

# 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).



# General Operation Overview

The following overview gives a quick description of the operation of the Superfly programmable pre-amp. This is followed by a complete detailed description of each section.

The pre-amp 'user interface' is made up of 22 push button switches, 9 bargraph displays, a 2 digit 7 segment display and 2 rotary controls. All settings, except the OUTPUT signal level may be STORED in one of the user PROGRAM MEMORY locations numbered 10 to 99.

**PROGRAM MEMORY** locations 00 to 09 are factory presets and cannot be overwritten although they can be modified and stored in user PROGRAM MEMORY locations 10 to 99.

**To keep things simple and intuitive operation is:- one button one function.**

Any parameter can be changed in real time with the alteration taking immediate effect. In this way temporary changes can be made to any program memory allowing tonal adjustments to be made 'on the fly', at a gig. Any temporary changes made will however be lost when another PROGRAM MEMORY number is selected unless those changes are stored first by pressing the STORE button, selecting the program number for writing the modified program into and pressing the STORE button again. The EXIT button takes you out of STORE mode if you change your mind.

**INPUT GAIN** is adjusted using the INPUT rotary encoder and should be set so that the SIGNAL LEVEL bargraph is showing a reading of at least half scale most of the time you are playing. The setting of this will depend on the sensitivity of the bass being used, the EQ applied and compensation in volume required for any Compression used. The factory presets have been created using a bass with average sensitivity. You may need to increase or decrease the INPUT GAIN for these factory presets to work well with your instrument.

Each of the 7 bands of the GRAPHIC EQ has an UP and DOWN button for boosting or cutting EQ at its frequency centre.

Pressing the BYPASS button bypasses your programmed sound with a FLAT EQ and 0dB INPUT GAIN setting. This is useful for comparison between FLAT and your adjusted EQ. Pressing BYPASS again returns to your programmed sound. BYPASS LED shows when BYPASS is selected.

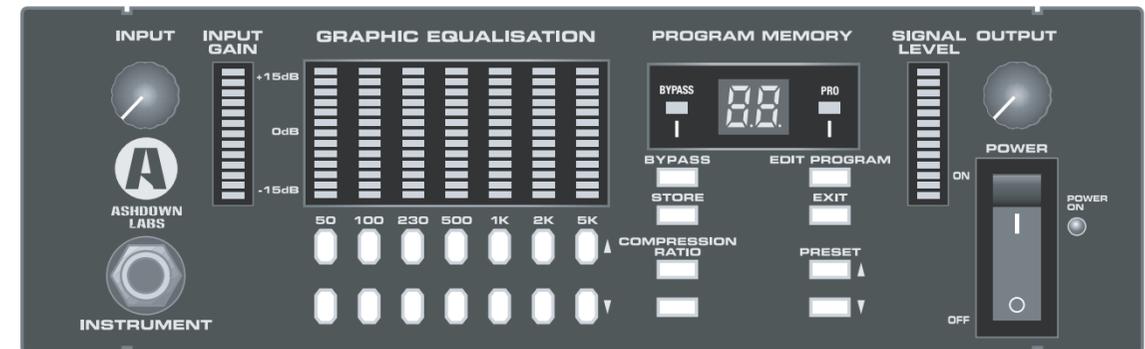
**COMPRESSION** can be added by increasing the COMPRESSION RATIO from 1.00:1 to some other value (1.00:1 = no compression).

**PRESET PROGRAM MEMORY** number can be selected with the PRESET UP and DOWN buttons or via MIDI.

**EDIT/PROGRAM** toggles between EDIT - the currently selected sound with any temporary changes or edits that have been made, and PROGRAM - the original program parameters stored in memory prior to any temporary edits. PROGRAM LED shows when PROGRAM is selected. You must be in EDIT mode in order for STORE to function.

All parameters, including compression Threshold, Attack & Release times as well as an optional 7 band Parametric EQ option can also be edited via USB with the SuperFly Editor software downloadable from the Ashdown web site. [www.ashdownmusic.com](http://www.ashdownmusic.com)

# Front Panel Facilities



**MAINS ON/OFF POWER SWITCH**

The Mains ON/OFF power switch is located on the front panel. Use this to turn ON the power to the Superfly.

Before using this switch make sure the Superfly is connected to the correct mains power supply for your country using the mains cable supplied and that the Voltage Selector is correctly set.

After connecting to the correct mains supply and turning on the power to the Superfly the 'POWER ON' LED and the front panel displays should light.

**INSTRUMENT INPUT JACK SOCKET**

The Instrument Input jack socket is a high impedance input perfectly matched to the pick-ups of Passive bass instruments.

