GPIB Command Syntax

for

E1963A W-CDMA/HSDPA Mobile Test Application Revision A.09

E6703C W-CDMA/HSDPA Lab Application Revision C.04

E6703D W-CDMA/HSDPA Lab Application Revision D.00

E6703T Special High Data Rate W-CDMA/HSDPA Lab Application Revision T.00

1000-1922
Print Date: July 2006

www.agilent.com/find/E1963A
www.agilent.com/find/E6703C
www.agilent.com/find/E6703D
www.agilent.com/find/E6703T

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NOTE: *This guide is applicable to the E6703T, however there are a few exceptions which can be found in the online user's guide available at* http://wireless.agilent.com/rfcomms/refdocs/wcdma/default.php

Notice

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GPIB Syntax for E1963A and E6703C/D/T

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Description

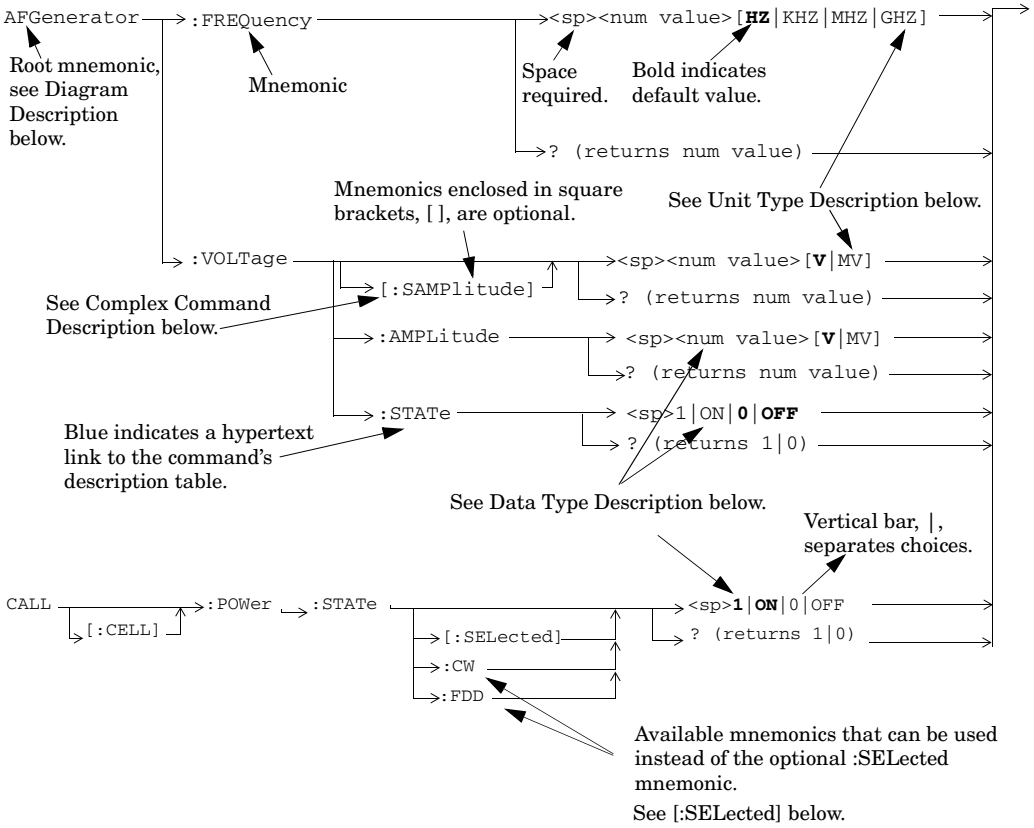


Diagram Description

Mnemonics are connected by lines. Each line can be followed in only one direction, as indicated by the arrow at the end of the line. Any combination of mnemonics that can be generated by starting at the root mnemonic and following the line in the direction of the arrow is syntactically correct.

The uppercase letters of a mnemonic represent the short form of the mnemonic, whereas the long form of a mnemonic is the short form followed by the lowercase letters. The test set accepts either the long form or the short form of the mnemonic. The mnemonics that are inside square brackets are optional. That is, a command operates the same whether or not the mnemonic in square brackets is used in the command.

The drawings show the proper use of spaces. Where spaces are required they are indicated by <sp>, otherwise no spaces are allowed between mnemonics.

Complex Command Description

Complex commands are valuable because they set the state of the parameter and a value for that parameter. For example, the command in the above figure that contains the mnemonic [:SAMPlitude] is a complex command because sets the state to ON as well as the amplitude. You can use parameters such as amplitude, frequency, gain, number, time, and value as a complex command. Refer to the specific command for the parameter that applies.

Data Type Description

num value	Integer, float or scientific values.
	For example,
	`CALL:POWer -55.5`
	`CALL:POWer -5.55E+001`
	`CALL:CHANnel 525`

string	Characters. The string will often need to be enclosed in single or double quotes, depending upon your programming environment. For example, `CALL:UPLink:PRAChannel:ASUBchannels '111111111111'` The string returned by the test set is enclosed by double quotes.

choice1 | choice2 | choice3	Specific character choices.
	For example,
	`CALL:OPERating:MODE D2KTest`
	`SYSTem:COMMunicate:GPIB:DEBug ON`

Unit Type Description

Some commands have optional units of measurement. These are displayed in square brackets. If no units are specified in the command then the default unit in bold font is used. The test set accepts the specified unit either with or without a space inserted between the <num value> and the unit (for example, both `10S` and `10 S` are valid). The following table summarizes the units available.

Description	Optional Units	Example

Amplitude (linear)	**V** | MV	To set the spectrum monitor's timeout interval to 20 seconds, use any of the following formats:
		`SETup:SMONitor:TIMeout:TIME 20`
		`SETup:SMONitor:TIMeout:TIME 20S`
		`SETup:SMONitor:TIMeout:TIME 20 S`

Power (logarithmic)	**DBM** | DBW	
Level (relative)	**DB**	
Frequency	**HZ** | KHZ | MHZ | GHZ	
Time	**S** | MS | US | NS	
Percentage	**PCT**	

[:SELected] Mnemonic

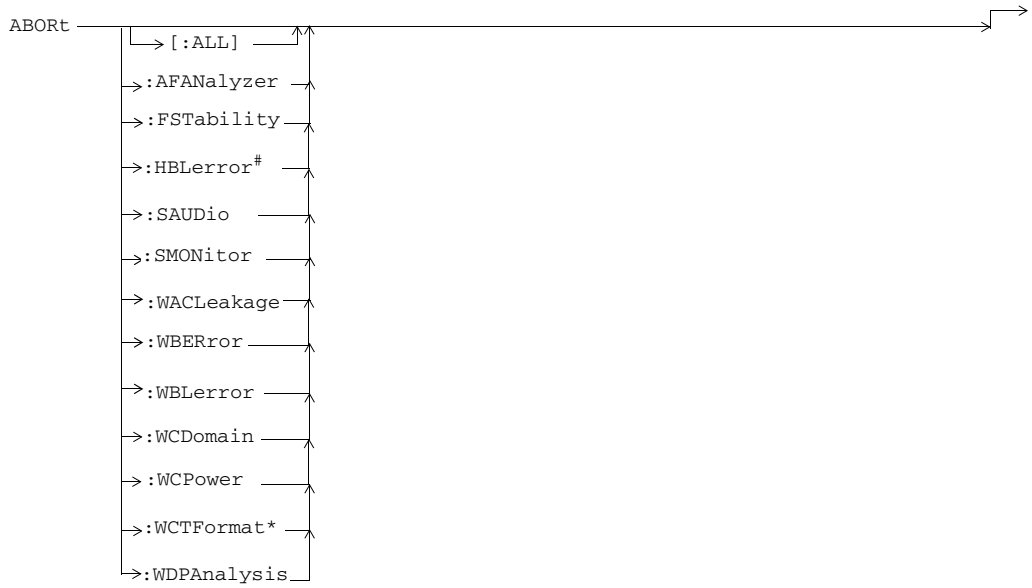
The [:SELected] Mnemonic is an optional mnemonic that implies a current selection on the test set. Often there are other mnemonics that can be used in place of the [:SELected] mnemonic to configure a setting that is not the currently selected configuration on the test set. The mnemonics that can replace the [:SELected] mnemonic are listed in parentheses separated by vertical bars (|) in the description table title. An example of a command that contains the [:SELected] mnemonic is shown in the following table.

CALL[:CELL]:POWer:AMPLitude[:SELected]

CALL[:CELL]:POWer:AMPLitude:(CW|FDD) ← Available mnemonics that can be use instead of the optional [:SELected] mnemonic.

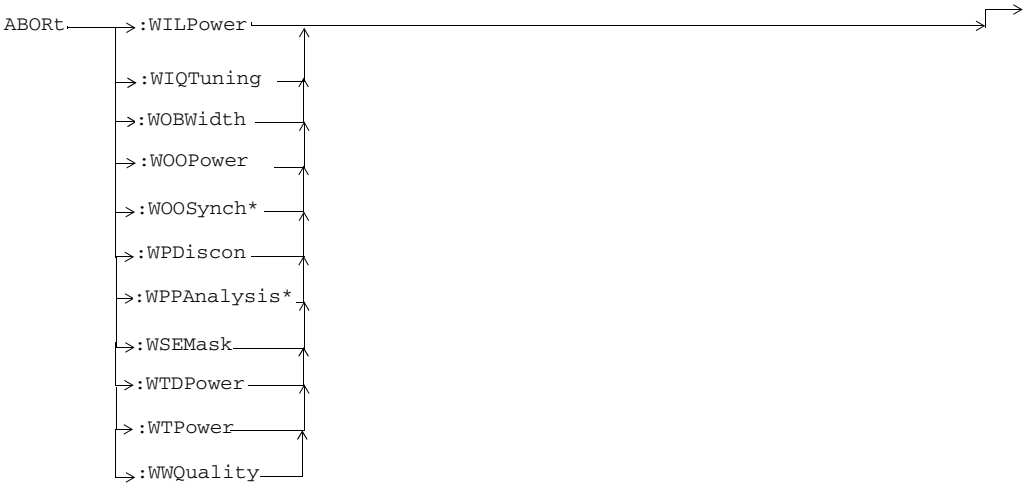
Function	Sets/queries the desired cell power level. (See "Cell Pow information about desired versus current power levels.) The optional [:SELected] keyword in this command spec queried applies to the current system type (see "CALL[:C settings for the CW operating mode are independent of operating modes.
Setting	Range: (This is the range of settings accepted, see "Cell Ranges" for the actual hardware range of the source • FDD: -165 dBm/3.84MHz to +37 dBm/3.84MHz • CW: -177 dBm to +49 dBm

