Thank you for purchasing your Ashdown Engineering Amplifier. If you live in the UK, please register your purchase by completing this form and return it to the following address:

Ashdown Engineering, The Old Maltings, Hall Road, Heybridge, Maldon, Essex CM9 4NJ, England

(Alternatively you can register online at http://www.ashdownmusic.com)

If you live outside the UK, the local Ashdown distributor may have included a specific registration form for your country.

Your Ashdown Engineering product details:

Model .....
Colour .....
Voltage .....
Tested by .....
Serial number .....
Date .....

1 YEAR WARRANTY

Your Ashdown Engineering amplifier has been manufactured to the highest standards, using the best-selected materials. To ensure its optimum performance, please ensure your amplifier is regularly serviced. This product carries a one year warranty, against defects in materials and workmanship, for the original purchaser. Ashdown Engineering will, at their discretion, replace or repair any product or part thereof, which is found by Ashdown Engineering to be defective. This warranty shall not apply to the damage of covering, fittings or finishes when affected by carelessness, accident or extreme climate changes. Nor does it apply to normal wear and tear of parts such as valves, fuses, light bulbs, speakers, controls etc.

Please complete the lower section of this warranty and return it within 10 days of purchase to Ashdown Engineering Ltd. at the above address. In the unlikely event of any defect, please contact an authorised Ashdown Engineering dealer. All transport charges are to be pre-paid by the Owner. Unless the registration card is returned normal country warranty laws apply.

IMPORTANT - REGISTRATION CARD

Please complete and return this warranty within 10 days of purchase. Include any comments if possible.

Name .....
Address .....
.....
.....
.....
.....
Email .....
Age .....

Purchased from .....
Date .....
Model .....
Serial Number .....

Comments .....
.....
.....
.....

www.ashdownmusic.com

OPERATING INSTRUCTIONS

OPERATING INSTRUCTIONS

Fallen Angel 40 DSP Combo
Fallen Angel 60 DSP Combo & Head
Fallen Angel 180 Head

Important Safety Instructions

BASIC PRECAUTIONS

WARNING - When using electrical products, basic precautions should be followed, including the following:

1. Read all the instructions before using the product.
2. Do not use this product near water – for example, near a bathtub, washbowl, kitchen sink, in a wet basement or near a swimming pool.
3. This product may cause permanent hearing loss. Do not operate for long periods of time at a high volume level or at any level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
4. Make sure nothing interferes with the ventilation of the product when in use.
5. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
6. The product should be connected to a power supply of the type described in the operating instructions or as marked on the product.
7. The power supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
8. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
9. The product should be serviced by qualified personnel when:
   a. The power supply cord or the plug has been damaged; or
   b. Objects have fallen, or liquid has been spilled into the product: or
   c. The product has been exposed to rain or moisture: or
   d. The product does not appear to operate normally or exhibits marked change in performance: or
   e. The product has been dropped, or the enclosure damaged.
10. Do not attempt to service the product. All servicing should be referred to qualified service personnel.
11. For continued protection against the risk of fire, replace fuses only with those of the same type and rating as indicated on the back of the product.

WARNINGS USED ON THE EQUIPMENT

WARNING **TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.**

WARNING - ATTENTION

THIS APPARATUS MUST BE EARTHED FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE AND RATING OF FUSE. UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE ET CALIBRE.

The lightning flash with the arrow head symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated 'dangerous voltage' within this product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying this product.

GROUNDING INSTRUCTIONS

This product must be grounded (earthed). If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a supply cord having an equipment grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with the local codes and ordinances.

DANGER - Improper connection of the equipment grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product – if it will not fit the outlet, have a suitable outlet fitted.

The wires in this mains cord are coloured in accordance with the following code:

Green & Yellow - Earth
Blue - Neutral
Brown - Live

CE MARK FOR EUROPEAN HARMONISED STANDARDS

The CE mark which is attached to these products means it conforms to EMC Directive (89/69/EEC), CE mark Directive (93/68/EEC) and Low Voltage Directive (72/23/EEC).

