

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}

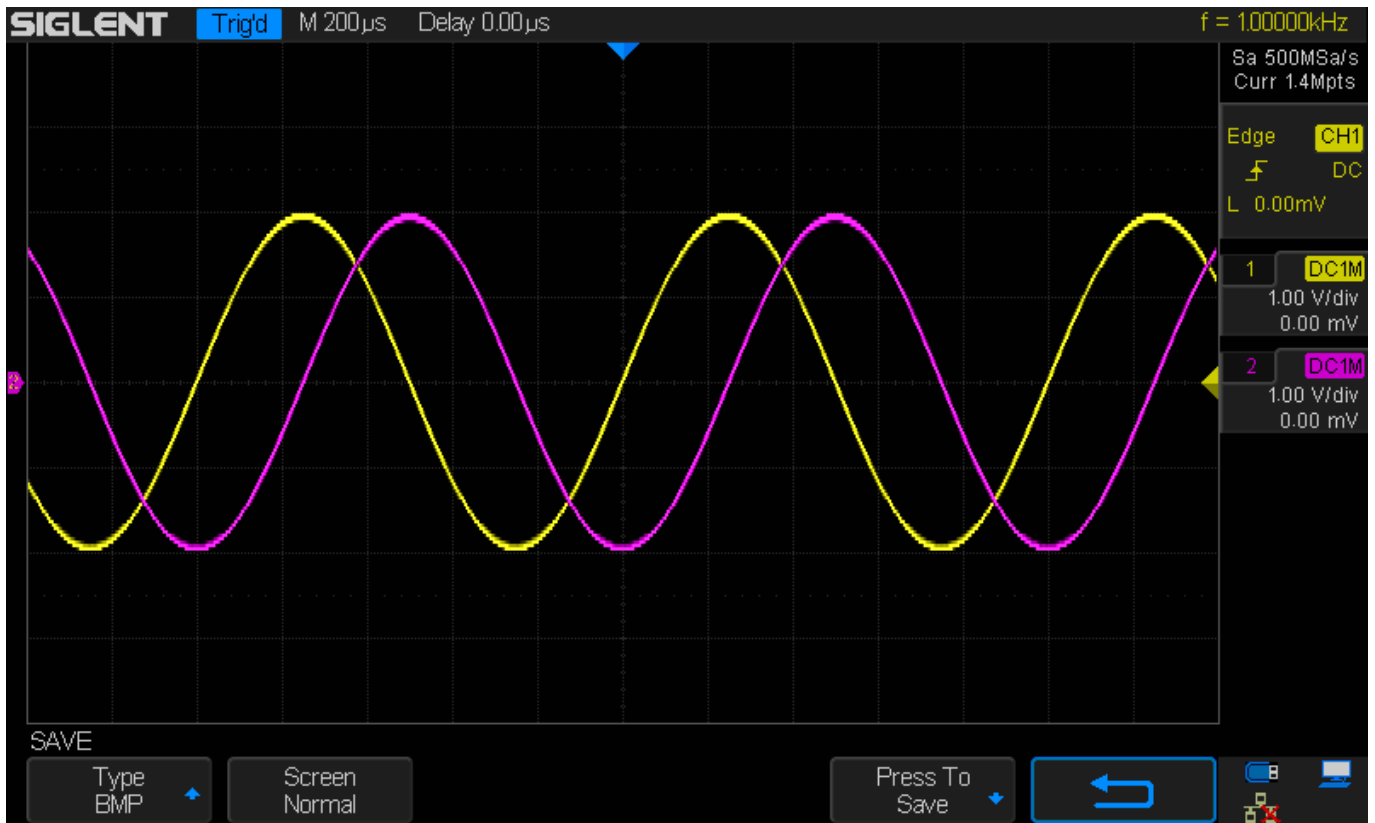
The PHA is phase, the others are the same as the specified type of the instruments delay measure in the SDS programming guide.

