

MAINTENANCE MANUAL

POWER DISTRIBUTION PANEL

19D904180G5

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SPECIFICATIONS*

MECHANICAL

Length	Standard 19-inch rack mount
Height	2 rack units (3.5 inches)
Depth	2.75 inches

INPUT CONNECTIONS

Total Connectors	one (J1)
Connector Type	AMP 641685-2 four position connector

PANEL-TO-PANEL JUMPER CONNECTIONS

Total Connectors	two (J2 and J3)
Connector Type	AMP 350782-1 nine position connectors

OUTPUT CONNECTIONS

Total Connectors	thirteen (J4 - J16; DVIU uses J4 - J11 only)
Connector Type	AMP 350767-1 four position connectors

* These specifications are intended primarily for the use of the serviceman. See the appropriate Specifications Sheet for complete specifications.

DESCRIPTION

Power Distribution Panel 19D904180G5 is used in the Digital Voice Interface Unit (DVIU) cabinet to provide dc power interconnections between the Redundant Power Supply (RPS) unit and the DVIUs within the cabinet. A

fully loaded DVIU cabinet requires two (2) Power Distribution Panels.

Each panel distributes the +5 and ±12 Vdc power from the RPS unit to the eight (8) DVIUs directly above it. Panel 1 serves DVIUs 1 - 8 and Panel 2 serves DVIUs 9 - 16.

The panels mount on the cabinet's rear mounting rails. See the Application Assembly Diagram in LBI-39041 for additional rack-up details.

POWER DISTRIBUTION

As shown in Figure 1, dc power from the RPS unit enters the Power Distribution Panel at connector J1 via Power Cable 344A4677P60. From this point, the power is distributed to the eight (8) DVIUs that the panel serves via connectors J4 - J11 and Power Cables 344A4677P40.

If the DVIU cabinet is equipped with nine (9) or more DVIUs, a second Power Distribution Panel (Panel 2) is installed in the DVIU cabinet to serve the second group of eight DVIUs. Power for this second panel is not applied directly from the RPS unit. Instead, a power "jumper" cable jumps the +5 and ±12 Vdc power lines from the first panel to the second panel. Specifically, this is achieved via connectors J2 at each panel and Power Cable 344A4677P52.

PIN-TO-PIN WIRING AND COLOR CODING

Table 1 identifies the pin-to-pin wiring pattern and the wire color coding scheme used within the Power Distribution Panel. This same color coding scheme is followed in all power interconnecting cables within the DVIU cabinet.

NOTE

The 5 Vdc remote voltage sense leads from the RPS unit are not routed through the Power Distribution Panels. These leads, within Cable 344A4677P60, terminate at J1 on the first Power Distribution Panel (Panel 1). The +5V sense lead (brown) terminates at J1 pin 4 and the -5V or return sense lead (white) terminates at J1 pin 3.

