

Remarks

L (large) can only be used when the number of the currently enabled channels is no more than 8.

Return Format

The query returns SMAL, LARG, or MED.

Example

```
:LA:SIZE SMALL /*Sets the waveform display size to SMALL.*/
:LA:SIZE? /*The query returns SMAL.*/
```

3.14 :LAN Commands

The :LAN commands are used to set or query the LAN-related parameters.

**NOTE**

After configuring all the other :LAN commands, you need to send **:LAN:APPLY** to make all the LAN configurations take effect.

3.14.1 :LAN:DHCP

Syntax

:LAN:DHCP <bool>

:LAN:DHCP?

Description

Turns on or off the DHCP configuration mode; or queries the on/off status of the current DHCP configuration mode.

Parameter

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

Remarks

- When the three IP configuration types (DHCP, Auto IP, and Static IP) are all turned on, the priority of the parameter configuration from high to low is "DHCP", "Auto IP", and "Static IP". The three IP configuration types cannot be all turned off at the same time.

- When DHCP is valid, the DHCP server in the current network will assign the network parameters (such as the IP address) for the oscilloscope.
- After the `:LAN:APPLY` command is executed, the configuration type can take effect immediately.

Return Format

The query returns 1 or 0.

Example

```
:LAN:DHCP OFF          /*Disables DHCP configuration mode.*/
:LAN:DHCP?             /*The query returns 0.*/
```

3.14.2 :LAN:AUTOip

Syntax

`:LAN:AUTOip <bool>`

`:LAN:AUTOip?`

Description

Turns on or off the Auto IP configuration mode; or queries the on/off status of the current Auto IP configuration mode.

Parameter

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

Remarks

When the auto IP mode is valid, disable DHCP manually. You can self-define the gateway and DNS address for the oscilloscope.

Return Format

The query returns 1 or 0.

Example

```
:LAN:AUTOip OFF          /*Disables the Auto IP configuration
mode.*/
:LAN:AUTOip?             /*The query returns 0.*/
```

3.14.3 :LAN:GATeway

Syntax

`:LAN:GATeway <string>`

:LAN:GATeway?

Description

Sets or queries the default gateway.

Parameter

Name	Type	Range	Default
<string>	ASCII String	Refer to <i>Remarks</i>	-

Remarks

- The format of <string> is nnn.nnn.nnn.nnn. The range of the first section of "nnn" is from 0 to 223 (except 127), and the ranges of the other three sections of "nnn" are from 0 to 255.
- When you use this command, the IP configuration mode should be Auto IP or Static IP mode.

Return Format

The query returns the current gateway in strings.

Example

```
:LAN:GATeway 192.168.1.1 /*Sets the default gateway to
192.168.1.1.*/
:LAN:GATeway? /*The query returns 192.168.1.1.*/
```

3.14.4 :LAN:DNS

Syntax

:LAN:DNS <string>

:LAN:DNS?

Description

Sets or queries the DNS address.

Parameter

Name	Type	Range	Default
<string>	ASCII String	Refer to <i>Remarks</i>	-

Remarks

- The format of <string> is nnn.nnn.nnn.nnn. The range of the first section of "nnn" is from 0 to 223 (except 127), and the ranges of the other three sections of "nnn" are from 0 to 255.
- When you use this command, the IP configuration mode should be Auto IP or Static IP mode.

Return Format

The query returns the current DNS address in strings.

Example

```
:LAN:DNS 192.168.1.1      /*Sets the DNS address to
192.168.1.1.*/*
:LAN:DNS?                /*The query returns 192.168.1.1.*/*
```

3.14.5 :LAN:MAC?

Syntax

:LAN:MAC?

Description

Queries the MAC address of the instrument.

Parameter

N/A

Remarks

N/A

Return Format

The query returns the MAC address in strings. For example, 00:19:AF:00:11:22.

Example

N/A

3.14.6 :LAN:DSERver?

Syntax

:LAN:DSERver?

Description

Queries the address of the DHCP server.

Parameter

N/A

Remarks

N/A

Return Format

The query returns the address of the DHCP server in strings.

Example

N/A

3.14.7 :LAN:MANual

Syntax

```
:LAN:MANual <bool>
```

```
:LAN:MANual?
```

Description

Turns on or off the static IP configuration mode; or queries the on/off status of the static IP configuration mode.

Parameter

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

Remarks

When the static IP mode is valid, disable DHCP and Auto IP manually. You can self-define the network parameters of the oscilloscope, such as IP address, subnet mask, gateway, and DNS address. For the setting of the IP address, refer to the [:LAN:IPADdress](#) command. For the setting of the subnet mask, refer to the [:LAN:SMASk](#) command. For the setting of the gateway, refer to the [:LAN:GATeway](#) command. For the setting of DNS, refer to the [:LAN:DNS](#) command.

Return Format

The query returns 1 or 0.

Example

```
:LAN:MANual ON          /*Enables the static IP configuration mode.*/
:LAN:MANual?            /*The query returns 1.*/
```

3.14.8 :LAN:IPADdress

Syntax

:LAN:IPADdress <string>

:LAN:IPADdress?

