



FRA5087/5097 LabVIEW Driver

Instruction Manual

DA00017116-001

FRA5087/5097 LabVIEW Driver

Instruction Manual

Registered Trademarks

LabVIEW is a registered trademark of National Instruments Corporation in the United States.

Adobe and Acrobat are trademarks of Adobe Systems, Inc. in the United States.

Other company names and product names may be trademarks or registered trademarks of their respective companies.

— Preface —

Thank you very much for purchasing our FRA5087/5097 frequency response analyzers. FRA5087/5097 LabVIEW Driver is a LabVIEW instrument driver exclusive for FRA5087/5097.

- **Before Reading This Manual**

This manual is provided as a PDF file. To view the file, Acrobat Reader 5 or later from Adobe Systems, Inc. must be installed on your computer.

- **Caution Symbols Used in This Manual**

- 1. OUTLINE**

This chapter provides a brief overview of FRA5087/5097 LabVIEW Driver.

- 2. OPERATION vi**

This chapter describes each operation vi.

————— DISCLAIMER —————

FRA5087/5097 LabVIEW Driver (hereinafter referred to as “this software”) has been properly tested and inspected by NF Corporation (hereinafter referred to as “we”) before shipment.

Should you have any problems with this software, contact us or our dealer.

We shall assume no responsibility, whatsoever, for any damages resulting from the use of this software. Even if this software is defective, we shall be under no obligation to provide any modification or support. Use this software at your own risk.

Contents

	Page
1. OUTLINE.....	1-1
2. OPERATION vi.....	2-1
2.1 VI Tree.....	2-1
2.2 Samples	2-1
2.3 Initializing VISA.....	2-3
2.4 Closing VISA	2-4
2.5 Data Calculation Messages	2-4
2.6 Messages about Amplitude Compression Control Settings.....	2-7
2.7 Messages about Data Control Settings.....	2-9
2.8 Messages about Display Control Settings.....	2-14
2.9 Messages about File Control Settings	2-20
2.10 Messages about Input Control Settings	2-24
2.11 Messages about Measurement Control Settings.....	2-26
2.12 Messages about Oscillator Control Settings	2-31
2.13 Miscellaneous Setting Messages.....	2-33
2.14 Messages about Sweep Control Settings	2-36
2.15 Other Setting Messages	2-42
2.16 Other Query Messages.....	2-42

1. OUTLINE

This LabVIEW instrument driver is intended for NF Corporation Frequency Response Analyzer FRA5087/5097.

This driver allows you to build an application without any reference to the details of FRA5087/5097 program messages.

* Operation of this driver has been checked in the following environments:

- OS: Windows2000 and WindowsXP
- LabVIEW: Ver6.1, Ver7.0, and Ver8.0
- VISA: Ver3.5 or later

Please note that in some LabVIEW versions, VI may be changed without notice. In this case, please follow the instructions on the screen.

2. OPERATION vi

All FRA5097 operation VIs have an error input and error output. Concatenating error clusters so that an error output is connected to the error input of the subsequent VI establishes error I/O suitable for LabVIEW data flow architecture. If necessary, an application can monitor the real-time error status.

This driver ensures its proper operation when SETUP HEADER is OFF and SETUP MNEMONIC is OFF.

FRA5097 is configured according to the above by factory default.

Generally, configuration can be made by setting the terminal isReset of NF_FRA5097 Initialize.vi to True.

Note that the default is False in order to avoid initialization of FRA.

For the connection procedure, refer to the sample applications.

This section describes I/O terminals other than error I/O and VISA sessions.

2.1 VI Tree

NF_FRA5097 VI Tree.vi

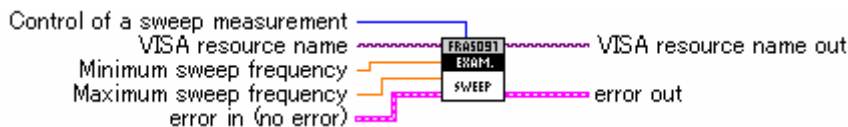
VIs in this driver are shown in a diagram.



2.2 Samples

NF_FRA5097_exam_settingaSweepFrequencyRangeAndSweepMeasurement.vi

A sample of sweep frequency range setting and sweep measurement
Setting the sweep frequency range and starting sweep measurement



NF_FRA5097_exam_setupAndQuery.vi

A sample of setup and query
Setting oscillator amplitude and outputting the query result



NF_FRA5097_exam_transferOfMeasurementDataToController1.vi

Transferring measurement data to the controller (1)

[Input] isOmitParam

True if the argument is omitted.

Loading the measurement data in the current tag of FRA



NF_FRA5097_exam_transferOfMeasurementDataToController2.vi

Transferring measurement data to the controller (2)

[Input] isOmitParam

True if the argument is omitted.

Performing single measurement, waiting for its completion, and then loading the measurement data



NF_FRA5097 Comm Interface.vi

Specifying the FRA local/remote state (for GPIB only)

[Input] Mode

remote/lockedRemote/local



NF_FRA5097 DataReaddata.vi

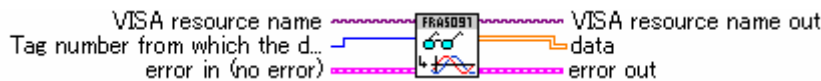
Querying the specified tag

[Input] Tag number from which the data block count is read out

Tag number (from 1 to 6) for data query

[Output] data

Outputting data according to the data transfer format



NF_FRA5097 QueryCondition.vi

Querying each parameter

[Output] CONDITION

Setup values of oscillation waveform, oscillator output amplitude, DC bias, sweep frequency range, resolution of a log sweep, the number of manual integration, measurement mode, degree of harmonic analysis, the number of delay cycles, automatic integration action, the operation mode of a slow sweep, and the operation mode of amplitude compression



NF_FRA5097 Reset.vi

Initializing the FRA settings



NF_FRA5097 Revision Query.vi

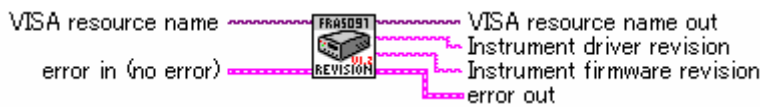
Querying the version of FRA software

[Output] Instrument driver revision

The corresponding version of LabVIEW driver

[Output] Instrument firmware revision

FRA software version



NF_FRA5097 SetupCondition.vi

Setting each parameter

[Input] CONDITION

Setup values of oscillation waveform, oscillator output amplitude, DC bias, sweep frequency range, resolution of a log sweep, the number of manual integration, measurement mode, degree of harmonic analysis, the number of delay cycles, automatic integration action, the operation mode of a slow sweep, and the operation mode of amplitude compression



NF_FRA5097 SWEEPMeasure.vi

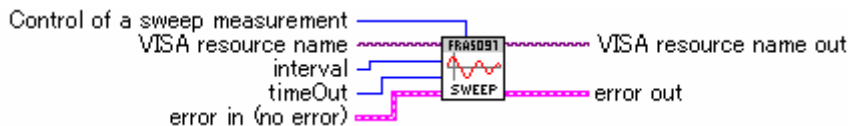
Sweep measurement control

[Input] interval

Interval time of status byte reading (ms)

[Input] timeout

Status byte loading timeout (ms)



2.3 Initializing VISA

NF_FRA5097 Initialize.vi

Outputting the model name and initializing the model

[Input] isIdQuery

Is the model name queried? True/False

[Input] isReset

Is reset to be conducted? True/False



2.4 Closing VISA

NF_FRA5097 Close.vi

Closing the FRA interface



2.5 Data Calculation Messages

NF_FRA5097_dvr_sCALculationArithmetic.vi

Configuring the function of four arithmetic operations

[Input] isOmitParam

True if the argument is omitted.

*[Input] "Type of target data 1 for arithmetic calculation" cannot be omitted.

*[Input] "Value of target data 1 for arithmetic calculation" cannot be omitted.

[Input] Type of target data 1 for arithmetic calculation

Type of target data 1 for arithmetic calculation

[Input] Value of target data 1 for arithmetic calculation

Value of target data 1 (0, 1 to 6 if the type of target data for arithmetic calculation is tag data, and from -99.99E+6 to +99.99E+6 if the type of target data for arithmetic calculation is a constant)

[Input] Arithmetic calculation mode

Arithmetic calculation mode

[Input] Type of target data 2 for arithmetic calculation

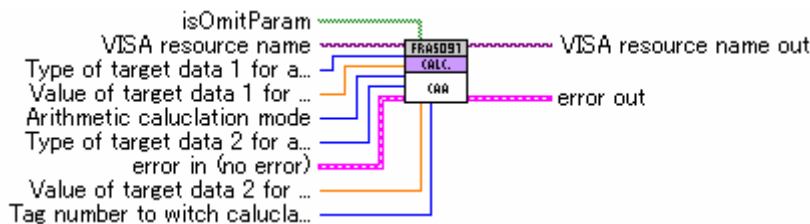
Type of target data 2 for arithmetic calculation

[Input] Value of target data 2 for arithmetic calculation

Value of target data 2 (0, 1 to 6 if the type of target data for arithmetic calculation is tag data, and from -99.99E+6 to +99.99E+6 if the type of target data for arithmetic calculation is a constant)

[Input] Tag number to witch calculation result is stored

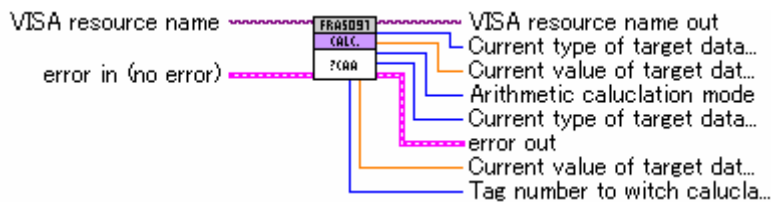
Tag number to which calculation result is stored



NF_FRA5097_dvr_qCALculationArithmetic.vi

Querying the function of four arithmetic operations

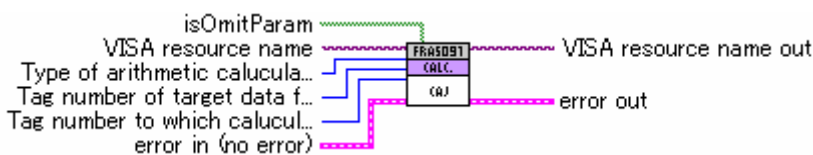
- [Output] Current type of target data 1 for arithmetic calculation
Current type of target data 1 for arithmetic calculation
- [Output] Current value of target data 1 for arithmetic calculation
Current value of target data 1 for arithmetic calculation
- [Output] Arithmetic calculation mode
Arithmetic calculation mode
- [Output] Current type of target data 2 for arithmetic calculation
Current type of target data 2 for arithmetic calculation
- [Output] Current value of target data 2 for arithmetic calculation
Current value of target data 2 for arithmetic calculation
- [Output] Tag number to witch calculation result is stored
Tag number to which calculation result is stored



NF_FRA5097_dvr_sCALculationJw.vi

Configuring the settings of differentiation and integration functions

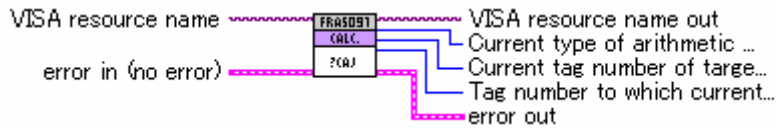
- [Input] isOmitParam
True if the argument is omitted.
- [Input] Type of arithmetic calculation
Type of arithmetic calculation
- [Input] Tag number of target data for arithmetic calculation
Tag number of target data for arithmetic calculation
- [Input] Tag number to which calculation result is stored
Tag number to which calculation result is stored



NF_FRA5097_dvr_qCALculationJw.vi

Querying the differentiation and integration functions

- [Output] Current type of arithmetic calculation
Current type of arithmetic calculation
- [Output] Current tag number of target data for arithmetic calculation
Current tag number of target data for arithmetic calculation
- [Output] Tag number to which current calculation result is stored
Tag number to which current calculation result is stored



NF_FRA5097_dvr_sCALculationLoop.vi

Configuring the settings of the open/closed loop calculation function

[Input] isOmitParam

True if the argument is omitted.