Fallen Angel Design Philosophy

Fallen Angel 180 All Tube Head:

This amplifier helps the professional live gigging guitarist get a saturated and singing soloing voice that still retains the big bottom end punch required by so many of today's music styles. A fat bottom end requires a lot of power from the output stage to deliver the punch needed for muted notes and chords. The Fallen Angel, with 180 Watts of raw power derived from 6 x EL34 output tubes, does the business.

180 Watts may at first sound excessive for a guitar amplifier but music styles have changed and amplifiers need to adapt accordingly. This is even more relevant when you consider how many players now use 7 string guitars. Most amplifiers wimp out when presented with 7 strings of chugging power chords because their output stage can't deliver.

With many tube amplifiers you only get the best solo voice when the output stage is close to working flat out.Then it's often too loud - so some kind of power soak device is used to get this sound at lower volumes and you lose the power you require for chords. With the Fallen Angel 180, the solo voice character comes from the carefully designed all tube pre-amp so you don't have run it flat out for the best tone. However, if you do crank it up to the max, our 6 tube output stage will saturate with the best of them so be warned, it will be deafening!

Fat bottom end tone also comes from the pre-amp and with the Fallen Angel 180, a huge 180 RMS Watts of output power is delivered to the speaker stack. You'll get an idea of the power required for different styles if you watch the VU meter while playing - it monitors the output power being used and you will notice on muted chords with a fat chunky bottom end whack that it will be peaking quite high showing that massive amounts of power are required for this sound. With the same settings try a screaming solo line and you will see the power drop right back. This demonstrates exactly what we are saying - that old style amps are great for screaming solo lines but give up on modern 7 string fat chords.

The CLEAN channel allows you to switch instantly from huge body crunching chords and screaming solo leads to crisp and sparkling arpeggio chords that ring out with unbelievable clarity. The dual effects loops also help here, allowing you to set up separate effects for each channel. So you can (for instance) have a beautiful clean sound with a swirling chorus on Channel 1, and a soaring solo voice with lashings of delay on Channel 2 - then instantly switch between the two. Either or both effects loops can be assigned to either or both channels.

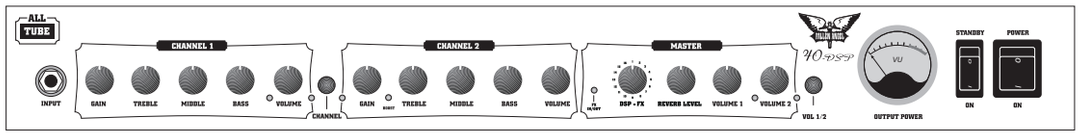
Also supplied with the Head is a dedicated 4-way footswitch on a single jack lead (no more fiddling with multi-way connectors). LED indication on the footswitch itself is provided so you always know the current status without having to look at the amplifier. Footswitch provides control for Channel 1/Channel 2, Channel 2 Boost, Master 1/Master 2 and Loop In/Out.

Fallen Angel 40 DSP and 60 DSP Combos, and 60 DSP Head:

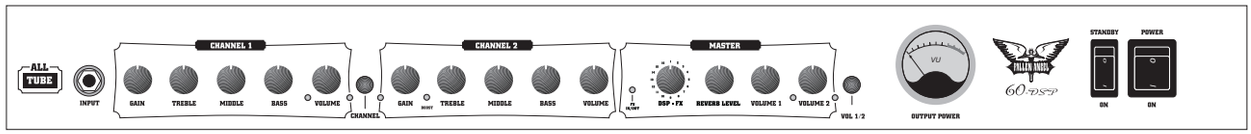
The Fallen Angel 40 DSP and 60 DSP combos (and 60 DSP head) amplifiers are built on the same principles as the 180 Watt head and suit the same heavier guitar playing styles. They have been designed to produce the maximum bottom end possible from an open back cabinet. For extended low end and maximum 'Punch' it is recommended that they be used with a 4 x 12 closed back cabinet.

