

Very good settings strategy for reaching optimal operating conditions

1. If you have impedance analyzer, make impedance measurements and select initial scanning range that will capture both series and parallel resonant frequency and little bit wider (on both sides).
2. Measure and/or calculate the frequency interval between series and parallel resonant frequency $\Delta f = f_p - f_s = f_2 - f_1$
3. Set the **Span** value (on the first settings tab) to be between $2\Delta f < \text{Span} < 6\Delta f$, (optimal $\text{Span} = 4\Delta f$). Test later different Span values and select one that is producing optimal operating conditions.
4. Initially set the **Start frequency** to be in the low phase, low current zone (far from any other resonance), and to have the value $f_{\text{start}} \leq f_p + 3\Delta f = f_s + 4\Delta f$ (below maximal frequency).

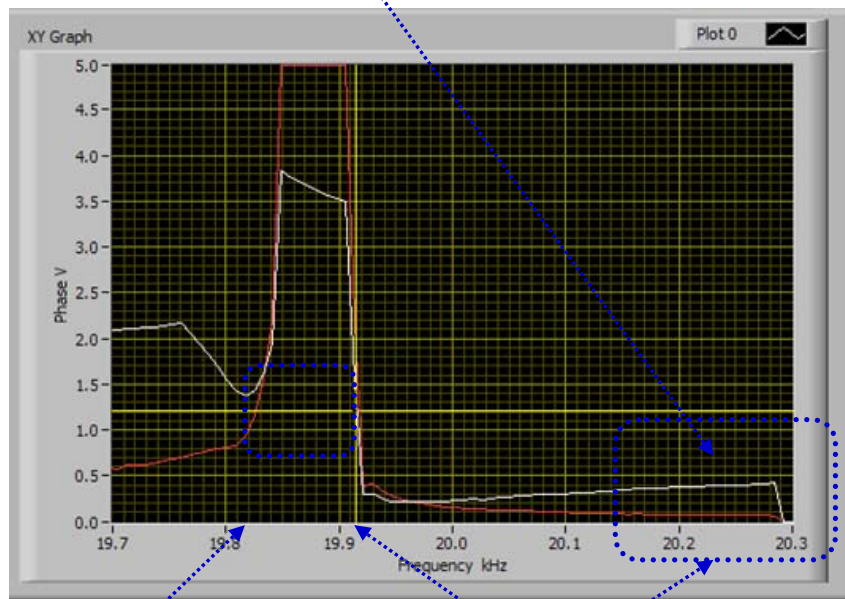


Fig. 2: Typical scanning curve (wide scanning range).

Here is series resonant frequency f_s . Here is parallel resonant frequency f_p .
Select Start frequency somewhere here

5. Make all scanning, testing and tuning as already explained in this manual, while also respecting points 1, 2, 3 and 4 (see above on this page).
6. Test the generator and verify if amplitude and phase are being regulated correctly (and automatically). Try operating mostly around parallel resonance.
7. Readjust only start frequency going from higher to lower frequencies until reaching proper and stable, automatic regulation of **phase** and **amplitude**. Do not increase the Span. Optimal operating conditions in this case will found only by readjusting start frequency. All other setting parameters will stay unchanged as previously selected).