
APC
Est.RunTime:120min
Fuel:50%
LOW BATTERY
LINE OK
FILTERING
OVERLOAD
APC AV
ENGINEERED POWER SOLUTIONS

## Proven Expertise. Proven Reliability.

From corporate data centers to home offices, APC is regarded as an innovator, designer, and manufacturer of high quality availability solutions. With a proven reputation for Legendary Reliability®, leading companies depend on APC every day to protect and support many of the most critical networks in the world, including those at Microsoft, Toyota Motor Sales, Inc., and IBM.

Over the last 20 years, APC has been a pioneer in the development of new power protection technologies, resulting in countless industry awards, design patents and an installed base numbering in the tens of millions of units. Multiple R&D centers, along with APC-owned and controlled factories, have helped ensure that APC solutions are among the safest, most advanced, and reliable available. When you buy APC, you buy "peace of mind".

## Depend on APC AV for Pure Uninterrupted Power.

You've invested a lot of time, effort, and money to build the best high-performance system possible. You expect and demand the most realistic cinematic performances your home theater technology can provide. But, in the span of a single movie frame, your entire investment can be lost due to bad power. Every day, power fluctuations, noise, and outages can make it impossible for your system to perform to its maximum capability. Volatile memory settings, DVR recordings, and media server data can be lost (sometimes permanently) when the power goes out. Costly projector bulbs can also be damaged by blackouts.

From the world's power experts comes the home AV power protection unit that eliminates all these power threats. Complete protection means peace of mind. And peace of mind means complete relaxation and enjoyment.

Introducing... APC AV ENGINEERED POWER SOLUTIONS

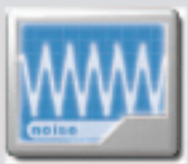
APC Legendary Reliability®

# Your High-Performance AV Experience Begins (and Ends) with Power.

Signals and storage are both dependent on electricity.

**The quality and availability of power for high-end AV systems is just as relevant and important as it is for any computer system or network.** Poor power can have a noticeable impact on sound and video quality. Component power supplies and electrical circuits can be stressed or even destroyed outright. Power outages can result in the loss of system presets and in missed DVR recordings. The presence of hard drives and network connectivity makes AV systems even more susceptible to damage or lowered performance as the result of power disturbances. Blackouts can make home security and automation systems inoperable. The ability to conduct basic household functions and chores can be lost simply because of changing power conditions, often that have nothing to do with your system.

## There are several types of power anomalies that can negatively affect your audio/video experience:

| Power Anomaly: | **SURGE**<br>Short-term increase in RMS voltage levels | **SPIKE**<br>Dramatic and instantaneous increase in voltage | **NOISE INTERFERENCE**<br>Electromagnetic and radio frequency interference (EMI/RFI) | **BROWNOUT/OVER-VOLTAGE**<br>Sustained low or high RMS voltage levels | **BLACKOUT**<br>RMS voltage goes to "0" | **VOLTAGE DISTORTION**<br>RMS voltage waveform is distorted |
|---|---|---|---|---|---|---|
| |  |  |  |  <br>  |  |  |
| **Typical Cause of Disturbance:** | Start/stop of household appliances (washing machine, AC, etc) | Lightning | Generated by appliances, HAM radios, nearby radio stations and even AV equipment itself | Too much demand on electric utility; running of larger household appliances | Overloaded utility network; storm activity; downed power lines; animal infestation | Powering household appliances and power tools |
| **Effect on Audio Quality:** | N/A | None | If severe enough, can cause an audible hum or buzzing sound | Limits dynamic range of sound produced by the amplifier; not enough current is available during peak periods | N/A | Possibly degrades sound quality |
| **Effect on Video Quality:** | N/A | None | Visible lines of distortion ("hum bar" distortion) possible | Creates visible lines of distortion | Damages or reduces lifespan of projector bulbs | May result in visible lines of distortion |
| **Effect on Components:** | Stresses power supplies and/or causes premature failure | Catastrophic failure | N/A | Stresses power supplies by forcing larger current draws; may result in premature failure due to increased stress | Entertainment becomes unavailable or is interrupted; DVR recordings are lost or missed; pre-sets are lost; hard drives may be damaged or data lost; security and home automation systems become inoperable | Stresses power supplies |

## APC AV Means Legendary Reliability® for Home Entertainment

The world's most trusted provider of availability solutions brings our reputation and history of innovation to your audio/video electronics. When you want to ensure the best experience, look to APC AV.

