twelve month period. If the product develops a problem any stage during the warranty period, it should be returned to the point of purchase in it's original packaging, and complete with no items missing.

A full description of VIBE's warranty information and registration can be found on our website :

www.vibeaudio.co.uk/warranty



What Is Not Covered

- Damage to product due to improper installation.
- Subsequent damage to other components.
- Damage caused by exposure to moisture, excessive heat, chemical cleaners and / or UV radiation.
- Damage through negligence, misuse, accident or abuse. Repeated returns for the same fault may be considered abuse.
- Any cost or expense related to the removal and / or re-installation of the product.
- Damage caused by amplifier clipping or distortion.
- Items repaired or modified by any unauthorised repair facility.
- Return shipping on non defective items.
- Products returned without a returns authorisation number.
- Damage to product due to use of sealant.

International Warranty

Contact your international VIBE dealer or distributor concerning specific procedure for your country's warranty policies. www.vibeaudio.co.uk

Warning

VIBE equipment is capable of sound pressure levels that can cause permanent damage to your hearing and those around you. Please use common sense when listening to your audio system and practice safe sound.

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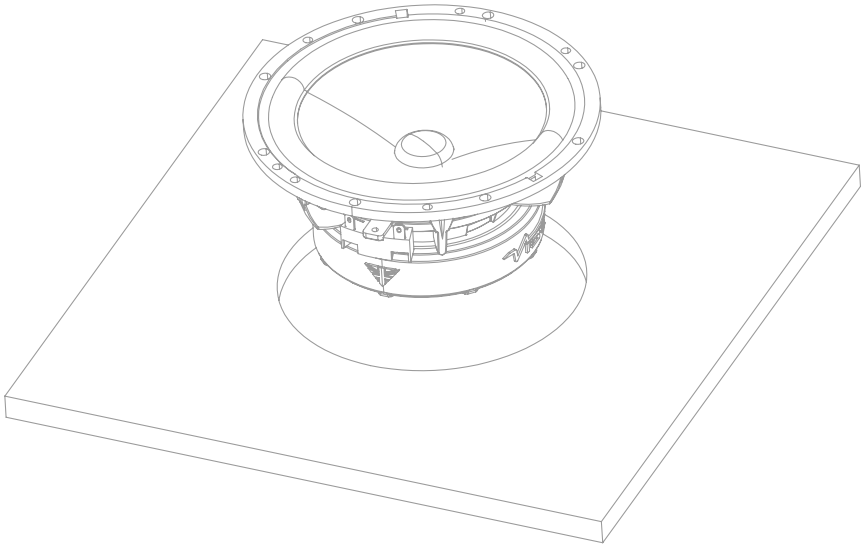
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Speaker Installation Guidelines : BA3M, BA6, BA6MW

Firstly, make sure that the speakers will fit in your chosen location. This may involve the removal of the standard vehicle speakers. Please use the mounting depth and hole cut dimensions as detailed in this manual for guidance.

- If necessary cut any material away to allow the speaker to sit correctly.
- Cut out the mounting hole and pre-drill any other fixing holes.
- Screw through both gasket and speaker until the speaker is securely fastened.



Speaker Installation

Using the template provided find a suitable mounting location for the speaker.

Mark the mounting holes and pre drill the fixing hole with a 2mm drill bit. If the grill is to be fitted then place it over the speaker and screw through both the grille and the speaker using the provided screws. Be careful not to over tighten the screws as it may cause damage to the grille.

Tweeter Installation Guidelines : BA1TW

The tweeter can either be fitted flush or surface mount.

Try and take into account the following when locating a suitable position.

For optimum staging try and locate a position that is higher than the woofer but within twelve inches (maximum) of it.

It is vital that the tweeter is adjusted so that it is focused towards the listener.

