

PORSH Power Supply & Charger

INSTALLATION INSTRUCTIONS

Item: 4728_26 (A5DS)

Description

The PORSH is an advanced 12V DC, 16 channels central Power Supply with optional battery charger. PORSH provides central power for DVR and CCTV cameras, alarm systems, access control and similar large installations with devices that operate on 12V DC.

PORSH_CH model (DC UPS) supplied with battery monitor and charger module. The PORSH_CH protects the battery, not allows totally discharged, overcharge and wrong polarity wiring. The PORSH is enclosed in ABS box, metal box is optional.

Ordering: PORSH power supply in ABS box, PORSH_MWL (with Mean Well PS Australian version) without charger, PORSH_CH with add-on charger module, PORSH_MCH power supply Australian version with charger.

Installation Instructions

- Attention! High voltage is supplied; **disconnect main AC prior to service**
- The PORSH supply maximum 12.5A in total. Output 1 is for DVR 2.8A
- The Switching Power Supply metal case is **HOT** under full load, don't cover!
- Install the box to wall with ventilation slot upwards! Do not lay the box!



Step One: Locating and Mounting

In some models: Remove the White absorber sheet before wiring and power up.

Locate the power supply in a ventilated and dry place, in hot location add local ventilator.

Locate nearby socket for the main AC power. Always ground the PORSH by connecting the main ground wire to the terminal marked as EARTH at the PORSH AC main input (refer to figure 1).

Step Two: Wiring Main AC Refer to figure 1

The PORSH operates on 115V or 240V AC. The factory setting is for 240V. For 115V mode set the internal selector on the switching power supply and switch to 115V.

Connect the ground first (refer to figure 1) "N" and "L" wires to the two "AC Main" terminals. The switching power supply is factory interfaced to the PORSH main board.

Step Three: Wiring DVR and Cameras

Each channel output has +V and -V, the -V (negative) is common to all outputs.

Output 1 is compatible with DVR (or camera) that powered by 12 volts, maximum 3A. Channels (outputs) 2 to 16 are for cameras powered by 12V maximum current consumption of 2A.

Power-up without battery, before wiring DVR and/or CCTV cameras, and battery connection, verify that all output channels Green LEDs are on.

Wire-up the loads (DVR, cameras) in the correct polarity; Positive to the +V and Negative to the -V terminals, power up and verify the Green LED is on, make sure the powered items well operate.

Note 1: The PORSH is factory adjusted at approximately 13V (supply 12A) to allow the 12V long wiring, for higher current lower the output voltage to 12V get higher current (12.5A). To lower the voltage: Apply a voltmeter and gently tune the trimmer (located on the metal main power supply). Connect the Battery Red wire to + (Positive) battery terminal and the Black wire to the - (Negative) battery terminal.

The PORSH_CH is compatible with SLA type rechargeable battery, voltage is set to 13.6V. Use only 12V, 7 to 9 A/H Battery, it's not allowed to use larger A/H capacity battery.

The PORSH_MWL and PORSH_MCH includes automatic power down circuitry that power off automatically at high temperature. If the auto shut down activated power down (remove AC and battery) wait 3 minutes before power up. Make sure the Porsh installed at well ventilated location.