ABORt



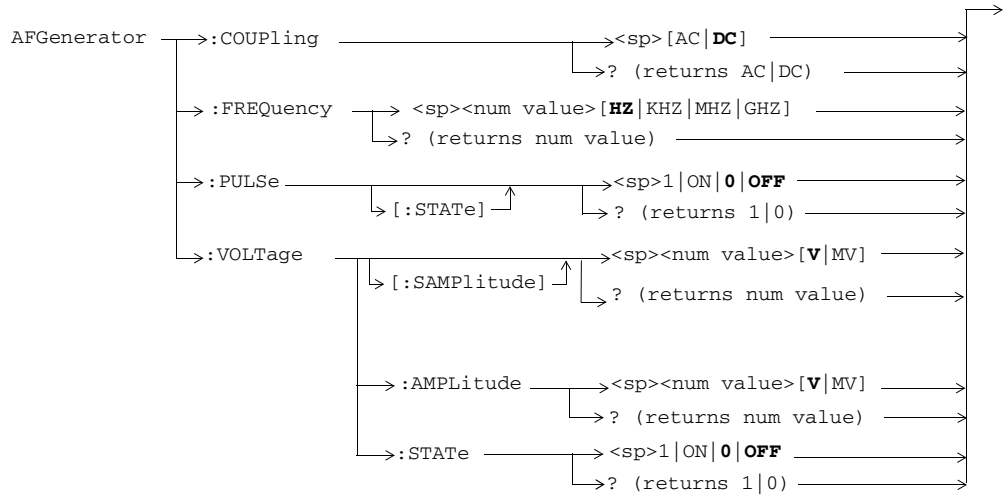
* Only applicable to the lab application.

Only applicable to a feature-licensed test application.

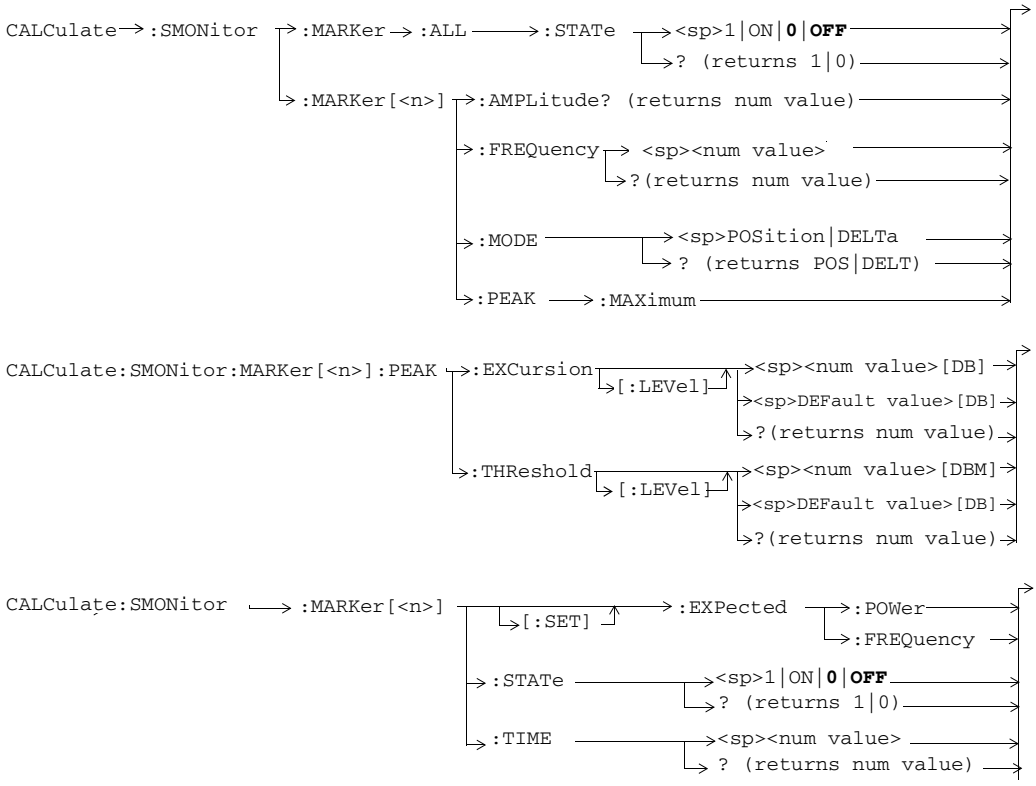


* This command is only applicable to the lab application.

