

A decorative graphic on the left side of the slide, consisting of a vertical column of light blue lines and circles that resemble a circuit board or a stylized tree structure. The lines are of varying thickness and connect to small circles at various points.

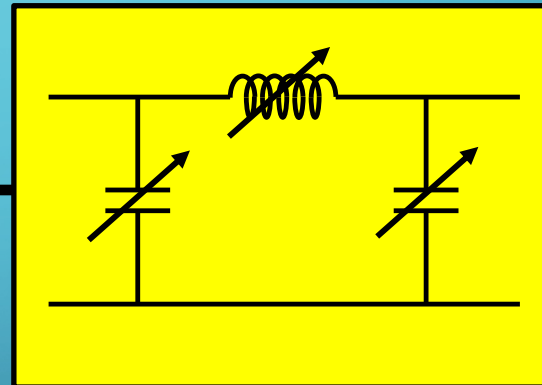
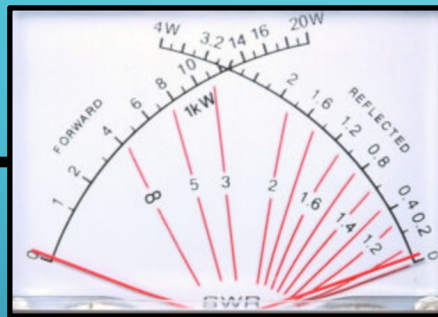
HOW TO NOT BLOW UP YOUR QRP TRANSCEIVER

GEORGE, K1IG

QRP TRANSCEIVER KITS

- Many designs
- \$25 - \$150
- Simple circuits, lots of SDRs and SMD's
- No protective circuitry, intolerant of high SWR

QRP TRANSCEIVER KITS



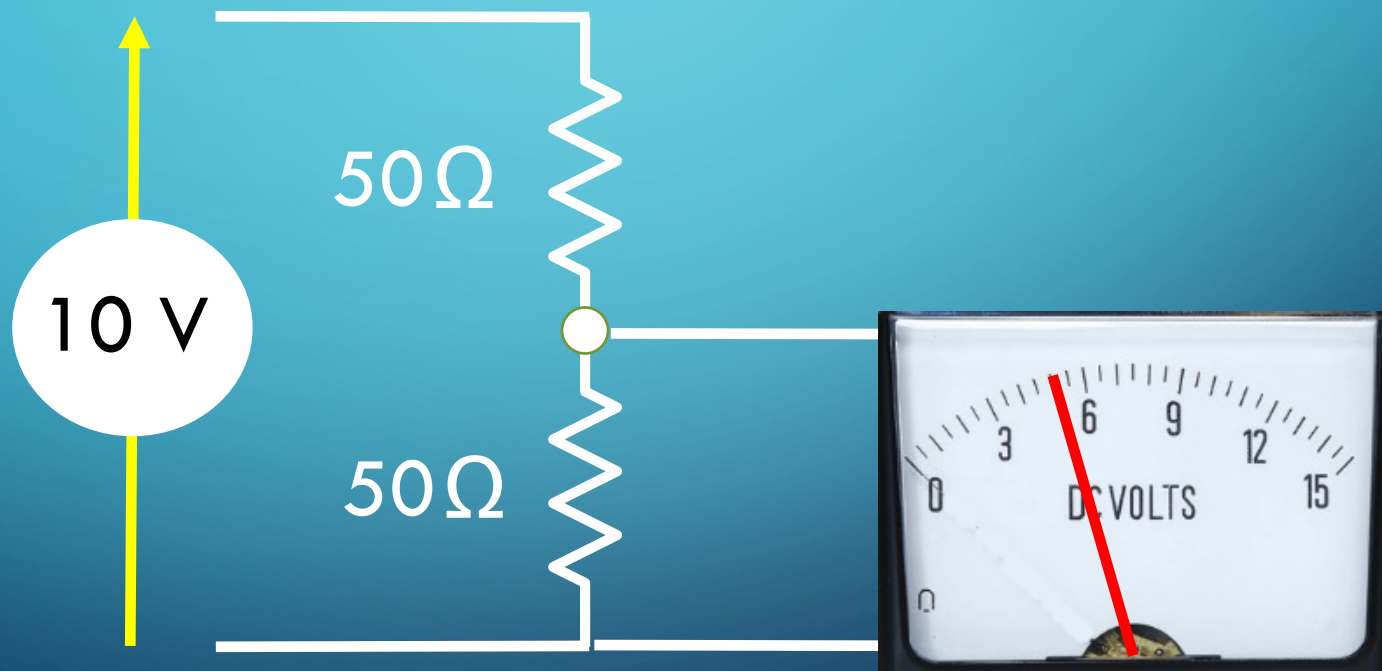
You Have to Have a Tuned Antenna BEFORE You Apply Power, But You Can't Tune the Antenna Without Applying Power

QRP ANTENNA TUNER

- Prevents the transceiver from seeing high SWR.
- SWR always $< 2:1$ while tuning.



