Errata

Agilent References in this manual

NOTICE: This document contains references to Agilent Technologies. Agilent's former Test and Measurement business has become Keysight Technologies. For more information, go to:

www.keysight.com

About this manual

We've added this manual to the Keysight website in an effort to help you support your product. This manual provides the best information we could find. It may be incomplete or contain dated information.

Support for your product

You can find information about technical and professional services, product support, and equipment repair and service on the web:

www.keysight.com

Select your country from the drop-down menu at the top. Under *Electronic Test and Measurement*, click on *Services*. The web page that appears next has contact information specific to your country.

For more detailed product information, go to: www.keysight.com/find/ *<product model>*
i.e., for the M9514A, use: www.keysight.com/find/M9514A

Hypertext links to documents on agilent.com are no longer active. Use this substitution to access PDF files:

Broken links have the form: http://cp.literature.agilent.com/litweb/pdf/*<literature_part_number>*
Substitute links with this form: http://literature.cdn.keysight.com/litweb/pdf/*<literature_part_number>*
Where *<literature_part_number>* has the form: M9300-90001.pdf

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KEYSIGHT TECHNOLOGIES

Agilent L4400 Series LXI Instruments Command Quick Reference

Version 1.0

Syntax Conventions

- Braces (**{ }**) enclose the parameter choices for a given command string. The braces are not sent with the command string.
- A vertical bar (**|**) separates multiple parameter choices for a given command string.
- Triangle brackets (**< >**) indicate that you must specify a value for the enclosed parameter. The brackets are not sent with the command string. You must specify a value for the parameter.
- Some parameters are enclosed in square brackets (**[ ]**). The square brackets indicate that the parameter is optional and can be omitted. The brackets are not sent with the command string. If you do not specify a value for an optional parameter, the instrument chooses a default value.

Measurement Commands

MEASure:DIGital? {BYTE|1|WORD|2|LWORd|4}, [<*voltage*>,] [{NORMal|INVerted} ,] (@<*ch_list*>)

MEASure:TOTalize? [{READ|RRESet} ,] (@<*ch_list*>)

Temperature Configuration Commands

Thermocouple Configuration

[SENSe:]TEMPerature:RJUNction[:INTernal]? (@<*ch_list*>)

Digital I/O and Totalizer Configuration Commands

Digital I/O Configuration

CONFigure:DIGital {BYTE|1|WORD|2|LWORd|4}, [<*voltage*>,] [{NORMal|INVerted},] (@<*ch_list*>)

CONFigure:DIGital:DIRection {INPut|0|OUTPut|1}, (@<*ch_list*>)
CONFigure:DIGital:DIRection? (@<*ch_list*>)

CONFigure:DIGital:HANDshake SYNChronous, [<*thresh_voltage*>, [<*level_voltage*>, [<*polarity*>,]]] (@<*ch_list*>)

CONFigure:DIGital:HANDshake:CTIMe {<*seconds*>|MIN|MAX|DEF}, (@<*ch_list*>)
CONFigure:DIGital:HANDshake:CTIMe? [{MIN|MAX},] (@<*ch_list*>)

CONFigure:DIGital:HANDshake:DRIVe {ACTive|OCOLlector}, (@<*ch_list*>)
CONFigure:DIGital:HANDshake:DRIVe? (@<*ch_list*>)

CONFigure:DIGital:HANDshake:POLarity {NORMal|INVerted}, [{H0|0|H1|1|H2|2|ALL},] (@<*ch_list*>)
CONFigure:DIGital:HANDshake:POLarity? {H0|0|H1|1|H2|2}, (@<*ch_list*>)

CONFigure:DIGital:HANDshake:RATE {<*frequency*>|MIN|MAX|DEF}, (@<*ch_list*>)
CONFigure:DIGital:HANDshake:RATE? [{MIN|MAX},] (@<*ch_list*>)

CONFigure:DIGital:HANDshake:STATe {HIMPedance|OFF|ON}, (@<*ch_list*>)
CONFigure:DIGital:HANDshake:STATe? (@<*ch_list*>)

CONFigure:DIGital:HANDshake:SYNChronous:STRobe[:SOURce] {INTernal|EXTernal}, (@<*ch_list*>)
CONFigure:DIGital:HANDshake:SYNChronous:STRobe[:SOURce]? (@<*ch_list*>)

CONFigure:DIGital:INTerrupt:POLarity {NORMal|INVerted}, (@<*ch_list*>)
CONFigure:DIGital:INTerrupt:POLarity? (@<*ch_list*>)

CONFigure:DIGital:POLarity {NORMal|INVerted}, (@<*ch_list*>)
CONFigure:DIGital:POLarity? (@<*ch_list*>)

CONFigure:DIGital:WIDTh {BYTE|1|WORD|2|LWORd|4}, (@<*ch_list*>)
CONFigure:DIGital:WIDTh? (@<*ch_list*>)

[SENSe:]DIGital:DATA[:{BYTE|WORD|LWORd}]? [{DECimal|BINary|HEXadecimal|OCTal},] (@<*ch_list*>)

[SENSe:]DIGital:DATA:BIT? <*bit*>, (@<*ch_list*>)

[SENSe:]DIGital:HANDshake:THReshold {<*voltage*>|MIN|MAX|DEF}, (@<*ch_list*>)
[SENSe:]DIGital:HANDshake:THReshold? [{MIN|MAX},] (@<*ch_list*>)