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

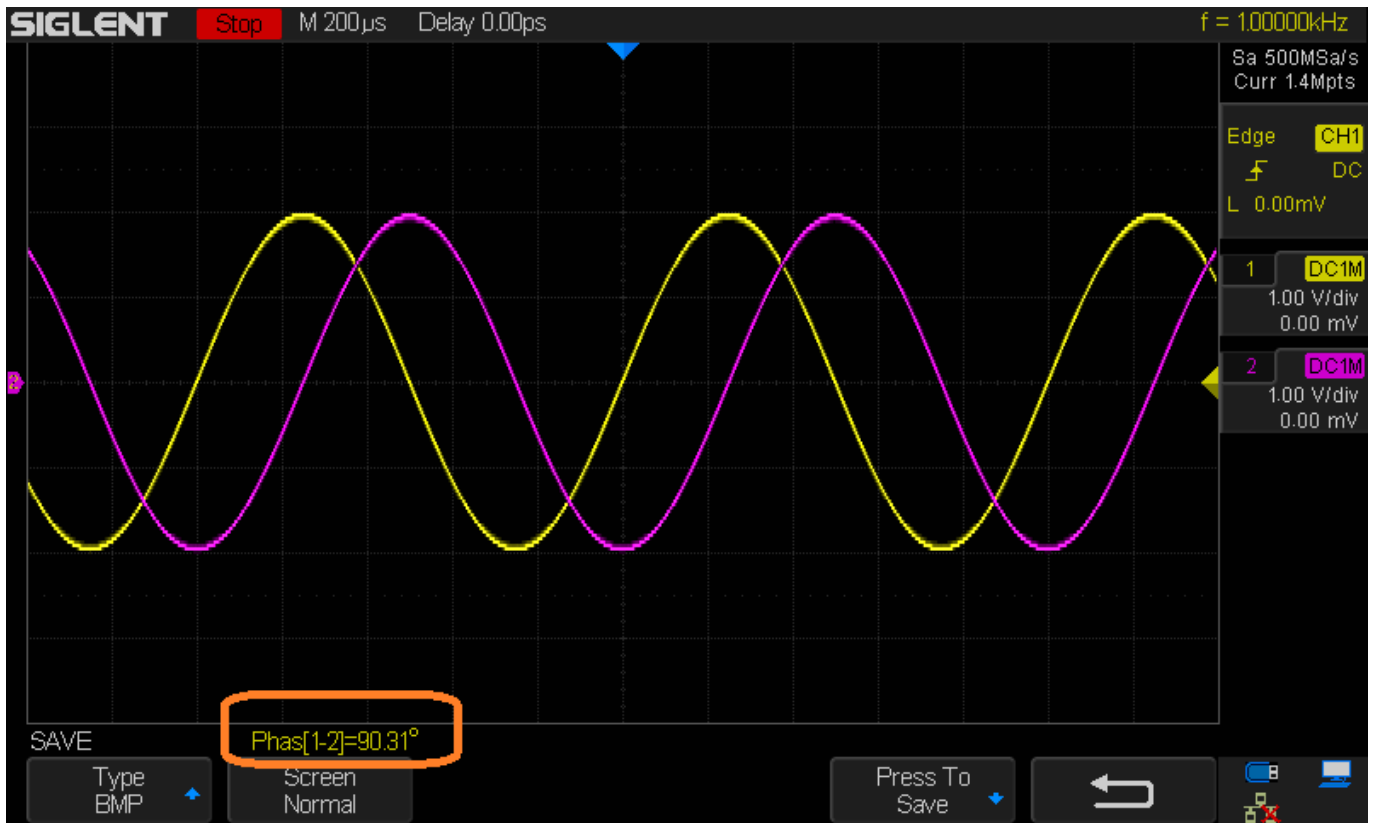
NOTE: The SDS1202X was set to default factory settings, CH2 was activated manually, and 2 sine waves with different phases were used as inputs to either channel.

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.



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

The screenshot shows the 'VISA Test Panel' window for a device at 'USB0::0xF4EC::0xEE3A::SDS1XDB3150377::INSTR'. The 'Basic I/O' tab is active, with 'Line Control' selected. The 'Select or Enter Command' dropdown is set to 'C1-C2:MEAD?\sPHA'. The 'Query' button is highlighted in blue. The 'Return Data' panel on the right shows 'Read Operation No Error'. The main text area displays the following sequence of operations:

```

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
    
```

The value '9.13E+01degree\n' is highlighted in an orange box.



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
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