[Input] Tag number of target data for arithmetic calculation

Tag number of target data for arithmetic calculation

[Input] Type of feedback element data Tm

Type of feedback element data Tm

[Input] Value of feedback element data Tm

Value of feedback element data Tm

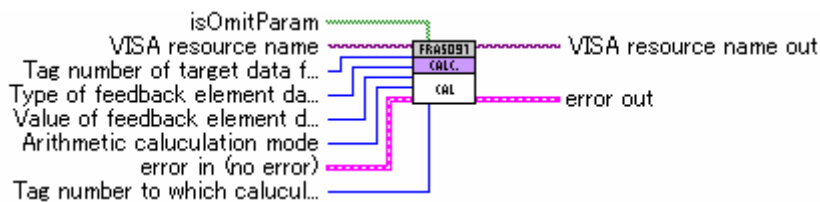
Value of target data 2 (0, 1 to 6 if the type of target data for arithmetic calculation is tag data, and from -99.99E+6 to +99.99E+6 if the type of target data for arithmetic calculation is a constant)

[Input] Arithmetic calculation mode

Arithmetic calculation mode

[Input] Tag number to which calculation result is stored

Tag number to which calculation result is stored



NF_FRA5097_dvr_qCALculationLoop.vi

Querying the open/closed loop calculation function

[Output] Current tag number of target data for arithmetic calculation

Current tag number of target data for arithmetic calculation

[Output] Current type of feedback element data Tm

Current type of feedback element data Tm

[Output] Current value of feedback element data Tm

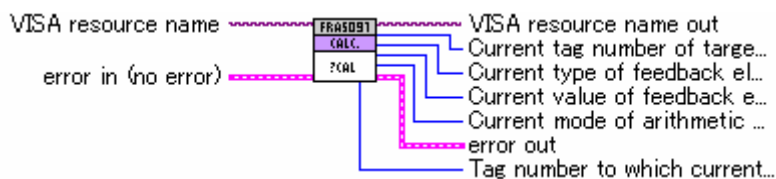
Current value of feedback element data Tm

[Output] Current mode of arithmetic calculation

Current mode of arithmetic calculation

[Output] Tag number to which current calculation result is stored

Tag number to which current calculation result is stored



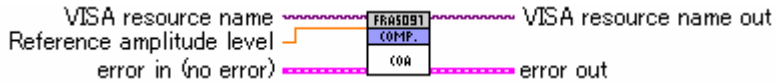
2.6 Messages about Amplitude Compression Control Settings

NF_FRA5097_dvr_sCompressionAmplitude.vi

Setting the reference amplitude level for amplitude compression operation

[Input] Reference amplitude level

Reference amplitude level (from 1E-3 to 250 (from 1mVrms to 250Vrms))



NF_FRA5097_dvr_qCompressionAmplitude.vi

Querying the reference amplitude level for amplitude compression operation

[Output] Current level of reference amplitude

Current level of reference amplitude

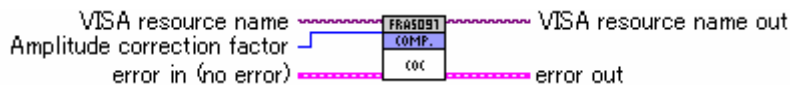


NF_FRA5097_dvr_sCompressionCorrection.vi

Setting the amplitude correction factor for amplitude compression operation

[Input] Amplitude correction factor

Amplitude correction factor (from 0 to 100 (%))

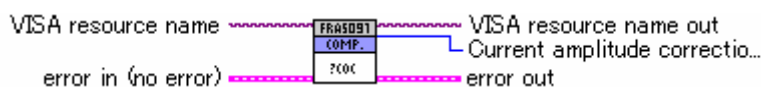


NF_FRA5097_dvr_qCompressionCorrection.vi

Querying the amplitude correction factor for amplitude compression operation

[Output] Current amplitude correction factor

Current amplitude correction factor



NF_FRA5097_dvr_sCompressionError.vi

Setting the maximum error rate for amplitude compression operation

[Input] Maximum error rate

Maximum error rate (from 0 to 100 (%))



NF_FRA5097_dvr_qCompressionError.vi

Setting/Querying the maximum error rate for amplitude compression operation

[Output] Current maximum error rate

Current maximum error rate

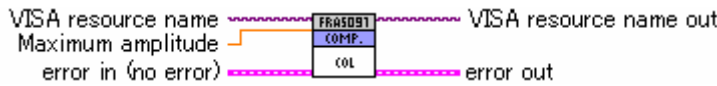


NF_FRA5097_dvr_sCCompressionLimit.vi

Setting the output amplitude limit for amplitude compression operation

[Output] Maximum amplitude

Maximum amplitude value (output open conversion) (from 1E-3 to 10.0 (Vpeak))

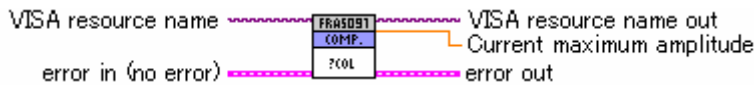


NF_FRA5097_dvr_qCCompressionLimit.vi

Querying the output amplitude limit for amplitude compression operation

[Output] Current maximum amplitude

Current maximum amplitude (output open conversion)



NF_FRA5097_dvr_sCCompressionmode.vi

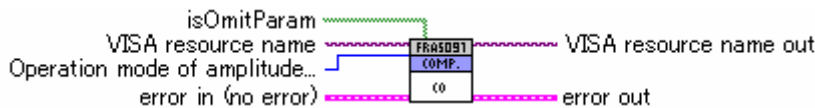
Setting the operation mode of amplitude compression

[Input] isOmitParam

True if the argument is omitted.

[Input] Operation mode of amplitude compression

Operation mode of amplitude compression

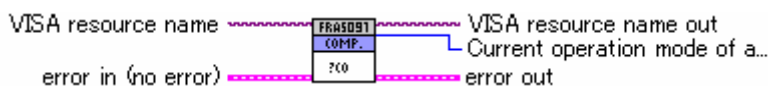


NF_FRA5097_dvr_qCCompressionmode.vi

Querying the amplitude compression mode

[Output] Current operation mode of amplitude compression

Current operation mode of amplitude compression



NF_FRA5097_dvr_sCCompressionRetry.vi

Setting the maximum number of correction retries for amplitude compression operation

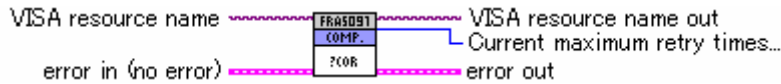
[Input] Maximum retry times of correction

Maximum correction retries (from 1 to 9999 (times))

NF_FRA5097_dvr_qCCompressionRetry.vi

Querying the maximum number of correction retries for amplitude compression operation

[Output] Current maximum retry times of correction
 Current maximum number of correction retries

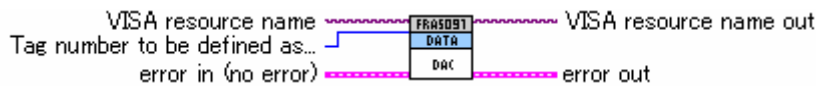


2.7 Messages about Data Control Settings

NF_FRA5097_dvr_sDataCurent.vi

Setting the current tag number

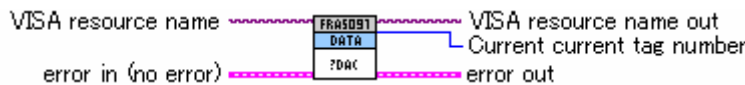
[Input] Tag number to be defined as the current tag number
 Tag number to be defined as the current tag number



NF_FRA5097_dvr_qDataCurent.vi

Querying the current tag number

[Output] Current current tag number
 Current current tag number



NF_FRA5097_dvr_sDataDisply.vi

Setting the tag number to be displayed

[Input] isOmitParam

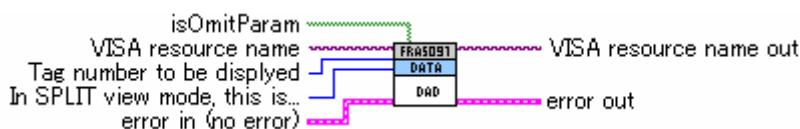
True if the argument is omitted.

[Input] Tag number to be displyed

In SPLIT view mode, the tag number to be displayed is the tag number to be displayed in the upper graph.

[Input] In SPLIT view mode, this is the tag number that is displyed in the lower graph

The tag number that is displayed in the lower graph in SPLIT view mode. This is enabled in SPLIT view mode. If 0 is specified, the lower graph does not change.



NF_FRA5097_dvr_qDataDisply.vi

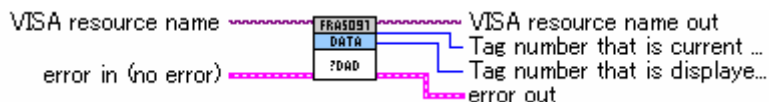
Querying the tag number to be displayed

[Output] Tag number that is current being displayed

The tag number that is currently displayed (In SPLIT view mode, this is the tag number in the upper graph.)

[Output] Tag number that is displayed in the lower graph (in SPLIT view mode)

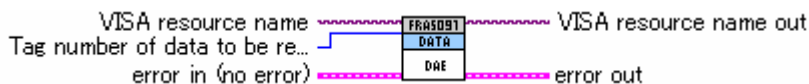
The tag number that is displayed in the lower graph

**NF_FRA5097_dvr_sDataEqualize.vi**

Registering with equalize memory

[Input] Tag number of data to be registered with equalize memory

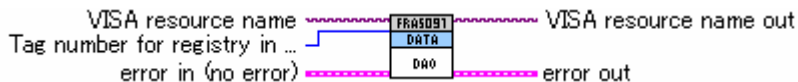
Tag number of data to be registered with equalize memory

**NF_FRA5097_dvr_sDataOpen.vi**

Registering with open correction memory

[Input] Tag number for registry in open equalize memory

The tag number of data to be registered with open correction memory

**NF_FRA5097_dvr_qDataReadCondition.vi**

Querying the measurement conditions of the specified tag data

[Input] isOmitParam

True if the argument is omitted.

[Input] Tag number to which measurement condition will be transferred

The tag number which measurement condition will be transferred

[Output] Data type

Data type

[Output] Data count

Data count

[Output] Date and time when a measurement was carried out

Date and time when a measurement was carried out

[Output] Title of data

Title of data

[Output] Oscillator amplitude

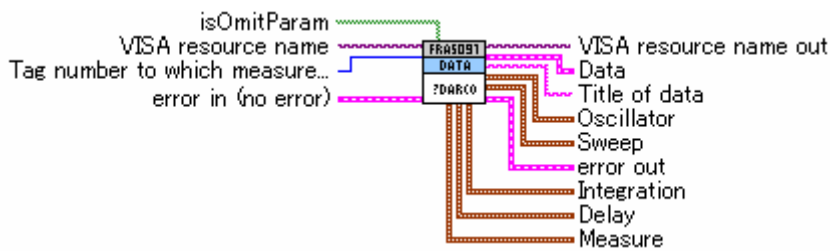
Oscillator amplitude (Vpeak)

[Output] Oscillator, DC bias

Oscillator, DC bias (V)

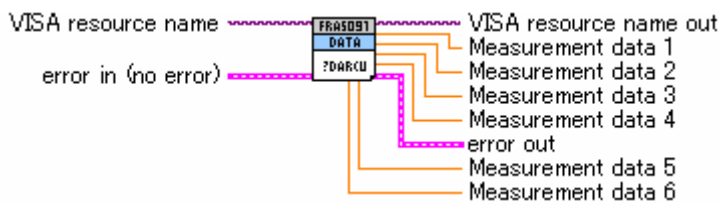
[Output] Oscillator waveform

- Oscillator waveform
- [Output] Maximum sweep frequency
 - Maximum sweep frequency (Hz)
- [Output] Minimum sweep frequency
 - Minimum sweep frequency (Hz)
- [Output] Sweep type
 - Sweep type
- [Output] Sweep resolution
 - Sweep resolution
- [Output] Integration type
 - Integration type
- [Output] Integration level
 - Integration level
- [Output] Delay type
 - Delay type
- [Output] Delay level
 - Delay level
- [Output] Degree of harmonic analysis
 - Degree of harmonic analysis
- [Output] Measurement mode
 - Measurement mode
- [Output] Automatic integration function
 - Automatic integration function
- [Output] Low-speed & high-density sweep function
 - Low-speed, high-density sweep function
- [Output] Amplitude compression function
 - Amplitude compression function



NF_FRA5097_dvr_qDataReadCUrrent.vi

Querying the data (one block) that was last measured
 The output will be in the format you set in the Data Template.