[SENSe:]DIGital:INTerrupt[:ENABle] {OFF|0|ON|1}, (@<*ch_list*>)
[SENSe:]DIGital:INTerrupt[:ENABle]? (@<*ch_list*>)

[SENSe:]DIGital:INTerrupt:MODE {MFULl|COMPare}, (@<*ch_list*>)
[SENSe:]DIGital:INTerrupt:MODE? (@<*ch_list*>)

[SENSe:]DIGital:INTerrupt:STATus? (@<*ch_list*>)

SOURce:DIGital:DATA[:{BYTE|WORD|LWORd}] <*data*>, (@<*ch_list*>)
SOURce:DIGital:DATA[:{BYTE|WORD|LWORd}]? [{DECimal|BINary|HEXadecimal|OCTal},] (@<*ch_list*>)

SOURce:DIGital:DATA:BIT {0|1}, <*bit*>, (@<*ch_list*>)
SOURce:DIGital:DATA:BIT? <*bit*>, (@<*ch_list*>)

SOURce:DIGital:DRIVe {ACTive|OCOLlector}, (@<*ch_list*>)
SOURce:DIGital:DRIVe? (@<*ch_list*>)

SOURce:DIGital:HANDshake:LEVel {<*voltage*>|MIN|MAX|DEF}, (@<*ch_list*>)
SOURce:DIGital:HANDshake:LEVel? [{MIN|MAX},] (@<*ch_list*>)

SOURce:DIGital:INTerrupt[:ENABle] {OFF|0|ON|1}, (@<*ch_list*>)
SOURce:DIGital:INTerrupt[:ENABle]? (@<*ch_list*>)

[SENSe:]DIGital:INTerrupt:MODE {STARt|STOP|GATE}, (@<*ch_list*>)
[SENSe:]DIGital:INTerrupt:MODE? (@<*ch_list*>)

[SENSe:]DIGital:MEMory:CLEar (@<*ch_list*>)

[SENSe:]DIGital:MEMory:COMPare:ACTion {CONTinue|STARt|STOP}, (@<*ch_list*>)
[SENSe:]DIGital:MEMory:COMPare:ACTion? (@<*ch_list*>)

[SENSe:]DIGital:MEMory[:DATA]? <*index*>, <*count*>, (@<*channel*>)

[SENSe:]DIGital:MEMory[:DATA]:ALL? (@<*channel*>)

[SENSe:]DIGital:MEMory[:DATA]:FORMat {LIST|BLOCk}
[SENSe:]DIGital:MEMory[:DATA]:FORMat?

[SENSe:]DIGital:MEMory[:DATA]:POINts? [MAX,] (@<*ch_list*>)

[SENSe:]DIGital:MEMory:ENABle {OFF|0|ON|1}, (@<*ch_list*>)
[SENSe:]DIGital:MEMory:ENABle? (@<*ch_list*>)

[SENSe:]DIGital:MEMory:MATCh[:DATA]? (@<*ch_list*>)

[SENSe:]DIGital:MEMory:SAMPle:COUNt {<*count*>|MIN|MAX|DEF|INFinity}, (@<*ch_list*>)

[SENSe:]DIGital:MEMory:STARt (@<*ch_list*>)

[SENSe:]DIGital:MEMory:STEP (@<*ch_list*>)

[SENSe:]DIGital:MEMory:STOP (@<*ch_list*>)

SOURce:DIGital:MEMory:TRACe <*name*>, (@<*channel*>)
SOURce:DIGital:MEMory:TRACe? (@<*channel*>)

[SENSe:]DIGital:THReshold {<*voltage*>|MIN|MAX|DEF}, (@<*ch_list*>)
[SENSe:]DIGital:THReshold? [{MIN|MAX},] (@<*ch_list*>)

SOURce:DIGital:LEVel {<*voltage*>|MIN|MAX|DEF}, (@<*ch_list*>)
SOURce:DIGital:LEVel? [{MIN|MAX},] (@<*ch_list*>)

SOURce:DIGital:MEMory:ABORt (@<*ch_list*>)

SOURce:DIGital:MEMory:ENABle {OFF|0|ON|1}, (@<*ch_list*>)
SOURce:DIGital:MEMory:ENABle? (@<*ch_list*>)

SOURce:DIGital:MEMory:NCYCles {<*count*>|MIN|MAX|DEF|INFinity}, (@<*ch_list*>)
SOURce:DIGital:MEMory:NCYCles? [{MIN|MAX},] (@<*ch_list*>)

SOURce:DIGital:MEMory:STARt (@<*ch_list*>)

SOURce:DIGital:MEMory:STEP (@<*ch_list*>)

SOURce:DIGital:MEMory:STOP (@<*ch_list*>)

SOURce:DIGital:STATe {OFF|0|ON|1}, (@<*ch_list*>)
SOURce:DIGital:STATe? (@<*ch_list*>)

Trace Pattern Configuration

TRACe:CATalog? {(@<*channel*>)|1}

TRACe[:DATA]:DIGital[:{BYTE|1|WORD|2|LWORd|4}] (@<*channel*>), <*name*>, {<*binary_block*>|<*value*>,
<*value*> [,<*value*>, **. . .**]}