Front Panel Facilities

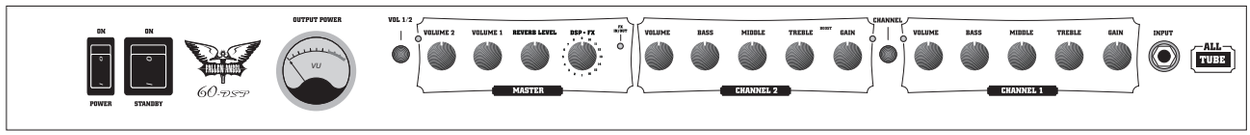
FALLEN ANGEL 40 DSP, 60 DSP, 180



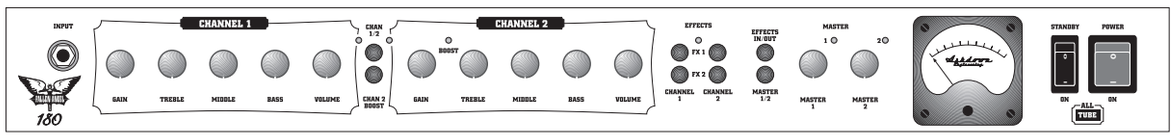
Fallen Angel 40 DSP Combo



Fallen Angel 60 DSP Combo



Fallen Angel 60 DSP Head



Fallen Angel 180 Head

Front Panel Facilities

INPUT - The single jack input socket perfectly matches passive guitars with its very high impedance but still retains sufficient headroom to cope with the output from modern active instruments.

CHANNEL 1

Channel 1 is intended to be used mainly as a CLEAN channel.

GAIN - The setting of the GAIN control will depend very much on the output level of the guitar being used. For single coil pickups the sound will be clean for most of the range of the control with a slight edge only on the maximum setting. For humbucking pickups the sound will be clean up to about 12 O'clock with a slight edge being added beyond this and a definite crunch on maximum.

TREBLE, MIDDLE, BASS - The Treble, Middle and Bass controls are a traditional passive guitar tone network and as such are interactive in their function. This type of tone network provides the best overall character for the guitar, giving a classic, vintage, full-bodied guitar tone. The values of components used in the Channel 1 tone control network have been chosen to best suit a Clean and Sparkling guitar tone.

VOLUME - Channel 1 has its own Volume control to allow Channel 1 and Channel 2 to be easily balanced in level against each other. It is best in terms of background noise and overall tone to set this control as high as possible and the Master control as low as possible for the required playing volume.

CHANNEL SELECT AND CHANNEL 2 BOOST (180 Head) - Between Channel 1 and Channel 2 there are 2 push buttons used for selecting 'Channel 1/Channel 2' and 'Channel 2 Boost' from the front panel. If the footswitch is to be used these push buttons must be in their OUT position for the footswitch to operate. Channel 1 or Channel 2 activity is indicated by LEDs above this push button. An LED above and to the right of the Channel 2 Gain control indicates Channel 2 Boost.

CHANNEL SELECT AND CHANNEL 2 BOOST (40 DSP & 60 DSP Combos, 60 DSP Head) - Between Channel 1 and Channel 2 there is a single push button used for selecting 'Channel 1/Channel 2' from the front panel. If the footswitch is to be used this push button must be in its OUT position for the footswitch to operate. Channel 1 or Channel 2 activity is indicated by LEDs either side of this push button. Channel 2 Boost can only be selected from the footswitch and an LED to the right of the Channel 2 Gain control indicates Channel 2 Boost.

CHANNEL 2

Channel 2 is a very versatile channel and can be used for styles including fluent solo playing, power chords, big fat bottom end muted notes and chords, and screaming over-the-top lead lines. Due to the dynamics available on this channel, the guitars' own volume control can open up a whole range of other uses. For instance by winding the guitar volume back and playing lightly it can be clean. Hit the string a bit harder and it has and edge to it. Crank it up to wind into a singing soloing voice. Muted notes and chords retain a solid fat bottom end whilst solo lines can be full and singing with a saturated, smooth distortion that still retains a degree of dynamics.

GAIN/CHANNEL 2 BOOST - Channel 2 Gain control has a vast range available (especially when used with the Channel 2 Boost facility). At its lowest setting Channel 2 can be clean. At its maximum setting it provides a fully saturated, very high gain, over-the-top lead tone. We have been very careful to ensure that the fat bottom end is retained throughout the entire range of this Gain control. Channel 2 has been designed to allow you to set the GAIN control somewhere in the middle of its range for chords and general playing. Then you can use the BOOST to add that extra gain for soloing, over-the-top fat muted chords or muted note lines. Adding the BOOST also makes this channel ideal for tapping styles. If you want balls out, over-the-top guitar then Channel 2 can be used with maximum GAIN and BOOST. Be warned - you will have such a massive degree of gain that it may be somewhat uncontrollable.

