History of TORUS POWER

The Torus Power brand was introduced in 2005 by Plitron Manufacturing Inc., a Canadian company specializing in toroidal transformers since 1983. The genesis of Torus Power was provided by the combination of Plitron's capability to design and manufacture no-compromise toroidal transformers, with the deep understanding of the requirements of the audio and video industry for improved power quality to ensure performance and long-term reliability of all connected equipment.

All Torus Power audio-video power conditioners utilize Plitron-built toroidal isolation transformers that act as low-pass filters to provide clean power, as opposed to most the products on the market that provide only filtering. Torus Power products provide the proper implementation of proprietary patented technology called "Narrow Band Technology" (NBT) developed by Plitron that allows the isolation transformer to perform as a low pass filter. All Torus products, regardless of power rating or series feature toroidal isolation transformers as the base technology platform.

Engineered to Perform Like No Others

Torus Power Isolation Power Line Conditioners include unique toroidal transformer technologies from PLITRON to provide the ultimate in AC power conditioning and protection for sensitive audio and video equipment applications. Isolation is combined with proven proprietary technologies from PLITRON in the over-sized toroidal transformer. NBT works as a low pass filter using the controlled leakage inductance and capacitances within the transformer to effectively reduce noise. LoNo technology has been used for years by high-end audio companies who demand silent transformers. UST provides additional common mode filtering using a highly efficient Faraday screen. High instantaneous peak current capability, providing the most unconstrained, yet protected, energy source available to your equipment.

Torus Power Isolation Units Provide Clean AC Power and Surge Suppression that really works

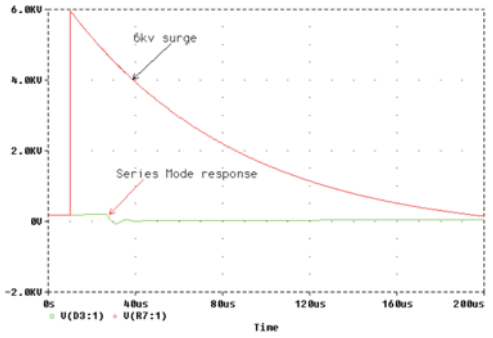
Noisy AC power delivery adversely affects every aspect of your Audio/Video system. From diminished resolution and dimensionality in audio playback to lifeless colors and poor contract in video display. Torus Power Isolation Units (PIUs) totally ISOLATE your audio/video system from these harsh AC power line realities and provide state-of-the-art protection and performance. Torus PIUs are available in a family of models rated from 2.5A to 100A to provide a complete system to protect and improve audio/video performance. Standard 120V versions are available in rack mount and box styles, as well as balanced 240V input versions for custom installations. The Torus PIU's deliver true isolation along with low source impedance and large enough instantaneous current for today's most sophisticated and powerful audio amplifiers. (Most products in the category are simple filters and do not provide isolation between the outside power grid and the inside power source). The ever-present risk of severe power line spikes caused by everything from machinery and common household appliances to lightning storms is a constant threat to your system. Torus provides state-of-art protection and seriesmode surge without the use of failure-prone MOVs (metaloxide varistors). Torus Power Isolation Units provide Clean AC Power to enable you to obtain the performance your audio and video products are capable of; plus, protect your valuable equipment through the advanced series mode surge suppression.

Benefit #1: Torus Power Automatic Voltage Regulation

Automatic Voltage Regulation (AVR) continuously monitors incoming mains to detect high and low line conditions, and then seamlessly and instantaneously triggers compensating circuitry to ensure the voltages powering your equipment are always optimal. Your equipment is always powered by a stable input voltage, allowing components to function without undue stress, prolonging equipment life, enhancing performance, and providing peace of mind (available on AVR models only).

Benefit #2: Low Source Impedance Delivers High Instantaneous Current Bursts

Torus Power provides very low source impedance to any connected devices. A low impedance power source allows a power amplifier to instantaneously deliver high amounts of current. A typical 200W audio power amplifier demands 10A RMS current from a 120V line but may demand up to 50A instantaneous peaks. The standard residential wall receptacle can't supply the 50A peaks. A 20A Torus Power Audio Video Power Conditioner can deliver 400A peaks when the system demands it.



