

How to remotely retrieve measurements with an SDS X and XE series of Oscilloscope October 23, 2017

The command sequence for returning measurements with a SIGLENT SDS X and XE series of oscilloscopes is as follows:

MEAD <type>, <source> Activate measurement type

Where <type> = {PHA, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF}

The PHA is phase, the others are the same as the specified type of the instruments delay measure in the SDS programming guide.

<source> = {C1-C2, C1-C3, C1-C4, C2-C3, C2-C4, C3-C4}

<source>:MEAD? <type> Return measurement data

Where <source> = {C1-C2, C1-C3, C1-C4, C2-C3, C2-C4, C3-C4}

<type> = {PHA, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF}

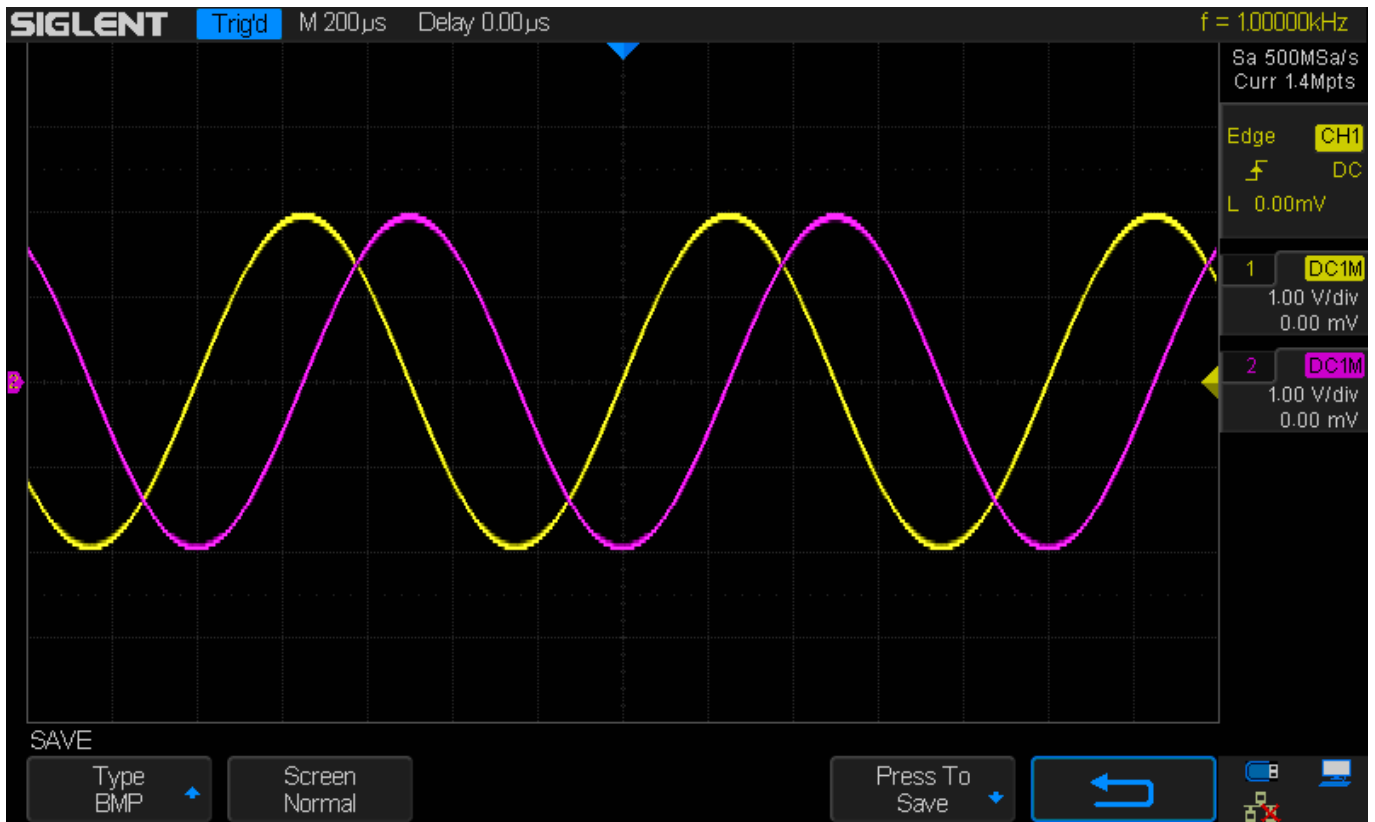
The PHA is phase, the others are the same as the specified type of the instruments delay measure in the SDS programming guide.

The following example shows the command sequence to enable phase measurements between CH1 and CH2 on an SDS1202X Oscilloscope.

NOTE: The SDS1202X was set to default factory settings, CH2 was activated manually, and 2 sine waves with different phases were used as inputs to either channel.

The commands were sent using NI-MAX VISA Test Panel.

Here is the default display. Note, there are no measurements active on the display.



Step 1: Send "MEAD PHA,C1-C2" to activate phase measurements between CH1 and CH2.

