HP 89400-Series HP-IB Commands
Quick Reference
HP 89400-Series HP-IB Commands:
Quick Reference
This Quick Reference lists the common commands and then lists the subsystem commands in alphabetical order. Figure 1 shows the HP 89400-series status registers.

- Syntax descriptions use the following conventions:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>{}</td>
<td>encloses one or more parameters that may be included zero or more times.</td>
</tr>
<tr>
<td></td>
<td>indicates &quot;or&quot;; one and only one of the items can be chosen.</td>
</tr>
<tr>
<td>&lt; &gt;</td>
<td>indicates the name of items that need further definition.</td>
</tr>
<tr>
<td></td>
<td>indicates the enclosed items are optional.</td>
</tr>
<tr>
<td>~</td>
<td>indicates a valid range of values.</td>
</tr>
</tbody>
</table>
- Add a "?" to make the query form of a command; commands listed with a "?" are query only; commands listed with a ":?" cannot be queried.

- A ":" indicates branching points on the command tree.

- Use ";" to send multiple commands within a single program message. The command parser assumes the second command comes from the same branch as the preceding command. Use ";;" to reset the command parser to the base of the command tree.

- The input defaults to channel 1 and the trace defaults to trace A if the optional [1|2] parameter is not specified.

- To view the HP-IB command which corresponds to a front panel operation, press `[Local/Setup]` `[SCPI cmd echo on]`.

- For more information on a particular command refer to HP 89400-Series HP-IB Command Reference.
Command List

*CAL?  Calibrates analyzer and returns the result
*CLS  Clears the Status Byte
*ESE (0 ~ 255)  Sets or queries bits in the Standard Event Enable register
*ESR?  Reads and clears the Standard Event event register
*IDN?  Returns analyzer’s identification string
*OPC  Sets completion of overlapped commands
*OPC?  Queries completion of overlapped commands
*OPT?  Returns analyzer’s option configuration
*PCB? (0 ~ 30)  Sets the pass-control-back address
*PSC (-32767 ~ 32767)  Sets or queries Power-On Status Clear flag
*RST  Executes a device reset
*SRE (0 ~ 255)  Sets or queries bits in the Service Request Enable register
