

Remarks

N/A

Return Format

The query returns 1 or 0.

Example

```
:REfERENCE:LABel:ENABle ON          /*Enables the label display of
all the reference channels.*/
:REfERENCE:LABel:ENABle?           /*The query returns 1.*/
```

3.20.9 :REfERENCE:LABel:CONTent

Syntax

```
:REfERENCE:LABel:CONTent <ref>,<str>
```

```
:REfERENCE:LABel:CONTent? <ref>
```

Description

Sets or queries the label of the specified reference channel.

Parameter

Name	Type	Range	Default
<ref>	Discrete	{1 2 3 4 5 6 7 8 9 10}	-
<str>	ASCII String	The label can contain English letters and numbers, as well as some symbols.	-

Remarks

N/A

Return Format

The query returns the label of the specified reference channel in strings.

Example

```
:REfERENCE:LABel:CONTent 1,REF1    /*Sets the label of
reference channel 1 to REF1.*/
:REfERENCE:LABel:CONTent? 1        /*The query returns REF1.*/
```

3.21 :SAVE Commands

You can save the current setups, waveforms, screen image, and parameters of the oscilloscope to the internal memory or external USB storage device (such as USB storage device) in various formats and recall the stored setups when necessary.

3.21.1 :SAVE:IMAGe:INVert

Syntax

`:SAVE:IMAGe:INVert <bool>`

`:SAVE:IMAGe:INVert?`

Description

Enables or disables the invert function when saving the image; or queries whether the invert function is enabled when saving the image.

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

```
:SAVE:IMAGe:INVert ON          /*Enables the invert function when
saving the image.*/
:SAVE:IMAGe:INVert?           /*The query returns 1.*/
```

3.21.2 :SAVE:IMAGe:COLOr

Syntax

`:SAVE:IMAGe:COLOr <color>`

`:SAVE:IMAGe:COLOr?`

Description

Sets the image color for image saving to Color or Gray; or queries image color for image saving.

Parameter

Name	Type	Range	Default
<color>	Discrete	{COLOr GRAY}	COLOr

Remarks

N/A

Return Format

The query returns COL or GRAY.

Example

```
:SAVE:IMAGe:COLor GRAY          /*Sets the image color for image
saving to GRAY.*/
:SAVE:IMAGe:COLor?              /*The query returns GRAY.*/
```

3.21.3 :SAVE:IMAGe:FORMat**Syntax**

:SAVE:IMAGe:FORMat <*format*>

:SAVE:IMAGe:FORMat?

Description

Sets or queries in what format is the image saved.

Parameter

Name	Type	Range	Default
<format>	Discrete	{PNG BMP JPG}	-

Remarks

N/A

Return Format

The query returns PNG, BMP, or JPG.

Example

```
:SAVE:IMAGe:FORMat PNG          /*Sets the storage format to PNG.*/
:SAVE:IMAGe:FORMat?             /*The query returns PNG.*/
```

3.21.4 :SAVE:IMAGe:HEADer**Syntax**

:SAVE:IMAGe:HEADer <*bool*>

:SAVE:IMAGe:HEADer?

Description

Sets or queries whether to display the image header.

Parameter

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

Remarks

- **1|ON:** enables to display the image header. If you select "ON", the instrument model and the image creation date will be displayed in the header of the image when you save the image file.
- **0|OFF:** disables to display the image header.

Return Format

The query returns 1 or 0.

Example

```
:SAVE:IMAGe:HEADer ON /*Enables the display of the image header.*/
:SAVE:IMAGe:HEADer? /*The query returns 1.*/
```

3.21.5 :SAVE:IMAGe:DATA?

Syntax

:SAVE:IMAGe:DATA?

Description

Queries the bitmap data stream of the currently displayed image.

Parameter

N/A

Remarks

The read data format is TMC header + binary data stream of the screenshot + terminator. The TMC header is in #NXXXXXX format; wherein, # is the TMC header identifier; N following # represents the number of digits (in the decimal integer) that follow; the length of the binary data stream of the screenshot is expressed in ASCII strings, and the terminator represents the ending of communication. For example, the data read for one time is #9000387356. 9 indicates the number of digits (in the decimal integer) that follow, and "000387356" indicates the length of the binary data stream, that is, 387356 bytes.

Return Format

The query returns the binary data stream.

Example

```
:SAVE:IMAGe:DATA? /*The query returns the binary data stream.*/
```

3.21.6 :SAVE:IMAGe**Syntax**

```
:SAVE:IMAGe <path>
```

Description

Stores the contents displayed on the screen into the internal or external memory in image format. The supported image format is PNG, Windows Bitmap, and JPEG.

Parameter

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

Remarks

<path> includes the file storage location and the filename with a suffix.

- The path of the local disk is C:/, and the path of the external storage device can be D:/ or E:/.
- The suffix of the filename can be .bmp, .png, or .jpg.
- Refer to *:SAVE:OVERlap*. When you send the command :SAVE:OVERlap ON, if the specified storage location already contains a file with the same filename, the original file will be overwritten.
- The filename can contain letters, numbers, and other non-Chinese characters. The length of the filename shall not exceed 16 characters.

