COMPLIANCE INFORMATION

UL Listed
C-UL Listed (Canada)
CISPR/EN55022 Class A

FCC Regulations

This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at the user's own expense.

Canadian Regulations

This digital apparatus does not exceed the Class A limits for radio noise for digital apparatus set out on the radio interference regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

European Regulations

Warning

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Achtung !

Dieses ist ein Gerät der Funkstörgrenzwertklasse A. In Wohnbereichen können bei Betrieb dieses Gerätes Rundfunkstörungen auftreten, in weichen Fällen der Benutzer für entsprechende Gegenmaßnahmen werantwortlich ist.

Attention !

Ceci est un produit de Classe A. Dans un environment domestique, ce produit risque de créer des interférences radioélectriques, il appartiendra alors à l'utilsateur de prende les measures spécifiques appropriées.

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TRANSITION networks

48 VDC-to-12 VDC

External Power Supply

SPS-48V

USER'S GUIDE

The TRANSITION Networks SPS-48V 48-to-12 VDC External Power Supply provides isolated 12 VDC output voltage from a 48 VDC external input voltage source to a media converter or similar devce.

INSTALLATION

NOTE: The TRANSITION Networks 48-to-12 VDC External Power Supply is shipped with four (4) attached feet.

1. For installation, place on any ***well-ventilated*** table-top or shelf with access to a 48 VDC power source.

2. Connect barrel connector attached to 12 VDC cord on External Power Supply to media converter or similar device

CAUTION: Ensure that 48 VDC power source is NOT powered when connecting power to the 48-to-12 External Power Supply. Failure to observe this caution could result in damage to, and subsequent failure of, the 48-to-12 External Power Supply and of any attached device.

3. Ensure that external power source is powered OFF.

Compliance	UL listed EN60950; FCC & CISPR class A; CE Mark	
Dimensions	5.6" x 3.3"" x 1.6""	
Power Distribution	+12VDC at 0.8 A maximum.	
Power Consumption	14 watts maximum	
Long Term Stability	0.1% for eight (8) hours (after 20 minutes warm-up)	
Efficiency	70 % (typical)	
Noise and Ripple	1% peak-to-peak of output voltage (typical)	
MTBF	Greater than 60,000 hours with typical load operating at 20°C ambient temperature (calculated according to MIL-HDBK-217E)	
Environment	Typical Operating Temperature*:	0-50°C (32° to 122° F)
	Storage Temperature:	-20 to 85°C
	Humidity:	10-90%, non condensing
	Altitude:	0-10,000 feet
Warranty	Lifetime	

*At operating temperature range 50°C-70°C, operates linearly to 50% of full rating.

TRANSITION networks

DECLARATION OF CONFORMITY

Name of Mfg: **Transition Networks**
6475 City West Parkway, Minneapolis MN 55344 USA

Model: **SPS-48V External Power Supply**

Part Number: **SPS-48V**

Regulation: **EMC Directive 89/336/EEC**

Purpose: To declare that the ***SPS-48V*** to which this declaration refers is in conformity with the following standards.

EMC-CISPR 22: 1985 Class A; EN 55022: 1988 Class A; EN 50082-1:1992; EN 60950 A4:1997; IEC 801.2, IEC 801.3, and IEC 801.4; IEC 950

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s).

Stephen Anderson, Vice-President of Engineering

May 8, 2001
Date

TECHNICAL SPECIFICATIONS

Input

Input Voltage	48 VDC	
Inrush Current	0.20 A (peak cold start)	
Hold-Up Time	20 msec minimum at full load and nominal input voltage	
Isolation Voltage	(Dielectric withstand) Meets IEC 960 for one minute.	
	1,500 VAC:	Output/Input
	500 VAC:	Input/Safety GND
	500 VAC:	Output/Safety GND

