

Calibration Command Group

Calibration Overview

The calibration commands provide information about the current state of calibration for the mainframe and all resident sampling head channels.

Calibration Commands

Command	Description
*CAL?	Instructs the scope to perform self-calibration
CALibrate:PRObestate:CH<x>?	Returns the calibration status of the attached probe
CALibrate:RESults?	Returns status of all calibration subsystems without performing an SPC operation
CALibrate:RESults:SPC?	Returns the results of the last SPC operation

***CAL?**

Description

This query-only command instructs the digitizing oscilloscope to perform a signal path compensation and returns its calibration status. This command is equivalent to selecting Instrument Calibration from the Utilities menu and then clicking the Calibrate button.

Note: The self-calibration can take several minutes to respond. No other commands will be executed until calibration is complete.

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Calibration

Related Commands

CALibrate:RESults_SPC? (see page 44)

Syntax

*CAL?

Example

*CAL?

This query performs an internal self-calibration that returns *CAL 0 to indicate that the calibration was successful or nonzero to indicate a failure.

CALibrate:REsults?

Description

This query-only command returns the status of all the calibration subsystems, without performing an SPC operation. The results returned do not include the calibration status of attached probes. The CALibration:REsults? Query is intended to support GO/NoGO testing of the oscilloscope's calibration readiness: all returned results should indicate Pass status if the oscilloscope is "fit for duty". It is quite common, however, to use uncalibrated probes (particularly when the oscilloscope inputs are connected into a test system with coax cables). Not including the probe cal results prompts the instrument to perform a simple "every returned status field must be Pass" test.

This command is equivalent to selecting Instrument Calibration from the Utilities menu and then viewing the contents of the Status field.

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Calibration

Related Commands

*CAL? (see page 41)

Syntax

CALibrate:REsults?

Example

CALibrate:REsults?

This query returns the status of all the calibration subsystems. The query might return

```
:CALIBRATE:RESULTS:SPC PASS;VOLTAGE PASS;FREQUENCY PASS;TRIGGER PASS
```

CALibrate:PRObestate:CH<x>?

Description

This query-only command returns the status of probe calibration of a given channel's probe, which can be Pass (0), Initialized, (1), Fail (-1), or Running (2). This command is equivalent to selecting Probe Cal from the Vertical menu.

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Related Commands

CH<x>:PROBECal? (see page 439)

Syntax

CALibrate:PRObestate:CH<x>?

Example

CALibrate:PRObestate:CH1?

This query returns the status of the probe calibration of a given channel's probe. A query might return :CALIBRATE:PROBESTATE:CH1 0, indicating that the probe calibration passed.

CALibrate:RESults:SPC?

Description

This query-only command returns the results of the last SPC operation. However, this query does not cause an SPC to be run. This command is equivalent to selecting Instrument Calibration from the Utilities menu.

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Related Commands

*CAL? (see page 41)

Syntax

CALibrate:RESults:SPC?

Arguments

None.

Example

CALibrate:RESults:SPC?

This query returns the results of the last SPC operation.