

PRE99-1205 UNIVERSAL +48 VDC POWER SUPPLY USER GUIDE

The Universal +48 VDC Power Supply has one regulated output of +48 volts DC. It is used with various GatesAir consoles and VistaMax card frames as a main or redundant power supply. It is also a field replacement for the obsolete PRE99-1201 and PRE99-1202 power supplies.

The supply has a recessed mains power switch and a green "48-volt output is good" LED on the front panel. The rear panel has three connectors: an IEC AC mains input; a five-pin DC power output, and a 4-pin Power Good Indicator (only used with BMXdigital consoles).

For redundant power on BMXdigital consoles, a PRE99-1203 Power Supply Coupler is required; for NetWave consoles, a PRE90-1995 48-Volt Coupler is required. RMXdigital and VistaMax card frames have built-in redundant supply couplers.

POWER SUPPLY PLACEMENT

The supply uses 3.5" (2 RU) of EIA rack space. To mount the supply, pop-off the cosmetic front panel (it fastens to the chassis using two bottom plastic snaps and two top tabs). Fasten the supply using four rack screws (not included). To re-mount the front cover, insert the cover tabs into the two cutouts and then snap the bottom into place.

The supply uses convection cooling: cool air comes in through the front vents and hot air exits out recessed cover vents. When mounted in a furniture rack there must a rack or furniture vent above the supply for hot air to exit.

The supply must be within six feet of an orange (isolated-ground) AC mains outlet capable of supplying 115/230 VAC ($\pm 8\%$), 50/60 Hz at a minimum of 4 amps (at 115 VAC) without sagging. Using an extension cord or outlet strip is

not recommended. Longer IEC power cords are available for direct connection of the supply to a wall outlet. The third-pin "U-ground" on the AC cord must always connect to the wall outlet for safety.



Route the AC cord away from all audio wiring. Audio wiring must not parallel the AC cord and should only cross the AC cord at a 90° angle.

SUPPLY CONNECTIONS

The PRE99-1205 supply connects to a BMXdigital console using a PRE90-1709 cable; to a VistaMax card frame using a PRE90-1858 cable; and to RMXdigital and NetWave-24 consoles using a PRE90-1858-1 cable. Always connect the DC cable between device and supply before applying power to the supply. To turn the supply on or off, press the recessed front panel button. A front panel LED lights to indicate the 48 VDC output is active.

SPECIFICATIONS

Power Supply Output Voltage

Regulated +48 VDC, maximum current 6.7 Amps

Maximum Operating Temperature

<40°C (104°F), ambient, front panel air intake openings

Ground

Chassis grounded through AC cord safety ground wire. DC voltages floated from chassis.

Power Connection

AC Input: 6 foot IEC cord.

DC Output: two keyed, multi-wire connectors.

Size

2 RU (3.5"x19.0"x11.5", HxWxD)

Safety Instructions

1. Read All Instructions. Read all safety and operating instructions before operating the product.
2. Retain All Instructions. Retain all safety and operating instructions for future reference.
3. Heed All Warnings. You must adhere to all warnings on the product and those listed in the operating instructions.
4. Follow All Instructions. Follow all operating and product usage instructions.
5. Heat. This product must be situated away from any heat sources such as radiators, heat registers, stoves, or other products (including power amplifiers) that produce heat.
6. Ventilation. Slots and openings in the product are provided for ventilation. They ensure reliable operation of the product and keep it from overheating. Do not block or cover these openings during operation. Do not place this product into a rack unless proper ventilation is provided and the manufacturer's recommended installation procedures are followed.
7. Water and Moisture. Do not use this product near water such as a bathtub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool or the like.
8. Attachments. Do not use any attachments not recommended by the product manufacturer as they may cause hazards.
9. Power Sources. You must operate this product using the type of power source indicated on the marking label and in the installation instructions. If you are not sure of the type of power supplied to your facility, consult your local power company.
10. Grounding and Polarization. This product is equipped with a polarized AC plug with integral safety ground pin. Do not defeat the safety ground in any manner.
11. Power Cord Protection. Power supply cords must be routed so that they are not likely to be walked on nor pinched by items placed upon or against them. Pay particular attention to the cords at AC wall plugs and convenience receptacles, and at the point where the cord plugs into the product.
12. Lightning. For added protection for this product, unplug it from the AC wall outlet during a lightning storm or when it is left unattended and unused for long periods of time. This will prevent damage to the product due to lightning and power line surges.
13. Overloading. Do not overload AC wall outlets, extension cords, or integral convenience outlets as this can result in a fire or electric shock hazard.
14. Object and Liquid Entry. Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short out parts, which could result in a fire or electric shock. Never spill liquid of any kind on the product.
15. Accessories. Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult and serious damage to the product. Any mounting of the product must follow manufacturer's installation instructions.
16. Product and Cart Combination. Move this product with care. Quick stops, excessive force, and uneven surfaces may cause the product and the cart combination to overturn.
17. Servicing. Refer all servicing to qualified servicing personnel.
18. Damage Requiring Service. Unplug this product from the wall AC outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the AC cord or plug is damaged.
 - b. If liquid has been spilled or objects have fallen into the product.
 - c. If the product has been exposed to rain or water.
 - d. If the product does not operate normally (following operating instructions).
 - e. If the product has been dropped or damaged in any way.
 - f. When the product exhibits a distinct change in performance. This indicates a need for service.
19. Replacement Parts. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock, or other hazards.
20. Safety Check. Upon completion of any repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
21. Cleaning. Do not use liquid or aerosol cleaners. Use only a damp cloth for cleaning.