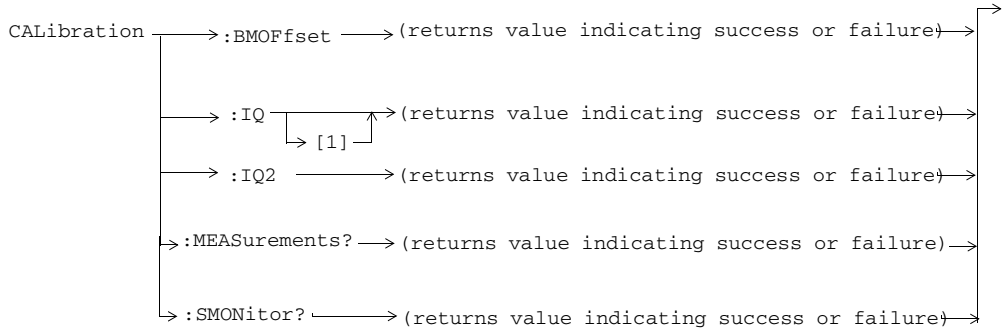
AFGenerator



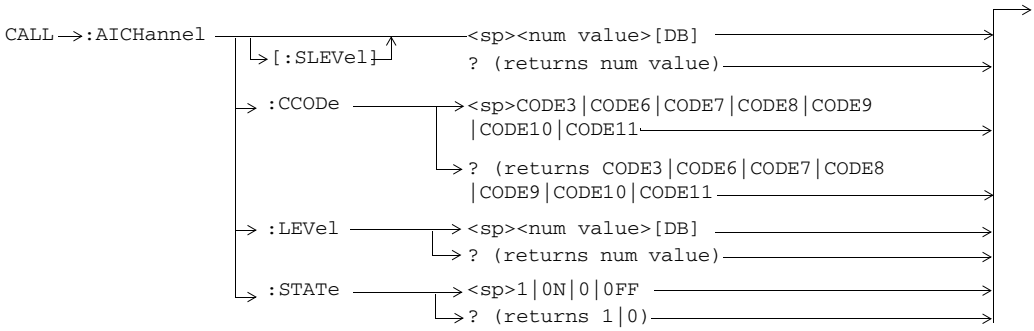
CALCulate:SMONitor



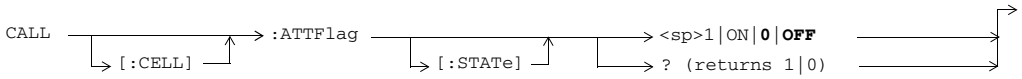
CALibration



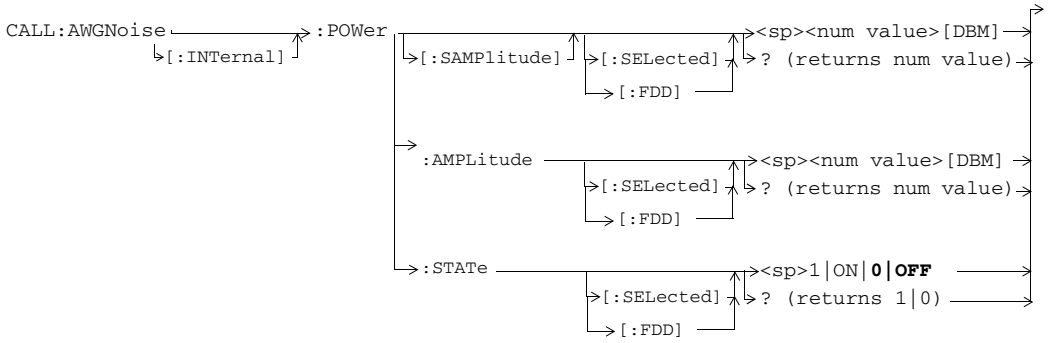
CALL:AICHannel



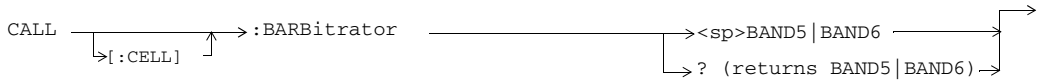
CALL:ATTFlag



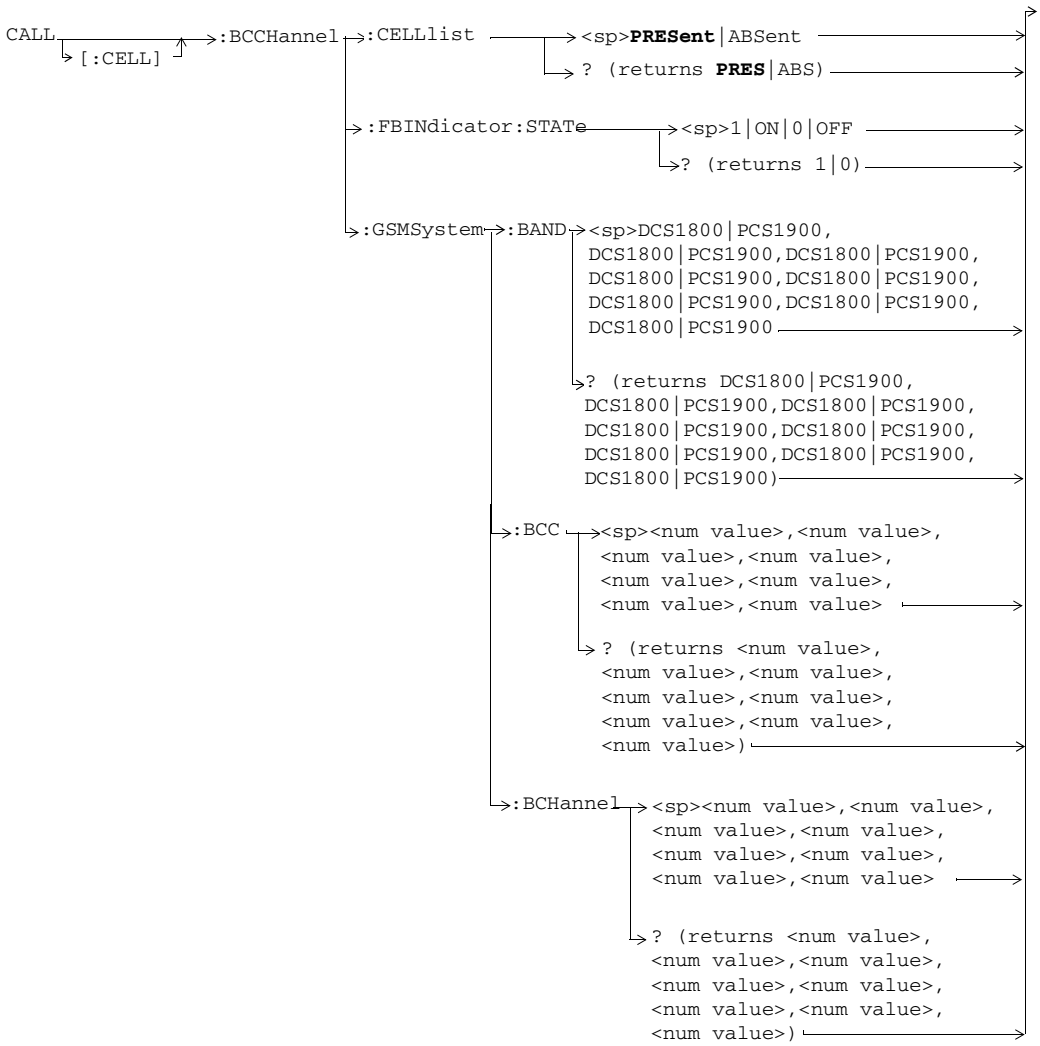
CALL:AWGNoise

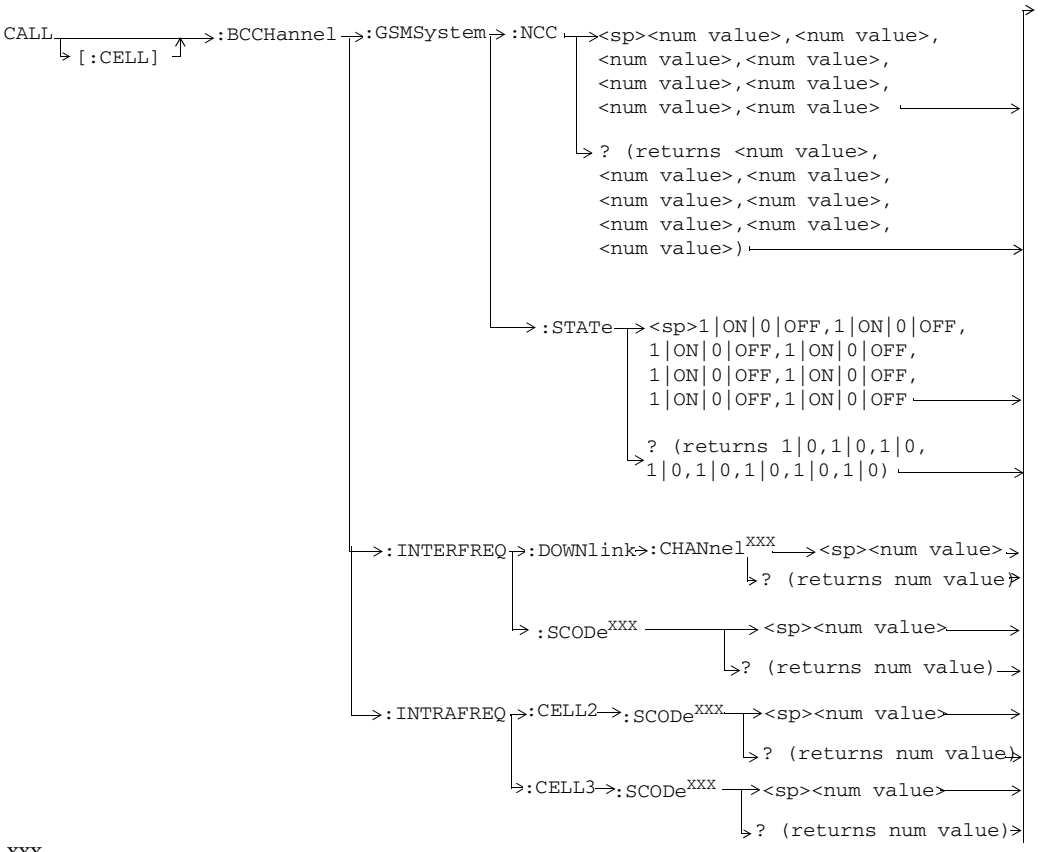


CALL:BARBitrator



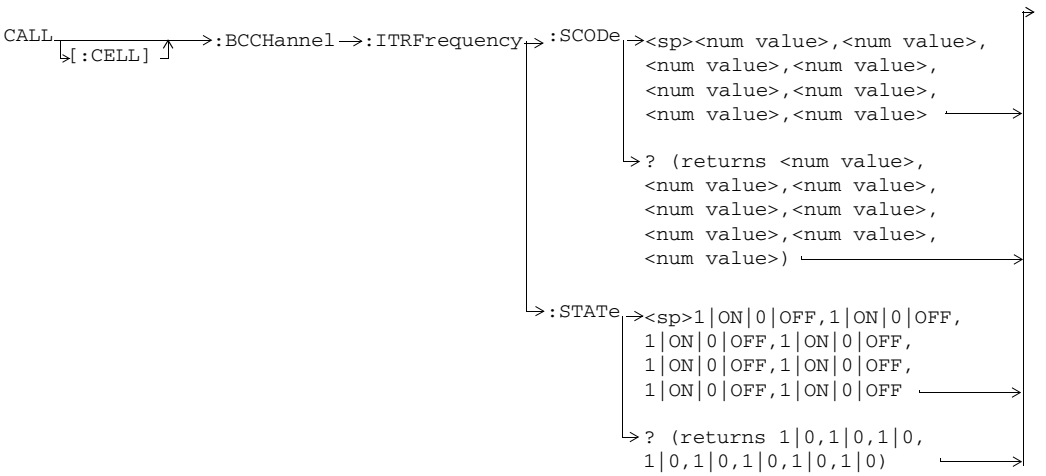
CALL:BCCHannel

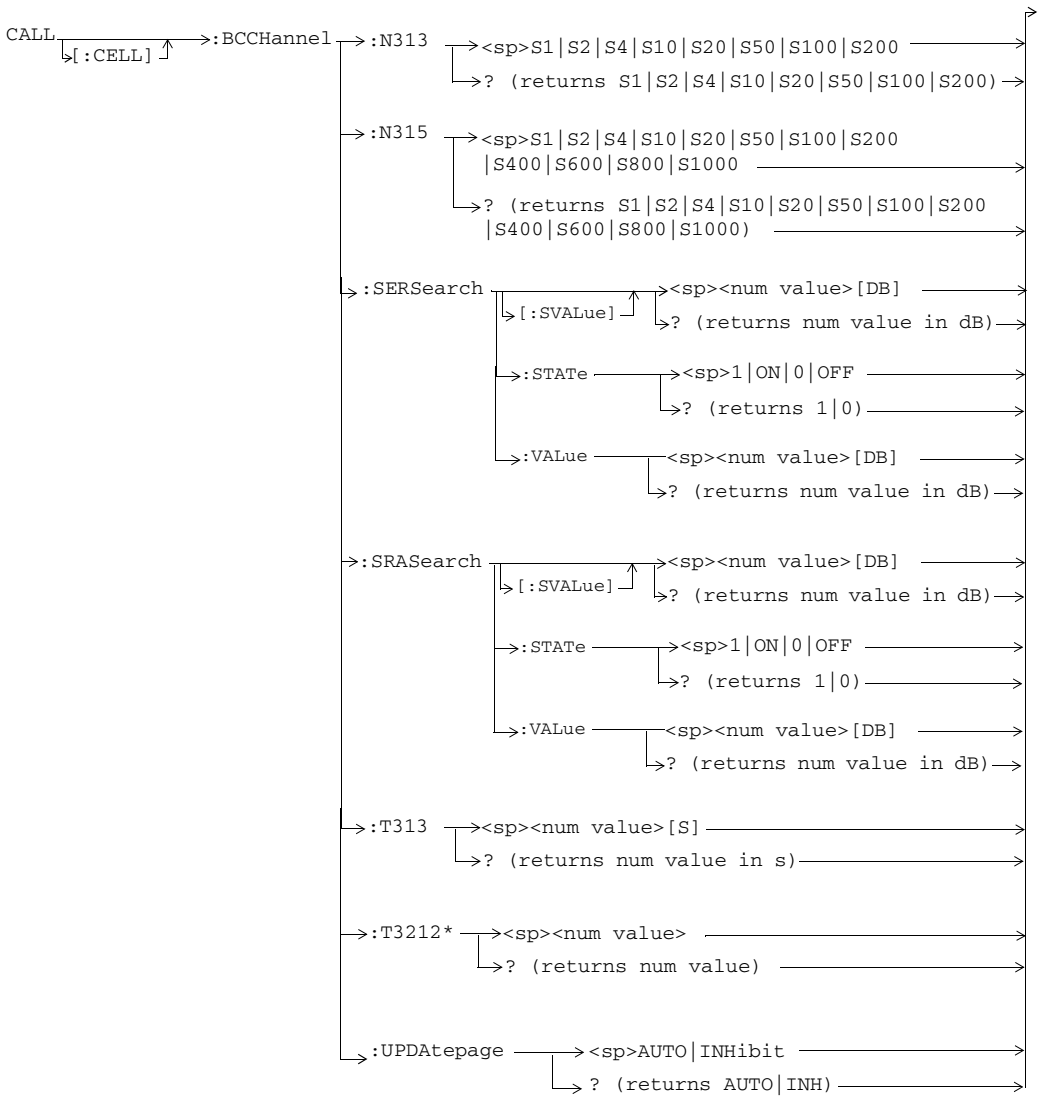




XXX This command is obsolete.