**APC AV S Type Power Conditioner with Battery Backup.** This unit was designed and engineered solely for high-performance audio/video systems. This new power solution ensures the quality sound and video performance you expect and demand, combining the features you need for uninterrupted home entertainment. Protect your AV investment and experience with APC AV's S Type Power Conditioner with Battery Backup.

### CONVERGENCE MAKES BATTERY BACKUP POWER INDISPENSIBLE

The S Type's Uninterruptible Power Supply (UPS) feature prevents interruptions and lost presets, DVR recordings, and media server data.

In the event of a power outage, an extremely deep power sag or over-voltage, the S Type Power Conditioner with Battery Backup will instantaneously provide pure sine wave power from its internal batteries to keep your entire system up and running without any interruption. With APC AV, you'll never have to worry about your DVR missing a recording, losing system presets or being able to finish a movie, game, or pay-per-view event. Home security and automation systems will remain operational no matter what happens to the power.

The S15 model allows you to add additional battery packs (SBATT) to get the runtime you desire. Even at full load capacity, it is possible to have well over an hour of runtime available when the power goes out.

Other competitive home UPS manufacturers try to cut cost by designing units that output "step" or "square" wave power when operating on battery. This type of waveform, while ideal for switched mode computer power supplies, is not optimal for video sources. APC designed for performance by building an inverter that outputs a pure sine wave when on battery, ensuring the purest power possible for all your components.

*Add extra batteries to get whatever runtime you desire. Pictured here is an S15 with two extra SBATT battery packs connected*

## Conditioned. Protected. Uninterrupted.

Built to Handle Multiple Types of Power Disturbances

**Complete Power Conditioning = Surge Protection + Filtering + Voltage Regulation.** Many competitive brands like to call their surge protectors "power conditioners". Surge protectors and even voltage regulators do not offer complete power conditioning. A surge protector does not address the most common power disturbance: voltage fluctuations (a.k.a. brownouts and over-voltages). Conversely, a voltage regulator typically does not offer much in the way of surge protection or noise filtering. APC AV's S10 and S15 offer complete power conditioning.

**A Reliable and Pure Power Foundation = Power Conditioning with Battery Backup.** Anything less puts your home AV experience and investment at risk. APC AV's S10 and S15 Power Conditioner with Battery Backup offer an all-in-one solution that eliminates all power threats to your high-performance entertainment system. By eliminating surges, spikes, brownouts, over-voltages, EMI/RFI interference, and blackouts, APC offers the secure power foundation that protects your investment and enables your system to perform to its peak capabilities.




### Voltage Regulation Can Improve Sound and Video

**Prevents the Most Common Power Disturbance from Impacting Video Quality and Stressing Component Power Supplies**

APC's Automatic Voltage Regulation (AVR) corrects brownouts (low AC voltage) and over-voltages to keep the RMS voltage within proper operating ranges for your components' power supplies. This helps your system perform to its maximum capability.

Ideal for those who live in chronic brownout conditions, APC AV's units can operate indefinitely in AVR mode without overheating or causing undue stress to the unit. With APC's Automatic Voltage Regulation, your high-performance system will no longer be a slave to fluctuating voltages.

## 12 Surge-Protected Outlets Protect Your Components

**Proactively Protects Your Investment and Eliminates Potential Insurance Claim Hassles**

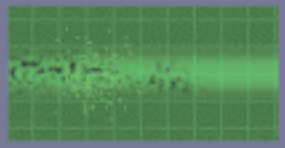
Twelve surge-protected outlets provide guaranteed protection against surges, spikes, and even lightning. Tested to the toughest standards of UL1449 and IEEE, APC AV offers very low Let-Through Voltage ratings, ensuring the best level of protection.

Surges and spikes come in many different forms (different amplitudes, different durations). Unlike other surge protectors and power conditioners, APC AV employs a multi-stage strategy that is more than capable of reducing any surge or spike to harmless levels, regardless of amplitude or duration.

## Isolated EMI/RFI Noise Filter Banks Maximize Sound and Video Quality

**Allows Your System to Perform to Its Maximum Capabilities**

APC AV's S Type Power Conditioner with Battery Backup virtually eliminates any electromagnetic and radio frequency interference that may exist on the AC power circuit. There is a specific filter circuit for Digital, Analog, Video, and High Current components. Both the input and output AC are filtered.



