

Introduction to the SCPI Language

Syntax

SCPI commands present a hierarchical tree structure and contain multiple sub-systems, each of which is made up of a root keyword and one or more sub-keywords. The command string usually starts with ":", the keywords are separated by ":" and are followed by the parameter settings available, "?" is added at the end of the command string to indicate query and the command and parameter are separated by "space".

For example,

```
:TRIGger:SINGle:EDGE:SOURce <source>  
:TRIGger:SINGle:EDGE:SOURce?
```

TRIGger is the root keyword of the command. **SINGle**, **EDGE** and **SOURce** are the second-level, third-level and fourth-level keywords respectively. The command string starts with ":" which separates the multiple-level keywords. **<source>** represents parameters available for setting, "?" represents query and the command : **TRIGger:SINGle:EDGE:SOURce** and the parameter **<source>** are separated by "space".

Syntax Rules

SCPI language itself defines a group of sub-system keywords, and at the same time allows users to add or reduce keywords. Those keywords can be some meaningful English words and are easy to remember, which are called mnemonics. Mnemonic has long and short types. The short are the abbreviation of the long.

➤ Rule to format mnemonics:

- 1) If the letter number of an English word is less than or equal to 4, then the word itself can be the mnemonic.(such as "Free" can be "FREE")
- 2) If the letter number of an English word exceeds 4, then the first four letters will be the mnemonic.(such as "Frequency" can be "FREQ")
- 3) If the forth letter is vowel, then mnemonic uses the former three letters. Vowels consist of a, e, i, o, and u.(such as "Power" can be "POW")
- 4) If it is not a word but a sentence, then use the first letters of the former words and the whole of the last word. (such as "Input Voltage" can be "IVOLTage")

➤ Usage of symbols

- 1) Space

The space is used to separate command and parameter.

2) Colon :

If the colon is in front of the first character, it means the following is Root Command. When the colon is set between two keywords, then it means moving from the current level to the next level.

3) *asterisk

The commands start with asterisk are named Common Command, which is used to execute IEEE488.2 common commands.

4) Braces {}

The parameters enclosed in the braces are optional and are usually separated by the vertical bar "|". When using this command, one of the parameters must be selected.

5) Vertical Bar |

The vertical bar is used to separate multiple parameters and one of the parameters must be selected when using the command.

6) Triangle Brackets < >

The parameter enclosed in the triangle brackets must be replaced by an effective value.

➤ **Parameter Type**

1) **Discrete**

The parameter should be one of the values listed. For example,

:TRIGger:SINGle:EDGE:SOURce <source>

:TRIGger:SINGle:EDGE:SOURce?

wherein,

<source> can be set to CH1|CH2|EXT|EXT/5

The query returns the abbreviated format: "CH1", "CH2", "EXT", or "EXT/5".

2) **Integer**

Unless otherwise noted, the parameter can be any integer (NR1 format) within the effective value range. Note that, do not set the parameter to a decimal, otherwise errors will occur. For example,

:CH<n>:OFFSet <offset>

:CH<n>:OFFSet?

wherein,

<n> can be set to 1 or 2, represents CH1 or CH2.

<offset> can be set to any integer between -2000 and 2000.

The query returns any integer between -2000 and 2000.

3) **Bool**

The parameter could be "OFF", "ON". For example,

:CH1:DISPlay <bool>

:CH1:DISPlay?

wherein,

<bool> can be set to {OFF|ON}

The query returns "OFF" or "ON".

Command Abbreviation

Each SCPI command can be written mixed with uppercase and lowercase according to the syntax rules, and the capital letter part is just the abbreviation of the command. If abbreviation is used, all the capital letters in the command must be written completely. For parameters with units, please refer to the detail parameter specifications in the sub-system.

Example 1:

:ACQuire:MODE SAMPlE

Abbreviation Below:

:ACQ:MODE SAMP

Example 2:

:CH1:SCALe 1v

Abbreviation Below:

:CH1:SCAL 1v

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IEEE488.2 Common Commands

***IDN?**

Description

The query returns the ID character string of the instrument.

Return Format

<Manufacturer>,<model>,<serial number>,X.XX.XX

<model>: the model number of the instrument.

<serial number>: the serial number of the instrument.

X.XX.XX: the software version of the instrument.