VOLTAGE DIVIDER



RESISTORS IN SERIES & PARALLEL

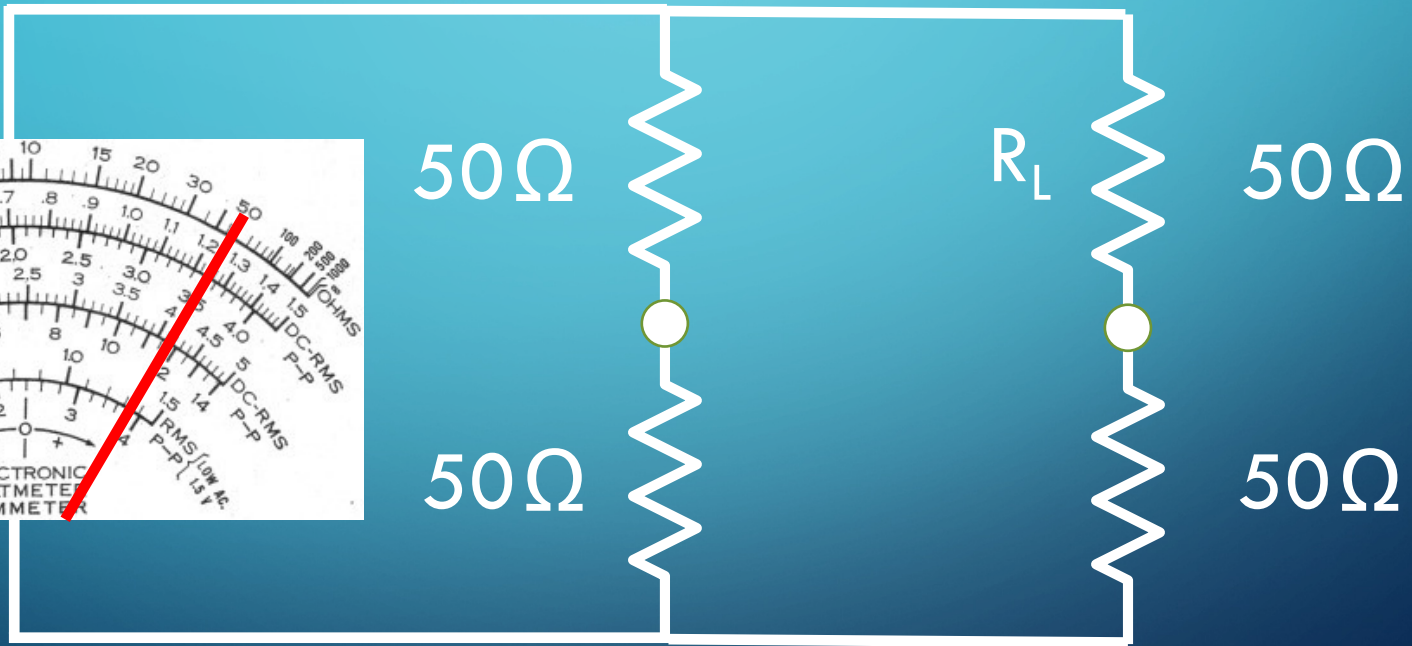


50 Ω

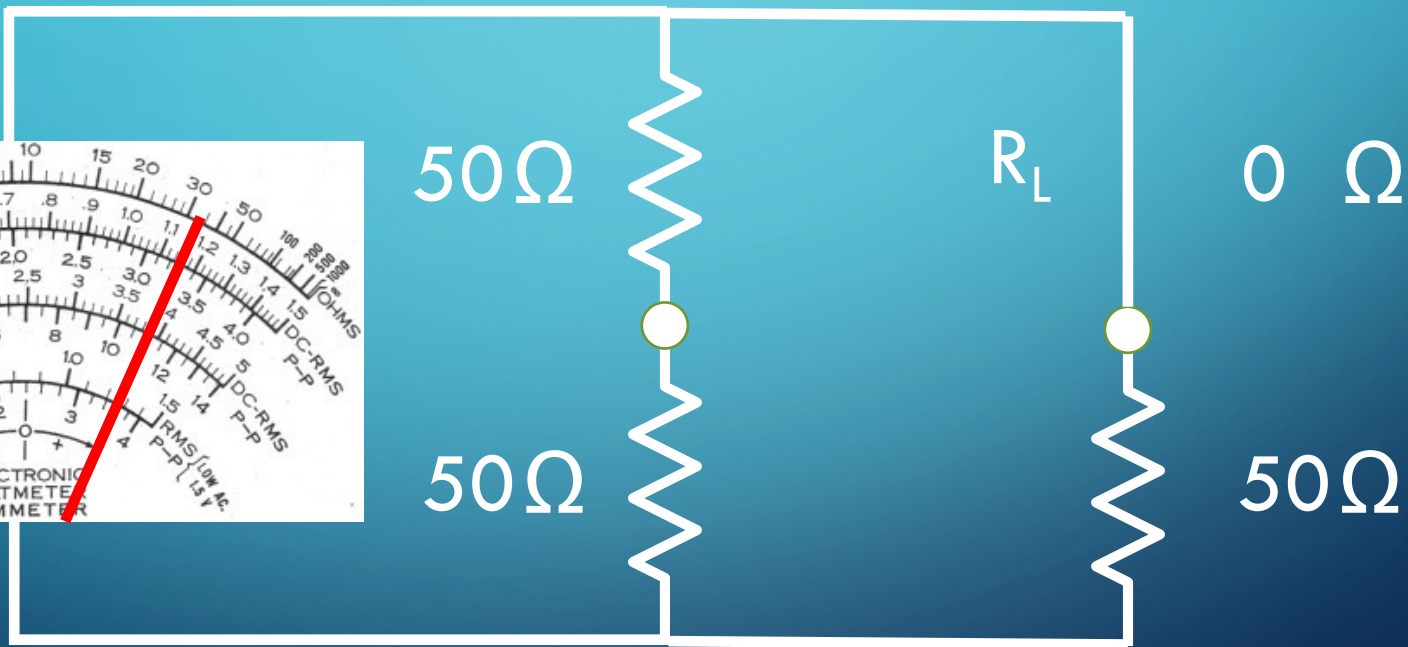
50 Ω