THIS DOCUMENT APPLIES TO
PRE99-1205



PACIFIC RESEARCH &
ENGINEERING

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DESIGNS BY PACIFIC RESEARCH & ENGINEERING

TITLE INSTRUCTION SHEET, 48 VDC UNIVERSAL
POWER SUPPLY

DRAWN

RLM

DATE

June 18, 2014

DWG. NO.

71-1205



REV.

C

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APVD.

Hazard and Warning Label Identification

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
WARNING: SHOCK HAZARD - DO NOT OPEN AVIS: RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR		
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE ANY COVER OR PANEL. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		
WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THE PRODUCT TO RAIN OR MOISTURE.		





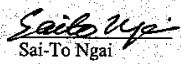
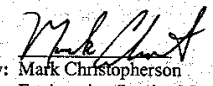
The Exclamation Point symbol, within a yellow circle, alerts the user to the presence of important operating and maintenance (servicing) instructions in product literature and instruction manuals.



The Lightning Flash with Arrowhead symbol, within a red equilateral triangle, alerts the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

NOTE: The PRE99-1205 power supply 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 his own expense.

PRE99-1205 Power Supply Certificate of Compliance

	
<h1 style="margin: 0;">Certificate of Compliance</h1>	
Certificate: 1434033	Master Contract: 220332
Project: 1434033	Date Issued: May 29, 2003
Issued to: Harris Corporation Pacific Design Center 1493 Poinsettia Ave, Suite 143 Vista, CA 92083 USA Attention: Dave Pollard	
<p><i>The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US'</i></p>	
	Issued by:  Sai-To Ngai
	Authorized by:  Mark Christopherson Engineering Service Manager
PRODUCTS CLASS 5311 06/86 – POWER SUPPLIES - Component Type intended for use with Information Technology and Business Equipment, where the suitability of the combination is to be determined by CSA International. Model 99-1205, cord-connected, input rated 90-126/180-252 V ac, 43/67 Hz, 5/2.5 A; output rated overall classification level 5, 48 V dc, 7.0 A, 336 W max total output.	
Notes: (a) The model designations may have a suffix and/or prefix consisting of alphanumeric characters denoting minor mechanical options, system configuration options and/or extra low voltage secondary circuit options.	
APPLICABLE REQUIREMENTS CAN/CSA C22.2 No 60950-00 - Safety of Information Technology Equipment ANSI/UL No 60950, 3 rd Ed. - Safety of Information Technology Equipment	
The 'C' and 'US' indicators adjacent to the CSA Mark signify that the product has been evaluated to the applicable CSA and ANSI/UL Standards, for use in Canada and the U.S., respectively. This 'US' indicator includes products eligible to bear the 'NRTL' indicator. NRTL, i.e. National Recognized Testing Laboratory, is a designation granted by the U.S. Occupational Safety and Health Administration (OSHA) to laboratories which have been recognized to perform certification to U.S. Standards.	

