

- ± 8 V (65.01 mV/div to 260 mV/div)
- ± 20 V (260.01 mV/div to 2.65 V/div)
- ± 100 V (2.6501 V/div to 10 V/div)

You can use `:CHANnel<n>:SCALE` to set or query the vertical scale of the specified channel.

Return Format

The query returns the bias voltage of the specified channel in scientific notation. The unit is V.

Example

```
:CHANnel1:POSition 10 /*Sets the bias voltage of CH1 to 10 V.*/
:CHANnel1:POSition? /*The query returns 1.000000E+01.*/
```

3.7 :COUNter Commands

:COUNter commands are used to set or query the measurement and statistic parameters for the frequency counter.

The frequency counter analysis function provides frequency, period, or edge event counter measurements on any analog channel.

3.7.1 :COUNter:CURRent?

Syntax

:COUNter:CURRent?

Description

Queries the measurement value of the frequency counter.

Parameter

N/A

Remarks

N/A

Return Format

The query returns the current measurement value of the frequency counter in scientific notation.

Example

```
N/A
```

3.7.2 :COUNter:ENABle

Syntax

```
:COUNter:ENABle <bool>
```

```
:COUNter:ENABle?
```

Description

Enables or disables the frequency counter; or queries the on/off status of the frequency counter.

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

```
:COUNter:ENABle ON      /*Enables the frequency counter.*/
:COUNter:ENABle?        /*The query returns 1.*/
```

3.7.3 :COUNter:SOURce

Syntax

```
:COUNter:SOURce <source>
```

```
:COUNter:SOURce?
```

Description

Sets or queries the source of the frequency counter.

Parameter

Name	Type	Range	Default
<source>	Discrete	{D0 D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 D11 D12 D13 D14 D15 CHANnel1 CHANnel2 CHANnel3 CHANnel4 EXT}	CHANnel1

Remarks

Only DHO900 series supports the digital channels D0-D15.

"EXT" is only available for DHO812 and DHO802.

Return Format

The query returns D0, D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, CHAN1, CHAN2, CHAN3, CHAN4, or EXT.

Example

```
:COUNter:SOURce CHANnel2 /*Sets the source of the frequency counter
to CHANnel2.*/
:COUNter:SOURce? /*The query returns CHAN2.*/
```

3.7.4 :COUNter:MODE

Syntax

```
:COUNter:MODE <mode>
```

```
:COUNter:MODE?
```

Description

Sets or queries the mode of the frequency counter.

Parameter

Name	Type	Range	Default
<mode>	Discrete	{FREQuency PERiod TOTalize}	FREQuency

Remarks

- **FREQuency:** indicates the Frequency measurement.
- **PERiod:** indicates the Period measurement.
- **TOTalize:** indicates the Totalize measurement.

Return Format

The query returns FREQ, PER, or TOT.

Example

```
:COUNter:MODE PERiod /*Sets the mode of the frequency counter
to PERiod.*/
:COUNter:MODE? /*The query returns PER.*/
```

3.7.5 :COUNter:NDIGits

Syntax

```
:COUNter:NDIGits <val>
```

```
:COUNter:NDIGits?
```

Description

Sets or queries the resolution of the frequency counter.

Parameter

Name	Type	Range	Default
<val>	Integer	3 to 6	4

Remarks

The resolution setting is only available for "Period" and "Frequency", and unavailable for "Totalize". You can use `:COUNter:MODE` to query or set the measurement mode.

Return Format

The query returns an integer ranging from 3 to 6.

Example

```
:COUNter:NDIGits 4 /*Sets the resolution of the frequency counter
to 4.*/
:COUNter:NDIGits? /*The query returns 4.*/
```

3.7.6 :COUNter:TOTalize:ENABLE

Syntax

`:COUNter:TOTalize:ENABLE <bool>`

`:COUNter:TOTalize:ENABLE?`

Description

Enables or disables the statistical function of the frequency counter; or queries the on/off status of the statistical function of the frequency counter.

Parameter

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

Remarks

The statistical function is only available for "Period" and "Frequency", but it is unavailable for "Totalize". You can use `:COUNter:MODE` to query or set the measurement mode.

Return Format

The query returns 1 or 0.

Examples

```
:COUNter:TOTalize:ENABle ON /*Enables the statistical function of  
the frequency counter.*/  
:COUNter:TOTalize:ENABle? /*The query returns 1.*/
```

3.7.7 :COUNter:TOTalize:CLEar

Syntax

```
:COUNter:TOTalize:CLEar
```

Description

Clears the total count.

Parameter

N/A

Remarks

Available when "Totalize", "Frequency", or "Period" is selected under "Measure".

Return Format

N/A

Example

N/A

3.8 :CURSor Commands

The **Cursor** commands are used to measure the X axis values (e.g. Time) and Y axis values (e.g. Voltage) of the waveform on the screen.

Before making cursor measurements, connect the signal to the oscilloscope to acquire stable display. The cursor measurement function provides the following two cursors.