

# Power Amplifier Instruction Manual

To ensure maximum performance and safety, please follow this manual. Please retain the manual for future reference after installation

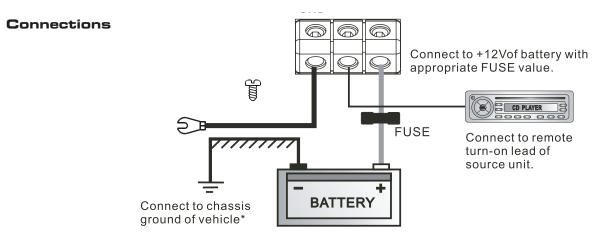
## **OWNERS MANUAL**

Thank you for purchasing this VIBE amplifier. It will provide you with a lifetime of trouble free usage providing you follow a few simple guidelines.

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#### **Mounting Guidelines**

Your VIBE amplifier is designed with a swift installation routine in mind. Please mount the amplifier in a dry location on a solid surface. NEVER mount the amplifier upside down, this will cause the amplifier to over heat and will eventually damage the amplifier. Before fixing the amplifier in place please ensure that there is sufficient air flow around the exterior of the casing, at least two inches is sufficient.



#### Power Cable

- At least an 8 gauge cable should be used for both the power and the ground connections to the amplifier.
- The power cable should be taken directly from the battery. Rubber grommets should be used when passing through any bulkheads to prevent the cable from becoming chaffed or cut.
- It is vital that a fuse / circuit breaker (of at least equal value to the one fitted on the amplifier) is placed inline with the power cable and is no further than eighteen inches away from the battery.
- Please ensure that the fuse is not fitted until the entire installation procedure is complete.
- The two tables below are to help you decide on what cable is correct for you. The first enables you to select the size of cable depending on the length required. The second will help you convert the cable size from American Wire Gauge to Metric if you need to.

				Length of Run				
Current demand	0 - 4 Ft	4 - 7 Ft	7 - 10 Ft	10 - 13 Ft	13 - 16 Ft	16 - 19 Ft	19 - 22 Ft	22 - 28 Ft
0-20 amps	14	12	12	10	10	8	8	8
20-35 amps	12	10	8	8	6	6	6	4
35-50 amps	10	8	8	6	4	4	4	4
50-65 amps	8	8	6	4	4	4	4	2
65-85 amps	6	6	4	4	2	2	2	0
85-105 amps	6	6	4	2	2	2	2	0
105-125 amps	4	4	4	2	0	0	0	0
125-150 amps	2	2	2	0	0	0	0	0

AWG to Metric Conversion Chart cross sectional area				
AWG Number	Inch	mm	mm <sup>2</sup>	
	0.005	0.05	505	
0	0.325	8.25	53.5	
1	0.289	7.35	42.4	
2	0.258	6.54	33.6	
3	0.229	5.83	26.7	
4	0.204	5.19	21.1	
5	0.182	4.62	16.8	
6	0.162	4.11	13.3	
7	0.144	3.66	10.5	
8	0.128	3.26	8.36	
9	0.114	2.91	6.63	
10	0.102	2.59	5.26	

#### **Ground Cable**

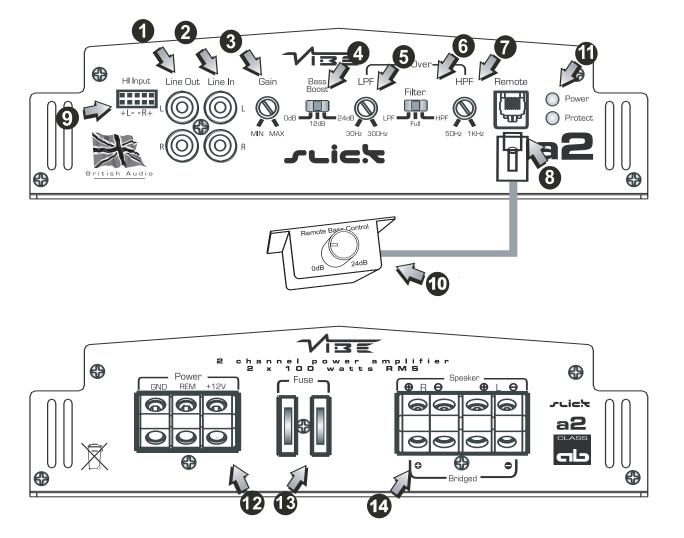
- The ground cable needs to carry the same current as the power cable. At least an 8 gauge cable should be used.
- The amplifier ground should be connected directly to the chassis of the vehicle, to bare metal.
- The cable length should be kept to an absolute minimum.
- It is not recommended that you connect the ground cable to the vehicles seatbelts anchor point.