TRACe[:DATA]:DIGital:FUNCtion (@<*channel*>), {COUNt|WONes}, <*name*>, <*points*>

TRACe:DELete:ALL {(@<*channel*>)|1}

TRACe:DELete[:NAME] {(@<*channel*>)|1}, <*name*>

TRACe:FREE? {(@<*channel*>)|1}

TRACe:POINts? {(@<*channel*>)|1}, <*name*>

Digital Input Pattern Comparison

CALCulate:COMPare:DATA[:{BYTE|1|WORD|2|LWORd|4}] <*data*>, (@<*ch_list*>)
CALCulate:COMPare:DATA? (@<*ch_list*>)

CALCulate:COMPare:MASK[:{BYTE|1|WORD|2|LWORd|4}] <*data*>, (@<*ch_list*>)
CALCulate:COMPare:MASK? (@<*ch_list*>)

CALCulate:COMPare:STATe {OFF|0|ON|1}, (@<*ch_list*>)
CALCulate:COMPare:STATe? (@<*ch_list*>)

CALCulate:COMPare:TYPE {EQUal|NEQual}, (@<*ch_list*>)
CALCulate:COMPare:TYPE? (@<*ch_list*>)

[SENSe:]DIGital:MEMory:COMPare:ACTion {CONTinue|STARt|STOP}, (@<*ch_list*>)
[SENSe:]DIGital:MEMory:COMPare:ACTion? (@<*ch_list*>)

[SENSe:]DIGital:MEMory:MATCh[:DATA]? (@<*ch_list*>)

Totalizer Configuration

CONFigure:COUNter:DCYCle [{<*gate_time*>|MIN|MAX|DEF},] (@<*ch_list*>)

CONFigure:COUNter:FREQuency [{<*gate_time*>|MIN|MAX|DEF},] (@<*ch_list*>)

CONFigure:COUNter:PERiod [{<*gate_time*>|MIN|MAX|DEF},] (@<*ch_list*>)

CONFigure:COUNter:PWIDth [{<*gate_time*>|MIN|MAX|DEF},] (@<*ch_list*>)

CONFigure:COUNter:TOTalize [{READ|RRESet},] (@<*ch_list*>)

CONFigure:TOTalize [{READ|RRESet},] (@<*ch_list*>)

MEASure:COUNter:DCYCle? [{<*gate_time*>|MIN|MAX|DEF},] (@<*ch_list*>)

MEASure:COUNter:FREQuency? [{<*gate_time*>|MIN|MAX|DEF},] (@<*ch_list*>)

MEASure:COUNter:PERiod? [{<*gate_time*>|MIN|MAX|DEF},] (@<*ch_list*>)

MEASure:COUNter:PWIDth? [{<*gate_time*>|MIN|MAX|DEF},] (@<*ch_list*>)

MEASure:COUNter:TOTalize? [{READ|RRESet},] (@<*ch_list*>)

[SENSe:]COUNter:ABORt (@<*ch_list*>)

[SENSe:]COUNter:DATA? (@<*ch_list*>)

[SENSe:]COUNter:FREQuency[:DATA]? (@<*ch_list*>)

[SENSe:]COUNter:FUNCtion {FREQuency|PERiod|DCYCle|PWIDth|TOTalize}, (@<*ch_list*>)
[SENSe:]COUNter:FUNCtion? (@<*ch_list*>)

[SENSe:]COUNter:GATE:POLarity {NORMal|INVerted}, (@<*ch_list*>)
[SENSe:]COUNter:GATE:POLarity? (@<*ch_list*>)

[SENSe:]COUNter:GATE:SOURce {INTernal|EXTernal}, (@<*ch_list*>)
[SENSe:]COUNter:GATE:SOURce? (@<*ch_list*>)

[SENSe:]COUNter:GATE:TIME[:INTernal] {<*time*>|MIN|MAX|DEF}, (@<*ch_list*>)
[SENSe:]COUNter:GATE:TIME[:INTernal]? [{MIN|MAX},] (@<*ch_list*>)

[SENSe:]COUNter:INITiate (@<*ch_list*>)

[SENSe:]COUNter:PERiod[:DATA]? (@<*ch_list*>)

[SENSe:]COUNter:PWIDth[:DATA]? (@<*ch_list*>)

[SENSe:]COUNter:SLOPe {NEGative|POSitive}, (@<*ch_list*>)
[SENSe:]COUNter:SLOPe? (@<*ch_list*>)

[SENSe:]COUNter:THReshold:VOLTage {<*voltage*>|MIN|MAX|DEF}, (@<*ch_list*>)
[SENSe:]COUNter:THReshold:VOLTage? [{MIN|MAX},] (@<*ch_list*>)

[SENSe:]COUNter:TOTalize:CLEar:IMMediate (@<*ch_list*>)

[SENSe:]COUNter:TOTalize[:DATA]? (@<*ch_list*>)

[SENSe:]COUNter:TOTalize:TYPE {READ|RRESet}, (@<*ch_list*>)
[SENSe:]COUNter:TOTalize:TYPE? (@<*ch_list*>)

[SENSe:]MODule:COUNter:GATE:THReshold[:VOLTage] {<*voltage*>|MIN|MAX|DEF}, 1
[SENSe:]MODule:COUNter:GATE:THReshold[:VOLTage]? [{MIN|MAX},] 1

