



CONVEX

Field Support Tech Tip

Product: C-1

Tech Tip Number: Power-001

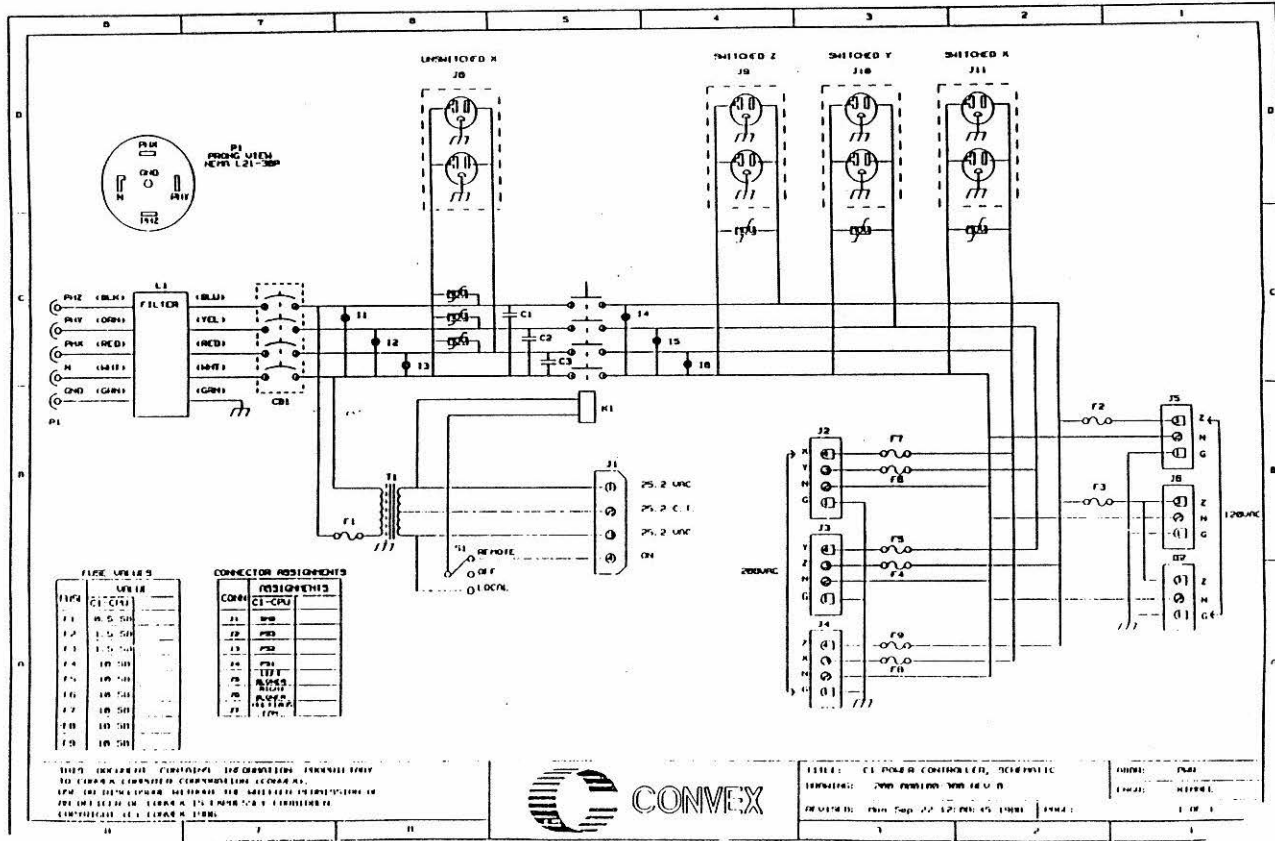
Date: October 15, 1986

Subject: Power Controllers

Submitted By: Brad Jones

The purpose of this Tech Tip is to provide Schematic Diagrams for the following C-1 Power Controllers:

200-000100-300	Domestic C-1 CPU Power Controller
200-000103-300	Domestic C-1 Peripheral Power Controller
200-000106-300	"Junior" C-1 Power Controller
200-000108-300	International C-1 CPU Power Controller
200-000109-300	International C-1 Peripheral Power Controller



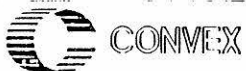
FUSE LIST

TYPE	VALUE
F1	10 A 50V
F2	10 A 50V
F3	10 A 50V
F4	10 A 50V
F5	10 A 50V
F6	10 A 50V
F7	10 A 50V
F8	10 A 50V
F9	10 A 50V

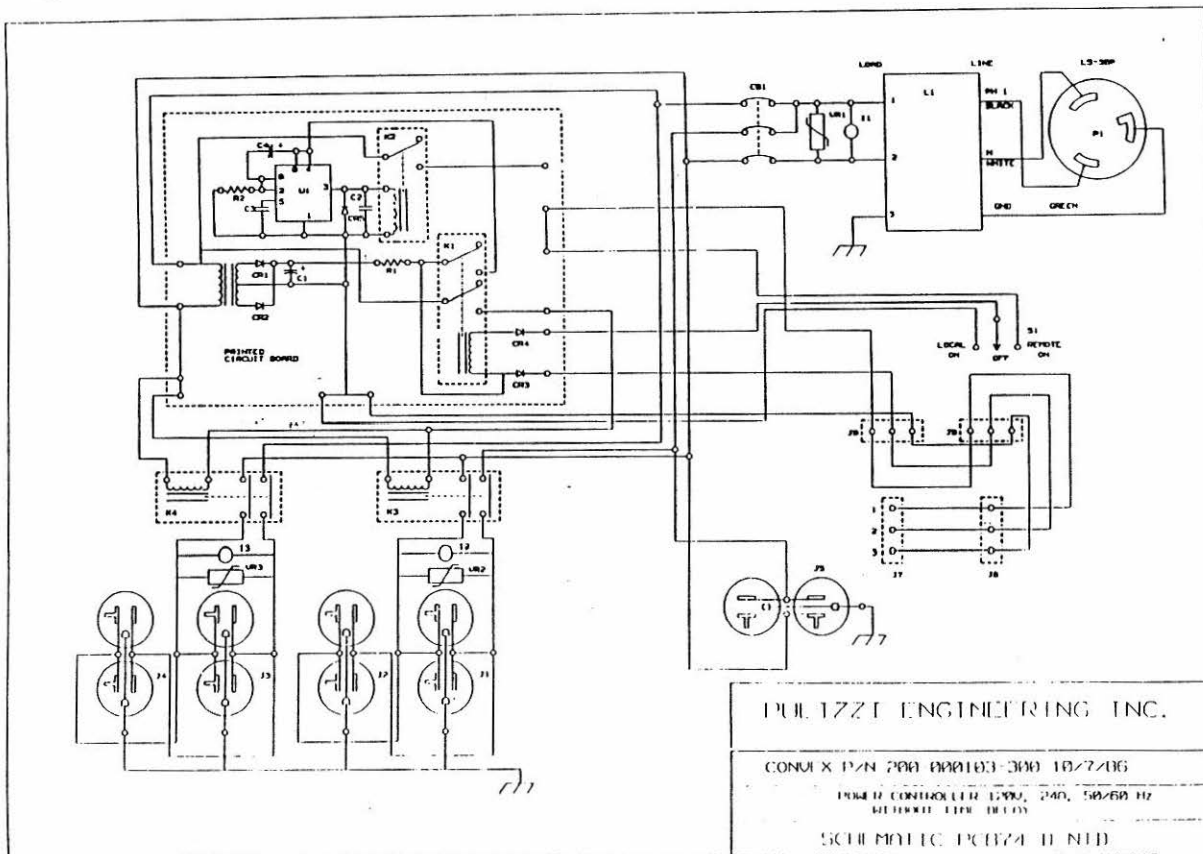
CONNECTOR ASSIGNMENTS

CONN	ASSIGNMENTS
J1	25, 2 C.I.
J2	25, 2 C.I.
J3	04
J4	
J5	
J6	
J7	
J8	
J9	
J10	
J11	

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TITLE: CE POLAR CONTROLLER, MECHANICAL
DATE: 2/28/70
REVISED: FROM SUPP. 2/27/70 AS SHOWN
DESIGNED BY: P.M.H.
CHECKED BY: M.H.W.
DATE: 1 OF 1