Description

Sets or queries the IP address of the instrument.

Parameter

Name	Type	Range	Default
<string>	ASCII String	Refer to <i>Remarks</i>	-

Remarks

- The format of <string> is nnn.nnn.nnn.nnn. The range of the first section of "nnn" is from 0 to 223 (except 127), and the ranges of the other three sections of "nnn" are from 0 to 255.
- When you use the command, the IP configuration mode should be static IP. Besides, the DHCP and auto IP should be disabled.

Return Format

The query returns the current IP address in strings.

Example

```
:LAN:IPADdress 192.168.1.10 /*Sets the IP address to  
192.168.1.10.*/  
:LAN:IPADdress? /*The query returns 192.168.1.10.*/
```

3.14.9 :LAN:SMASk

Syntax

:LAN:SMASk <string>

:LAN:SMASk?

Description

Sets or queries the subnet mask.

Parameter

Name	Type	Range	Default
<string>	ASCII String	Refer to <i>Remarks</i>	-

Remarks

- The format of <string> is nnn.nnn.nnn.nnn. The range of the section "nnn" is from 0 to 255.
- When you use the command, the IP configuration mode should be static IP. Besides, the DHCP and auto IP should be disabled.

Return Format

The query returns the current subnet mask in strings.

Example

```
:LAN:SMASK 255.255.255.0 /*Sets the subnet mask to
255.255.255.0.*/
:LAN:SMASK? /*The query returns 255.255.255.0.*/
```

3.14.10 :LAN:STATus?

Syntax

:LAN:STATus?

Description

Queries the current network configuration status.

Parameter

N/A

Remarks

- **UNLINK:** not connected.
- **CONNECTED:** the network is successfully connected.
- **INIT:** the instrument is acquiring an IP address.
- **IPCONFLICT:** there is an IP address conflict.
- **BUSY:** please wait...
- **CONFIGURED:** the network configuration has been successfully configured.
- **DHCPFAILED:** the DHCP configuration has failed.

- **INVALIDIP:** invalid IP.
- **IPLOSE:** IP lost.

Return Format

The query returns UNLINK, CONNECTED, INIT, IPCONFLICT, BUSY, CONFIGURED, DHCPFAILED, INVALIDIP, or IPLOSE.

Example

N/A

3.14.11 :LAN:VISA?

Syntax

:LAN:VISA? [<type>]

Description

Queries the VISA address of the instrument.

Parameter

Name	Type	Range	Default
<type>	Discrete	{USB LXI SOCKET}	-

Remarks

This command contains a parameter "type" and it is used to set or query the address type. By default, it returns the LXI address.

Return Format

The query returns the VISA address in strings.

Example

N/A

3.14.12 :LAN:MDNS

Syntax

:LAN:MDNS <bool>

:LAN:MDNS?

Description

Enables or disables mDNS; or queries the mDNS status.

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

```
:LAN:MDNS ON /*Enables mDNS.*/
:LAN:MDNS? /*The query returns 1.*/
```

3.14.13 :LAN:HOST:NAME

Syntax**:LAN:HOST:NAME** <name>**:LAN:HOST:NAME?****Description**

Sets or queries the host name.

Parameter

Name	Type	Range	Default
<name>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	-

Remarks

N/A

Return Format

The query returns the host name in ASCII strings.

Example

N/A

3.14.14 :LAN:DESCription

Syntax**:LAN:DESCription** <name>

:LAN:DESCRiption?

Description

Sets or queries the description.

Parameter

Name	Type	Range	Default
<name>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	-

Remarks

N/A

Return Format

The query returns the description in ASCII strings.

Example

N/A

3.14.15 :LAN:APPLy

Syntax

:LAN:APPLy

Description

Applies the network configuration.

Parameter

N/A

Remarks

After configuring all the LAN-related parameters with the :LAN commands, you need to send this command to make all the LAN configurations take effect.

Return Format

N/A

Example

N/A

3.15 :MASK Commands

:MASK commands are used to set or query the pass/fail test related parameters.

During the product design and manufacturing process, you usually need to monitor the variations of the signal or judge whether the product is up to standard. The standard pass/fail test function of this series oscilloscope can accomplish this task perfectly. You can use this function to set the test rules based on standard waveforms and define the mask. It compares the signal under test with the mask and displays the test results.

3.15.1 :MASK:ENABLE

Syntax

```
:MASK:ENABle <bool>
```

```
:MASK:ENABle?
```

Description

Enables or disables the pass/fail test function; or queries the on/off status of the pass/fail test function.

Parameter

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

Remarks

The pass/fail test is disabled in the following conditions:

- When the horizontal time base is in ROLL mode; (to set or query the horizontal time base mode, run *:TIMebase:MODE*.)
- When the delayed sweep mode (Zoom) is enabled; (to set or query the on/off status of the delayed sweep, run *:TIMebase:DElay:ENABle*.)
- When performing the waveform recording and playing.

Return Format

The query returns 1 or 0.

Example

```
:MASK:ENABle ON      /*Enables the pass/fail test function.*/
:MASK:ENABle?        /*The query returns 1.*/
```