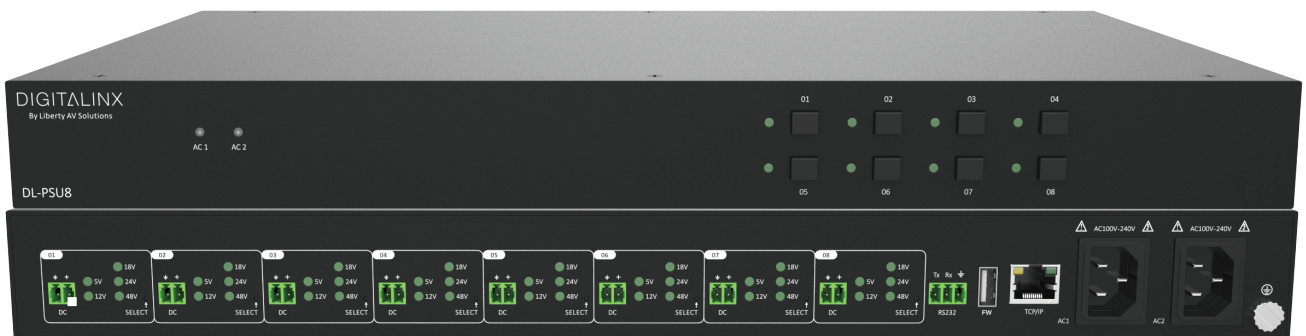




DIGITALINX  
BY LIBERTY AV SOLUTIONS

## DL-PSU8 Owners Manual



## Important Safety Instructions

- » Please completely read and verify you understand all instructions in this manual before operating this equipment.
- » Keep these instructions in a safe, accessible place for future reference.
- » Heed all warnings.
- » Follow all instructions.
- » Do not use this apparatus near water.
- » Clean only with a dry cloth.
- » Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- » Use only accessories specified or recommended by Intelix.
- » Explanation of graphical symbols:

◊ Lightning bolt/flash symbol: the lightning bolt/flash and arrowhead within an equilateral triangle symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product enclosure which may be of sufficient magnitude to constitute a risk of shock to a person or persons.



◊ Exclamation point symbol: the exclamation point within an equilateral triangle symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.



- » **WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE AND OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THIS APPARATUS.**
- » Use the mains plug to disconnect the apparatus from the mains.
- » **THE MAINS PLUG OF THE POWER CORD MUST REMAIN READILY ACCESSIBLE.**
- » Do not defeat the safety purpose polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of your obsolete outlet. **Caution! To reduce the risk of electrical shock, grounding of the center pin of this plug must be maintained.**
- » Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and the point where they exit from the apparatus.
- » Do not block the air ventilation openings. Only mount the equipment per Intelix’s instructions.
- » Use only with the cart, stand, table, or rack specified by Intelix or sold with the equipment. When/if a cart is used, use caution when moving the cart/equipment combination to avoid injury from tip-over.
- » Unplug this apparatus during lightning storms or when unused for long periods of time.
- » **Caution! Shock Hazard. Do not open the unit.**
- » Refer to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