#### Remote Turn On

- A minimum of 18 gauge cable should be used for this connection.
- The cable should be run with exactly the same care and attention as the power cable and taken back to the source (headunit) and joined to the remote cable provided.
- If the source (headunit) does not have a remote turn on cable then a 12v supply should be used. This will require a
  switch to be fitted inline to enable the amplifier to be turned on and off. Remember that if this switch is left on you will
  flatten the car battery.

#### **RCA Cables**

- Depending on the model number of your amplifier and the number of speakers you wish to power you will have to run either one or two RCA cables from the source to the amplifier.
- Please take extra care when running these cables from the source to the amplifier. Ensure that they are placed away
  from all items that can generate any interference, wiring harnesses etc.
- It is recommended that the RCA cables should be run on opposite sides of the car to the previously installed power
  cables if possible, to avoid the cable picking up interferance.



#### 1. Low Level Output

A daisy chain output For connection to another amplifier with a low level input using only a single RCA output from the source [headunit].

#### 2. Low Level Input

For connection to any source [head unit] with a low level output. This is your RCA output from the source [headunit]

#### 3. Gain Control

Used to match the input signal of the source to the amplifier. See the setup section for more details.

#### 4. Bass Boost Switch

To provide up to an extra +24 dB of bass boost at 45 Hz. Use this boost to Increase bass output from the amplifier.

#### 5. Low pass Crossover Control

The control is used to select the low pass filter frequency. The frequency ranges are from 30 Hz to 300 Hz.

#### 6. crossover control switch

This switch is used to select high pass, low pass or flat (no crossover) operation for the amplifier speaker outputs.

#### 7. High pass Crossover Control

The control is used to select the High pass filter frequency. The frequency ranges are from 50 Hz to 1KHz.

#### 8. Gain Remote Input Jack

Use to plug in the remote bass controller. (optional ) see back

#### 9. High Level Input

To be used when no RCA's are available. Use the provided loom to connect to closest speakers. The loom connector will only fit one way around. Once plugged in you should connect the wires as below:

Left Positive - Brown

Right Positive - Black

Left Negative - Blue

Right Negative - Green

#### 8. Rear Gain Remote Input Jack

Use to plug in the remote bass controller.

#### 10. Gain Remote Controller

This remote can be mounted in the front of the car and will give you the ability to raise the gain of the amplifier remotely in the range of 0.25 volts to 6 volts. (Optional accesory, see back for details)

#### 11. Indicator LED

When the amplifier is operating correctly the LED will show as blue. When the amplifier is in protection mode the LED will show as red.

#### 12. Power Connections

Power connections. See Connections section for details on correct connections.

#### 13. Fuses

Please ensure the following fuse rating is used when replacing fuses: 15 amp x 2

#### 14. Speaker Terminal Output

For connection to the speakers. See Application section for wiring examples.

#### Set Up Section

To correctly set the gain control of the amplifier to match that of the source (headunit) use the following setup routine:

Turn the gain control to minimum on the amplifier.

Ensure the bass boost is set to O dB.

On the headunit set all crossovers ( if applicable) to flat and both bass and treble to zero.

Turn up the source (headunit) to approx 3/4 volume.

Very slowly turn up the gain on the amplifier until distortion can be heard in any of the speakers or until the volume reaches an uncomfortable listening level when this is reached turn down the gain control slightly.

#### The gain control is now set.

The setting of the crossover will depend on what kind of speaker you are installing.

