

Could also use phase detector

calibration point
Reference Frequency
(tuned frequency in
known radiation field)

Frequency to
Voltage converter
(counter, etc.)

To readout electronics

Reference command to
drive to balance point

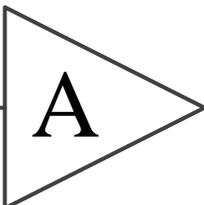
0 V

Error signal
V

VCO
(Voltage Controlled
Oscillator)

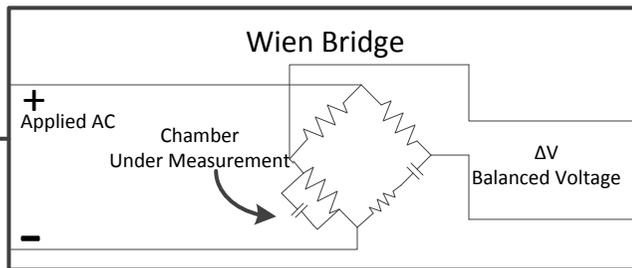
Dynamic frequency range
determines range of
radiation detectable

Hz



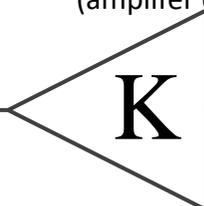
Hz

Gain block for appropriate
AC bias level for the chamber
(amplifier or transformer)

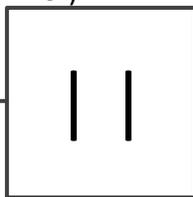


V

V



Gain block for scaling



Absolute value
And signal
conditioning

calibration point

Reference Voltage
(voltage the error will be in a
known radiation field)

To readout electronics