*STB?  Reads Status Byte register
*TRG  Triggers analyzer
*TST?  Performs self test
*WAI  Wait-to-continue command
CALCulate1 [2] [3] [4]:MARKer:FUNCTION:RESULT?
CALCulate1 [2] [3] [4]:MARKer:MAXimum
CALCulate1 [2] [3] [4]:MARKer:MAXimum:LEFT
CALCulate1 [2] [3] [4]:MARKer:MAXimum:NEXT
CALCulate1 [2] [3] [4]:MARKer:MAXimum:RIGHT
CALCulate1 [2] [3] [4]:MARKer:MAXimum:TRACk OFF | 0 | ON | 1
CALCulate1 [2] [3] [4]:MARKer:MINimum:GLOBAL
CALCulate1 [2] [3] [4]:MARKer:OFFSet:STATe OFF | 0 | ON | 1
CALCulate1 [2] [3] [4]:MARKer:OFFSet:X (-3.40282e+38 -- 3.40282e+38[HZ | S | SYM])
CALCulate1 [2] [3] [4]:MARKer:OFFSet:Y (range depends on config)(see table Units)
CALCulate1 [2] [3] [4]:MARKer:OFFSet:Z (-3.40282e+38 -- 3.40282e+38[S])
CALCulate1 [2] [3] [4]:MARKer:OFFSet:ZERO
CALCulate1 [2] [3] [4]:MARKer:POLar:UNIT:POWER DBM | WRMS | W | V
CALCulate1 [2] [3] [4]:MARKer:READout:MPHase:RIMaginary
CALCulate1 [2] [3] [4]:MARKer:SEARCH:BUFFer:STATe OFF | 0 | ON | 1
CALCulate1 [2] [3] [4]:MARKer:SEARCH:LEFT
CALCulate1 [2] [3] [4]:MARKer:SEARCH:OFFSET
CALCulate1 [2] [3] [4]:MARKer:SEARCH:RIGHT
CALCulate1 [2] [3] [4]:MARKer:SEARCH:TARGET (range depends on config)(see table Units)
CALCulate(1|2|3|4):UNIT:AM
    AM|AM2|PCT|DBAMRMS|DBAMPK2|AMRMS|AMPK|AMRMS2|AMPK2|DBAMRMS2/Hz|DBAMPK2/Hz
    AMRMS/Hz|AMPK/Hz|AMRMS2/Hz|AMPK2/Hz
CALCulate(1|2|3|4):UNIT:ANGLE
    DEG|RAD|DBRADRMS|DBRADPK2|RADRMS|RADPK|RADRMS2|RADPK2|RAD2|DBRADRMS2/Hz|DBRADPK2/Hz
    RADRMS/Rad|RADPK/Rad|RRMS2/Rad|RADPK2/Rad
CALCulate(1|2|3|4):UNIT:FREQuency
    HZ|DBHzRMS|DBHzPK2|HzRMS|HzPK|HzRMS2|HzPK2|Hz2|DBHzRMS2/Hz|DBHzPK2/Hz
    HzRMS/Hz|HzPK/Hz
CALCulate(1|2|3|4):UNIT:POWer
    DBVRMS|DBVPK|DBV|VPK|VRMS|DBM|V2|VPK2|VRMS2|WRMS|W|VRMS/Hz|VRMS2/Hz|V2/Hz|VPK/Hz
    VPK2/Hz|VRMS2/Hz|DBV RMS2/Hz|DBVPK/Hz|DBV/Hz|DBM/Hz|WRMS/Hz|W/Hz|DB|UNITLESS|PCT
CALCulate(1|2|3|4):UNIT:TIME S
CALCulate(1|2|3|4):UPHase:CREference (0 - 3.40262e+38Hz | S | SYM)
CALCulate(1|2|3|4):UPHase:OFFSet (range depends on config[DEG | RAD])
CALCulate(1|2|3|4):X:UNIT:FREQuency Hz
CALCulate(1|2|3|4):X:UNIT:TIME S | SYM
CAL
CALibration:AUTO OFF | ON | 1 | ONCE
CALibration:ZERO:AUTO OFF | ON | 1 | ONCE
CONTINUE

