## AD8066 & AD825 PCB MODULE



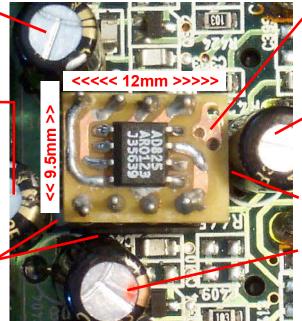
If you want to use the new AD8066 or AD825 in the VS, then you'll have to resort to a custom size PCB. Luckily, here's one I made earlier. I feel a bit doubtful with the ready-made LC Audio modules, as the dimensions look way too big for the job. Did someone say expensive? Ah yes, £28.75 each! The good news is that the Sound Odyssey AD8066 (minus voltage dropping diode network) module looks near definite to fit, and AD8066/AD825 module projects shown here, are guaranteed to fit any VS machine. On the downside, you'll need experience in making PCBs and keen eyesight.

#### AD825 CUSTOM PCB

Maximum of 1mm give on this capacitor

Unfortunately,
bending
this capacitor is
difficult, as the
capacitor legs are
located left to right
with the adaptor
PCB

2mm space between PCB and electrolytic



Decoupling capacitor option (minus 3 pins)

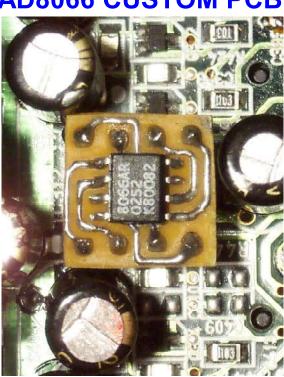
This capacitor will only bend north to south

PCB just touching electrolytic

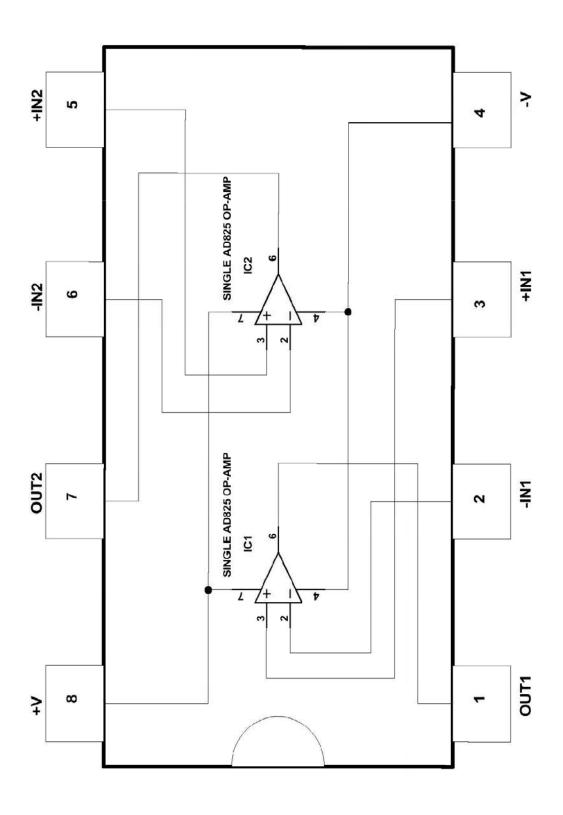
This capacitor can be bent south from the PCB to a maximum of 1mm

## **AD8066 CUSTOM PCB**

AD8066
module in
the tightest
of the 4
VS-1880
input
opamps.
Input 7 and
guitar
input 8.

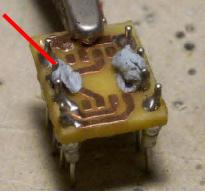


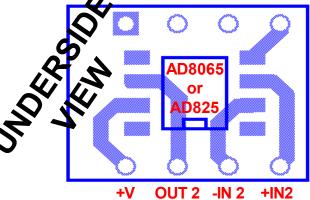
# **AD825 DIL SCHEMATIC**



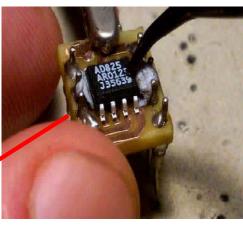


receive
AD825.
Blu-Tack
helps
precise
positioning
of the chip.

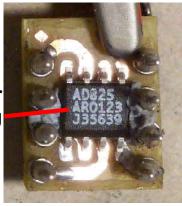




Working under hi magnification helps final positioning.