NF_FRA5097_dvr_sDataWritedata.vi

Writing data

[Input] isOmitParam

True if the argument is omitted.

*[Input] "Block number of data from which writing is started" cannot be omitted.

*[Input] "Block count of data to be written" cannot be omitted.

[Input] Tag number to witch data is written

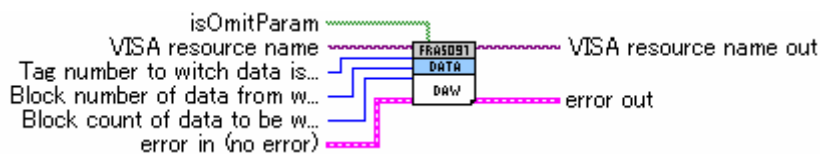
The tag number to which data is written

[Input] Block number of data from which writing is started

The block number of data from which writing is started

[Input] Block count of data to be written

The block count of data to be written



NF_FRA5097_dvr_qDataReaddata.vi

Querying the data of the specified tag within the specified range

[Input] isOmitParam

True if the argument is omitted.

[Input] Tag number to be inquired for data

The tag number used to query data

[Input] Block number of data from which reading is started

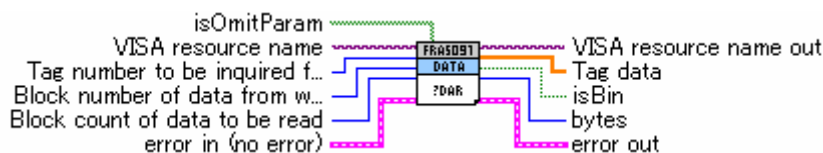
The block number from which reading is started (from 0 to the number of blocks to be read minus 1)

[Input] Block count of data to be read

The block count of data to be read (from 1 to the block count of data to be read)

[Output] Tag data

Specified data



NF_FRA5097_dvr_qDataReadSize.vi

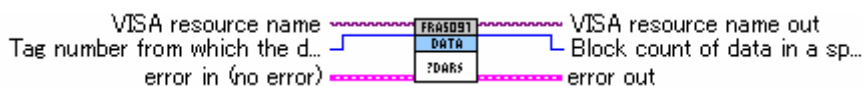
Querying the tag data block count

[Input] Tag number from which the data block count is read out

The tag number from which the data block count is read out

[Output] Block count of data in a specified tag

The block count of data in a specified tag



NF_FRA5097_dvr_sDataWriteTitle.vi

Writing a data title string for a tag

[Input] `isOmitParam`

True if the argument is omitted.

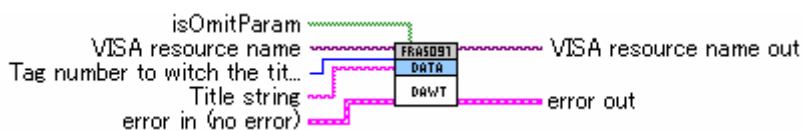
*[Input] "Tag number to witch the title string is written" cannot be omitted.

[Input] Tag number to witch the title string is written

The tag number to which the title is written

[Input] Title string

Title strings (up to 63 characters)



NF_FRA5097_dvr_qDataReadTitle.vi

Querying the tag title strings

[Input] Tag number from which the title string is read out

The tag number from which the title strings are read out

[Output] Title string of data in a specified tag

The title strings of data in a specified tag

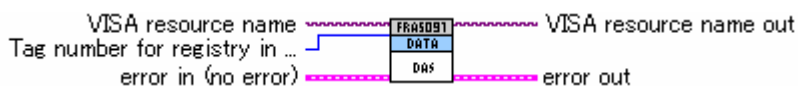


NF_FRA5097_dvr_sDataShort.vi

Registering with short correction memory

[Input] Tag number for registry in short equalizer memory

The tag number of data to be registered with short correction memory



NF_FRA5097_dvr_sDataTemplate.vi

Setting the data transfer format

[Input] `isOmitParam`

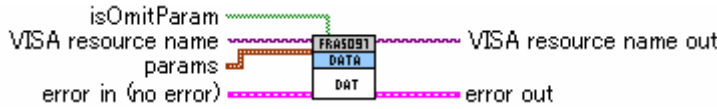
True if the argument is omitted.

[Input] Data format

Data format

[Input] Configuration and sequence of transfer data in a single block 1-6

Configuration and sequence of transfer data in a single block (with up to six arguments)



NF_FRA5097_dvr_qDataTemplate.vi

Querying the data transfer format

[Output] Current data format

Current data format

[Output] Configuration and sequence of transfer data in a single block 1

[Output] Configuration and sequence of transfer data in a single block 2

[Output] Configuration and sequence of transfer data in a single block 3

[Output] Configuration and sequence of transfer data in a single block 4

[Output] Configuration and sequence of transfer data in a single block 5

[Output] Configuration and sequence of transfer data in a single block 6



2.8 Messages about Display Control Settings

NF_FRA5097_dvr_sDisplayANalysis.vi

Setting the display mode of (active) tag data being displayed

[Input] Analysis mode

Analysis mode

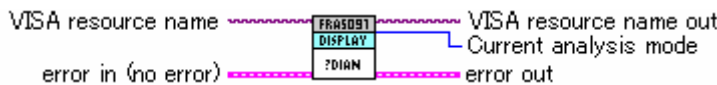


NF_FRA5097_dvr_qDisplayANalysis.vi

Querying the analysis mode of tag data being displayed

[Output] Current analysis mode

Current analysis mode

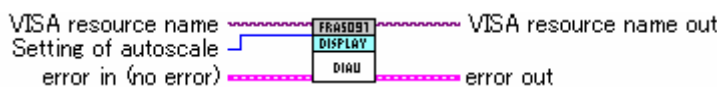


NF_FRA5097_dvr_sDisplayAUto.vi

Setting autoscale to ON/OFF

[Input] Setting of autoscale

Setting of autoscale



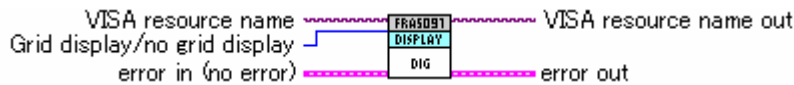
NF_FRA5097_dvr_qDisplayAUto.vi

Querying the ON/OFF state of autoscale
 [Output] Current setup conditions of autoscale
 Current setup conditions of autoscale



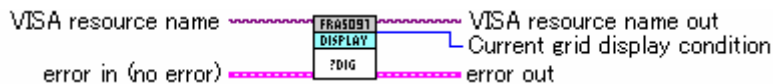
NF_FRA5097_dvr_sDisplayGridmode.vi

Setting the grid to be displayed or hidden
 [Input] Grid display/no grid display
 Setting of grid display/no grid display



NF_FRA5097_dvr_qDisplayGridmode.vi

Querying the grid display/no display state
 [Output] Current grid display condition
 Current grid display condition



NF_FRA5097_dvr_sDisplayGridStyle.vi

Setting the grid mode
 [Input] Grid mode
 Grid mode



NF_FRA5097_dvr_qDisplayGridStyle.vi

Querying the grid mode
 [Output] Current grid mode
 Current grid mode

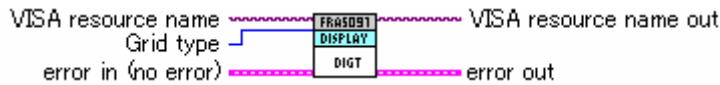


NF_FRA5097_dvr_sDIsplayGridType.vi

Setting the grid type

[Input] Grid type

Grid type

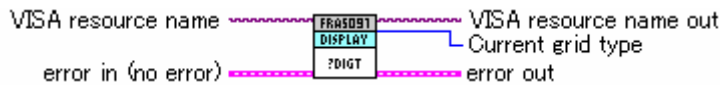


NF_FRA5097_dvr_qDIsplayGridType.vi

Querying the grid type

[Output] Current grid type

Current grid type

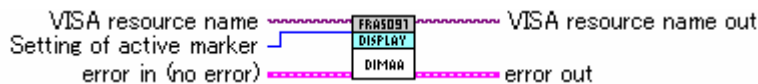


NF_FRA5097_dvr_sDIsplayMArkerActive.vi

Setting an active marker

[Input] Setting of active marker

Setting of an active marker

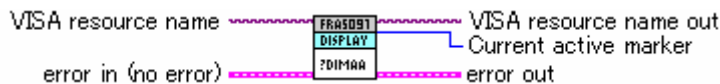


NF_FRA5097_dvr_qDIsplayMArkerActive.vi

Querying an active marker

[Output] Current active marker

Current active marker

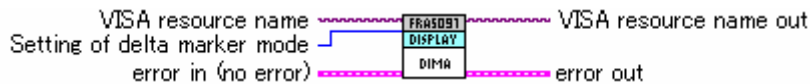


NF_FRA5097_dvr_sDIsplayMArkermode.vi

Setting a delta marker

[Input] Setting of delta marker mode

Setting of delta marker mode

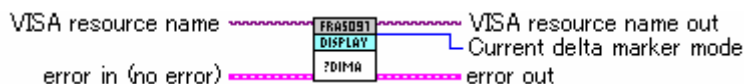


NF_FRA5097_dvr_qDIsplayMArkermode.vi

Querying a delta marker

[Output] Current delta marker mode

Current delta marker mode



NF_FRA5097_dvr_sDIsplaymode.vi

Setting the graph display mode

[Input] isOmitParam

True if the argument is omitted.

[Input] X axis of graph

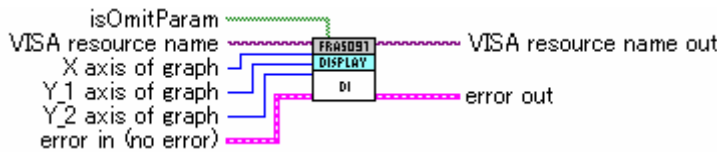
The X axis of the graph

[Input] Y_1 axis of graph

The Y_1 axis of the graph

[Input] Y_2 axis of graph

The Y_2 axis of the graph



NF_FRA5097_dvr_qDIsplaymode.vi

Querying the graph display mode

[Output] X axis of current graph

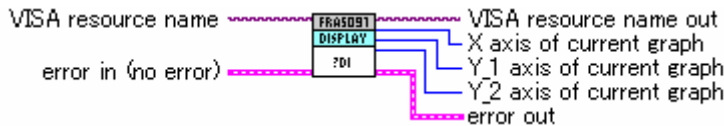
The X axis of the current graph

[Output] Y_1 axis of current graph

The Y_1 axis of the current graph

[Output] Y_2 axis of current graph

The Y_2 axis of the current graph



NF_FRA5097_dvr_sDIsplayPhase.vi

Setting the phase display range

[Input] Central value in the phase display range

Central value in the phase display range (-180 (from -360 to 0 deg), 0 (from -180 to 180 deg), 180 (from 0 to 360 deg))

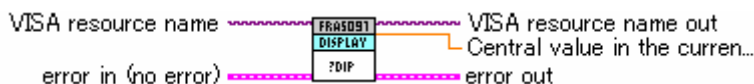


NF_FRA5097_dvr_qDIsplayPhase.vi

Querying the phase display range

[Output] Central value in the current phase display range

The central value in the current phase display range



NF_FRA5097_dvr_sDIsplayScaleXaxis.vi

Setting the X-axis display range

[Input] isOmitParam

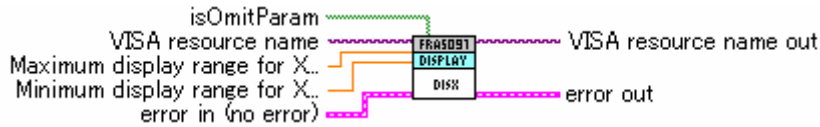
True if the argument is omitted.