TREBLE, MIDDLE, BASS - The Treble, Middle and Bass controls are based on a traditional passive guitar tone network and as such are interactive in their function. This type of tone network provides the best overall character for the guitar, giving a classic, full-bodied guitar tone. The values of components used in the Channel 2 tone control network have been chosen to best suit a modern, high gain, saturated guitar sound (with big bottom end).

It is recommended to use the Treble and Middle controls set between minimum and 12 O'clock. The bass control can be used set on maximum if desired.

180 Watt Head Only - Because the 6-tube output stage of this amplifier reacts so well with the speakers used, the tonal character can change drastically from one model of speaker to another. We recommend the speakers in Ashdown 4 x 12 cabinets to best suit this amplifier.

VOLUME - Channel 2 has its own Volume control to allow Channel 1 and Channel 2 to be easily balanced in level against each other. It is best in terms of background noise and overall tone to set this control as high as possible and the Master control as low as possible for the required playing volume.

Front Panel Facilities

MASTER SECTION

EFFECTS LOOP PUSH BUTTONS (180 Head) - There are 4 push buttons for assigning the 2 effects loops to either Channel 1, Channel 2 or both. The first 2 push buttons are for Channel 1. The top button assigns Loop 1 to Channel 1. The lower button assigns Loop 2 to Channel 1. With both buttons IN, both Loop1 and Loop 2 are assigned to Channel 1. The next set of 2 push buttons perform the same operation for Channel 2. This effects scheme provides a supremely flexible effects facility. Switching is also provided on the back panel for selecting either Serial or Parallel effects loops.

EFFECTS IN/OUT (180 Head) - To the right of the Effects assignment section are two more push buttons. The top one activates the effects loops from the front panel. The LED above the 4 effects assignment buttons indicates Loops active. If you are using the footswitch then leave this front panel push button in its OUT position.

INTERNAL DSP EFFECTS (40 DSP & 60 DSP Combos, 60 DSP Head) - The 40 and 60 DSP combo amplifiers and 60 DSP head have 16 built in Digital Signal Processor (DSP) effects. These can be selected from the 16 way rotary switch. The 16 Effects available are: 4 x Chorus, 4 x Flanger & 8 x Delay, all have been specially created specifically for guitar use. The DSP Effects can be switched IN/OUT with the front panel push switch. Effects IN is indicated with the LED next to this push button switch. If you are using the foot switch then leave this front panel push button in its OUT position.

INTERNAL DSP REVERB (40 DSP & 60 DSP Combos, 60 DSP Head) - The level of the DSP reverb is set using the Reverb Level control next to the 16 way rotary switch. The actual type of REVERB has been specially created for guitar use and to be a big improvement over traditional Spring Reverb.

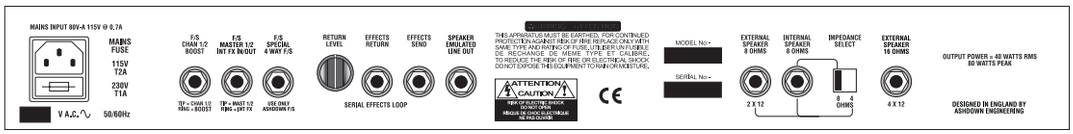
MASTER 1/MASTER 2 - Two selectable Master Level controls are provided for further flexibility. The push button to the side of these can be used to switch between Master 1 and Master 2. If you are using the footswitch then leave this front panel push button in its OUT position. This is a very useful facility which allows instant switching between two pre-set volume levels on either channel. LEDs at the top right of each control indicate which is active.

VU METER - The VU meter indicates output power level.