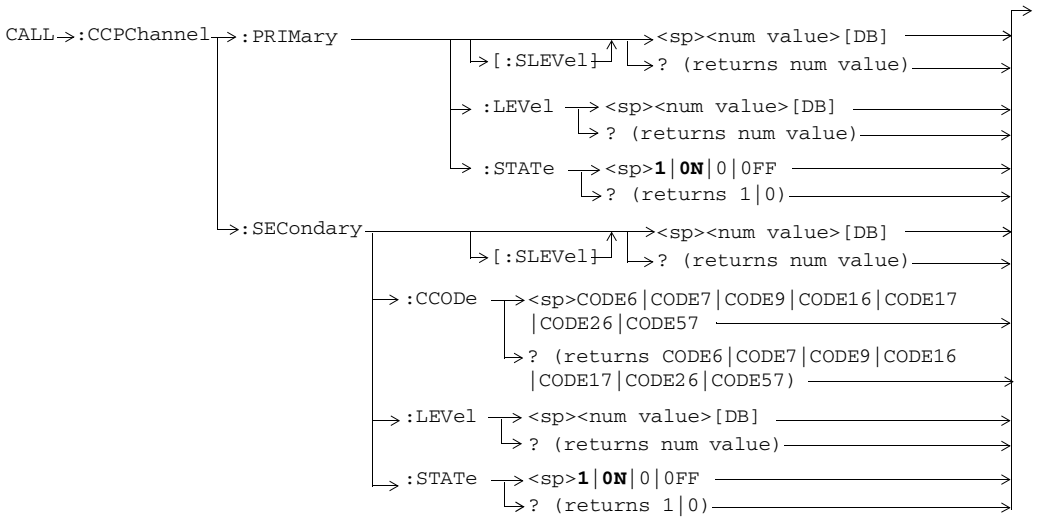

CALL
[:CELL]
:BCCHannel
:ITAFrequency
:SCODe
<sp><num value>,<num value>,
<num value>,<num value>,
<num value>,<num value>,
<num value>,<num value>
? (returns <num value>,
<num value>,<num value>,
<num value>,<num value>,
<num value>,<num value>,
<num value>)
:STATe
<sp>1|ON|0|OFF,1|ON|0|OFF,
1|ON|0|OFF,1|ON|0|OFF,
1|ON|0|OFF,1|ON|0|OFF,
1|ON|0|OFF,1|ON|0|OFF
? (returns 1|0,1|0,1|0,
1|0,1|0,1|0,1|0,1|0)
:ITRFrequency:DOWNlink:CHANnel
<sp><num value>,
<num value>,<num value>,
<num value>,<num value>,
<num value>,<num value>,
<num value>
? (returns <num value>,
<num value>,<num value>,
<num value>,<num value>,
<num value>,<num value>,
<num value>)


CALL
[:CELL]
:BCCHannel
:ITRFrequency
:SCODe
<sp><num value>,<num value>,
<num value>,<num value>,
<num value>,<num value>,
<num value>,<num value>
? (returns <num value>,
<num value>,<num value>,
<num value>,<num value>,
<num value>,<num value>,
<num value>)
:STATe
<sp>1|ON|0|OFF,1|ON|0|OFF,
1|ON|0|OFF,1|ON|0|OFF,
1|ON|0|OFF,1|ON|0|OFF,
1|ON|0|OFF,1|ON|0|OFF
? (returns 1|0,1|0,1|0,
1|0,1|0,1|0,1|0,1|0)

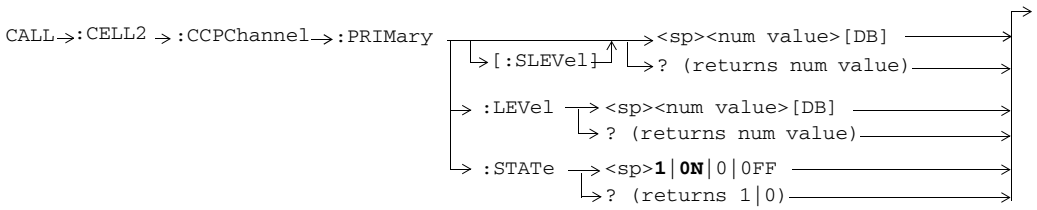


* This command is only applicable to the lab application.

CALL:CCPChannel

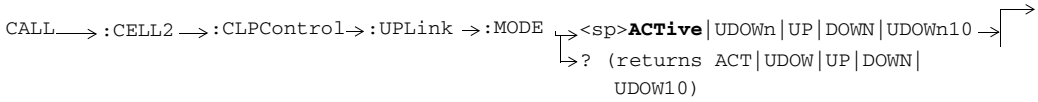


CALL:CELL2:CCPChannel



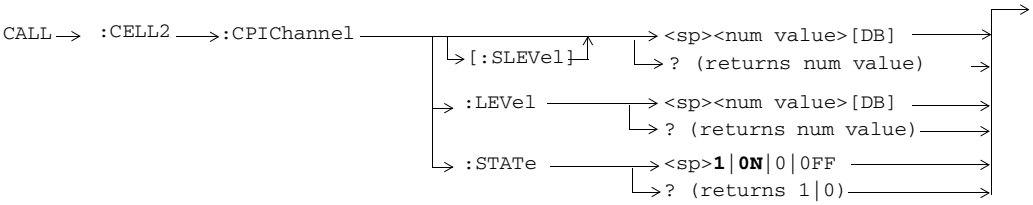
All commands shown in this diagram are only applicable to the lab application.

CALL:CELL2:CLPControl



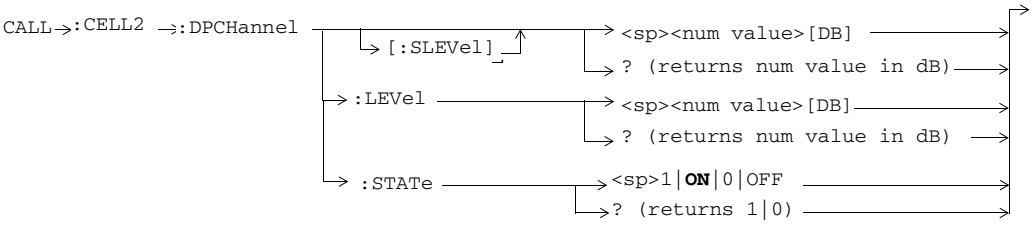
All commands shown in this diagram are only applicable to the lab application.

CALL:CELL2:CPIChannel



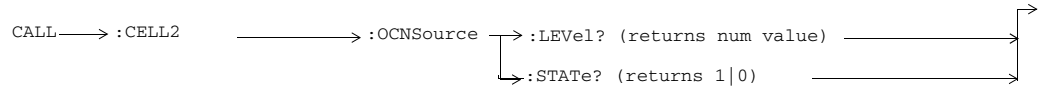
All commands shown in this diagram are only applicable to the lab application.

CALL:CELL2:DPCHannel



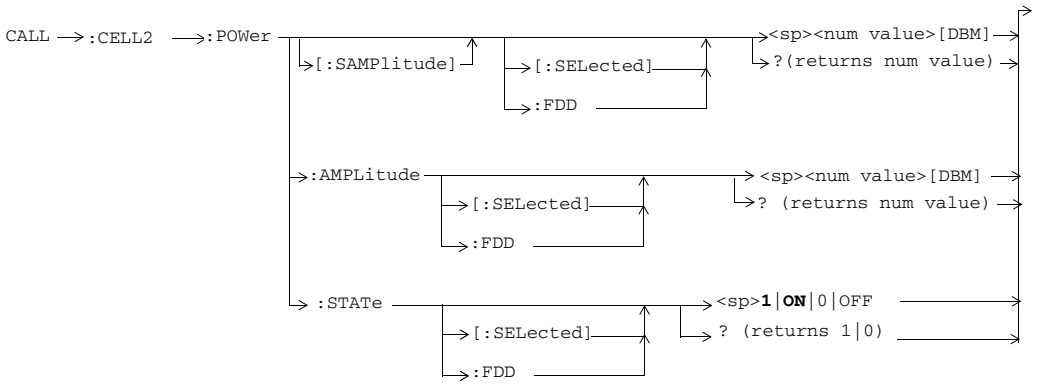
All commands shown in this diagram are only applicable to the lab application.

CALL:CELL2:OCNSource



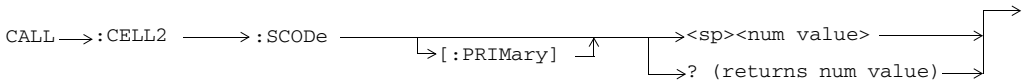
All commands shown in this diagram are only applicable to the lab application.

CALL:CELL2:POWer



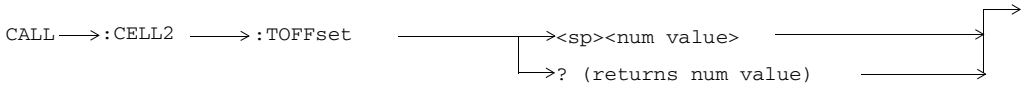
All commands shown in this diagram are only applicable to the lab application.

CALL:CELL2:SCODe



All commands shown in this diagram are only applicable to the lab application.

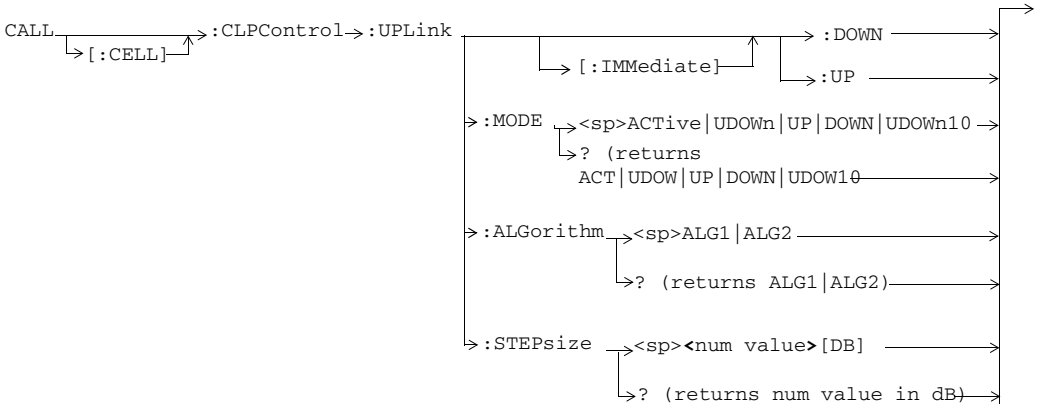
CALL:CELL2:TOFFset



All commands shown in this diagram are only applicable to the lab application.

