



SMP10 Power Supply/Charger

Overview:

Altronix SMP10 power supply/charger converts low voltage AC input into 12VDC or 24VDC @ 10A of continuous supply current (refer to specifications). This general purpose power supply has a wide range of applications for access control, security and CCTV system accessories that require additional power (Voltage Output/Transformer Selection Table).

Specifications:

Input:

- Input 24/28VAC.
(Voltage Output/Transformer Selection Table).

Output:

- 12VDC or 24VDC selectable output.
- 10A supply current.*
- Filtered and electronically regulated outputs.
- Short circuit and thermal overload protection.

Battery Backup:

- Built-in charger for sealed lead acid or gel type batteries.

Battery Backup (cont'd):

- Maximum charge current 0.7A.
- Zero voltage drop when switching over to battery backup.

Indicators:

- AC input and DC output LED indicators.

Board Dimensions (W x L x H approximate):

7" x 4.25" x 1.25" (177.8mm x 107.9mm x 31.8mm).

* Specified at 25°C ambient.

Voltage Output/Transformer Selection Table:

Voltage	Switch Position	Transformer
12VDC @ 10A	ON	24VAC or 28VAC / 175VA (Altronix model T2428175)
24VDC @ 6A	OFF	28VAC / 175VA (Altronix model T2428175)
24VDC @ 10A	OFF	28VAC / 300VA (Altronix model T2428300)

Installation Instructions:

SMP10 should be installed in accordance with The National Electrical Code and all applicable Local Regulations.

1. Mount SMP10 in the desired location/enclosure (mounting hardware included).
2. Connect proper transformer to the terminals marked [AC] (Voltage Output/Transformer Selection Table).
Use 18 AWG or larger for all power connections (Battery, DC output).
3. Set the SMP10 to the desired DC output voltage by setting the switch to the appropriate positions (Fig. 1a, pg. 2) (Voltage Output/Transformer Selection Table).
Adjust output voltage by using the trimpot on the power supply board (Fig. 1a, pg. 2) prior to connecting devices.
Keep power-limited wiring separate from non power-limited wiring (115VAC, 50/60Hz Input, Battery Wires). Minimum 0.25" spacing must be provided.
CAUTION: Do not touch exposed metal parts. Shut branch circuit power before installing or servicing equipment. There are no user serviceable parts inside. Refer installation and servicing to qualified service personnel.
4. Measure output voltage before connecting devices. This helps avoiding potential damage.
5. Connect devices to be powered to the terminals marked [- DC +] (Fig. 1, pg. 2).
6. When the use of stand-by batteries is desired, they must be lead acid or gel type.
Connect battery to the terminals marked [- BAT +] (battery leads included).
Use two (2) 12VDC batteries connected in series for 24VDC operation.
7. When batteries are not used, a loss of AC will result in the loss of output voltage.

LED Diagnostics:

Red (DC)	Green (AC)	Power Supply Status
ON	ON	Normal operating condition.
ON	OFF	Loss of AC. Stand-by battery is supplying power.
OFF	ON	No DC output. Short circuit or thermal overload condition.
OFF	OFF	Loss of AC. Discharged or no stand-by battery. No DC output.

Fig. 1

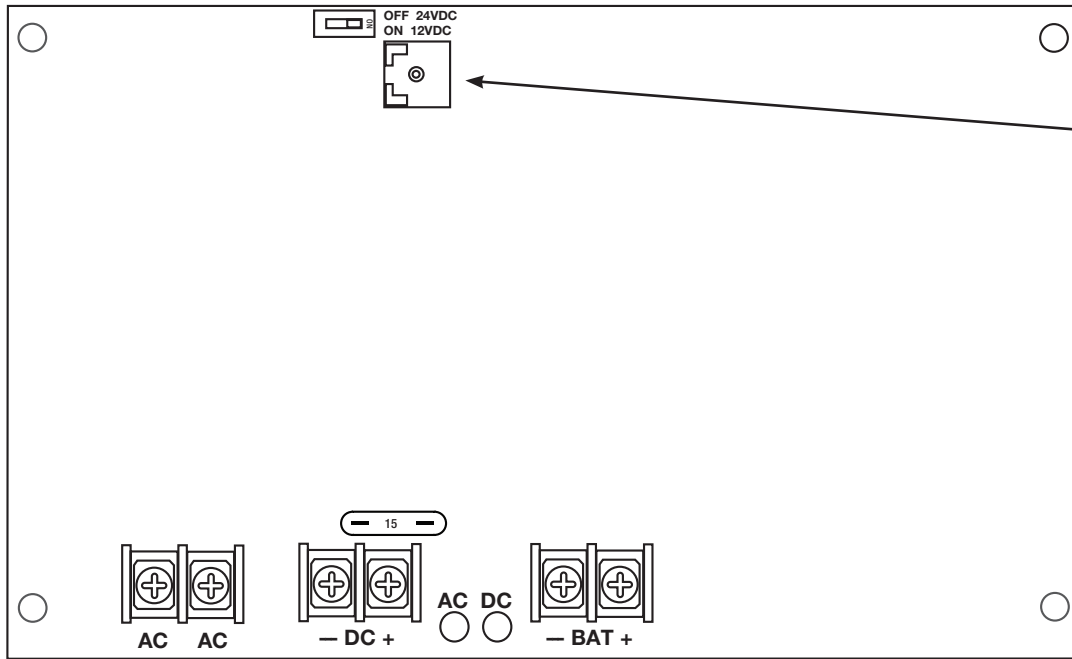
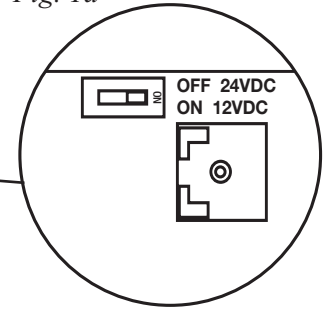


Fig. 1a



Terminal Identification:

Terminal	Function/Description
AC/AC	Low voltage AC input (<i>Voltage Output/Transformer Selection Table</i>). For 12VDC output use 28VAC or higher with 175VA power rating or higher. For 24VDC output use 28VAC with 175VA power rating or higher. Caution: Do not apply voltages above 28VAC (28VAC is maximum input rating).
- DC +	12VDC / 24VDC @ 10A continuous output.
- BAT +	Stand-by battery connections. Maximum charge rate 0.7A.