Prepared	Pat	Document no.		
ERU/XMR GREGORY WHITE	G.W.	XM-92325		
Approved	Checked	Date	Rev	File reference
		11/12/92	A	E:\WPDOC

I. DESCRIPTION

The RBS500HP Power Panel distributes DC power to the high powered amplifiers and the 882 transceiver units. This panel also acts as an alarm interface panel to to high powered transmitters. The panel has been designed to interrupt DC power to the transceiver module if any major alarms are developed within the high powered transmitters. External alarm contacts have been integrated into the power panel so that any transmitter alarms generated by the high powered transmitters can be connected to the cell site external alarm panel. Several LED's have also been incorporated into the power panel which gives displays the current status of the panel.

II. SPECIFICATIONS

Number of controlled outputs	4
Input voltage	26.4vdc nominal
Controlled output voltage @26.4vdc	24.5vdc nominal
Alarms/Controls - Type	4. TTL
	Power shutdown fron overtemp
	Temperature power reduction
	R.F. failure (drive but low output)
	Over-current
LED indicators per controlled output	3
	GREEN = Active (Normal)
	Red = Fault
	Amber = Blown Fuse (TRM)
Maximum transceiver current	7 amps
Transceiver fuse	7 amps

III. INSTALLATION

The panel is installed, using appropriate fasteners, in the designated rack location. The DC inputs are at the rear of the chassis and are intended to be fed from individually protected circuits. Appropriate connecting lugs and wires capable of 30 amperes should be used. The front panel connections provide DC power to each TRM and amplifier along with alarm connections to each amplifier. These cables are provided in seperate kits.

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IV. TESTING

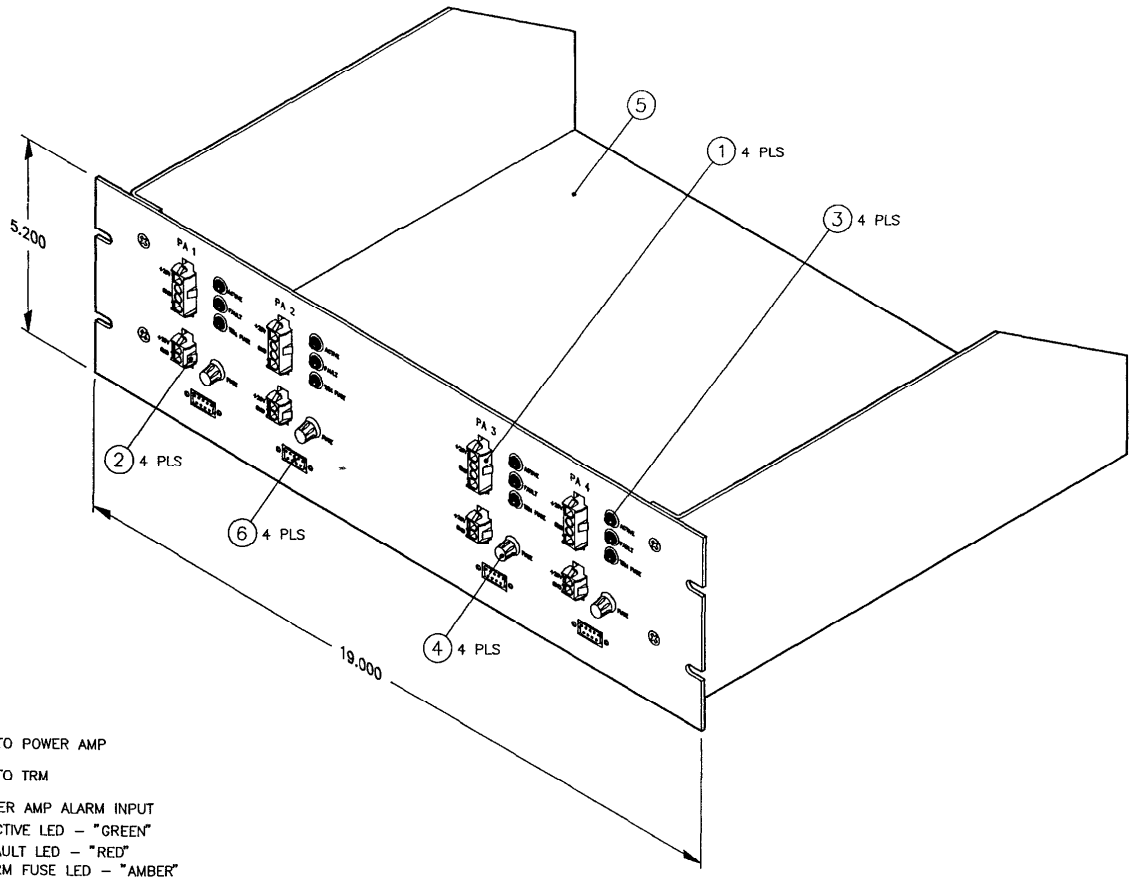
The DC voltage at the front panel connectors should be verified with a voltmeter before powering up any device. The DC voltage should be measured at both the rear entry points and front exit points on the power panel. There should be little to no voltage drop at the power amp DC connectors. However, the voltage at the TRM DC connectors will measure approximately 1.5 vdc less then the voltage measured at the P.A. connector outputs. This is normal due to the voltage drop across the transistors in the logic boards of the Power Panel. Voltage at the Power Panel alarm connector must also be verified to assure that the TTL condition is "HIGH". This condition will remain "HIGH" at all times so that the transmitter will "KEY" as soon as an R.F. carrier is present. Use a voltmeter and measure the voltage across pin 9 of the alarm connector. Use precaution when touching the pin with the meter lead so that two pins are not accidentally shorted together. The connector housing can be used to ground the negative lead of the meter. Approximately +5vdc should be measured at pin 9. If this voltage is not there, the amplifier will not transmit any R.F. power. Therefore, the panel shall be considered faulty and returned for repair.

Testing of the Power Panel LED indicators can readily be accomplished with all four channels operating. Merely unscrewing any of the panel fuses will test the Amber LED of that channel. Disconnecting the 9-pin alarm connector of any channel will cause the Red LED to illuminate. The Green LED is illuminated when DC power is supplied to the TRM. The Panel will not provide power to the transceiver module unless the 9-pin transmitter alarm cable is connected.

V. MAINTENANCE

This panel does not require any periodic maintenance procedures.

A		02-07-92	B S.	INITIAL RELEAS	
B		08-21-92	T C	REVISED DRAWI	



NOTES:

1. DC TO POWER AMP
2. DC TO TRM
3. POWER AMP ALARM INPUT
   ACTIVE LED – "GREEN"
   FAULT LED – "RED"
   TRM FUSE LED – "AMBER"
4. TRM FUSE
5. AREA CONTAINING PC BOARDS & DC POWER INPUT BLOCK
6. ALARM INPUT TO POWER AMP

TITLE: RBS 500 HP POWER PANEL		ERICSSON / Ericsson Radio Systems Inc.	
PROJECT: TYPICAL			
SITE NO./NAME: TYPICAL			
DRAFTER: B. SORRELLS 06 FEB 92	C	DWG. NO. 1533-IPA-1113561	B
CHECKER: Gregory White 09/21/92	DWG. SIZE	SCALE NONE	SHEET 1 OF 1 REV
APPROVAL:			