This Input jack socket is also suitable for use with Active instruments, i.e. those with a built in pre-amp.

**INPUT ROTARY CONTROL**

The INPUT rotary control is actually a digital rotary encoder and is used to adjust the signal level from the instrument input jack socket through the pre-amplifier.

For optimum signal to noise ratio and for correct operation of the Compression facility INPUT GAIN should be set using this rotary control so that the SIGNAL LEVEL bargraph located near the OUTPUT control has at least half its Green LEDs illuminated most of the time while playing your instrument, with only occasional peaks into Yellow/Red.

The SIGNAL LEVEL bargraph monitors the signal from after the EQ section, therefore if

the EQ is boosted then the INPUT GAIN level will need to be decreased so that clipping does not occur within the pre-amp.

The INPUT signal level setting is shown on the INPUT GAIN bargraph and is STORED along with all other parameter settings for each PROGRAM MEMORY location.

When the INPUT control is adjusted the INPUT GAIN value is also shown on the two digit PROGRAM MEMORY numeric display. The range displayed is from -60dB through to +15dB. The value is shown for about 4 seconds and during this time the INPUT GAIN bargraph will be flashing on and off. After 4 seconds have elapsed the 2 digit display reverts back to showing the current PROGRAM MEMORY number.

**SIGNAL LEVEL BARGRAPH**

SIGNAL LEVEL bargraph located next to the OUTPUT rotary control shows in real time the pre-amp signal level from after the EQ but before the OUTPUT rotary control. Keep this bargraph showing about half scale to ensure there is no clipping of the signal in any part of the pre-amplifier.

**INPUT GAIN**

When the INPUT rotary control is operated manually the INPUT GAIN vertical column of LEDs shows the actual GAIN setting being selected.

When recalling a PROGRAM MEMORY preset it displays the GAIN setting stored in memory for that preset number.

**GRAPHIC EQUALISER**

The GRAPHIC EQUALISER has 7 frequency bands chosen specifically to suit EQ for bass,

each frequency band is represented by a vertical column of LEDs. Below each column of LEDs are 2 x buttons, one for UP and one for DOWN. These buttons are for increasing or decreasing the degree of boost or cut applied by each band of EQ.

If any of the UP or DOWN buttons are operated the change to that frequency band is shown on the vertical column of LEDs above the buttons as well as on the 2 digit numeric display. The range available is +/- 15dB in half dB steps. After 4 seconds the 2 digit display will revert to showing the PROGRAM MEMORY number.

Temporary changes can be made in real time to any of the Graphic frequency bands and these will take immediate effect in both the graphic display and the sound through the Superfly. These changes will however be lost when changing to another PROGRAM MEMORY number unless they are first STORED. See STORE below. Making temporary changes in this way is ideal for quick adjustments to a sound during a gig without affecting the stored parameters.

**BYPASS**

If BYPASS is pressed at any time, the LED above it lights and all bands on the Graphic are set to their centre position (i.e. FLAT), Compression is set to minimum Ratio 1.0:1 and the Input Gain is set to 0dB. You will not see these changes other than the BYPASS LED lighting as the parameters of your selected PROGRAM MEMORY will remain on the front panel display. The above description is merely to inform you what setting are selected internally for BYPASS mode.

# Front Panel Facilities

Press BYPASS a second time, the LED above it extinguishes and all settings are returned to those of the selected PROGRAM MEMORY number.

This is a useful facility to compare any program setting to the FLAT sound of the bass.

### COMPRESSION

To make it simple to use COMPRESSION has only one parameter that can be adjusted from the front panel UP and DOWN buttons, this is the setting for compression RATIO. This setting will be stored along with the Input Gain and Graphic settings.

Compression RATIO is initially set to 1.0:1 (1.0:1 = no compression). Use the UP and DOWN buttons to alter the RATIO. The Range available is from 1.0:1 to 16:1 and is displayed on the 2 digit numeric display for 4 seconds. The 2 digit numeric display will remain flashing on and off whilst the compression RATIO is displayed and revert back to showing the PROGRAM MEMORY number after the 4 seconds have elapsed.

Because the Threshold for the compression is preset you will need to adjust the INPUT GAIN to get the compression working at its optimum. Also because the action of the compression is to squash down the level of signal you will probably need to play with the INPUT GAIN to achieve a balance between sounds with compression and sounds without. You will find that too much compression is not very useful.

The compression Threshold, Attack & Release have been preset internally to be appropriate for a bass guitar. The Threshold, Attack & Release can be edited from an external computer via USB. See details about SuperFly Editor later in these operating instructions.

### PRESET UP/DOWN BUTTONS

Select another PROGRAM MEMORY number by using the PRESET UP & DOWN buttons. Press once to advance one program number up or down, or hold the button for auto repeat.