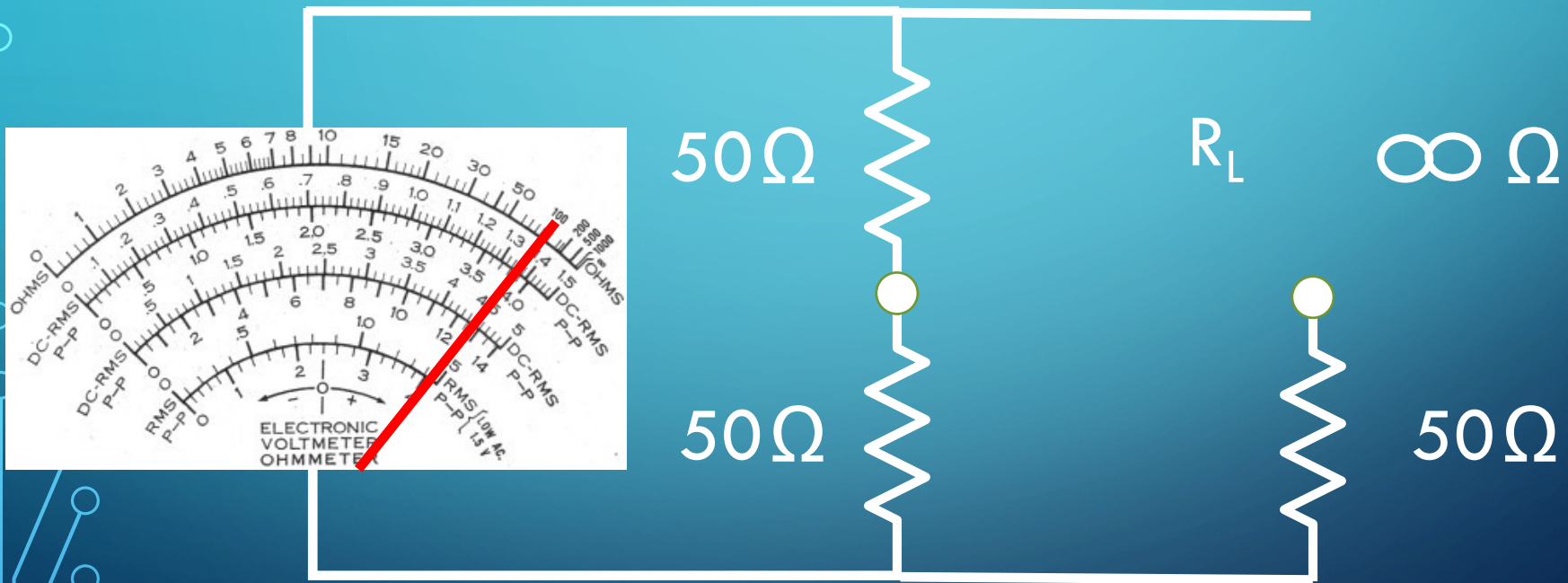
RESISTORS IN SERIES & PARALLEL



RESISTORS IN SERIES & PARALLEL

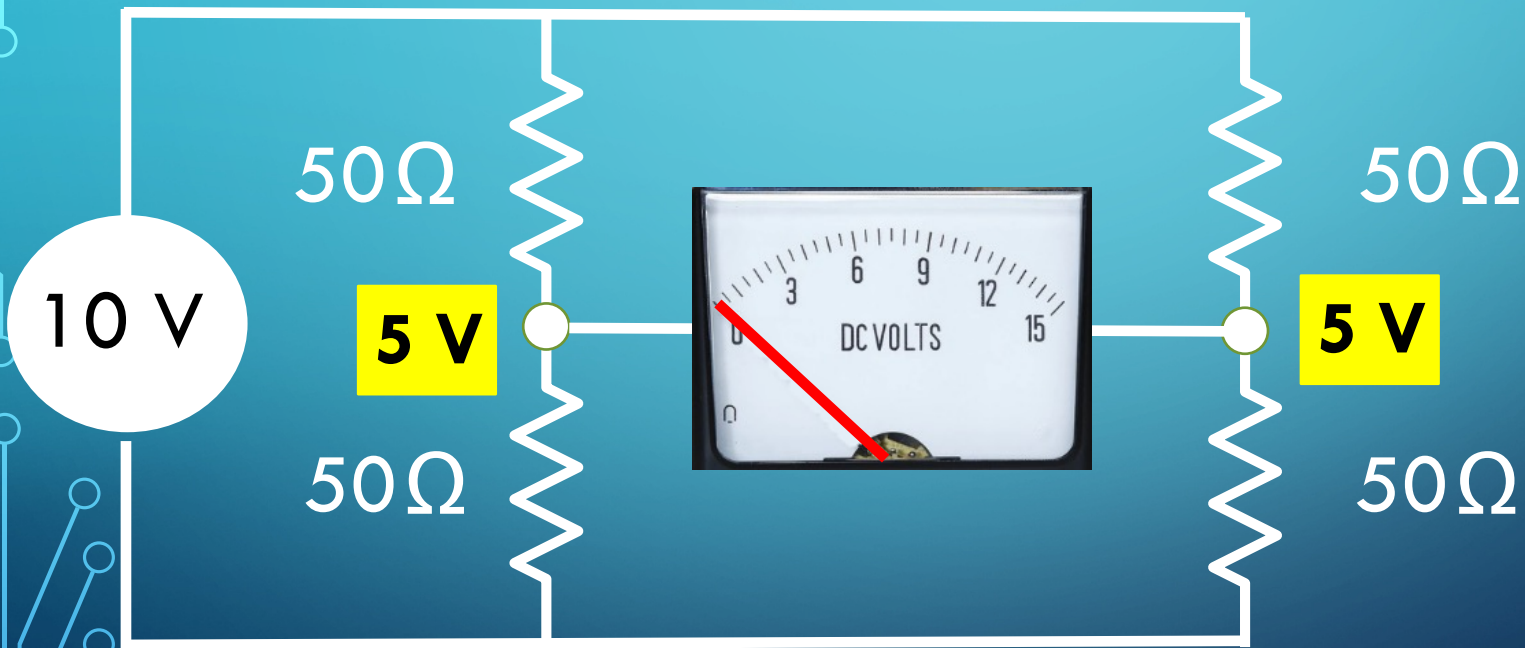