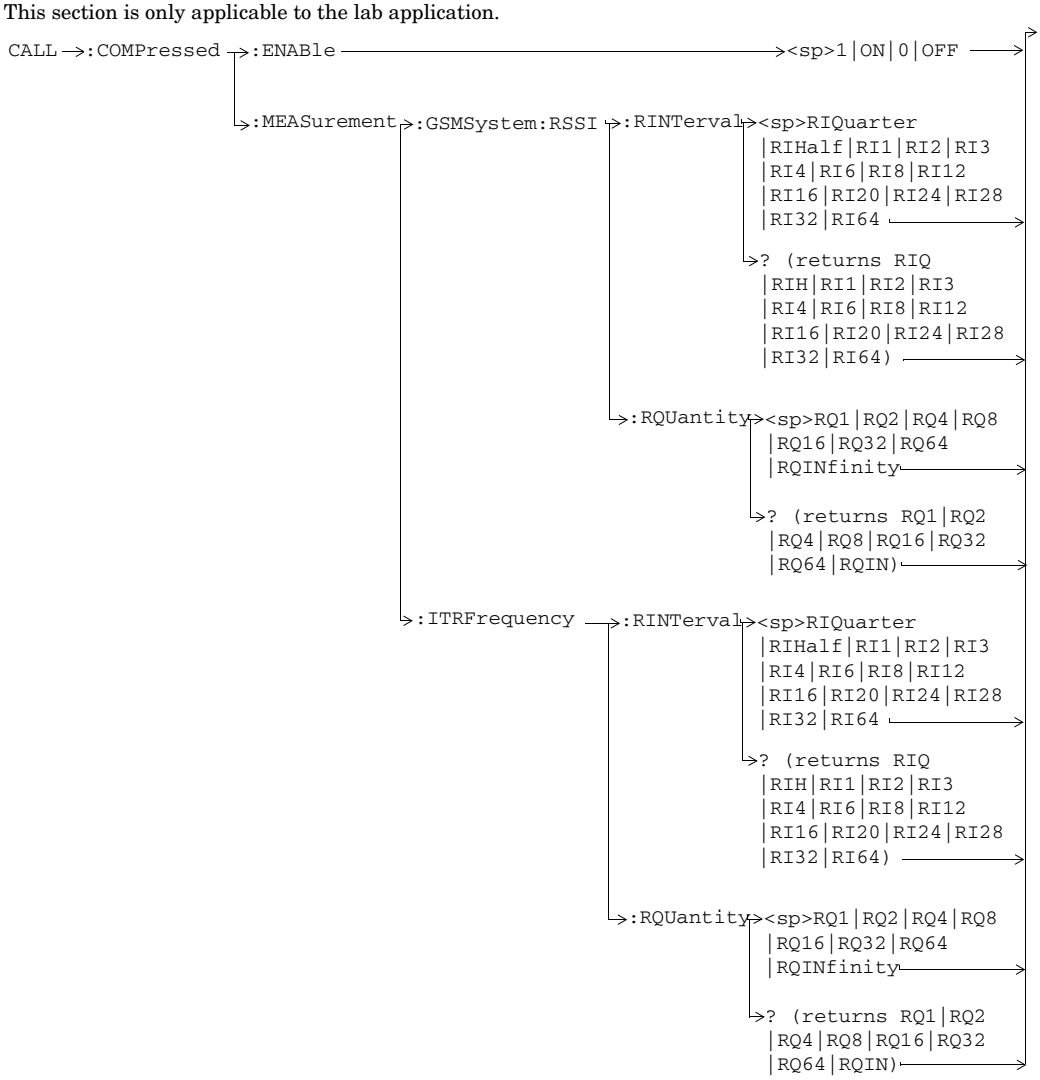
CALL:CHANnel

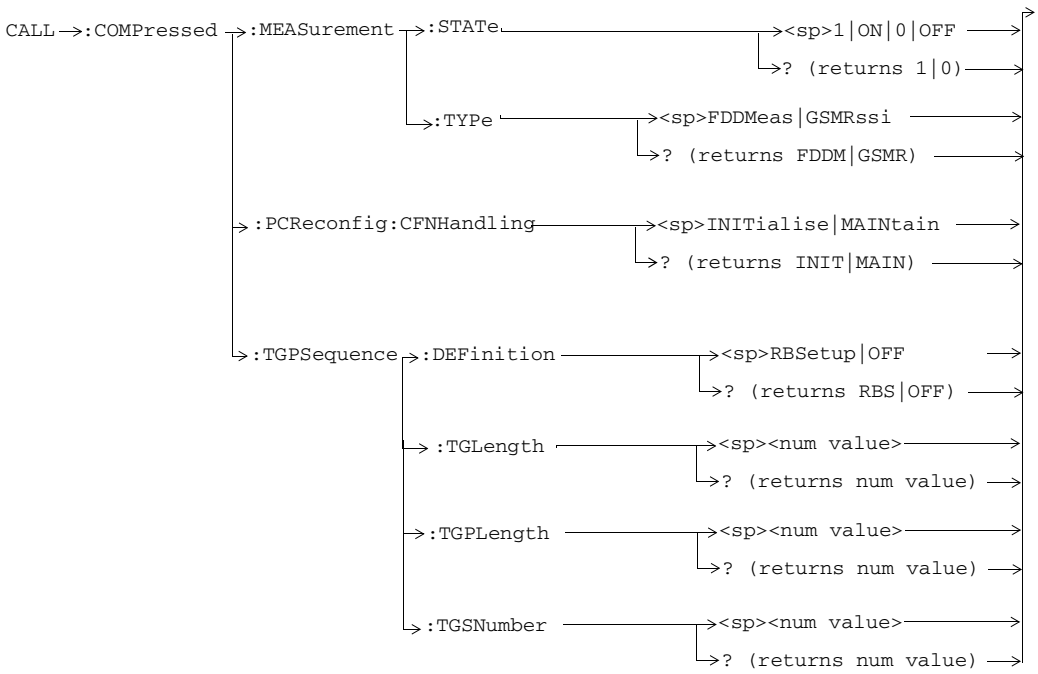
CALL:CLPControl



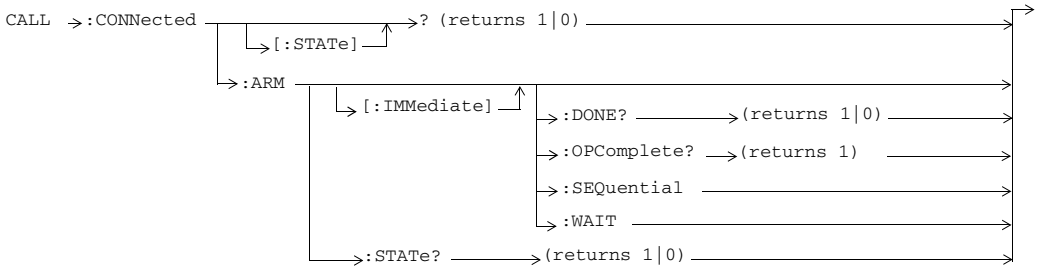
CALL:COMPressed

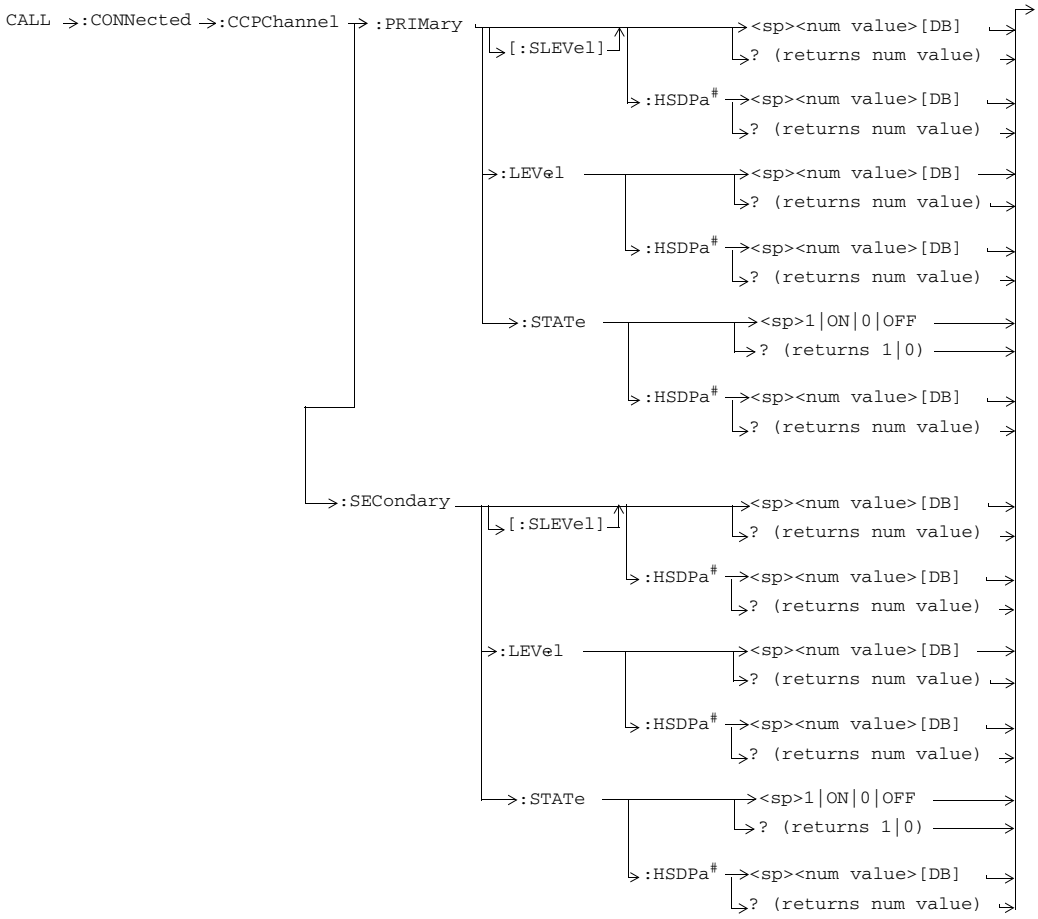
This section is only applicable to the lab application.