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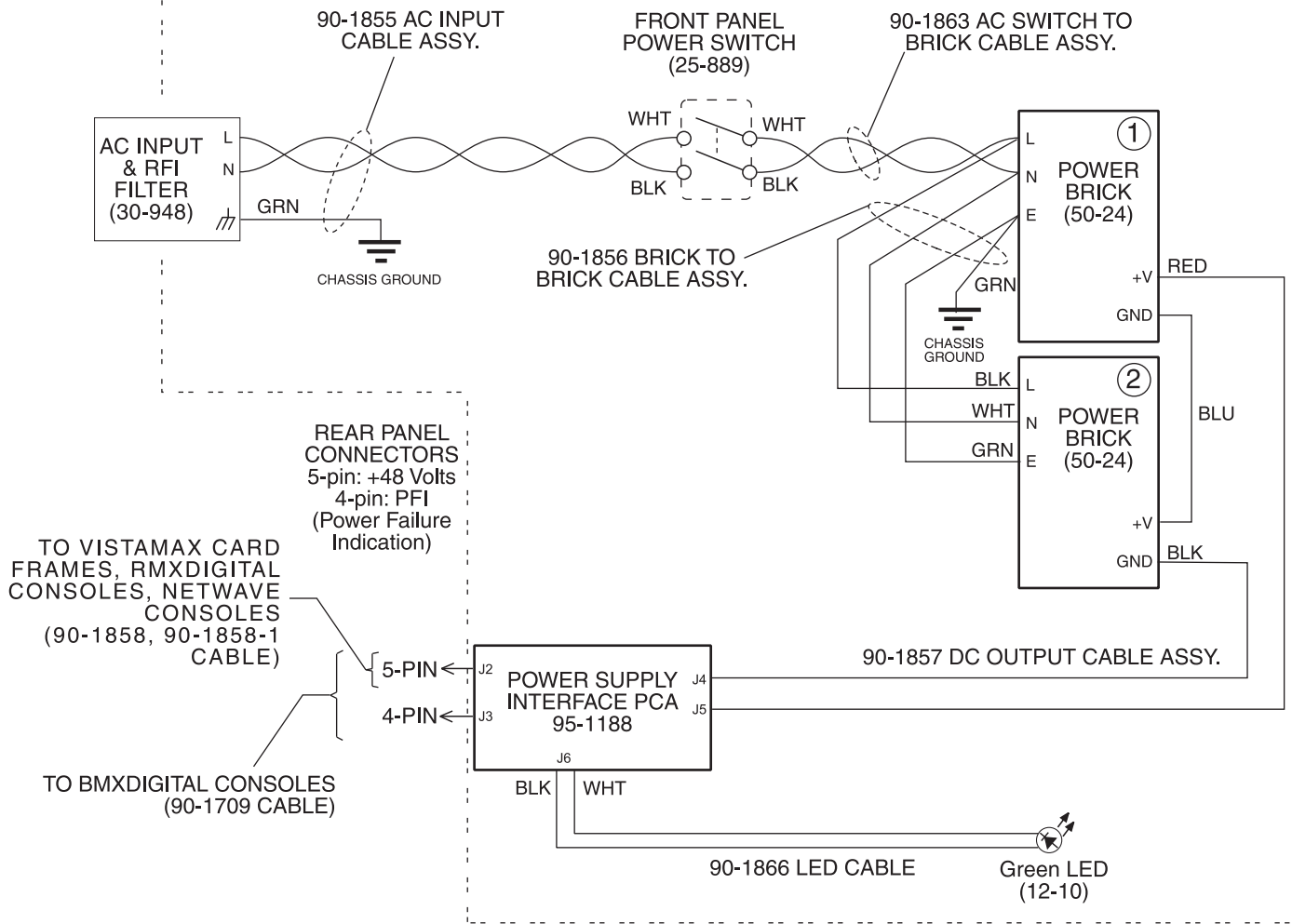
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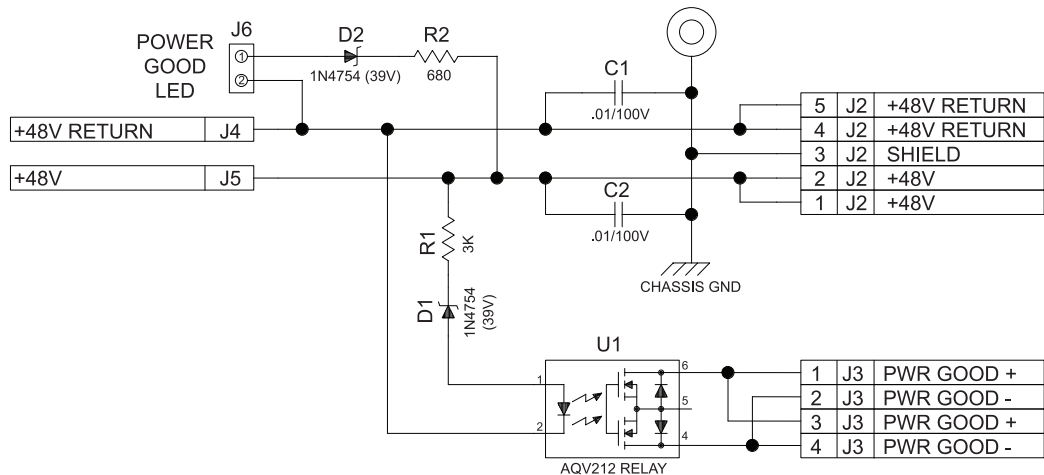
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48 VOLT UNIVERSAL POWER SUPPLY ASSEMBLY (99-1205)



95-1188 SCHEMATIC



THIS DOCUMENT APPLIES TO
PRE99-1205

TITLE
BLOCK DIAGRAM, UNIVERSAL 48 VOLT DC
POWER SUPPLY



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