

Tune up procedure

LPA1900-160-SC01

V1.0

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1. Appearance description



Figure 1 appearance

a. DC power input port

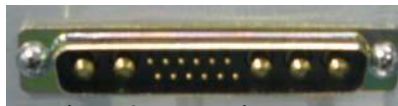


Figure 2 power input port

This is the power input port show on the figure 2, need to input 28V DC power so that the PA can work.

b. signal input and output port



Figure 3 signal input and output ports

The right port show on the figure 3 is the signal input port, and the left port as show is the signal output port.

c. LED display description

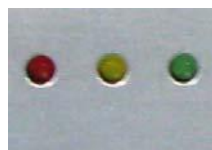


Figure 4 LED display

The LED show above defined different status of the PA, when major alarm the red on compare yellow on means minor alarm, and if the green on means the PA is work well.

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Table 1 Specification of Power Amplifier Indicator Lights

Item	Label	Color	State	Specification
1	Major alarm	Red	On	PA alarms and shuts down
	Minor alarm	Yellow	Off	
	RF on	Green	Off	
2	Major alarm	Red	Off	PA alarms but still works
	Minor alarm	Yellow	On	
	RF on	Green	Off	
3	Major alarm	Red	Off	PA works normally
	Minor alarm	Yellow	Off	
	RF on	Green	On	

d. Hyper Terminal Port



Figure 5 the hyper terminal port

The port show on figure 5 is the hyper terminal port, connect the PA and the computer with a data line to realize the communication between them.

e. the whole appearance



Figure 6 the whole appearance

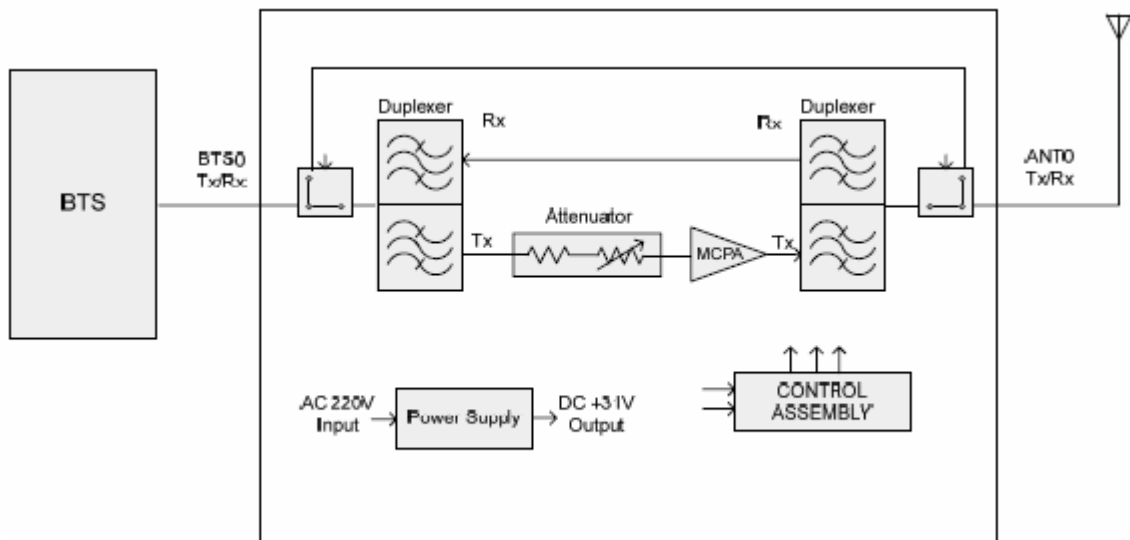
When every port is connected, the whole appearance is show above.

2. Adjustment description

a. Test apparatus

1. 30A/28V Power Supply		1set
2. Power meter		1set
3. Signal generator	1set	
4. Spectrum analyzer	1set	
5. Coupler (30dB and 20dB)	1set	
6. Attenuator (20dB)	2set	
7. 50dB load		1set
8. Test Jumper Cables		some

b. Test flow chart



Instruction:

1). Set up the structure according to the figure 7.

2). Signal generator setup:

signal type: 3G 4Carriers 4CDMA_7.58dB_1111

3). Spectrum analyzer setup:

RBW→30KHz; VBW→300KHz; Center frequency: 1960MHz; SPAN:30MHz; Sweep time: 1S;

Spectrum Analyzer's offset value according the attenuation from PA output to input port of spectrum analyzer.

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- 4). Power meter must to be calibration and set the offset value according to attenuation from PA output to power sensor.
- 5). Input PA voltage setup +28V.
- 6). Turn on the signal generator.
- 7). Than confirm standard ACLR peculiarity.

3. Checking item before testing

- 1) No seam on the surface of PA, the position and content of barcodes and cables are right.
- 2) Check the silk-screen of PA is correct and normal.
- 3) The connectors of power supply work normally and polar of positive and negative are right.
- 4) RF connectors work normally.
- 5) Power switch is in the position of turnoff.
- 6) Turn on power supply
- 7) When the PA works with full power, the current should be 28A~30A.