Example

XXXX,XXXXXXXX,2128009,V2.1.1.5

:HORizontal Command Subsystem

:HORizontal:SCALE

Syntax

:HORizontal:SCALE <scale_value>

:HORizontal:SCALE?

Description

Set the scale of the main time base.

Parameter

Name	Type	Range	Default Value
<scale_value>	Discrete	Please refer to Explanation	----

Explanation: Default to set the main time base.

time base gear:

{2.0ns|5.0ns|10.0ns|20.0ns|50.0ns|100ns|200ns|500ns|1.0us|2.0us|5.0us|10us|20us|50us|100us|200us|500us|1.0ms|2.0ms|5.0ms|10ms|20ms|50ms|100ms|200ms|500ms|1.0s|2.0s|5.0s|10s|20s|50s|100s|200s|500s|1000s}

Return Format

The query returns the horizontal scale in character string.

Example

The command below sets the horizontal scale of channel 1 to 200us/div.

:HORizontal:SCALE 200us

The query below returns "200us".

:HORizontal:SCALE?

:HORizontal:OFFSet

Syntax

:HORizontal:OFFset <value>

:HORizontal:OFFset?

Description

Set the Horizontal offset of the time base.

Parameter

Name	Type	Range	Default Value
<value>	Integer	Please refer to Explanation (indicating the number of grids to move horizontally)	0

Return Format

The query returns the offset in character string.

Explanation

If the current main time base is 500 us/div, and the horizontal offset is 2 div, then the horizontal offset time is 1.000 ms.

Example

The command below sets the horizontal offset of channel1 to 1 div.

:HORIZONTAL:OFFSET 1

The query returns horizontal offset div.

If the current main time base is 500 us/div, and the horizontal offset time is 1.000 ms, the query below returns "2".

Query current channel waveform offset value

:HORIZONTAL:OFFSET?

:ACQUIRE Command Subsystem

:ACQUIRE :MODE

Syntax

:ACQUIRE :MODE <type>

:ACQUIRE :MODE?

Description

Set the acquisition mode of the oscilloscope.

Parameter

Name	Type	Range	Default Value
<type>	Discrete	{SAMPLE PEAK}	SAMP

Return format

The query returns "SAMPle", "PEAK".

Example

The command below selects the sample acquisition mode.

:ACQUIRE:MODE SAMPLE

The query below returns " **SAMPLE**".

:ACQUIRE:MODE?

:ACQUIRE :DEPMem <mdep>

Syntax

:ACQUIRE :DEPMem <mdep>

:ACQUIRE :DEPMem?

Description

Set the number of waveform points that the oscilloscope can store in a single trigger sample.

Parameter

Name	Type	Range	Default Value
<mdep>	Discrete	{4K 8K}	4K

Return format

The query returns the actual number of points (integer).

Example

The command below sets the memory depth to "4K".

:ACQUIRE :DEPMEM 4K

The query below returns the actual number of points, for example "4K".

:ACQUIRE :DEPMEM?

:CH Command Subsystem

:CH<n>:DISPlay

Syntax

:CH<n>:DISPlay <bool>

:CH<n>:DISPlay?

Description

Turn the display of the channel on or off.

Parameter

Name	Type	Range	Default Value
<n>	Discrete	{1 2}	1
<bool>	Bool	{OFF ON}	OFF

Return Format

The query returns "OFF" or "ON".

Example

The command below turns the display of channel1 on.

:CH1:DISPlay ON

The query returns "ON".

:CH1:DISPlay?

:CH<n>:COUPling

Syntax

:CH<n>:COUPling <coupling>

:CH<n>:COUPling?

Description

Set the coupling mode of the channel to "AC", "DC" or "GND".

Parameter

Name	Type	Range	Default Value
<n>	Discrete	{1 2}	1
<coupling>	Discrete	{AC DC GND}	DC

Return Format

The query returns "AC", "DC" or "GND".

Example

The command below sets the input coupling mode of channel 1 to "DC".

:CH1:COUPling DC

The query returns "DC".

:CH1:COUPling?

:CH<n>:PROBe

Syntax

:CH<n>:PROBe <atten>

:CH<n>:PROBe?

Description

Set the attenuation ratio of the probe.

Parameter

Name	Type	Range
<n>	Discrete	{1 2}
<atten>	Discrete	{1X 10X 100X 1000X}

Return Format

The query returns the attenuation ratio of the probe.

Example

The command below sets the attenuation ratio of the probe connected to channel1 to 10.