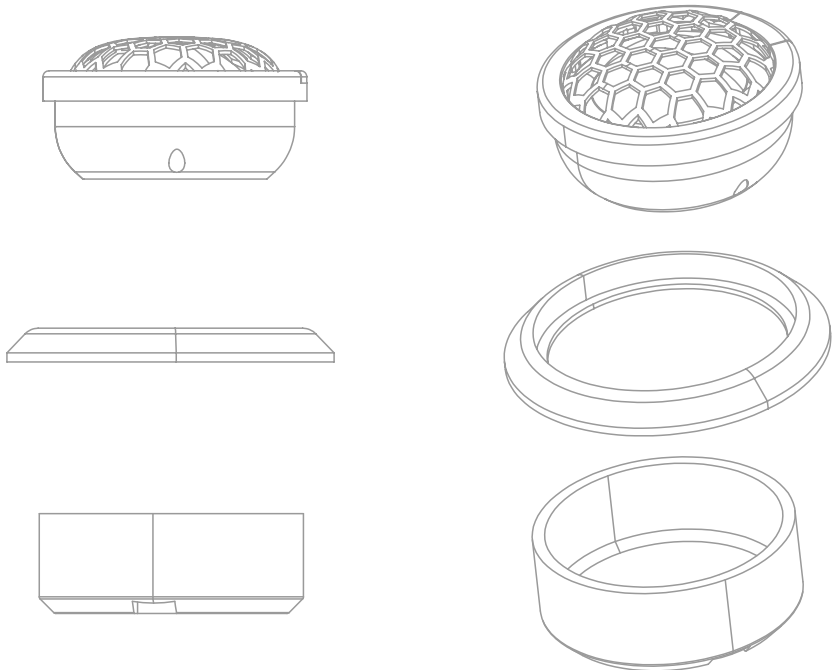
Surface Mount Installation

After finding a suitable position for the tweeters, place the base of the tweeter casing in the correct position.

Using the base, mark a hole for the wire to pass through.

Cut out this hole using an 8mm drill for the cable and ensure that the hole cut for the cable is big enough and will not cause the cable to become chaffed in any way.

Pass the tweeter cable through the bottom of the base and through the previously drilled hole.



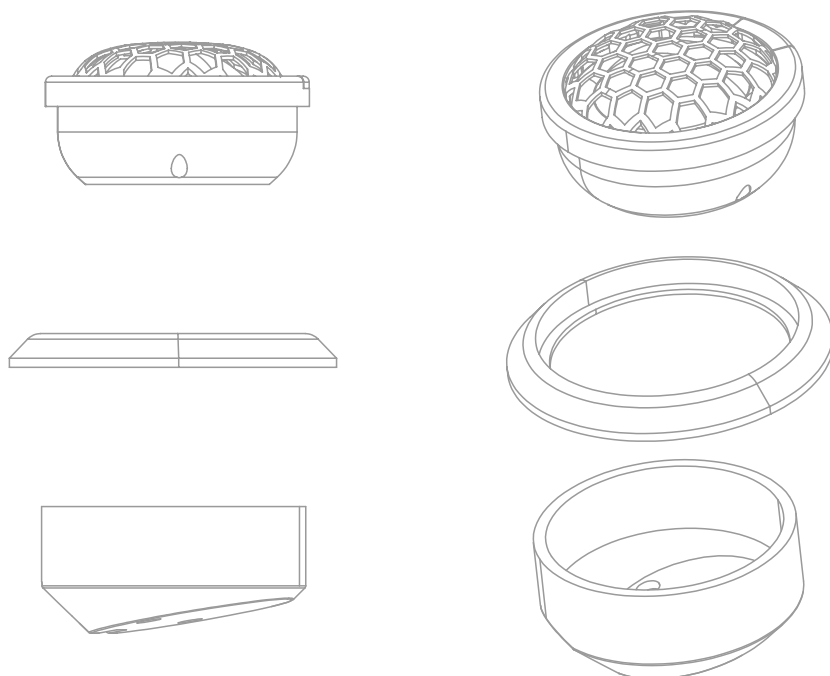
Angled Surface Mount Installation

After finding a suitable position for the tweeters, place the base of the tweeter casing in the correct position.

Using the base, mark a hole for the wire to pass through.

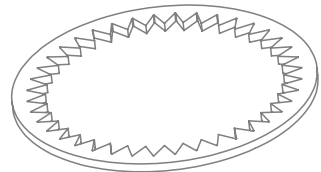
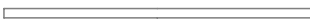
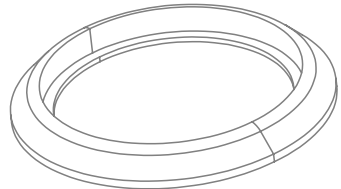
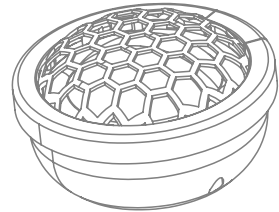
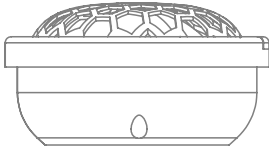
Cut out this hole using an 8mm drill for the cable and ensure that the hole cut for the cable is big enough and will not cause the cable to become chafed in any way.

Pass the tweeter cable through the bottom of the base and through the previously drilled hole.