When a PROGRAM MEMORY number is selected using the PRESET UP/DOWN push buttons all settings for that program number will be recalled from memory, displayed on the front panel and enabled in the signal path.

PROGRAM numbers can also be selected via MIDI using PROGRAM CHANGE command. MIDI channel is initially set to 1. The MIDI channel can be altered via USB using the SuperFly Editor software (see below for details).

PROGRAM MEMORY numbers 10 to 99 are user PRESETS and are fully editable. These are initially set to Flat EQ, INPUT GAIN 0dB & Compression RATIO 1.0:1.

PROGRAM MEMORY numbers 00 to 09 are factory presets and cannot be overwritten although they can be modified and stored in user PROGRAM MEMORY locations 10 to 99.

Factory PRESET 00 to 09 are as follows:

- 00 Flat – No Compression
- 01 Flat – With Compression
- 02 Mid Pre Shape – No Compression
- 03 Mid Pre Shape – With Compression
- 04 Big Bottom – No Compression
- 05 Honky Mids – No Compression
- 06 Big Dipper – No Compression
- 07 Big Dipper – With Compression
- 08 Bright – No Compression
- 09 Standard Rock – No Compression

### EDIT/PROGRAM

When a PROGRAM MEMORY number is selected, the parameters for this are loaded into an edit buffer. The contents of this edit buffer control the settings shown on the front panel and in the signal path.

If an adjustment is made to any parameter then the setting in the edit buffer for this parameter only is updated to reflect the change. The front panel display and signal path also reflect this re-adjusted parameter. If a further adjustment is made to another parameter then this is also modified in the edit buffer.

To compare the modified program to the original press the EDIT/PROGRAM button, the LED above it lights and the original parameters from the main memory are recalled to the display and signal path. Press this button again, the LED extinguishes and the parameters from the edit buffer are recalled once again.

This is a useful facility to compare the changes you have made to the original program parameters.

If you do not STORE the changes as described below then selecting another PROGRAM MEMORY number will load its parameters into the edit buffer, the signal path and front panel display and any previous 'Edit' will be lost.

In this way temporary changes can be made to any parameter during use that are not required to be stored into the memory, although they can be if the user so wishes.

### STORE

Press STORE and the 2 digit numeric display starts flashing, while it is flashing you may use the PRESET UP/DOWN buttons to select a different PROGRAM MEMORY location on the 2 digit display. Press the STORE button again, the 2 digit display stops flashing and the parameters are copied from the edit buffer and stored into the selected PROGRAM NUMBER memory location.

If memory location 00 to 09 is selected when STORE is pressed for the second time then the 2 digit display just keeps flashing until one of the user program number memory locations 10 to 99 is selected. This is because 00 to 09 are factory presets and cannot be overwritten.

### EXIT

If you change your mind after selecting STORE, you can use the EXIT button to exit from the STORE command. This will return you to the conditions immediately prior to pressing STORE.

### NUMERIC DIGITAL DISPLAY

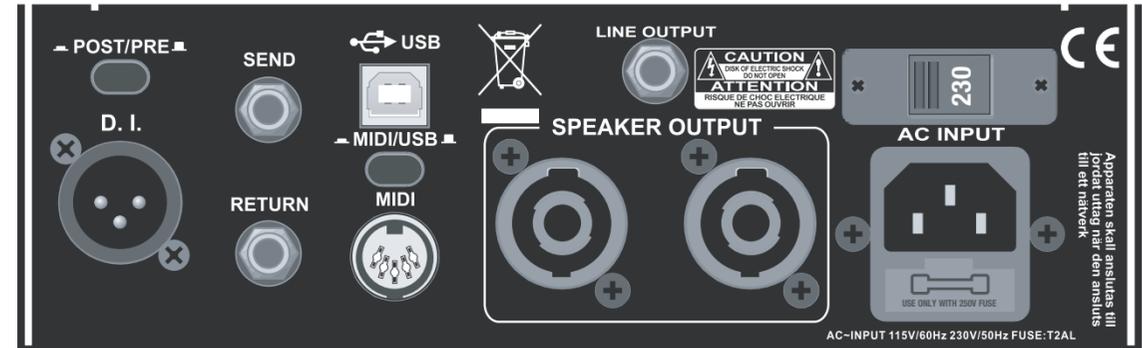
The 2 digit numeric display shows the PROGRAM MEMORY number at all times except for 4 seconds after any parameter has been modified. It will then display the value of the modified parameter until the 4 seconds have elapsed when it will once again revert to showing the PROGRAM MEMORY number.