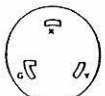


PULITZ ENGINEERING INC.

CONVEX P/N 700 000103-300 10/7/06

DATE OF CONTROLLER 12/00, 2/00, 5/02/00 BY
WELLSITE TYPE 00100

SCHEMATIC PCB74-11-110

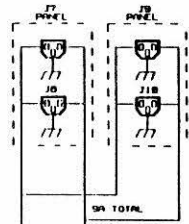


P1
PHONG VIEN
1.6-307

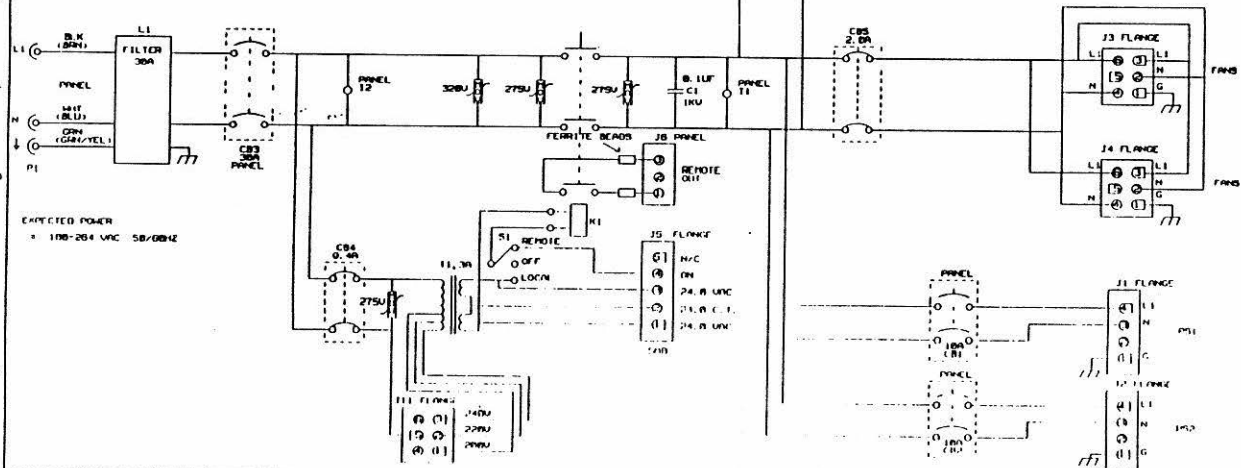
CONNECTOR ASSIGNMENTS

CONN	ASSIGNMENTS
C1-J, B.	
J6	REMOTE AC CTRL
J7	PERFORM OUTLET
J8	PERFORM OUTLET
J9	PERFORM OUTLET
J10	PERFORM OUTLET
J11B	PERFORM OUTLET
J1	PS1
J2	PS2
J3	FAN(S)
J4	FAN(S)
J5	SW
J11	VALVEZ SELECTION

USE SHIPPED INTERNATIONAL OUTLET OR



SA TOTAL



EXPECTED POWER
1 100-204 VAC 50/60HZ

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FILE: J. H. INVER CONTROLLED, TELETYPE
 DRAWING: 200 DRAWING NO. 10 U B
 PANEL: 1542
 PARTS: 111111
 1 1 1 1



Field Support Tech Tip

Product: C-1

Tech Tip Number: Power-002

Date: November 19, 1986

Subject: AC Power Connector Types

Submitted By: Brad Jones

NOTE: THIS TECH TIP EXPANDS UPON AND TOTALLY REPLACES THE PRESENT VERSION OF THE TECH TIP NUMBERED, "POWER-002" DATED OCTOBER 15, 1986.