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## Product Overview

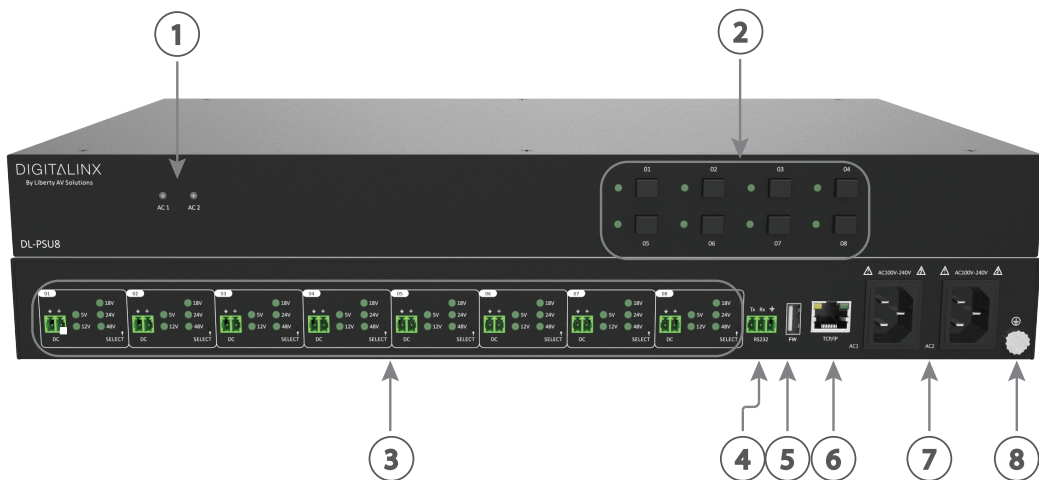
The DL-PSU8 is an integrated switching power supply designed for converting AC into DC power. It provides 2 AC input channels and 8 DC output channels. Input voltage is 100~240VAC, output voltage is selectable per output channel; 5/12/18/24/48V DC. The max power consumption of a single DC channel is 12W when using the 5VDC setting and 15W when using the 12/18/24/48VDC settings. Voltage for each output channel can be adjusted and switched on/off via the front panel buttons, RS232 / IP commands or using the built in web GUI.

The DL-PSU8 can replace bulky power AC/DC power adapters and power strips with a universal power solution for DC powered AV, networking, security and IOT devices located in a rack system.

## Product Contents

- DL-PSU8 8 Port DC Power Hub
- (1) Quick Install Guide
- (8) DC Power Cables (2-pin Terminal Block to DC)
- (1) RS232 Cable (DB9 to 3-pin Terminal Block)
- (2 each) US, UK, EU and AU Power Adapters
- (2) Rack Mounting Brackets
- (4) Plastic Cushions

# Front and Rear Panel



1. **AC1 AC2** - Input AC Source Indicators
  - When GREEN; AC input is powered on with normal output
  - When RED; AC input is not powered
  - When ORANGE- Input voltage is too low or too high
2. **O1-O8 (Front)** - Output Selection Buttons; Press once to activate / deactivate output, long press for 3 seconds to lock/unlock the selection
3. **O1-O8 (Back)** - DC Output Channels / Voltage Selector
  - *DC*: 2 pin DC Phoenix power connector
  - *SELECT*: Press switch to toggle output voltage selection
  - *5/12/18/24/48V*: Voltage selection LEDs
    - \* When Solid; Selected voltage is working normally
    - \* When Blinking Slowly; The channel is off or closed
    - \* When Blinking Fast; Channel is short circuiting or over voltage
4. **RS232**- 3 pin Phoenix connector for RS232 system control
5. **FW**- USB A firmware update port
6. **TCP/IP** - RJ45 connector for Ethernet / GUI system control
7. **AC1 AC2** - 2 AC input channels. Input voltage is AC100~240V.
8. **Ground Pin** - Ground device to earth

**How to Reset Device to Factory Default:** On rear panel, simultaneously long-press SELECT on channel O1 and channel O2 for 3 seconds or more, the device will be restored to factory setting.

## Voltage, Power, Current Per Output

VOLTAGE	POWER (WATTS MAX)	MAX CURRENT PER OUTPUT
5V DC	12W	2.4A
12V DC	15W	1.25A
18V DC	15W	.83333A
24V DC	15W	.625A
48V DC	15W	.3125A



**WARNING:** DO NOT EXCEED MAXIMUM RATINGS



## Installation Instructions

### ***Rack-mounting the Power Hub***

Attach the supplied rack ears to the sides of the DL-PSU8. The hub requires one rack unit (1 RU) of space. It is recommended that you leave an empty rack space above and below the DL-PSU8 for additional cooling

### ***Connecting Devices***

Connect powered devices to the the positive and ground pin of the DL-PSU8 DC channel, be sure to select the correct voltage for each DC power circuit.

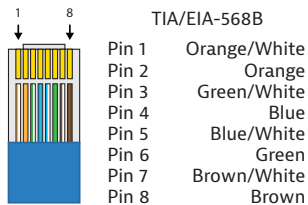
### ***Apply Power***

Connect one IEC power cable to the AC1 power input on the DL-PSU8. Using both AC1 and AC2 is not necessary, AC2 is a backup supply input.

