

Parameter

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

Remarks

- **1|ON:** starts playing the waveforms.
- **0|OFF:** stops playing the waveforms.

During playing in Frame Segment navigation mode, you are not allowed to set the Start Frame and the End Frame.

Return Format

The query returns 1 or 0.

Example

```
:NAVigate:FRAME:PLAY ON /*Sets to play the waveforms in Frame
Segment navigatio mode.*/
:NAVigate:FRAME:PLAY? /*The query returns 1.*/
```

3.24 :SYSTem Commands

The :SYSTem commands are used to set the system-related parameters.

3.24.1 :SYSTem:AOUTput

Syntax

```
:SYSTem:AOUTput <auxoutput>
```

```
:SYSTem:AOUTput?
```

Description

Sets or queries the type of the signal output from the rear-panel **[AUX OUT]** connector.

Parameter

Name	Type	Range	Default
<auxoutput>	Discrete	{TOUT PFAil}	TOUT

Remarks

- **TOUT:** after you select this type, the oscilloscope initiates a trigger and then a signal which reflects the current capture rate of the oscilloscope can be output from the connector.

- **PFAil:** after you select this type, a pulse signal will be output from the connector once the oscilloscope detects a successful or failed event.

Return Format

The query returns TOUT or PFA.

Example

```
:SYSTem:AOUTput PFAil /*Sets the signal type to PFAil.*/
:SYSTem:AOUTput? /*The query returns PFA.*/
```

3.24.2 :SYSTem:BEEPer

Syntax

:SYSTem:BEEPer <bool>

:SYSTem:BEEPer?

Description

Turns on or off the beeper or queries the on/off status of the beeper.

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

```
:SYSTem:BEEPer ON /*Enables the beeper.*/
:SYSTem:BEEPer? /*The query returns 1.*/
```

3.24.3 :SYSTem:ERRor[:NEXT]?

Syntax

:SYSTem:ERRor[:NEXT]?

Description

Queries and clears the error queue message.

Parameter

N/A

Remarks

N/A

Return Format

The query is in <Message Number>, <Message Content> format. Wherein, <Message Number> is an integer; <Message Content> is a double-quoted ASCII string. For example, -113, "Undefined header; command cannot be found".

Example

N/A

3.24.4 :SYSTem:PON

Syntax

```
:SYSTem:PON <power_on>
```

```
:SYSTem:PON?
```

Description

Sets or queries the configuration type recalled by the oscilloscope when it is powered on again after power-off.

Parameter

Name	Type	Range	Default
<power_on>	Discrete	{LATest DEFault}	DEFault

Remarks

N/A

Return Format

The query returns LAT or DEF.

Example

```
:SYSTem:PON LATest          /*Sets the oscilloscope to recall Last
value after it is powered on again.*/
:SYSTem:PON?                /*The query returns LAT.*/
```

3.24.5 :SYSTem:PStatus

Syntax

```
:SYSTem:PStatus <sat>
```

```
:SYSTem:PStatus?
```

Description

Sets or queries the power status of the oscilloscope.

Parameter

Name	Type	Range	Default
<sat>	Discrete	{DEFault OPEN}	OPEN

Remarks

- **DEFault:** after the oscilloscope is powered on, you need to press the Power key on the front panel to start the oscilloscope.
- **OPEN:** after the oscilloscope is powered on, it starts directly. You do not have to press the Power key.

Return Format

The query returns DEF or OPEN.

Example

```
:SYSTem:PSTatus DEFault      /*Sets the power status to DEFault.*/
:SYSTem:PSTatus?             /*The query returns DEF.*/
```

3.24.6 :SYSTem:OPTion:INSTall

Syntax

```
:SYSTem:OPTion:INSTall <license>
```

Description

Installs an option.

Parameter

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

Remarks

- To install the option, first purchase the required option to obtain the key, and then use the key to obtain the option license according to the following steps.
 - Log in to the RIGOL official website (<http://www.rigol.com>). Click **SERVICE CENTRE (Products & Services) > License Activation** to enter the license activation interface.

- In the interface, input the correct key, serial number (Click or tap **Utility** to enter the system utility menu. In the menu, click or tap **System** > **About** to obtain the serial number.), and the verification code. Click **Generate** to obtain the download link of the option license file. If you need to use the option license file, click to download the file to the specified directory of the USB storage device.
- The <license> format is "<series>-<opt>@<code>".
 - **<series>**: indicates the product series.
 - **<opt>**: indicates the option name. The options supported include:
BODE: bode plot option (only supported by the DHO924S and DHO914S models).
 - **<code>**: The license is a fixed length of strings. Each instrument has a unique license.

Return Format

N/A

Example

```
:SYSTem:OPTion:INSTall DHO900-  
BODE@A7DEC6C1E10D42EE8E3AF0728C3D272F507E646EB54B9C97E6CCBA98468A46A  
863FED814C24D47B8B40C894B1822660B94852E6778392281A20B54B4E723E3FD
```

3.24.7 :SYSTem:OPTion:UNINStall

Syntax

```
:SYSTem:OPTion:UNINStall
```

Description

Uninstalls all the official options.

Parameter

N/A

Remarks

After the option has been uninstalled, you need to restart the instrument.

Return Format

N/A

Example

N/A

3.24.8 :SYSTem:OPTion:STATus?**Syntax****:SYSTem:OPTion:STATus?** <type>**Description**

Queries whether an option is activated or not.

