

# OPERATING INSTRUCTIONS



## **OPERATING INSTRUCTIONS**

MAG & Electric Blue Amplifier Heads and Combos



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.

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## IMPORTANT - REGISTRATION CARD

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

Name ..... Purchased from .....  
Address ..... Date .....  
..... Model .....  
..... Serial Number .....  
.....  
Email .....  
Age .....  
Comments .....  
.....  
.....  
.....

# 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 REMPLACEMENT 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

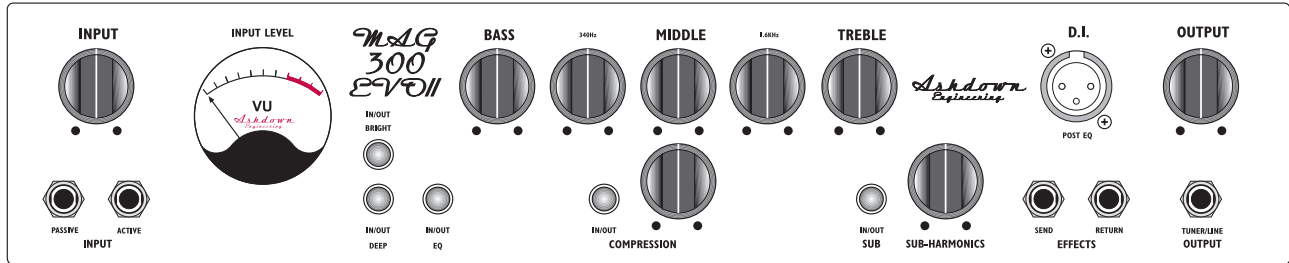
## CE MARK FOR EUROPEAN HARMONISED STANDARDS



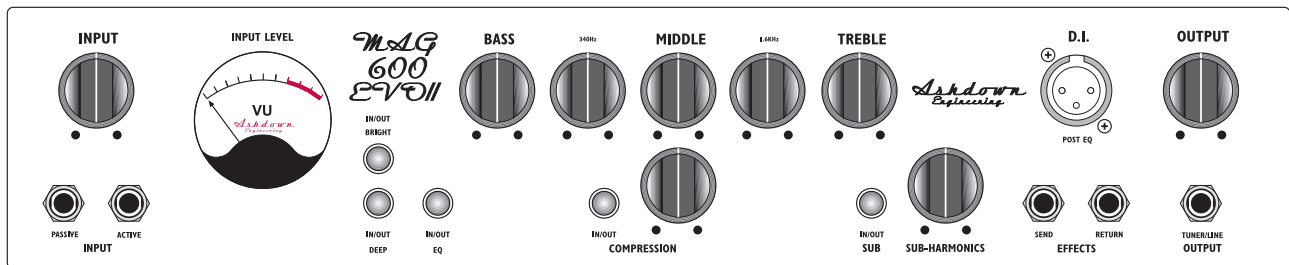
The CE mark which is attached to these products means it conforms to EMC Directive (89/69/EEC), CE mark Directive (93/68/EEC) and Low Voltage Directive (72/23/EEC).



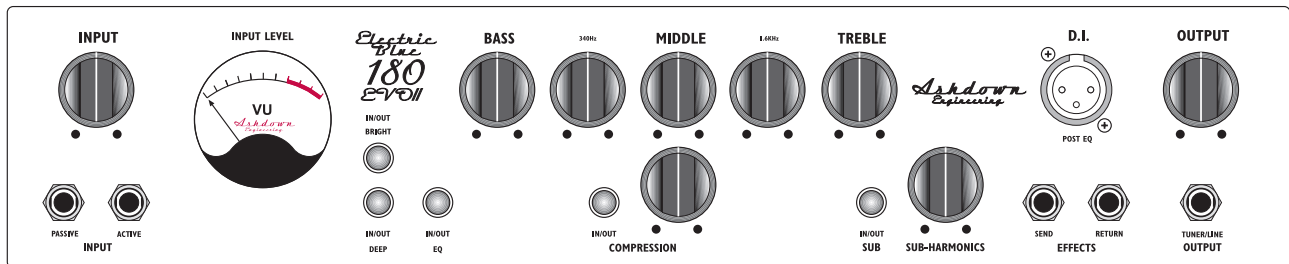
# Front Panel Facilities



MAG300



MAG600



Electric Blue

MAG300, MAG600 and Electric Blue amplifiers share the same front panel facilities.

**INPUTS** - There are two choices of instrument input, these are marked **PASSIVE** and **ACTIVE**. The **PASSIVE** input is high sensitivity and high impedance to suit **PASSIVE** bass instruments. The **ACTIVE** input is much lower sensitivity and impedance to accurately match the signal from **ACTIVE** bass instruments i.e. those with a built in battery powered pre-amp.

**INPUT CONTROL** - The **INPUT** control sets the signal level through the preamp in conjunction with the **INPUT LEVEL** VU Meter. This is adjusted to give a reading of 0VU on the meter for average playing dynamics with occasional peaks into the red region. Please note that the setting of this may have to be re-adjusted after modification of the EQ controls.