# System Control

## Connect Ethernet Control

The DL-PSU8 can be controlled via Ethernet through a web browser interface or can be controlled using Telnet commands



The TCP/IP port requires a standard straight-through Category 5 or greater cable with the TIA/EIA-568B crimp pattern for optimal operation.

The default settings for the TCP/IP port are:  
IP address: 192.168.0.178, Telnet Port 4001

User name and password for the web GUI is *admin*

## Connecting RS232 Control

### RS232 Port Wiring

Connect a control system to the DL-PSU8 via RS232 for switcher control.

#### RS232 Wiring

Connect the system controller RX signal to TX on the DL-PSU8, then connect the controllers TX signal to RX on the DL-PSU8.

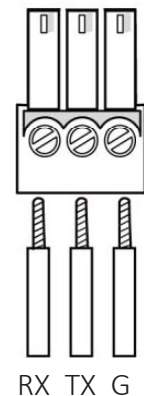
#### RS232 Settings:

- 9600 baud
- 8 Data Bits
- 1 Stop Bit
- Parity = none

DL-PSU8 RS232 Port



Connected RS232 Device pins



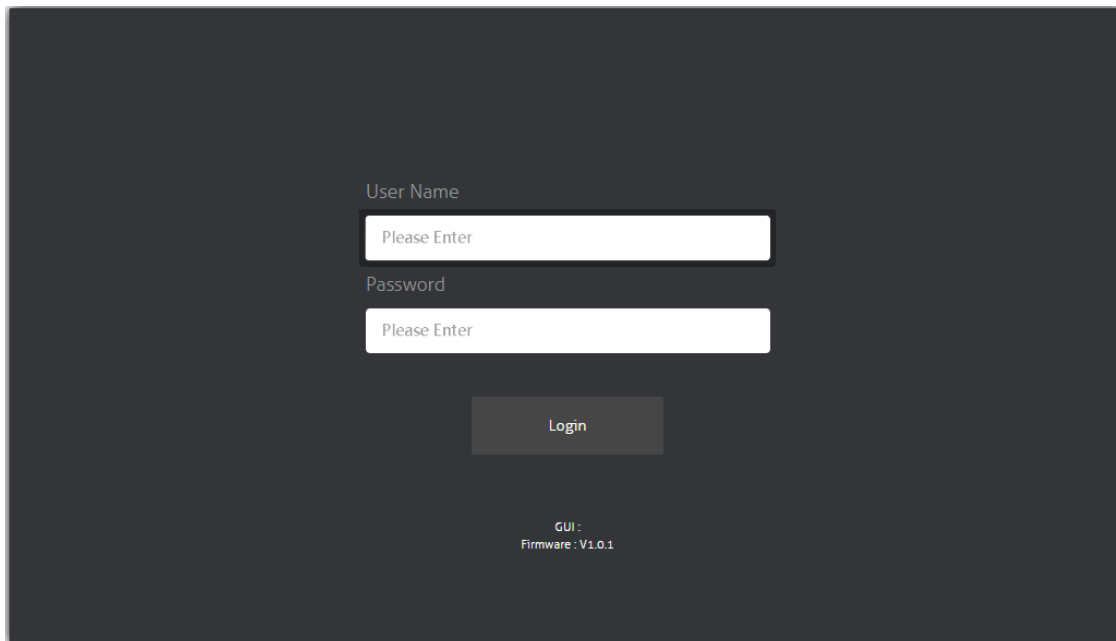
# Web GUI Settings

## **Switcher Control**

### *Connecting to Web GUI Control*

Network a PC computer and the DL-PSU8 then open a web browser in the PC and type in IP address of the DL-PSU8. The default IP address is 192.168.0.178 so be sure the computer you are using to connect to the DL-PSU8 is in the same Network ID to access the internal web GUI / server.