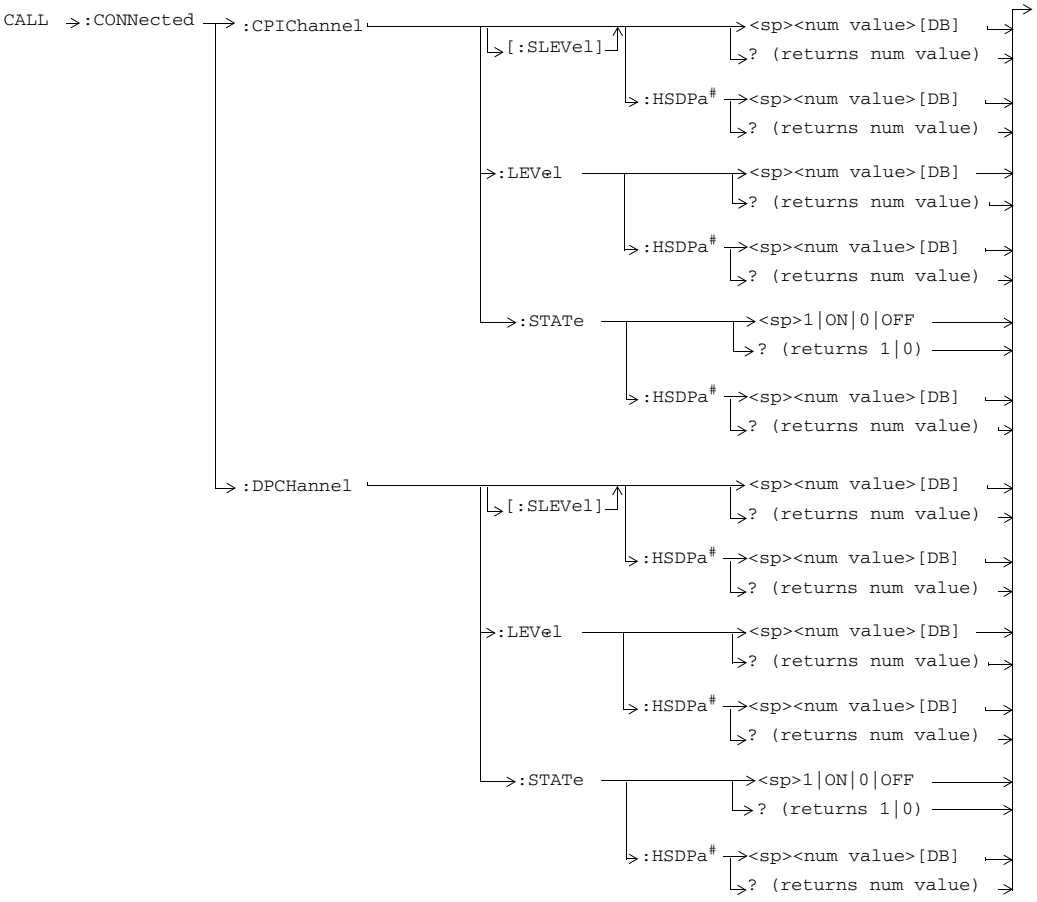

CALL
:COMPressed
:MEASurement
:STATe
<sp>1|ON|0|OFF
? (returns 1|0)
:TYPe
<sp>FDDMeas|GSMRssi
? (returns FDDM|GSMR)
:PCReconfig:CFNHandling
<sp>INITialise|MAINtain
? (returns INIT|MAIN)
:TGPSequence
:DEFinition
<sp>RBSetup|OFF
? (returns RBS|OFF)
:TGLength
<sp><num value>
? (returns num value)
:TGPLength
<sp><num value>
? (returns num value)
:TGSNumber
<sp><num value>
? (returns num value)

CALL:CONNected

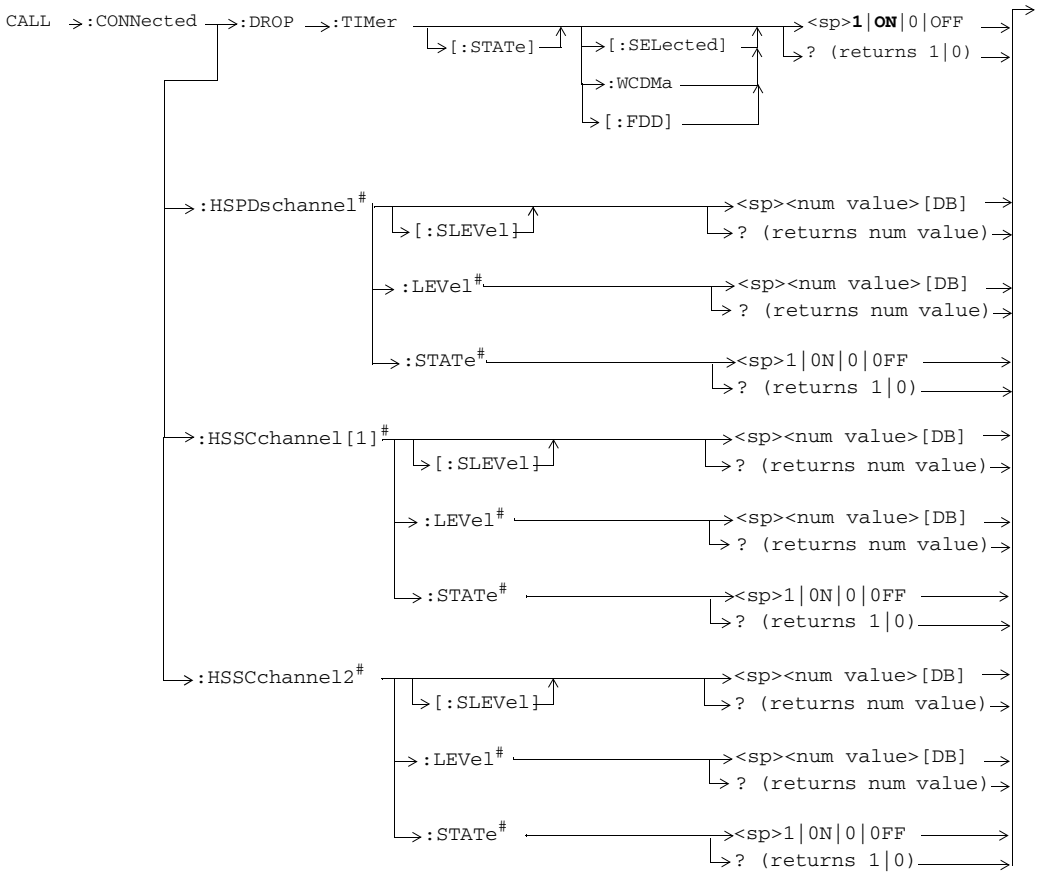




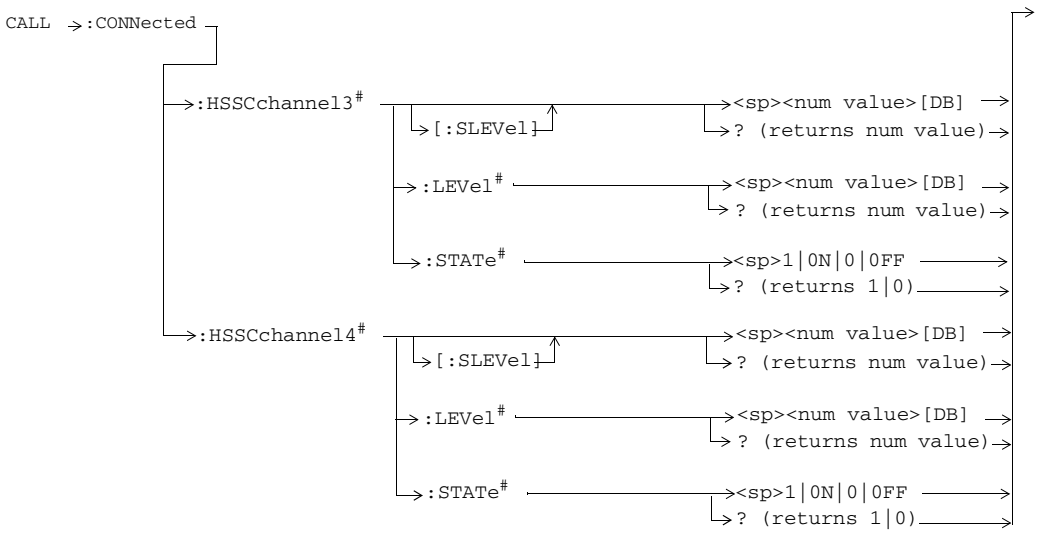
Only applicable to the lab application or a feature-licensed test application



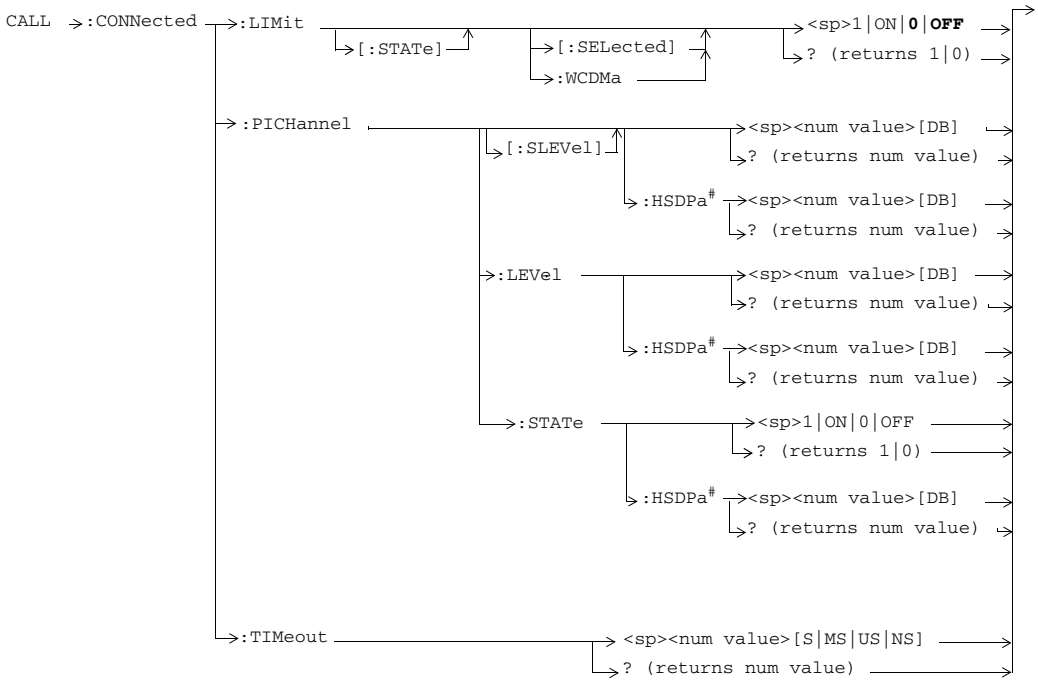
Only applicable to the lab application or a feature-licensed test application



