

## **IV --- TRANSMITTER TURN-ON PROCEDURE**

Before applying AC Power to the transmitter for initial turn-on and check out, the installation should be approved by a qualified broadcast engineer. The turn-on procedure that follows is recommended by Pineapple Technology, Inc. engineering staff:

- 1. Check transmitter load or antenna for proper installation and connection to the transmitter.
- 2. Open the transmitter and inspect all cables and wires for loose connections or broken wires in the rack assembly.
- 3. Check for damage to the equipment mounted in the racks.
- 4. Check all AC breakers and on/off switched to ensure that they are all in the **OFF** position.
- 5. Turn-on the Main AC breaker(s) located in the house service sub-panel.
- 6. Turn-on the Main AC breaker (**CB-1**) on the <u>ACDIS4</u> Power Distribution panel. Each panel should display a light indicating power is on.
- 7. Turn-on **CB9** on the <u>ACDIS4</u> panel. The <u>AUX</u> Panel should now have the green AC ON lamp lighted. This supplies power to the AC duplex outlets on the AUX panel.
- 8. Turn-on CB10 on each ACDIS4 panel. This supplies 110 VAC power to the transmitter
- 9. Turn-on the AC Power switch located on the front panel of the <u>ADP500</u>. The indicating lights should be on and ready for operation.
- 10. Turn-on the <u>AUX</u> breaker **CB-2** located on the <u>ACDIS5</u> Power Distribution panel. The PA Fans and the rack exhaust Fan should come on.
- 11. Turn-on the power supply breakers, **CB-3** thru **CB-8**, located on the <u>ACDIS4</u> Power panel. Check the PS12KW Power Supply to see if the green lights are on indicating normal operation. (Note: There are six green lights is the PS12KW)
- 12. Using the <u>ADP500</u> and <u>PAS6</u> panel, check the idling currents on each PA to ensure that the currents are in the correct range. Typical range is 0.5 to 2.5 Amps. See ADP500 Operating Section for details. Turn the rotary switch to the P FWRD position.

NOTICE: The Modulator has been set at the factory so that the output power indication on the ADP500 will show 100% or 2 KW p-sync power level. It is important to read the instruction manual supplied with the modulator to locate key adjustment devices on the front panel. The output level adjustment will be necessary for the next step in the turn-on procedure.

- 13. Turn-on the power switch located on the UDR100AC front panel.
- 14. Apply a video signal (1 volt P-P) to the video input terminal.
- 15. Verify the display rocker switch on the MA2000 Modulator is in the VIDEO or down position and three (3) green bars appear on the display bar graph.
- 16. Slowly increase the output level adjustment while watching the RF Output level on the APD500 meter until it reads to 50%.
- 17. Using the ADP500 reflected power indication, check the LOAD reflected power. This should be less than 5% reflected.
- 18. Return to the PA current readings on the ADP500 to verify that all the currents are approximately the same.
- 19. With successful performance to Step 17, the transmitter output power can be increased using the output level adjustment on the modulator to achieve 100%. The aural power can be added at this time not exceeding 10% of output p-sync power as indicated on the ADP500.