[SENSe:]TOTalize:CLEar:IMMediate (@<*ch_list*>)

[SENSe:]TOTalize:DATA? (@<*ch_list*>)

[SENSe:]TOTalize:SLOPe {NEGative|POSitive}, (@<*ch_list*>)
[SENSe:]TOTalize:SLOPe? (@<*ch_list*>)

[SENSe:]TOTalize:THReshold[:MODE] {AC|TTL}, (@<*ch_list*>)
[SENSe:]TOTalize:THReshold[:MODE]? (@<*ch_list*>)

[SENSe:]TOTalize:THReshold:VOLTage {<*voltage*>|MIN|MAX|DEF}, (@<*ch_list*>)
[SENSe:]TOTalize:THReshold:VOLTage? [{MIN|MAX},] (@<*ch_list*>)

[SENSe:]TOTalize:TYPE {READ|RRESet}, (@<*ch_list*>)
[SENSe:]TOTalize:TYPE? (@<*ch_list*>)

External Clock Output Configuration

SOURce:MODule:CLOCk:FREQuency {<*frequency*>|MIN|MAX|DEF}, *1*
SOURce:MODule:CLOCk:FREQuency? [{MIN|MAX},] 1

SOURce:MODule:CLOCk:LEVel {<*voltage*>|MIN|MAX|DEF}, 1
SOURce:MODule:CLOCk:LEVel? [{MIN|MAX},] 1

SOURce:MODule:CLOCk:STATe {OFF|0|ON|1}, *1*
SOURce:MODule:CLOCk:STATe? 1

DAC Configuration Commands

OUTPut[:STATe] {OFF|0|ON|1}, (@<*ch_list*>)
OUTPut[:STATe]? (@<*ch_list*>)

SOURce:CURRent[:LEVel] {<*current*>|MIN|MAX|DEF}, (@<*ch_list*>)
SOURce:CURRent[:LEVel]? [{MIN|MAX},] (@<*ch_list*>)

SOURce:FUNCtion:TRIGger:SOURce {IMMediate|MANual|EXTernal}, (@<*ch_list*>)
SOURce:FUNCtion:TRIGger:SOURce? (@<*ch_list*>)

SOURce:MODE {VOLTage|CURRent}, (@<*ch_list*>)
SOURce:MODE? (@<*ch_list*>)

SOURce:MODule:CLOCk:FREQuency {<*frequency*>|MIN|MAX|DEF}, *1*
SOURce:MODule:CLOCk:FREQuency? [{MIN|MAX},] 1

SOURce:MODule:CLOCk:STATe {OFF|0|ON|1}, *1*
SOURce:MODule:CLOCk:STATe? 1

SOURce:MODule:TRIGger:EXTernal:IMMediate 1

SOURce:MODule:TRIGger:OUTPut {OFF|0|ON|1}, *1*
SOURce:MODule:TRIGger:OUTPut? 1

SOURce:VOLTage[:LEVel] {<*voltage*>|MIN|MAX|DEF}, (@<*ch_list*>)
SOURce:VOLTage[:LEVel]? [{MIN|MAX},] (@<*ch_list*>)

Trace Waveform Configuration

SOURce:FUNCtion:CLOCk:EXTernal:DIVisor {<*value*>|MIN|MAX|DEF}, (@<*ch_list*>)
SOURce:FUNCtion:CLOCk:EXTernal:DIVisor? [{MIN|MAX},] (@<*ch_list*>)

SOURce:FUNCtion:CLOCk:SOURce {INTernal|EXTernal|STEP}, (@<*ch_list*>)
SOURce:FUNCtion:CLOCk:SOURce? (@<*ch_list*>)

SOURce:FUNCtion:CURRent:GAIN {<*gain*>|MIN|MAX|DEF}, (@<*ch_list*>)
SOURce:FUNCtion:CURRent:GAIN? [{MIN|MAX},] (@<*ch_list*>)

SOURce:FUNCtion:CURRent:OFFSet {<*offset*>|MIN|MAX|DEF}, (@<*ch_list*>)
SOURce:FUNCtion:CURRent:OFFSet? [{MIN|MAX},] (@<*ch_list*>)

SOURce:FUNCtion:ENABle {OFF|0|ON|1}, (@<*ch_list*>)
SOURce:FUNCtion:ENABle? (@<*ch_list*>)

SOURce:FUNCtion:FREQuency {<*frequency*>|MIN|MAX|DEF}, (@<*ch_list*>)
SOURce:FUNCtion:FREQuency? [{MIN|MAX},] (@<*ch_list*>)

SOURce:FUNCtion:HALT (@<*ch_list*>)

SOURce:FUNCtion:SAMPle:PERiod {<*period*>|MIN|MAX|DEF}, (@<*ch_list*>)
SOURce:FUNCtion:SAMPle:PERiod? [{MIN|MAX},] (@<*ch_list*>)

SOURce:FUNCtion:TRACe:NCYCles {<*count*>|MIN|MAX|DEF|INFinity}, (@<*ch_list*>)
SOURce:FUNCtion:TRACe:NCYCles? [{MIN|MAX},] (@<*ch_list*>)

SOURce:FUNCtion:TRACe:SINDex <*point*>, (@<*ch_list*>)
SOURce:FUNCtion:TRACe:SINDex? (@<*ch_list*>)