DISPLAY:ANNOTATION:ALL OFF | 0 | ON | 1
DISPLAY:BRIGHTNESS (20 - 100(PCT))
DISPLAY:CMAP:COLOR(1 | 2 | ... | 256);HSL (0 - 1), (0 - 1), (0 - 1)
DISPLAY:CMAP:Default
DISPLAY:ENABLE OFF | 0 | ON | 1
DISPLAY:FORMAT SINGLE | TWO | FOUR | QUAD
DISPLAY:FUNCTION OFF | 0 | ON | 1
DISPLAY:PROGRAM:MODE OFF | 0 | FULL | UPPER | LOWER
DISPLAY:TCAPTURE:ENVlope OFF | 0 | ON | 1
DISPLAY:WINDOW(1 | 2 | 3 | 4):ACTIVE OFF | 0 | ON | 1 | ONCE
DISPLAY:WINDOW(1 | 2 | 3 | 4):SPECTrogram:COLORS(2 - 64)
DISPLAY:WINDOW(1 | 2 | 3 | 4):SPECTrogram:ENHANCE (0 - 100(PCT))
DISPLAY:WINDOW(1 | 2 | 3 | 4):SPECTrogram:MAP COLOR | RCOlor | GREY | RGrey | MAP1 | MAP2
DISPLAY:WINDOW(1 | 2 | 3 | 4):SPECTrogram:STATE| OFF | 0 | ON | 1
DISPLAY:WINDOW(1 | 2 | 3 | 4):SPECTrogram:THRESHOLD (0 - 100(PCT))
DISPLAY:WINDOW(1 | 2 | 3 | 4):TRACE:BUFFER (0 - Buffer Depth)*
DISPLAY:WINDOW(1 | 2 | 3 | 4):TRACE:DCAFrier OFF | 0 | ON | 1
DISPLAY:WINDOW(1 | 2 | 3 | 4):TRACE:EYE:COUNT (0.1 - 40)
DISPLAY: WINDOW[1,2,3,4]: TRACe:GRID:STATe OFF | 0 | ON | 1
DISPLAY: WINDOW[1,2,3,4]: TRACe:INDicat CROSs | CIRCle
DISPLAY: WINDOW[1,2,3,4]: TRACe:INDicat:SIZE (0.1 ~ 50)[PCT]
DISPLAY: WINDOW[1,2,3,4]: TRACe:INFO < STRING >
DISPLAY: WINDOW[1,2,3,4]: TRACe:LABel?
DISPLAY: WINDOW[1,2,3,4]: TRACe:LABel:AUTO OFF | 0 | ON | 1
DISPLAY: WINDOW[1,2,3,4]: TRACe:LABel:USER < STRING >
DISPLAY: WINDOW[1,2,3,4]: TRACe:STATE OFF | 0 | ON | 1
DISPLAY: WINDOW[1,2,3,4]: TRACe:SYMBol DOTS | BARS | OFF | 0
DISPLAY: WINDOW[1,2,3,4]: TRACe:SYMBol:FORMat BIN | HEX
DISPLAY: WINDOW[1,2,3,4]: TRACe:X:SCALE:AUTO OFF | 0 | ON | 1 | ONCE
DISPLAY: WINDOW[1,2,3,4]: TRACe:X:SCALE:LEFT (range depends on config[HZ | S | SYM])
DISPLAY: WINDOW[1,2,3,4]: TRACe:X:SCALE:RIGHT (range depends on config[HZ | S | SYM])
DISPLAY: WINDOW[1,2,3,4]: TRACe:X:SCALE:RLEVEL (range depends on config[see table Units 1])
DISPLAY: WINDOW[1,2,3,4]: TRACe:X:SCALE:SPACING LINEar | LOGarithmic
DISPLAY: WINDOW[1,2,3,4]: TRACe:Y:RLINE OFF | 0 | ON | 1
DISPLAY: WINDOW[1,2,3,4]: TRACe:Y:SCALE:AUTO OFF | 0 | ONCE
DISPLAY: WINDOW[1,2,3,4]: TRACe:Y:SCALE:DIVision (range depends on config[see table Units 2])
DISPLAY: WINDOW[1,2,3,4]: TRACe:Y:SCALE:RLEVEL (range depends on config[see table Units 1])
DISPLAY: WINDOW [1 | 2 | 3 | 4]: TRACe:Y:SCALe:RLEVel:OFF | 0 | ON | 1
DISPLAY: WINDOW [1 | 2 | 3 | 4]: TRACe:Y:SCALe:RPDStion (0 – 100[PCT])
DISPLAY: WINDOW [1 | 2 | 3 | 4]: WATerfall:AZiMuth (-99 ~ 99[PIECELS])
DISPLAY: WINDOW [1 | 2 | 3 | 4]: WATerfall:BLINe:STATe OFF | 0 | ON | 1
DISPLAY: WINDOW [1 | 2 | 3 | 4]: WATerfall:ELEvation (0 ~ Buffer Depth[PIECELS])
DISPLAY: WINDOW [1 | 2 | 3 | 4]: WATerfall:HEIGHT (0 ~ Buffer Depth[PIECELS])
DISPLAY: WINDOW [1 | 2 | 3 | 4]: WATerfall:HLINe:STATe OFF | 0 | ON | 1
DISPLAY: WINDOW [1 | 2 | 3 | 4]: WATerfall:STATe OFF | 0 | ON | 1
DISPLAY: WINDOW [1 | 2 | 3 | 4]: WATerfall:THReshold (0 ~ 100[PCT])

