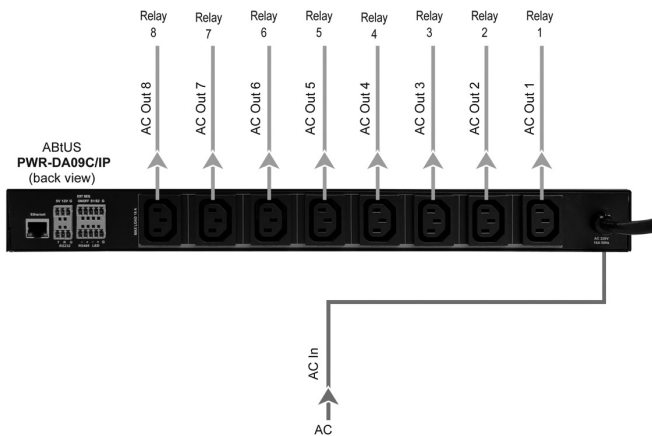


SPECIFICATION

Max Current Rating:	16 Amp (3840 Watts at 240 VAC)
Input Voltage:	90 to 265 VAC without damage
Delay Intervals:	Total elapsed ON delay time adjustable from 1-60 seconds, with RS-232 for precise timing and sequence order
ON Sequence:	Respective relay goes ON base on programmed sequence/order and delay time for each relay.
Remote Switch:	Screw type terminal block, LED, Switch and GND
Spike Protection Modes:	Line to neutral, zero ground leakage
Response Time:	1 nanosecond
Relay Rating	30Amps @ 240VAC
Power Consumption	4.5 Watts (standby), 15Watts (all relay ON)
Dimension	430 x 232 x 45 mm
Weight	4.6 Kg
Operational	220/240V
Housing	Metal enclosure
Dimensions (L x W x H)	430 x 232 x 45 mm
Fixedness	Standard 1-U rack-mount (*with "L" bracket)
Package include	1 x Switcher with power cord, 1 x Quick User Guide

* Specifications are subject to changes without notice.

DIAGRAM



Typical Applications
 Any professional audio system in powering a rack full of equipments in sequence order with a timed delays.

- Schools (Media Classroom)
- Churches
- Corporate Applications (Meeting Room)



Sequenced Output Power Conditioner (8 Relay + 1)



Model: PWR-DA09C/IP

DESCRIPTION

The **PWR-DA09C/IP** is a safe and convenient Sequenced Output Power Conditioner distribution unit offering protection to all valuable rack-mounted equipments. Sequenced power up of a complete power audio system from just a push of a switch that eliminates the loud "POP"s which may damage speakers and other equipments connected.

The PWR-DA09C/IP features sequenced power start-up. During start up, each outlet is turned on one at a time with a delay time (Variable and programmable) between each other.

This delay prevents the "POPs" by allowing each piece of equipment to properly power up before allowing the audio signals to pass through. The Line Voltage sensor monitors the incoming voltage from 185~265VAC, assuring the AC voltage is in a safe operating range for the connected equipment .

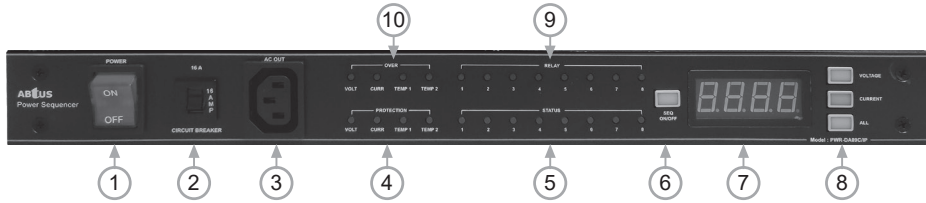
Its 5V/12VDC outlet also allows power for a LED light/Lamp that provides a cool-running light source for all the equipments in your rack.

The PWR-DA09C/IP also features relays that can be controlled and monitored individually via RS232/485 or IP. By monitoring, it means that each relay's voltage, current and active power readings can be monitored real-time. And by control, it means that each relay can be turned on/off without triggering the whole on/off sequence. Thus the PWR-DA09C/IP can be deployed in a more user-controlled environment.

PRODUCT HIGHLIGHTS

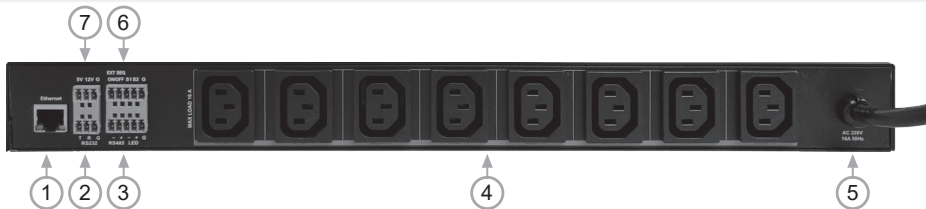
- Monitoring and control for each individual ports
- Multi-Stage surge protection
- Front panel power status LEDs
- Customizable alarms for low/high voltage
- External I/Os allow remote operation
- 8 switched outlets (rear) and one pass through un-switched outlet (front)
- 5V/12VDC supply (terminal block) allow any lamp or LEDs that provides a cool running source for the rack

