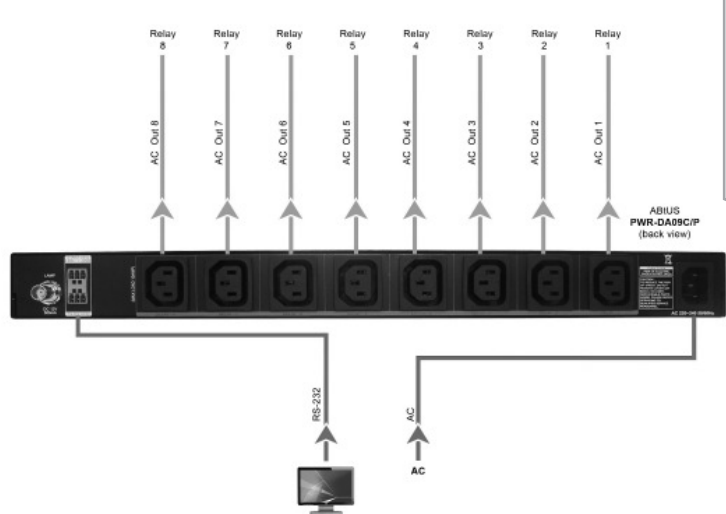


**SPECIFICATION**

Technical	PWR-DA09C/P (10Amp)	PWR-DA09C/PG (16Amp)
<b>Max Current Rating:</b>	10 Amp (2400 Watts at 240 VAC)	16 Amp (3840 Watts at 240 VAC)
<b>Input Voltage:</b>	185 to 275 VAC without damage	
<b>Relay Intervals:</b>	Total elapsed ON relay time adjustable from 1-60 seconds, with RS-232 for precise timing and sequence order.	
<b>ON Sequence:</b>	Respective relay goes ON base on programmed sequence/order and relay time for each relay.	
<b>Remote Switch:</b>	Screw type terminal block, Status, Sequence ON & Sequence OFF	
<b>Spike Protection Modes:</b>	Line to neutral, zero ground leakage	
<b>Spike Clamping Voltage:</b>	188 Vpk @ 3,000 amps, (133 VAC RMS)	
<b>Response Time:</b>	1 nanosecond	
<b>Maximum Surge Current:</b>	6,500 amps	
<b>Relay Rating</b>	30Amps @ 240VAC	
<b>Power Consumption</b>	4.5 Watts (standby), 14 Watts (all relay ON)	
<b>Weight</b>	3.6Kg	
<b>Over Voltage Shut Down</b>	150V ±1% (Low), 275 ±1% (High)	
<b>Operational</b>	220/240V	
<b>Mechanical</b>		
<b>Housing</b>	Metal enclosure	
<b>Product</b>		
<b>Dimensions (L x W x H)</b>	430 x 204 x 44 mm	
<b>Weight</b>	1.35 Kg	
<b>Fixedness</b>	Standard 1-U rack-mount (*with "L" bracket)	
<b>Package include</b>	1 x Switcher	1 x RS-232
	1 x Power Cord	1 x Quick User Guide

\* Specifications are subject to changes without notice.



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

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



# Sequenced Output Power Conditioner (8 Relay + 1 )



Model: PWR-DA09C/P & PWR-DA09C/PG

**DESCRIPTION**

The **PWR-DA09C/P (10 amp)** and **PWR-DA09C/PG (16 amp)** 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, eliminating the loud "POP"s which may damage speakers and other equipments connected.

The **PWR-DA09C/P (10 amp)** and **PWR-DA09C/PG (16 amp)** features sequenced power start up. During start up, each outlet is turned on one at a time with a relay time (Variable and programmable) between each other.

This relay prevents the "POPs" by allowing each piece of equipment to properly power up before allowing the audio signals to pass through. **The PWR-DA09C/P** also features an **EMI filter** which suppresses RF (radio frequency) and other AC line noises, ensuing a quieter operation of units that's plugged in. **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 12VDC BNC outlet also allows power for a **LED light/Lamp** that provides a cool-running light source for all the equipments in your rack.