[Input] Maximum display range for X axis of graph

Maximum value of the X-axis display range

[Input] Minimum display range for X axis of graph

Minimum value of the X-axis display range



NF_FRA5097_dvr_qDIsplayScaleXaxis.vi

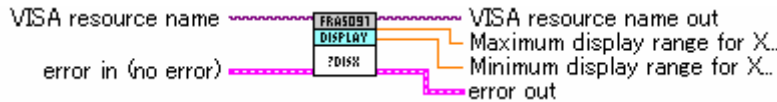
Querying the X-axis display range

[Output] Maximum display range for X axis of current graph

Current maximum value of the X-axis display range

[Output] Minimum display range for X axis of current graph

Current minimum value of the X-axis display range



NF_FRA5097_dvr_sDIsplayScaleY1axis.vi

Setting the Y₁-axis display range

[Input] isOmitParam

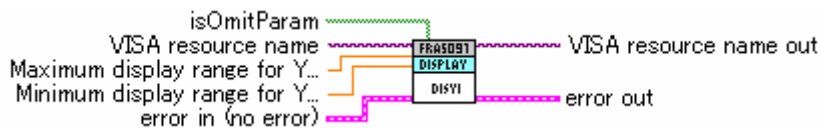
True if the argument is omitted.

[Input] Maximum display range for Y₁ axis of graph

Maximum value of the Y₁-axis display range

[Input] Minimum display range for Y₁ axis of graph

Minimum value of the Y₁-axis display range



NF_FRA5097_dvr_qDIsplayScaleY1axis.vi

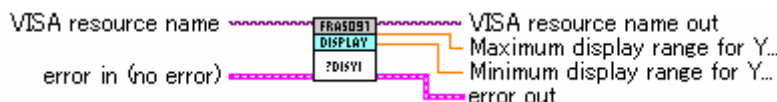
Querying the Y₁-axis display range

[Output] Maximum display range for Y₁ axis of current graph

Current maximum value of the Y₁-axis display range

[Output] Minimum display range for Y₁ axis of current graph

Current minimum value of the Y₁-axis display range



NF_FRA5097_dvr_sDisplayScaleY2axis.vi

Setting the Y₂-axis display range

[Input] isOmitParam

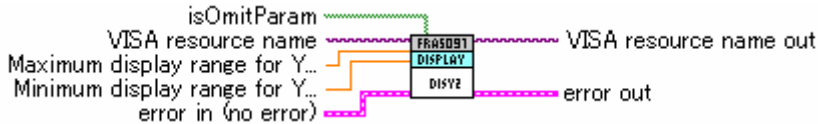
True if the argument is omitted.

[Input] Maximum display range for Y₂ axis of graph

Maximum value of the Y₂-axis display range

[Input] Minimum display range for Y₂ axis of graph

Minimum value of the Y₂-axis display range



NF_FRA5097_dvr_qDisplayScaleY2axis.vi

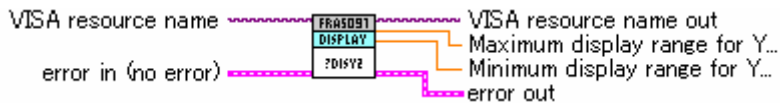
Querying the Y₂-axis display range

[Output] Maximum display range for Y₂ axis of current graph

Current maximum value of the Y₂-axis display range

[Output] Minimum display range for Y₂ axis of current graph

Current minimum value of the Y₂-axis display range

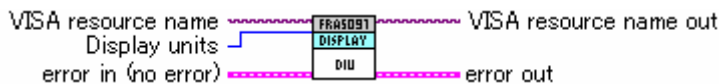


NF_FRA5097_dvr_sDisplayUnits.vi

Setting display units

[Input] Display units

Display units



NF_FRA5097_dvr_qDisplayUnits.vi

Querying display units

[Output] Present graph display window mode

Current display units

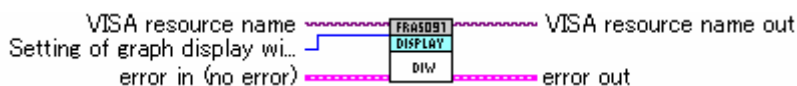


NF_FRA5097_dvr_sDisplayWindow.vi

Setting the graph display window mode

[Input] Setting of graph display window mode

Setting of the graph display window mode

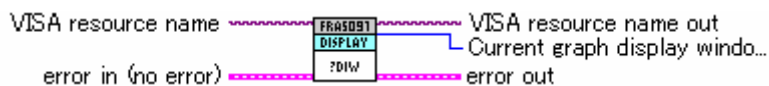


NF_FRA5097_dvr_qDisplayWindow.vi

Querying the graph display window mode

[Output] Current graph display window mode

Current graph display window mode



2.9 Messages about File Control Settings

NF_FRA5097_dvr_sFileDeleteDisk.vi

Deleting files

[Input] Name of a file to be deleted

The name of a file to be deleted (the name of a file stored in the USB memory)

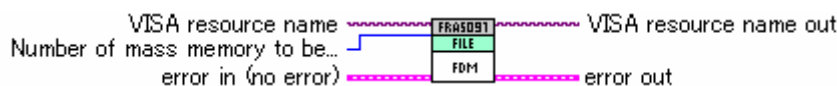


NF_FRA5097_dvr_sFileDeleteMass.vi

Deleting mass memory

[Input] Number of mass memory to be deleted

The number of mass memory to be deleted (from 1 to the number stored in the mass memory)

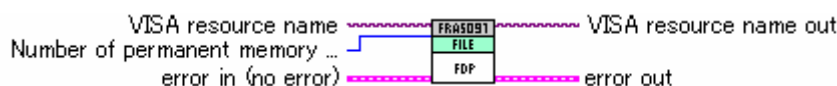


NF_FRA5097_dvr_sFileDeletePermanent.vi

Deleting permanent memory

[Input] Number of permanent memory to be deleted

The number of permanent memory to be deleted (from 1 to the number stored in the permanent memory)



NF_FRA5097_dvr_qFileDirDisk.vi

Outputting a list of files that are stored in the USB memory

[Output] File name

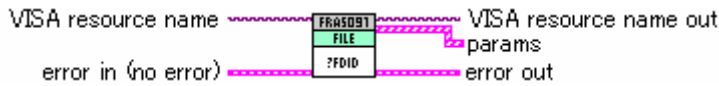
File names

[Output] Date on which a file was created

Dates on which the files were created

[Output] Time at which a file was created

Time at which the files were created



NF_FRA5097_dvr_qFileDirMass.vi

Outputting a list of file numbers that are registered with mass memory

[Output] Registration number of mass memory

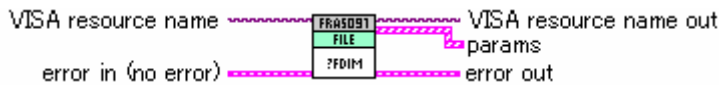
Mass memory registration numbers

[Output] Date on which a file was created

Date on which the files were created

[Output] Time at which a file was created

Time at which the files were created



NF_FRA5097_dvr_qFileDirPermanent.vi

Outputting a list of file numbers that are registered with permanent memory

[Output] Registration number of permanent memory

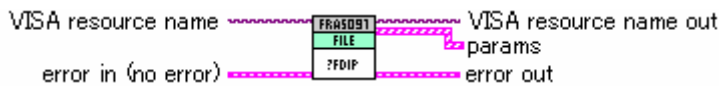
Permanent memory registration numbers

[Output] Date on which a file was created

Date on which the files were created

[Output] Time at which a file was created

Time at which the files were created



NF_FRA5097_dvr_sFileLoadDiskdata.vi

Loading data files from the USB memory

[Input] isOmitParam

True if the argument is omitted.

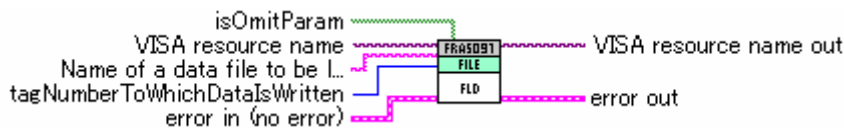
*[Input] "Name of a data file to be loaded" cannot be omitted.

[Input] Name of a data file to be loaded

The name of a data file to be loaded (including the extension ".dat")

[Input] tagNumberToWhichDataIsWritten

The number of the tag to which data is written

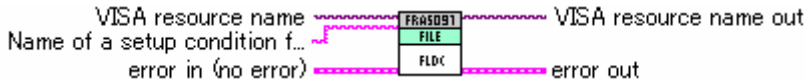


NF_FRA5097_dvr_sFileLoadDiskCondition.vi

Loading a setup condition file from the USB memory

[Input] Name of a setup condition file to be loaded

The name of the setup condition file to be loaded (including the extension ".con")



NF_FRA5097_dvr_sFileLoadMass.vi

Loading mass data and assigning it to a tag

[Input] isOmitParam

True if the argument is omitted.

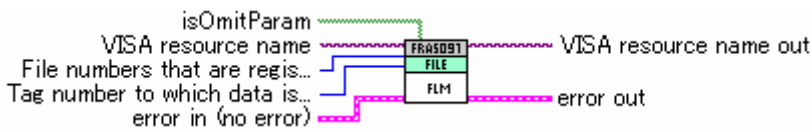
*[Input] “File numbers that are registered with mass memory” cannot be omitted

[Input] File numbers that are registered with mass memory

The file numbers that are registered with mass memory (the file numbers stored in the mass memory)

[Input] Tag number to which data is written

The number of a tag to which data is written



NF_FRA5097_dvr_sFileLoadPermanent.vi

Loading permanent data and assigning it to a tag

[Input] isOmitParam

True if the argument is omitted.

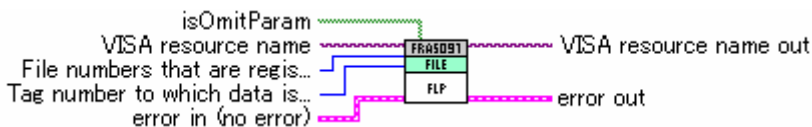
*[Input] “File numbers that are registered with permanent memory” cannot be omitted

[Input] File numbers that are registered with permanent memory

The file numbers that are registered with permanent memory (the file numbers stored in the permanent memory)

[Input] Tag number to which data is written

The number of a tag to which data is written



NF_FRA5097_dvr_sFileRenameDisk.vi

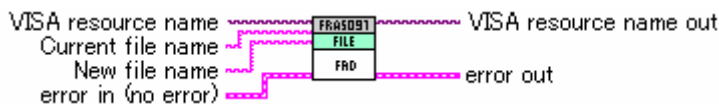
Renaming a file in a USB memory

[Input] Current file name

Current filename (a filename stored in the disk (including its extension))

[Input] New file name

New filename (a filename not stored in the disk (including its extension))



NF_FRA5097_dvr_sFileSaveDiskdata.vi

Saving tag data to a USB memory

[Input] isOmitParam

True if the argument is omitted.