Parameter

Name	Type	Range	Default
<type>	Discrete	{BODE}	-

Remarks**BODE:** bode plot option (only supported by the DHO924S and DHO914S models).**Return Format**

The query returns 0 or 1.

- 0: indicates that the option is not installed.
- 1: indicates that the official option has been installed.

Example

N/A

3.24.9 :SYSTem:OPTion:VALid?**Syntax****:SYSTem:OPTion:VALid?** <type>**Description**

Queries whether an option is activated or not.

Parameter

Name	Type	Range	Default
<type>	Discrete	{BODE}	-

Remarks**BODE:** bode plot option (only supported by the DHO924S and DHO914S models).

Return Format

The query returns 0 or 1.

- 0: indicates that the option is not installed.
- 1: indicates that the official option has been installed.

Example

N/A

3.24.10 :SYSTem:RAMount?

Syntax

:SYSTem:RAMount?

Description

Queries the number of analog channels of the current instrument.

Parameter

N/A

Remarks

N/A

Return Format

The query returns the number of analog channels of the current instrument in integer.

Example

N/A

3.24.11 :SYSTem:RESet

Syntax

:SYSTem:RESet

Description

Resets the system to power on.

Parameter

N/A

Remarks

N/A

Return Format

N/A

Example

N/A

3.24.12 :SYSTem:SETup

Syntax

```
:SYSTem:SETup <setup_data>
```

```
:SYSTem:SETup?
```

Description

Sends or reads the data stream of the system setup file.

Parameter

Name	Type	Range	Default
<setup_data>	Binary	Refer to <i>Remarks</i>	-

Remarks

- <setup_data> is a binary data block, which consists of the TMC data block header and setup data.
 - The format of the TMC data block header is #NX...X. Wherein, # is the start identifier of the data stream; the N-digit data "X...X" (N≤9) following the start identifier indicate the length of the data stream (the number of bytes).
For example, 9000002506
Wherein, N is 9, 000002506 following it represents that the data stream contains 2506 bytes of effective data.
 - The setup data are expressed in ASCII format.
- When sending the command, directly place the data stream after the command string, then complete the whole sending process in one time. When reading the data stream, ensure that there is enough buffer space to receive the data stream; otherwise, errors might occur in reading the program.

Return Format

N/A

Example

N/A

3.24.13 :SYSTem:LOCKed

Syntax

`:SYSTem:LOCKed <bool>`

`:SYSTem:LOCKed?`

Description

Enables or disables the front-panel key operation and touch screen operation; queries whether the front-panel key operation and touch screen operation are locked.

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

```
:SYSTem:LOCKed ON          /*Disables the front-panel key operation
and touch screen operation.*/
:SYSTem:LOCKed?           /*The query returns 1.*/
```

3.24.14 :SYSTem:MODules?

Syntax

`:SYSTem:MODules?`

Description

Queries the hardware modules.

Parameter

N/A

Remarks

N/A

Return Format

The query returns 1,0,0,0,0. The first figure indicates LA; the second figure indicates DG; and the others are not defined currently. 1 indicates available, and 0 indicates not available.

Example

N/A

3.24.15 :SYSTem:AUToscale

Syntax

```
:SYSTem:AUToscale <bool>
```

```
:SYSTem:AUToscale?
```

Description

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

Parameter

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

Remarks

- You can send this command or use the menu key to disable the function of the **AUTO** key.
- After the function of the **AUTO** key is disabled, you cannot perform the Auto Scale operation.

Return Format

The query returns 1 or 0.

Example

```
:SYSTem:AUToscale ON      /*Enables the function of the front-panel  
AUTO key.*/  
:SYSTem:AUToscale?        /*The query returns 1.*/
```

3.24.16 :SYSTem:GAMount?

Syntax

```
:SYSTem:GAMount?
```

Description

Queries the number of grids in the horizontal direction of the screen.

Parameter

N/A

Remarks

N/A

Return Format

The query returns the number of grids in integer. For this oscilloscope, the query returns a fixed value 10.

Example

N/A

3.24.17 :SYSTem:VERSion?

Syntax`:SYSTem:VERSion?`**Description**

Queries the version number of the SCPI used by the system.

Parameter

N/A

Remarks

N/A

Return Format

The query returns the SCPI version number in strings.

Example

```
:SYSTem:VERSion? /*The query returns 3.0.*/
```

3.24.18 :SYSTem:DGStatus?

Syntax`:SYSTem:DGStatus?`**Description**

Queries whether the DG module exists.

Parameter

N/A

Remarks

N/A

Return Format

The query returns 1 or 0.

Example

```
:SYSTem:DGStatus? /*The query returns 1 if the instrument has  
installed the DG module; otherwise, it returns 0.*/
```

3.24.19 :SYSTem:KEYBOARDCheck?

Syntax

```
:SYSTem:KEYBOARDCheck?
```

Description

Queries the status of the keyboard.

Parameter

N/A

Remarks

N/A

Return Format

The query returns true or false.

Example

```
N/A
```

3.25 :SOURce Commands

:SOURce commands are used to set AFG parameters.

This series oscilloscope has a standard built-in 25 MHz AFG, which integrates the signal source and the oscilloscope into one.

**NOTE**

The commands are only available for DHO914S and DHO924S.

3.25.1 :SOURce:OUTPut:STATe

Syntax

```
:SOURce:OUTPut:STATe <bool>
```

```
:SOURce:OUTPut:STATe?
```