






















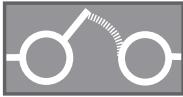







Entry-Level Home Entertainment System	Intermediate Level Home Theater or Entertainment System	Premium Level Home Theater or Entertainment System	Elite Level Home Theater or Entertainment System	Custom Installation Solutions	New Solutions
<p>Audio Receiver Retail: \$124.99 - \$299.99</p>	<p>Audio Receiver Retail: \$300.00 - \$599.99</p>	<p>Audio/Video Receiver (AVR) Retail: \$600.00 - \$1,399.99</p>	<p>Audio/Video Receiver (AVR) Retail: \$1,400.00 - \$3,499.99</p>		
 <p>Good: PM8-AV Surge protection and filtration for improved picture and sound quality.</p>  <p>Better: M8-AV Step-Up Advantages over PM8-AV: Greater protection from brownouts and wiring faults, superior audio/video performance.</p>  <p>Best: MR4000 Step-Up Advantages over M8-AV: Complete protection and Level 2 Filtration for improved picture and sound.</p>	 <p>Good: M8-AV Complete surge/spike/voltage protection and filtration for improved picture and sound quality.</p>  <p>Better: MR4000 Step-Up Advantages over M8-AV: Complete protection and Level 2 Filtration for improved picture and sound.</p>  <p>Best: MR4300 Step-Up Advantages over MR4000: Complete protection and Linear Filtration for improved picture and sound. Component class design with variety of convenience features.</p>	 <p>Good: MR5100 Complete protection and Linear Filtration for improved picture and sound. High current outlets do not limit current to amps and subs. Component class design with variety of convenience features.</p>  <p>Better: M5300-PM Step-Up Advantages over MR5100: Increased filtration, isolation, and convenience features. Includes rack mount ears and detachable cord.</p>  <p>Best: M5400-PM Step-Up Advantages over M5300-PM: Voltage regulation delivers stable 120V ± 5% output.</p>	 <p>Better: M4315-PRO BlueBOLT plug-and-play remote power and energy management. Front panel reboot buttons with sequential start-up/shut-down, includes 4 isolation banks.</p>  <p>Best: M5400-PM Step-Up Advantages over M4315-PRO: Additional outlets with Linear Filtration for improved picture and sound. Voltage regulation delivers stable 120V output ± 5%</p>	 <p>MIW-XT Extend UPS and/or filtered power to remote locations. Code compliant with signal passthrough (plastic or metal black-box required).</p>  <p>MIW-POWER-PRO-PFP Code compliant with signal passthrough (plastic or metal black-box required). 2 recessed outlets, with overvoltage auto-reset.</p>  <p>MIW-SURGE-1G In-wall high-performance surge protection. Code compliant (plastic or metal black-box required).</p>  <p>PLUGLOCK Prevent space hogging wall warts from falling out. 5 outlets with thumb screws and straight plug.</p>  <p>D10-PFP Add 10 outlets to any rack mount system. 15A circuit breaker & straight plug.</p>	 <p>M4000 PRO \$399.95</p> <ul style="list-style-type: none"> 8-Outlet 15 AMP "Entry Level" BlueBOLT-ready Power Management component (3 controllable banks) Linear Filtration with 3 isolated filter banks. Automatic Voltage Monitoring™ with Protect Or Disconnect™ circuitry.  <p>SM3 PRO \$349.95</p> <ul style="list-style-type: none"> 3-Outlet Compact BlueBOLT enabled System Manager (2 controllable banks). 2-Port Network Switch Automatic Voltage Monitoring™ with Protect Or Disconnect™ circuitry. (2) Accessory Ports for External Sensors/Triggers.
<p>For Complete Power Management, add:</p>  <p>MB850 or MX5120 Provides voltage boost regulation if needed and battery backup for game consoles, DVRs, and digital media devices.</p>	<p>For Complete Power Management, add:</p>  <p>MB850 or MX5120 Provides voltage boost regulation if needed and battery backup for game consoles, DVRs, and digital media devices.</p>	<p>For Complete Power Management, add:</p>  <p>MB1500 Provides voltage regulation and battery backup for digital media devices. BlueBOLT Compatible.</p>	<p>For Complete Power Management, add:</p>  <p>MB1500 Provides voltage regulation and battery backup for digital media devices. BlueBOLT Compatible. <i>(Note: large systems may require an expansion pack, BATT1500-EXT, for UPS units due to demands)</i></p>		<p>For additional product information, please visit www.panamax.com</p> <p>Tech Support: 800-472-5555</p>