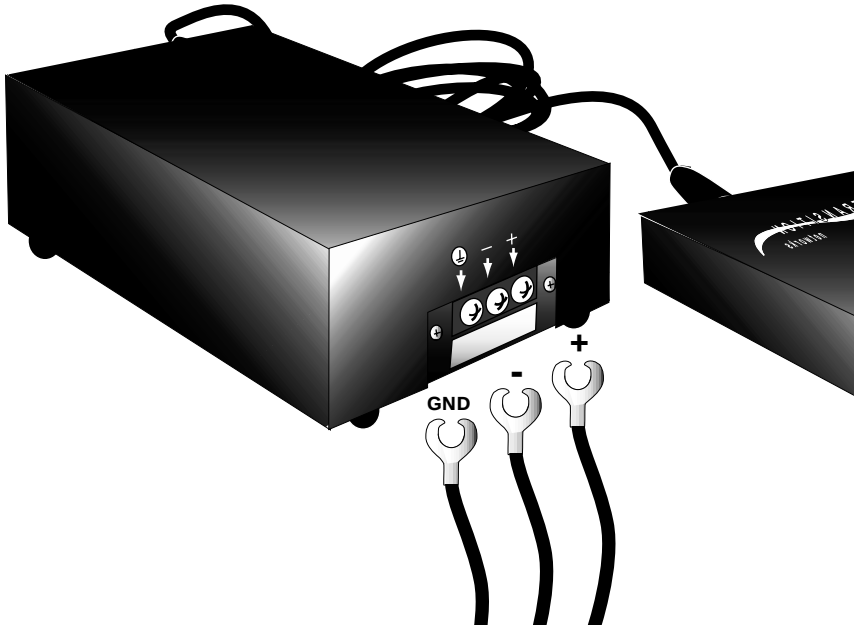
Output

Output Voltage	12 VDC
Output Current	0.8 A
Line Regulation	±0.5 % of all output within specified range
Load Regulation	±1.0 % at 20 % load to full-rated load
Cross Regulation	±1.0 % maximum on any output change from 50 % to 100 % rated load
Transient Response	Output voltage returns in less than 3 msec following a 50 % load change
Over Load Protection	(OLP) When the average power rating exceeds 125%-150% of maximum power, output voltages reduced to a safe dissipation level; protects against short circuit of any output.
Over Voltage Protection	(OVP) 124 % ±8 % on output.
Over Circuit Protection	Withstands a continous short without damage; returns automatically to regulation upon removal of short.
No Load Operation	No damage to power supply when operating at no load.
Overshoot Protection	No voltage spike at power-on, power-off, or power failure.

4. Connect +48-VDC terminal to 48-to-12 VDC External Power Supply terminal block control marked “+”. Turn terminal screw clockwise to secure.

5. Connect -48-VDC terminal to 48-to-12 VDC External Power Supply terminal block control marked “-”. Turn terminal screw clockwise to secure.

6. Connect ground terminal to 48-to-12 VDC External Power Supply terminal block control marked “chassis ground”. Turn terminal screw clockwise to secure.