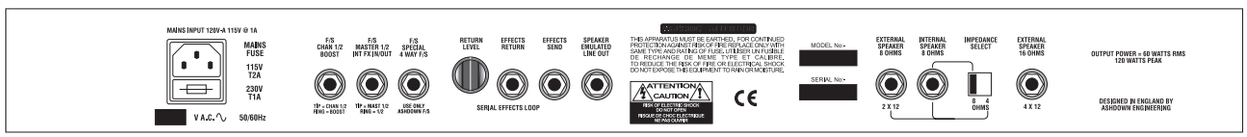
STANDBY AND POWER SWITCH - Always make sure the Standby switch is in its OFF position before activating the main Power switch. Allow the amplifier to warm up for at least 1 minute before setting the Standby to ON. Following this procedure every time you use the amplifier will prolong the life of the tubes. Always allow the tubes to cool down well before transporting the amplifier otherwise damage to the tubes can easily result.

Rear Panel Facilities

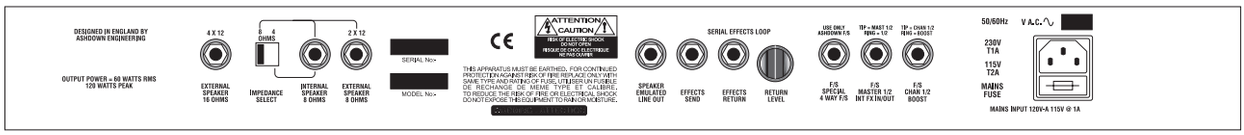
FALLEN ANGEL 40 DSP, 60 DSP, 180



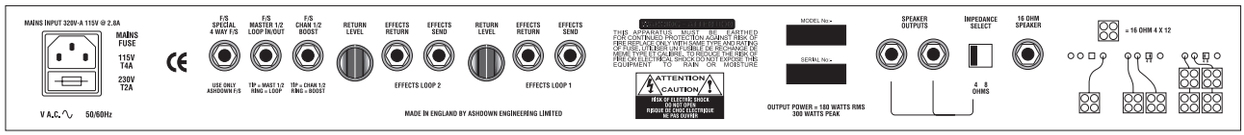
Fallen Angel 40 DSP Combo



Fallen Angel 60 DSP Combo



Fallen Angel 60 DSP Head



Fallen Angel 180 Head

Rear Panel Facilities

FUSED MAINS INLET SOCKET - This is for connection to the mains supply using supplied cable. Always use a mains outlet that has an earth/ground connection for safety. Never remove or replace the plug on the supplied cable. Always replace the fuse with the same type and rating as stipulated on the rear panel adjacent to the mains inlet socket.

FOOTSWITCH SOCKETS - There are 3 footswitch sockets provided on the amplifier. For any of these footswitch sockets to operate, it is essential that the corresponding front panel push buttons are in the OUT position. The first of these sockets is a mono jack for connection of the supplied 4-way footswitch. Always connect this prior to turning on the power to the amplifier as footswitch power is derived from the amplifier. The next 2 footswitch sockets are both stereo sockets and use a standard 2-way, push on/push off type footswitches for their operation. These may be used as an alternative to the dedicated 4-way footswitch supplied.

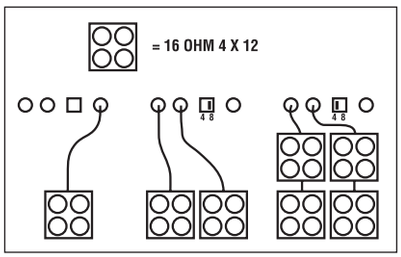
EFFECTS LOOPS (180 Head) - There are 2 Effects Loops provided on this amplifier. Each has two jack sockets for Effects Send & Effects Return signals; the Effects return socket also has an Effects Return Level control associated with it for adjusting the level of the returned signal. There is a single push button for dedicating these Effects Loops as either Serial (where the signal path through the amplifier is broken by the effects loop) or Parallel (where the effects return signal is in parallel with the signal through the amplifier). Use the 4 front panel push buttons for assigning either of the 2 Effects Loops to Channel 1, Channel 2 or both.

N.B. Switching the effects loop IN (in Serial mode) when there are no effects connected will MUTE the amplifier as there will be no signal returned to either Effects Return socket.