Benefit #3: Surge Protection Offers Protection From Harmful Electrical Spikes

Torus Power products use the finest, most sophisticated surge suppression technology available. Series Mode Surge Suppression does not shunt the spike to ground like MOV's do, therefore preventing ground contamination. Additionally, most MOV-based surge suppression units allow as much as 300V through to the protected components, easily enough to do substantial damage. Torus Power surge suppression has a clamping voltage onset of 2V above peak voltage. Torus Power is built to withstand 6000V, 3000A surges, with up to 1000 repeats.

Benefit #4: High Electrical Isolation Barrier From Power Grid

A combination of advanced engineering and precision manufacturing allows Torus Power Conditioners to achieve uppermost levels of electrical isolation that operates as an electronic firewall separating your sensitive electronic equipment from electrical impurities carried on the common power grid, while maintaining total product performance, and preserving the integrity of audio and video signals.

Benefit# 5: Cleaner Power

Torus Power uses Plitron's NBT (Narrow Band Technology) to attenuate differential and common-mode noise without external current limiting circuits or components. Torus Power provides noise filtering across a range from approximately 2kHz to over 1MHz – other regular transformer based products do not start operating until nearly 10kHz. The result is startling – see press and user comments!

Benefit # 6: Low Acoustic Noise While Operating under Adverse Line Conditions

Torus Power uses Plitron's LoNo (Low Noise) transformer design technology that eliminates audible noise in the power transformer regardless of line conditions, DC offset and over-voltage. Torus Power products perform at the NC10 level measured on the standard NC (Noise Criterion curve) – which makes them suitable for use in very quiet environments such as professional recording and broadcast studios, as well as the most demanding consumer audio video systems.

AVR Series - Automatic Voltage Regulation

Torus Power AVR Series provide all the acclaimed Torus Power benefits of isolated clean power, series-mode surge suppression, plus the added benefit of providing stabilized voltage to connected equipment. Dated power grids and unstable line conditions work against your valuable audio and video equipment. Connected devices perform better, operate at optimal temperatures, and last longer when operated at the correct voltages. With stabilized voltages, power amplifiers can provide the full rated power regardless of variations in the input voltages. Torus Power AVR keeps equipment running in the optimal range of 115V to 125V for any input voltage from 85V to 135V. (International units operate within the range of 230 to 250V with an input range from 180V to 270V). Torus Power AVR series uses a micro-processor to monitor and control incoming voltages. High current relays are utilized to switch taps on the transformer primary providing seamless switching to the load when it is necessary to adjust the output voltage. The dimmable front panel display on the Torus Power AVR indicates the input and output voltages, and displays output current and fault condition. When a fault occurs, the Torus Power AVR can pre-program whether to continue operating the equipment or power it down. Likewise when line conditions return to normal, user can pre-program whether to power up the equipment, or wait for manual power up. There are several interfaces: Ethernet interface with built-in web browser allows any computer to view voltage and current readings and turn the AVR unit on or off. RS-232 is provided for connection to media control systems. Two 12V triggers are provided.

Torus Power AVR cleans and conditions AC power, providing noise attenuation from 2kHz to beyond 1MHz. Like all Torus Power products, AVR series provides true isolation (using massive toroidal transformers) along with low source impedance and large enough instantaneous current for today's most sophisticated and powerful audio amplifiers. Medical grade outlets are used to ensure maximum contact reliability. Torus Power AVR protects all connected equipment from the risk of severe power line using series-mode surge suppression, and without the use of failure-prone MOVs (metal oxide varistors).

Torus Power AVR series models use a micro-processor to monitor and control the voltage provided to connected components.

The Torus Power AVR is pre-programmed to power off the system when high or low fault conditions occur (user can over-ride).

Rear Panel Interfaces

There are multiple interfaces built into the Torus Power AVR:

1) Ethernet connectivity for connectivity for web browser control allows any internet connected computer to view voltage and current readings and turn the AVR unit on or off.