*Filters EMI/RFI noise to help ansure best sound and video quality.*

Each filter bank is physically and electrically isolated to prevent noise generated by the components themselves from polluting other connected components. Unlike many competitive brands, our High Current filter allows for protection of high-powered amplifiers and sub-woofers without compromising their ability to draw high currents during periods of peak sound output. Plugging the amplifier into a separate and unprotected wall outlet is not necessary with APC AV. In buildings where electrical noise is negatively impacting sound and video quality, APC AV can make a noticeable improvement in performance.


### THE LOWER THE LET-THROUGH, THE BETTER

APC engineering subjects its designs to 6,000V spikes of varying current levels to simulate worst case, real world scenarios that could be found at a building duplex outlet. We then measure how much of the spike gets through to the outlet and to any connected equipment. This measurement is referred to as the Let-Through Voltage Rating by the Institute of Electronics and Electrical Engineers (IEEE). According to UL's 1449 standard, a Let-Through rating of "<330V" is considered good. APC AV's S Type Power Conditioner with Battery Backup has a Let-Through Voltage rating of "<40V". Simply put, the lower the number, the better the performance.

According to the IEEE, Let-Through Voltage Rating is the best indicator of surge protection performance. What matters in the end is how much of a surge or spike actually reaches your valuable equipment. Let-Through is a direct measurement of this. Other companies promote Joule ratings as an indicator of surge performance. A Joule rating only communicates how much energy is required to break down the surge protector, but has absolutely nothing to do with how effective the protector is in preventing surges and spikes from reaching your equipment. With APC, protection is guaranteed for life.

## COAX, Phone, and Ethernet Protection Jacks Prevent Damage from Surges Traveling Over Data Lines

### Protect Your System's "Back Door"


It is very common for surges and spikes to enter a system over COAX, phone, or Ethernet lines. APC AV's low insertion loss protection jacks offer you the protection and flexibility you need. Three pairs of gold COAX jacks are included to protect CATV, satellite, and antenna lines. The S15 also includes a low insertion loss splitter to facilitate splitting a COAX line to both a CATV box and a cable modem for those who have Broadband service provided by their cable TV provider.

For any component that is connected to a home computer network, the S15 offers Ethernet protection jacks. Finally, if you have a DVR, set-top box, or DSL modem connected to a standard analog phone line, protection is available through the unit's 2-line, 4-wire phone protection jacks. (Note: S10 has single line only)

## DC Trigger Enables Remote Sequenced Turn On/Off of the 3 Delayed Outlets

### Components "Follow the Leader" in Power On/Off

Many high-performance AV components use a DC voltage trigger to automatically control turning on and off other components. Both the S10 and S15 have a built-in DC trigger that controls power to the three delayed outlets as well as acts as a pass-through for another device downstream.


## Display Panel and LED Indicators Provide Advanced Monitoring and Configuration

### Know Your Power Situation at a Glance....Customize To Your Environment

Not only do APC AV's S Type Power Conditioners with Battery Backup proactively notify you of changing power and unit conditions, they also allow you to configure them for your particular power and system needs. Either the display screen or the LEDs will tell you if the unit is operating on battery power, how charged the battery is, how much battery runtime is available, whether the unit is boosting/trimming the voltage, and much more. Through the display screen, you are able to adjust various settings including transfer voltage points, unit sensitivity to power disturbances, outlet turn on delays, alarm settings, and LED/Display brightness.

### 3 Delayed Outlets Prevent Stressing Speakers and Help Manage Current Draw on Startup

**APC AV Helps You Power 'ON' Safely and Easily**

If the system is powered "on" out of sequence, an audible "pop" will be heard through the speakers, which is believed to cause unnecessary "wear and tear". By turning on the pre-amp and amplifier (or receiver) in the correct sequence (with the right delay), this stress can be avoided. APC AV's S10 and S15 provide this "sequenced turn on" functionality. Delays can be set by the user via the front panel display.

If the branch circuit is heavily loaded, proper sequencing can also avoid tripping your circuit breaker. Both the S10 and S15 are designed so that these in-rush start-up currents do not overload, or cause damage to, the unit.

### Rack-mountable

**APC AV is easy to install**

Hardware is included to fit any 19" rack. No custom shelving or mounting hardware needed.

## Style. Function. Performance.

Designed Specifically for High-Performance AV Environments

**Unique needs require special design.** We know you pay attention to detail when it comes to your home AV setup. APC spent extra time and resources to ensure we provided the right design to complement your audio and video components. That's not to say it's just another pretty faceplate. You get the trusted technology that's earned APC millions of delighted customers worldwide.

