

DCP125 Power Supply User Guide

Installation & Operating Instructions

Introduction

The DCP125 is a linear power supply which, like other linear supplies, produces DC voltages by rectifying, smoothing and regulating AC voltages from the secondary windings of a mains transformer. Soundcraft mixing consoles employ a number of DC voltage supply levels in their operation and these are provided at the output of each unit.

PLEASE READ THIS GUIDE CAREFULLY BEFORE CONNECTING YOUR DCP125 POWER SUPPLY TO THE MAINS.



THIS UNIT CONTAINS NO SERVICEABLE PARTS. REFER ALL SERVICING TO A QUALIFIED SERVICE ENGINEER, THROUGH THE APPROPRIATE SOUNDCRAFT DEALER

General Precautions

- Avoid storing or using the DCP125 in conditions of excessive heat or cold, or in positions where it is likely to be subjected to vibration, dust or moisture. Do not use any liquids to clean the exterior of the unit: a soft, dry cloth or brush is ideal.

SOLVENTS MAY CAUSE DAMAGE TO PAINT OR PLASTIC PARTS



- The DCP125 is supplied in a rugged carton box. If it is necessary to move the unit any distance after installation, it is recommended that this carton is used to protect it. Be sure to disconnect all cabling before moving. If the DCP125 is to be moved regularly (e.g. touring) it is recommended that it is installed in a foam lined case. At all times avoid applying excessive force to any switches or connectors.
- ALWAYS MAKE SURE THAT THE POWER SUPPLY HAS BEEN SET TO THE SAME AC SOURCE VOLTAGE AS DERIVED FROM THE MAINS SOCKET.
- ALWAYS SWITCH THE POWER SUPPLY OFF BEFORE CONNECTING OR DISCONNECTING THE CONSOLE POWER CABLE, REMOVING OR INSTALLING MODULES AND SERVICING.
- In the event of an electrical storm, or large mains voltage fluctuations, immediately switch off the power supply and disconnect from the mains supply. During normal operation there is some heat generated, the dissipation of which is achieved through a heatsink and ventilated chassis.
- DO NOT COVER THE UNIT DURING OPERATION

Mains Voltage Selection

This unit is capable of operating over a wide range of mains input voltages by means of a comprehensive set of selectable voltage settings. It is important to ensure that the correct voltage setting has been selected for the level of local AC mains input voltage supply, for safe, uninterrupted operation of this unit.



DO NOT CHANGE THE AC MAINS VOLTAGE SETTING WITHOUT FIRST DISCONNECTING THE MAINS PLUG FROM THE MAINS SOCKET

The power supply is provided with an IEC types mains connector, coupled with a voltage selector with integral AC mains fuseholder. Confirm that the arrow moulded into the connector unit aligns with the voltage setting that is correct for your area. Voltage selection should be as follows:

- 100 Volt Setting for AC Mains Input 100-115 Volts AC
- 120 Volt Setting for AC Mains Input 115-125 Volts AC
- 220 Volt Setting for AC Mains Input 210-225 Volts AC
- 230 Volt Setting for AC Mains Input 207-253 Volts AC

To change the selected voltage, prise off the fuseholder square top with a screwdriver type tool, using the square blade tip in the slot. Pull the fuse carrier assembly clear of the body, rotate the fuse carrier body until the required input voltage lines up with the arrow, and then push fuse carrier back into connector body.



DO NOT USE DC MAINS INPUT VOLTAGES

DCP125 - Installation

Free Standing

The DCP125 is designed to operate as a free-standing unit without requiring any special cooling arrangement, but should not be accidentally or deliberately covered in any way.

Location

As with any power supply that contains a mains voltage transformer, 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 hum pick-up. For this reason the unit is provided with a long (1.8m) 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 adjacent to signal processing equipment.

Earthing

Some consideration should be given to the earthing arrangement of the system at the centre of which is the console and the DCP125. The console chassis is earthed, to the mains earth, via the power supply. When rack-mounting the DCP125 care should be taken to avoid any possible "ground loops" in the system which would introduce audible hum to otherwise clean audio signals. Ground loops may occur where signal processing equipment, patched to the console, has its signal earth commoned to the equipment chassis. The ground loop is formed if this chassis and the DCP125 chassis are in electrical contact through the fixing rails they share in the rack.

Replacing Mains Fuse

In the event of incorrect switching of the mains voltage selector, a mains surge or under-rated fuse value, the mains input fuse will rupture. Switch the unit on/off mains switch to the off position, remove the mains lead plug from the mains supply socket.

Check the fuse and replace if necessary; also check that the voltage selector is correct for the mains supply level before switching the unit on again. The correct fuse ratings are as follows:

- 220/230 VAC fuse rating T1.0A/250 V
- 100/120 VAC fuse rating T2.0A/250 V



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

In the event of repeated failure of the mains fuse, consult the local dealer from where the unit was purchased.

Technical Specification

<i>Mains Input Voltage Range</i>	230/220/120/100 VAC +/- 10% @ 50/60 Hz
<i>Rated Input Power (max)</i>	99VA
<i>Outputs:</i>	+ 17 Volts @ 1.3A Max, Max Noise - 68 dBu - 17 Volts @ 1.3A Max, Max Noise - 68 dBu + 48 Volts @ 150 mA Max, Max Noise - 80 dBu
<i>Operating Temperature Range (ambient)</i>	- 10 to + 40 °C
<i>Overall Dimensions (Chassis)</i>	Height: 85 mm Width: 185 mm Depth: 210 mm



This equipment complies with the EMC Directive 89/336/EEC and LVD 73/23/EEC and 93/68/EEC

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