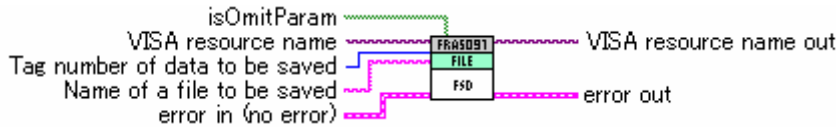
*[Input] "Name of a file to be saved" cannot be omitted

[Input] Tag number of data to be saved

The tag number to be saved

[Input] Name of a file to be saved

The name of the file to be saved including its extension ".dat"

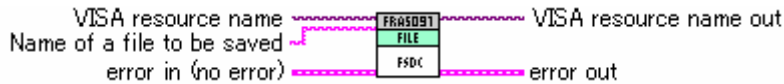


NF_FRA5097_dvr_sFileSaveDiskCondition.vi

Saving setup conditions to a USB memory

[Input] Name of a file to be saved

The name of the file to be saved including its extension ".con"



NF_FRA5097_dvr_sFileSaveMass.vi

Storing tag data to a mass memory

[Input] isOmitParam

True if the argument is omitted.

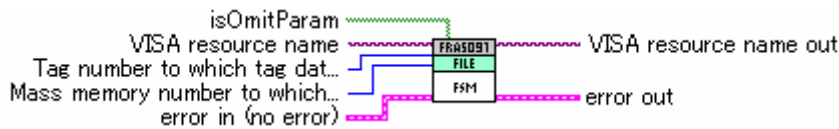
[Input] Tag number to which tag data is stored

The number of a tag whose data will be stored to a mass memory

[Input] Mass memory number to which data is stored

The number of mass memory to which data will be stored (from 1 to 99)

If omitted, the number is automatically generated.



NF_FRA5097_dvr_sFileSavePermanent.vi

Storing tag data to a permanent memory

[Input] isOmitParam

True if the argument is omitted.

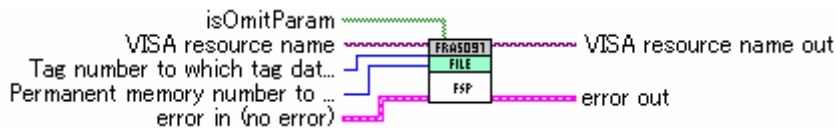
[Input] Tag number to which tag data is stored

The number of a tag whose data will be stored to a permanent memory

[Input] Permanent memory number to which tag data is stored

The number of a permanent memory to which data will be stored (from 1 to 99)

If omitted, the number is automatically generated.



2.10 Messages about Input Control Settings

NF_FRA5097_dvr_sInputAction.vi

Setting an action for overload input detected

[Input] isOmitParam

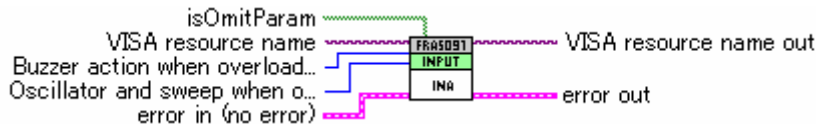
True if the argument is omitted.

[Input] Buzzer action when overload input is detected

Buzzer action when overload input is detected

[Input] Oscillator and sweep when overload input is detected

Behavior of the oscillator and sweep when overload input is detected



NF_FRA5097_dvr_qInputAction.vi

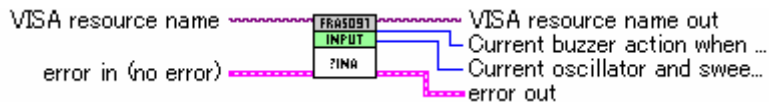
Querying the action to be taken when overload input is detected

[Output] Current buzzer action when overload input is detected

Current buzzer action when overload input is detected

[Output] Current oscillator and sweep when overload input is detected

Current behavior of the oscillator and sweep when overload input is detected



NF_FRA5097_dvr_sInputCAIculate.vi

Setting input weighting

[Input] isOmitParam

True if the argument is omitted.

[Input] Number to be applied to CH1 input

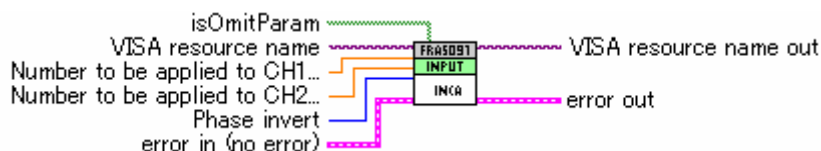
The value to be applied to CH1 (from 0.0 to 1.0E+6)

[Input] Number to be applied to CH2 input

The value to be applied to CH2 (from 0.0 to 1.0E+6)

[Input] Phase invert

Invert the phase

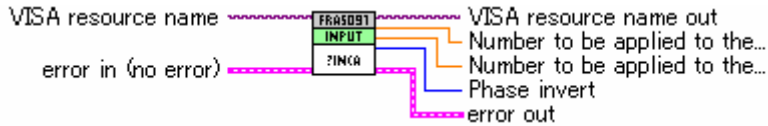


NF_FRA5097_dvr_qInputCAIculate.vi

Querying input weighting

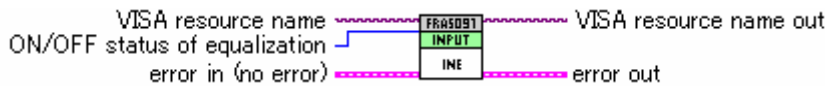
[Output] Number to be applied to the current CH1 input

The value to be applied to the current CH1 input
 [Output] Number to be applied to the current CH2 input
 The number to be applied to the current CH2 input
 [Output] Phase invert
 Invert the phase



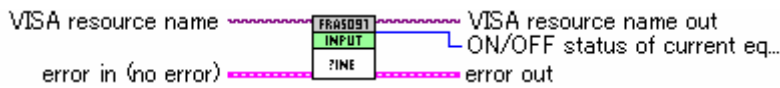
NF_FRA5097_dvr_sINputEqualize.vi

Setting input equalization
 [Input] ON/OFF status of equalization
 ON/OFF status of equalization



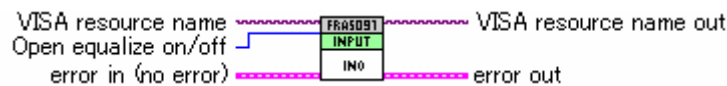
NF_FRA5097_dvr_qINputEqualize.vi

Querying the equalization
 [Output] ON/OFF status of current equalization
 Current ON/OFF status of equalization



NF_FRA5097_dvr_sINputOpen.vi

Setting the open correction function
 [Input] Open equalize on/off
 ON/OFF state of the open correction function



NF_FRA5097_dvr_qINputOpen.vi

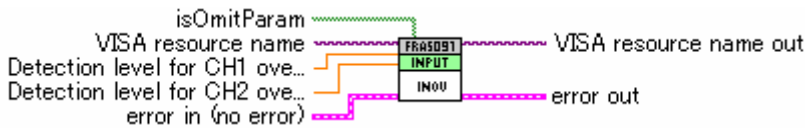
Querying the open correction function
 [Output] Present open equalize on/off state
 Current ON/OFF state of the open correction function



NF_FRA5097_dvr_sINputOVER.vi

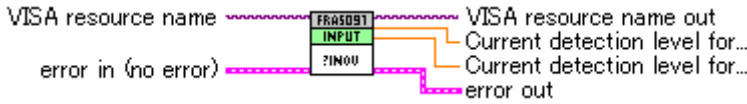
Setting the detection level for overload
 [Input] isOmitParam
 True if the argument is omitted.
 [Input] Detection level for CH1 overload

The detection level for CH1 overload (from 0 to 250 (Vrms))
 [Input] Detection level for CH2 overload
 The detection level for CH2 overload (from 0 to 250 (Vrms))



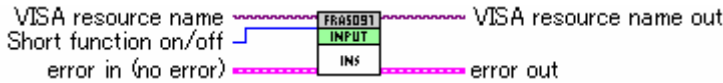
NF_FRA5097_dvr_qInputOver.vi

Querying the detection level for overload
 [Output] Current detection level for CH1 overload
 Current detection level for CH1 overload
 [Output] Current detection level for CH2 overload
 Current detection level for CH2 overload



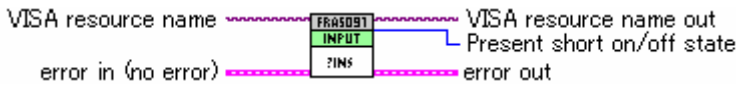
NF_FRA5097_dvr_sInputShort.vi

Setting the short correction function
 [Input] Short function on/off
 ON/OFF state of the short correction function



NF_FRA5097_dvr_qInputShort.vi

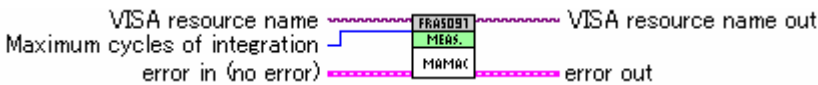
Querying the short correction function
 [Output] Present short on/off state
 Current ON/OFF state of the short correction function



2.11 Messages about Measurement Control Settings

NF_FRA5097_dvr_sMeasureAutoMaxCycle.vi

Setting the maximum number of automatic integration
 [Input] Maximum cycles of integration
 Maximum number of integration (from 2 to 9999 (cycles))

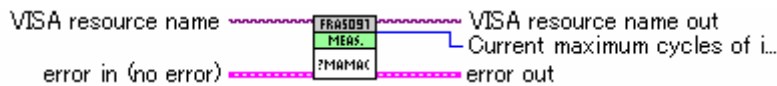


NF_FRA5097_dvr_qMeasureAutoMaxCycle.vi

Querying the maximum number of automatic integration

[Output] Current maximum cycles of integration

Current maximum number of integration

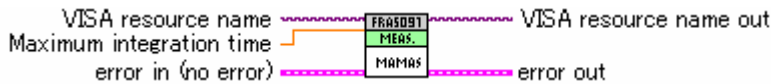


NF_FRA5097_dvr_sMeasureAutoMAxSec.vi

Setting the maximum time of automatic integration

[Input] Maximum integration time

Maximum integration time (from 0 to 9999 (sec))

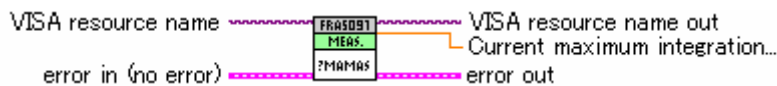


NF_FRA5097_dvr_qMeasureAutoMAxSec.vi

Querying the maximum time of automatic integration

[Output] Current maximum integration time

Current maximum integration time

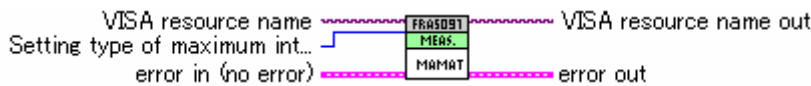


NF_FRA5097_dvr_sMeasureAutoMAxType.vi

Setting the method of setting maximum automatic integration

[Input] Setting type of maximum integration

The method of setting maximum integration



NF_FRA5097_dvr_qMeasureAutoMAxType.vi

Querying the method of setting maximum automatic integration

[Output] Current setting type of maximum integration

Current method of setting maximum integration

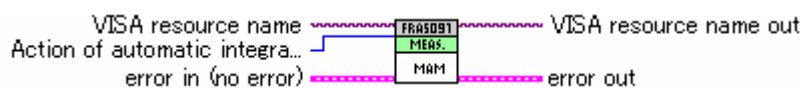


NF_FRA5097_dvr_sMeasureAutoMode.vi

Setting the automatic integration action

[Input] Action of automatic integration

Automatic integration action



NF_FRA5097_dvr_qMeasureAutoMode.vi

Querying the automatic integration action

[Output] Action of current automatic integration

Current automatic integration action



NF_FRA5097_dvr_sMeasureCoherence.vi

Setting the coherence calculation mode

[Input] Coherence calculation mode

Coherence calculation mode



NF_FRA5097_dvr_qMeasureCoherence.vi

Querying the coherence calculation mode

[Output] Current coherence calculation mode

Current coherence calculation mode

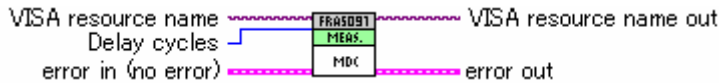


NF_FRA5097_dvr_sMeasureDelayCycle.vi

Setting the measurement start delay cycle

[Input] Delay cycles

Delay cycle (from 0 to 9999 (cycles))