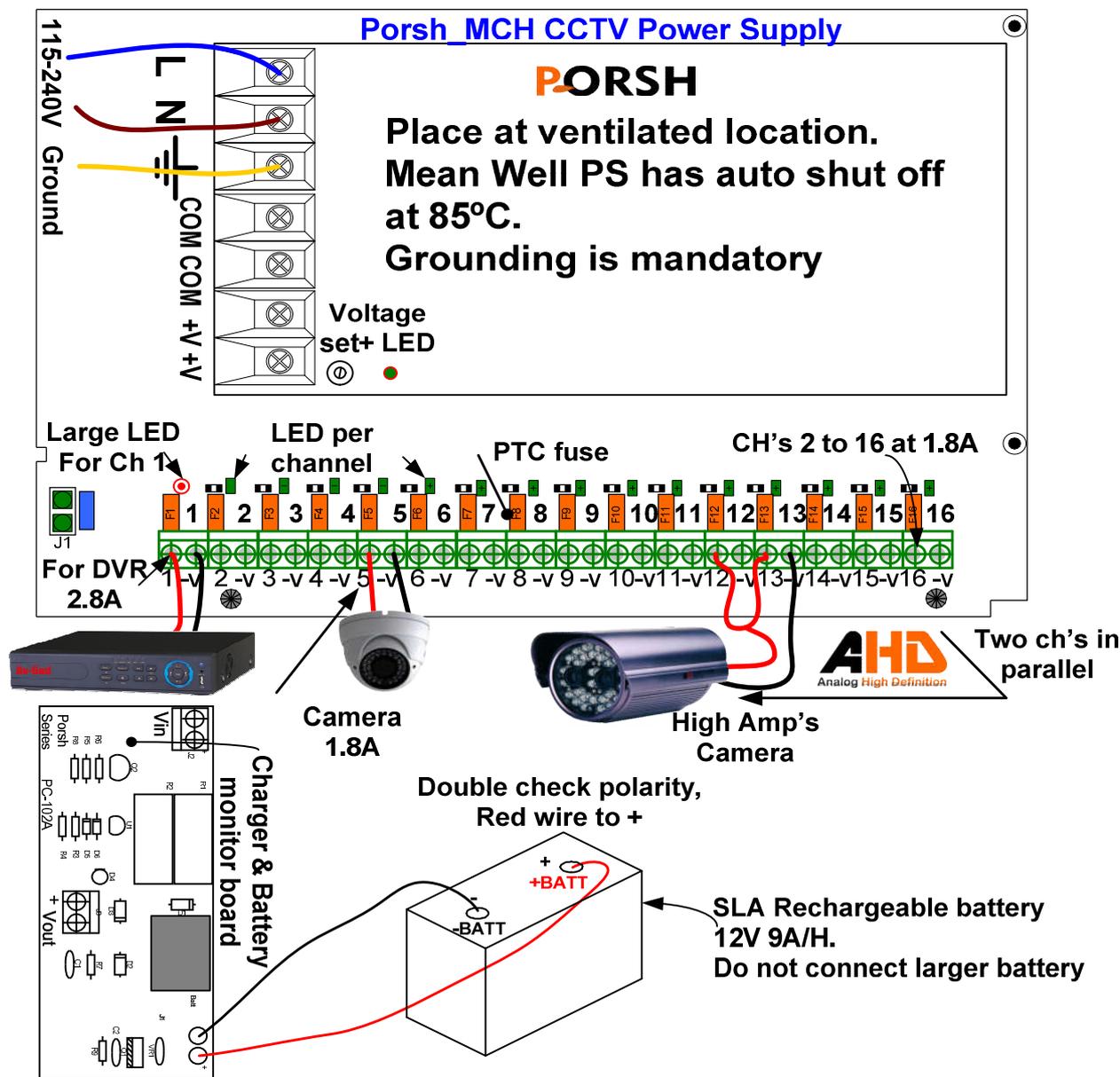


Figure 1: PORSH wiring diagram – Disconnect main power at service

Step 4: Testing

The PORSH 16 outputs are electronically protected by a solid-state fuse and over current circuitry build-in the regulator. In case of failure touch the fuse body (Yellow color) for over heating. Hot electronic fuse means over loading. Disconnect the channel's camera or DVR and find the overloading item, most caused by wires short or faulty camera/DVR.

In case one or few channels are overloaded the fuse disconnect them automatically, but the overloaded channels consumes the limited current, disconnect them to prevent over heating of the whole power supply.

If IR cameras used test at low light or cause the IR LEDs to be active, in order to simulate maximum current consumption.