:CH1:PROBe 10X

The query returns "10X".

:CH1:PROBe?

:CH<n>:SCALE

Syntax

:CH<n>:SCALE <scale>

:CH<n>:SCALE?

Description

Set the vertical scale of the specified waveform display.

Parameter

Name	Type	Range	
<n>	Discrete	{1 2}	
<scale>	Discrete	X1	{10.0mV 20.0mV 50.0mV 100mV 200mV 500mV 1.00V 2.00V 5.00V 10.0V}
		X10	{100mV 200mV 500mV 1.00V 2.00V 5.00V 10.0V 20.0V 50.0V 100V}
		X100	{1.00V 2.00V 5.00V 10.0V 20.0V 50.0V 100V 200V 500V 1.00kV}
		X1000	{10.0V 20.0V 50.0V 100V 200V 500V 1.00kV 2.00kV 5.00kV 10.0kV}

Explanation

The attenuation ratio of the probe should be considered when setting the parameter. E.g., the attenuation ratio of the probe is 10X, if you want to set the vertical scale as 100mv, the command is:CH<n>:SCALE 100mV。

Return Format

The query returns the vertical scale in character string.

Example

The command below sets the vertical scale of channel 1 to 1V/div.

:CH1:SCALE 1 or 1v

The query returns "1v".

:CH1:SCALE?

:CH<n>:OFFSet

Syntax

:CH<n>:OFFSet <offset>

:CH<n>:OFFSet?

Description

Set the vertical offset of the specified waveform display.

Parameter

Name	Type	Range	Default Value
<n>	Discrete	{1 2}	None
<offset>	Integer	-200 to 200	0

Return Format

The query returns the offset div value in Integer.

Example

The command below sets the vertical offset of channel 1 to 1 div.

:CH1:OFFSet 1

The query below returns 1.

:CH1:OFFSet?

:Data Command Subsystem

Because of the huge size of the data get from Dada command, there are 4 bytes in the returned data to indicate the size of the returned data.

:DATa:WAVE:SCReen:HEAD?

Syntax

:DATa:WAVE:SCReen:HEAD?

Description

Get the file header of the screen waveform data file.

Return Format

The query returns a piece of text in JSON format.

Example

The command below return a piece of text as the following sample:

```
{ "timebase": { "scale": "1.0ms", "offset": 0 }, "sample": { "fullscreen": 1520, "slowmove": -1, "data len": 1520, "samplerate": "(500ks/s)", "type": "sample", "depmem": "10k" }, "channel": [ { "name": "ch1", "display": "on", "coupling": "ac", "probe": "10x", "scale": "5.00mv", "offset": 50, "frequency": 0, "inverse": "off" }, { "name": "ch2", "display": "on", "coupling": "ac", "probe": "10x", "scale": "10.0mv", "offset": 45, "frequency": 0, "inverse": "off" } ], "datatype": "screen", "runstatus": "auto", "trig": { "mode": "single", "type": "edge", "items": { "channel": "ch1", "level": "32.0mv", "edge": "rise", "coupling": "dc", "holdoff": "100ns" }, "sweep": "auto" } }。
```

:DATa:WAVE:SCReen:CH<x>?

Syntax

:DATa:WAVE:SCReen:CH<x>?

Parameter

Name	Type	Range	Default Value
<x>	Discrete	{CH1 CH2}	无

Description

Get the screen waveform data of the specified channel.

Return format

The query returns the screen waveform data of the specified channel.

Explanation

The data point is recorded as 8-bit, a point uses two bytes, little-endian byte order.

Example

Reading flow of the screen waveform data:

:DATa:WAVe:SCReen:HEAD?

:DATa:WAVe:SCReen:CH1?

:DATa:WAVe:SCReen:CH2?

:TRIGger Command Subsystem

:TRIGger:STATus?

Syntax

:TRIGger: STATus?

Description

Query the current trigger status.

Parameter

Type	Range	Default Value	Type
Value	Discrete	{AUTO READy TRIG SCAN STOP }	None

Return Format

The query returns the current trigger status.

Example

:TRIGger: STATus?

The query below returns "AUTO".

:TRIGger:SINGle

:TRIGger:SINGle:SOURce

Syntax

:TRIGger:SINGle:SOURce <source>

:TRIGger:SINGle:SOURce?

