3.9.10 :DISPlay:WHOLd

Syntax

:DISPlay:WHOLd <*bool*>

:DISPlay:WHOLd?

Description

Sets to enable or disable the waveform freezing function; queries whether to enable or disable the waveform freezing function.

Parameter

Name	Type	Range	Default
<bool>	Bool	{{1|ON}|{0|OFF}}	0|OFF

Remarks

N/A

Return Format

The query returns 1 or 0.

Example

```
:DISPlay:WHOLd ON    /*Enables the Waveform Freeze.*/
:DISPlay:WHOLd?       /*The query returns 1.*/
```

3.10 :DVM Commands

:DVM commands are used to set or query the DVM parameters.

The built-in DVM of this oscilloscope provides 4-digit voltage measurements on any analog channel. DVM measurements are asynchronous from the oscilloscope's acquisition system and are always acquiring.

3.10.1 :DVM:CURRent?

Syntax

:DVM:CURRent?

Description

Queries the current voltage value under test.

Parameter

N/A

Remarks

N/A

Return Format

N/A

Example

```
N/A
```

3.10.2 :DVM:ENABle

Syntax

:DVM:ENABle <*bool*>

:DVM:ENABle?

Description

Enables or disables the digital voltmeter; or queries the on/off status of the digital voltmeter.

Parameter

Name	Type	Range	Default
<bool>	Bool	{{1|ON}|{0|OFF}}	0|OFF

Remarks

N/A

Return Format

The query returns 1 or 0.

Example

```
:DVM:ENABle ON    /*Enables the digital voltmeter.*/
:DVM:ENABle?      /*The query returns 1.*/
```

3.10.3 :DVM:SOURce

Syntax

:DVM:SOURce <*source*>

:DVM:SOURce?

Description

Sets or queries the source of the digital voltmeter.

Parameter

Name	Type	Range	Default
<source>	Discrete	{CHANnel1|CHANnel2|CHANnel3|CHANnel4}	CHANnel1

Remarks

N/A

Return Format

The query returns CHAN1, CHAN2, CHAN3, or CHAN4.

Example

```
:DVM:SOURce CHANnel1     /*Sets the source of DVM to CHANnel1.*/
:DVM:SOURce?             /*The query returns CHAN1.*/
```

3.10.4 :DVM:MODE

Syntax

:DVM:MODE <*mode*>

:DVM:MODE?

Description

Sets or queries the mode of digital voltmeter.

Parameter

Name	Type	Range	Default
<mode>	Discrete	{ACRMs|DC|DCRMs}	ACRMs

Remarks

- **ACRMs:** displays the root-mean-square value of the acquired data, with the DC component removed.
- **DC:** displays the root- average-square value of the acquired data.
- **DCRMs:** displays the root-mean-square value of the acquired data.

Return Format

The query returns ACRM, DC, or DCRM.

Example

```
:DVM:MODE DC      /*Sets the mode of the digital voltmeter to DC.*/
:DVM:MODE?            /*The query returns DC.*/
```

3.11 :HISTogram Commands

This histogram analysis function provides a diagram of the statistics on the waveforms or its measurement results, enabling you to judge the trend of waveforms, and quickly locate the potential abnormalities of the signal.

NOTE

Only the DHO900 series supports the histogram analysis function.

Histogram Analysis Results

The statistical results of the histogram analysis include the following items.

- Sum: indicates the sum of all bins (buckets) in the histogram.
- Peaks: indicates the maximum number of hits in any single bin.
- Max: indicates the maximum value.
- Min: indicates the minimum value.
- Pk_Pk: indicates the Delta (Max-Min) between the max. value and the min. value.
- Mean: indicates the average value of the histogram.
- Median: indicates the median value of the histogram.
- Mode: indicates the mode value of the histogram.
- Bin width: indicates the width of each bin (bucket) in the histogram.
- Sigma: indicates the standard deviation of the histogram.
- XScale: indicates the horizontal scale of the histogram. It is 100 times the value of Bin width.

3.11.1 :HISTogram:ENABle

Syntax

`:HISTogram:ENABle` <*bool*>

`:HISTogram:ENABle?`

Description

Enables or disables the histogram function; or queries the on/off status of the histogram.