FORM: FORMat:DATAn ASCII REAL (3 ~ 64)

HCOP: HCOPY:ABORt
HCOPY:DATA?
HCOPY:DESTination < STRING >
HCOPY:DEVice:CMAPlDEFault
HCOPY:DEVice:COLor OFF | 0 | ON | 1
HCOPY:DEVice:LANGuage PCL | HPGL | PHPGl | TIFF
HCOPY:DEVice:RESolution (0 ~ 600)
HCOPY:DEVice:SPeed (0 ~ 100)
HCOPY:IMMEDIATE
HCOPY:PRIn1:ADDRess (0 ~ 30)

INIT
INITiate:CONTInuous OFF | 0 | ON | 1
INITiate:IMMediate

INP
INPut[1 | 2]:COUPling AC | DC
INPut[1 | 2]:FILTer:[LPAS][STATE] OFF | 0 | ON | 1
INPut[1 | 2]:IMPedance (50 ~ 1e+06|OHM)
INPut[1 | 2]:STATe| OFF | 0 | ON | 1

INST
INSTRument:NSELect (1 ~ 5)
INSTRument:SELect| SCALar| DEmod | ADEMod | DDEMod | VECTor | VDEMod

MEM
MEMORY:DELeTe[:NAME] | 7 | RDIsk | D1 | D2 | D3 | D4 | D5 | D6 | DREG
MEMORY:Mallocate:APPlication (0 ~ 3.40282e+38)
MEMORY:Mallocate:MEAsurement:DEFault
MEMORY:Mallocate:MEAsurement:FPOints (51 ~ 3201)
MEMORY:Mallocate:MEAsurement:MSRate (16 ~ 100)
MEMORY:Mallocate:MEAsurement:TEMp (0 ~ 100)
MEMORY:Mallocate:MEAsurement:TPOints (64 ~ 4096)
MEMORY:Mallocate:POGram (0 ~ 3.40282e+38)
MEMORY

MEMORY: COPY <FILENAME>, <MSUS> [ , <FILENAME> ]

MEMORY: DATA <FILENAME>, <USER>

MEMORY: DELETE <FILENAME>, <MSUS>

MEMORY: FSYS tem? LIF | DOS

MEMORY: INITIALize? <MSUS> [ , LIF | DOS ] , (0 – 7.0006e + 06) , (0 – 256)

MEMORY: LOAD: APPL ication? <FILENAME>, <MSUS>

MEMORY: LOAD: CONT inue

MEMORY: LOAD: CONT inue?

MEMORY: LOAD: MATH? <FILENAME>, <MSUS>

MEMORY: LOAD: PROG ram? <FILENAME>, <MSUS>

MEMORY: LOAD: STATE? (1 – 1), <FILENAME>, <MSUS>

MEMORY: LOAD: TCAP ture? <FILENAME>, <MSUS>

MEMORY: LOAD: TRAC e? D1 | D2 | D3 | D4 | D5 | D6, <FILENAME>, <MSUS>

MEMORY: LOAD: TRAC e: BUFFER? D1 | D2 | D3 | D4 | D5 | D6, <FILENAME>, <MSUS>

MEMORY: MOVE? <FILENAME>, <MSUS>

MEMORY: MSIS <MSUS>

MEMORY: NAME <FILENAME>

MEMORY: STOR e: CONT inue

MEMORY: STOR e: CONT inue?
MME Mem:STOR:MAT <- <FILENAME>, <MSUS>
MME Mem:STOR:PROG <- <FILENAME>, <MSUS>
MME Mem:STOR:STAT <- (1-4), <FILENAME>, <MSUS>
MME Mem:STOR:TCAP <- <FILENAME>, <MSUS>
MME Mem:STOR:TRACE <- TRACE1 | TRACE2 | TRACE3 | TRACE4, <FILENAME>, <MSUS>
MME Mem:STOR:BUFF <- TRACE1 | TRACE2 | TRACE3 | TRACE4, <FILENAME>, <MSUS>

OUTP:OUTPut:FILTER: mascara:STATe OFF| ON | 1
OUTP:IMPedance (50 - 750000)
OUTP:STATe OFF| ON | 1