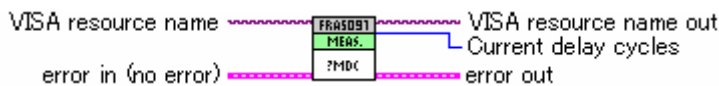


NF_FRA5097_dvr_qMeasureDelayCycle.vi

Querying the measurement start delay cycle

[Output] Current delay cycles

Current delay cycle

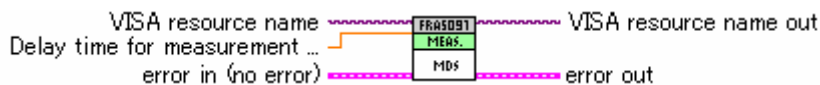


NF_FRA5097_dvr_sMeasureDelaySec.vi

Setting the delay time for measurement start

[Input] Delay time for measurement start

Delay time for measurement start (from 0 to 9999.0 (sec))

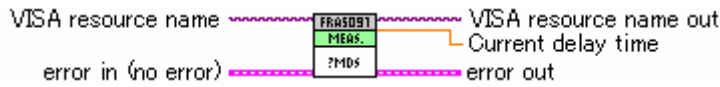


NF_FRA5097_dvr_qMeasureDelaySec.vi

Querying the delay time for measurement start

[Output] Current delay time

Current delay time

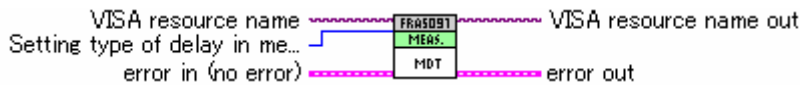


NF_FRA5097_dvr_sMeasureDelayType.vi

Setting the method of setting delay in measurement start

[Input] Setting type of delay in measurement start

The method of setting delay in measurement start

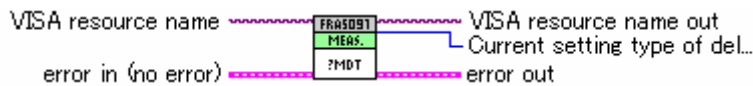


NF_FRA5097_dvr_qMeasureDelayType.vi

Querying the method of setting delay in measurement start

[Output] Current setting type of delay in measurement start

Current method of setting delay in measurement start

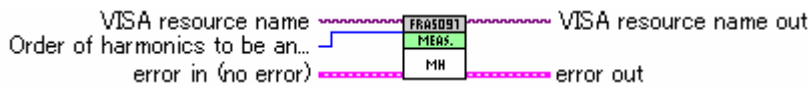


NF_FRA5097_dvr_sMeasureHarmonic.vi

Setting the order for harmonics analysis

[Input] Order of harmonics to be analyzed

The order of harmonics to be analyzed



NF_FRA5097_dvr_qMeasureHarmonic.vi

Querying the order for harmonics analysis

[Output] Current order of harmonics to be analyzed

Current order of harmonics to be analyzed



NF_FRA5097_dvr_sMeasureIntegrationCycle.vi

Setting the number of manual integration

[Input] isOmitParam

True if the argument is omitted.

[Input] Cycles of integration

The number of integration (from 1 to 9999 (cycles))



NF_FRA5097_dvr_qMeasureIntegrationCycle.vi

Querying the number of manual integration

[Output] Current cycles of integration

Current number of manual integration

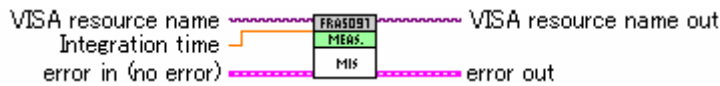


NF_FRA5097_dvr_sMeasureIntegrationSec.vi

Setting manual integration time

[Input] Integration time

Integration time (from 0 to 9999.0 (sec))

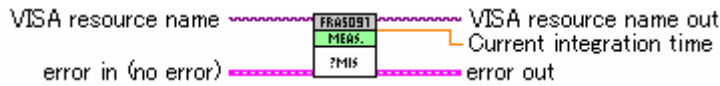


NF_FRA5097_dvr_qMeasureIntegrationSec.vi

Querying manual integration time

[Output] Current integration time

Current manual integration time

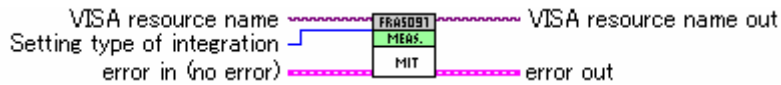


NF_FRA5097_dvr_sMeasureIntegrationType.vi

Setting the method of setting integration

[Input] Setting type of integration

The method of setting integration

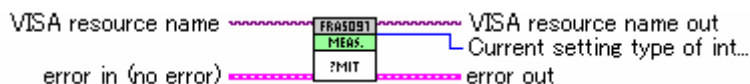


NF_FRA5097_dvr_qMeasureIntegrationType.vi

Querying the method of setting integration

[Output] Current setting type of integration

Current method of setting integration

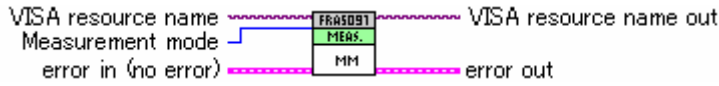


NF_FRA5097_dvr_sMeasureMode.vi

Setting the measurement mode

[Input] Measurement mode

Measurement mode



NF_FRA5097_dvr_qMeasureMode.vi

Querying the measurement mode
 [Output] Current measurement mode
 Current measurement mode



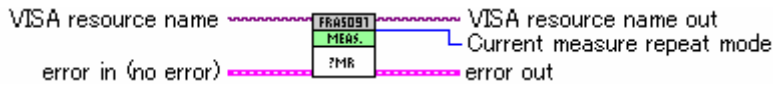
NF_FRA5097_dvr_sMeasureRepeat.vi

Setting the continuous measurement (Repeat) mode
 [Input] Setting of the measure repeat mode
 Setting of the continuous measurement mode



NF_FRA5097_dvr_qMeasureRepeat.vi

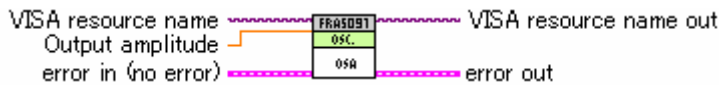
Querying the continuous measurement (Repeat) mode
 [Output] Current measure repeat mode
 Current continuous measurement mode



2.12 Messages about Oscillator Control Settings

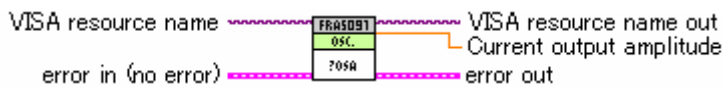
NF_FRA5097_dvr_sOscillatorAmplitude.vi

Setting oscillator output amplitude
 [Input] Output amplitude
 Output amplitude (when output open (from 0 to 10 (V_{peak})))



NF_FRA5097_dvr_qOscillatorAmplitude.vi

Querying oscillator output amplitude
 [Output] Current output amplitude
 Current output amplitude (when output open)

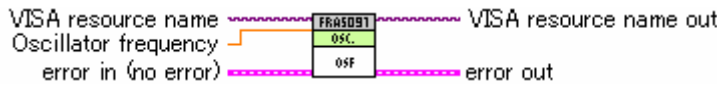


NF_FRA5097_dvr_sOscillatorFrequency.vi

Setting oscillator frequency

[Input] Oscillator frequency

Oscillator frequency (from 0.1E-3 to 15E+6 (Hz))
 From 0.1E-3 to 10E+6 (Hz) for FRA5087



NF_FRA5097_dvr_qOscillatorFrequency.vi

Querying oscillator frequency

[Output] Current oscillator frequency
 Current oscillator frequency



NF_FRA5097_dvr_sOscillatormode.vi

Setting the voltage change mode

[Input] isOmitParam

True if the argument is omitted.

[Input] Oscillator ON/OFF

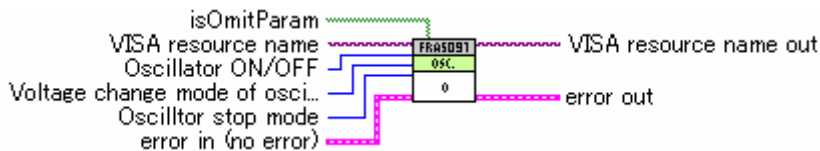
Oscillator ON/OFF

[Input] Voltage change mode of oscillator

Voltage change mode of oscillator (SLOW ON/OFF setting)

[Input] Oscillator stop mode

Oscillator stop mode



NF_FRA5097_dvr_qOscillatormode.vi

Querying the voltage change mode

[Output] Current ON/OFF status of oscillator

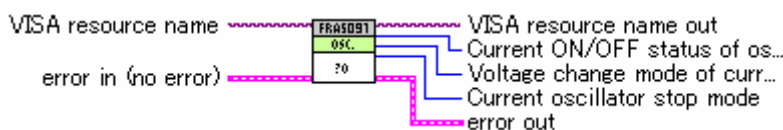
Current ON/OFF status of the oscillator

[Output] Voltage change mode of current oscillator

Current voltage change mode of the oscillator

[Output] Current oscillator stop mode

Current oscillator stop mode



NF_FRA5097_dvr_sOscillatorOFFSet.vi

Setting DC bias

[Input] DC bias

DC bias (when output open (from -10 to 10 (V)))



NF_FRA5097_dvr_qOscillatorOFFSet.vi

Querying DC bias

[Output] Current DC bias

Current DC bias (when output open)

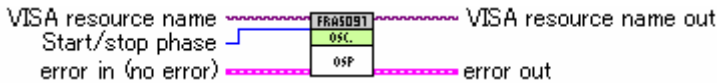


NF_FRA5097_dvr_sOscillatorPhase.vi

Setting the oscillator-start/stop phase

[Input] Start/stop phase

Start/stop phase (from 0 to 359 (deg))

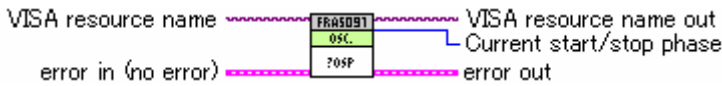


NF_FRA5097_dvr_qOscillatorPhase.vi

Querying the oscillator-start/stop phase

[Output] Current start/stop phase

Current start/stop phase

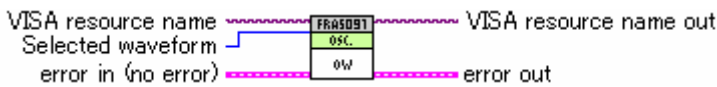


NF_FRA5097_dvr_sOscillatorWaveform.vi

Setting oscillation waveform

[Input] Selected waveform

Waveform selection

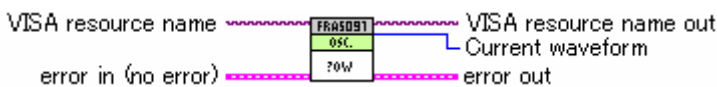


NF_FRA5097_dvr_qOscillatorWaveform.vi

Querying oscillation waveform

[Output] Current waveform

Current waveform



2.13 Miscellaneous Setting Messages

NF_FRA5097_dvr_sSetupBuzzer.vi

Setting the buzzer ON/OFF

[Input] Buzzer ON/OFF

Buzzer ON/OFF

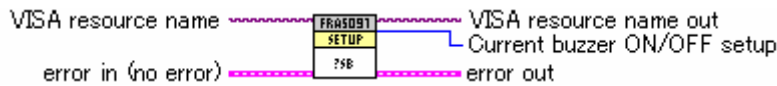


NF_FRA5097_dvr_qSetupBuzzer.vi

Querying the buzzer ON/OFF

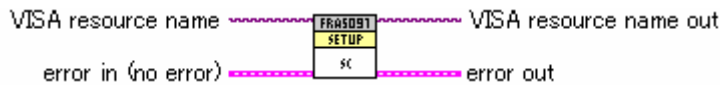
[Output] Current buzzer ON/OFF setup

Current buzzer ON/OFF state



NF_FRA5097_dvr_sSetupCalibration.vi

Executing calibration



NF_FRA5097_dvr_sSetupDate.vi

Setting the date

[Input] isOmitParam

True if the argument is omitted.