RESISTORS IN SERIES & PARALLEL

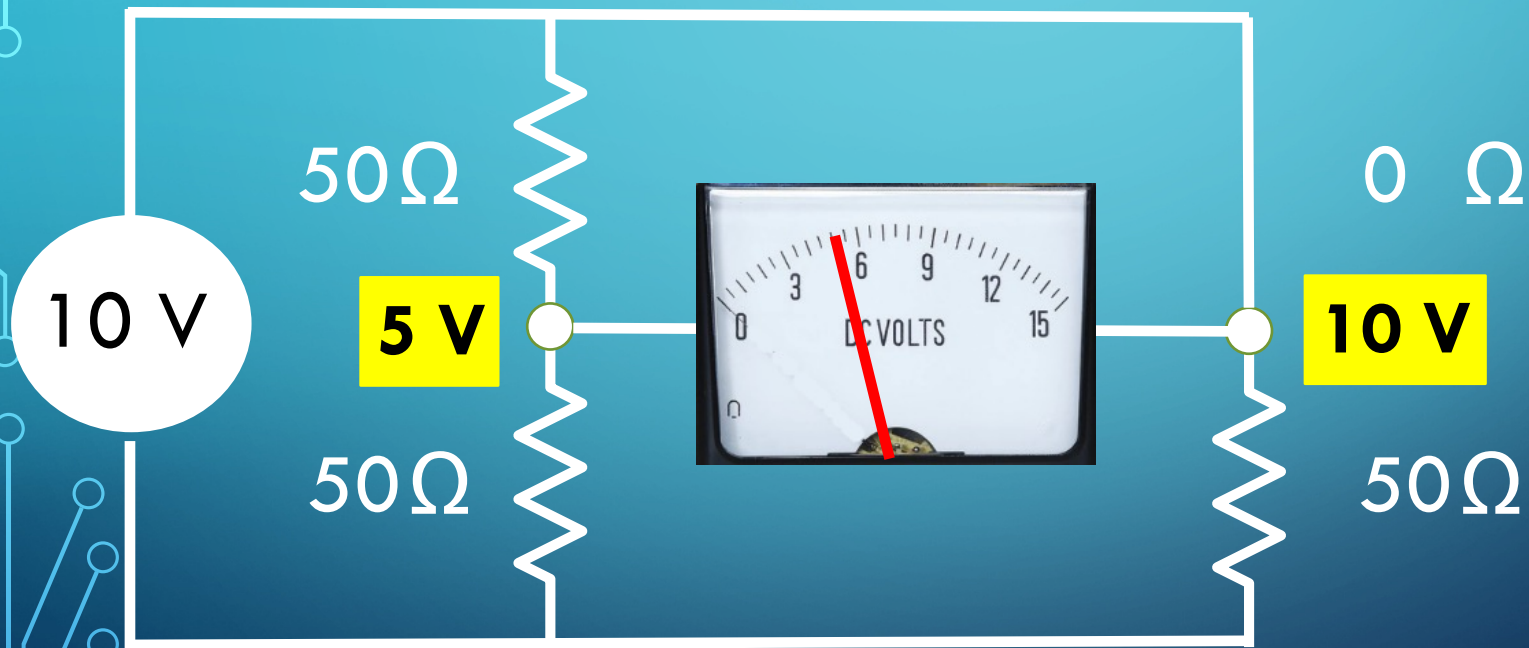


No matter what R_L is, the ohmmeter will always see $33 < R < 100$ ohms