Return Format

N/A

Example

```
:SAVE:IMAGe D:/123.png /*Stores the contents displayed on the screen into the external storage device Disk D, with the filename 123.png.*/
```

3.21.7 :SAVE:SETup**Syntax**

```
:SAVE:SETup <path>
```

Description

Saves the current setup parameters of the oscilloscope to the internal or external memory as a file.

Parameter

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

Remarks

<path> includes the file storage location and the filename with a suffix.

- The path of the local disk is C:/, and the path of the external storage device can be D:/ or E/.
- The suffix of the filename is "*.stp".
- Refer to *:SAVE:OVERlap*. When you send the command :SAVE:OVERlap ON, if the specified storage location already contains a file with the same filename, the original file will be overwritten.
- The filename can contain letters, numbers, and other non-Chinese characters. The length of the filename shall not exceed 16 characters.

Return Format

N/A

Example

```
:SAVE:SETup D:/123.stp /*Stores the current setup parameters of
the oscilloscope into the external storage device Disk D, with the
filename 123.stp.*/
```

3.21.8 :SAVE:WAVEform

Syntax

:SAVE:WAVEform <path>

Description

Saves the waveform data to the internal or external memory as a file.

Parameter

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

Remarks

<path> includes the file storage location and the filename with a suffix.

- The path of the local disk is C:/, and the path of the external storage device can be D:/ or E:/.
- The suffix of the filename is "*.bin" or "*.csv".
- Refer to *:SAVE:OVERlap*. When you send the command :SAVE:OVERlap ON, if the specified storage location already contains a file with the same filename, the original file will be overwritten.
- The filename can contain letters, numbers, and other non-Chinese characters. The length of the filename shall not exceed 16 characters.

Return Format

N/A

Example

```
:SAVE:WAVEform D:/123.csv /*Saves the waveform file to the external
storage device Disk D, with the filename 123.csv.*/
```

3.21.9 :SAVE:MEMory:WAVEform

Syntax

:SAVE:MEMory:WAVEform <path>

Description

Saves the memory waveform data of the oscilloscope to the specified path as a file.

Parameter

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

Remarks

<path> includes the file storage location and the filename with a suffix.

- The path of the local disk is C:/, and the path of the external storage device can be D:/ or E:/.
- The suffix of the filename is "*.bin", "*.csv", or "*.wfm".

- Refer to **:SAVE:OVERlap**. When you send the command :SAVE:OVERlap ON, if the specified storage location already contains a file with the same filename, the original file will be overwritten.
- The filename can contain letters, numbers, and other non-Chinese characters. The length of the filename shall not exceed 16 characters.

Return Format

N/A

Example

```
:SAVE:MEMory:WAVeform D:/123.bin /*Saves the memory waveform
data of the oscilloscope to Disk D, with the filename 123.bin.*/*
```

3.21.10 :SAVE:STATus?**Syntax****:SAVE:STATus?****Description**

Queries the status of the memory.

Parameter

N/A

Remarks

N/A

Return Format

The query returns 0 or 1 (when the saving operation is completed).

Example

N/A

3.21.11 :SAVE:OVERlap**Syntax****:SAVE:OVERlap** <bool>**:SAVE:OVERlap?****Description**

Sets or queries whether to overwrite the existing file when saving a file.

Parameter

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

Remarks

- **1|ON:** enables to overwrite the existing file. The existing file with the same name as the file to be saved will be overwritten.
- **0|OFF:** disables to overwrite the existing file.

Return Format

The query returns 1 or 0.

Example

```
:SAVE:OVERlap ON /*Enables to overwrite the existing file.*/
:SAVE:OVERlap? /*The query returns 1.*/
```

3.21.12 :SAVE:PREFIX

Syntax

```
:SAVE:PREFIX <name>
```

```
:SAVE:PREFIX?
```

Description

Sets or queries the saved prefix of the filename.

Parameter

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

Remarks

The filename mentioned in this command shall not contain the suffix. Its prefix can contain letters, numbers, and other non-Chinese characters. The length of the prefix shall not exceed 16 characters.

Return Format

The query returns the saved prefix of the filename in strings.

Example

```
:SAVE:PREFIX Rigol /*Sets the saved prefix of the filename to
Rigol.*/
:SAVE:PREFIX? /*The query returns Rigol.*/
```

3.21.13 :LOAD:SETup

Syntax

:LOAD:SETup <path>

Description

Loads the setup file of the oscilloscope from the specified path.

Parameter

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

Remarks

<path> includes the file storage location and the filename with a suffix.

- The path of the local disk is C:/; and the path of the external storage device can be D:/, E:/...
- The suffix of the filename to be loaded is "*.stp".

Return Format

N/A

Example

```
:LOAD:SETup D:/123.stp /*Loads the setup file "123.stp" from
the external storage device Disk D.*/
```

3.22 :SEARCh Commands

3.22.1 :SEARCh:COUNT?

Syntax

:SEARCh:COUNT?

Description

Queries the total number of the search events.

Parameter

N/A

Remarks

N/A