SOURce:FUNCtion:TRACe[:NAME] <*name*>, (@<*ch_list*>)
SOURce:FUNCtion:TRACe[:NAME]? (@<*ch_list*>)

SOURce:FUNCtion:TRIGger:IMMediate (@<*ch_list*>)

SOURce:FUNCtion:VOLTage:GAIN {<*gain*>|MIN|MAX|DEF}, (@<*ch_list*>)
SOURce:FUNCtion:VOLTage:GAIN? [{MIN|MAX},] (@<*ch_list*>)

SOURce:FUNCtion:VOLTage:OFFSet {<*offset*>|MIN|MAX|DEF}, (@<*ch_list*>)
SOURce:FUNCtion:VOLTage:OFFSet? [{MIN|MAX},] (@<*ch_list*>)

TRACe:CATalog? {(@<*channel*>)|1}

TRACe:DELete:ALL {(@<*channel*>)|1}

TRACe:DELete[:NAME] {(@<*channel*>)|1}, <*name*>

TRACe:FREE? {(@<*channel*>)|1}

TRACe:POINts? {(@<*channel*>)|1}, <*name*>

TRACe[:DATA] 1, <*name*>, {<*binary_block*>|<*value*>, <*value*> [,<*value*>, **. . .**]}

TRACe[:DATA]:DAC 1, <*name*>, {<*binary_block*>|<*value*>, <*value*> [,<*value*>, **. . .**]}

TRACe[:DATA]:FUNCtion 1, <*type*>, <*name*>, <*points*>

Monitor Commands

ROUTe:MONitor:DATA?

ROUTe:MONitor:STATe {OFF|0|ON|1}
ROUTe:MONitor:STATe?

ROUTe:MONitor[:CHANnel] (@<*channel*>)
ROUTe:MONitor[:CHANnel]?

ROUTe:MONitor[:CHANnel]:ENABle {OFF|0|ON|1}, (@<*ch_list*>)
ROUTe:MONitor[:CHANnel]:ENABle? (@<*ch_list*>)

Scan Configuration Commands

ABORt

INITiate

FORMat:BORDer {NORMal|SWAPped}
FORMat:BORDer?

FORMat:DATA {ASCii,9|REAL,32|REAL,64}

FORMat:READing:ALARm {OFF|0|ON|1}
FORMat:READing:ALARm?

FORMat:READing:CHANnel {OFF|0|ON|1}
FORMat:READing:CHANnel?

FORMat:READing:TIME {OFF|0|ON|1}
FORMat:READing:TIME?

FORMat:READing:TIME:TYPE {ABSolute|RELative}
FORMat:READing:TIME:TYPE?

FORMat:READing:UNIT {OFF|0|ON|1}
FORMat:READing:UNIT?

READ? (@<ch_list>)

ROUTe:CHANnel:ADVance:SOURce <*source*>
ROUTe:CHANnel:ADVance:SOURce?

ROUTe:CHANnel:DELay {<*seconds*>|MIN|MAX|DEF}, (@<*ch_list*>)
ROUTe:CHANnel:DELay? [{MIN|MAX},] (@<*ch_list*>)

ROUTe:CHANnel:FWIRe <*mode*>, (@<*ch_list*>)
ROUTe:CHANnel:FWIRe? (@<*ch_list*>)

ROUTe:SCAN (@<*scan_list*>)
ROUTe:SCAN?

ROUTe:SCAN:ADD (@<*ch_list*>)

ROUTe:SCAN:REMove (@<*ch_list*>)

ROUTe:SCAN:ORDered {OFF|0|ON|1}
ROUTe:SCAN:ORDered?

ROUTe:SCAN:SIZE?

SWEep:COUNt {<*count*>|MIN|MAX|DEF}
SWEep:COUNt? [{MIN|MAX}]

TRIGger:COUNt {<*count*>|MIN|MAX|DEF|INFinity}
TRIGger:COUNt? [{MIN|MAX}]

TRIGger:SOURce {IMMediate|BUS|EXTernal|ALARm1|ALARm2|TIMer}
TRIGger:SOURce?

TRIGger:SOURce:ALARm[:MODE] {SINGle|CONTinuous}
TRIGger:SOURce:ALARm[:MODE]?

TRIGger:TIMer {<*seconds*>|MIN|MAX|DEF}
TRIGger:TIMer? [{MIN|MAX}]

Switch Control Commands

ROUTe:CHANnel:DRIVe:CLOSe:DEFault (@<*ch_list*>)
ROUTe:CHANnel:DRIVe:CLOSe:DEFault? (@<*ch_list*>)

ROUTe:CHANnel:DRIVe:OPEN:DEFault (@<*ch_list*>)
ROUTe:CHANnel:DRIVe:OPEN:DEFault? (@<*ch_list*>)

ROUTe:CHANnel:DRIVe:PAIRed[:MODE] {OFF|0|ON|1}, (@<*ch_list*>)
ROUTe:CHANnel:DRIVe:PAIRed[:MODE]? (@<*ch_list*>)

ROUTe:CHANnel:DRIVe:PULSe[:MODE] {OFF|0|ON|1}, (@<*ch_list*>)
ROUTe:CHANnel:DRIVe:PULSe[:MODE]? (@<*ch_list*>)