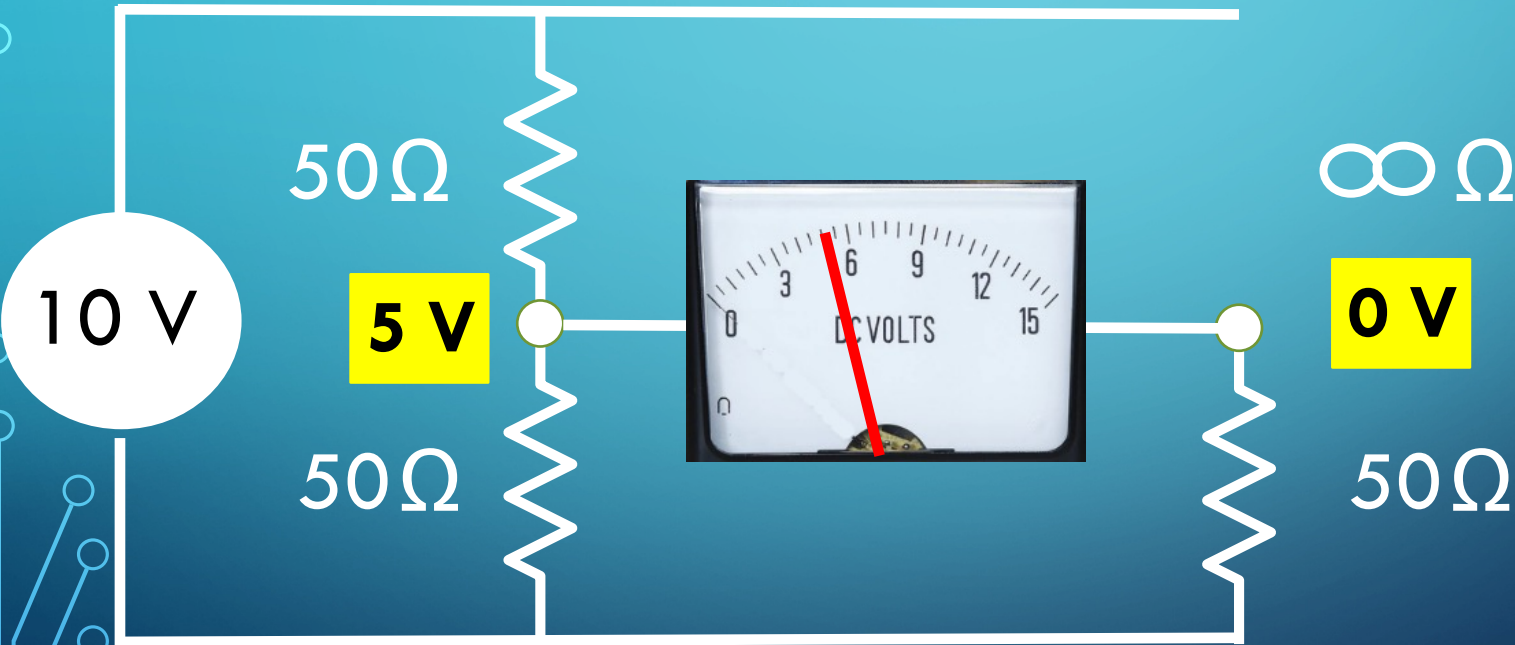
BRIDGE CIRCUIT



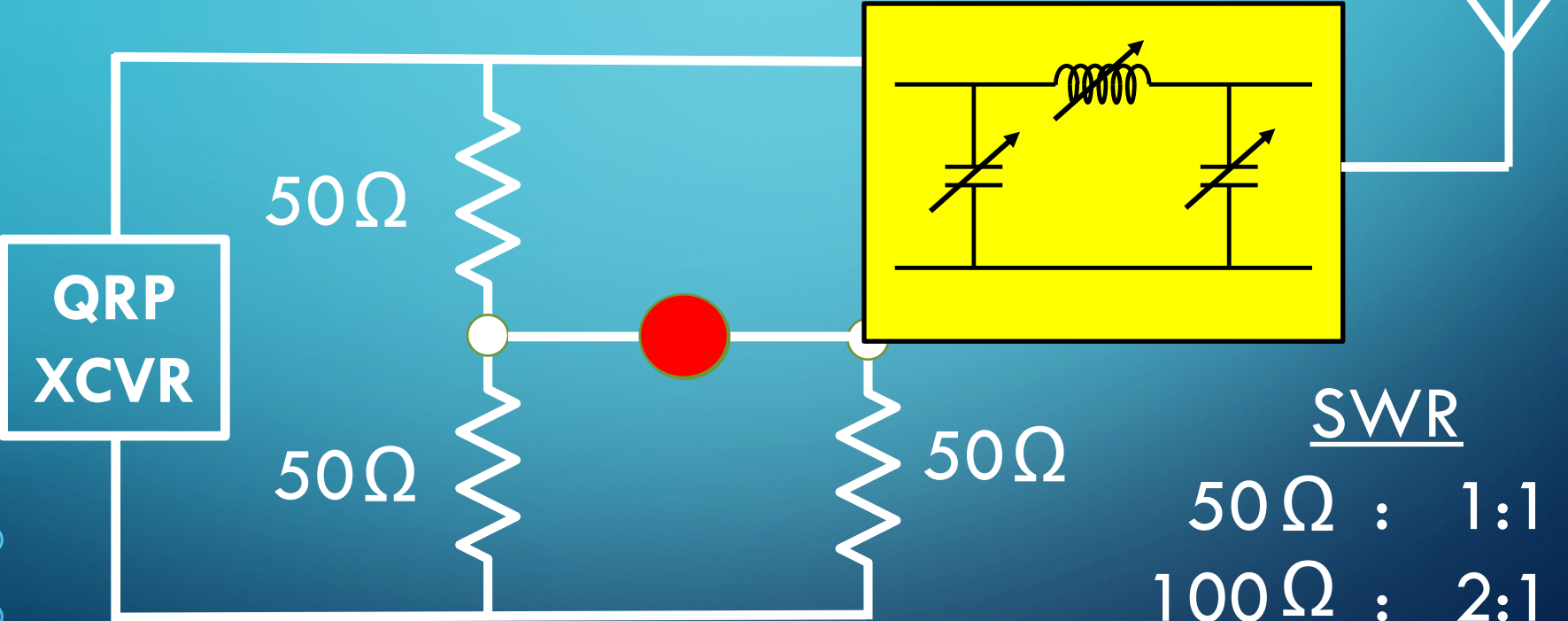
BRIDGE CIRCUIT



BRIDGE CIRCUIT