PAUS:PAUSE

PROG:PROG:EXPlode:DEFine PROG1, <PROGRAM>
PROG:SELected:DEFine <PROGRAM>
PROG:SELected:DELeete:ALL
PROG:SELected:DELeete:SELected
PROG:SELected:MAlocate (1200 - 500000)
PROG:SELected:NAME PROG1
PROG:SELected:NUMBer <STRING>, <BLOCK>
PROG:SELected:STATe STOP | PAUSE | RUN | CONT
PROG:SELected:STRing <STRING>, <STRING>
ROUT  ROUTe:RECeiver RF2 | RF1 | IF | INPUT | EXTernal | COMBine

SCR  SCReen:CONTents TRACE | MSTate | ISTate | MMEMory | MEMory | OPTIONS | TCAPture

SENS  [SENSe]:AVERAGE:COUNt (1 ~ 99999)
[SENSe]:AVERAGE:COUNt:INTermediate
[SENSe]:AVERAGE:RESult:RATe (1 ~ 99999)
[SENSe]:AVERAGE:RESult:STATe OFF | 0 | ON | 1
[SENSe]:AVERAGE:STATe OFF | 0 | ON | 1
[SENSe]:AVERAGE:TCDNtrol EXPonential | NORMal | REPeat
[SENSe]:AVERAGE:TYPE MAX | RMS | COMParen

[SENSe]:BANDwidth:MODE:ARBitrary OFF | 0 | ON | 1
[SENSe]:BANDwidth:RESolution (range depends on config[HZ])
[SENSe]:BANDwidth:RESolution:AUTO OFF | 0 | ON | 1
[SENSe]:BANDwidth:RESolution:AUTO:OFFSet OFF | 0 | ON | 1

[SENSe]:CORRection[1 | 2]:EDELay:TIME (range depends on config[S])
[SENSe]:CORRection[1 | 2]:EXTernal:STATe OFF | 0 | ON | 1
[SENSe]:CORRection[1 | 2]:FILTER:XTIME:STATe OFF | 0 | ON | 1
[SENSe]:CORRection[1 | 2]:IMPedance:INPUT:AMAGNitude (0.001 ~ 1e+10[OHM])
[SENSe]CORRection(1 | 2):LOSS:INPut:MAGNitude (range depends on config)

[SENSe]DATA TCAP1 | TCAP2, <DEF_BLOCK>
[SENSe]DATA:HEADer:POINTs? TCAP1 | TCAP2

[SENSe]DDEMod:CLOCK (range depends on config(SYM))
[SENSe]DDEMod:DVBOam:NSTate (16 ~ 64)
[SENSe]DDEMod:FILTER:ALPHA (range depends on config)
[SENSe]DDEMod:FILTER:MEASurement OFF | O | RECTangular | RCosine | RRCosine | GAUSsian | USER | LPASs
[SENSe]DDEMod:FILTER:REFERENCE OFF | O | RECTangular | RCosine | RRCosine | GAUSsian | USER | LPASs
[SENSe]DDEMod:FORMat QPSK | PSK | QAM | MSK | FSK | DVBOam | VSB
[SENSe]DDEMod:FREQuency:MIRRor OFF | O | ON | 1
[SENSe]DDEMod:FSK:NSTate (2 ~ 4)
[SENSe]DDEMod:MSK:FORMat TYPE1 | TYPE2
[SENSe]DDEMod:NorMALize OFF | O | ON | 1
[SENSe]DDEMod:PRATe (range depends on config)
[SENSe]DDEMod:PRESet? NADC | PDC | GSM | PHP | DECT | CDPO | TETRa
(SENSe:DDEMod:PSK:NSTate (2 ~ 8))
(SENSe:DDEMod:QAM:NSTate (18 ~ 256))
(SENSe:DDEMod:OPSks:FORMat NORMAL | DIFFerential | DPl4)
(SENSe:DDEMod:SEARch:PULSE:STATe OFF | ON | 1)
(SENSe:DDEMod:SEARch:SYNC:OFFSet (range depends on config|SYM))
(SENSe:DDEMod:SEARch:SYNC:PATTern < STRING >)
(SENSe:DDEMod:SEARch:SYNC:STATe OFF | ON | 1)
(SENSe:DDEMod:SEARch:TIME (range depends on config|SYM))
(SENSe:DDEMod:SRATe (range depends on config|HZ))
(SENSe:DDEMod:TfME (range depends on config|SYM))
(SENSe:DDEMod:VSB:NSTate (8 ~ 16))