[Input] Year

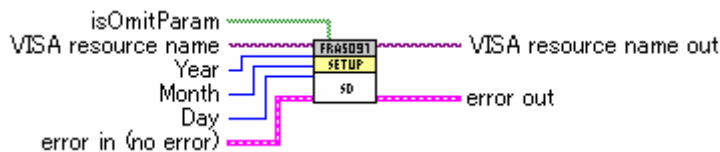
Year (from 1970 to 2069)

[Input] Month

Month (from 1 to 12)

[Input] Day

Day (from 1 to 31)



NF_FRA5097_dvr_qSetupDate.vi

Querying the date

[Output] Year

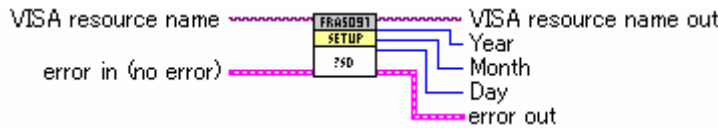
Year

[Output] Month

Month

[Output] Day

Day

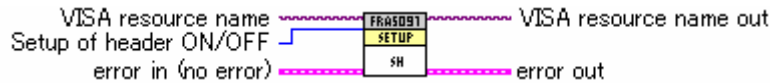


NF_FRA5097_dvr_sSetupHeader.vi

Setting the header ON/OFF

[Input] Setup of header ON/OFF

The header ON/OFF setting

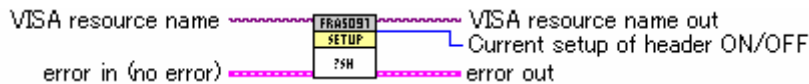


NF_FRA5097_dvr_qSetupHeader.vi

Querying the header ON/OFF

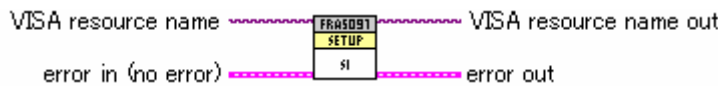
[Output] Current setup of header ON/OFF

Current state of the header ON/OFF



NF_FRA5097_dvr_sSetupInitialize.vi

Setting initialization

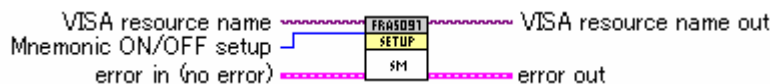


NF_FRA5097_dvr_sSetupMnemonic.vi

Setting the numeric/mnemonic form of response strings

[Input] Mnemonic ON/OFF setup

Mnemonic ON/OFF setup

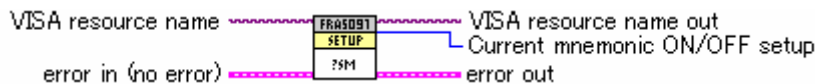


NF_FRA5097_dvr_qSetupMnemonic.vi

Querying the numeric/mnemonic form of response strings

[Output] Current mnemonic ON/OFF setup

Current state of mnemonic ON/OFF setup



NF_FRA5097_dvr_sSetupTime.vi

Setting time

[Input] isOmitParam

True if the argument is omitted.

[Input] Time

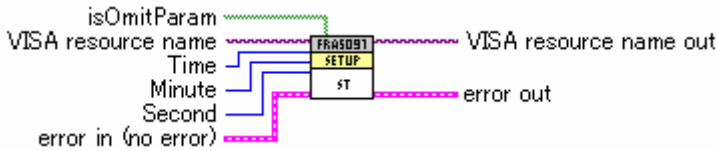
Hour (from 0 to 23 (24-hour system))

[Input] Minute

Minute (from 0 to 59)

[Input] Second

Second (from 0 to 59)



NF_FRA5097_dvr_qSetupTime.vi

Querying time

[Output] Time

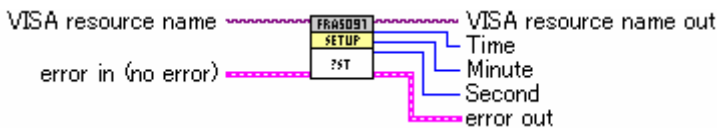
Hour

[Output] Minute

Minute

[Output] Second

Second



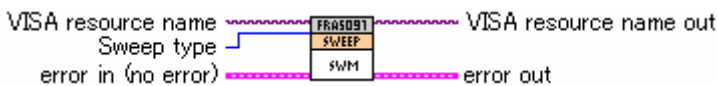
2.14 Messages about Sweep Control Settings

NF_FRA5097_dvr_sSweepManual.vi

Setting manual/automatic sweep

[Input] Sweep type

Sweep type

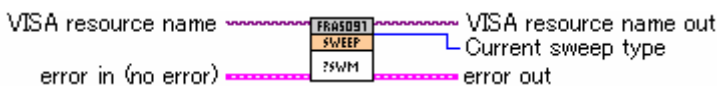


NF_FRA5097_dvr_qSweepManual.vi

Querying manual/automatic sweep

[Output] Current sweep type

Current sweep type

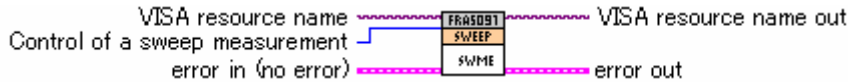


NF_FRA5097_dvr_sSweepMEasure.vi

Setting sweep measurement control

[Input] Control of a sweep measurement

Sweep measurement control

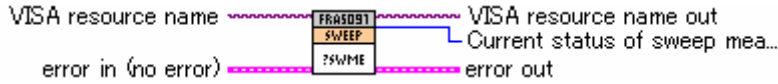


NF_FRA5097_dvr_qSWEEPMEasure.vi

Querying sweep measurement control

[Output] Current status of sweep measurement

Current sweep status



NF_FRA5097_dvr_sSWEEPrange.vi

Setting the sweep frequency range

[Input] isOmitParam

True if the argument is omitted.

[Input] Minimum sweep frequency

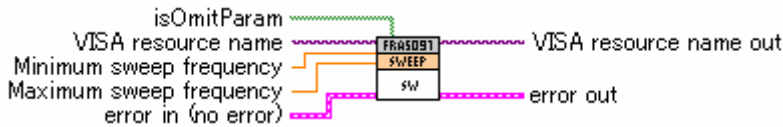
Minimum sweep frequency (from 0.1E-3 to 15E+6 (Hz))

From 0.1E-3 to 10E+6 (Hz) for FRA5087

[Input] Maximum sweep frequency

Maximum sweep frequency (from 0.1E-3 to 15E+6 (Hz))

From 0.1E-3 to 10E+6 (Hz) for FRA5087



NF_FRA5097_dvr_qSWEEPrange.vi

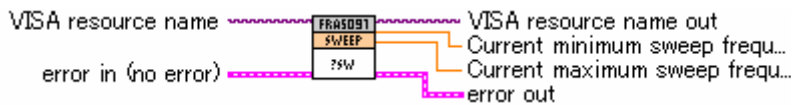
Querying the sweep frequency range

[Output] Current minimum sweep frequency

Minimum sweep frequency (Hz)

[Output] Current maximum sweep frequency

Maximum sweep frequency (Hz)

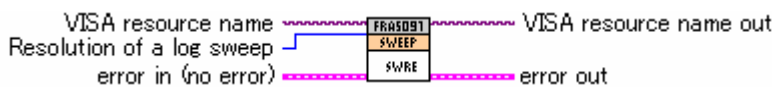


NF_FRA5097_dvr_sSWEEPREsolutionlogswEEP.vi

Setting resolution of a log sweep (steps/sweep)

[Input] Resolution of a log sweep

Resolution of a log sweep (from 3 to 20000 (steps/sweep))

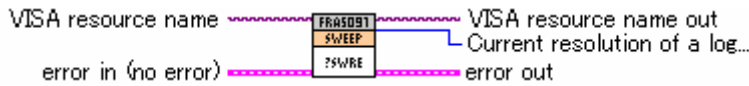


NF_FRA5097_dvr_qSWEEPREsolutionlogswEEP.vi

Querying resolution of a log sweep (steps/sweep)

[Output] Current resolution of a log sweep

Current resolution of a log sweep



NF_FRA5097_dvr_sSWEEPREsolutionlogDecade.vi

Setting the per-digit resolution of a log sweep (steps/decade)

[Input] Per-digit resolution of a log Sweep

Per-digit resolution of a log sweep (from 1 to 20000 (steps/decade))

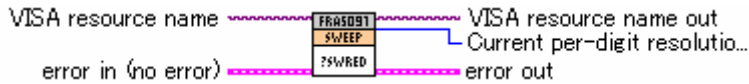


NF_FRA5097_dvr_qSWEEPREsolutionlogDecade.vi

Querying the per-digit resolution of a log sweep (steps/decade)

[Output] Current per-digit resolution of a log sweep

Current per-digit resolution of a log sweep



NF_FRA5097_dvr_sSWEEPREsolutionLinsweep.vi

Setting the resolution of a linear sweep (steps/sweep)

[Input] Resolution of a linear sweep

Resolution of a linear sweep (from 3 to 20000 (steps/sweep))

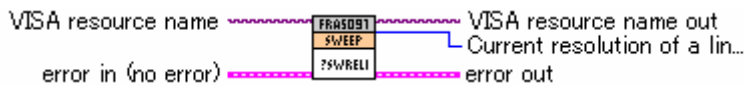


NF_FRA5097_dvr_qSWEEPREsolutionLinsweep.vi

Querying the resolution of a linear sweep (steps/sweep)

[Output] Current resolution of a linear sweep

Current resolution of a linear sweep



NF_FRA5097_dvr_sSWEEPREsolutionLinHz.vi

Setting the resolution (frequency) of a linear sweep

[Input] Resolution of a linear sweep

Resolution of a linear sweep (from 0.1E-3 to 15E+6 (Hz))

From 0.1E-3 to 10E+6 for FRA5087

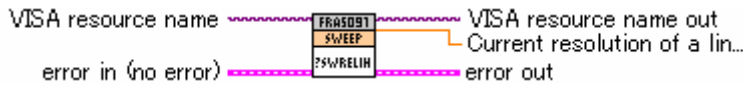


NF_FRA5097_dvr_qSWEEPREsolutionLinHz.vi

Querying the resolution (frequency) of a linear sweep

[Output] Current resolution of a linear sweep

Current resolution of a linear sweep

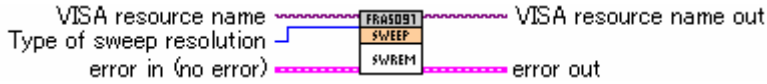


NF_FRA5097_dvr_sSweepREsolutionMode.vi

Setting the type of sweep resolution

[Input] Type of sweep resolution

Type of sweep resolution



NF_FRA5097_dvr_qSweepREsolutionMode.vi

Querying the type of sweep resolution

[Output] Current status of a sweep measurement

Current status of sweep resolution



NF_FRA5097_dvr_sSweepSlowmode.vi

Setting the operation mode of a low-speed, high-density sweep

[Input] Operation mode of a low-speed, high density sweep

Operation mode of a low-speed, high-density sweep (SlowSweep)