For a subwoofer it is recommended that the crossover is set to Low Pass and the frequency is set to match that of the speakers specifications, or your preferred frequency - this is usally about 60 - 120

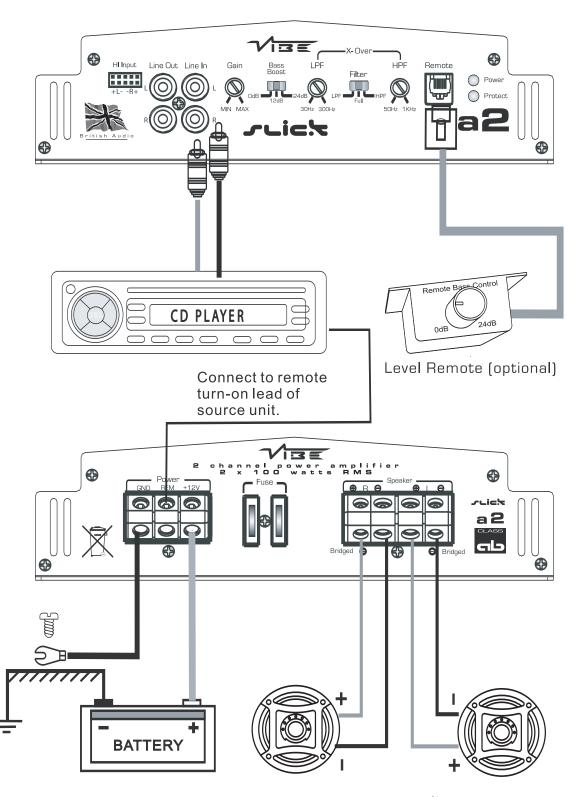
For a pair of full range speakers it is recommended that the crossover is set to Flat. The two frequency controls will then have no effect on the amplifiers output and the speaker will receive a full range signal. However, using the high pass crossovers will allow more control of your speakers. By removing the bass (low frequencies) the speakers can perform at higher volumes with less distortion.

Note: The smaller the speaker, the less bass it can handle. Adjust the crossover to get the most and best sound from your speakers. The easiest was to do this is by limiting the amount of bass you feed them.

For a pair of speakers with a passive crossover it is recommended that the crossover is set to High Pass and the frequency is set to match that of the speakers specifications. - This is usually about 40 - 120Hz

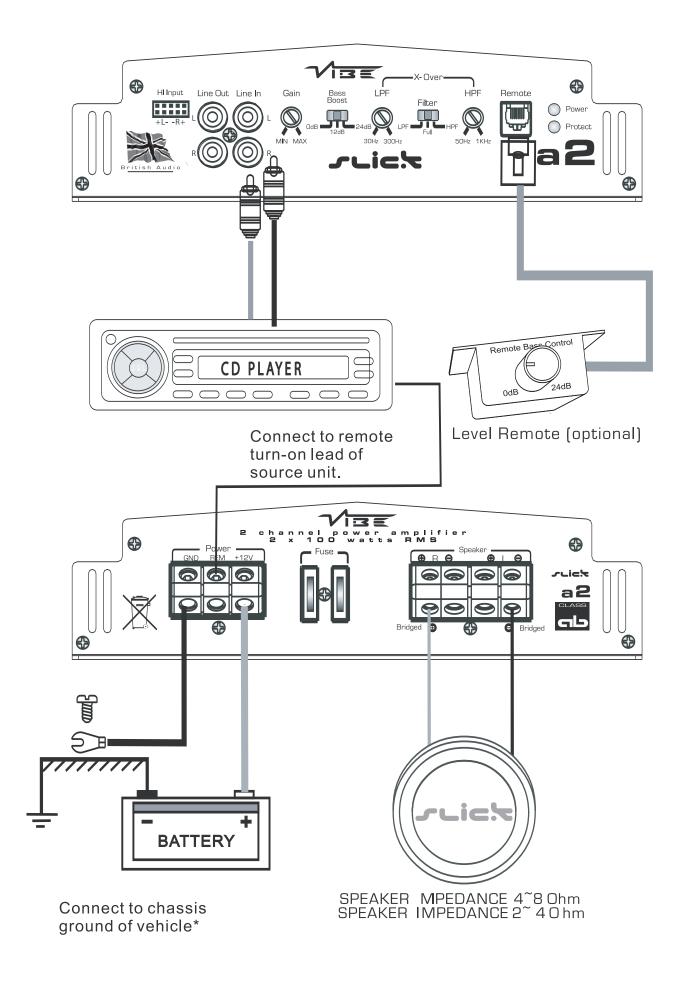
#### Note:

By using the crossovers correctly you will not only lengthen the life of your speakers but you will also get better performance from them. To optimise your setup seek the advise of a professional installation engineer or visit your local VIBE audio dealer.



Connect to chassis ground of vehicle\*

SPEAKER IMPEDANCE 2~40hm



#### Troubleshooting

- Before removing the amplifier, refer to the list below and follow the suggested procedures.
- Always test the speakers and confirm that they are wired correctly first.
- If in any doubt get help from a qualified auto electrician.

#### Amplifier Will Not Power Up

- ✓ Check for good ground connections. Ensure Ground cable is connected directly to bare metal and not a painted surface.
- ✓ Using a multimeter check that remote terminal has at least 7V DC.
- ✓ Using a multimeter check that there is battery voltage of at least 10.5v DC on the positive terminal.
- ✓ Check all fuses.
- ✓ Check that the protection light is not illuminated. If it is lit, shut off the amplifier by Disconnecting for thirty seconds and then turning it back on.

#### Protection LED Illuminates When Amplifier Is Powered Up

- ✓ Check for shorts on all speakers wires. (IE no speaker wires should be joined together and no speaker wires should be touching the cars chassis)
- The amplifier is designed to shut down automatically when the units temperature goes above 80 degrees. If the amplifier feels very hot then this may be the reason for the amplifier not starting.
- Remove the speaker wires and reset the amplifier. If the Protection LED still comes on then the amplifier is faulty. This
  damage may have been caused by either failure to follow these setup guidelines or abuse.

#### Amplifier Gets Very Hot

- ✓ Check the minimum speaker impedance for the amplifier is correct.
- ✓ Check for shorts on all speakers wires. (ie no speaker wires should be joined together and no speaker wires should be touching the cars chassis)
- ✓ Check that there is good airflow around the amplifier. In some applications an external fan may be required.

#### Blown Fuse(s)

- ✓ Check both positive supply and ground for shorts.
- ✓ Check that the positive wire is connected to the positive terminal on the amplifier.
- ✓ Check that the negative wire is connected to the ground terminal on the amplifier.
- ✓ Ensure that the correct rated fuse is fitted:

VIBE SLICK a2 -15 amp x 2,

#### **Distorted Sound**

- $\checkmark$  Check the gain control is not set at too high If the speakers sound distorted turn down the gain until the sound is clear.
- ✓ Check that all crossover frequencies are correct. See Setup section for more details.
- ✓ Check for shorts on all speaker wires.
- ✓ Check all speakers are wired correctly. With the correct polarity being observed on each connection.

Specification	
RMS Power @ 13.8v DC	
Power @ 4 Ohms	2 x 100 WRMS
Power @ 2 Ohms stereo	2 x 160 WRMS
Power @ 4 Ohms bridged	1 x 325 WRMS
Minimum speaker impendence	2 Ohms
THD Distortion	0.08%
IMD Distortion	0.08%
Frequency Response	20Hz - 20 Khz
Input Sensitivity	200 mV - 6V
Input Impendence	15K
Signal to Noise Ratio	90 dB
Channel Separation	50 dB
Remote GAIN control	0.25 v - +6V
Crossover Network	
Low pass filter	30 Hz – 300 Hz
Bass Boost	0 dB - +24 Db
High pass filter	50 Hz – 1 KHz
Fuse rating	15A x 2
Size length x width x height	375mm x 245mm x 65 mm

Vented Innovative Bass Enclosures	In order to protect your purchase and aid your warrantee please fill in the following form and keep it safe for your future reference:
Model Number:	
Serial Number:	
Purchased From:	
Date of Purchase:	
KEEP IT SAFE Staple your receipt here:	

# **ACCESSORIES**

### Accessories can be ordered separately from the VIBE website www.vibeaudio.co.uk

Only available in the UK If out side uk please contact your dealer or distributer from the VIBE website

£5.99

£99.99



Flat Y - Interconnect

Our professional quality full range OCC Y-interconnect guarantees a pure and strong signal. Available in female to male also.