CONVEX SUPPLIED POWER CONNECTORS	
NEMA NUMBER	LOCATION OR SOURCE
	(NOTE: DOMESTIC APPLICATIONS ONLY)
5-15P	From: Printronix P600 Line Printer, Expansion Multibus, Modem, Console Terminal, Console Printer, Fujitsu M2351A (474MB Eagle) Disc Drive, STC 2920 Tape Drive, User (TAB) Terminals, NEC D2352 (520MB) Disc Drive, and Control Data 9715 (515MB FSD) Disc Drive.
5-15R	Located in Domestic CPU Cabinet Power Distribution Assembly.
5-20R	Located in Domestic Peripheral Cabinet Power Distribution Assembly.
	(NOTE: INTERNATIONAL APPLICATIONS ONLY)
6-15P	From: Printronix P600 Line Printer, Expansion Multibus, Console Terminal, Console Printer, Fujitsu M2351A (474MB Eagle) Disc Drive, STC 2920 Tape Drive, User (TAB) Terminals, NEC D2352 (520MB) Disc Drive, and Control Data 9715 (515MB FSD) Disc Drive.
6-15R	Located in International Peripheral Cabinet Power Distribution Assembly.
L5-30P	Provided from Domestic Peripheral Cabinet and STC 1960 Tape Drive.
L6-20P	Provided from CDC 9766 (300MB SMD) Disc Drive.
L6-30P	Provided from International CPU and Junior CPU Cabinets.
L21-30P	Provided from Domestic CPU Cabinet.

(SEE NEXT PAGE FOR ADDITIONAL REFERENCE INFORMATION)

AC POWER CONNECTOR TYPES

PLUG		RECEPTACLE		VOLTAGE RATING	CURRENT RATING	CONNECTOR ILLUSTRATION
NEMA	HUBBELL	NEMA	HUBBELL			
5-15P	5266C	5-15R	5242I	125V	15A	
5-20P	5366C	5-20R	5342I	125V	20A	
6-15P	5666C	6-15R	5652I	250V	15A	
L5-30P	2611	IGL5-30R (Customer Supplied)	IG2610	125V	30A	
L6-20P	2321	IGL6-20R (Customer Supplied)	IG2320	250V	20A	
L6-30P	2621	IGL6-30R (Customer Supplied)	IG2620	250V	30A	
L21-30P	2811	IGL21-30R (Customer Supplied)	IG2810	120/208V	30A	



Field Support Tech Tip

Product: C-1

Tech Tip Number: Power-003

Date: March 30, 1987

Subject: Spare Power Supplies

Submitted By: Brad Jones

Spare power supplies require periodic maintenance. If left unattended on the shelf for prolonged periods, their reliability and endurance may suffer. Of course, this won't be noticed until the spare power supply is installed in place of a bad one.

To ensure continued reliability, it is recommended that A.C. power be applied to all spare power supplies for at least 5 minutes every 6 months. It is not necessary to have a load on the supply; the simple application of A.C. power will be adequate.

For reference purposes, the following Convex Part Numbers are affected by the above information.

<i>PART NUMBER</i>	<i>DESCRIPTION</i>
200-001000-200	LH Research, 1000 W, +5 VDC, Domestic C-1, PS1
200-001001-200	LH Research, 1000 W, +5 VDC, PS1, Junior and International C-1
200-001002-200	LH Research, Multivoltage, Domestic C-1, PS2 & PS3
200-001003-200	LH Research, Multivoltage, PS2 & PS3, Junior and International C-1
200-001005-200	LH Research, Multivoltage, All Expansion Multibus & HIA
200-001008-200	LH Research, +5 VDC, Domestic IOMEGA
200-001008-201	LH Research, +12 VDC, Domestic IOMEGA