Description

Select the source of SINGle EDGE trigger.

Parameter

Name	Type	Range	Default Value
<source>	Discrete	{CH1 CH2}	CH1

Return Format

The query returns "CH1"、"CH2"。

Example

The command below selects "CH2" as the source of SINGLE EDGE trigger.

:TRIGger:SINGle:SOURce CH2

The query below returns "CH2"。

:TRIGger:SINGle:SOURce?

:TRIGger:SINGle:COUPling

Syntax

:TRIGger:SINGle:COUPling <coupling>

:TRIGger:SINGle:COUPling?

Description

Select the coupling mode under SINGLE EDGE trigger.

Parameter

Name	Type	Range	Default Value
<coupling>	Discrete	{DC AC}	DC

Return Format

The query returns "DC"、"AC"。

Example

The command below selects "AC" as the coupling mode of SINGLE EDGE trigger.

:TRIGger:SINGle:COUPling AC

The query below returns "AC"。

:TRIGger:SINGle:COUPling?

:TRIGger:SINGle:EDGE

Syntax

:TRIGger:SINGle::EDGE: <slope>

:TRIGger:SINGle::EDGE ?

Description

Select the slope of SINGle EDGE trigger.

Parameter

Name	Type	Range	Default Value
<slope>	Discrete	{RISE FALL}	RISE

Return Format

The query returns "RISE"OR"FALL".

Example

The command below selects "FALL" as the slope under SINGle EDGE trigger.

:TRIGger:SINGle:SLOPe FALL

The query below returns "FALL".

:TRIGger:SINGle:SLOPe?

:TRIGger:SINGle:EDGE:LEVel

Syntax

:TRIGger:SINGle::EDGE:LEVel <level>

:TRIGger:SINGle::EDGE:LEVel?

Description

Set the trigger level under SINGle EDGE trigger.

Parameter

Name	Type	Unit	Default Value
<level>	Character string	uv, mv, v	无

Return Format

The query returns the trigger level in character string.

Example

he command below sets the trigger level of SINGle EDGE trigger in CH1 to 25mv.

:TRIGger:SINGle:SOURce CH1;

:TRIGger:SINGle::EDGE:LEVel 25mv

The query returns "25mv".

:TRIGger:SINGle::EDGE:LEVel?

:TRIGger:SINGle:SWEEp <mode>

Syntax

:TRIGger:SINGle:SWEEp <mode>

:TRIGger:SINGle:SWEEp?

Description

Select the trigger mode.

Parameter

Name	Type	Range	Default Value
<mode>	Discrete	{AUTO NORMal SINGle}	AUTO

Return Format

The query returns the current trigger mode.

Example

The command below selects normal as trigger mode.

:TRIGger:SINGle:SWEEp NORMal

The query below returns "NORMal".

:TRIGger:SINGle:SWEEp?

:MEASurement Command Subsystem

:MEASurement:DISPlay

Syntax

:MEASurement:DISPlay <bool>

:MEASurement:DISPlay?

Description

Turn the display of measurement on or off.

Parameter

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

Return Format

The query returns "ON" or "OFF".

Example

The command below turns the display of measurement on.

:MEASurement:DISPlay ON

The query returns "ON".

:MEASurement:DISPlay?

:MEASurement:CH<n>:<items>

Syntax

:MEASurement:CH<n>:<items>?

Description

Get the value of the channel measurement item.

Note: The inter-channel parameters are not included.

Parameter

Name	Type	Range	Default Value
<n>	Discrete	{1 2}	1
<items>	Discrete	{MAX MIN PKPK VAMP AVERage PERiod FREQuency}	--

Parameter list

Items(Voltage)	notation	Items (Time)	notation
MAX	Maximum	PERiod	Period
MIN	Minimum	FREQuency	Frequency
PKPK	Peak-to-peak		
VAMP	Amplitude		
AVERage	Average		

Example

The query below returns all the measurement values of CH1

:MEASurement:CH1:PERiod?

AG SCPI commands

:FUNction Command Subsystem

:FUNction

Syntax

:FUNction < waveform >

:FUNction?

Description

Set/query the waveform function for current channel when using the arbitrary function generator.

Parameter

Name	Type	Range	Default Value
<wave>	Discrete	{SINE SQUare RAMP PULSe AmpALT AttALT StairDn tairUD StairUp Besselj Bessely Sinc}	

Return Format

The query returns <waveform> for current channel in character string.