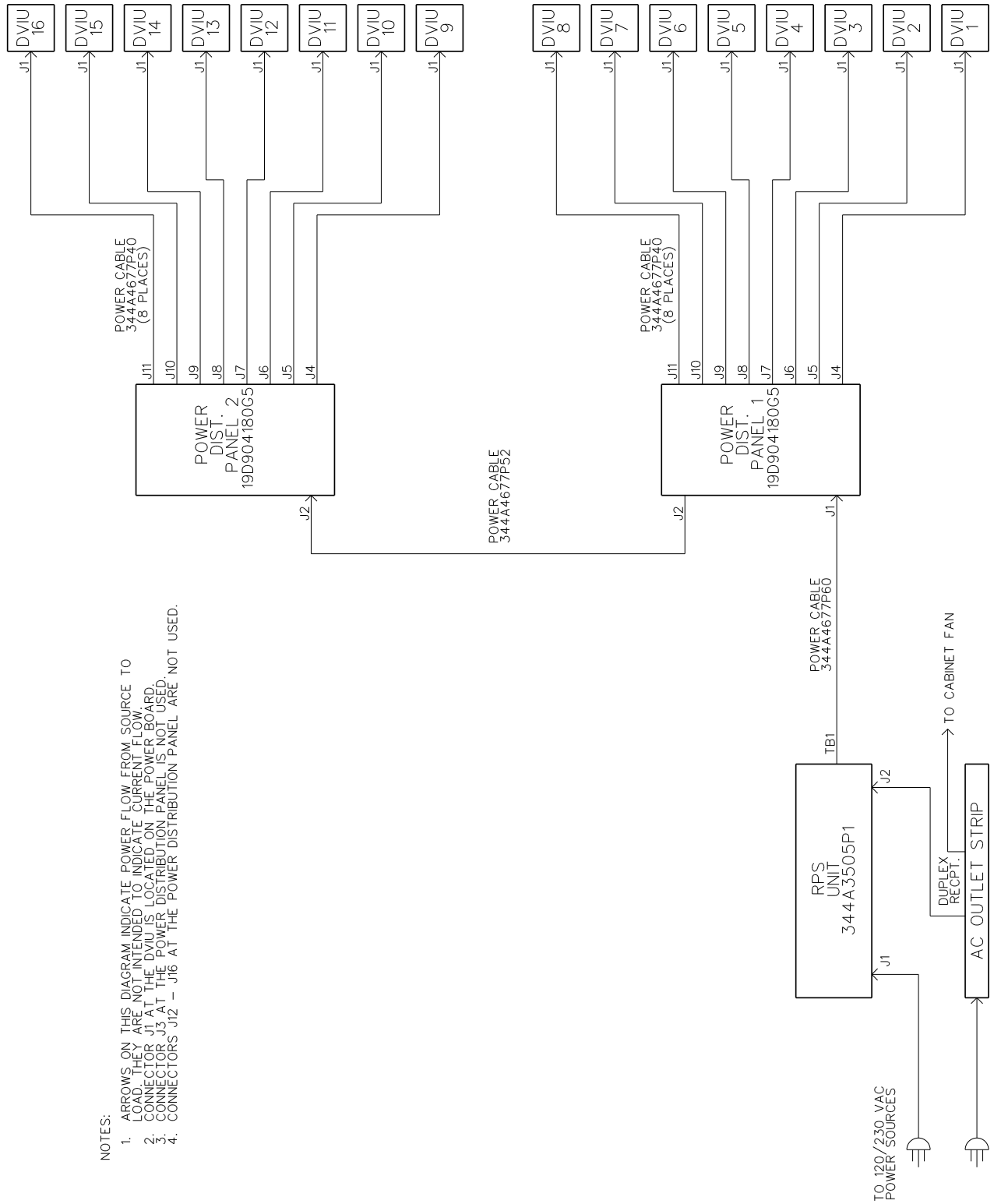
**TABLE 1 - POWER DISTRIBUTION PANEL 19D904180G5
PIN-TO-PIN WIRING LIST AND COLOR CODING**

J1 PIN NUMBER (Input Connector)	J2 & J3 PIN NUMBER(S) (Panel-To-Panel Jumper Connectors)	J4 - J16 PIN NUMBER (Output Connectors)	BUS BAR MARKING	USE	WIRE COLOR
1	1	1	-12V	-12 Vdc	Blue
2	2, 3, 4	2	+12V	+12 Vdc	Orange
3*	7, 8, 9	3	GND	Ground	Black
4*	5, 6	4	+5V	+5 Vdc	Yellow

* See above NOTE for 5 Vdc remote voltage sensing information.