CONVEX

Field Support Tech Tip

Product: C-1
Tech Tip Number: Power-004
Date: July 15, 1987
Subject: Power Supply Types
Submitted By: Brad Jones

The various models of LH Research power supplies that can be used in the C-1 CPU Cabinet are described below:

PART NUMBER	DESCRIPTION
200-001000-200	Model Super-Mite 11 (SM11), 1000 W, +5 VDC, PS1
200-001002-200	Model Super-Mite 24 (SM24), 850 W, ±12 & ±5 VDC, PS2 & PS3
200-001001-200	Model Mighty-Mite-A 31 (MMA31), 1000 W, +5 VDC, PS1 & PS3
200-001003-200	Model Mighty-Mite-A 44 (MMA44), 1000 W, ±12 & ±5 VDC, PS2

The models shown above are *electrically*, but not mechanically interchangeable as shown below:

PART NUMBER	SUBSTITUTE
200-001000-200	200-001001-200
200-001001-200	200-001000-200
200-001002-200	200-001003-200
200-001003-200	- NONE -

Mechanical mounting of the supplies differs as shown in the following parts breakdowns:

PART NUMBER	DESCRIPTION	QUANTITY
● 500-000105-200	Assembly, PS2 (w/SM24)	1
○ 200-001002-200	Power Supply, ±5 & ±12 VDC, 850 W	1
○ 320-000128-500	Power Supply Mounting Bracket, SM24	1
○ 310-000431-001	Screw, Phillip, Flat, #8-32 X ¼	4
○ 310-000400-001	Screw, Phillip, #8-32 X ¼	2
○ 310-200420-001	Washer, Star, #8, External Tooth	2

PART NUMBER	DESCRIPTION	QUANTITY
● 500-000106-200	Assembly, PS1 (w/SM11)	1
○ 200-001000-200	Power Supply, +5 VDC, 1000 W	1
○ 320-000129-500	Power Supply Mounting Bracket, SM11	1
○ 310-000431-001	Screw, Phillip, Flat, #8-32 X ¼	4
○ 310-000400-001	Screw, Phillip, #8-32 X ¼	2
○ 310-200420-001	Washer, Star, #8, External Tooth	2

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Field Support Tech Tip

Tech Tip Number: Power-004

Page: 2 of 2

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<i>PART NUMBER</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>
● 500-000111-200	Assembly, PS3 (w/SM24)	1
○ 200-001002-200	Power Supply, ± 5 & ± 12 VDC, 850 W	1
○ 320-000128-500	Power Supply Mounting Bracket, SM24	1
○ 310-000431-001	Screw, Phillip, Flat, #8-32 X $\frac{1}{4}$	4
○ 310-000400-001	Screw, Phillip, #8-32 X $\frac{1}{4}$	2
○ 310-200420-001	Washer, Star, #8, External Tooth	2

<i>PART NUMBER</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>
● 500-000111-201	Assembly, PS3 (w/MMA31)	1
○ 200-001001-200	Power Supply, +5 VDC, 1000 W	1
○ 320-000365-501	Power Supply Mounting Bracket, MMA31	1
○ 320-000367-500	Bracket, Power Supply Hold Down	1
○ 310-002401-002	Screw, #8-32 X $\frac{1}{4}$	4
○ 310-002301-001	Screw, #6-32 X	4

<i>PART NUMBER</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>
● 500-000164-200	Assembly, PS1 (w/MMA31)	1
○ 200-001001-200	Power Supply, +5 VDC, 1000 W	1
○ 320-000365-500	Power Supply Mounting Bracket, MMA31	1
○ 320-000367-500	Bracket, Power Supply Hold Down	1
○ 310-002401-002	Screw, #8-32 X $\frac{1}{4}$	4
○ 310-002301-001	Screw, #6-32 X	4

