



STEREO 2

CVENS2-V4

STEREO 4

CVENS4-V4

**CHANNEL 6** 

CVENCH6-V4



# **Owners Manual**

Congratulations on purchasing your VIBE amplifier. 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.

# Attention



An aftermarket audio amplifier will place an additional load on the vehicles charging system.

Most modern vehicles have sufficient capacity in the charging system as not all the electrical components of the vehicle will be switched on at once.

Check the fuse rating of the amplifier and use this as the peak current requirement.

Generally the continuous current draw will be a third of the peak current.

# Warning

During the normal use of this amplifier the heatsink may become very hot. Please do not touch during or immediately after use.

Please ensure that when installing this product the heatsink will not come into contact with any materials that may be damaged by heat such as upholstery or plastics.

# **Limited Warranty**

All VIBE products carry a full 12 month warranty, valid from the date of the original receipt and proof of purchase. 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. If the store is unable to repair the product it may have to be returned to VIBE.

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

## www.vibeaudio.co.uk

## 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/warranty

## 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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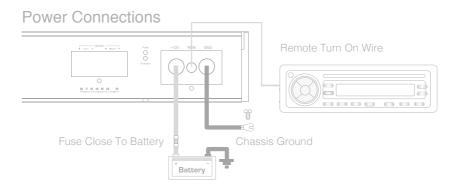
# Mounting Guidelines

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 as 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 to allow effective cooling.



# Low Level Input



# High Level Input

**NOTE**: When using high level input it is not necessary to connect the remote turn on wire. Do not connect both high level and low level input at the same time.



## Power Cable

- At least 4 gauge cable should be used for the power connection 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 in the amplifier) is placed inline with the power cable and is no further than 40cm )18 inches away) from the battery.
- Please ensure that the fuse is not fitted until the entire installation procedure is complete.

## **Ground Cable**

- At least 4 gauge cable should be used for the ground connection to the amplifier.
- 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.

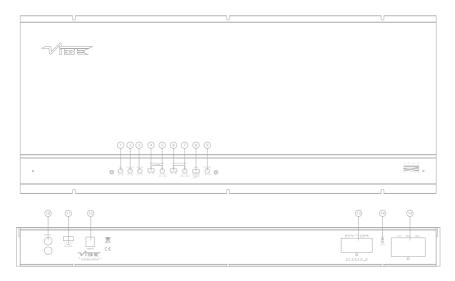
## Remote Turn On Cable

- 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 or 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
  interference.

## CVEN Stereo 2 Terminals And Connections



## 1. Gain control

This control is used to match the input signal of the source to the amplifier. See the setup section for more details.

## 2. Bass boost control

This control is used to add bass boost to the amplifier and is variable between 0dB and +12dB

## 3. Bass boost frequency control

This control is used to select the frequency for the bass boost, it is variable between 30Hz and 80Hz.

## 4. High Pass Filter (HPF) frequency multiplier switch

This switch is used to select the frequency multiplier for the high pass filter. x 1 and x10 settings are selectable.

## 5. High Pass Filter (HPF)

This control is used to set the crossover frequency for the amplifier when HPF is selected. The frequency is adjustable between 5Hz and 400Hz or 50Hz and 4000Hz depending on the position of the multiplier switch.

## 6. Low Pass Filter (LPF) frequency multiplier switch

This switch is used to select the frequency multiplier for the low pass filter. x 1 and x10 settings are selectable.

#### 7. Low Pass Filter (LPF)

This control is used to set the crossover frequency for the amplifier when LPF is selected. The frequency is adjustable between 30Hz and 400Hz or 300Hz and 4000Hz depending on the position of the multiplier switch.

## CVEN Stereo 2 Terminals And Connections

#### 8. Crossover mode select switch

This control is used to select the crossover mode of the amplifier. FLAT is for full range output, HPF is used to limit the amount of low frequency information passed to the speakers and LPF is used to limit the amount of high frequency information passed to the speakers.

**Note:** When LPF is selected the HPF is also active as a subsonic filter, for the maximum frequency range please ensure that the HPF is set to 5Hz or a desireable frequency.

#### 9. Phase shift control

This control is used to alter the output phase of the amplifier and is variable between 0° and 180°

## 10. Low level input

For connection to any source (headunit) with a low level output. This is your RCA output from the source.

## 11. High level input

For connection to the speaker output of your source (head unit). This is to be used if the source (headunit) does not have a low level output.

#### 12. Remote level control port

For connection to the supplied remote level control

## 13. Speaker terminals

Used to connect speaker cables to the amplifier. See the wiring configuration section for more details

#### 14. Power / protect LED

If the amplifier is operating normally, the GREEN LED will illuminate.