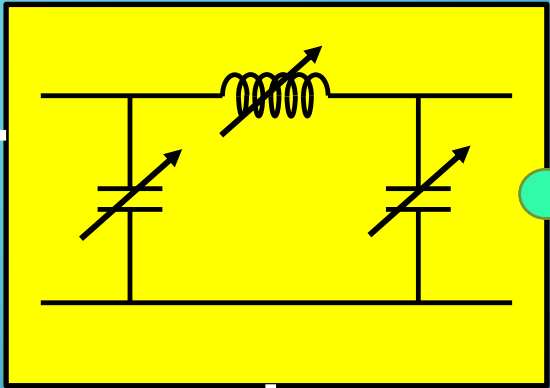
QRP TUNER



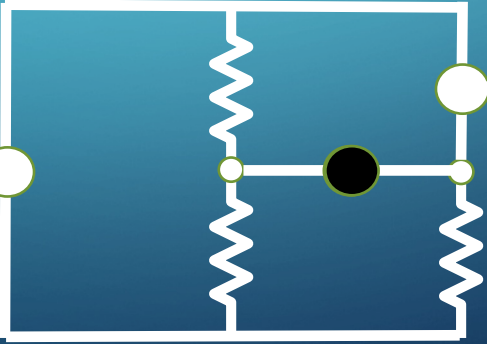
<u>SWR</u>	
50 Ω	: 1:1
100 Ω	: 2:1
33 Ω	: 1.6:1