Flush Mount Installation

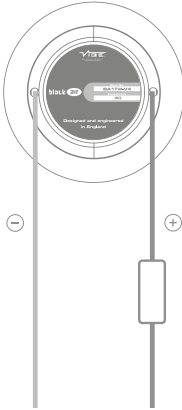
- After finding a suitable position for the tweeters place the cut out template for the tweeter in position and mark around it.
- Before cutting the holes double check that no brake, fuel lines or wiring harnesses are likely to get damaged.
- Ensure that the tweeter when fitted will not catch on any moving parts such as door / window handles.
- If mounting in a door check that the window can still be fully lowered before installing.
- Cut out the hole carefully.
- Place the entire tweeter into the cut out hole.
- From the back push the metal ring over the rear of the casing until it is tight into the cutout hole.
- After finding a suitable position for the tweeters place the cut out template for the tweeter in position and mark around it.
- Before cutting the holes double check that no brake, fuel lines or wiring harnesses are likely to get damaged.
- Ensure that the tweeter when fitted will not catch on any moving parts such as door / window handles.
- If mounting in a door check that the window can still be fully lowered before installing.
- Cut out the hole carefully.
- Position the metal fixing ring centrally, behind the cut out hole.
- Pass the tweeter cable through the central hole in the bottom of the case and the metal fixing ring..



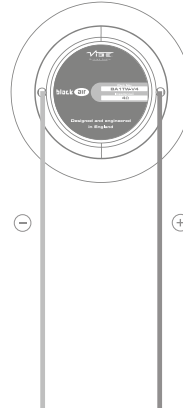
Speaker Connections

Without Electronic Crossover With Electronic Crossover

BA1TW-V4



BA1TW-V4

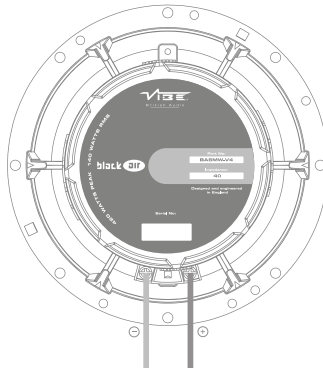


NOTE:

If no electronic crossover is being used then it is necessary to install the supplied filter capacitor in order to prevent damage to the tweeter due to too much low frequency information being passed to the tweeter.

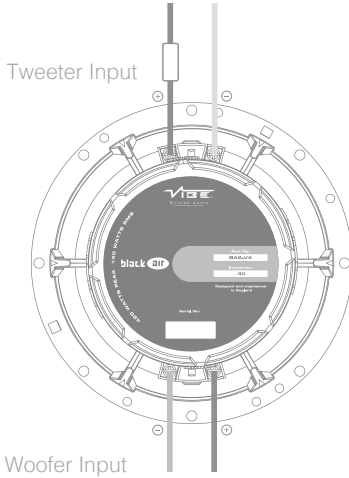
Failure to follow this will result in a non warranty failure of the tweeter.

BA3M-V4 / BA6MW-V4

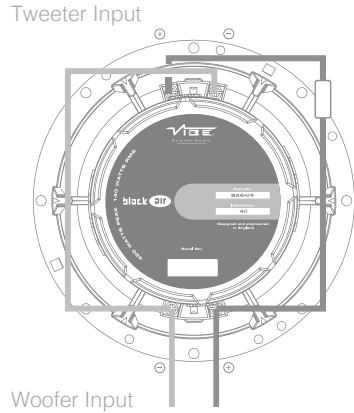


Without Electronic Crossover

BA6-V4 Dual Input



BA6-V4 Single Input



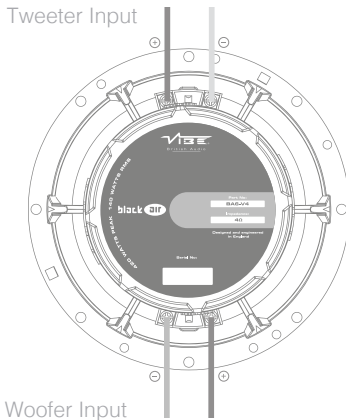
NOTE:

If no electronic crossover is being used then it is necessary to install the supplied filter capacitor in order to prevent damage to the tweeter due to too much low frequency information being passed to the tweeter.

