

ENFORCER®

Rack-Mount DC CCTV Power Supplies


Manual



PH-U1612-PULQ shown



16 Outputs	32 Outputs
PH-U1612-PULQ*	PH-U3212-PULQ*
PH-U1612-PTQ	PH-U1612-PTQ

* UL approved models and includes power cable with NEMA 5—15 plug connector. 

- 16 or 32 Outputs
- 12 Amps at 12VDC
- 3 Amps per output
- 12.6~13.5 VDC field-adjustable output
- Compact 1U size
- Easy cable management
- Bi-color LED status indicator
- For rack mounting, wall mounting, and stacking

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Introduction:

ENFORCER Rack-Mount DC CCTV Power Supplies fit into standard 19" IT racks to integrate smoothly into an existing rack-mount setup. The units provide flexible power, mounting, and cable-management options to best suit a company's CCTV power needs in an attractive, compact package.

Features:

- Compact 1U height fits into standard 19" equipment racks
 - Field-adjustable power output – 12.6~13.5VDC
 - Dual-color LED status indicator for each output:

Blue	Red
Normal	Fuse tripped
 - Outputs protected by PTC fuses rated at 3A each
 - Flexible mounting options:
 - a. Rack mount: Mount facing forward (easy access to indicator LEDs) or backward (easy access to connections)
 - b. Wall mount: Brackets face down for easy attachment on walls, under tables, etc.
 - c. Desk & Shelf mounting: Units can be stacked together or with other equipment
 - Flexible cable management options:
 - a. 2 Cable-management brackets with 3 different mounting points
 - b. 2 Cable-management hooks with 3 different mounting points
 - Removable screw terminal blocks for convenient installation and reliable connections
 - Available with either 16 or 32 outputs
 - Attractive, high-tech industrial design
-

Parts List:

1x Rack-mount DC CCTV power supply	2x Mounting brackets for rack, wall, and surface mounting
2x Cable-management brackets	1x Spare main fuse (Mounted inside unit, see page 6)
2x Cable-management hooks	1x Manual
4x Rubber feet	
1x Power cord	
4x M3x6 Cable-bracket screws	

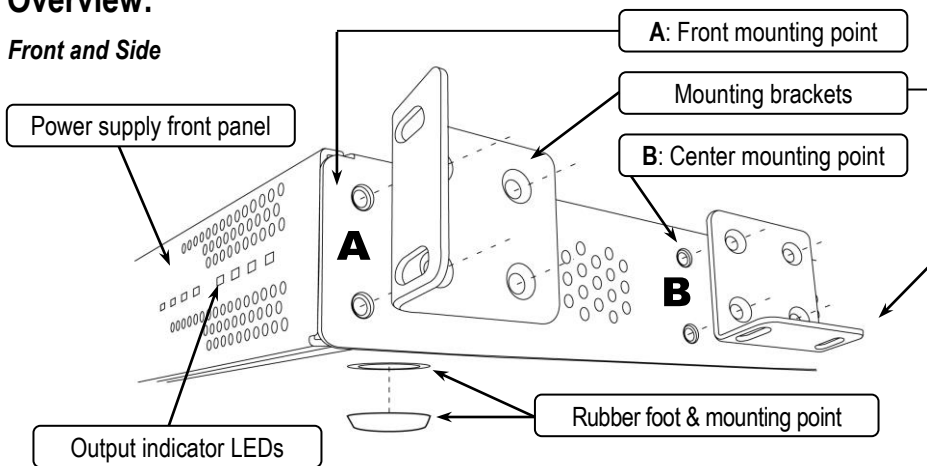
Specifications:

	PH-U1612-PULQ PH-U1612-PTQ	PH-U3212-PULQ PH-U3212-PTQ
Fuse type	PTC*	PTC*
Input voltage	100~240 VAC	
Number of outputs	16	32
Total supply current	12A@12VDC max.	
Max. current per output	3Amp	
Adjustable voltage output	12.6~13.5 VDC	
Rack-mount height	1U	
Dimensions	1 ³ / ₄ "x17 ¹ / ₂ "x11 ¹³ / ₃₂ " (45x445x289 mm)	
Weight	7-lb 14-oz (3.56kg)	9-lb (4.10kg)