If the amplifier is in protection mode the RED LED will illuminate.

#### 15. Power terminals

Used to connect DC power to the amplifier. See the power connections section for more details

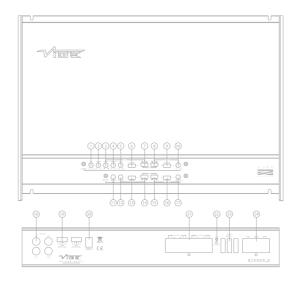
# CVEN Stereo 2 Wiring Configuration: 2 Channel



# CVEN Stereo 2 Wiring Configuration: Bridged



# **CVEN Stereo 4 Terminals And Connections**



## 1. CH 3/4 Gain control

This control is used to match the input signal of the source to the amplifier for channels 3 and 4. See the setup section for more details.

#### 2. CH 3/4 Bass boost control

This control is used to add bass boost to the amplifier for channels 3 and 4 and is variable between 0dB and +12dB and is centered at 45hz

## 3. CH 3/4 Phase shift control

This control is used to alter the output phase of the amplifier for channels 3 and 4 and is variable between 0° and 180°

## 4. CH 3/4 Subsonic filter control

This control is used to limit the very lowest frequencies passed to the speakers and is variable between 15Hz and 40Hz.

#### 5. CH 3/4 Low Pass Filter (LPF) control

This control is used to set the crossover frequency for channels 3 and 4 when LPF is selected. The frequency is adjustable between 40Hz and 600Hz or 400Hz and 6000Hz depending on the position of the multiplier switch.

#### 6. CH 3/4 Low Pass Filter (LPF) frequency multiplier switch

This switch is used to select the frequency multiplier for the low pass filter for channels 3 and 4.  $\times$  1 and  $\times$ 10 settings are selectable.

## 7. CH 3/4 Low Pass Filter (LPF) select switch

This switch is used to turn the LPF on or off for channels 3 and 4.

## **CVEN Stereo 4 Terminals And Connections**

## 8. CH 3/4 High Pass Filter (HPF) select switch

This switch is used to turn the HPF on or off for channels 3 and 4.

## 9. CH 3/4 High Pass Filter (HPF) frequency multiplier switch

This switch is used to select the frequency multiplier for the high pass filter for channels 3 and 4.  $\times$  1 and  $\times$ 10 settings are selectable.

#### 10. CH 3/4 High Pass Filter (HPF) control

This control is used to set the crossover frequency for channels 3 and 4 when HPF is selected. The frequency is adjustable between 40Hz and 600Hz or 400Hz and 6000Hz depending or the position of the multiplier switch.

#### 11. CH 1/2 Gain control

This control is used to match the input signal of the source to the amplifier for channels 1 and 2. See the setup section for more details.

## 12. CH 1/2 Low Pass Filter (LPF)

This control is used to set the crossover frequency for the amplifier when LPF is selected. The frequency is adjustable between 40Hz and 600Hz or 400Hz and 6000Hz depending on the position of the multiplier switch.

## 13. CH 1/2 Low Pass Filter (LPF) frequency multiplier switch

This switch is used to select the frequency multiplier for the low pass filter for channels 1 and 2 x 1 and x10 settings are selectable.

## 14. CH 1/2 Low Pass Filter (LPF) select switch

This switch is used to turn the LPF on or off for channels 1 and 2.

## 15. CH 1/2 High Pass Filter (HPF) select switch

This switch is used to turn the HPF on or off for channels 1 and 2.

## 16. CH 1/2 High Pass Filter (HPF) frequency multiplier switch

This switch is used to select the frequency multiplier for the high pass filter for channels 1 and 2  $\times$  1 and  $\times$ 10 settings are selectable.

## 17. CH 1/2 High Pass Filter (HPF)

This control is used to set the crossover frequency for channels 1 and 2 when HPF is selected. The frequency is adjustable between 40Hz and 600Hz or 400Hz and 6000Hz depending on the position of the multiplier switch.

## **CVEN Stereo 4 Terminals And Connections**

## 18. Low level input

For connection to any source (headunit) with a low level output. This is your RCA output from the source.

## 19. High level input

For connection to the speaker output of your source (head unit). This is to be used if the source (head-unit) does not have a low level output.

## 20. CH 3/4 Remote level control port

For connection to the supplied remote level control for channels 3 and 4.

#### 21. Speaker terminals

Used to connect speaker cables to the amplifier. See the wiring configuration section for more details

## 22. Power / protect LED

If the amplifier is operating normally, the GREEN LED will illuminate.

If the amplifier is in protection mode the RED LED will illuminate.