Only applicable to the lab application or a feature-licensed test application

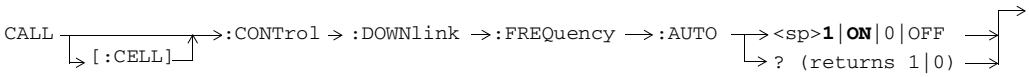


Only applicable to the lab application or a feature-licensed test application

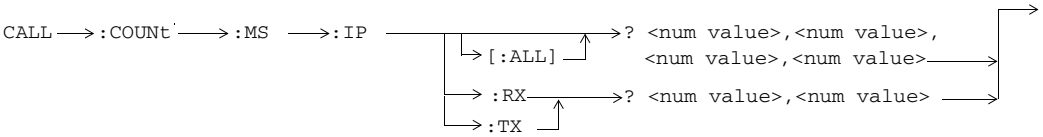


Only applicable to the lab application or a feature-licensed test application

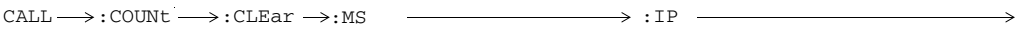
CALL:CONTrol



CALL:COUNt

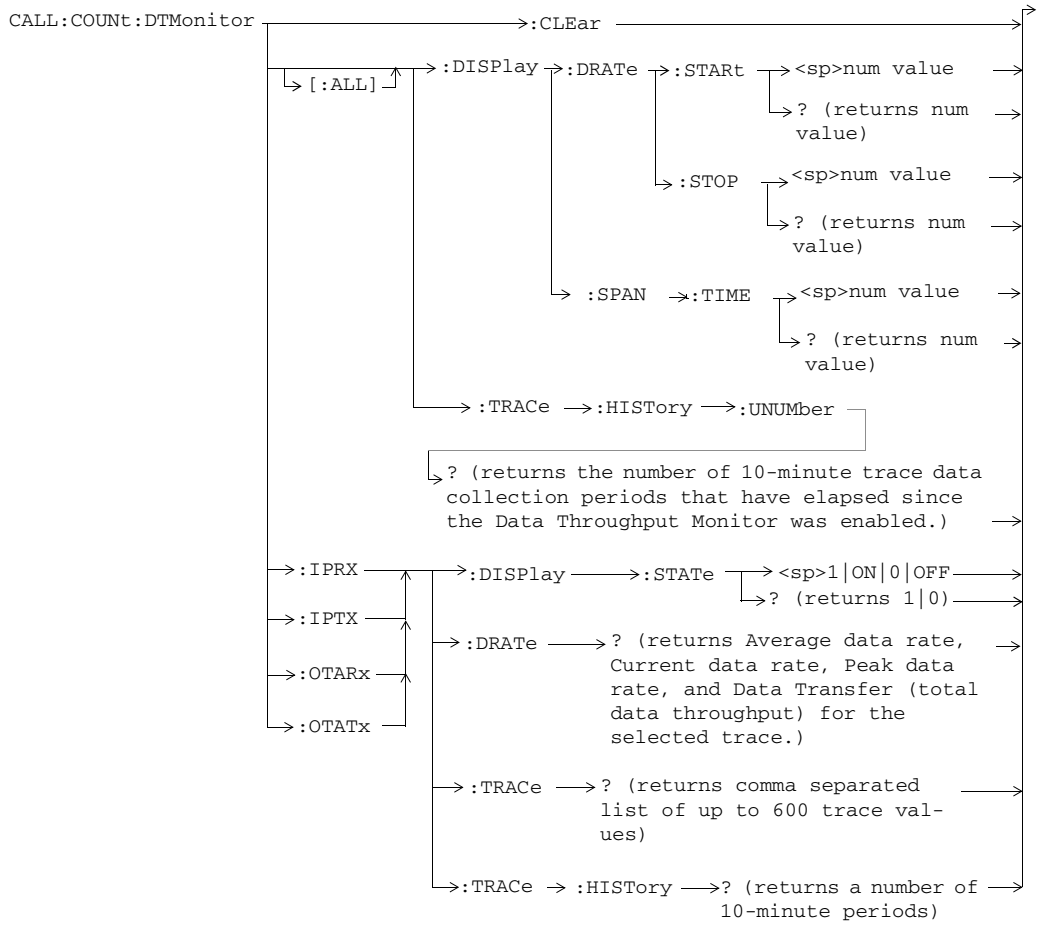


All commands shown in this diagram are only applicable to the lab application.



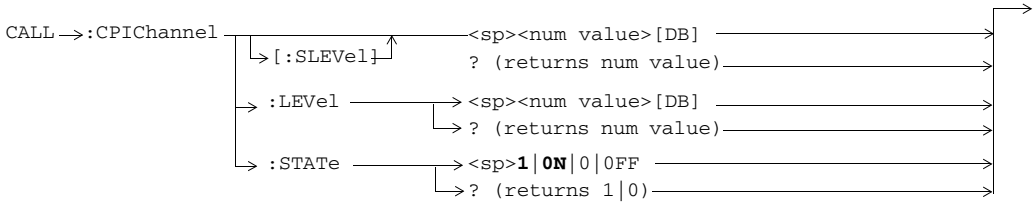
All commands shown in this diagram are only applicable to the lab application.

CALL:COUNt:DTMonitor

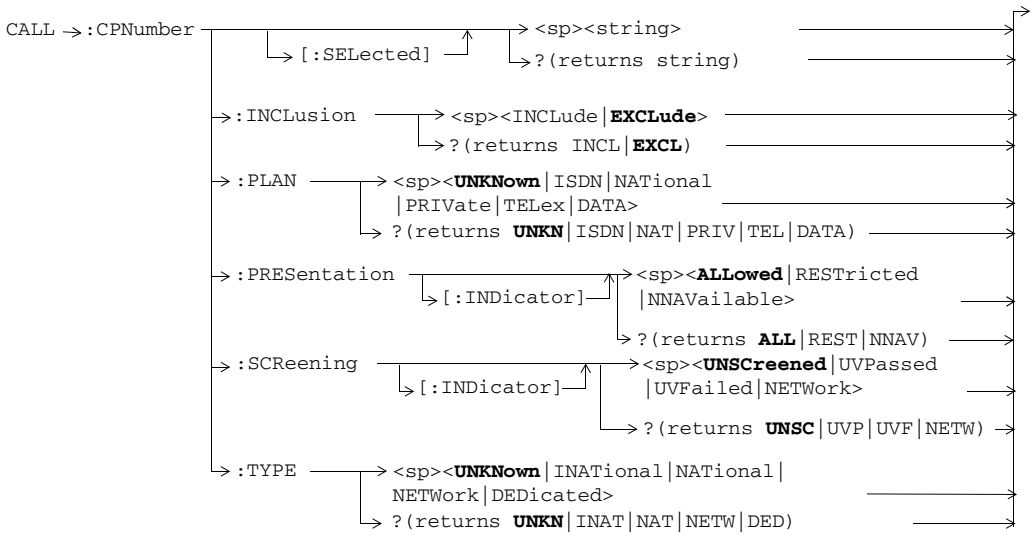


All commands shown in this diagram are only applicable to the lab application.

CALL:CPIChannel

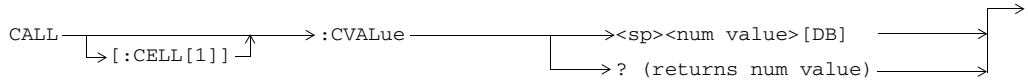


CALL:CPNumber



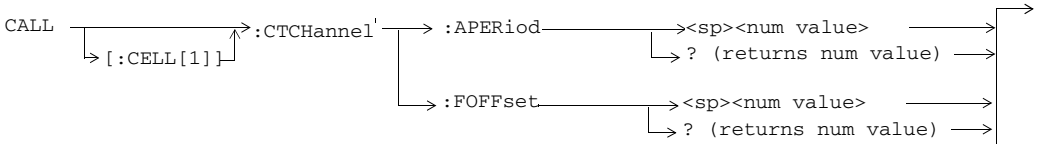
These commands are only applicable to the lab application.

CALL:CVALue

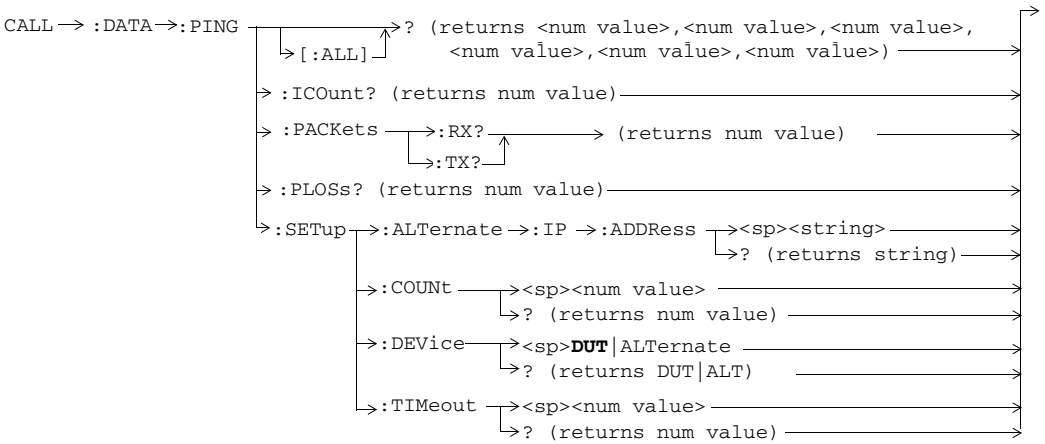


CALL:CTCHannel

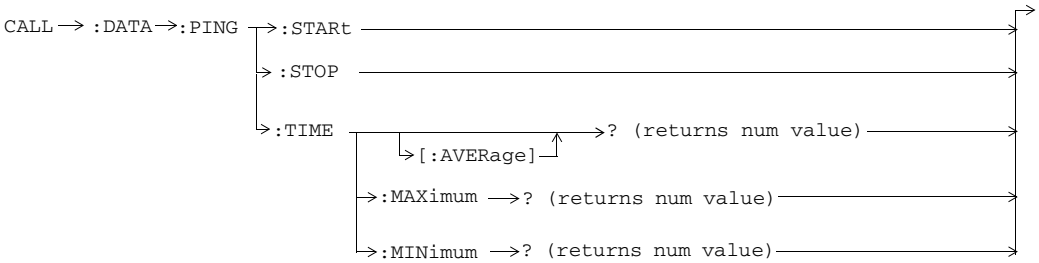
This section is only applicable to the lab application.