7. Ensure that external power source is powered ON.

MAINTENANCE

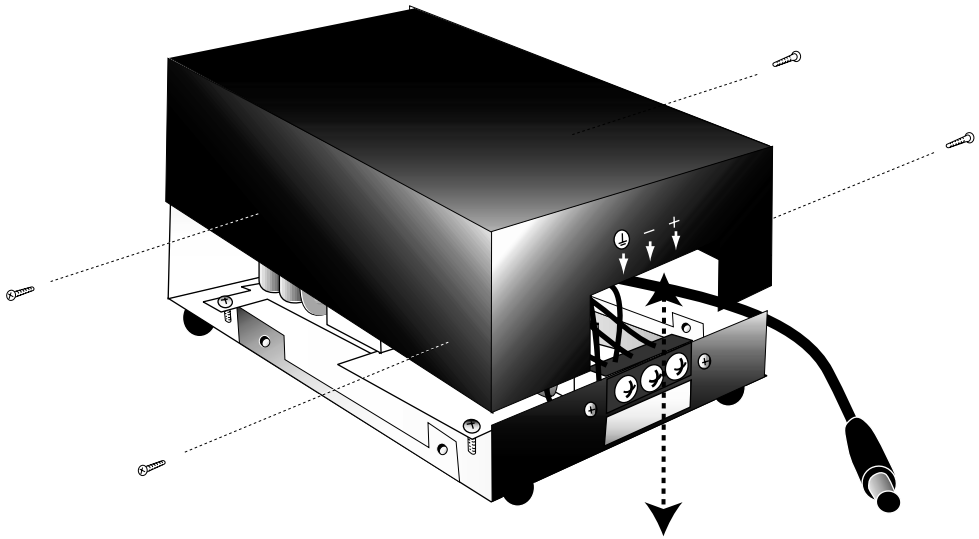
Replacing Power Supply Module Fuse

CAUTION: Wear a grounding device and observe electrostatic discharge precautions when replacing the fuse in the 48-to-12 VDC External Power Supply. Failure to observe this caution could result in damage to, and subsequent failure of, the 48-to-12 VDC External Power Supply.

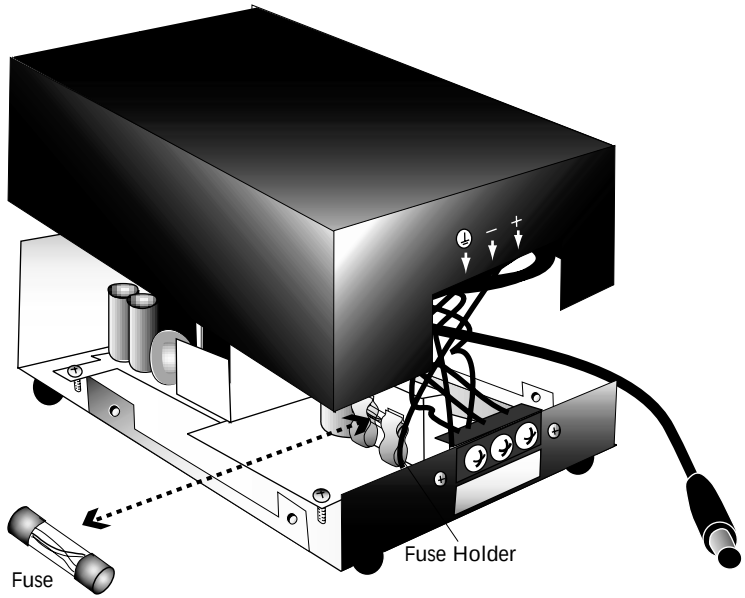
CAUTION: Replace fuse only with same size and rating. Failure to observe this caution could result in equipment damage.

CAUTION: Ensure that power source is NOT powered when disconnecting power from, or connecting power to, the 48-to-12 External Power Supply. Failure to observe this caution could result in damage to, and subsequent failure of, the 48-to-12 External Power Supply and of any attached device.

1. Ensure that external power source is powered OFF.
2. Disconnect +48-VDC terminal from Media Conversion Center terminal block control marked "+" by turning terminal screw counter-clockwise.
3. Disconnect -48-VDC terminal from Media Conversion Center terminal block control marked "-" by turning terminal screw counter-clockwise.
4. Disconnect ground terminal from Media Conversion Center terminal block control marked "chassis ground" by turning terminal screw counter-clockwise.
5. Remove and retain four (4) screws that secure cover to External Power Supply.



6. Carefully lift cover from External Power Supply.
7. Locate fuse on 48-VDC Power Supply Module.



8. Carefully remove fuse from fuse holder.
9. Install **same size and rating** replacement fuse in fuse holder.
10. Carefully slide cover onto External Power Supply.
11. Replace four (4) retained screws that secure cover to External Power Supply.
12. Connect +48-VDC terminal to 48-to-12 VDC External Power Supply terminal block control marked "+". Turn terminal screw clockwise to secure.
13. Connect -48-VDC terminal to 48-to-12 VDC External Power Supply terminal block control marked "-". Turn terminal screw clockwise to secure.
14. Connect ground terminal to 48-to-12 VDC External Power Supply terminal block control marked "chassis ground". Turn terminal screw clockwise to secure.
15. Ensure that external power source is powered ON.