



McIntosh MPC1500 Operational Features & Advantages

The MPC1500 is an AC Isolation transformer, AC switching hub with 12 rear panel AC outlets that have programmable Power Control options. Front and rear panel status LED indicators are used along with front panel, backlit meters displaying Amperage and Voltage level.





McIntosh MPC1500 Operational Features & Advantages

Main applications where isolation transformers are used are:

- Medical equipment that is used in life monitoring/supporting functions.
- Telecommunication equipment
- Building security/automation
- Laboratory Instrumentation

Specific Performance Advantages and Characteristics of the MPC1500

1-The secondary, output AC side of the MPC1500 is grounded to the shielding between the two sides of the transformer. This implementation results in a 100 to 1 attenuation of voltage spike amplitude.

2-Commonmode rejection of broadband AC line noise is a minimum of -30 dB.

3-Active circuit components clamp incoming voltage spikes at +2 volts over the average AC line voltage. The vast majority of 'Power Conditioners' use MOV, Metal Oxide Varistors to absorb and limit line voltage spikes. Due to the small size and fragile nature of even the largest MOVs these must be designed to limit at 100s of volts above AC line level. A few repeated spikes at the MOVs absorption level will result in MOV overheating and failure. . This is often promoted as the 'Power Conditioner' sacrificing itself to protect connected components.

4-1000 repeats of 6000/3000 volt spikes will not cause connected component or MPC1500 damage. Voltage spikes are reflected BACK into the AC line input side of the MPC1500 transformer.

5-The front panel meters show the OUTPUT side of the MPC1500. The MPC1500 increases the input voltage by 3 volts to make up for the insertion loss of the (45 lb.) transformer.

6-The low frequency knee of the transformer is 2 kHz. Any noise on the AC line above the frequency is attenuated to where it is no longer a performance issue. The vast majority of all other power conditioners use choke coils that will limit response at 1 MHz. The vast majority of AC line noise is between 80 to 120 kHz. This noise cluster is totally removed from the output by the MPC1500.

7-Any type of audio/video component may be connected to the MPC1500 as long as the maximum sustained power draw is under 11.2 amps. Due to the extremely low output impedance of the MPC1500 some power amps will actually show a slight increase in power when used with the MPC1500.