QRP TUNER

QRP
XCVR



Forward
Power



Reflected
Power



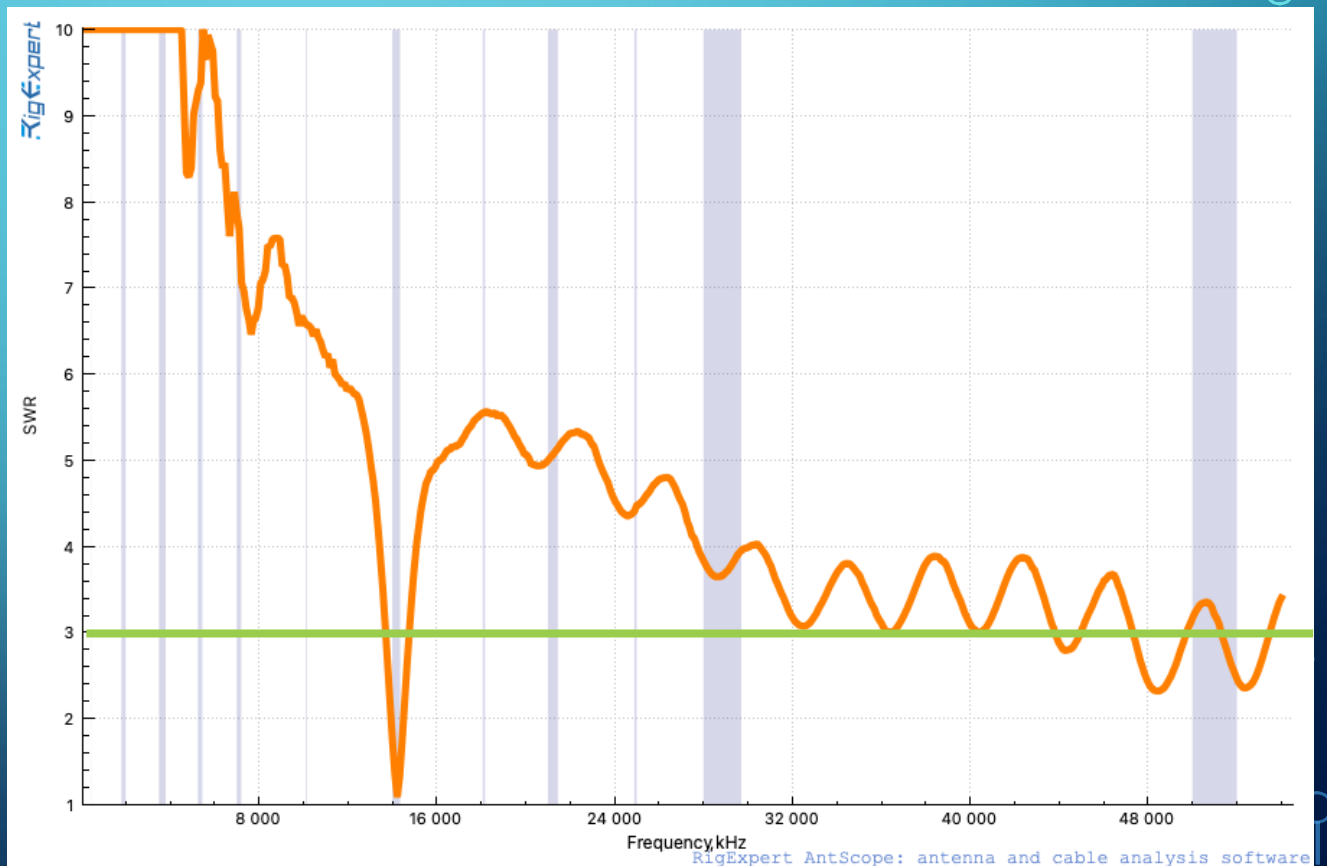
QRP TUNER

Component Side



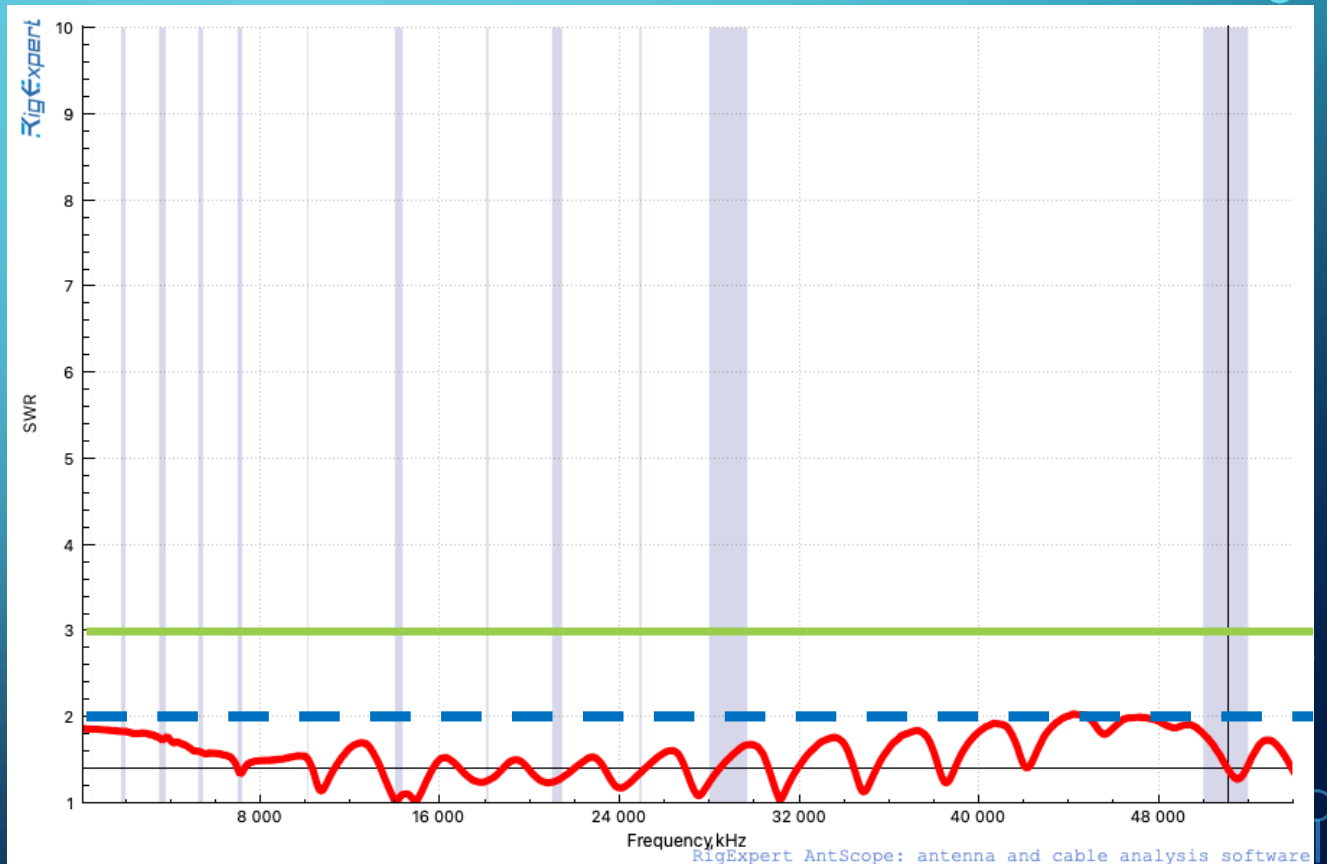
QRP TUNER

20 Meter
Dipole
No Tuner



