

AV-41 Power Supply & Charger

INSTALLATION INSTRUCTIONS

Item: 4728_41 (A5DS)

Description

The AV-41 is a 12V DC, DVR/CCTV, access control and alarm 8 channels Power Supply and Charger with battery monitor, provides the extra power for CCTV cameras, alarm, access control and other large installations with devices that operate on 12V DC. AV-41 is including Battery Monitor and Charger. The AV-41 protects the battery from damage, not allows totally discharged, overcharge and wrong polarity wiring. The AV-41 is enclosed in ABS box, metal box is optional.

Installation Instructions

- Attention! High voltage is supplied; **disconnect main AC prior to service**
- The AV-41 supply maximum 6A in total. Output +V & -V is for DVR
- 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!

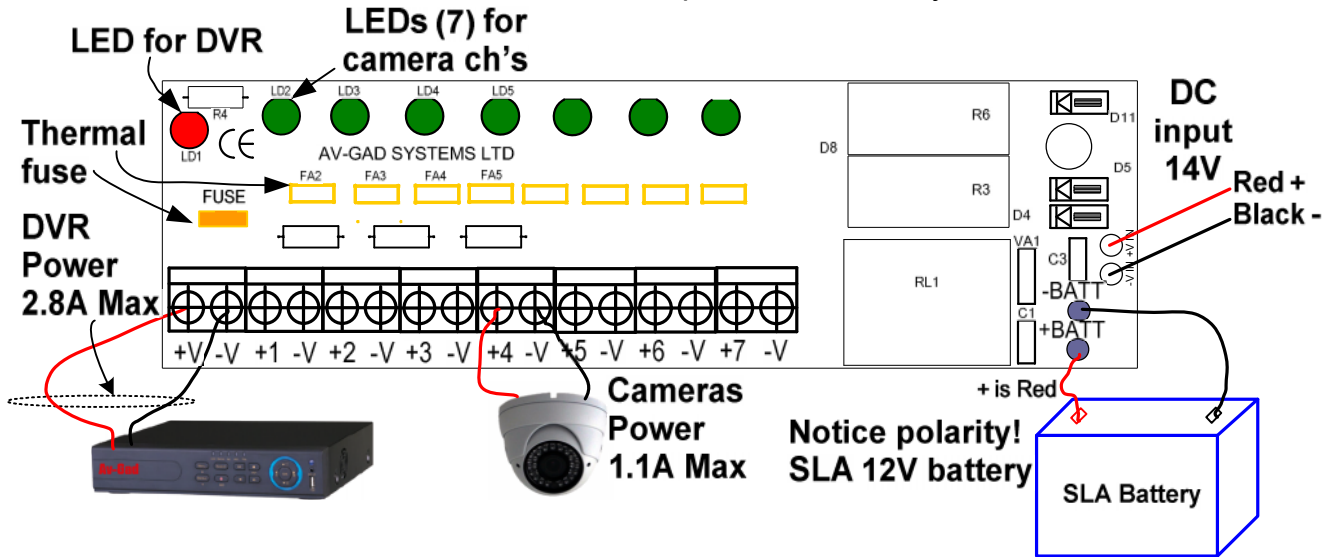


Figure 1: AV-41 wiring diagram – Disconnect main power at service

Step One: Mounting – Consider high voltage

Locate the power supply box in a ventilated and dry place, with nearby socket for the main AC power. Always ground the AV-41 by connecting the main ground wire to the terminal marked as EARTH at the AV-41 AC main input (refer to figure 2). Disconnect AC main power prior to service and wiring.

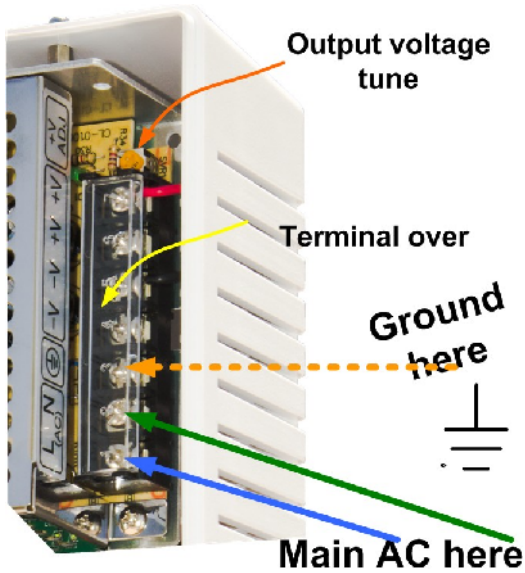


Step Two: Wiring Main AC Refer to figure 2

The AV-41 operates on 115V or 220V AC. The factory setting is for 220V. 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 AV-41 main board.

Figure 2: AV-41 Main AC wiring



Step Three: Wiring DVR and Cameras

Only output 1 is compatible with DVR that powered by 12 volts, maximum 2.8A, or camera. Outputs numbered 1 to 7 are for cameras powered by 12V maximum 1.1A.

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

Power-down the AV-41 by the removing AC main 220V wires (right side). The Green LED per channel indicated Power status. If one power channel fails the others keep on powering.

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 LEDs are on, make sure the powered items well operate.

Note 1: The AV-41 is factory adjusted at approximately 14 V (supply 6A) to allow the 12V long wiring, for higher current lower the output voltage to 12.8V get higher current. 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 AV-41 is compatible with SLA type rechargeable battery. Use 12V 7 to 9 A/H battery.

The AV-41 loads are electronically protected by a solid-state fuse and over current circuitry build-in the regulator. In case of failure touch the fuse enclosure (Yellow color) for over heating. Hot electronic fuse means over loading. Disconnect the channel's Jumper 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.

EasyLoader applications& Electronic Fuse

When connecting the AV-41 to EasyLoader control panel (fail output activate the dialer, or other alerts), connect the -V (common minus) from AV-41 and the -V of the control panel.

| AV-41 Specifications | | |
|----------------------------------|--------------------------------------|-------------------------------------|
| Operating Temp: -10 to +60 C° | Overload protection cut at 8A | Fail Indicator: Red LED Optional |
| Humidity: 80% | DC Output: 12.5V DC, +/- 8% | Fail output: Transistor output 50mA |
| AC Input: 220V or 115V AC | Max. DC Current per channel: 1.1A | 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 5 pc's | DC Wiring: Screws Terminals |
| Power supply: Switching 75W | Polarity Protection: Electronic | Metal box: 235 x 312 x 60 (mm) |
| Ripple at 1A load: 30 mV, P-P | Main switch: Toggle on PCB | ABS Box: 230 x 310 x 60 (mm) |

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