The login screen will appear. The default user name and password is *admin*

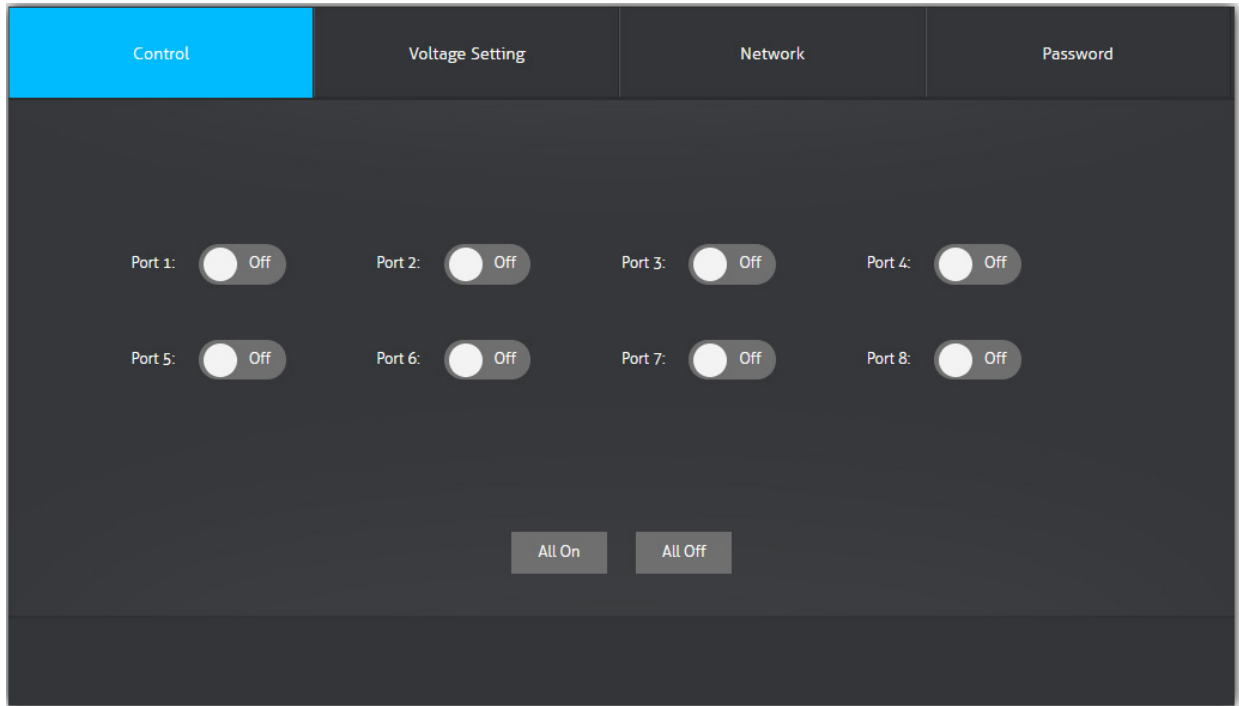




### Port ON and OFF Control

The *CONTROL* menu allows you to power ON and OFF DC power ports 1-8 on the DL-PSU8.

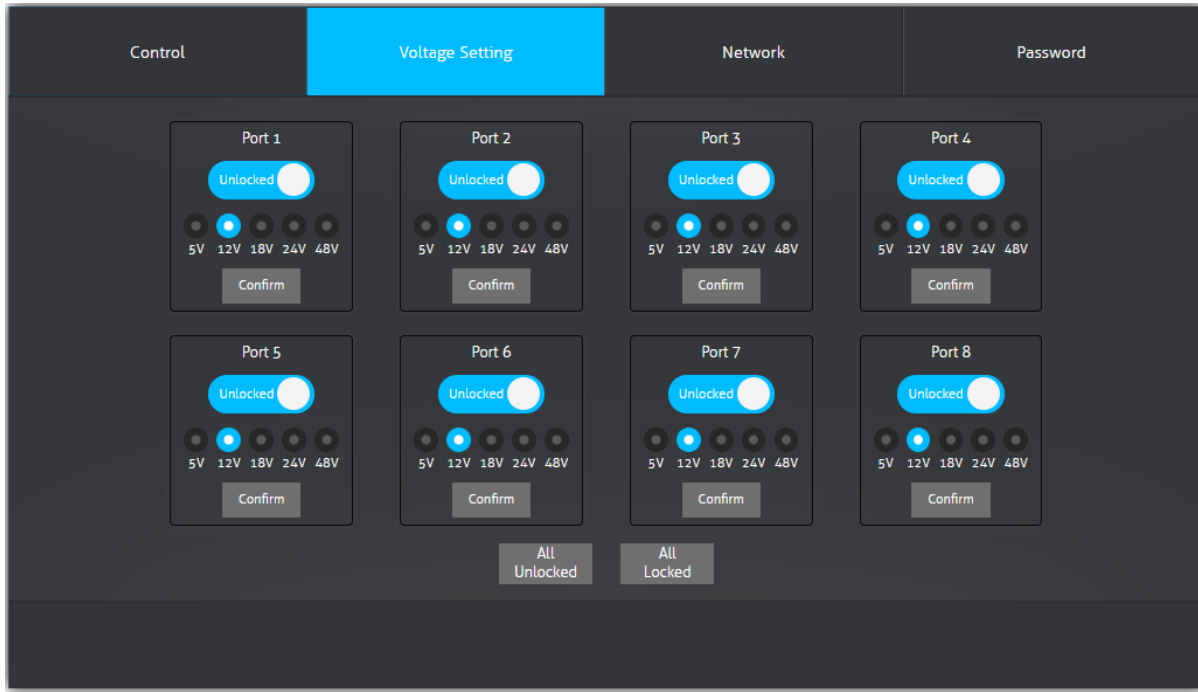
Click *On / Off* on the DC power port you would like to turn on or off. Click *All On* or *All Off* to turn ALL ports on or off.