Programs 00 to 09 are factory presets and cannot be overwritten, these can however be modified and stored into one of the user memory locations 10 to 99. All program numbers beyond the first 10 are user memory locations that are fully editable.

### OUTPUT

The OUTPUT rotary control sets the level of signal from the pre-amplifier to both of the 250 Watt power output stages. This is a standard rotary control to adjust the output level and is not stored in memory.

# Back Panel Facilities



### EFFECTS SEND/RETURN

A Serial Effects loop is provided with Send & Return jack sockets for connection to external effects units. As this is a Serial effects loop the Return jack socket breaks the signal through pre-amp when a jack plug is inserted.

This effects loop is located after the EQ & Compression but before Output level control. Nominal signal level is 0dB.

### BALANCED DI (DIRECT INJECT)

D.I. is provided on a balanced XLR socket for direct connection of the Superfly audio signal to a mixing desk. Pre/Post EQ signal switching is provided. Nominal signal level is -20dB to suit a balanced Microphone input.

### LINE OUTPUT

The Line Output jack socket provides a signal from after the output level rotary control that can be used to drive additional power amplifiers if required. Nominal signal level is 0dB.

### USB

Before using the USB make sure it is selected with the USB/MIDI switch. The USB is used for connection to a USB port on an external computer for editing of all parameters using the SuperFly Editor software. This software and the USB driver for your computer is downloadable free from the Ashdown web site.

### MIDI

Before using the MIDI socket make sure it is selected with the USB/MIDI switch. This is a MIDI IN socket for connection to other MIDI equipment to allow the Superfly Program Memory Numbers to be selected by an external MIDI Program Change command.

MIDI channel number is initially set to 1. This can be changed by pressing EXIT and EDIT/PROGRAM together, this displays 'CH' on the Graphic display and the MIDI channel on the 2 digit numeric display. MIDI channel can be changed using PRESET UP/DOWN buttons. Return to normal operation with EXIT. MIDI channel can also be changed using the SuperFly Editor software.

### SPEAKER OUTPUT

The Superfly has two 250 Watt RMS output stages, the sockets for these are combined Speakon/Jack sockets – One for each 250 Watt output stage. Both output stages are driven from the single Mono pre-amp.

### FUSED MAINS INLET SOCKET

For connection to your countries mains power using the power cord provided.

When replacing the mains fuse always use the same type and value as stated on the rear panel.

### VOLTAGE SELECTOR

Before connecting the Superfly to the mains supply first check that the Voltage Selector is showing the correct voltage for your country.

### SUPERFLY EDITOR SOFTWARE

SuperFly Editor and USB driver software are available by download from the Ashdown web site.

With the SuperFly Editor software you will be able to Load and Save individual presets to your computer or to the Superfly, Download/Upload all Presets in the Superfly to and from archive files on your computer, edit all parameters on the Superfly in real time from your computer, change the MIDI channel number and update the software in the Superfly for future upgrades to the operating system.

You also have access to additional facilities that are not available from the Superfly front panel i.e. you will be able to modify all the Compression parameters of Threshold, Attack time and Release time in addition to setting the Ratio Value.

You have available a 7 way fully Parametric Equalisation option that you can use in place of the 7 band graphic. This has a graphic representation of the EQ you are achieving to make it easy to understand exactly what effect your changes are having on the sound through the Superfly. The results that you achieve with this Parametric Equalisation can be saved in one of the user Program Memory locations of the Superfly for your own entirely unique equalisation.

# Specifications

# Notes

## SUPERFLY

### INPUTS

INSTRUMENT (Jack Socket) Impedance < 1Meg Ohm  
Signal 100mV to 3V p-p

EFFECTS RETURN (Jack Socket) Impedance 10k Ohms  
Nominal signal level 0dB

MIDI IN (5 Pin DIN)

USB

### OUTPUTS

EFFECTS SEND (Jack Socket) Impedance 600 Ohms  
Nominal signal level 0dB

D.I. (Balanced XLR) Impedance Balanced 600 Ohms  
Signal 20dB

LINE OUT (Jack Socket) Impedance 600 Ohms  
Nominal signal level 0dB

2 X SPEAKER (Speakon/Jack) 250 Watts RMS into 4 Ohms

### EQUALISATION

Frequency Response 20Hz - 20KHz, +0/-0.5dB

Bands 7

Bandwidth 1.1 Octave, 20Hz - 30KHz

Output Gain 45dBu at line output

Factory Presets 10

User Presets 90

Signal to Noise Ratio >95dBu, A-Weighted, 22Hz - 22KHz

### GENERAL SPECIFICATIONS

Dimensions 352 x 230 x 86mm

Weight 6.9Kg

# Notes