USB0::0xF4EC::0xEE3A::SDS1XDB3150377::INSTR - VISA Test Panel

Configuration Input/Output Advanced NI I/O Trace Help NATIONAL INSTRUMENTS

Basic I/O Line Control USB Control

Select or Enter Command MEAD\sPHA,C1-C2

MEAD\sPHA,C1-C2 Bytes to Read 1024

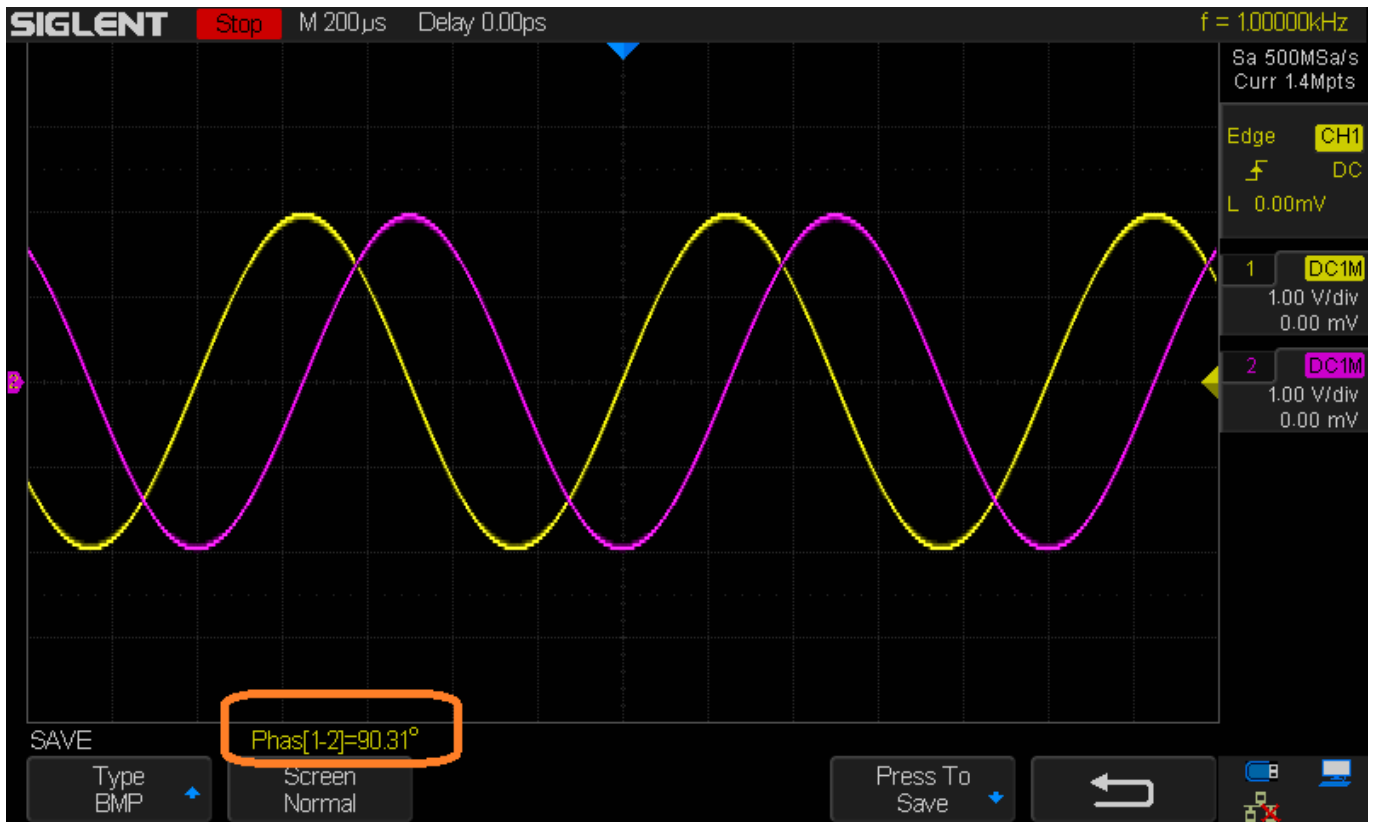
Write Query Read Read Status Byte Clear

View mixed ASCII/hexadecimal

1: Write Operation (MEAD\sPHA,C1-C2)
Return Count: 14 bytes

Copy to Clipboard Clear Buffer

Return Data
Write Operation (MEAD\sPHA,C1-C2)
No Error



Step 2: Send "C1-C2:MEAD? PHA" to activate phase measurements between CH1 and CH2.

USB0::0xF4EC::0xEE3A::SDS1XDB3150377::INSTR - VISA Test Panel

Configuration Input/Output Advanced NI I/O Trace Help NATIONAL INSTRUMENTS

Basic I/O Line Control USB Control

Select or Enter Command C1-C2:MEAD?\sPHA

C1-C2:MEAD?\sPHA Bytes to Read 1024

Write Query Read Read Status Byte Clear

View mixed ASCII/hexadecimal

2: Write Operation (C1-C2:MEAD?\sPHA)
Return Count: 15 bytes

3: Read Operation
Return Count: 30 bytes
C1-C2:MEAD\sPHA 9.13E+01degree\n

Copy to Clipboard Clear Buffer

Return Data
Read Operation
No Error



North American Headquarters

SIGLENT Technologies NA
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 GERMANY GmbH
Liebigstrasse 2-20, Gebaeude 14,
22113 Hamburg Germany
Tel: +49(0)40-819-95946
Fax: +49(0)40-819-95947
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