### Port Voltage Settings

The *Voltage Settings* menu allows you to set the voltage for DC ports 1-8

Choose the applicable voltage setting for the DC port, then click *Confirm*



### Locking Ports

In the *Voltage Settings* menu you can lock or unlock the DC port voltage selection so the voltage cannot be changed accidentally. It is best practice to lock the voltage selection once an appropriate voltage has been selected for the DC power circuit.

Click the *Unlocked/Locked* button on a DC port to unlock or lock the current selected voltage selection.

## Network Settings

The *Network* menu allows you to set the network settings for the device.

Navigate to the *Network* menu, select either *DHCP* or *STATIC IP* as the desired IP mode. If choosing *DHCP*, make sure the DL-PSU8 is connected to a router / network switch with a DHCP server support. When choosing the *STATIC IP* option, manually enter in the desired *IP ADDRESS*, *SUBNET MASK* and *GATEWAY* information, then click *CONFIRM* for changes to take place. Depending on the newly given IP address range you may need to adjust your computers IP address settings to log back into the web GUI for the DL-PSU8

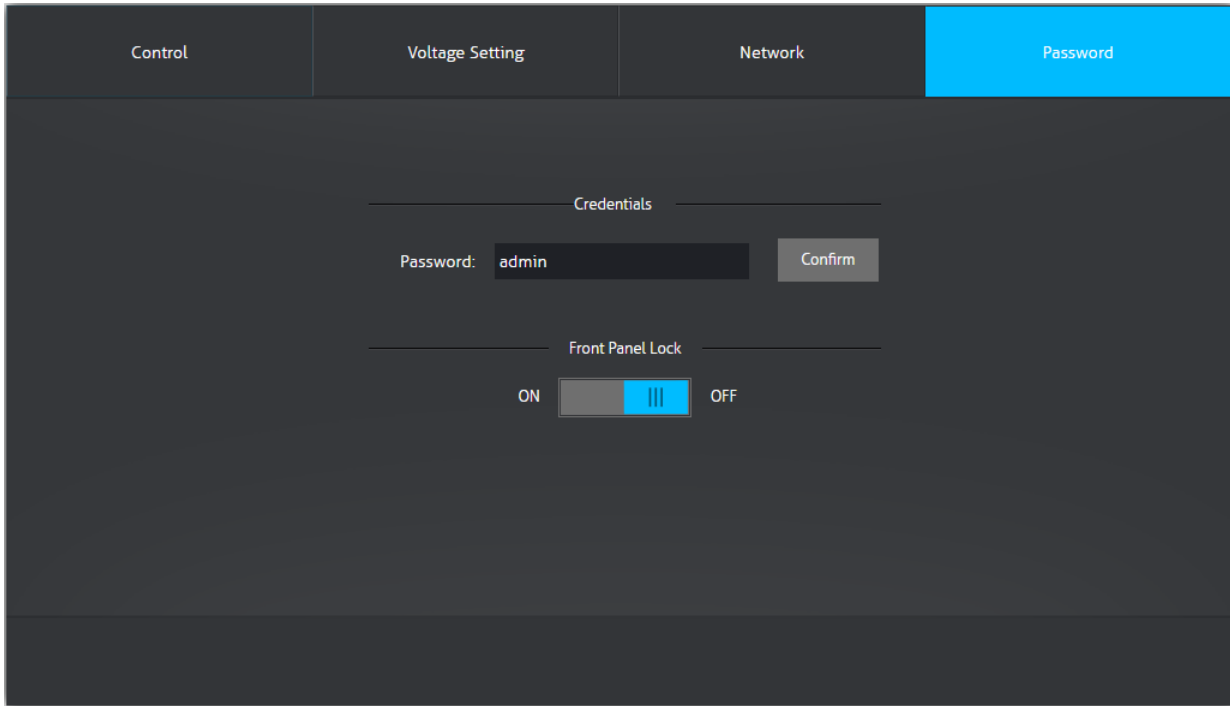
The screenshot shows the Network Settings interface with the following details:

- Control: Voltage Setting, **Network**, Password
- MAC Address: CC-8C-DA-89-76-1D
- Mode: DHCP (selected), Static IP
- IP Address: 192.168.0.178
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.0.1
- Confirm button

### Security Settings

The *Password* menu allows you to reset the password

Navigate to the *PASSWORD* menu, enter in a user defined password in the password field, then click *CONFIRM*.



### Locking Front Panel Buttons

The *Password* menu above will also allow you to lock or unlock the ON and OFF front panels buttons so they won't be accidentally turned off physically by mistake.

Click the *Front Panel Cock ON/OFF* button to lock the front panel buttons.

# Control Commands

RS232 Settings: 9600 baud, 8 Data bits, 1 Stop bit, Parity = None

Telnet Settings: User defined IP address (default IP address:192.168.0.178), port 4001

The commands are in ASCII format and are case sensitive

## DC Channel / Port Control

Description	Command	Examples
Set a specific DC port OPEN (on)	>SetChannelOpen:{#}  {#} = 1-8	Command: >SetChannelOpen:1  Response: <01 Open.
Set a specific DC port CLOSED (off)	>SetChannelClosed:{#}  {#} = 1-8	Command: >SetChannelClosed:1  Response: <01 Closed.
Set all DC ports OPEN (on)	>SetChannelAllOpen	Command: >SetChannelAllOpen  Response: <All Open.
Set all DC ports CLOSED (off)	>SetChannelAllClosed	Command: >SetChannelAllClosed  Response: <All Closed.
Set voltage selection on a port	>SetOutput:{v}V{c}  {v} = 5, 12, 18, 24, 48 {c} = 1-8 (when left empty the command will set voltage for ALL channels)	Command: >SetOutput:5V1  Response: <01 Output 5V.
Query open / closed status for ports	>GetStatus:{#}  [#] = 1-8 (when left empty the command will query status for ALL channels)	Command: >GetStatus:1  Response: <01 Open.
Rebooting ports	>SetReboot:{#}  {#} = 1-8 (when left empty the command will reboot ALL channels)	Command: >SetReboot:  Response: <01 Closed. <01 Open.