ROUTe:CHANnel:DRIVe:PULSe:WIDTh {<*seconds*>|MIN|MAX|DEF}, (@<*ch_list*>)
ROUTe:CHANnel:DRIVe:PULSe:WIDTh? [{MIN|MAX},] (@<*ch_list*>)

ROUTe:CHANnel:DRIVe:STATe? (@<*ch_list*>)

ROUTe:CHANnel:DRIVe:TIME:RECovery {<*seconds*>|MIN|MAX|DEF}, (@<*ch_list*>)
ROUTe:CHANnel:DRIVe:TIME:RECovery? [{MIN|MAX},] (@<*ch_list*>)

ROUTe:CHANnel:DRIVe:TIME:SETTle {<*seconds*>|MIN|MAX|DEF}, (@<*ch_list*>)
ROUTe:CHANnel:DRIVe:TIME:SETTle? [{MIN|MAX},] (@<*ch_list*>)

ROUTe:CHANnel:LABel:CLEar:MODule 1

ROUTe:CHANnel:LABel[:DEFine] "<*label*>" , (@<*ch_list*>)
ROUTe:CHANnel:LABel[:DEFine]? [<*type*>,] (@<*ch_list*>)

ROUTe:CHANnel:VERify[:ENABle] {OFF|0|ON|1}, (@<*ch_list*>)
ROUTe:CHANnel:VERify[:ENABle]? (@<*ch_list*>)

ROUTe:CHANnel:VERify:POLarity {NORMal|INVerted}, (@<*ch_list*>)
ROUTe:CHANnel:VERify:POLarity? (@<*ch_list*>)

ROUTe:CHANnel:VERify:POSition:STATe? (@<*ch_list*>)

ROUTe:CLOSe (@<*ch_list*>)
ROUTe:CLOSe? (@<*ch_list*>)

ROUTe:CLOSe:EXCLusive (@<*ch_list*>)

ROUTe:MODule:BUSY? {1|ANY}

ROUTe:MODule:WAIT {1|ANY}
ROUTe:MODule:WAIT? {1|ANY}

ROUTe:OPEN (@<*ch_list*>)
ROUTe:OPEN? (@<*ch_list*>)

ROUTe:OPEN:ABUS [{<*abus*>|ALL}]

ROUTe:OPEN:ALL 1

ROUTe:OPERation:OVERlap[:ENABle] {OFF|0|ON|1}
ROUTe:OPERation:OVERlap[:ENABle]?

ROUTe:RMODule:BANK:DRIVe[:MODE] {TTL|OCOLlector}, {1-4|BANK1-BANK4|ALL}, (@<*rem_ch_list*>)
ROUTe:RMODule:BANK:DRIVe[:MODE]? {1-4|BANK1-BANK4}, (@<*rem_ch_list*>)

ROUTe:RMODule:BANK:LED:DRIVe[:ENABle] {OFF|0|ON|1}, {1-4|BANK1-BANK4|ALL}, (@<*rem_ch_list*>)
ROUTe:RMODule:BANK:LED:DRIVe[:ENABle]? {1-4|BANK1-BANK4}, (@<*rem_ch_list*>)

ROUTe:RMODule:BANK:LED:DRIVe:LEVel {<*amps*>|MIN|MAX|DEF}, {1-4|BANK1-BANK4|ALL}, (@<*rem_ch_list*>)
ROUTe:RMODule:BANK:LED:DRIVe:LEVel? {1-4|BANK1-BANK4}, (@<*rem_ch_list*>)

ROUTe:RMODule:BANK:PRESet {1-4|BANK1-BANK4|ALL}, (@<*rem_ch_list*>)

ROUTe:RMODule:DRIVe:LIMit {<*max_drives*>|MIN|MAX|DEF}, (@<*rem_ch_list*>)
ROUTe:RMODule:DRIVe:LIMit? [{MIN|MAX},] (@<*rem_ch_list*>)

ROUTe:RMODule:DRIVe:SOURce:BOOT {OFF|INTernal|EXTernal}, (@<*rem_ch_list*>)
ROUTe:RMODule:DRIVe:SOURce:BOOT? (@<*rem_ch_list*>)

ROUTe:RMODule:DRIVe:SOURce[:IMMediate] {OFF|INTernal|EXTernal}, (@<*rem_ch_list*>)
ROUTe:RMODule:DRIVe:SOURce[:IMMediate]? (@<*rem_ch_list*>)

SYSTem:CDEScription? 1

SYSTem:CDEScription:RMODule? (@<*rem_ch*>) [,{DISTribution1-DISTribution4}]

SYSTem:CPON 1

SYSTem:CTYPe? 1

SYSTem:CTYPe:RMODule? (@<*rem_ch*>) [,{DISTribution1-DISTribution4}]

SYSTem:MODule:PFAil:JUMPer:AMP5? 1 (*L4437A/938A only*)

SYSTem:MODule:TEMPerature? [{TRANsducer|TTHReshold}], 1 (*L4437A/938A only*)

SYSTem:MODule:WIRE:MODE {WIRE1|WIRE2}, 1 (*L4423A/925A/933A only*)

SYSTem:RMODule:RESet {1|2|3|4|5|6|7|8}

SYSTem:RMODule:STATus? {1|2|3|4|5|6|7|8}

Sequence Operation Commands

ROUTe:SEQuence:ABORt

ROUTe:SEQuence:BUSY?