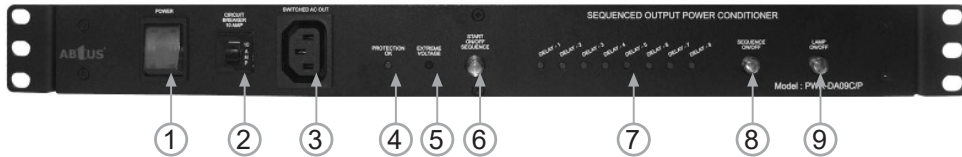
Revision 14092022

# User Operation Guide

## PRODUCT HIGHLIGHTS

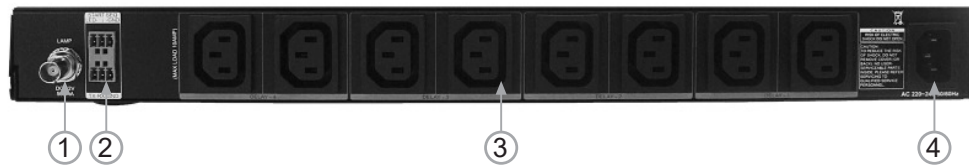
- Multi-Stage surge protection
- Linear Filtering Technology
- Front panel power status LEDs
- External I/Os allow remote operation
- 8 switched outlets (rear) and one pass through un-switched outlet (front)
- 12VDC supply (BNC) allow any gooseneck lamp or LEDs that provides a cool running source for the rack

## FRONT VIEW PANEL



Item	Description
1. <b>POWER</b>	Main Power ON/OFF switch
2. <b>CIRCUIT BREAKER</b>	Max overall load capacity is 10 amp, this circuit breaker will trip should the combined current drawn by all connected equipments exceed 10 amp. Should this occurs, reduce the load so that they are within the range. Reset can be done by simply pressing the reset button, however, please note that this is a thermal trip supplementary protector. (*Cooling time is required before reset is allow)
3. <b>SWTCHED AC OUTLET</b>	Provide a power outlet from front panel with main power ON/OFF and when the system is in and under normal power condition.
4. <b>PROTECTION OK</b>	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. <b>EXTREME VOLTAGE</b>	LED is normally off, it will only turn solid red when unit received voltage that is out of the range below (185VAC) or above (265VAC) *System will only allow reset (OFF/ON main power switch) when the incoming voltage is back within the safety range.
6. <b>SEQUENCE START</b>	Push to reset and begin an ON sequence
7. <b>RELAY STATUS</b>	LEDs, each LED provide the relay/relay status of the corresponding port.
8. <b>SEQUENCE ON/OFF</b>	ON/OFF of a sequence which allow outlets to be turn on one at a time with a relay time (Variable and programmable) between each one.
9. <b>LAMP ON/OFF</b>	ON/OFF control for rear 12VDC (500mA) supply which allow any gooseneck lamp/LED

## BACK VIEW PANEL



Item	Description
1. <b>LAMP</b>	BNC 12VDC (500mA) gooseneck lamp/LED
2. <b>STATUS - SEQ ON- SEQ OFF</b>	External control for status and Sequence ON/OFF
3. <b>RELAY 1 to RELAY 8</b>	AC outlet with delays and sequence based on programmed timing (1~60 Sec)
4. <b>AC AC220~240 50/60Hz</b>	AC Input socket, AC220~240 50/60Hz

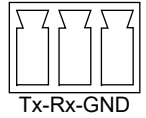
## RS-232 Command Code

### 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

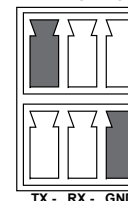
Pin		Function
1	Tx	Transmit data
2	Rx	Receive data
3	GND	Ground