APC AV's S10 and S15 were engineered to manage its thermal dissipation so efficiently that the ultra-quiet cooling fan should only need to operate during power outages. Audible alarms are set to "off" by default. LED and display brightness can be independently controlled by the user to suit their particular tastes. All of these details are critical to creating an all-in-one power protection unit that is well suited for high-performance home AV systems.

# General Product Specifications

| Models | S15 | S10 | SBATT |
|---|---|---|---|
| **INPUT** | | | |
| Input Voltage Range for Operation on Utility | 88V – 144V | Same | N/A |
| Nominal Voltage | 120Vac | Same | 48Vdc |
| Allowable Input Frequency for Operation on Utility | 47 – 63 Hz | Same | N/A |
| Rated Input Current | 12A | Same | N/A |
| Input Circuit Breaker Rating | 15A | Same | N/A |
| **OUTPUT** | | | |
| Number of Outlets (all outlets are surge protected, conditioned, regulated and backed up by battery power) | 12 | Same | N/A |
| Outlet Type | NEMA 5-15R | Same | N/A |
| Rated VA Capacity | 1440VA | 1000VA | N/A |
| Rated Watt Capacity (continuous) | 900W | 685W | N/A |
| Rated Output Current | 12A | Same | N/A |
| **BATTERY BACKUP** | | | |
| Transfer Time to Battery During Blackout | 7ms typical, 10ms maximum | Same | N/A |
| Battery Quantity/Type | 4 12V 9aH sealed lead-acid maintenance free | Same | 8 12V 9aH sealed lead-acid maintenance free |
| Typical Recharge Time to 90% Capacity | <8 hrs | Same | N/A |
| Battery Service | User-replaceable, hot-swappable | Same | Hot-swappable |
| Battery Life* | 2 – 5 years | Same | Same |
| Battery Runtime** with Internal batteries only:<br>with Internal batteries and 1 SBATT:<br>with Internal batteries and 2 SBATT: | Full load: 11 minutes / Half load: 24 minutes<br>Full load: 38 minutes / Half load: 75 minutes<br>Full load: 70 minutes / Half load: 140 minutes | Full load: 20 minutes / Half load: 40 minutes<br>*N/A (S10 does not accept extra batteries)*<br>N/A | N/A |
| **SURGE PROTECTION** | | | |
| Let-Through Voltage Rating | <40V | Same | N/A |
| **DATA LINE PROTECTION JACKS** | | | |
| COAX | 3 pair + splitter | 3 pair | N/A |
| Ethernet | 1 pair 10/100bT | None | N/A |
| Telephone/DSL | 2 line, 4 wire with splitter | 1 line, 2 wire | N/A |
| **PHYSICAL** | | | |
| DC Trigger | Two 3.5mm mini-jack plugs (5-30V) | Same | N/A |
| Unit Dimensions | 17"W x 5.125"H x 18.55"D | Same | 17"W x 3.5"H x 18.55"D |
| Unit Weight | 57.2 lbs / 26 Kgs | 55 lbs / 25 Kgs | 62.83 lbs / 29 Kgs |
| **CONFORMANCE** | | | |
| Safety Agency Approvals | UL1778 (tested to relevant UL1449), cUL, FCC Part 68 Class B | Same | N/A |
| **WARRANTY** | | | |
| Lifetime Equipment Protection Policy*** | Unlimited | Unlimited | N/A |

*Depends on use and environment temperature.
**Actual runtimes are determined by load, battery charge level, battery health and quantity of batteries installed.
***See user manual for details

## Interested in Selling APC AV Solutions?

visit ***http://www.apcav.com*** or call **1-888-88-APCAV**

## Ready to Buy?

Contact your local audio/video dealer.

For more information, visit ***http://www.apcav.com*** or call **1-888-88-APCAV**

APC AV
ENGINEERED POWER SOLUTIONS

CEDIA CUSTOM ELECTRONIC DESIGN & INSTALLATION ASSOCIATION

APC — NASDAQ-100 LISTED

The NASDAQ-100 Index is composed of the 100 largest non-financial stocks on the NASDAQ stock market.

500

*Information Week* identifies the most innovative users of IT from U.S. companies with $1 billion or more in annual revenues. Awarded 2003 for the 4th year in a row.

Forbes 2004

Every year since 1999, APC has been named to Forbes Platinum 400 list of the Best Big Companies in America.


APC's quality system is certified by ISO 9001 standards

ISO14001

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