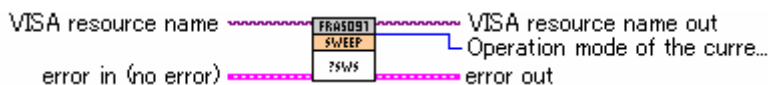


NF_FRA5097_dvr_qSweepSlowmode.vi

Querying the operation mode of a low-speed, high-density sweep

[Output] Operation mode of the current low-speed, high density sweep

Current operation mode of a low-speed, high-density sweep

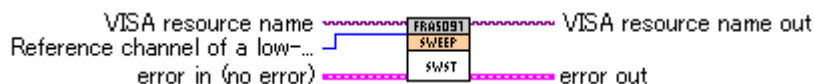


NF_FRA5097_dvr_sSweepSlowTarget.vi

Setting a reference channel of a low-speed, high-density sweep

[Input] Reference channel of a low-speed, high density sweep

Reference channel of a low-speed, high-density sweep

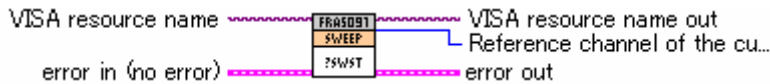


NF_FRA5097_dvr_qSweepSlowTarget.vi

Querying a reference channel of a low-speed, high-density sweep

[Output] Reference channel of the current low-speed, high density sweep

Current reference channel of a low-speed, high-density sweep

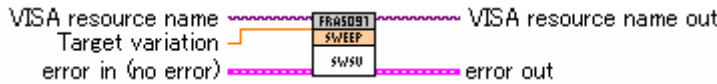


NF_FRA5097_dvr_sSweepSlowVariationLogr.vi

Setting target variation (measured voltage in dB) of a low-speed, high-density sweep

[Input] Target variation

Target variation (from 0 to 1000 (dB))

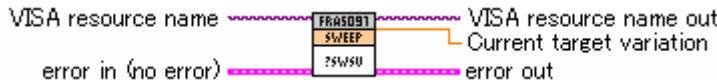


NF_FRA5097_dvr_qSweepSlowVariationLogr.vi

Querying target variation (measured voltage in dB) of a low-speed, high-density sweep

[Output] Current target variation

Current target variation (measured voltage in dB)

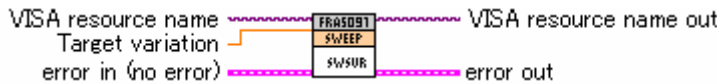


NF_FRA5097_dvr_sSweepSlowVariationR.vi

Setting target variation (measured voltage in Vrms) of a low-speed, high-density sweep

[Input] Target variation

Target variation (from 0 to 1.0E+9 (Vrms))

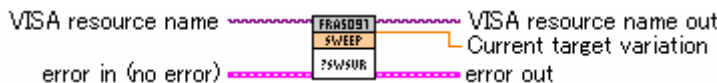


NF_FRA5097_dvr_qSweepSlowVariationR.vi

Querying target variation (measured voltage in Vrms) of a low-speed, high-density sweep

[Output] Current target variation

Current target variation (measured voltage in Vrms)

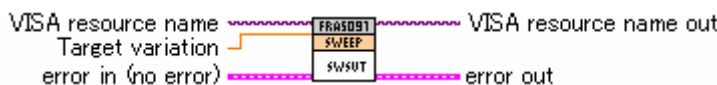


NF_FRA5097_dvr_sSweepSlowVariationTheta.vi

Setting the target variation (phase in deg) of a low-speed, high-density sweep

[Input] Target variation

Target variation (from 0 to 180 (deg))

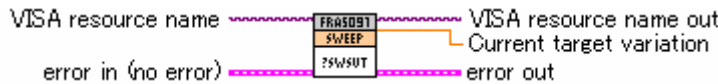


NF_FRA5097_dvr_qSweepSlowVariationTheta.vi

Querying the target variation (phase in deg) of a low-speed, high-density sweep

[Output] Current target variation

Current target variation (phase in deg)

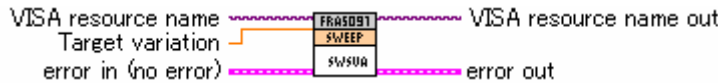


NF_FRA5097_dvr_sSWEEPSlowVariationA.vi

Setting the target variation (the real part of voltage in Vrms) of a low-speed, high-density sweep

[Input] Target variation

Target variation (from 0.00E+00 to 1.00E+9 (Vrms))

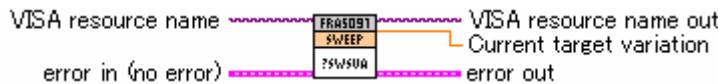


NF_FRA5097_dvr_qSWEEPSlowVariationA.vi

Querying the target variation (the real part of voltage in Vrms) of a low-speed, high-density sweep

[Output] Current target variation

Current target variation (the real part of voltage in Vrms)

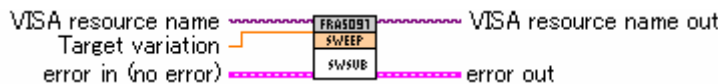


NF_FRA5097_dvr_sSWEEPSlowVariationB.vi

Setting the target variation (the imaginary part of voltage in Vrms) of a low-speed, high-density sweep

[Input] Target variation

Target variation (from 0.00E+00 to 1.00E+9 (Vrms))

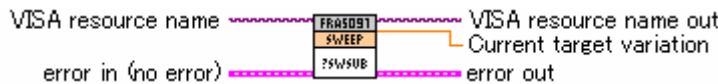


NF_FRA5097_dvr_qSWEEPSlowVariationB.vi

Querying the target variation (the imaginary part of voltage in Vrms) of a low-speed, high-density sweep

[Output] Current target variation

Current target variation (the imaginary part of voltage in Vrms)



NF_FRA5097_dvr_sSWEEPSlowVariationMode.vi

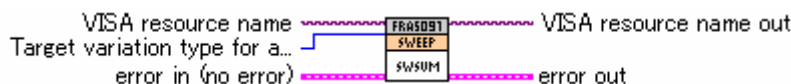
Setting the type of target variation of a low-speed, high-density sweep

[Input] isOmitParam

True if the argument is omitted.

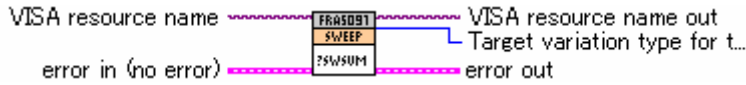
[Input] Target variation type for a low-Speed & high-density sweep

Type of target variation of a low-speed, high-density sweep (SlowSweep)



NF_FRA5097_dvr_qSWEEPSlowVariationMode.vi

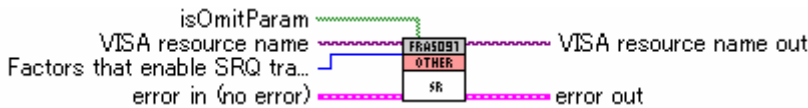
Querying the type of target variation of a low-speed, high-density sweep
 [Output] Target variation type for the current low-Speed & high-density sweep
 Current type of target variation of a low-speed, high-density sweep



2.15 Other Setting Messages

NF_FRA5097_dvr_sSRQenable.vi

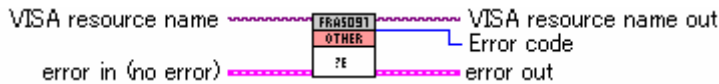
Setting SRQ transmission permission
 [Input] isOmitParam
 True if the argument is omitted.
 [Input] Factors that enable SRQ transmission
 Factors that enable SRQ transmission (from 0 to 47)



2.16 Other Query Messages

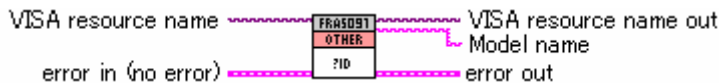
NF_FRA5097_dvr_qError.vi

Querying an error code
 [Output] Error code
 An error code



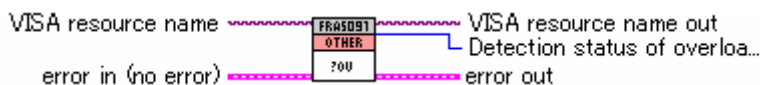
NF_FRA5097_dvr_qIDentifier.vi

Querying a model name
 [Output] Model name
 A model name



NF_FRA5097_dvr_qOVerload.vi

Querying the detection status of overload input
 [Output] Detection status of overload input
 Detection status of overload input

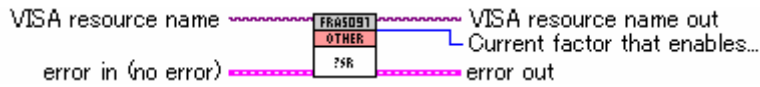


NF_FRA5097_dvr_qSRqenable.vi

Querying SRQ transmission permission

[Output] Current factor that enables SRQ transmission

Current factor that enables SRQ transmission

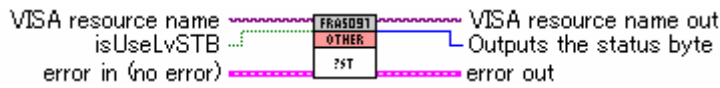


NF_FRA5097_dvr_qStatus.vi

Outputting a status byte

[Output] Outputs the status byte

A status byte

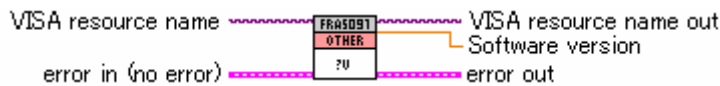


NF_FRA5097_dvr_qVersion.vi

Outputting software version

[Output] Software version

Software version

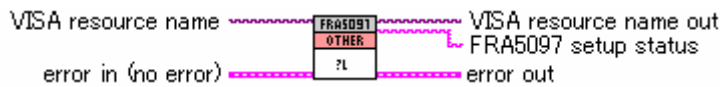


NF_FRA5097_dvr_qLearn.vi

Outputting all the FRA setup items

[Output] FRA5097 setup status

FRA setup status



COPYRIGHT

NF Corporation retains the copyright of this software that is protected under the copyright law of Japan and related international conventions.

You may either make one copy of this software for backup or storage purposes only, or install it on a hard disk while keeping the original of this software for backup or storage purposes only.

Reproduction of this instruction manual without permission, either in part or in whole, is prohibited.

ABOUT CONTACT

If a problem occurs or if you have questions, contact NF Corporation or an NF Corporation sales representative where you purchased this software.

When contacting NF Corporation or an NF Corporation sales representative, provide the model name (or product name), the manufacturing number (serial number shown on the CD case), version number, and information as detailed as possible about the nature of the problem, conditions of use, etc.

NOTES

- Reproducing or copying all or any part of this program or this manual without permission from NF Corporation is strictly prohibited.
- The contents of this manual may be revised without notice.
- Information provided in this manual is intended to be accurate and reliable. However, we assume no responsibility for any damage regarding the contents of this manual.

We assume no responsibility for influences resulting from the operations in this manual.

FRA5087/5097 LabVIEW Driver Instruction Manual

NF Corporation

6-3-20, Tsunashima Higashi, Kohoku-ku, Yokohama
223-8508 JAPAN

Phone +81-45-545-8111 Fax +81-45-545-8191

<http://www.nfcorp.co.jp/>

© Copyright 2007, NF Corporation

