

Chapter 6.0 Hamtronics
Section 6.6 Amps & Tubes

G4A04 (B) p.231

What reading on the plate current meter of a vacuum tube RF power amplifier indicates correct adjustment of the plate tuning control?

- A. A pronounced peak
- B. A pronounced dip
- C. No change will be observed
- D. A slow, rhythmic oscillation

G4A05 (C) p.231

What is a reason to use Automatic Level Control (ALC) with an RF power amplifier?

- A. To balance the transmitter audio frequency response
- B. To reduce harmonic radiation
- C. To reduce distortion due to excessive drive
- D. To increase overall efficiency

G4A07 (D) p.225

What condition can lead to permanent damage to a solid-state RF power amplifier?

- A. Insufficient drive power
- B. Low input SWR
- C. Shorting the input signal to ground
- D. Excessive drive power

G4A08 (D) p.231

What is the correct adjustment for the load or coupling control of a vacuum tube RF power amplifier?

- A. Minimum SWR on the antenna
- B. Minimum plate current without exceeding maximum allowable grid current
- C. Highest plate voltage while minimizing grid current
- D. Maximum power output without exceeding maximum allowable plate current

G6A10 (A) p.229

Which element of a triode vacuum tube is used to regulate the flow of electrons between cathode and plate?

- A. Control grid
- B. Heater
- C. Screen Grid
- D. Trigger electrode

G6A11 (B) p.228

Which of the following solid state devices is most like a vacuum tube in its general operating characteristics?

- A. A bipolar transistor
- B. A field effect transistor
- C. A tunnel diode
- D. A varistor

G6A12 (A) p.229

What is the primary purpose of a screen grid in a vacuum tube?

- A. To reduce grid-to-plate capacitance
- B. To increase efficiency
- C. To increase the control grid resistance
- D. To decrease plate resistance

G7B08 (B) p.226

How is the efficiency of an RF power amplifier determined?

- A. Divide the DC input power by the DC output power
- B. Divide the RF output power by the DC input power
- C. Multiply the RF input power by the reciprocal of the RF output power
- D. Add the RF input power to the DC output power

G7B10 (D) p.227

Which of the following is a characteristic of a Class A amplifier?

- A. Low standby power
- B. High Efficiency
- C. No need for bias
- D. Low distortion

G7B11 (B) p.228

For which of the following modes is a Class C power stage appropriate for amplifying a modulated signal?

- A. SSB
- B. CW
- C. AM
- D. All of these choices are correct

G7B12 (D) p.228

Which of these classes of amplifiers has the highest efficiency?

- A. Class A
- B. Class B
- C. Class AB
- D. Class C

G7B13 (B) p.231

What is the reason for neutralizing the final amplifier stage of a transmitter?

- A. To limit the modulation index
- B. To eliminate self-oscillations
- C. To cut off the final amplifier during standby periods
- D. To keep the carrier on frequency

G7B14 (B) p.227

Which of the following describes a linear amplifier?

- A. Any RF power amplifier used in conjunction with an amateur transceiver
- B. An amplifier in which the output preserves the input waveform
- C. A Class C high efficiency amplifier
- D. An amplifier used as a frequency multiplier