FRONT VIEW PANEL



Item	Description
1. POWER	Main Power ON/OFF switch. The unit will go into the last saved memory settings when powered on.
2. CIRCUIT BREAKER	Max overall load capacity is 16 amp, this circuit breaker will trip should the combined current drawn by all connected equipments exceed 16 amp. Should this occurs, reduce the load so that they are within the range.
3. SWTCHED AC OUTLET	Provide a power outlet from front panel with main power ON/OFF and when the system is in and under normal power condition.
4. PROTECTION LED	LED is at solid green when system is under normal condition. LED goes OFF when a extreme large surge occurs, all relays will open.
5. STATUS LED	LED is at solid green when relay is under normal condition.
6. SEQUENCE ON/OFF	ON/OFF of a sequence which allow outlets to be turn on one at a time with a delay time (Variable and programmable) between each one
7. LED DIGITAL DISPLAY	Display provides voltage/current/power factor readings measured at the relays
8. PUSH BUTTONS	Buttons to navigate through the readings measured at the relays
9. RELAY LED	Each LED provide the relay/delay status of the corresponding port.
10. OVER LED	LED is at solid red when system detects, overvoltage, overcurrent and high temperature

BACK VIEW PANEL



Item	Description
1. ETHERNET PORT	IP control port
2. RS232 PORT	RS232 control port
3. RS485 & LED PORT	RS485 control port, External LED Port
4. OUTPUT 1 to OUTPUT 8	AC outlet with delays and sequence based on programmed timing (1~60 Sec)
5. AC AC220~240 50/60Hz	AC Input socket, AC220~240 50/60Hz
6. EXTERNAL CONTROL & TEMPERATURE SENSOR PORT:	Dry Contact Port to start on/off sequence. Temperature sensor port for temperature measurements.
7. DC 5V/12V OUTPUT PORT	DC 5V/12V OUTPUT

RS-232 Command Code

Communication Parameter

Description	Setting
Baud Rate	:9600 bps
Data Length	: 8 bits
Parity	: Non Parity
Stop Bit	: One stop bit
X On/Off	: None

RS-232 connection

Pin	Function
1 Tx	Transmit data
2 Rx	Receive data
3 GND	Ground



Item	Description	Command code (Hex)
1.	Power On	Send 53 45 01 04 0B 02 30 39 00 01 Return 52 45 01 04 0B 02 30 39 00 01
2.	Power Off	Send 53 45 01 04 0B 02 30 39 00 00 Return 52 45 01 04 0B 02 30 39 00 00
3.	Relay 1 On	Send 53 45 01 04 0B 02 30 39 01 01 Return 52 45 01 04 0B 02 30 39 01 01
4.	Relay 1 Off	Send 53 45 01 04 0B 02 30 39 01 00 Return 52 45 01 04 0B 02 30 39 01 00
5.	Relay 2 On	Send 53 45 01 04 0B 02 30 39 02 01 Return 52 45 01 04 0B 02 30 39 02 01
6.	Relay 2 Off	Send 53 45 01 04 0B 02 30 39 02 00 Return 52 45 01 04 0B 02 30 39 02 00
7.	Relay 3 On	Send 53 45 01 04 0B 02 30 39 03 01 Return 52 45 01 04 0B 02 30 39 03 01
8.	Relay 3 Off	Send 53 45 01 04 0B 02 30 39 03 00 Return 52 45 01 04 0B 02 30 39 03 00
9.	Relay 4 On	Send 53 45 01 04 0B 02 30 39 04 01 Return 52 45 01 04 0B 02 30 39 04 01
10.	Relay 4 Off	Send 53 45 01 04 0B 02 30 39 04 00 Return 52 45 01 04 0B 02 30 39 04 00
11.	Relay 5 On	Send 53 45 01 04 0B 02 30 39 05 01 Return 52 45 01 04 0B 02 30 39 05 01
12.	Relay 5 Off	Send 53 45 01 04 0B 02 30 39 05 00 Return 52 45 01 04 0B 02 30 39 05 00
13.	Relay 6 On	Send 53 45 01 04 0B 02 30 39 06 01 Return 52 45 01 04 0B 02 30 39 06 01
14.	Relay 6 Off	Send 53 45 01 04 0B 02 30 39 06 00 Return 52 45 01 04 0B 02 30 39 06 00
15.	Relay 7 On	Send 53 45 01 04 0B 02 30 39 07 01 Return 52 45 01 04 0B 02 30 39 07 01
16.	Relay 7 Off	Send 53 45 01 04 0B 02 30 39 07 00 Return 52 45 01 04 0B 02 30 39 07 00
17.	Relay 8 On	Send 53 45 01 04 0B 02 30 39 08 01 Return 52 45 01 04 0B 02 30 39 08 01
18.	Relay 8 Off	Send 53 45 01 04 0B 02 30 39 08 00 Return 52 45 01 04 0B 02 30 39 08 00
19.	Read Port 1 Voltage Value (230V)	Send 53 45 01 04 03 04 31 32 01 00 00 00 Return 52 45 01 04 03 04 31 32 01 02 59 E0
20.	Read Port 8 Voltage Value (230V)	Send 53 45 01 04 03 04 31 32 08 00 00 00 Return 52 45 01 04 03 04 31 32 08 02 59 E0
21.	Read Port 1 Current Value (1A)	Send 53 45 01 04 04 04 31 32 01 00 00 00 Return 52 45 01 04 04 04 31 32 01 03 03 E8
22.	Read Port 8 Current Value (1A)	Send 53 45 01 04 04 04 31 32 08 00 00 00 Return 52 45 01 04 04 04 31 32 08 03 03 E8
23.	Read Port 1 Active Power Value (100W)	Send 53 45 01 04 07 04 31 32 01 00 00 00 Return 52 45 01 04 07 04 31 32 01 04 00 64
24.	Read Port 8 Active Power Value (100W)	Send 53 45 01 04 07 04 31 32 08 00 00 00 Return 52 45 01 04 07 04 31 32 08 04 00 64