

Why is the Bode Plot start frequency minimum 10 Hz?

June 23, 2021

The minimum start frequency is set to 10 Hz because of the extended acquisition time required to collect enough data to ensure a useful level of measurement accuracy. If the low limit was 1 Hz, the scope would need to test 10 cycles (to maintain specified accuracy), so the time base will be 10 s/div. This would make for a very slow test.

Other issues: For low frequencies/long acquisitions, the cabling/etc can be easily disturbed, causing the scope to re-acquire. So we limit it to 10 Hz.

SIGLENT[®]

North American Headquarters

SIGLENT Technologies America, Inc 6557 Cochran Rd Solon, Ohio 44139 Tel: 440-398-5800 Toll Free:877-515-5551 Fax: 440-399-1211 info@siglent.com www.siglentamerica.com/

European Sales Offices

SIGLENT TECHNOLOGIES EUROPE GmbH Staetzlinger Str. 70 86165 Augsburg, Germany Tel: +49(0)-821-666 0 111 0 Fax: +49(0)-821-666 0 111 22 info-eu@siglent.com www.siglenteu.com

Asian Headquarters

SIGLENT TECHNOLOGIES CO., LTD. Blog No.4 & No.5, Antongda Industrial Zone, 3rd Liuxian Road, Bao'an District, Shenzhen, 518101, China. Tel:+ 86 755 3661 5186 Fax:+ 86 755 3359 1582 sales@siglent.com www.siglent.com/ens