Important Safety Instructions

WARNINGS - Read the following before proceeding:

ATTENTION: RISQUE DE CHOC ELECTRIQUE – NE PAS OUVRIR

Read instructions: Retain these safety and operating instructions for future reference. Adhere to all warnings printed here and on the power supply unit. Follow the operating instructions printed in this User Guide.

Do not remove covers: Operate the power supply unit with its covers correctly fitted. Refer any service work on the power supply unit to competent technical personnel only.

Power sources: Connect the power supply unit to a mains power supply only of the type described in this User Guide and marked on the rear panel. Use only the power cord with sealed mains plug appropriate for your local mains supply as provided with the power supply unit. If the provided plug does not fit into your outlet consult your service agent for assistance.

Power cord routing: Route the power cord so that it is not likely to be walked on, stretched or pinched by items placed upon or against it.

Grounding: Do not defeat the grounding and polarisation means of the power cord plug. Do not remove or tamper with the ground connection in the power cord.

WARNING: This equipment must be earthed.

Water and moisture: To reduce the risk of fire or electric shock do not expose the power supply unit to rain or moisture or use it in damp or wet conditions. Do not place containers of liquid on it which might spill into any openings.

Ventilation: Do not obstruct the ventilation slots or position the power supply unit where the air flow required for ventilation is impeded. If the power supply unit is to be operated in a flightcase, ensure that it is constructed to allow adequate ventilation.

Heat and vibration: Do not locate the power supply unit in a place subject to excessive heat or direct sunlight as this could be a fire hazard. Locate the power supply unit away from any equipment which produces heat or causes excessive vibration.

Servicing: Switch off the equipment and unplug the power cord immediately if it is exposed to moisture, spilled liquid, objects fallen into the openings, the power cord or plug become damaged, during lightening storms, or if smoke, odour or noise is noticed. Refer servicing to qualified technical personnel only.

Installation: Install the power supply unit in accordance with the instructions printed in this User Guide. Do not connect the output of power supply unit to any other equipment other than that specified by Allen & Heath.

Important Mains plug wiring instructions.

The power supply unit is supplied with a moulded mains plug fitted to the AC mains power lead. Follow the instructions below if the mains plug has to be replaced.

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

TERMINAL		WIRE COLOUR	
		European	USA/Canada
L	LIVE	BROWN	BLACK
N	NEUTRAL	BLUE	WHITE
E	EARTH GND	GREEN & YELLOW	GREEN

The wire which is coloured Green and Yellow must be connected to the terminal in the plug which is marked with the letter E or with the Earth symbol. **This appliance must be earthed.**

The wire which is coloured Blue must be connected to the terminal in the plug which is marked with the letter N.

The wire which is coloured Brown must be connected to the terminal in the plug which is marked with the letter L.

Ensure that these colour codes are followed carefully in the event of the plug being changed.

Precautions

Damage: To prevent damage to the power supply unit cosmetics, avoid placing heavy objects on the unit, scratching the surface with sharp objects, or subjecting the power supply unit to rough handling and vibration.

Environment: Protect from excessive dirt, dust, heat and vibration when operating and storing. Avoid tobacco ash, smoke, drinks spillage, and exposure to rain and moisture. If the power supply unit becomes wet, switch off and remove power immediately. Allow to dry out thoroughly before using again.

Cleaning: Avoid the use of chemicals, abrasives or solvents. The power supply unit is best cleaned with a soft brush and dry lint-free cloth.

Transporting: The power supply unit should be transported in the original packing or secured in a purpose built flightcase to protect it from damage during transit.

DC power cable: Plan the location of the mixing console and power supply unit so that the DC power cable is not fully extended. Full extension of the cable can stress the mixing console and power supply unit connectors and may result in undesired performance. Ensure that the power cable is located such that it cannot be stood on or tripped over.