(SENSe:DEMod[1 | 2]:OFF | 0 | AM | PM | FM | BASeband)
(SENSe:DEMod[1 | 2]:CARRier:AUTO OFF | 0 | ON | 1)
(SENSe:DEMod[1 | 2]:CARRier:AUTO:PM PARep | PHASe)
(SENSe:DEMod[1 | 2]:CARRier:FREQ?)

(SENSe:DETeector:FUNCTION) SIGNAL | SAMPLE | POSitive
[SENSe]:FREQuency:BASehand OFF | 0 | ON | 1
[SENSe]:FREQuency:CENTer (range depends on config[HZ])
[SENSe]:FREQuency:CENTer:TRACK INP1 | INP2 | OFF | 0
[SENSe]:FREQuency:EXTernal:BANDwidth (range depends on config[HZ])
[SENSe]:FREQuency:EXTernal:CENTer (range depends on config[HZ])
[SENSe]:FREQuency:EXTernal:COMMunicate OFF | 0 | ON | 1
[SENSe]:FREQuency:EXTernal:COMMunicate:ADDRess (0 -- 30)
[SENSe]:FREQuency:EXTernal:MAXimum (range depends on config[HZ])
[SENSe]:FREQuency:EXTernal:MINimum (range depends on config[HZ])
[SENSe]:FREQuency:EXTernal:MIRror OFF | 0 | ON | 1
[SENSe]:FREQuency:MANual (range depends on config[HZ])
[SENSe]:FREQuency:SPAN (range depends on config[HZ])
[SENSe]:FREQuency:SPAN:FULL
[SENSe]:FREQuency:SPAN:PChirp EXACT | NEARest
[SENSe]:FREQuency:SPAN:WIDE OFF | 0 | ON | 1
[SENSe]:FREQuency:START (range depends on config[HZ])
[SENSe]:FREQuency:STEP:AUTO OFF | 0 | ON | 1
[SENSe]:FREQuency:STEP:INCRement (range depends on config(HZ))
[SENSe]:FREQuency:STOP (range depends on config(HZ))

[SENSe]:SWEp[1][2]:MODE AUTO | MANual
[SENSe]:SWEp[1][2]:OVERlap (0 ~ 99.99)(PCT)
[SENSe]:SWEp[1][2]:POINts (51 ~ (range depends on config)
[SENSe]:SWEp[1][2]:TIME:DElay (range depends on config(S))
[SENSe]:SWEp[1][2]:TIME:GATE:DElay (range depends on config(S))
[SENSe]:SWEp[1][2]:TIME:GATE:DElay:STEP:INCRement (range depends on config(S))
[SENSe]:SWEp[1][2]:TIME:GATE:[SPAN] (range depends on config(S))

[SENSe]:SWEp[1][2]:TIME:GATE:STATe OFF | ON | 1
[SENSe]:SWEp[1][2]:TIME:OVERlap (0 ~ 99.99)(PCT)
[SENSe]:SWEp[1][2]:TIME:RESolution:AUTO OFF | ON | 1
[SENSe]:SWEp[1][2]:TIME:[SPAN] (range depends on config(S))

[SENSe]:TCAPture[1][2]:ABOrt
[SENSe]:TCAPture[1][2]:DIRection FORWARD | REVerse
[SENSe]:TCAPture[1][2]:IMMediate
[SENSe]:TCAPture[1][2]:LENGth (range depends on config(S) POINTS | RECORDS)
[SENSe:]TCAPture[1 | 2]:RANGe [1e-20 -- 1e+20]
[SENSe:]TCAPture[1 | 2]:START (range depends on config[POINTS | RECORDS])
[SENSe:]TCAPture[1 | 2]:STOP (range depends on config[POINTS | RECORDS])