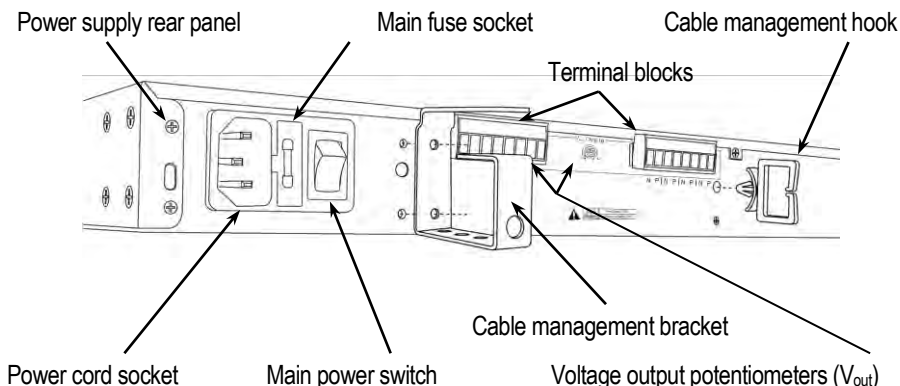
*Positive Temperature Coefficient

Overview:

Front and Side



Rear



Installation Notes:

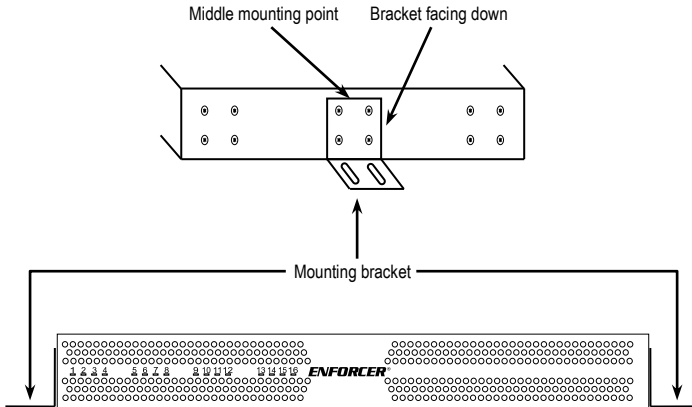
1. **Double-check DC output voltage before connecting cameras.**
 2. **FOR INDOOR USE ONLY.** Do not install the unit outdoors or expose it to rain or moisture.
 3. For professional installation and use only. Installation must conform to all local codes.
 4. Avoid installing the unit near heat-generating or heat-sensitive equipment.
 5. To prevent shock, do not open the housing. There are no user-serviceable parts inside.
-

Mounting:

1. Decide on a location to install the unit, away from moisture, high humidity, heat sources, etc.
2. Make sure there is enough space around the unit so air can flow in and out for cooling purposes.
3. Be sure ventilation holes are not blocked by other equipment, rack housing, walls, etc.
4. To avoid undesirable operation in either the product or other equipment place the unit at least 12" (30cm) from any television monitor or other radiation-producing, radiation-sensitive, or heat-producing equipment such as heaters, radiators, etc.

Shelf/table mounting

1. Units may be stacked one on top of the other, or with other equipment.
2. Make sure the rubber feet are firmly attached to the bottom of the unit and that no ventilation holes are blocked. (See *Overview*, pg. 3)



