

9. Transmitter tune-up (alignment) procedure :

There is no owners/operators applicable transmitter tune-up (alignment) procedure for Aselsan R4721 radio.

R4721 radio transmitter conducted carrier output power is programmable between 5 watts and 50 watts at 3 preset levels by using AP25DMY.exe (APCO25 Data Base Manager) and AP25TP47 Programmer.

Preset power levels are selectable by owners/operators by means of the power level selector button. Selected power levels are displayed on the upper line of LCD screen as “L” indicating low power level, “M” indicating medium power level and “H” indicating high power level. Default values for the power levels are as follows:

L (low power level) = 10 watt

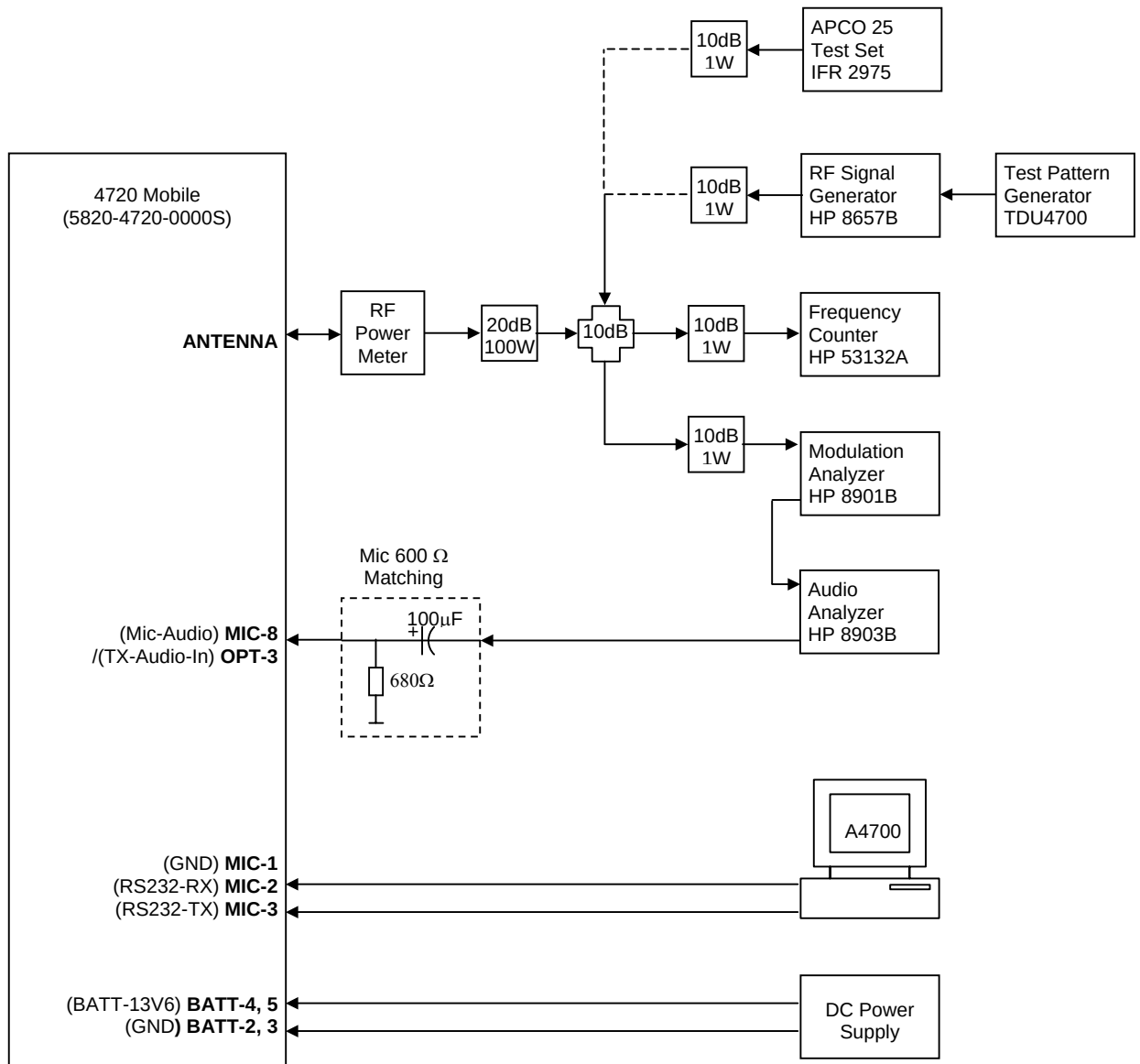
M (medium power level) = 20 watts

H (high power level) = 40 watts

In Aselsan, power control circuits of R4721 radio is calibrated according to 4700 Adjustment and Test Procedures given below.

NOTE: A4700.exe Adjustment and Test software is intended to be used by Aselsan/Authorized parties only.

5 ADJUSTMENTS



4720 Mobile Radios Adjustment Set-up

- a) Connect the equipment as illustrated.
- b) Set the Power Supply output to 13.6 volts and current limit to 10 amperes.
- c) Set the RF Signal Generator output to its minimum level.
- d) Set the Audio Analyzer output impedance to 600 Ω and amplitude to 0 Vrms.
- e) Set the Modulation Analyzer to measure peak deviation. Set the audio bandwidth for ≤ 5 Hz to ≥ 15 kHz. Turn the de-emphasis function off.
- f) Run A4700.exe on the PC.
- g) Click on the Read Radio icon and enter the “Radio Adj.” menu.

5.1 RF Output Power Adjustment

- a) Enter “RF Output Power Adjustment” window and click “Transmit”.
- b) Adjust RF Output Power Parameter to obtain the measured power levels to be equal to the selected power levels for each selected frequency.