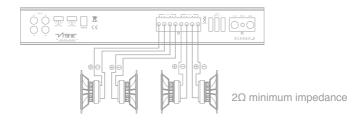
## 23. Fuses

Replace with only the same value ATC fuse: 3 x 25A

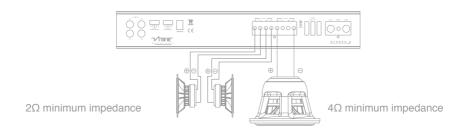
#### 24. Power terminals

Used to connect DC power to the amplifier. See the power connections section for more details

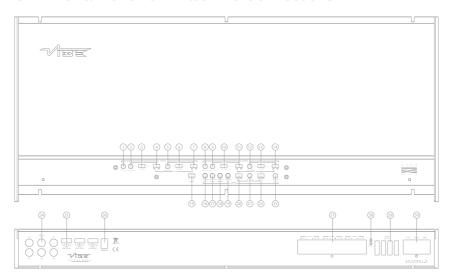
# CVEN Stereo 4 Wiring Configuration: 4 Channel



# CVEN Stereo 4 Wiring Configuration: 4 Channel



# **CVEN Channel 6 Terminals And Connections**



## 1. CH 1/2 Gain control

This control is used to match the input signal of the source to the amplifier for channels 1 and 2. See the setup section for more details.

## 2. CH 1/2 High Pass Filter (HPF) control

This control is used to set the crossover frequency for channels 1 and 2 when HPF is selected. The frequency is adjustable between 40Hz and 600Hz or 400Hz and 6000Hz depending on the position of the multiplier switch.

## 3. CH 1/2 High Pass Filter (HPF) frequency multiplier switch

This switch is used to select the frequency multiplier for the high pass filter for channels 1 and 2.  $\times$  1 and  $\times$ 10 settings are selectable.

## 4. CH 1/2 High Pass Filter (HPF) select switch

This switch is used to turn the HPF on or off for channels 1 and 2.

#### 5. CH 1/2 Low Pass Filter (LPF) control

This control is used to set the crossover frequency for channels 1 and 2 when LPF is selected. The frequency is adjustable between 40Hz and 600Hz or 400Hz and 6000Hz depending on the position of the multiplier switch.

#### 6. CH 1/2 Low Pass Filter (LPF) frequency multiplier switch

This switch is used to select the frequency multiplier for the low pass filter for channels 1 and 2.  $\times$  1 and  $\times$ 10 settings are selectable.

## 7. CH 1/2 Low Pass Filter (LPF) select switch

This switch is used to turn the LPF on or off for channels 1 and 2

## **CVEN Channel 6 Terminals And Connections**

## 8. CH 3/4 Gain control

This control is used to match the input signal of the source to the amplifier for channels 3 and 4. See the setup section for more details.

## 9. CH 3/4 High Pass Filter (HPF) control

This control is used to set the crossover frequency for channels 3 and 4 when HPF is selected. The frequency is adjustable between 40Hz and 600Hz or 400Hz and 6000Hz depending or the position of the multiplier switch.

#### 10. CH 3/4 High Pass Filter (HPF) frequency multiplier switch

This switch is used to select the frequency multiplier for the high pass filter for channels 3 and 4. x 1 and x10 settings are selectable.

## 11. CH 3/4 High Pass Filter (HPF) select switch

This switch is used to turn the HPF on or off for channels 3 and 4.

#### 12. CH 3/4 Low Pass Filter (LPF) control

This control is used to set the crossover frequency for channels 3 and 4 when LPF is selected. The frequency is adjustable between 40Hz and 600Hz or 400Hz and 6000Hz depending on the position of the multiplier switch.

## 13. CH 3/4 Low Pass Filter (LPF) frequency multiplier switch

This switch is used to select the frequency multiplier for the low pass filter for channels 1 and 2 x 1 and x10 settings are selectable.

## 14. CH 3/4 Low Pass Filter (LPF) select switch

This switch is used to turn the LPF on or off for channels 3 and 4

#### 15. Input mode select switch select switch

This switch is used to set the input mode. 2 channel, 4 channel and 6 channel are selectable.

#### 16. CH 5/6 Gain control

This control is used to match the input signal of the source to the amplifier for channels 5 and 6. See the setup section for more details.

#### 17. CH 5/6 Bass boost control

This control is used to add bass boost to the amplifier for channels 5 and 6 and is variable between 0dB and +12dB and is centered at 45hz

## 18. CH 5/6 Subsonic filter control

This control is used to limit the very lowest frequencies passed to the speakers and is variable between 15Hz and 40Hz.

## 19. CH 5/6 High Pass Filter (HPF) control

This control is used to set the crossover frequency for channels 5 and 6 when HPF is selected. The frequency is adjustable between 40Hz and 1000Hz.