ROUTe:SEQuence:CATalog?

ROUTe:SEQuence:DEFine <*name*>, "<*commands*>"
ROUTe:SEQuence:DEFine? <*name*>

ROUTe:SEQuence:DELete:ALL

ROUTe:SEQuence:DELete[:NAME] <*name*>

ROUTe:SEQuence:RUNNing:NAME?

ROUTe:SEQuence:TRIGger[:IMMediate] <*name*>

ROUTe:SEQuence:TRIGger:SOURce <*name*>, {ALARm1|ALARm2|MANual}
ROUTe:SEQuence:TRIGger:SOURce? <*name*>

ROUTe:SEQuence:WAIT

Triggering Commands

*TRG

INITiate

READ? (@<*ch_list*>)

TRIGger:COUNt {<*count*>|MIN|MAX|DEF|INFinity}
TRIGger:COUNt? [{MIN|MAX}]

TRIGger:DELay {<*seconds*>|MIN|MAX}
TRIGger:DELay? [{MIN|MAX}]

TRIGger:DELay:AUTO {OFF|0|ON|1}
TRIGger:DELay:AUTO?

TRIGger:SOURce {IMMediate|BUS|EXTernal|TIMer}
TRIGger:SOURce?

TRIGger:TIMer {<*seconds*>|MIN|MAX|DEF}
TRIGger:TIMer? [{MIN|MAX}]

Alarm Limit Commands

CALCulate:LIMit:LOWer {<*value*>|MIN|MAX|DEF}, (@<*ch_list*>)
CALCulate:LIMit:LOWer? [{MIN|MAX},] (@<*ch_list*>)

CALCulate:LIMit:LOWer:STATe {OFF|0|ON|1}, (@<*ch_list*>)
CALCulate:LIMit:LOWer:STATe? (@<*ch_list*>)

CALCulate:LIMit:UPPer {<*value*>|MIN|MAX|DEF}, (@<*ch_list*>)
CALCulate:LIMit:UPPer? [{MIN|MAX},] (@<*ch_list*>)

CALCulate:LIMit:UPPer:STATe {OFF|0|ON|1}, (@<*ch_list*>)
CALCulate:LIMit:UPPer:STATe? (@<*ch_list*>)

OUTPut:ALARm{1|2}:CLEar

OUTPut:ALARm:CLEar:ALL

OUTPut:ALARm:MODE {LATCh|TRACk}
OUTPut:ALARm:MODE?

OUTPut:ALARm{1|2}:SEQuence?

OUTPut:ALARm:SLOPe {NEGative|POSitive}
OUTPut:ALARm:SLOPe?

OUTPut:ALARm{1|2}:SOURce (@<*ch_list*>)
OUTPut:ALARm{1|2}:SOURce?

SYSTem:ALARm?

Measurement Statistics Commands

CALCulate:AVERage:AVERage? (@<ch_list>)

CALCulate:AVERage:CLEar (@<ch_list>)

CALCulate:AVERage:COUNt? (@<ch_list>)

CALCulate:AVERage:MAXimum? (@<ch_list>)

CALCulate:AVERage:MAXimum:TIME? (@<ch_list>)

CALCulate:AVERage:MINimum? (@<ch_list>)

CALCulate:AVERage:MINimum:TIME? (@<ch_list>)

CALCulate:AVERage:PTPeak? (@<ch_list>)

DATA:LAST? ,(@<*channel*>)

Reading Memory Commands

DATA:POINts:EVENt:THReshold <*num_readings*>
DATA:POINts:EVENt:THReshold?

DATA:POINts?

DATA:REMove? <*num_readings*>

FETCh?

FORMat:DATA {ASCii,9|REAL,32|REAL,64}

R? [<*max_count*>]

SYSTem:TIME:SCAN?

Calibration Commands

CALibration?

CALibration:ABORt

CALibration:BEGin[:VOLTage] [<*setup_#*>,] (@<*channel*>)

CALibration:COUNt? 1

CALibration:LFRequency {50|60|400}
CALibration:LFRequency?

CALibration:POINt? <*value*>

CALibration:SECure:CODE <*new_code*>

CALibration:SECure:STATe {OFF|0|ON|1}, <*code*>
CALibration:SECure:STATe?

CALibration:STRing "<*string*>" [,1]
CALibration:STRing? 1

CALibration:VALue <*value*>
CALibration:VALue?

State Storage Commands

*RCL {1|2|3|4|5}

*SAV {1|2|3|4|5}

MEMory:NSTates?

MEMory:STATe:CATalog?

MEMory:STATe:DELete {1|2|3|4|5}

MEMory:STATe:DELete:ALL

MEMory:STATe:NAME {1|2|3|4|5} [,<*name*>]
MEMory:STATe:NAME? {1|2|3|4|5}

MEMory:STATe:RECall:AUTO {OFF|0|ON|1}
MEMory:STATe:RECall:AUTO?

MEMory:STATe:RECall:SELect {0|1|2|3|4|5}
MEMory:STATe:RECall:SELect?

MEMory:STATe:VALid? {1|2|3|4|5}

IEEE-488 Commands

*CLS

*ESE <*enable_value*>
*ESE?