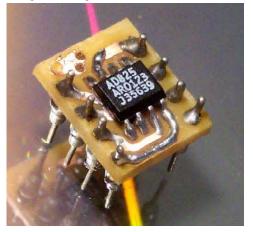
Ready for soldering



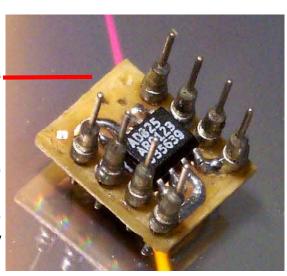
**+IN2** 

0

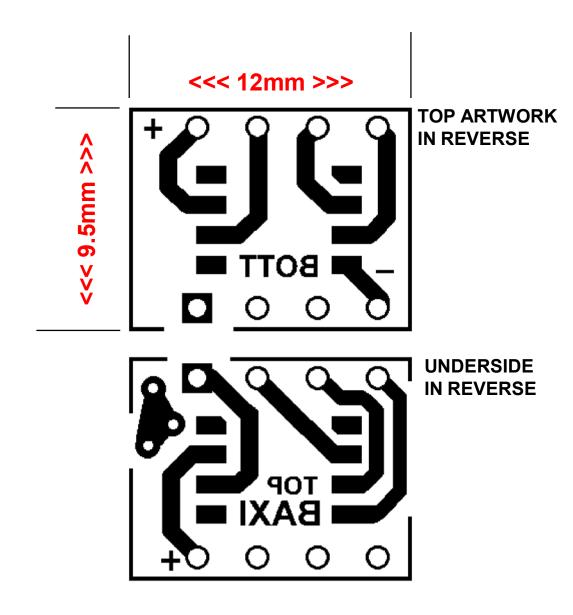
Top complete



Underside complete.
Working around those pins can be a little bit tricky



# **ARTWORK AND DIMENSIONS**

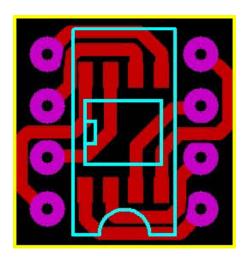


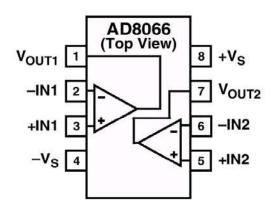
The pitch between pin1 and pin 8 is 7.62mm. To us home constructors, may as well make that 7.5mm. Pitch between pin 1 and pin 4 is also 7.62mm.

# **AD8066 CUSTOM ARTWORK AND OVERLAY**

AD8066 Plan-View

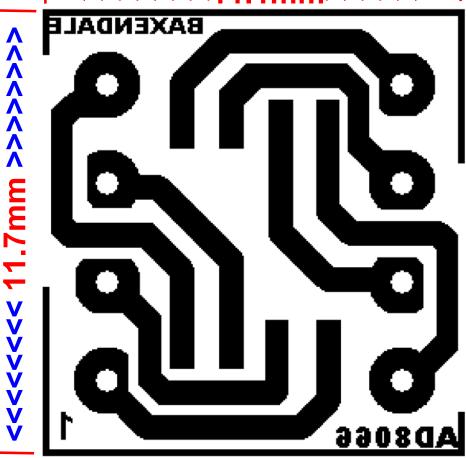






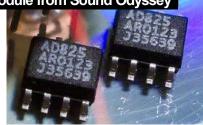
# **ARTWORK SHOWN IN REVERSE**

<<<<<<11.1mm>>>>>

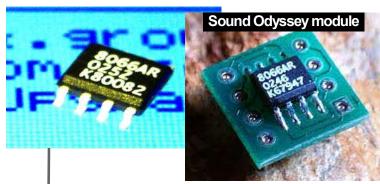


# AD825/AD8066 MODULE PARTS LIST Prices inc V.A.T





Price each £4.81 without PCB module. Supplier: Viewcom Electronics & Sound Odyssey (AD8066 not available from Viewcom 15.12.2003) www.viewcom.force9.co.uk



Sound Odyssey

Price \$27.00 per module.

AD8066 chips alone \$19.00.

Supplier:

Sound Odyssey www.soundodyssey.com

#### FROM MAPLIN www.maplin.co.uk

Single row modular 2.54mm pitch sockets.

Maplins. Order code: DC18U.

Price £1.99

Copper-Clad Board.

(Medium double) for AD825 module

Order code: WF42V. Price each £2.99.

PCB SRBP Small single sided copper board

for AD8066 module.

Order code: HX00A. Price each £0.99



**OPTIONAL PARTS also from Maplin:** 

Ceramic Disc capacitor 0.1uf

Order code: BX03D. Price each = £0.06.

or alternatively, Monares Cap 0.1uF.

Order code: RA49D. Price each = £0.09.



Type 2145 PCB PINS Single-ended pin 1mm.

Order code: FL24B. Price £2.99





### **RESOURCES & LINKS**

#### **ESSENTIAL READING**

VS-1880 Service Manual, Available from Roland, Priced at £10.

#### SOFTWARE

Spectralab 4.32.17. www.soundtechnology.com/
Sony Soundforge 7. http://mediasoftware.sonypictures.com/
Camtasia Studio. Version 2. www.techsmith.com
PhotoImpact 8. www.Ulead.com
Serif PagePlus. www.serif.com

#### **WEB LINKS**

#### Yahoo VS modding group.

http://uk.groups.yahoo.com/group/mod-your-roland-vs/ http://uk.groups.Yahoo.com/group/RolandVS-Upgraders/ (Mirror Group)

MAPLIN ELECTRONICS. <a href="http://www.maplin.co.uk/">http://www.maplin.co.uk/</a> Another great company to get components from, although these days they're looking a little bit 'High Street'. No longer supplying a vast range of chips. Usual first port of call.

LC AUDIO. http://www.lcaudio.dk/ An interesting company from Denmark. They do the latest 'Super chip' AD8066. That's the good news! The bad news is, it won't fit in any VS machine. They also supply the now discontinued AD825.

VIEWCOM ELECTRONICS <a href="http://www.viewcom.force9.co.uk/">http://www.viewcom.force9.co.uk/</a> A very helpful company. How many times do you find yourself having to take out an account with some company, just to get hold of the right parts. Well, with Viewcom you don't. One of the UK's more progressive component suppliers.

SOUND ODYSSEY. http://www.soundodyssey.com/ The US supplier for the new AD8066 offered by Analog Devices.

THE DARK LORD OF HARD DISK RECORDING. <a href="http://www.roland.co.uk/">http://www.roland.co.uk/</a> Well, we could hardly miss this one out now could we.

AKM. <a href="http://www.akm.com/">http://www.akm.com/</a> The company that makes the VS-1880 A-D convertor. There are improved versions of the AK5394A, but they are not likely to fit.

#### VS PLANETS BULLETIN BOARD.

http://www.vsplanet.com/cgi-bin/ubb/ultimatebb.cgi

Roland reckon they've sold 100,000 VS machines. 100,000 users can't be wrong.