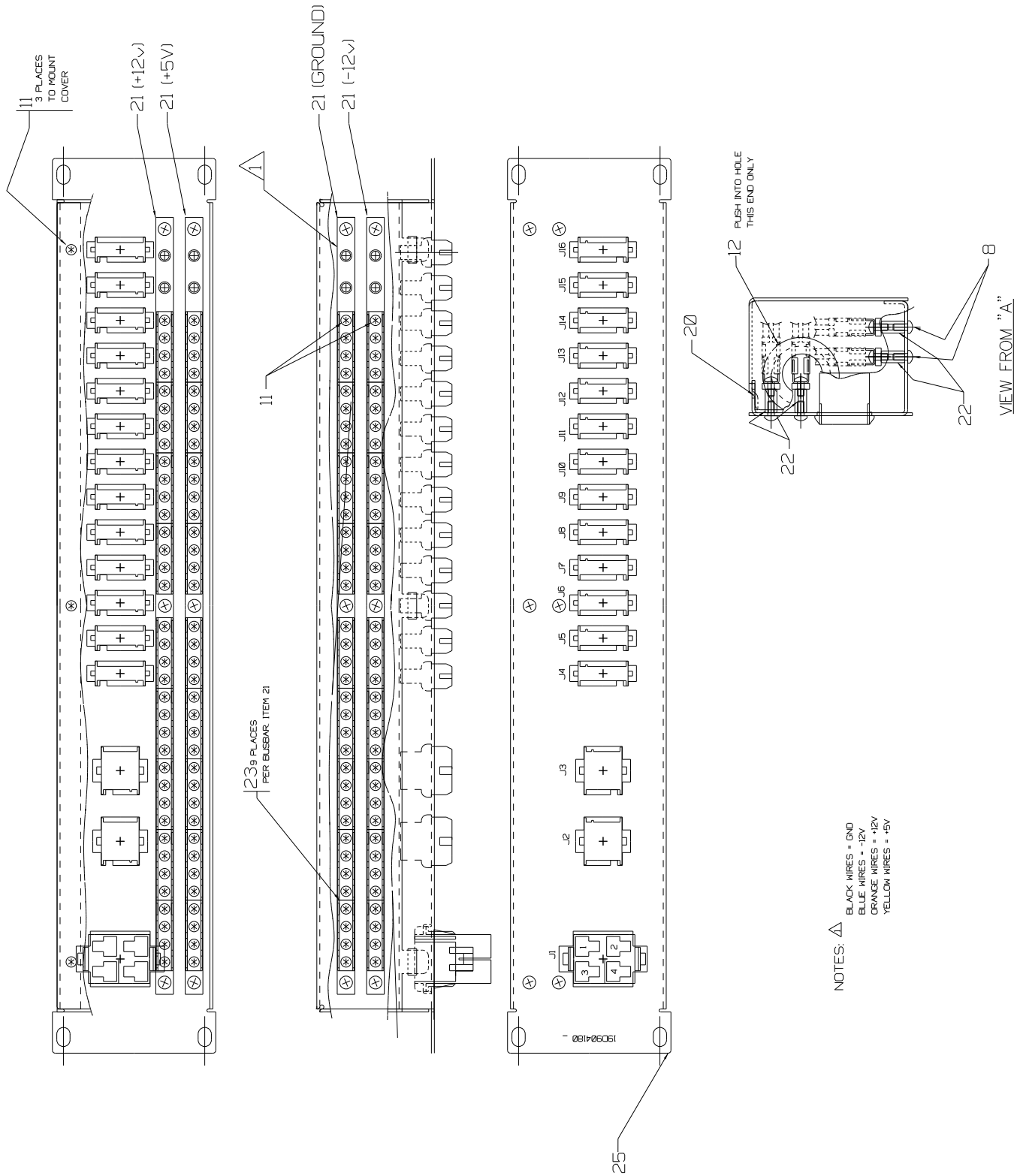


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- NOTES:
1. ARROWS ON THIS DIAGRAM INDICATE POWER FLOW FROM SOURCE TO LOAD. THEY ARE NOT INTENDED TO INDICATE CURRENT FLOW.
 2. CONNECTOR J1 AT THE DVIUS LOCATED ON THE POWER BOARD.
 3. CONNECTOR J5 AT THE POWER DISTRIBUTION PANEL IS NOT USED.
 4. CONNECTORS J12 - J16 AT THE POWER DISTRIBUTION PANEL ARE NOT USED.

Figure 1 – DVIU Power Distribution Block Diagram



POWER DISTRIBUTION PANEL
19D904180G5

(Made From 19D904180 Sh. 5, Rev. 0)

POWER DISTRIBUTION PANEL
19D904180G5

ISSUE 1

SYMBOL	PART NUMBER	DESCRIPTION
----- JACKS -----		
J1	344A4964P130	Cable, power. Includes:
	344A3804P2	Connector housing: sim to AMP 641685-2.
	344A3805P1	Terminal: sim to AMP 350650-1. (Qty = 4)
J2 and J3	344A4964P140	Cable, power. Includes:
		Connector housing: sim to AMP 350782-1
		Terminal, female: sim to AMP 350874-3 or 350919-3. (Qty = 9)
J4 thru J16	344A4964P120	Cable, power. Includes:
		Connector housing: sim to AMP 350767-1
		Terminal, female: sim to AMP 350874-3 or 350919-3. (Qty = 9)
----- MISCELLANEOUS -----		
8	N80P13005B6	Machine screw, panhead: No. 6-32 x 5/16.
11	19A702381P408	Tap screw, TORX Drive, M3-0.5 x 8.
12	5490407P45	Grommet, rubber.
20	19D904159P2	Cover, steel.
21	19B802376P2	Busbar, steel.
22	19B802469P2	Spacer, nylon: 0.5 inch length, No. 6-32 threads
23	19B209137P3	Terminal, quick disconnect; sim to Zerick 929-130-FOUR
25	19D904129P5	Panel, steel.

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