**Voltage locking, Front panel control**

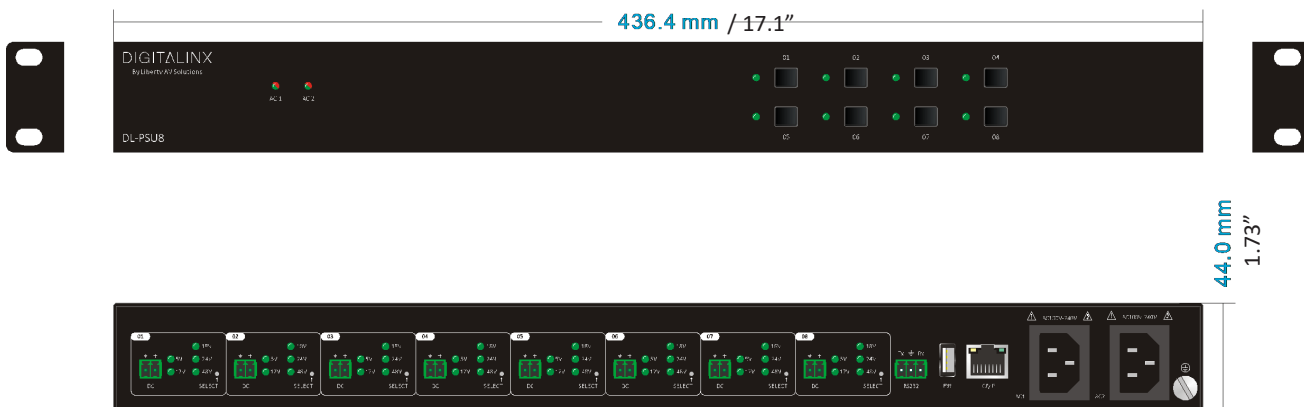
Description	Command	Examples
Locks voltage selection on a port	>SetLock:{#}  {#} = 1-8 = 1-8 (when left empty the command will lock ALL channels)	Command: >SetLock:1  Response: <Locking 01 channel.
Unlocks voltage selection on a port	>SetUnlock:{#}  {#} = 1-8 = 1-8 (when left empty the command will unlock ALL channels)	Command: >SetUnlock:1  Response: <UnLocking 01 channel.
Locks front panel button control	>SetLockKeyboard:{L}  {L} = 0 (unlock) 1 (lock)	Command: >SetLockKeyboard:1  Response: <Locking keyboard.
Query status of front button lock	>GetKeyLockSta	Command: >GetKeyLockSta  Response: <Keyboard is locked.

## System Commands

Description	Command	Examples
Query status of all channels	>GetSta	<p>Command: &gt;GetSta</p> <p>Response: Out 01 02 03 04 05 06 07 08 State 0 S S S S S S S S Vm 12 12 12 12 12 12 12 12 Over N N N N N N N N</p> <p>Out: out channel State: 0-Open, S-Shut Vm: voltage Over: overload N-NO Y-Yes</p>
Query firmware version	>GetVersion	<p>Command: &gt;GetVersion</p> <p>Response: &lt;V1.0.1</p>
Query IP address	>GetIP	<p>Command: &gt;GetVersion</p> <p>Response: &lt;IP 192.168.0.178</p>
Factory Reset	>SetFactorySettings	<p>Command: &gt;SetFactorySettings</p> <p>Response: &lt;Baud= 9600 Please make changes. &lt;Factory Default 12V (default), and all channels are closed.</p>

# Technical Specifications

<b>Input/Output Connections</b>	
Inputs	Two (2) IEC 320 C13/C14 Male
Input Voltage	100~240VAC 50~60Hz
Outputs	Eight (8) 2-Pin terminal block
Output Voltage	5V, 12V, 18V, 24V or 48V; selectable.
Maximum output power consumption of signal channel	5V:12W 12/18/24/48V:15W
<b>Control</b>	
Ethernet	100BaseT
RS232 Baud Rate	9600bps
<b>Chassis and Environmental</b>	
Enclosure	Painted Aluminum
Dimensions (H x W x D)	44mm x 435mm x 357mm / 1.7" x 17.2" x 14"
Shipping Weight	5.2Kg / 11.5lb
Operating Temperature	0° to +50° C (+32° to +122° F)
Operating Humidity	10% to 90%, Non-condensing
Storage Temperature	-20° to +70° C (-4° to +140° F)
Storage Humidity	10% to 90%, Non-condensing
<b>Power, ESD, and Regulatory</b>	
Power Supply	100V-240VAC / 50-60 Hz
Power Consumption	178W (Max.)
Total DC Output Current	19.2A
Total DC Output Power	120W (Fully Loaded)
ESD Protection	8kV air, 4kV contact
Product Regulatory	FCC, CE, RoHS, UL
<b>Other</b>	
Standard Warranty	5 years
Included Accessories	(1) Quick Install Guide (8) DC Power Cables (2-pin Terminal Block to DC) (1) RS232 Cable (DB9 to 3-pin Terminal Block) (2 each) US, UK, EU and AU Power Adapters (2) Rack Mounting Brackets (4) Plastic Cushions





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