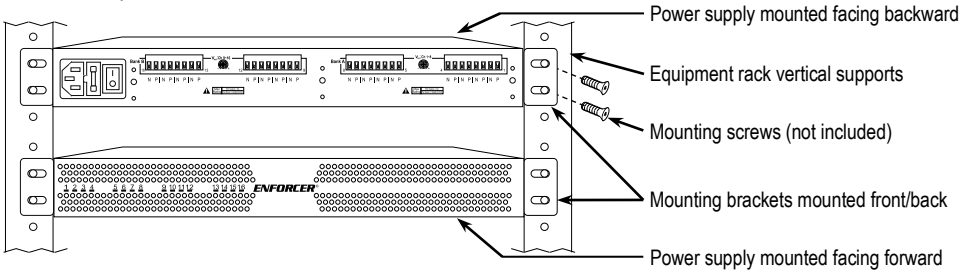
Wall mounting

1. Remove the mounting screws from the middle mounting points on the left and right sides of the chassis.
 2. Screw the left and right mounting brackets on, facing downward.
 3. Make sure no ventilation holes are blocked when the unit is in place.
 4. Use screws or bolts (not included) to mount the unit in the desired location.
- Note:** Make sure that the screws/bolts and mounting surface can support the weight of the unit.
-

Rack mounting

1. Forward-facing installation (for easy view of LED indicators):
 - a. Remove the mounting screws from the mounting points at the front of the unit.
 - b. Screw the mounting brackets onto the front of the unit.
2. Backward-facing installation (for easy access to terminal blocks and ON/OFF switch):
 - a. Remove the mounting screws from the mounting points at the back of the unit.
 - b. Screw the mounting brackets onto the back of the unit.
3. Find an unused 1U space in the equipment rack and screw the unit in place.
4. Leave at least 0.5U **above and below** the unit for ventilation.

Note: No rear support rails are needed. The unit can be fully supported using the mounting brackets provided.



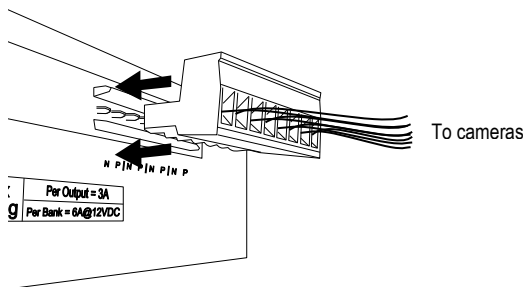
Wiring:

1. Unplug terminal blocks from their sockets for easy installation.
2. Connect equipment power input cables to the screw terminals side by side in N/P pairs.
3. Screw the terminals closed. Once done, reinsert the terminal blocks back into their slots.
4. Adjust channel voltage for each bank of terminal blocks using the voltage output potentiometers (V_{out}) for each bank.

Note: Group cameras with similar power-cable lengths on the same terminal block bank and adjust the voltage output potentiometers (V_{out}) to compensate for voltage drops. Test voltage after changing settings.

5. Connect the unit's power cord to a 120V outlet and switch on the unit.
6. Front-panel LEDs should glow blue to show output is on.
7. Test the output **at the camera end** of each power cable to be sure voltage is correct.

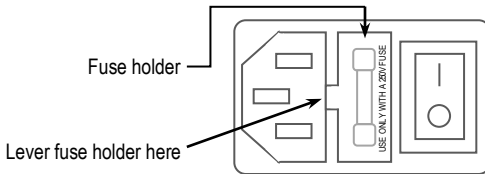
Caution: Always test output voltage before connecting cameras or other equipment.



Replacing the Main Fuse:

Caution: Replace only with same fuse type and rating.