## 20. CH 5/6 High Pass Filter (HPF) select switch

This switch is used to turn the HPF on or off for channels 5 and 6

## **CVEN Channel 6 Terminals And Connections**

## 21. CH 5/6 Low Pass Filter (LPF) control

This control is used to set the crossover frequency for channels 5 and 6 when LPF is selected. The frequency is adjustable between 40Hz and 1000Hz.

## 22. CH 5/6 Low Pass Filter (LPF) select switch

This switch is used to turn the LPF on or off for channels 5 and 6

#### 23. CH 5/6 Phase shift control

This control is used to alter the output phase of the amplifier for channels 5 and 6 and is variable between 0° and 180°

## 24. High level input

For connection to any source (headunit) with a low level output. This is your RCA output from the source

#### 25. High level input

For connection to the speaker output of your source (head unit). This is to be used if the source (headunit) does not have a low level output.

## 26. CH 5/6 Remote level control port

For connection to the supplied remote level control for channels 5 and 6

#### 27. Speaker terminals

Used to connect speaker cables to the amplifier. See the wiring configuration section for more details

## 28. Power / protect LED

If the amplifier is operating normally, the GREEN LED will illuminate.

If the amplifier is in protection mode the RED LED will illuminate.

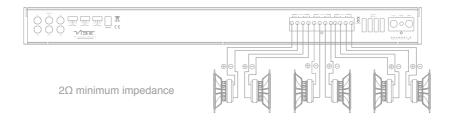
#### 29. Fuses

Replace with only the same value ATC fuse: 4 x 25A

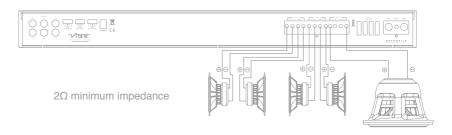
## 30. Power terminals

Used to connect DC power to the amplifier. See the power connections section for more details

# CVEN Channel 6 Wiring Configuration: 6 Channel



# CVEN Channel 6 Wiring Configuration: 5 Channel



4Ω minimum impedance

# 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 0 dB.
- Set all crossovers on the headunt (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 the gain control down 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 usually around 60 - 120 Hz

For a pair of full range speakers it is recommended that the crossover is set to flat (I.e. that the HPF and LPF filters are set to off).

The two frequency controls will then have no effect on the amplifiers output and the speaker will receive a full range signal.

Using the high pass crossovers will allow more control of your speakers by removing the bass (low frequencies). The speakers can now 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 way to do this is by limiting the amount of bass you pass to 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.

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.

# Specification

Model	CVENS4-V4	CVENCH6-V4	CVENS2-V4
Configuration	4 channel	6 channel	2 channel
Dimensions (H x W x D)	2.4" x 18.5" x 11.4" (60mm x 470mm x 290mm)	2.4" x 25.5" x 11.4" (60mm x 647mm x 290mm)	2.4" x 25.5" x 11.4" (60mm x 647mm x 290mm)
RMS @ 4Ω Stereo (14.4v 1% THD)	2 x 70 + 2 x 130 watts	4 x 70 + 2 x 130 watts	2 x 350 watts
RMS @ 2Ω Stereo (14.4v 1% THD)	2 x 100 + 2 x 180 watts	4 x 100 + 2 x 180 watts	2 x 700 watts
RMS @ 1Ω Stereo (14.4v 1% THD)	N/A	N/A	2 x 1000 watts
RMS @ 4Ω Mono (14.4v 1% THD)	2 x 70 + 1 x 360 watts	4 x 70 + 1 x 360 watts	1 x 1400 watts
RMS @ 2Ω Mono (14.4v 1% THD)	N/A	N/A	1 x 2000 watts
RMS @ 1Ω Mono (14.4v 1% THD)	N/A	N/A	N/A
RMS @ 0.5Ω Mono (14.4v 1% THD)	N/A	N/A	N/A
Maximum Power	1120 watts	1520 watts	4000 watts
Frequency Response	10Hz - 20kHz	10Hz - 20kHz	10Hz - 20kHz
Crossover Type	LP / HP / BP / Flat	LP / HP / BP / Flat	LP / HP / BP / Flat
Crossover Range	15Hz - 6kHz	15Hz - 6kHz	15Hz - 4kHz
Topology	Class AB	Class AB	Class AB

# **UK Technical Enquiries**

# Call 09067031420

Calls cost 50p per minute. Call costs correct at date of publication (01/02/12)
Hours of business 9.00am - 5.30pm GMT Monday - Friday.
All calls are recorded for training purposes.
MIDBASS Distribution
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