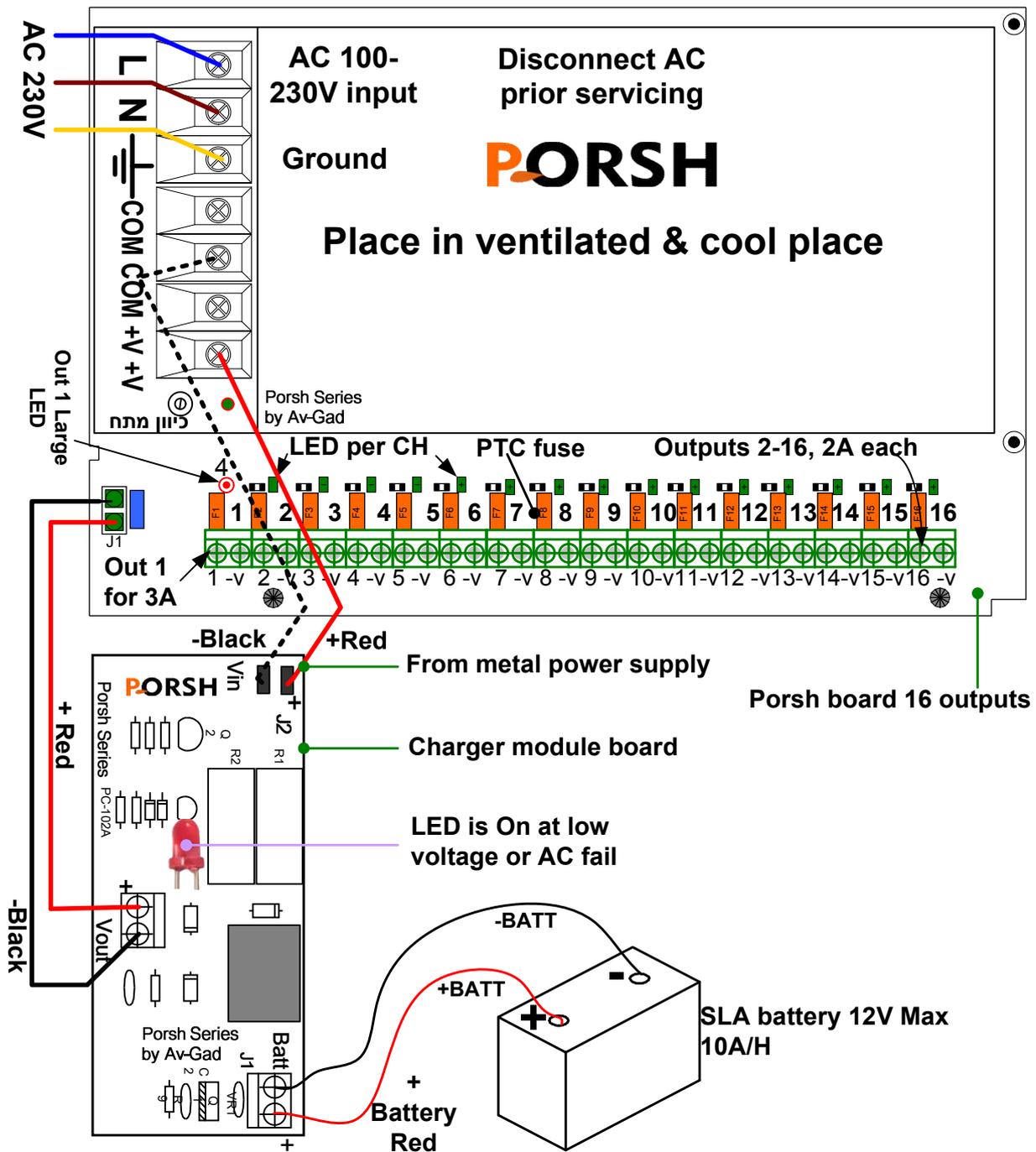


Figure 2: PORSH charger module wiring diagram

PORSH Specifications		
Operating Temp: -10 to +60 C°	Overload protection cut at 14A	Fail Indicator: Red LED Optional
Humidity: 80%	DC Output: 12.5V DC, +/- 8%	Fail output: Transistor output 50mA
AC Input: 240V or 115V AC	Max. DC Current per channel: 1.8A	Power Indicators: Green SMT LED
AC Input: Barrier wire terminals	Max. DC Current DVR channel: 2.8A	Power Indicator DVR: Green LED
AC Fuse: Build-In main P. Supply	Channel Protection: Elec fuse 16 pc's	DC Wiring: Screws Terminals
Power supply: Switching 150W	Polarity Protection: Electronic	Metal box: 235 x 312 x 60 (mm)
Ripple at 1A load: 30 mV, P-P	High Temp. Protection: at 85°C	ABS Box: 230 x 310 x 60 (mm)

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