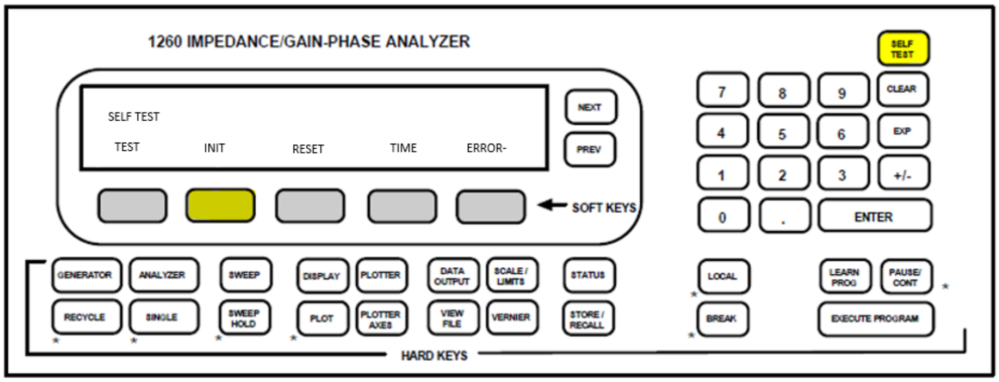
Solartron 1260A

PROCEDURE FOR A FUNCTIONAL CHECK

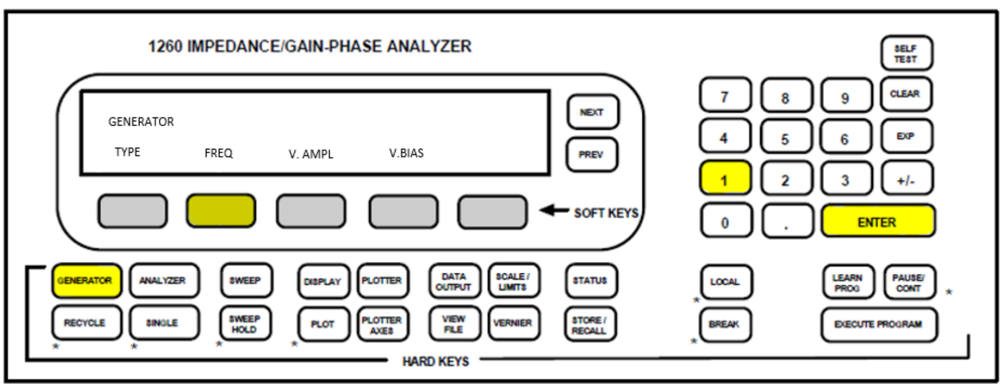
HTTP://WWW.AMETEKSI.COM/SUPPORT-CENTER/SOLARTRON-ANALYTICAL/USER-TESTS

This is a basic test procedure used to ensure that the generator and input channels are working on the impedance analyzer in question. The following steps outline the procedure for performing a basic bench test on the Solartron Analytical 1260A.

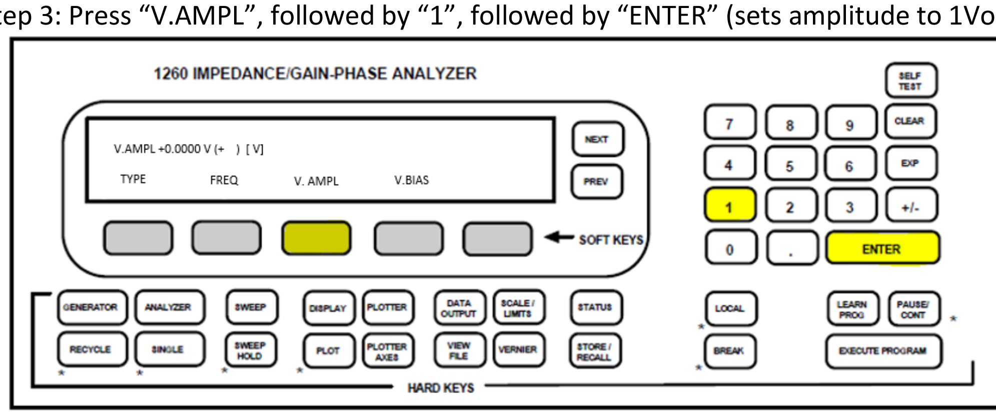
- Step 1: Press the “SELF TEST” key, followed by “INIT”. Relays should click and “Initialized” message should appear on the display.