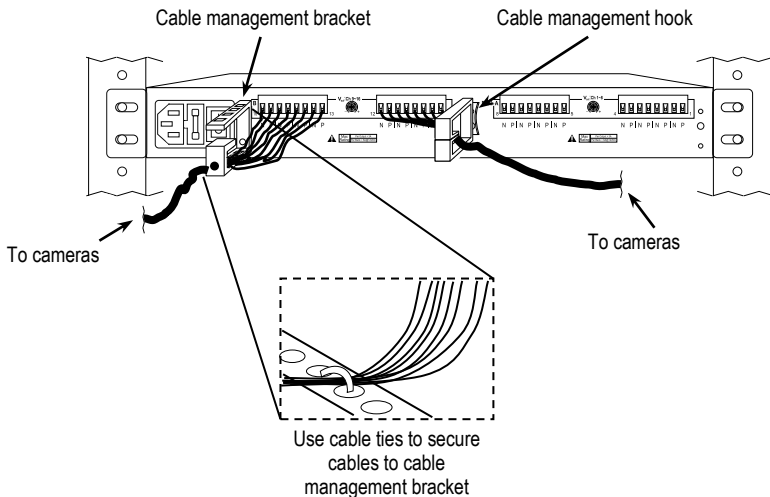
1. Find the main fuse at the back of the unit, between the power cord socket and the ON/OFF switch.
2. To check or replace the fuse, first power down the unit and disconnect the power cord.
3. Use a flat-head screwdriver to gently lever the fuse holder out at the place indicated in the diagram below. Be careful not to damage the soft plastic fuse holder with the screwdriver.



Cable Management:

1. There are two cable management options included with the product:
 - a. Cable-management brackets (x2). Screw the brackets onto any of the three mounting points on the rear of the unit with the included M3x6 screws. Mount the brackets with the open end at the top.
 - b. Cable-management hooks (x2). Press the white plastic hooks into any of the three mounting holes on the rear.

Note: Cable-management hooks, once inserted, cannot be removed.
2. Mount the brackets and route power cables in a way that best suits the installation. Be sure to leave slack in the cable to ease future maintenance. Use cable ties to reduce cable tension.



Camera Control Chart:

Use the chart provided below to keep track of which cameras are connected to which channels.

Channel	Camera Model and Description
0	SAMPLE – EV-122C-DVB3Q / Gray Vandal Rollerball Camera, 3.6mm, 480TVL
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Troubleshooting:

Power does not turn on	<ul style="list-style-type: none">• Check front panel LEDs and rear main fuse.• Ensure the power cord is firmly in its socket.
Power cycles on and off	<ul style="list-style-type: none">• The unit may be overheating. Check for heat sources nearby and ensure ventilation holes are free from obstruction.
Voltage drop is large	<ul style="list-style-type: none">• Use 18 gauge or thicker wire.
The camera case is hot	<ul style="list-style-type: none">• Check that the correct power is being supplied.

Also Available from SECO-LARM:

16-Channel Passive Video Transceiver



EB-P116-01Q
Cut cost and complexity by sending CCTV signals over Cat5e/6 cables up to 1,950ft (600m).

12V/24DC Tester with Continuity



ST-BT03Q
Perform 6 different tests including voltage drop, voltage with load, polarity, and continuity.

Passive Video Balun with Power or Data Pass-Through



EB-P501-02Q
Transmit video, power, and data signals over a single Cat5e/6 cable up to 1,950ft (600m).

12VDC Switching CCTV Power Supplies



PS-U Series
Available with 4, 9, 18, and 36 fused outputs. 6Amp or 12Amp supply current. UL Listed.



CAUTION: To reduce the risk of electric shock, do not open the product case. There are no user serviceable parts inside. Refer servicing to qualified service personnel.

WARRANTY: This SECO-LARM product is warranted against defects in material and workmanship while used in normal service for a period of one (1) year from the date of sale to the original consumer customer. SECO-LARM's obligation is limited to the repair or replacement of any defective part if the unit is returned, transportation prepaid, to SECO-LARM. This Warranty is void if damage is caused by or attributed to acts of God, physical or electrical misuse or abuse, neglect, repair, or alteration, improper or abnormal usage, or faulty installation, or if for any other reason SECO-LARM determines that such equipment is not operating properly as a result of causes other than defects in material and workmanship. The sole obligation of SECO-LARM, and the purchaser's exclusive remedy, shall be limited to replacement or repair only, at SECO-LARM's option. In no event shall SECO-LARM be liable for any special, collateral, incidental, or consequential personal or property damages of any kind to the purchaser or anyone else.

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