EFFECTS LOOP (40 DSP & 60 DSP Combos, 60 DSP Head) - The Effects Loop on these amplifiers is a Serial loop. This has two jack sockets for Effects Send & Effects Return signals; the Effects return socket also has an Effects Return Level control associated with it for adjusting the level of the returned signal.

SPEAKER EMULATED LINE OUTPUT (40 DSP & 60 DSP Combos, 60 DSP Head) - The 40 & 60 DSP combos and 60 DSP head have a special Speaker Emulated Line Output jack socket that can be used for direct recording the guitar sound. This has a special Equalisation circuit that Emulates the characteristics of the loudspeaker/Output stage combination.

SPEAKER OUTPUT SOCKETS & IMPEDANCE SELECTOR (180 Head)



There are 3 speaker output sockets provided. The one on the far right is fixed at 16 Ohms should be used if you are driving just one 4 x 12 cabinet (16 Ohms). The other two sockets are connected in parallel with the IMPEDANCE SELECT switch controlling their combined impedance. Follow the scheme printed on the back panel (and reproduced here) adjacent to these sockets for the correct impedance to use for various speaker combinations.

WARNING – Do not use open back cabinets with this amplifier as the low-end power that the amplifier produces will cause the cones of the speakers to be damaged. Never run the amplifier without a speaker connected as this will damage the output transformer.

SPEAKER OUTPUT SOCKETS & IMPEDANCE SELECTOR (40 DSP & 60 DSP Combos, 60 DSP Head) - There are 3 speaker output sockets provided. The one on the far right is fixed at 16 Ohms and should be used if you are driving just one 4 x 12 cabinet (16 Ohms). The other two sockets are connected in parallel with the IMPEDANCE SELECT switch controlling their combined impedance.

INTERNAL SPEAKER 8 OHMS - This is the socket for connection to the internal 8 Ohm speaker. The impedance select switch should be set to 8 Ohms for use with the internal speaker only (as indicated by the graphics).

EXTERNAL SPEAKER 8 OHMS - This is an external speaker socket for connecting to an 8 Ohms speaker such as a 2 x 12 cabinet (normally 8 Ohms). This socket is in parallel with the internal speaker socket, so if an external 8 Ohms speaker is used with the internal speaker still connected then the impedance select switch will need to be set to 4 Ohms (as indicated by the graphics).

WARNING - Never run the amplifier without a speaker connected as this will damage the output transformer.

Specifications

180 WATT HEAD

INPUTS

Instrument Input	Impedance 1M Ohm	Level 100mV to 1V
Effects Return 1	Impedance 50k Ohms	Level 0dBu adjustable
Effects Return 2	Impedance 50k Ohms	Level 0dBu adjustable

OUTPUTS

Effects Send 1	Impedance 4.7k Ohms	Level Nominal 0dBu
Effects Send 2	Impedance 4.7k Ohms	Level Nominal 0dBu

EQUALISATION

Treble, Middle, Bass	Traditional passive, interactive tone control network providing classic guitar tonal adjustment

TUBES

Pre-Amp	4 x 12AX7 with DC heaters for low noise
Output	6 x EL34 fixed bias
Output power	200 Watts RMS into 4, 8 or 16 Ohms

POWER REQUIREMENT

320 Watts at rated supply voltage

40 DSP & 60 DSP COMBOS, 60 DSP HEAD

INPUTS

Instrument Input	Impedance 1M Ohm	Level 100mV to 1V
Effects Return	Impedance 50k Ohms	Level 0dBu adjustable

OUTPUTS

Effects Send	Impedance 4.7k Ohms	Level Nominal 0dBu
Speaker Emulated Line Output	Impedance 4.7k Ohms	Level Nominal 0dBu

EQUALISATION

Treble, Middle, Bass	Traditional passive, interactive tone control network providing classic guitar tonal adjustment

TUBES

Pre-Amp	4 x 12AX7 with DC heaters for low noise
Output 40	4 x EL84 fixed bias
Output power	40 Watts RMS into 4, 8 or 16 Ohms
Output 60	2 x EL34 fixed bias
Output power	60 Watts RMS into 4, 8 or 16 Ohms

POWER REQUIREMENT

Fallen Angel 40 = 80 Watts at rated supply voltage
Fallen Angel 60 = 120 Watts at rated supply voltage