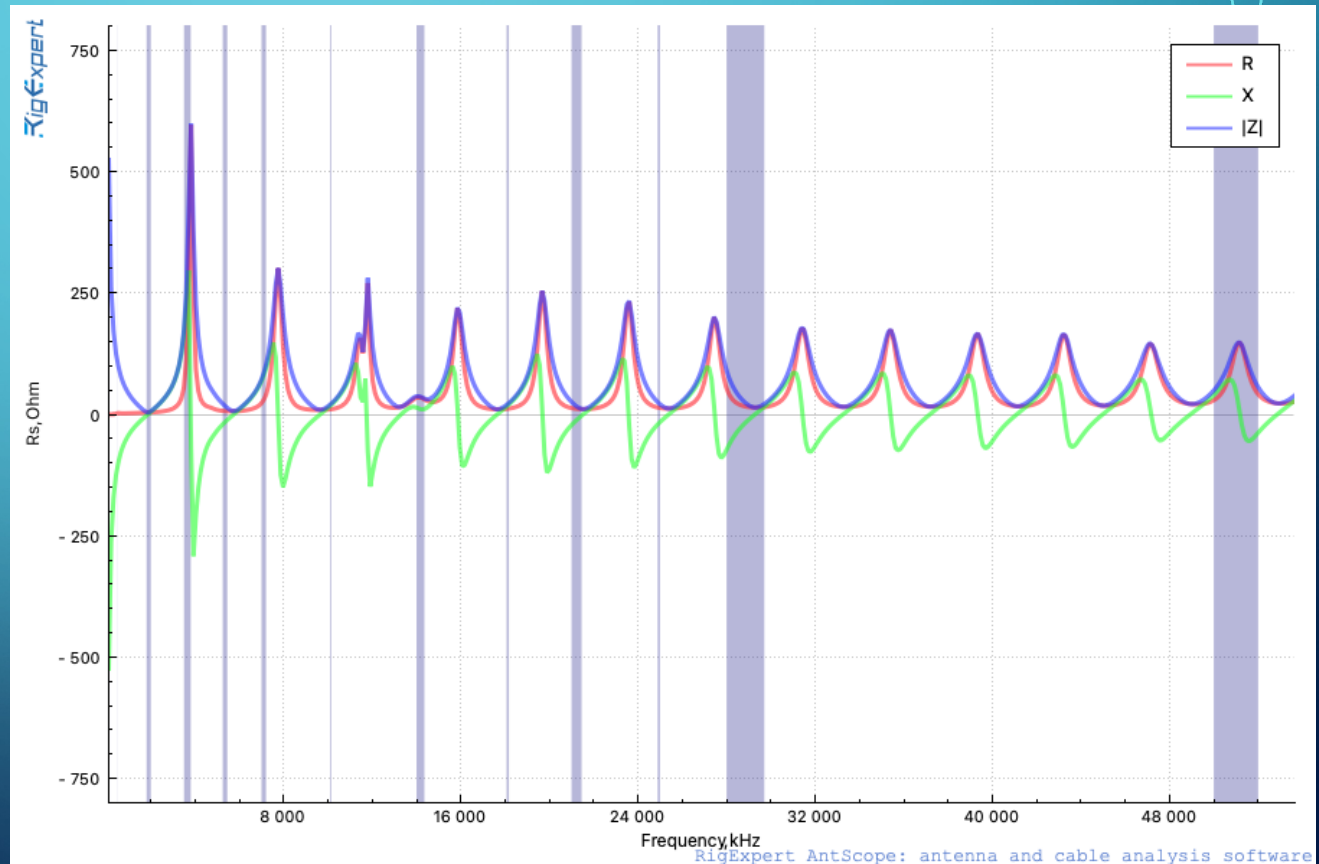
QRP TUNER

20 Meter
Dipole
With
Bridge
And
Tuner



QRP TUNER

20 Meter
Dipole
Complex
Impedence



QRP TUNER

20 Meter Dipole Complex Impedence With Tuner & Bridge