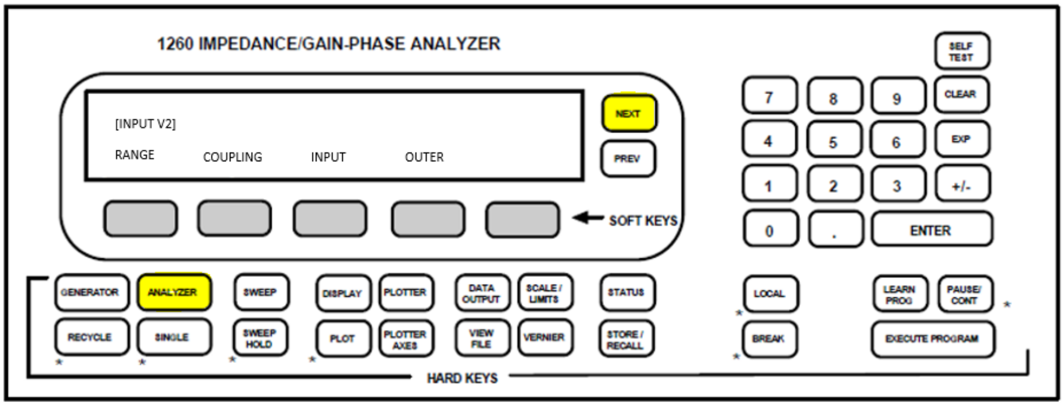
- Step 2: Press “GENERATOR”, followed by “FREQ”, followed by “1”, followed by “ENTER” (sets frequency to 1Hz).



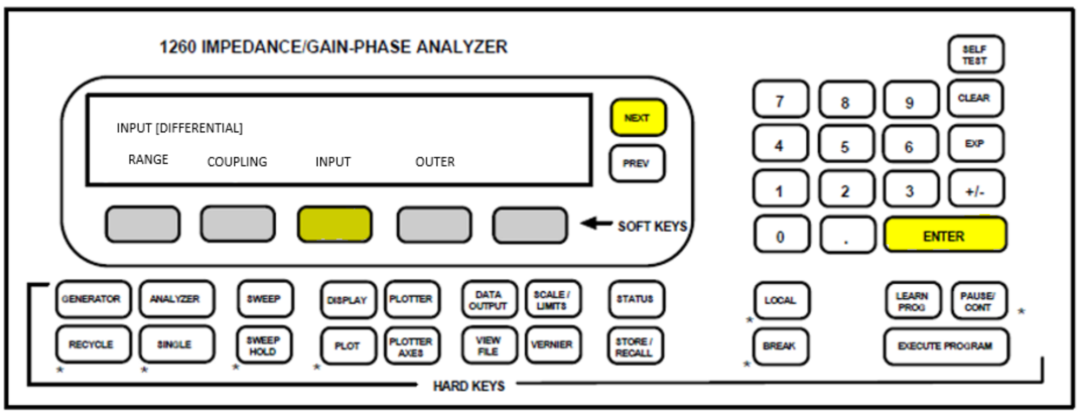
- Step 3: Press “V.AMPL”, followed by “1”, followed by “ENTER” (sets amplitude to 1Volt).