<i>PART NUMBER</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>
● 500-000165-200	Assembly, PS2 (w/MMA44)	1
○ 200-001003-200	Power Supply, ± 5 & ± 12 VDC, 1000 W	1
○ 320-000365-501	Power Supply Mounting Bracket, MMA44	1
○ 320-000367-500	Bracket, Power Supply Hold Down	1
○ 310-002401-002	Screw, #8-32 X $\frac{1}{4}$	4
○ 310-002301-001	Screw, #6-32 X	4



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Field Support Tech Tip

Product: C-1 and C-2

Tech Tip Number: Power-005

Date: March 25 1988

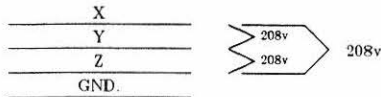
Subject: Input Power

Submitted By: Rick Miller

The purpose of this Tech Tip is to provide clarification on the power differences of the 3-phase WYE used with the C-1, and the 3-phase DELTA used on the C-2 product.

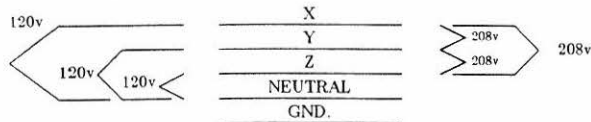
3-PHASE DELTA (Domestic)

A 3-phase delta SOURCE delivers power to a load using three wires... the X, Y, and Z phases. Because there is not a "neutral" available, only ONE voltage level is available, 208vac. The C-2 product uses 200+vac fans and no switched outlets... thus no need for 110vac.



3-PHASE WYE (Domestic)

A 3-phase wye SOURCE delivers power to a load using four wires... the X, Y, Z, and NEUTRAL phases. Here, there are two voltages available, 208/120vac. This is needed on the C-1 product.



INTERNATIONAL POWER (C-2)

The international power recommended is 220/380 vac 3-phase wye. But only the 220 vac capability is used within the current C210 series.

NOTE: Both the international and domestic power controllers have a voltage select switch. This switch straps the SCM transformer according to the source voltage. A proper 24 vac to the contactors is assured this way. The "200" setting is used for U.S. (208 vac delta) and Japan (200 vac delta), "220" for Germany (220/380 vac wye), and "240" for the U.K. (240/415 vac wye).



Field Support Tech Tip

Product: C2 Widebody

Tech Tip Number: Power-006

Date: 01/16/91

Subject: New C2XXw/i Power Supplies

Submitted By: TAC/HW

New Power Supplies for C2XXw and C2XXi Systems

Convex is switching to a new power supply vendor (HC) for C2XXw and C2XXi Systems. C2XXw and C2XXi Systems shipped during Jan. or Feb. 91 could have the (HC) or (LH) supplies.

The (HC) supplies are silver in color, so should be easy to identify.

NOTE

The (HC) supplies ARE NOT interchangeable with existing (LH) supplies.

With the (LH) supplies, the slaves are adjusted to a lower voltage and the slave voltage tracks up to match the master.

With the (HC) supplies, the slaves are adjusted to a higher voltage and the slave voltage tracks down to match the master.

HC Power Supply Voltage Set Points

PS1L = -2.030 Volts(M)	PS5L = -4.550 Volts(M)
PS4L = -2.150 Volts(S)	PS6L = -4.650 Volts(S)
PS2L = +5.050 Volts	PS7L = -4.650 Volts(S)
PS2R = +5.050 Volts	PS8L = -4.650 Volts(S)
PS1R = -2.030 Volts	PS5R = -4.550 Volts(M)
	PS6R = -4.650 Volts(S)
	PS7R = -4.650 Volts(S)

New HC Spares Part Nos.

ASSEMBLY	PART NUMBER	SYSTEM TYPE
P/S -2.0V, HC w/sense	500-000240-290	2XXw 2XX1
P/S -4.5V, HC w/sense	500-000240-291	2XXw 2XX1
P/S +5.0V, HC w/sense	500-000240-292	2XXw 2XX1
P/S +5.0V, HC wo/sense	500-000240-293	2XXw 2XX1