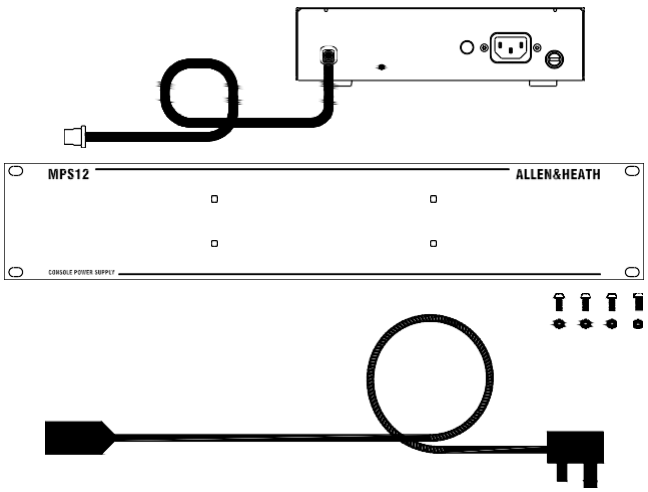
Introduction

This user guide presents a quick reference to the **MPS12.** We recommend that you read this fully before starting. Included is information on installing, connecting and operating the power supply unit along with panel drawings and technical specification. Whilst we believe the information in this guide to be reliable we do not assume responsibility for inaccuracies. We also reserve the right to make changes in the interest of further product development.

We are able to offer further product support through our worldwide network of approved dealers and service agents. You can also access our Web site (www.allen-heath.com) for information on our company and its pedigree, our full product range and our design philosophy. To help us provide the most efficient service please keep a record of your power supply unit serial number, and date and place of purchase to be quoted in any communication regarding this product. The serial number is located on the rear panel.

Check the Packing Contents

Retain the product packing should you need to ship the product in future. You should find the following components:



1x **MPS12** POWER SUPPLY UNIT with captive DC power lead.

1x 19" FRONT PANEL. Fixes to the **MPS12** for 19" rack mounting. This is supplied ready-fitted, but can be easily removed if the unit is to be used free-standing.

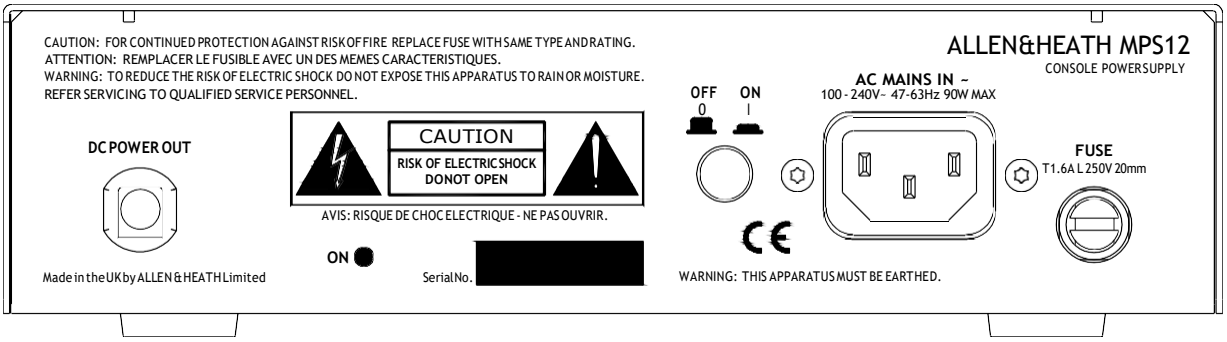
4x M4x8 POZI SCREWS, with 4x SHAKEPROOF WASHERS. Fix the 19" front panel to the **MPS12** for 19" rack mounting.

1x IEC MAINS LEAD with moulded plug. Check that the plug is suitable for connection to your local mains supply.

DOCUMENTATION including Safety Sheet **AP3345**, this user guide **AP5739** and the Registration Card **AP3594**.

The MPS12

The slimline **MPS12** power supply unit uses switch mode technology to generate the DC voltages required by the console. It will operate from a wide range of AC mains input voltages with no change of setting required. Full protection and thermally controlled fan cooling ensures the power unit will operate consistently.



Installation

Free standing

The **MPS12** can be operated as a free standing unit for shelf or floor operation. Ensure adequate air flow around the unit. It must not be covered in any way. Always stand the unit on a firm flat surface well away from any soft furnishings or carpet.

Rack mounting

The **MPS12** can be mounted in a standard 19 inch rack using the optional front panel (supplied), and will occupy 2U (3.5 inches) of rack space.

An important consideration when rack-mounting the unit is the need for natural convection of airflow around the unit. Good ventilation below the unit, in the floor or back of the rack, will ensure a continuous path for airflow.

Rack equipment known to produce a significant amount of heat should not be mounted directly below the power supply unit. Equipment which also relies on good airflow within the rack (i.e. most power amplifiers and other power supply units) should be given due consideration and some space should be provided between such units and the **MPS12**. Forced convection, by means of a fan-tray, may be desirable in some situations.