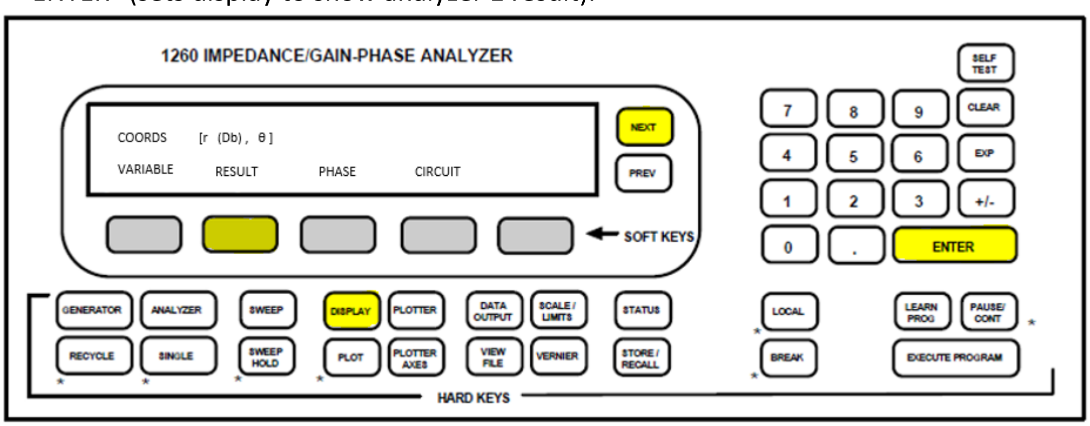
- Step 4: Press “ANALYZER” key, followed by “NEXT” key two times (selects analyzer 2 option).



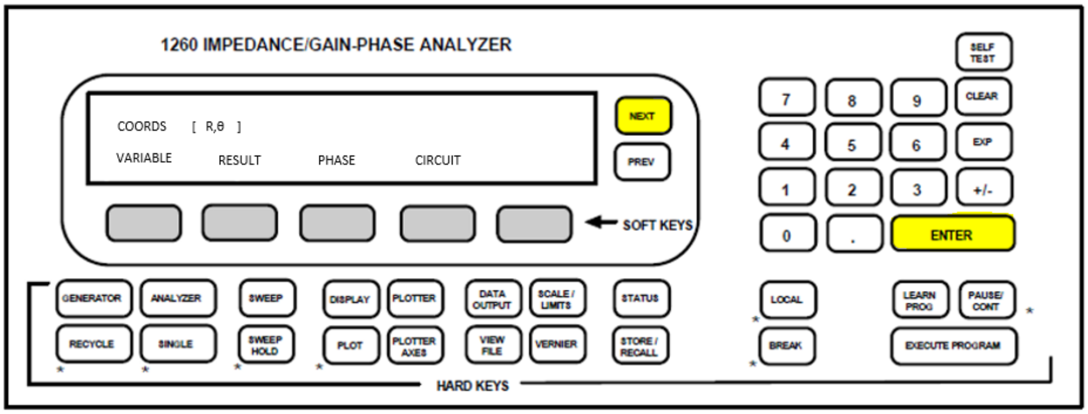
- Step 5: Select “INPUT”, followed by “NEXT”, followed by “ENTER” (selects analyzer 2 for differential input).



- Step 6: Press “DISPLAY”, followed by “RESULT”, followed by “NEXT” 5 times, followed by “ENTER” (sets display to show analyzer 1 result).



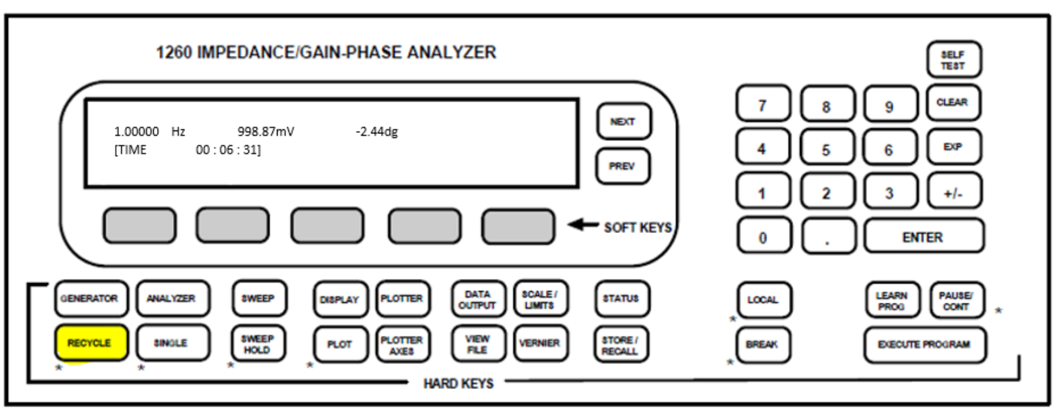
- ☐ Step 7: Press “NEXT” 4 times, followed by “ENTER” (sets display to show R/theta).