Power Management 101 - Technology and Applications



Problem: Electrical - AC Transient Spikes	Problem: Brownouts and Over-voltages	Problem: AC Line Noise	Problem: Unstable AC Voltage Conditions	Problem: AC Blackouts	Problem: Current Limitations	Problem: Frequent Service Calls
<p>Definition and Cause: Extremely brief increases in delivered AC voltage and current (spike). Caused by lightning (most severe) or, far more commonly, spikes caused by the utility substation and major appliances switching on and off</p>	<p>Definition and Cause: Brownouts are commonly caused by overuse on the grid or utilities temporarily cutting back on available power. Over voltages are commonly caused by wiring faults within a home, generators, or downed power lines.</p>	<p>Definition and Cause: AC line distortion caused by radio frequency interference, electro-magnetic interference, and signals induced into the AC line by electronic components and switch mode power supplies.</p>	<p>Definition and Cause: Voltage consistently or intermittently outside of the "ideal" range of 115V-125V. Caused by many factors, including: utility adjustment for peak demand, faulty utility delivery, or large variances in load on grid.</p>	<p>Definition and Cause: Short or extended interruptions in power (0 Volts delivery). Commonly caused by faults in transmission infrastructure or downed power lines in a storm or accident.</p>	<p>Definition and Cause: Restricted or insufficient electrical current for power amplifier's power supplies. Instantaneous current is required to reproduce acoustic dynamic range. When heavy filtration or regulation is used, current can be limited or "compressed." Current Compression limits amplifier's ability to fully reproduce the dynamic range of the sound track..</p>	<p>Definition and Cause: One or more electrical components requires reboot.</p>
<p>Effect on A/V Equipment: Lightning can destroy an entire system with one strike. The multiple daily AC spikes slowly break down sensitive circuits, causing lockups, decreased performance, and premature equipment failure.</p>	<p>Effect on A/V Equipment: When subject to extended periods of voltage under 90V or over 140V, components can sustain permanent damage or fail completely.</p>	<p>Effect on A/V Equipment: Compromised picture and sound quality due to the masking of high definition audio/video signals. Higher levels manifest as audible clicks, pops, radio interference, or visual "snow".</p>	<p>Effect on A/V Equipment: AC Voltages outside the ideal range can cause component power supplies to overheat, while others will exhibit unreliable behavior and compromised performance.</p>	<p>Effect on A/V Equipment: Failure of data storage (media hard drives), loss of data. Failure of components that need a fan to cool after use (such as projectors).</p>	<p>Effect on A/V Equipment: Anemic, weak audio reproduction, even with premium components. Causes audio to sound muddy, losing definition, bass extension, and visceral impact.</p>	<p>Effect on A/V Equipment: Components or even the full system will not respond until the effected component has been restarted.</p>
Solution:	Solution:	Solution:	Solution:	Solution:	Solution:	Solution:
Protect-or-Disconnect™	Extreme Voltage Protection Panamax: AVM	Linear Noise Filtration	AC Voltage Regulation	Battery Backup / UPS	High Current Outlets	BlueBOLT Remote Energy Management
						
<p>System Benefit: Protection from small to catastrophic events, resulting in improved reliability, longevity and performance.</p>	<p>System Benefit: Maximized system life due to protection from extreme or catastrophic voltage events.</p>	<p>System Benefit: Increased audio and video performance, increased reliability of digital components.</p>	<p>System Benefit: Increased component reliability and longevity. <i>(Note: the majority of residences do not need voltage regulation)</i></p>	<p>System Benefit: Protection from data loss and increased longevity of components such as lamp-based projectors.</p>	<p>System Benefit: When connected to High Current Outlets, amplification equipment is not limited by additional filtration, resulting in uncompromised audio reproduction.</p>	<p>System Benefit: Real-time, cloud-based control and monitoring of connected devices enables remote hard re-boots from any Internet-connected device without the need for a truck roll.</p>
Available in:	Available in:	Available in:	Available in:	Available in:	Available in:	Available in:
All Panamax power management products.	All Panamax power management products with 8 or more outlets, and \$99.95 (retail) and above	All Panamax power management products feature standard noise filtration. Component products feature Linear filtration.	Panamax M5400-PM <small>(Low noise torroid)</small> Panamax MB850 <small>(Two Boost Stages)</small> Panamax MB1000 Panamax MB1500	Panamax MB850 Panamax MX5102 Panamax MB1000 Panamax MB1500	All "PRO" products, and Component products. Panamax M8-AV-PRO	Panamax M4315-PRO / 20 Panamax M4000-PRO Panamax SM3-PRO Panamax BB-ZB1 Panamax MD2-ZB Panamax SP-1000 Panamax MB1500 + CV1