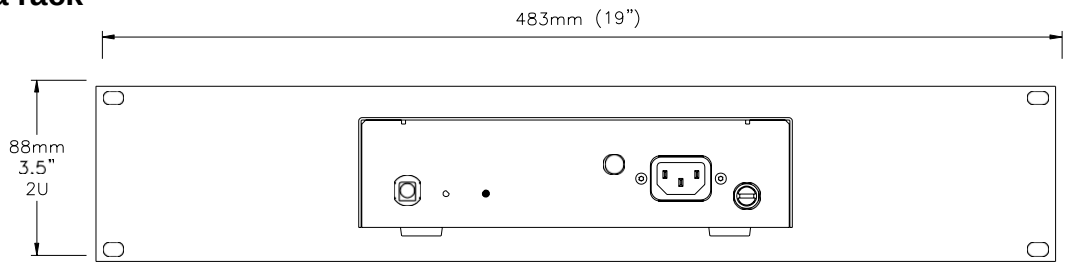
Location

As with any power supply unit, it is preferable to provide a degree of physical isolation of the unit from other equipment, particularly that which carries low level audio signals, to avoid any possible interference pick-up. For this reason the **MPS12** power supply unit is provided with a long (2.9m) DC output cable to enable it to be positioned away from the mixing console. For the same reason, when rack-mounting it is preferable to avoid locating the unit next to signal processing equipment.

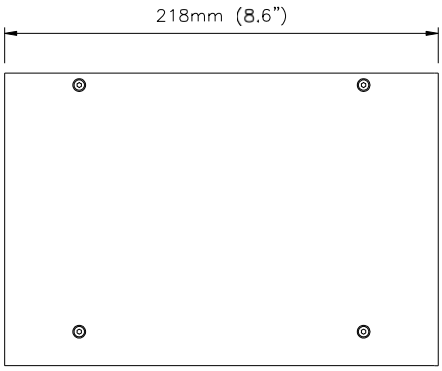
Grounding

Consideration must be given to the Grounding arrangement of the system, at the centre of which is the console and the **MPS12**. The console chassis is connected to the mains earth via the power supply unit. The **MPS12** has audio 0V and mains earth connected internally. For safety it is important that all equipment grounds are connected to mains ground so that exposed metal parts are prevented from carrying high voltage which can injure or even kill the operator. Do not disconnect the ground connection in the mains lead. It is recommended that the system engineer check the continuity of the safety ground from all points in the system including microphone bodies, cable shields, equipment cases, rack metalwork and so on. If audible hum or buzz is present in the system due to a "ground loop", consult the console user guide for possible solutions.

Fitting in a rack



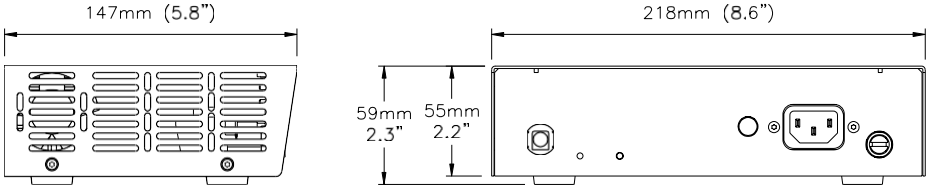
The **MPS12** is supplied ready for rack mounting. For free standing use, remove the 19" front panel, which is secured by four M4x8 Pozi screws and shakeproof washers.



Do not obstruct the ventilation slots. Ensure adequate air flow around the MPS12.

Do not install the unit directly above or below other equipment.

Do not remove the cover of the MPS12. There are no user serviceable parts inside.



Operating the MPS12

Read the SAFETY INSTRUCTIONS printed in the front of this user guide and on the rear panel. The **MPS12** is a high performance switch mode power supply with universal mains input. It will operate from an AC mains supply voltage from 100V to 240V.

The power supply unit is provided with an IEC type mains connector and moulded mains plug. Check that this is correct for connection to your wall socket outlet.

Switch the unit on by pressing the rear panel ON switch. The green ON led should light.

To avoid audible thumps and bangs through the speakers, always turn the console on before switching on the amplifier system, and turn the amplifiers off before switching off the console power supply unit.