- ☐ Step 8: Link “GEN OUTPUT” to “INPUT V1 HI” with BNC to BNC lead.

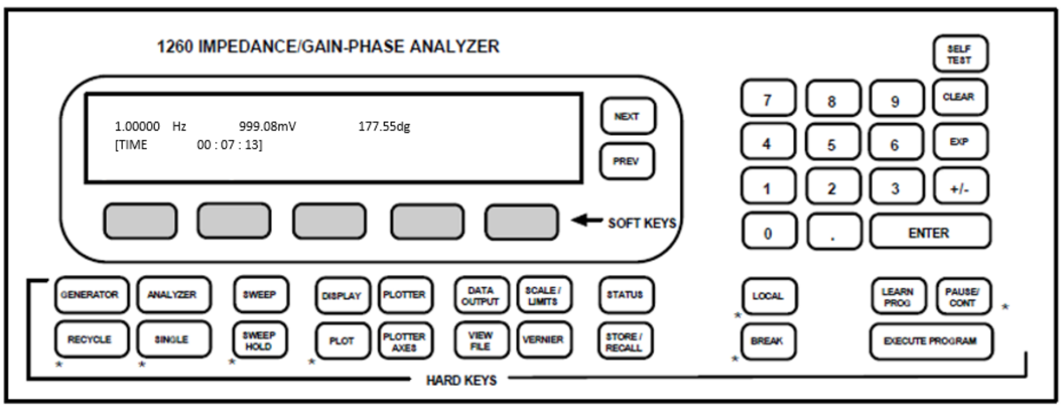
- ☐ Step 9: Press “RECYCLE”.

- ☐ Step 10: Display should show a frequency of 1Hz @ approximately 1V (+/-0.03V) @ approximately 0 deg Phase (+/- 3 deg phase).

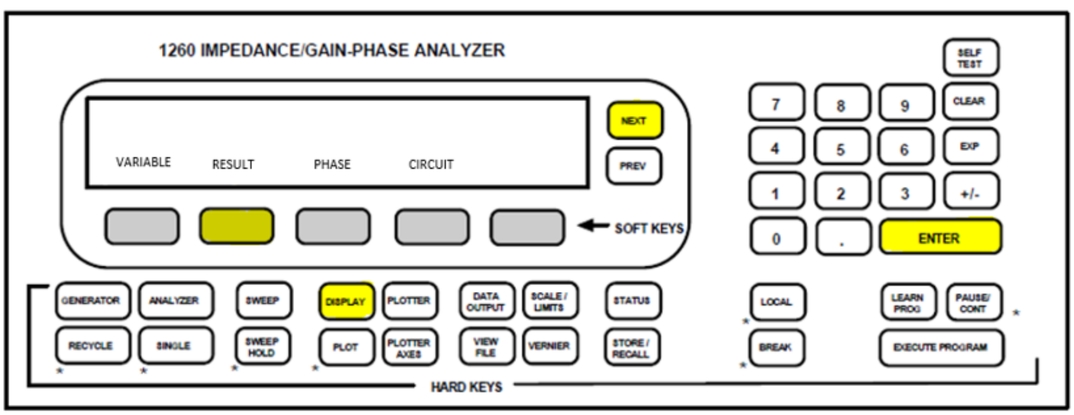


☐ Step 11: Link “GEN OUTPUT” to “INPUT V1 LO” with BNC to BNC lead.

☐ Step 12: Display should show a frequency of 1Hz @ approximately 1V (+/-0.03V) @ approximately 180 deg Phase (+/- 3 deg phase).

