# *FURMAN*. F1500-UPS

#### UNINTERRUPTIBLE POWER SUPPLY BATTERY BACKUP/POWER CONDITIONER



### The F1500-UPS: Battery Backup For A/V, Not I.T.

Furman proudly introduces the F1500-UPS: battery backup designed exclusively for audio/video professionals and home theater aficionados.

For decades, traditional audio/video components were simple analog devices designed to easily weather power outages of well over two seconds. Later, as computer and microprocessor based components gained in popularity, their extraordinary sensitivity to even a fraction of a second's power loss was managed with traditional UPS (uninterruptible power supply) technology.

Unfortunately, these units were solely designed for the I.T. professional. Though they included many technologies and features appropriate to that application, they fell short for premium audio/video components. Though many of these manufactures later recognized the ever-emerging professional audio/video, broad-cast, and home theater market, their lack of experience led merely to a re-tooled chassis. These hastily produced UPS devices lacked the technologies necessary to truly optimize protection, performance, and control for today's audio video components.

The Furman F1500-UPS more than fills this void, and offers your system unparalleled battery back-up technology, created from the ground up to meet the exacting demands of the world's most sensitive audio, video and control systems!

#### Protection

Typical UPS systems feature antiquated surge suppression technologies that can cause as much damage and annoying lock-ups as they attempt to prevent. Only Furman offers battery back-up with our road-proven SMP non-sacrificial, zero ground contamination surge suppression technology and EVS Extreme Voltage Shutdown. After all, the most robust battery cannot function if the accompanying circuits are damaged! With Furman's F1500-UPS, you can expect years of trouble free operation\*.

#### Filtration

Though many control devices are relatively immune to moderate levels of AC line noise, today's more sensitive devices (such as DLP projectors and line-level signal processors) certainly are not. High-definition technologies have pushed resolution to levels so extreme that virtually any AC noise capable of coupling with your system's signal will distort, mask, or destroy the performance advantages we all strive so hard to capture and reproduce. Once again, the F1500-UPS is different. While other UPS devices feature AC line filters suitable for an IT closet, only Furman employs our exclusive Linear Filtering Technology (LiFT) to four discrete isolated outlet banks. This advanced noise filtering technology assures that today's ultra-wide dynamic range is maintained as it must be – pristine. Remember, less AC noise equals greater content, greater resolution, and higher definition.

#### True Sine Wave Output

The F1500-UPS provides True Sine Wave output when in battery backup mode, ensuring the utmost reliability to all connected equipment while running on battery power.

#### Expandability

At 1500VA, the F1500-UPS provides substantial backup time for most critical digital A/V components (see runtime chart). If more runtime is needed, 1500VA battery packs (BATT1500E-EXT) may be daisy chained to double, triple, and further increase runtime as the application demands.

#### **Programmability & Control**

Audio/video systems can vary greatly in their size and components, and as such, flexibility is needed in determining how a battery backup solution should function under different circumstances. Because of this, Furman has provided open source RS-232 control over four independent AC outlet banks, with a wide range of features to interface with an existing control unit. Dual programmable IR control allows the unit to send a shut down command to remote components in the event of a blackout – no more expensive projector bulbs to replace in the event of a blackout. Optional TCP/IP control (separate interface card, available Q4), offers remote control over any Internet connection via a truly plug-and-play, hosted, web-based graphical user interface, with full remote control and power monitoring functionality.



\* As with any battery back up system, the battery pack must be replaced periodically (2.5 to 3 years typically)

# **TYPICAL BACKUP COMPONENTS**

Because of the nature of battery backup technology, high-current audio and video components such as power amplifiers, powered subwoofers, and high-wattage displays are not recommended for use with the F1500-UPS. Not only will these components drain battery power quite rapidly, line impedance will be raised due to the F1500-UPS's (or any) AVR and AC to DC inverter, which can induce current compression and noticeably diminish performance with high-current A/V equipment. The following components are **ideal** for use with the F1500-UPS:

#### DAWs • Satellite Receivers • Cable Boxes • Digital Video Recorders • Media Servers External Hard Drives • Digital Mixing Consoles • Lamp Based Video Displays • Control Systems

For power management of other components, Furman recommends Classic i or Reference i Series Power Conditioners. For high-current components such as power amplifiers and powered subwoofers, solutions featuring Furman's exclusive Power Factor Technology are ideal.

# APPROXIMATE RUN TIME, 1500VA\*\*

Satellite Receiver or Cable Box = 80 Minutes Media Server + Control System = 40 Minutes Digital Mixing Console (24 Channel) = 20 minutes DAW Computer + Digital I/O + External Hard Drive + 24" LCD Monitor = 7 Minutes

\*\*These run times should be used as a guideline only and are dependant on device and usage.

## PRODUCT FEATURES



Furman's exclusive SMP Technology provides the highest level of surge & spike protection available



LiFT offers linear AC power filtering to ensure clean power for unequaled audio & video clarity



Advanced EVS circuitry detects dangerous voltage irregularities and safely powers down itself and connected equipment in unsafe conditions



1500VA simulated sine wave battery backup protects your data in a power failure and allows the opportunity to shut-down the system gracefully



Digital indicators provide information on power quality and operational status of unit

# PRODUCT SPECIFICATIONS

#### INPUT

Voltage: 85 - 137 VAC Frequency: 57 - 63 Hz

#### AC POWER

Surge Protection: Non-sacrifical SMP (Series Multi-Stage Protection) Circuit Breaker Current Rating: 12 A Overvoltage Shutoff, fast rise:  $150 \pm 5V$ Overvoltage Shutoff, slow rise:  $140 \pm 5V$ Noise Attenuation: 10 dB @ 10 kHz, 40 dB @ 100 kHz, 50 dB @ 500 kHzLinear Attenuation Curve: From 0.05 - 100 Ohms line impedance

Automatic Voltage Regulation, Sensitive Mode Capture Range: 96 - 135 V Automatic Voltage Regulation, Sensitive Mode Output Range:  $120 \pm 5\%$ Automatic Voltage Regulation, Standard Mode Capture Range: 93 - 145 V Automatic Voltage Regulation, Standard Mode Output Range:  $120 \pm 10\%$ 



Dual Learning IR Blasters allow safe shutdown of remote components



Custom programming provides control of unit via RS-232 interface with Optional TCP/IP Control Card for IP control and monitoring (Sold separately, available Q4)



Critical Load Management prioritizes the allocation of temporary power to connected equipment



Easy to use power control software assists you in maximizing the performance of your UPS

#### UPS OUTPUT

Voltage: 120 ± 5 V True Sine Wave Frequency: 60 Hz ± 1% UPS Output Capacity: 1500VA, 900W @ 0.6pf (7.5A) UPS Backup Time: 12 minutes at full load, 32 minutes at half load Transfer Time: < 4ms

#### DIMENSIONS

**Product:** 3.5" H x 19.2" L x 17" W **Weight:** 72 lbs.