[SENSe:]VOLTage[1 | 2]:DC:RANGe:AUTO OFF | ON | ONCE
[SENSe:]VOLTage[1 | 2]:DC:RANGe:DIRection UP | BOTH
[SENSe:]VOLTage[1 | 2]:DC:RANGe:UNIT:VOLTage DBV | DBVRMS | DBVPK | V | VPK | VRMS | W | WRMS
[SENSe:]VOLTage[1 | 2]:DC:RANGe:UPPer (range depends on config[DBV | DBVRMS | DBVPK | V | VPK | VRMS | W | WRMS])
[SENSe:]VOLTage[1 | 2]:PROTection:CLEar

[SENSe:]WINdow:GATE UNIform | FLATtop | HANNing | GTOP
[SENSe:]WINdow:GATE:COUPling OFF | ON | 1
[SENSe:]WINdow:TYPE UNIform | FLATtop | HANNing | GTOP

SOURce:AM:STATe OFF | ON | 1
SOURce:FREQuency:CW (range depends on config[Hz])
SOURce:FREQuency:OFFSet (range depends on config[Hz])
SOURce:FUNCTION:SHAPe SInusoid | USER | RANDom | PCHirp
SOURce:FUNCTION:USER:FEED < STRING >
SOURce:FINput:STATe OFF | ON | 1
SOURce:RF OFF [0 | ON | 1]
SOURce:USER:REPeat OFF [0 | ON | 1]
SOURce:VOLTage[:LEVEL][:IMMediate][:AMPLitude] (range depends on config[DBM | DBV | DBVPRM | DPVK | VP | VP | VPRM | W | WRMS])
SOURce:VOLTage[:LEVEL][:IMMediate]:OFFSet (range depends on config[V])
SOURce:VOLTage[:LEVEL][:UNIT]:VOLTage DBM | DBV | DBVPRM | DPVK | VP | VP | VPRM | W | WRMS
SOURce:VOLTage:PROTection:CLEar

STATus:DEVice:CONDition?
STATus:DEVice:ENABLE (0 ~ 32767)
STATus:DEVice[:EVENt]??
STATus:DEVice:NTRansition (0 ~ 32767)
STATus:DEVice:PTRansition (0 ~ 32767)
STATus:OPERation:CONDition?
STATus:OPERation:ENABLE (0 ~ 32767)
STATus:OPERation[:EVENt]??
STATus:OPERation:NTRansition (0 ~ 65535)
STATus:OPERation:PTRansition (0 ~ 32767)
STATus:PRESet
STATus:QUEstionable:CONDition?
STATus:QUESTIONable:ENABLE (0 ~ 65535)
STATus:QUESTIONable:EVENt?
STATus:QUESTIONable:FREQuency:CONDition?
STATus:QUESTIONable:FREQuency:ENABLE (0 ~ 32767)
STATus:QUESTIONable:FREQuency:EVENt?
STATus:QUESTIONable:FREQuency:NTTransition (0 ~ 32767)
STATus:QUESTIONable:FREQuency:PTransition (0 ~ 32767)
STATus:QUESTIONable:MODulation:CONDition?
STATus:QUESTIONable:MODulation:ENABLE (0 ~ 32767)
STATus:QUESTIONable:MODulation:EVENt?
STATus:QUESTIONable:MODulation:NTTransition (0 ~ 32767)
STATus:QUESTIONable:MODulation:PTransition (0 ~ 32767)
STATus:QUESTIONable:NTTransition (0 ~ 32767)
STATus:QUESTIONable:PTransition (0 ~ 32767)
STATus:QUESTIONable:VOLTage:CONDition?
STATus:QUESTIONable:VOLTage:ENABLE (0 ~ 32767)
STATus:QUESTIONable:VOLTage:EVENt?
STATus:QUESTIONable:VOLTage:NTTransition (0 ~ 32767)
STATus:QUESTIONable:VOLTage:PTransition (0 ~ 32767)
STATus:USER:ENABLE (0 ~ 32767)
STATus:USER:ENVironment?
STATus:USER:PRtSe:ON (0 ~ 65535)