Explanation

For the multi-channel generator, this command work on the current selected channel by default. If you want to set other channels, you need to switch channel first (refer to the command :CHANnel, such as :CHANnel:CH2).

Example

:FUNction RAMP

:FUNction?

:FUNction:FREQuency

Syntax

:FUNction:FREQuency < frequency >

:FUNction:FREQuency?

Description

Set/query the output frequency of current channel when using the arbitrary function generator.

Parameter

<frequency>, floating point number that represents the frequency, in Hz.

Return Format

The query returns the frequency l in character string

Example return: 1.000000e+04

Explanation

This command is not available when the waveform is DC or noise

Example

The command below sets the output frequency of current channel to 10 kHz

:FUNction:FREQuency 10000

Query the waveform frequency value of the current channel

:FUNction:FREQuency?

:FUNction:PERiod

Syntax

:FUNction:PERiod < period >

:FUNction:PERiod?

Description

Set/query the output period of current channel when using the arbitrary function generator.

Parameter

<period>, floating point number that represents the period, in seconds.

Return Format

The query returns the output period of current channel in scientific notation.

Example return: 1.000000e-04

Explanation

This command is not available when the waveform is DC or noise.

Example

The command below sets the output period of current channel to 10 μ s.

:FUNction:PERiod 1e-5

Query the waveform period value of the current channel

:FUNction:PERiod?

:FUNction:AMPLitude

Syntax

:FUNction:AMPLitude < amplitude >

:FUNction:AMPLitude?

Description

Set/query the amplitude (PK-PK) of output function for current channel when using the arbitrary function generator.

Parameter

<amplitude>, floating point number, in Vpp.

Return Format

The query returns the amplitude of current channel in scientific notation.

Example return: 1.000000e+00

Explanation

This command is not available when the waveform is DC.

Example

The command below sets the amplitude of current channel to 1.5 Vpp.

:FUNCTION:AMPLitude 1.5

The query below returns the amplitude of current channel.

:FUNCTION:AMPLitude?

:FUNCTION:OFFSet**Syntax**

:FUNCTION:OFFSet < offset >

:FUNCTION:OFFSet?

Description

Set/query the offset of output function for current channel when using the arbitrary function generator.

Parameter

<offset>, floating point number, in V.

Return Format

The query returns the offset of output function for current channel in scientific notation.

Example return: 0.000000e+00

Example

The command below sets the offset for current channel to 1 V.

:FUNCTION:OFFSet 1

Query current channel waveform offset value

:FUNCTION:OFFSet?

:FUNCTION:HIGHt**Syntax**

:FUNCTION:HIGHt <high level>

:FUNction:HIGht?

Description

Set/query the high level of output function for current channel when using the arbitrary function generator.

Parameter

<high level>, floating point number, in V.

Return Format

The query returns the high level of output function for current channel in scientific notation.

Example return: 5.000000e-01

Example

The command below sets the high level for current channel to 1 V.

:FUNction:HIGht 1

Query the high-level voltage value of the current channel waveform

:FUNction:HIGht?

:FUNction:LOW

Syntax

:FUNction:LOW <low level>

:FUNction:LOW?

Description

Set/query the low level of output function for current channel when using the arbitrary function generator.

Parameter

<low level>, floating point number, in V.

Return Format

The query returns the low level of output function for current channel in scientific notation.

Example return: -5.000000e-01

Example

The command below sets the low level for current channel to -1 V.

:FUNction:LOW -1

The query below returns the low level for current channel.

:FUNction:LOW?

:FUNction:SYMMetry

Syntax

:FUNction: SYMMetry < symmetry >

:FUNction: SYMMetry?

Description

Set/query the symmetry of ramp waveform as a percentage for current channel when using the arbitrary function generator.

Parameter

<symmetry>, integer that represents the symmetry, in %.

Return Format

The query returns the symmetry of ramp waveform for current channel in floating point number.

Example return: 50.0

Example

The command below sets the symmetry of ramp waveform for current channel to 60%.

:FUNction:RAMP:SYMMetry 60

The query below returns the symmetry of ramp waveform for current channel.

:FUNction:RAMP:SYMMetry?

:FUNction:WIDTh

Syntax

:FUNction: WIDTh < width >

:FUNction: WIDTh?

Description

Set/query the pulse width for current channel when using the arbitrary function generator.

