

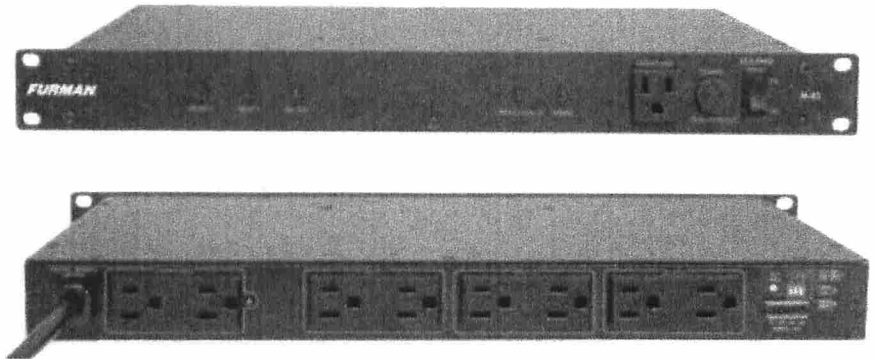
FEATURED PRODUCT

PL-PRO DMC

(product.php?div=01&id=PL-PRODMC) Advanced Rack Mount Power Conditioner

(product.php?div=01&id=PL-PRODMC)

- Series Multi-Stage Protection, with LiFT and EVS
- Two retractable, long-life, low-heat LED lights with dimmer
- Voltmeter / Ammeter displays line voltage and true RMS current draw
- 20 amp rating, 9 outlets

**M-8S
POWER SEQUENCER****Power Sequencing**

Prevents excessive inrush currents.

Noise Filtration

Noise filtering to reduce radio frequency and electromagnetic interference.

Surge Protection

Ensures equipment stays safe.

9 Total Outlets

Eight rear panel outlets and one front panel convenience panel outlet.

15 Amp Rating

15 amp rating, with circuit breaker.

"Protection OK" Indicator

Front panel indicator LEDs for Outlet Banks, Protection OK and Power Status.

Wall Wart Spacing

Rear outlets have been spaced to accommodate even the bulkiest of wall warts and adapters.

Features

- Standard level AC protection and filtering.
- Six sequenced rear panel outlets (in 3 groups), two unswitched rear

- panel outlets, and one front panel unswitched outlet.
- Momentary and Maintained sequencing via rear panel terminal block or front panel switch (momentary only).
 - All settings and configurations available on rear panel.
 - 15 amp rating.
 - Three year limited warranty.
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Description

Merit M-8S Power Sequencer is the perfect low-cost AC power solution for any rack mount system. Install an M-8S in your rack, and the eight outlets in the rear panel will power up in sequence and protect all your equipment up to a 15-amp load.

- (<http://www.panamax.com/>)
- (<https://www.mybluebolt.com/>)

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(<http://www.furmansound.com/facebook>)

(<http://www.furmansound.com/twitter>)

(<http://www.furmansound.com/youtube>)



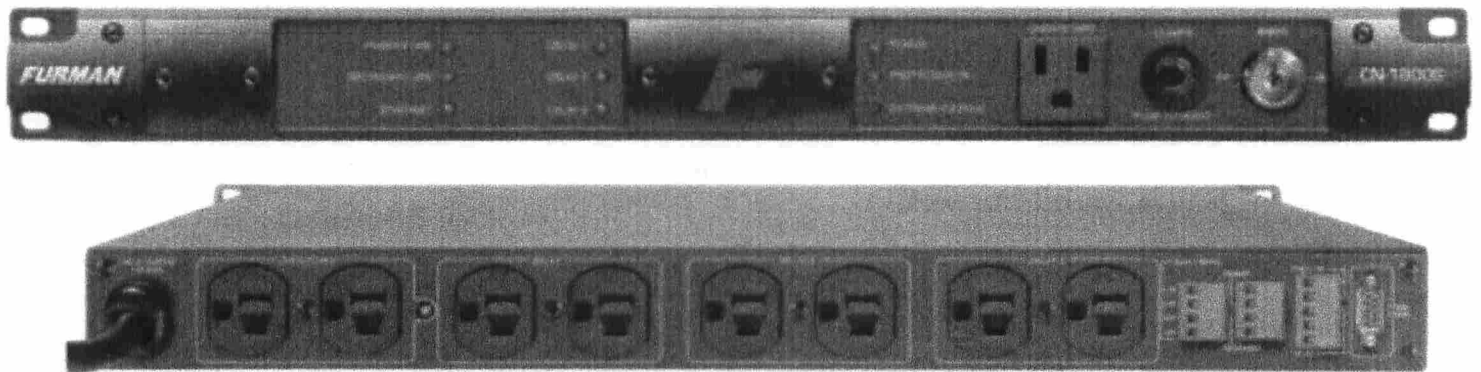
The Contractor Series Advanced Technology for Smart Integration

SmartSequencers™
Contractor Series

Intelligent Power Management Solutions for Professional Integrators

CN-1800S SmartSequencer™

15 Amp Bidirectional Sequencer



- [Product Information](#)
- [Specifications](#)
- [Product Photos](#)
- [Resources & Media](#)

CN-1800S Features

• **SMP** SERIES MULTI-STAGE PROTECTION

Surge Protection

Series Multi-Stage Protection (SMP) Technology provides the highest level of surge & spike protection available.

• **LiFT** LINEAR FILTERING TECHNOLOGY

Noise Filtration

Linear Filtration Technology (LiFT) reduces AC noise linearly across a very wide bandwidth for unequaled audio & video clarity.

