

# Summary Slide

- Main goal of Amplitude Control loop is to stabilize the output power and to deliver constant power even with dynamic load condition.
- This goal is achieved by varying the drive reference as output power is deviating from the requested power.
- To handle dynamic load condition, anode biasing voltage is adjusted in real time to keep Screen Grid current between nominal operational value and limiting value.
- Other goal of the amplitude control loop is to drive the amplifier operation in limiting mode rather than terminating the pulse if any abnormality in operating parameters are observed.
- Even if limiting mode of operation is not able to keep operating parameter within limit then protection function will terminate the pulse to avoid severe damage of amplifier component.
- In short amplitude control loop is essential part of local control system for make IC-RF source operation safe & reliable.