£29.99

£24.99

£24.99



GT - 2V Terminal

Our gold plated binding post speaker terminal is standard issue on all VIBE enclosures, it comes with 5 Allen head screws, a foam gasket and features raised VIBE logo with text.



Power 8 Wiring Kit

This 8 AWG kit includes a 60 amp AGU fuse holder, 5 meter flat power 8supply cable, 5 meter FLAT remote cable, 1 meter ground cable and all the cable terminals required

£24.99

£3.99



Power 4 Wiring Kit

This 4 AWG kit includes a 100 amp circuit breaker, 5 meter flat power 4 supply cable, 5 meter FLAT remote cable, 1 meter ground cable and all the cable terminals required.

£49.99



BC10 - Level Controller

Suitable for all amplifiers, our in dash level controller is easy to fit and enables amplifier gain control from the dash mounted lever



Deltabox Linedriver

Allows a single stereo output from a conventional head unit to be split three ways without any signal loss.



FK-28 Fixing Kit

To reduce enclosure movement in a carpet lined car boot VIBE recommend this kit. It comes with four industrial Velcro pieces with tac for the bottom of the enclosures.



Dedicated bass RCA interconnect. With ferrite loaded gold plated plugs, interference is greatly reduced and OCC guarantees a pure and strong signal.

£29.99



RCA's designed for full range signals. With our flat design and ferrite loaded gold plated plugs interference can be greatly reduced.



Professional quality OCC flat design audio interconnect. OCC technology and ferrite loaded gold plated plugs provide reference quality sound with this top of the range cable. £29.99



signals. Its flat design guarantees ease

Flat 13 (standard cable for any VIBE enclosure) This dedicated bass cable has solid cores guaranteeing higher power bass

Flat 16

High quality multi-strand full range cable With flat design for easy installation.interference can be greatly reduced.

£19.99



Alloy CNC TurboPort

These exclusive TurboPorts are available in 2.5" and 3" diameter, with either a length of 1.5" or 6" to provide the perfect finishing touch for any custom build.



GB - 41 Plus

Our professional gold plated 4mm banana plugs, are polarity marked with coloured rubber shrouds.



3 metre £9.99

Port Plugs

Port Plugs can be used to tightly seal the port chamber. Use a port plug to either tune a multi ported enclosure to the desired sound or to convert a ported enclosure to a sealed. Available in 2.5" and 3"



Subwoofer Defender

The VIBE chrome subwoofer arill not only provides protection for your sub but also adds style. Available in 10", 12" and 15" versions to fit

10"12" £24.99 15" £29.99





PC10 Power Capacitor

A 1.0 Farad capacitor designed to deliver maximum power to any bass amplifier. £129.99



Our high quality half zip fleece with vibe logo on front and back £49.99

£4.99



heavy weight polo shirt with vibe logo available in gray and black

£19.99



Is a quick release car amplifier to enclosure connector

£14.99

Order online or call sales on 0870 765 8423. All items above come with free next day delivery.

#### **Limited Warranty**

All VIBE products carry a full twelve months warranty, valid from the date of the original receipt / proof of purchase. In order to validate this warranty, the warranty card should be returned to VIBE within seven days of the original purchase date. The original receipt and packaging should also be retained for this twelve month period.

If at any stage during the warranty period you have a problem with the product then it should be returned to the point of purchase, with proof of purchase in its original packaging, complete with no items missing.

If the store is unable to fix the product it may have to be returned to VIBE this process takes around 7 working days.

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

#### www.vibeaudio.co.uk/warranty

A written version can also be obtained from VIBE warranty Dept PO BOX 11000 B75 7WG

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