

Spectrum IF Demo circuit

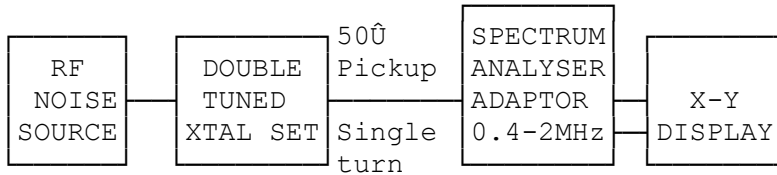
By G8MNY

(New Feb 10)

(8 Bit ASCII graphics use code page 437 or 850, Terminal Font)

Being involved with ham training, I have been doing all the technical demos for the advanced course, this one shows "under", "critical" & "over" coupling between 2 tuned circuits.

SETUP

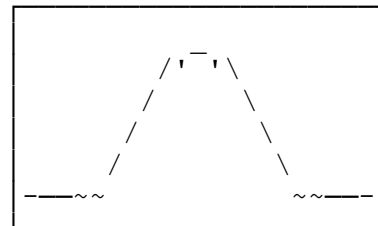
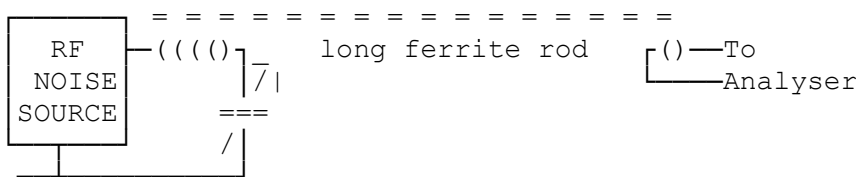


I cheated with the use of my RF Noise Bridge as a noise source & my Crystal Set with its 2 sliding coils on a ferrite rod, as the variable couple tuned circuits.

Using a noise source instead of a spectrum analyser's tracking generator is not ideal & the display is quite wobbly, but using a low display video bandwidth & slow sweep rate (50Hz) helps.

DEMO 1

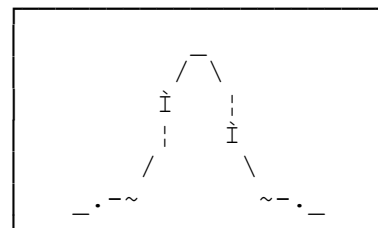
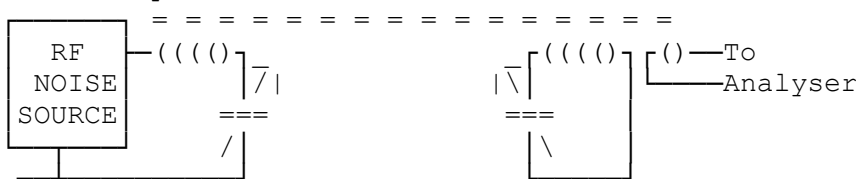
Single tuned circuit



Shows broad tuned circuit

DEMO 2

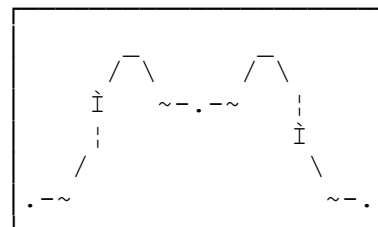
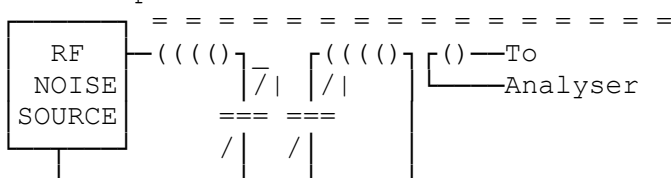
Under coupled tuned circuits



Narrower & better skirt

DEMO 3

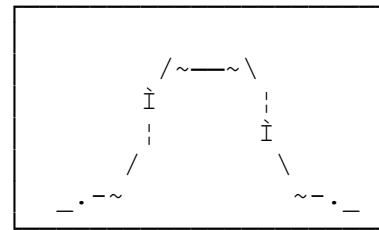
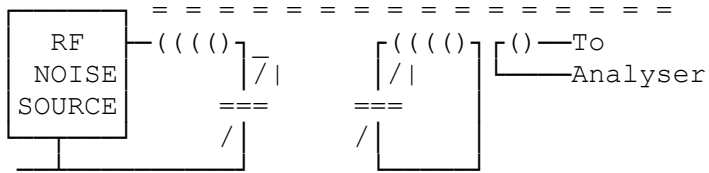
Over Coupled tuned circuits



Always wide & double hump

DEMO 4

Critical Coupled tuned circuits



Almost ideal square top

See also my TECH buls on "RF Noise Bridge for LF, MF, & HF", "A Quality Crystal Set" & "Spectrum Analyser mods 88-89".

Why don't U send an interesting bul?

73 de John G8MNY @ GB7CIP