

Timebase adjust procedure for HP8648 signal generator
yo4hfu – 2018

1. Switch OFF HP8648

2. Change to position 1 the rear side DIP Switch “Timebase Adjust”



3. Switch ON HP8648, wait 30 minutes or more in order to warm-up the unit, OPT1E5 needs enough time to oven the 10MHz internal oscillator.

4. Next message will be displayed:



5. Push “RF ON” key. Connect accurate frequency counter (1Hz resolution) to HP8648 RF output. Output signal has 10dBm and 100MHz.

6. Adjust Frequency knob for Coarse and Amplitude knob for Fine until frequency indication of counter is exactly 100,000.000MHz.



7. When indication is stable, press "SAV" key in order to save new calibration value.



8. Switch OFF HP8648 and change DIP switch back to 0 position.

Done! Frequency calibration of signal generator will be better for next period. Before calibration I found small deviation of frequency, maximum 20Hz at 100MHz.

Frequency counter drive by GPS disciplined oscillator is recommend for best accuracy.