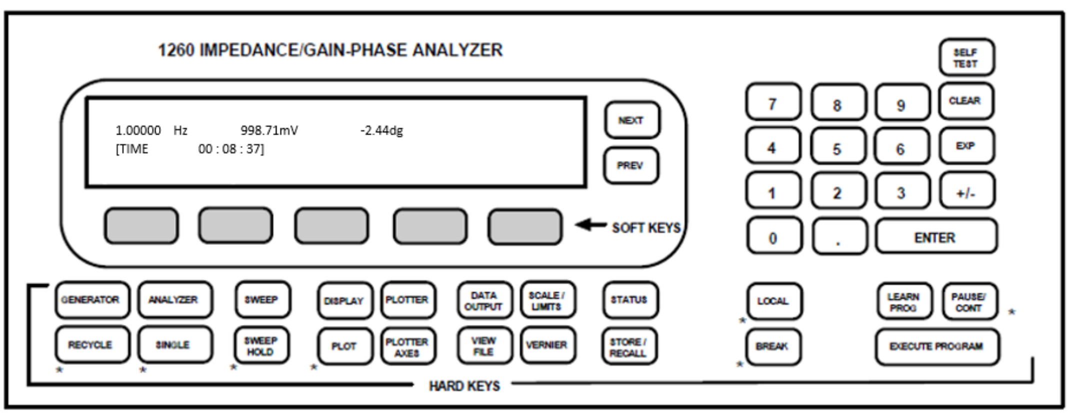


☐ Step 13: Press “DISPLAY”, followed by “RESULT”, followed by “NEXT”, followed by “ENTER” 3 times (sets display to shows analyzer 2 result).



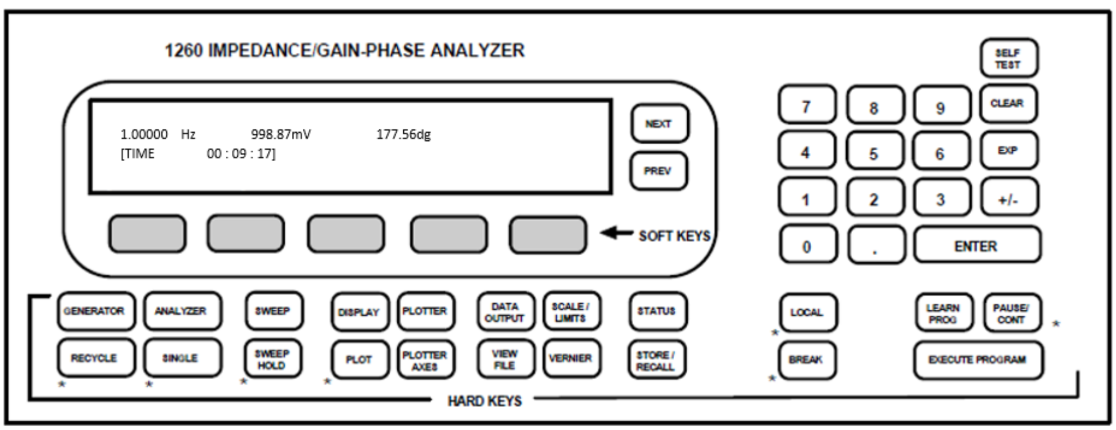
- Step 14: Link “GEN OUTPUT” to “INPUT V2 HI” with BNC to BNC lead.

- Step 15: Display should show a frequency of 1Hz @ approximately 1V (+/-0.03V) @ approximately 0 deg Phase (+/- 3 deg phase).



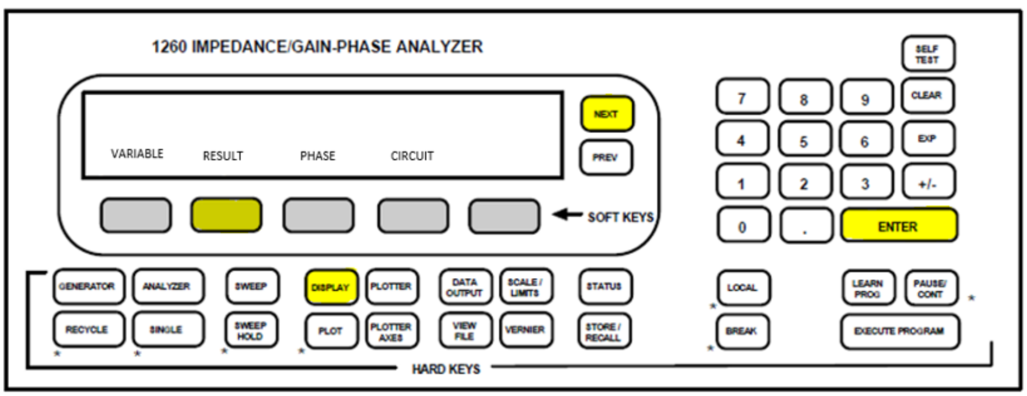
□ Step 16: Link "GEN OUTPUT" to "INPUT V2 LO" with BNC to BNC lead.