Item	Description		Command code (Hex)
1.	Enter Setting Mode	Send	53 45 54 53 08 50 57 52 44 41 30 39 43
		Return	52 45 54 53 08 50 57 52 44 41 30 39 43
2.	Set Relay 01 ON (Hex 01) Relay 01 sec	Send	53 45 54 53 04 44 4C 01 01
		Return	52 45 54 53 04 44 4C 01 01
3.	Set Relay 02 ON (Hex 02) Relay 02 sec	Send	53 45 54 53 04 44 4C 02 02
		Return	52 45 54 53 04 44 4C 02 02
4.	Set Relay 03 ON (Hex 03) Relay 03 sec	Send	53 45 54 53 04 44 4C 03 03
		Return	52 45 54 53 04 44 4C 03 03
5.	Set Relay 04 ON (Hex 04) Relay 04 sec	Send	53 45 54 53 04 44 4C 04 04
		Return	52 45 54 53 04 44 4C 04 04
6.	Set Relay 05 ON (Hex 05) Relay 05 sec	Send	53 45 54 53 04 44 4C 05 05
		Return	52 45 54 53 04 44 4C 05 05
7.	Set Relay 06 ON (Hex 06) Relay 06 sec	Send	53 45 54 53 04 44 4C 06 06
		Return	52 45 54 53 04 44 4C 06 06
8.	Set Relay 07 ON (Hex 07) Relay 07 sec	Send	53 45 54 53 04 44 4C 07 07
		Return	52 45 54 53 04 44 4C 07 07
9.	Set Relay 08 ON (Hex 08) Relay 08 sec	Send	53 45 54 53 04 44 4C 08 08
		Return	52 45 54 53 04 44 4C 08 08
10.	Set Relay 08 ON (Hex 08) Relay 10 sec (Hex 0A)	Send	53 45 54 53 04 44 4C 08 0A
		Return	52 45 54 53 04 44 4C 08 0A
11.	Set Relay 08 OFF (Hex 10) Relay 01 sec	Send	53 45 54 53 04 44 4C 10 01
		Return	52 45 54 53 04 44 4C 10 01
12.	Set Relay 07 OFF (Hex 0F) Relay 02 sec	Send	53 45 54 53 04 44 4C 0F 02
		Return	52 45 54 53 04 44 4C 0F 02
13.	Set Relay 06 OFF (Hex 0E) Relay 03 sec	Send	53 45 54 53 04 44 4C 0E 03
		Return	52 45 54 53 04 44 4C 0E 03
14.	Set Relay 05 OFF (Hex 0D) Relay 04 sec	Send	53 45 54 53 04 44 4C 0D 04
		Return	52 45 54 53 04 44 4C 0D 04
15.	Set Relay 04 OFF (Hex 0C) Relay 05 sec	Send	53 45 54 53 04 44 4C 0C 05
		Return	52 45 54 53 04 44 4C 0C 05
16.	Set Relay 03 OFF (Hex 0B) Relay 06 sec	Send	53 45 54 53 04 44 4C 0B 06
		Return	52 45 54 53 04 44 4C 0B 06
17.	Set Relay 02 OFF (Hex 0A) Relay 07 sec	Send	53 45 54 53 04 44 4C 0A 07
		Return	52 45 54 53 04 44 4C 0A 07
18.	Set Relay 01 OFF (Hex 09) Relay 08 sec	Send	53 45 54 53 04 44 4C 09 08
		Return	52 45 54 53 04 44 4C 09 08
19.	Set Relay 01 OFF (Hex 09) Relay 10 sec (Hex 0A)	Send	53 45 54 53 04 44 4C 09 0A
		Return	52 45 54 53 04 44 4C 09 0A
20.	Exit (Setting Mode)	Send	53 45 54 53 03 31 50 31
		Return	52 45 54 53 03 31 50 31
21.	Power Sequencer ON	Send	53 45 54 53 03 30 50 01
		Return	52 45 54 53 03 30 50 01
21.	Power Sequencer OFF	Send	53 45 54 53 03 30 50 00
		Return	52 45 54 53 03 30 50 00

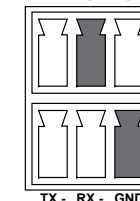
## EXTERNAL CONTROL

STATUS - SEQ - SEQ  
ON OFF



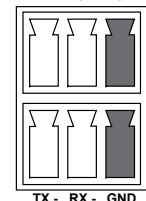
Optional  
Status LED

STATUS - SEQ - SEQ  
ON OFF



Sequence  
"ON"

STATUS - SEQ - SEQ  
ON OFF



Sequence  
"OFF"