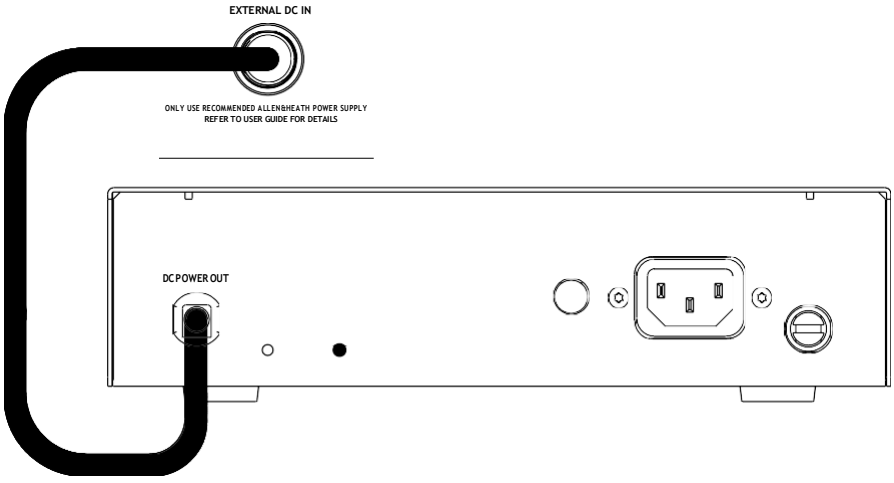
Always switch the power supply unit off before connecting or disconnecting the console power cables, removing or installing console modules and any servicing work. In the event of an electrical storm, or large mains voltage fluctuations, immediately switch off the power supply unit and disconnect from the mains supply.

Avoid fully extending the DC cable when plugging in as this may stress the cable and connectors resulting in failure. Ensure that walkways, aisles and gangways are not obstructed by cables. To ensure correct performance we recommend that you do not extend or modify the DC power cable in any way.

Connecting the MPS12

The **MPS12** may be used to power Allen & Heath consoles fitted with a compatible EXTERNAL DC IN socket. Connect the **MPS12** DC POWER OUT cable to the EXTERNAL DC IN socket of the mixing console as shown below.

The MPS12 should only be connected to consoles specified to work with the MPS12 by Allen & Heath. If in any doubt over its suitability for use with a particular console, please contact Allen & Heath technical support.



Using the MPS12 as a Backup Power Supply

The **MPS12** is suitable for use as a redundant backup supply, in addition to a console's primary power source. Some smaller Allen & Heath consoles feature an **MPS12** compatible EXTERNAL DC IN connector in addition to the built in mains power supply. These consoles have combiner circuitry to enable both supplies to run at the same time. In the event of a problem with one of the supplies, the other will take over seamlessly, without affecting the console's performance.

The MPS12 should only be connected as a backup supply to consoles specified to work with the MPS12 by Allen & Heath. If in any doubt over its suitability for use with a particular console, please contact Allen & Heath technical support.

Cleaning the Unit

The **MPS12** does not use any internal filters. Air is drawn through the fan grille on the side of the chassis, blown through a heatsink tunnel and out through ventilation slots in the other side of the chassis. It is not necessary to open the unit for cleaning. Simply keep the fan and ventilation slots free of dust and dirt using a vacuum cleaner and dry, lint free cloth. Do not use liquid cleaners or compressed air to clean the unit.

Always switch the unit off before inspecting or cleaning it.

Replacing the mains fuse

The AC mains fuse is located on the rear of the **MPS12** unit next to the AC mains connector. In the event of a mains surge or under-rated fuse value, the fuse will rupture. Switch off the power supply and remove the mains lead plug from the "AC MAINS IN~" socket on the rear of the unit. Check the fuse and replace if necessary. In the event of repeated failure of the mains fuse, consult your Allen & Heath service agent.

In the unlikely event of an internal DC rail fuse failure, consult your Allen & Heath service agent or Allen & Heath technical support.

TO AVOID THE RISK OF FIRE REPLACE FUSE WITH THE CORRECT TYPE ONLY, AS INDICATED ON THE UNIT.

AC~ mains input voltage	Fuse type
100V – 240V ± 10%	T 1.6A L 250V 20mm

Technical specification

Internal universal input switch mode power unit.

MAINS IN socket	IEC 3 pin
Power lead	Country dependent with moulded mains plug supplied
AC mains	100 to 240V AC @ 50/60Hz auto sensing
Consumption	90W max
Mains fuse rating	100-240V AC T 1.6A L 250V 20mm (A&H part number: AL0466)

Overall Dimensions:

19" Front Panel:	483mm x 88mm	19 inch 2U
Chassis	218mm x 55mm	8.6 inches
Height including feet:	59mm	2.3 inches
Depth:	147mm	5.8 inches
Weight:	1.6kg	3.5 lbs

Mains Leads:

Territory	Voltage	A&H Part no:
USA	100-120V	AH0323
Europe	220-230V	AH0205
UK	240V	AH0206