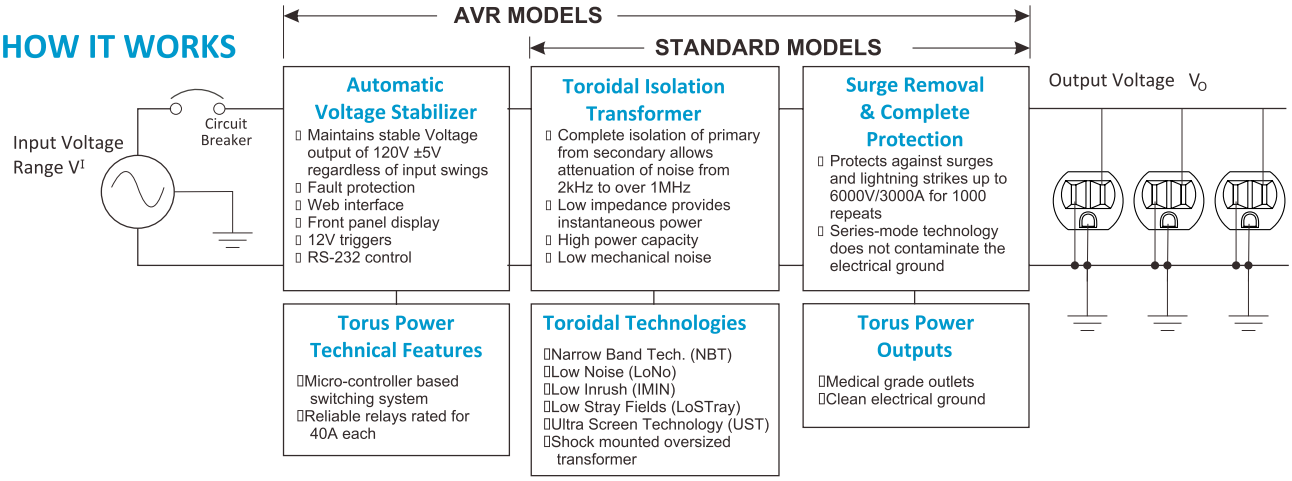
2) RS-232 is provided for connection to media control systems.

3) Two 12V triggers are provided.

AVR2 Series

AVR2 further extends the capabilities with individual IP-addressable duplex outlet zones, and other features, for sophisticated custom installations. Building on the IP Monitoring and Control features of the AVR Series, the AVR2 Series provides individual outlet zone control, a fully automated scheduler and sequencer as well as an auto-reboot outlet dedicated to cycle routers and modem when internet connection is lost. The AVR2 also offers the standard AVR features, which include automatic voltage regulation, surge suppression, noise filtration, isolation from the main electrical grid, remote monitoring and control (via web browser interface, RS-232 or 12V triggers), fault email notification, and high levels of dynamic current for the most demanding AV systems.

HOW IT WORKS



	Model No.	Outlets	Toroidal Isolation	Clean Power	Surge Suppression	Automatic Voltage Regulation	Ethernet Connectivity / RS-232
AVR series	AVR Series - Input voltage of 170 – 270 VAC, Automatic Voltage Regulation, Ethernet / RS232, Toroidal Isolation Transformer, Clean Power, Series Mode Surge Suppression, Noise Filtration, High Instantaneous Current Capability						
	AVR 4 515R	8	●	●	●	●	●
	AVR 8 515R	10	●	●	●	●	●
	AVR 16 520R	12	●	●	●	●	●
	AVR 30 520R	12	●	●	●	●	●
	AVR 45 520R	12	●	●	●	●	●

AVR2 series	AVR2 Series - Input Voltage range from 170 to 270 VAC, Toroidal Isolation Transformer, Clean Poser / Noise Filtration, Series Mode Surge Suppression, High Instantaneous Current Capacity, Auto Reboot feature, Scheduling feature, Power up Sequencing, Selectable Time Zones.						
	AVR2 8 515R	10	●	●	●	●	●
	AVR2 16 520R	12	●	●	●	●	●
	AVR2 30 520R	12	●	●	●	●	●
	AVR2 45 520R	12	●	●	●	●	●

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