**DEEP** - With this button **IN** a fixed E.Q. is superimposed on the pre-amp to give a **BASS** boost to the sound. This gives +8dB at 50Hz.

**BRIGHT** - With this button **IN** a fixed E.Q. is superimposed on the pre-amp to give a **TREBLE** boost to the sound. This gives +10dB at 10kHz.

**E.Q.** - This button switches the Equalisation section **IN** or **OUT** i.e. the Bass, Middle and Treble controls and the two rotary controls placed between these.

**EQUALISATION** - This consists of BASS, MIDDLE and TREBLE controls with two more rotary controls placed in-between. This can be used in a number of ways:

Firstly as a very simple Bass, Middle and Treble tone control section as found on older traditional amplifiers. This is done by leaving the 340Hz and 1.6kHz controls set in their centre positions and using only the BASS, MIDDLE and TREBLE controls to alter the overall tone.

Secondly, If more control is required then the 340Hz and 1.6kHz controls can also be used to tailor the E.Q. in the regions between the main tone controls.

This provides a very versatile Equalisation section, it is simple to understand and operate, yet provides a wide degree of variation. It retains the simplicity of a three control tone section but provides the flexibility of a graphic equaliser.

**COMPRESSION** - Adding a small amount of compression gives a fat bottom end to the sound and allows a greater volume of amplification to be used without the playing peaks distorting the amplifiers output stage. You will also find that this will add definition to your playing bringing out notes within a run more clearly as it evens out the dynamics of your playing.

A large amount of compression can be used as an effect but it will tend to reduce the dynamics in your playing to such an extent that the volume of the note will be the same no matter how hard or soft you hit the string. Compression also adds sustain to notes making them longer before they die away.

The Compression Level control adjusts the degree of compression applied to the bass signal. For this to function correctly the Input Level must be correctly set as described in the INPUT CONTROL section (left).

When the Input Level is correctly set there will be hardly any difference in volume between Compression IN and Compression OUT. This is because the amplifier automatically compensates for the reduction in level that would be apparent when Compression is added by increasing the overall gain to restore the volume to its pre compression level, because of this you may notice an increase in background noise with high compression settings.

Compression is switched IN/OUT with the push button adjacent to the Compression Level control.

**SUB HARMONICS** - This section produces Sub Harmonics an octave below the notes being played. The level of these Sub Harmonics relative to the straight bass sound can be adjusted using the LEVEL control. This is very effective in thickening the sound and you will find in use that only a small degree of this lower octave is required to really fill out the sound and provide a character that is not possible by any other means.

The degree of Sub Harmonics is also dependant on the setting of the BASS control.

Sub Harmonics are switched IN/OUT with the push button adjacent to the Sub Harmonics Level control.

**DIRECT INJECT ( D.I. )** - A balanced D.I. is provided on the front panel XLR socket. This provides a Post E.Q. Post effects signal. The output signal from this XLR socket is set to a level and impedance suitable for connecting directly into a Balanced Microphone input of a mixing desk for either Direct Injection into the PA system or for recording.

**EFFECTS SEND/RETURN** - A serial effects loop is provided at a level of 0dB. The Effects Send and Return sockets for this are on the front panel below the D.I. socket. The EFFECTS SEND socket can also be used as a Line Out socket if required. The signal path through the preamp is only broken when a jack plug is inserted into the EFFECTS RETURN socket. The EFFECTS SEND is situated after the EQ.

**TUNER/LINE OUT** - This output socket provides a line level signal that can be used either for a permanent connection to a tuner or a line output for connection to other power amplifiers and speakers.

**OUTPUT LEVEL** - The OUTPUT control adjusts the overall level of the amplifier. Adjust this for your preferred overall stage playing volume.

Everything possible has been done to make these reliable, minimum service, high quality, long lasting powerful bass amplifiers.

We know you will appreciate the effort that has been put into the design and manufacture of this unit and you will be rewarded in your choice of bass amplifier by long life and reliability.

# Specifications

## INPUTS

High Input  
Low Input  
Effects Return

Impedance 3.9M Ohms  
Impedance 10K Ohms  
Impedance 22K Ohms

Input range 150mV to 20V p-p  
Input range 300mV to 40V p-p  
Input level 0dBu nominal

## OUTPUTS

Tuner Output  
Effects Send  
D.I. Output

Impedance 10K Ohms  
Impedance 22K Ohms  
600 Ohms balanced

Level 0dBu nominal  
Level 0dBu nominal  
Level -20dBu nominal

Speaker Outputs  
Frequency Response

Minimum Impedance 4 Ohms  
-3dB at 22Hz and 25kHz

## EQUALISATION

Bass  
Lo Mid  
Middle  
Hi Mid  
Treble  
Deep  
Bright

+/- 15dB @ 100Hz  
+/- 15dB @ 340Hz  
+/- 15dB @ 660Hz  
+/- 15dB @ 1.6kHz  
+/- 15dB @ 7kHz Shelving  
+ 8dB @ 50Hz  
+ 10dB @ 10kHz

Signal to Noise  
Distortion

Better than 80dB (EQ Flat)  
Less than 0.5% THD



[www.ashdownmusic.com](http://www.ashdownmusic.com)