□ Step 17: Display should show a frequency of 1Hz @ approximately 1V (+/-0.03V) @ approximately 180 deg Phase (+/- 3 deg phase).

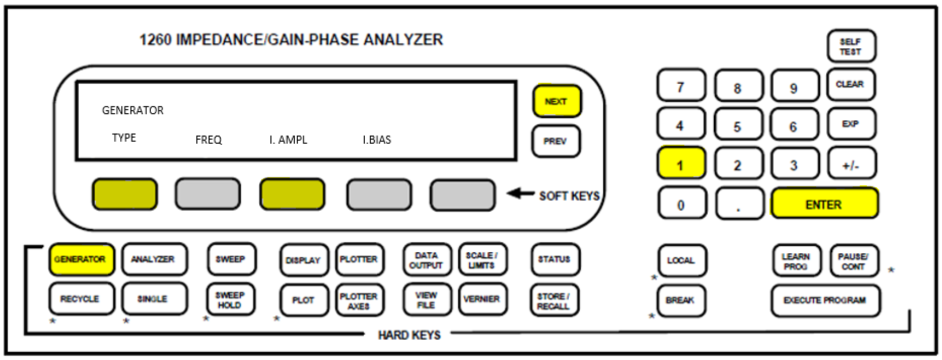


- ☐ Step 18: Link “GEN OUTPUT” to “INPUT I” (current analyzer input).

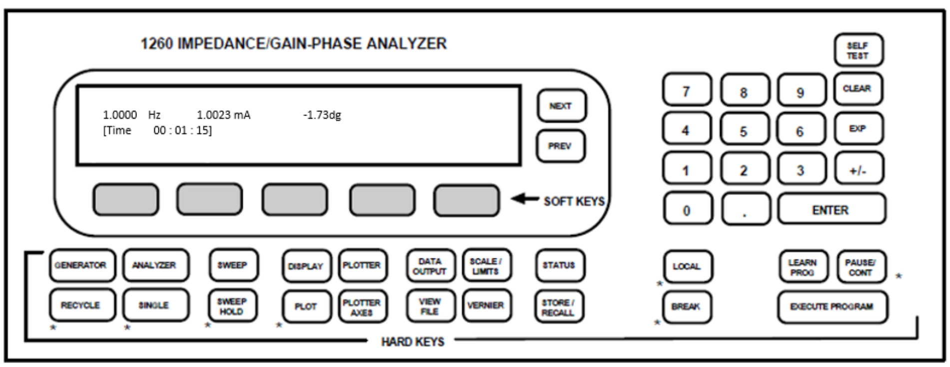
- ☐ Step 19: Press “DISPLAY”, followed by “RESULT”, followed by “NEXT” 3 times, followed by “ENTER” 3 times (sets display to show current input result).



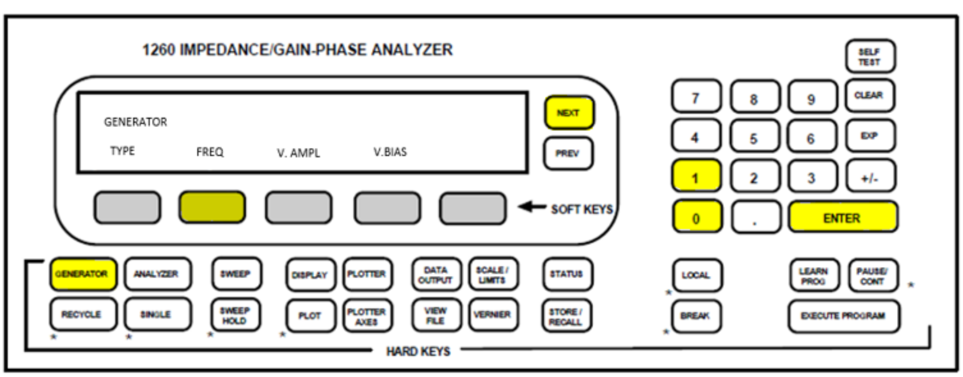
- Step 20: Press “GENERATOR”, followed by “TYPE”, followed by “NEXT”, followed by “ENTER”, followed by “NEXT”, followed by “I AMPL”, followed by 1, followed by “ENTER” 2 times (sets 1 mA current).



