ZinAmp
Beautiful sound, for people who love music

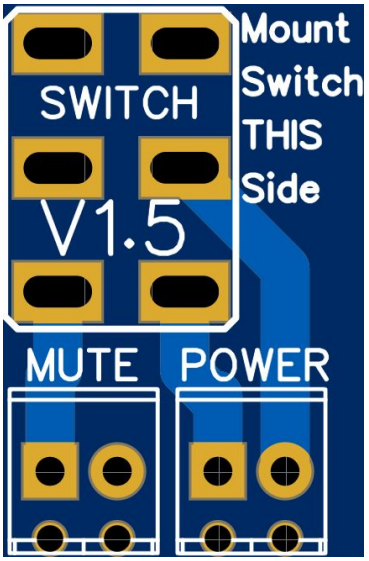
Datasheet Power & Mute Switch

Application & Purpose:

Simple PCB for attaching a double pole three position switch to control amplifier power on/off and audio output mute.

Three positions: Off | On-muted | On-unmuted]

WARNING: Very high AC voltage device. Care must be taken to avoid fatal electric shock.



Bare PCB

Specification:

Purpose	Mains AC switching and speaker muting
Switch type	Double pole, three position, toggle switch
Switch Positions	Three: - Off - On-muted - On-unmuted

Safety:
Always disconnect the AC power lead before doing anything to this module. It is the main AC switch and is therefore 'live' when the AC power lead is connected. Live mains electricity can kill.

Details:

A simple PCB for attaching a double pole three position switch for switching the amplifier on and off and muting/unmuting the audio output.

This switch is exclusively for use with ZinAmp valve amplifiers. The main purpose of combining the on/off and mute switches is that you cannot switch the amplifier off without muting the audio output. This prevents any snap or thump entering the speakers that can arise from the high voltage power supplies that drive the valve pre-amplifiers. This switch is not used, nor is necessary in our solid state amplifiers; a simple two position on/off switch is used instead.

Setup and Usage:

Note the switch and terminals are mounted on the same side of the PCB. This is not the case with the EQ Switch and Record Monitor Switch modules, so may seem unfamiliar during construction. Once installed, the terminals are shrouded by the PCB to increase clearance in the ZinAmp enclosure and ensure live terminals are as far from surrounding modules as possible.

Terminals should be screw terminal block only - for both AC power and mute terminals. Do not use Molex 254 or MTA-100 or similar header pins as they are not suitable for live AC power and may spark 'violently' if they work loose. The mute terminal is also shrouded behind the PCB, making the use of Molex 254 or MTA-100 header pins very difficult.

The mute terminal connects to the Start-Up timer and operates the Mute Relay circuit. The AC terminal connects to the AC Distribution Board which is fused.

Fit a 3A slow-blow fuse in the ZinAmp AC fuse holder in the chassis and connect this to the AC distribution board where shown. Fit a fuse to your AC lead - max 5A.

Safety Reminder:
Always disconnect the AC power lead before doing anything to this module. It is the main AC switch and is therefore 'live' when the AC power lead is connected. Live mains electricity can kill.

Parts List:

Designator	Value/Spec	Quantity	Manufacturer	Manufacturer Part	RS Part
	SWITCH-DPDTES	1	RS-PRO	734-7050	734-7050
		2	RS-PRO	790-1098	790-1098

Parts available from RS Online. Also try Farnell, Mouser and other online suppliers.

Parts from different manufacturers can be substituted where spec is sufficient

Supplier trading names may differ by country.