*ESR?

*IDN?

*OPC

*OPC?

*RCL {1|2|3|4|5}

*RST

*SAV {1|2|3|4|5}

*SRE <*enable_value*>
*SRE?

*STB?

*TRG

*TST?

*WAI

System-Related Commands

*IDN?

*RST

*TST?

CALibration:LFRequency {50|60|400}
CALibration:LFRequency?

SYSTem:ABUS:INTerlock:SIMulate {OFF|0|ON|1}
SYSTem:ABUS:INTerlock:SIMulate?

SYSTem:CDEScription? 1

SYSTem:CDEScription:RMODule? (@<*rem_ch*>) [,{DISTribution1-DISTribution4}]

SYSTem:CPON 1

SYSTem:CTYPe? 1

SYSTem:CTYPe:RMODule? (@<*rem_ch*>) [,{DISTribution1-DISTribution4}]

SYSTem:DATE <*yyyy*>,<*mm*>,<*dd*>
SYSTem:DATE?

SYSTem:DELay[:IMMediate] <*time*>

SYSTem:ERRor?

SYSTem:PRESet

SYSTem:SECurity:IMMediate

SYSTem:TIME <*hh*>,<*mm*>,<*ss.sss*>
SYSTem:TIME?

SYSTem:TIME:SCAN?

SYSTem:VERSion?

Remote Interface Configuration Commands

SYSTem:COMMunicate:ENABle {OFF|0|ON|1}, {GPIB|LAN|SOCKets|TELNet|VXI11|WEB}
SYSTem:COMMunicate:ENABle? {GPIB|LAN|SOCKets|TELNet|VXI11|WEB}

SYSTem:COMMunicate:GPIB:ADDRess <*address*>
SYSTem:COMMunicate:GPIB:ADDRess?

SYSTem:LOCK:OWNer?

SYSTem:LOCK:RELease

SYSTem:LOCK:REQuest?

LAN Configuration Commands

SYSTem:COMMunicate:LAN:AUTOip {OFF|0|ON|1}
SYSTem:COMMunicate:LAN:AUTOip?

SYSTem:COMMunicate:LAN:BSTatus?

SYSTem:COMMunicate:LAN:CONTrol?

SYSTem:COMMunicate:LAN:DHCP {OFF|0|ON|1}
SYSTem:COMMunicate:LAN:DHCP?

SYSTem:COMMunicate:LAN:DNS "<*address*>"
SYSTem:COMMunicate:LAN:DNS?

SYSTem:COMMunicate:LAN:DOMain "<*name*>"
SYSTem:COMMunicate:LAN:DOMain? [{CURRent|STATic}]

SYSTem:COMMunicate:LAN:GATEway "<*address*>"
SYSTem:COMMunicate:LAN:GATEway? [{CURRent|STATic}]

SYSTem:COMMunicate:LAN:HISTory:CLEar

SYSTem:COMMunicate:LAN:HISTory?

SYSTem:COMMunicate:LAN:HOSTname "<*name*>"
SYSTem:COMMunicate:LAN:HOSTname? [{CURRent|STATic}]

SYSTem:COMMunicate:LAN:IPADdress "<*address*>"
SYSTem:COMMunicate:LAN:IPADdress? [{CURRent|STATic}]

SYSTem:COMMunicate:LAN:KEEPalive {<*seconds*>|MIN|MAX}
SYSTem:COMMunicate:LAN:KEEPalive? [{MIN|MAX}]

SYSTem:COMMunicate:LAN:MAC?

SYSTem:COMMunicate:LAN:SMASk "<*mask*>"
SYSTem:COMMunicate:LAN:SMASk? [{CURRent|STATic}]

SYSTem:COMMunicate:LAN:TELNet:PROMpt "<*string*>"
SYSTem:COMMunicate:LAN:TELNet:PROMpt?

SYSTem:COMMunicate:LAN:TELNet:WMESsage "<*string*>"
SYSTem:COMMunicate:LAN:TELNet:WMESsage?

Status System Commands

*CLS

*ESE <*enable_value*>
*ESE?

*ESR?

*SRE <*enable_value*>
*SRE?

*STB?

STATus:ALARm:CONDition?

STATus:ALARm:ENABle <*enable_value*>
STATus:ALARm:ENABle?

STATus:ALARm[:EVENt]?

STATus:MODule:ENABle <*enable_value*>
STATus:MODule:ENABle?

STATus:MODule:EVENt?

STATus:MODule:SLOT1:CONDition?
STATus:MODule:SLOT1:ENABle <*enable_value*>

STATus:MODule:SLOT1:ENABle?

STATus:MODule:SLOT1[:EVENt]?

STATus:OPERation:CONDition?

STATus:OPERation:ENABle <*enable_value*>
STATus:OPERation:ENABle?

STATus:OPERation[:EVENt]?

STATus:PRESet

STATus:QUEStionable:CONDition?

STATus:QUEStionable:ENABle <*enable_value*>
STATus:QUEStionable:ENABle?

STATus:QUEStionable[:EVENt]?

SYSTem:ALARm?

SYSTem:MODule?

Service-Related Commands

DIAGnostic:RELay:CYCLes? (@<*ch_list*>)

DIAGnostic:RELay:CYCLes:CLEar (@<*ch_list*>)