SYSTem:BEEPer:STATe OFF | ON | 1
SYSTem:COMMunicate[1] 2:GPIB:ADDress (0 ~ 33)
SYSTem:COMMunicate[1] 2:LAN:STATe OFF | ON | 1
SYSTem:COMMunicate[1] 2:LAN:XWINdow:RATE (0 ~ 60[HZ])
SYSTem:COMMunicate[1] 2:LAN:XWINdow:STATe OFF | ON | 1
SYSTem:DATE (1980 ~ 2100),(1 ~ 12),(1 ~ 31)
SYSTEM:ERROR?
SYSTEM:GPIB:ECHO OFF | 0 | ON | 1
SYSTEM:KEY | 0 ~ 511 |
SYSTEM:KLOCK OFF | 0 | ON | 1
SYSTEM:PRESet
SYSTEM:TIME | 0 ~ 23 | | 0 ~ 59 | | 0 ~ 59 |

TRACe:BUFFer:COPY | D1 | D2 | D3 | D4 | D5 | D6 | TRACe1 | TRACe2 | TRACe3 | TRACe4 | CAL1 | CAL2
TRACe:COPY? | D1 | D2 | D3 | D4 | D5 | D6 | TRACe1 | TRACe2 | TRACe3 | TRACe4 | CAL1 | CAL2
TRACe:DATA? | D1 | D2 | D3 | D4 | D5 | D6 | DEF_BLOCK>
TRACe:DATA:HEADER:POINTS? | D1 | D2 | D3 | D4 | D5 | D6
TRACe:X:DATA? | D1 | D2 | D3 | D4 | D5 | D6 | TRACe1 | TRACe2 | TRACe3 | TRACe4
TRACe:X:UNIT? | D1 | D2 | D3 | D4 | D5 | D6 | TRACe1 | TRACe2 | TRACe3 | TRACe4

TRIGger:HOLDoff:DELAY | 0 ~ 41.94(SI)
TRIGger:HOLDoff:STATE OFF | 0 | ON | 1
TRIGger:LEVel (range depends on config:DBM | DBV | DBVRMS | DBVPK | V | VPK | VRMS | W | WRMS)
TRIGger:SLOPe POSitive | NEGative
TRIGger:SOURce BUS | EXTERNAL | IF | IF1 | IF2 | IMMEDIATE | INTernal1 | INTernal2 | OUTPut
### Units 1

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<td>Vs</td>
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25
Parameter Definitions:

<BLOCK> or <DEF_BLOCK>

If you are sending binary data using indefinite length syntax,
<BLOCK> takes the following form:
<BLOCK> ::= #0<data_byte>[,<data_byte>] . . . <LF><^END>
<data_byte> ::= unsigned 8-bit data
<LF> ::= line feed character, ASCII decimal 10
<^END> ::= HP-IB END message (EOI set true)

If you are sending binary data using definite length syntax,
<BLOCK> takes the following form:
<BLOCK> ::= #<byte><length_bytes><data_byte>[<data_byte>] . . .
<byte> ::= number of length bytes to follow (ASCII encoded)
<length_bytes> ::= number of data bytes to follow (ASCII encoded)
<data_byte> ::= unsigned 8-bit data

If you are sending ASCII data, <BLOCK> takes the following form:
<BLOCK> ::= NRf[<NRf>] . . . <LF>
<FILENAME> takes the following form:

<FILENAME> ::= ['MSUS:]filename

where MSUS: (mass storage unit specifier) is replaced with:

RAM: which selects volatile RAM.
NVRAM: which selects non-volatile RAM.
INT: which selects the internal disk drive.
EXT[,<select_code>[,<unit_number>]]: selects external disk drive.

<STRING> is an ASCII string

HP Part Number 86400-90005
Microfiche Part Number 89400-90205
For Instruments with Firmware Revision A.04.00
Print Date: June 1995
8600 Super Hill Road, Everett, WA 98205-1298 U.S.A.
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