• **EVS** EXTREME VOLTAGE SHUTDOWN

Voltage Protection

Extreme Voltage Shutdown (EVS) circuitry safely powers down itself and connected equipment during unsafe voltage periods.



SmartSequencing™

SmartSequencing allows bidirectional, safe sequenced power up/down operations via the push of a button or turn of a key.



Diagnostic Lights

Diagnostic lights provide valuable system information including power quality, “Protection Ok” indicator, and Extreme Voltage indicator.



15 Amp Output Current

15 amp maximum current capacity with incorporated 15 amp thermal circuit breaker.



Remote Access (RS-232)

RS-232 compatibility & command set provide integration with control systems, open source and control programming.



BlueBOLT Compatible®

BlueBOLT provides remote access to reboot components, power equipment on/off, and monitor power quality via the internet from anywhere in the world.



Nine Total Outlets

The CN-1800S contains eight rear panel NEMA 5-15R outlets and one front panel NEMA 5-15R outlet.

CN-1800S Description

Designed for Commercial A/V Installers, the CN-1800S combines robust control capabilities via SmartSequencing™ Technology, advanced AC protection, AC noise filtration, and optional compatibility with the BlueBOLT® Remote Power and Energy Management Platform (BB-RS232 adapter required, sold separately).

The new CN-1800S is one of the first products to feature Furman’s SmartSequencing™ technology, which allows large and complex A/V systems to be safely powered on and off with a simple press of a button or turn of a key, even by nontechnical personnel. SmartSequencing’s bidirectional communications between installed units enables a primary unit to control and sequence multiple secondary units, ensuring multizone electronic systems are powered on and off safely and dependably from a single control point across an entire installation. Units can be connected via current loop at runs of more than 1,000 feet with backwards compatibility with Furman’s legacy sequencers.

In addition, the CN-1800S offers robust control options, equipped with RS-232 ports and command sets for integration with control systems. An optional RS-232-to-Ethernet adaptor (sold separately) adds full IP-addressability to the unit, allowing it to be controlled, programmed, and monitored from a smartphone, tablet, PC, or any Web-enabled device via Telnet, direct HTTP connection, or Panamax/Furman’s BlueBOLT®-hosted remote power and energy management platform.

CN-1800S Technical Specifications

AC Voltage Input Range

Making the Circuit Breaker Your Friend

Ward Durrett

Colorado Bandmasters Convention

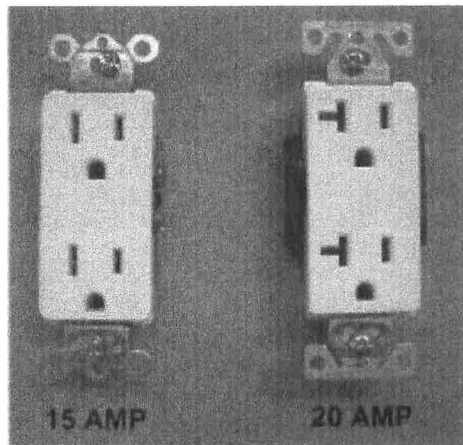
July 16th 2015

CBA Rule 6.05- *If a band causes a power surge when they plug in to the provided power source that causes a circuit breaker or GFI to trip, that is an automatic 2.0 penalty. Additional penalties may be added if this causes a delay of contest according to Rule 5.08. This penalty will be waived if it is determined the stadium power system failed. The power supply will be checked prior to the contest by stadium management and the T&P judge to determine that a power supply of 120 volts/20 amps is available.*

The Goal: To avoid any penalties.

The Method: To initiate the flow of electricity to your electronics *gradually*.

What you DO know: You've been provided with (what was originally installed as) a 120 volt, 15 or 20 amp electrical circuit.



What you probably DON'T Know:

What's already been plugged in to that circuit (microwave(s), television, fan...etc...) by facility staff.

What additional circuits have been added using your circuit as the source since original installation.

Has a GFI been added to reduce amperage (common perceived safety step)

The Problem: Instantaneous demand (*inrush* current) on the circuit.

Explanation: The circuit breaker will trip when the equipment drawing current from the circuit demands more of the circuit than it can provide.

Solution: Add electrical demand *slowly*.

Step one: Plug in to stadium circuit with all equipment turned off. **ALL of it!**

Step two: Turn on components w/lower electrical demand: (mixer, router, synth...etc) WAIT 10 seconds

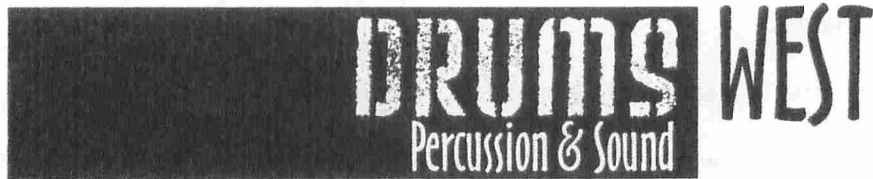
Step three: Turn on one amplifier/powered speaker at a time. (again at app. 10 second intervals)

In the Heat of Battle: This can all be accomplished manually, but if you have concerns about getting the order correct every time.....

Automatic Solutions: Rack Mountable Power Sequencers.

Furman M8-S Power Sequencer: <http://www.furmansound.com/product.php?div=01&id=M-8S>

Furman CN1800S Power Sequencer: <http://www.furmancontractor.com/cn-1800s.php> (w/Linear Filtering)



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