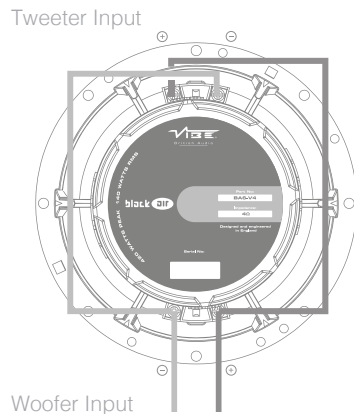
Failure to follow this will result in a non warranty failure of the tweeter.

With Electronic Crossover

BA6-V4 Dual Input

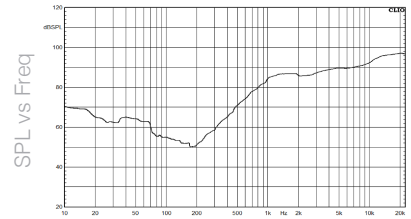


BA6-V4 Single Input

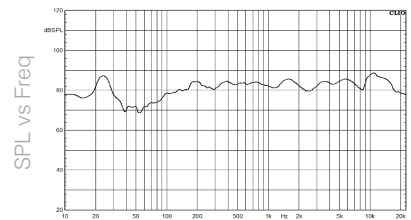
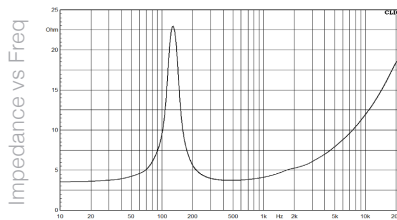


Response Curves

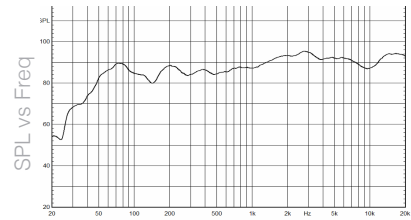
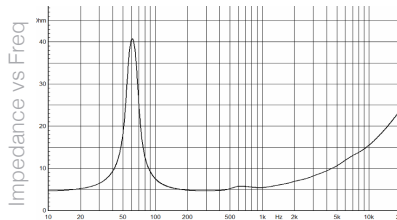
BA1TW-V4



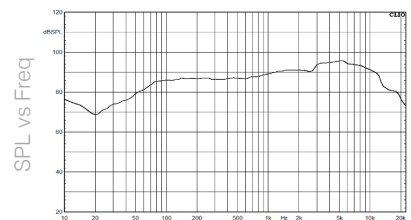
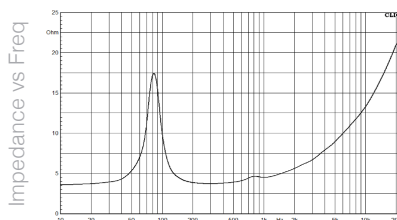
BA3M-V4



BA6-V4



BA6MW-V4



Specifications

Model	BA1TW-V4	BA3M-V4	BA6-V4	BA6MW-V4
Type	Tweeter	Midrange	Coaxial	Mid-Woofer
Configuration	1-way	1-way	2-way	1-way
Speaker Size	2.1" (54mm)	3.6" (91mm)	6.5" (165mm)	6.5" (165mm)
Peak/RMS Power	180W / 60W	180W / 60W	420W/140W	420W / 140W
Sensitivity	94dB	91dB	95dB	95dB
Freq. Response	1.5kHz -25khZ	125Hz - 20kHz	45Hz - 25kHz	45Hz - 25kHz
Impedance	4 Ω	4 Ω	4 Ω	4 Ω
Mount. Depth	0.7" (18mm)	1.7" (43mm)	2.4" (66mm)	2.6" (66mm)
Mount. Diameter	1.7" (43mm)	3" (76mm)	5.6" (143mm)	5.6" (143mm)

TS Parameters

Parameter	BA3M-V4	BA6-V4	BA6MW-V4
Fs (Hz)	128.44	61.4	82.99
Vas (L)	0.3423	19.7901	7.0132
Re (Ω)	3.2	3.2	3.2
Qms	4.8803	8.4785	4.2526
Qes	0.7903	0.5291	0.9560
Qts	0.6801	0.4940	0.7805
BL (Tm)	2.9228	4.7604	4.1792
SPL (dB)	81.65	91.3981	88.24
Cms (mm/N)	0.5873	0.6917	0.3675
Mms (G)	2.6140	9.7114	10.0063
Rms (Ω m)	0.4323	0.4419	1.2270
Mmd (G)	2.5617	8.7422	9.2909
Zmin (Ω)	3.7007	4.6127	3.7215
Zmax (Ω)	22.9617	54.4779	17.4347
Zavg (Ω)	7.0006	9.7849	7.1910



S E R I E S

Designed and engineered in England



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