Parameter

<width>, floating point number, in seconds.

Return Format

The query returns the pulse width for current channel in scientific notation.

Example return: 2.000000e-04

Example

The command below sets the pulse width for current channel to 20 μ s.

:FUNction:PULSe:WIDTh 2e-5

The query below returns the pulse width for current channel.

:FUNction:PULSe:WIDTh?

:FUNction:RISing

Syntax

:FUNction: RISing <rising>

:FUNction: RISing?

Description

Set/query the rising time for current channel when using the arbitrary function generator.

Parameter

<rising>, floating point number, in seconds.

Return Format

The query returns the rising time for current channel in scientific notation.

Example return: 2.000000e-04

Example

The command below sets the rising time for current channel to 20 μ s.

:FUNction:RISing 2e-5

The query below returns the rising time for current channel.

:FUNction:RISing?

:FUNction:FALing

Syntax

:FUNction: FALing <faling>

:FUNction: FALing?

Description

Set/query the falling time for current channel when using the arbitrary function generator.

Parameter

<faling>, floating point number, in seconds.

Return Format

The query returns the falling time for current channel in scientific notation.

Example return: 2.000000e-04

Example

The command below sets the rising time for current channel to 20 μ s.

```
:FUNction:FALing 2e-5
```

The query below returns the rising time for current channel.

```
:FUNction:FALing?
```

:FUNction: DTYCycle

Syntax

```
:FUNction:PULSe:DTYCycle < duty cycle >
```

```
:FUNction:PULSe:DTYCycle?
```

Description

Set/query the duty cycle of the pulse waveform as a percentage for current channel when using the arbitrary function generator.

Parameter

<duty cycle>, floating point number, in %.

Return Format

The query returns the duty cycle of the pulse waveform for current channel in floating point number.

Example return: 25.0

Example

The command below sets the duty cycle of the pulse waveform for current channel to 30%.

```
:FUNction:PULSe:DTYCycle 30
```

The query below returns the duty cycle of the pulse waveform for current channel.

```
:FUNction:PULSe:DTYCycle?
```

:FUNction:LOAD

Syntax

```
:FUNction:LOAD <bool>
```

```
:FUNction:LOAD?
```

Parameter

<bool> Bool data type

Can be ON/OFF

Return Format

Return <bool> string

The <bool> string returned by the query is such as: OFF

:CHANnel Command Subsystem

:CHANnel

Syntax

:CHANnel <bool>

:CHANnel?

Description

Set/query the current channel when using the arbitrary function generator.

Parameter

<bool> Bool data type

ON/OFF, Or 1/0

Return Format

Return <bool> string

The <bool> string returned by the query is such as: OFF

Example

:CHANnel ON

Set the output status of channel 1 to on

:CHANnel?

Set the output status of channel 1 to off

Multimeter SCPI commands

:CONFigure Command Subsystem

Syntax

:DMM:CONFigure <RESistance, DIODe, CONTInuity, CAPacitance>

:DMM:CONFigure?

Parameter

RESistance, DIODe, CONTInuity, CAPacitance

Description

This command queries or sets the present measurement function of the multimeter RESistance, DIODE, CONTInuity, CAPacitance.

:VOLTage

Syntax

:DMM:CONFigure:VOLTage {AC, DC}

:DMM:CONFigure:VOLTage?

Parameter

AC, DC

Description

This command queries or sets the voltage measurement type of the multimeter.

:CURRent

Syntax

:DMM:CONFigure:CURRent {AC, DC}

:DMM:CONFigure:CURRent?

Parameter

AC, DC

Description

This command queries or sets the current measurement type of the multimeter.

:REL

Syntax

:DMM:REL {ON, OFF}

:DMM:REL?

Parameter

ON, OFF

Description

This command sets the relative value of the multimeter on or off, or queries the present relative value.

:RANGE

Syntax

:DMM:RANGE {ON, mV, V}

:DMM:RANGE?

Parameter

ON, OFF

ON	Switch to the next tap position
mV	Switch to the mV tap position
V	Switch to the V tap position

Description

This command sets the multimeter to tap position, returns the tap value.

:AUTO**Syntax**

DMM:AUTO {ON}

Parameter

ON

Description

This command sets the multimeter to enable auto range.

:MEAS**Syntax**

DMM:MEAS?

Description

This command queries the measured value displayed by the multimeter.