- Step 21: Display should show a frequency of 1Hz @ approximately 1mA @ approximately 0deg Phase (+/- 2 deg phase).



- Step 22: Set frequency to 100KHz. (Note, ignore phase readings at this frequency). To set frequency to 100KHz- After pressing “GENERATOR”, followed by “FREQ” in step 2, type in “100”. Then use the “NEXT” key to change setting to KHz, and press “ENTER”. Resume from step 3 of the previously outlined test to complete the procedure at 100KHz.



- Repeat the steps and check results as listed below:

Results for steps 3-9: Freq = 100 KHz, Voltage = 1.0 +/-0.03 V

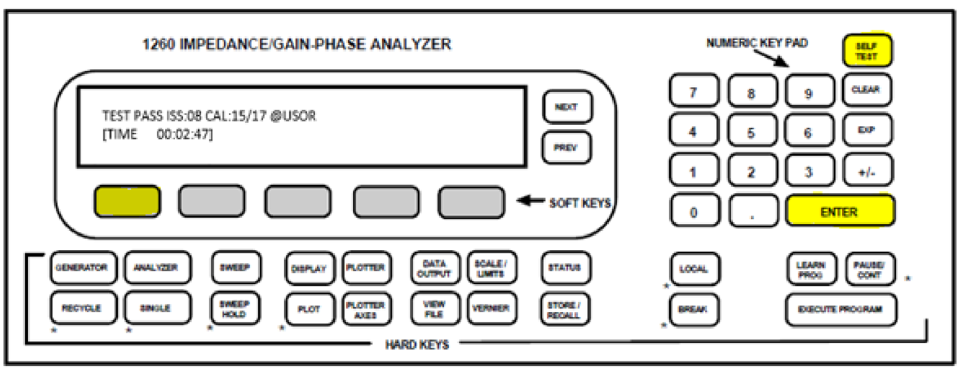
Results for step 11-12: Freq = 100 KHz, Voltage = 1.0 +/-0.03 V

Results for steps 13-15: Freq = 100 KHz, Voltage = 1.0 +/-0.03 V

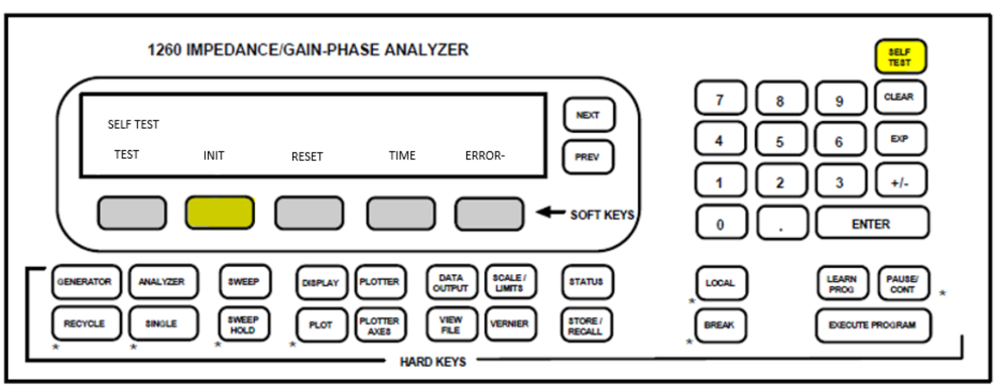
Results for step 16-17: Freq = 100 KHz, Voltage = 1.0 +/-0.03 V

Results for step 18-21: Freq = 100 KHz, Amp = 1.0 mA

- Step 23: As a final check, Press "SELF TEST", then "TEST", then "ENTER" four times. The first time "ENTER" is pressed, lights will move down the display. The second time "ENTER" is pressed, lights will move across the screen left to right. The third time "ENTER" is pressed, the alphabet, along with numbers and symbols will display on the screen. The final time "ENTER" is pressed, it is requested that all keys be pressed (44). After completion, you should see "TEST PASS" on the display.



- Step 24: Complete the test by pressing "SELF TEST", then "INIT". This will initialize the unit.



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