CALL:DATA:PING

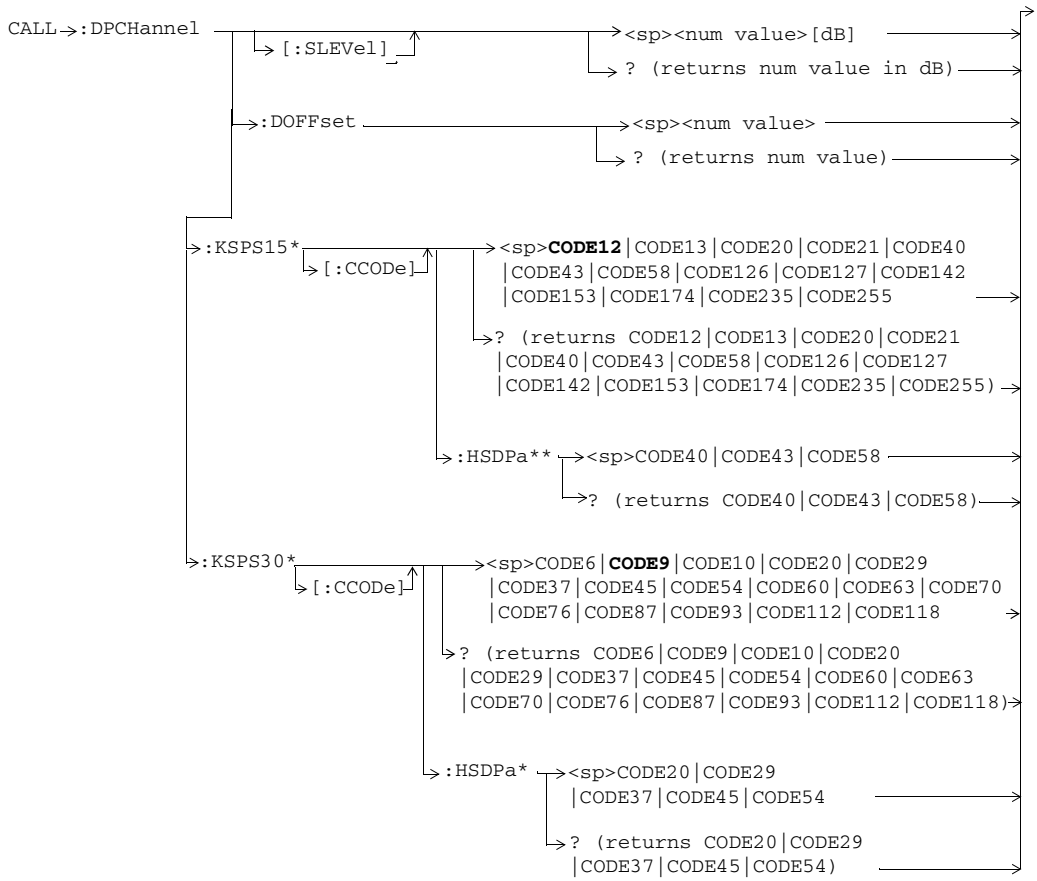


All commands shown in this diagram are only applicable to the lab application.



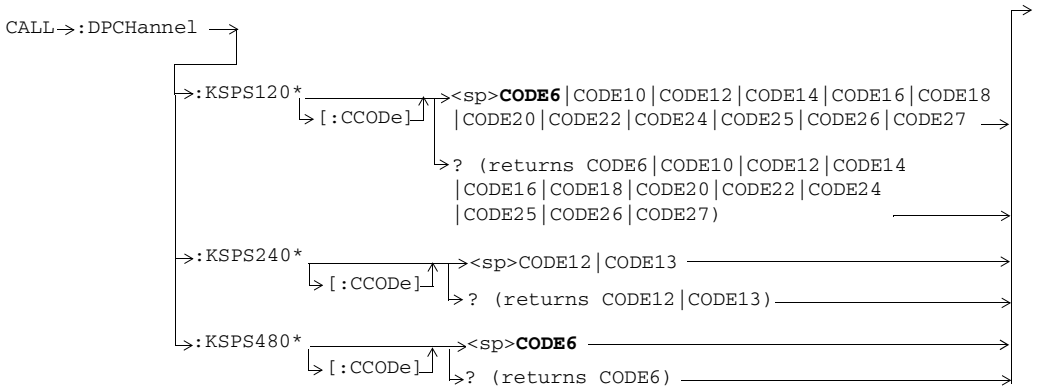
All commands shown in this diagram are only applicable to the lab application.

CALL:DPCHannel

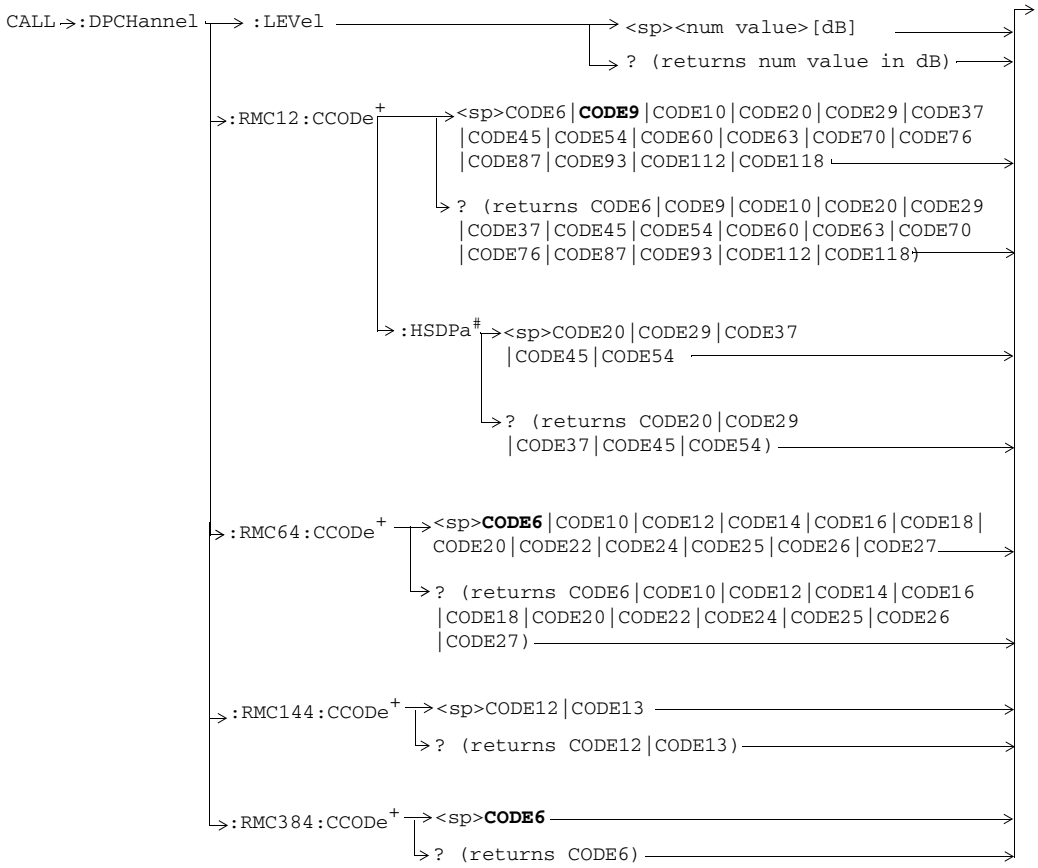


* Only applicable to the lab application.

** Only applicable to the E6703D.

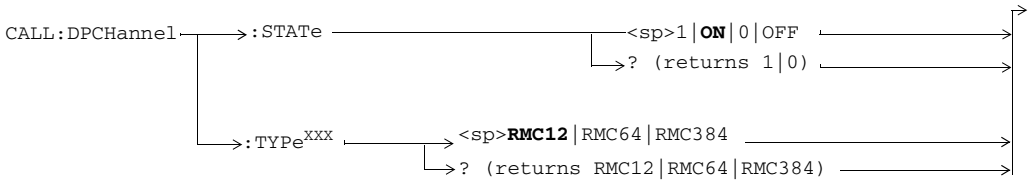


* This command is only applicable to the lab application.



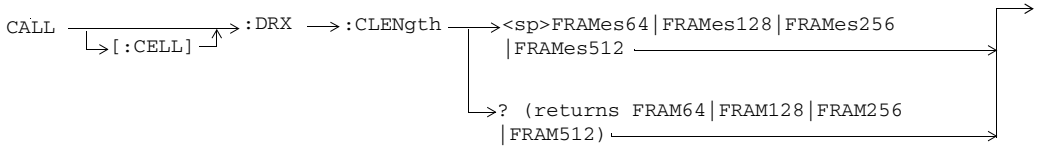
+ This command is only applicable to the test application.

This command is only applicable to a feature-licensed test application.

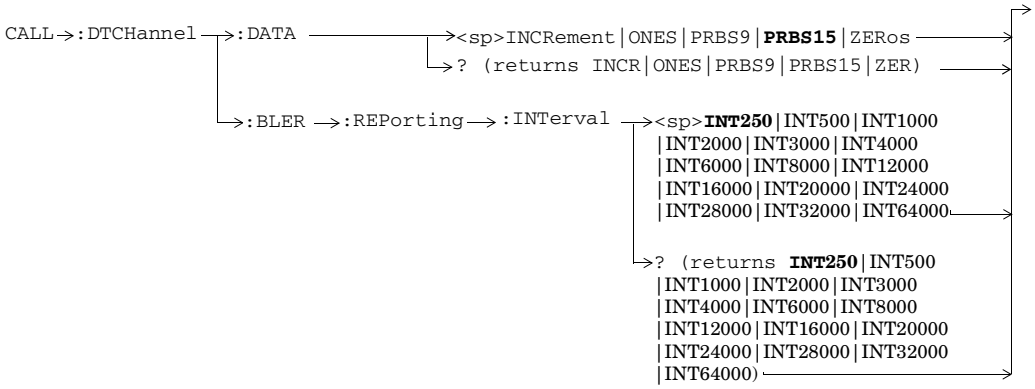


XXX This command is obsolete.

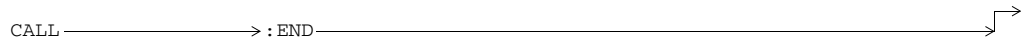
CALL:DRX



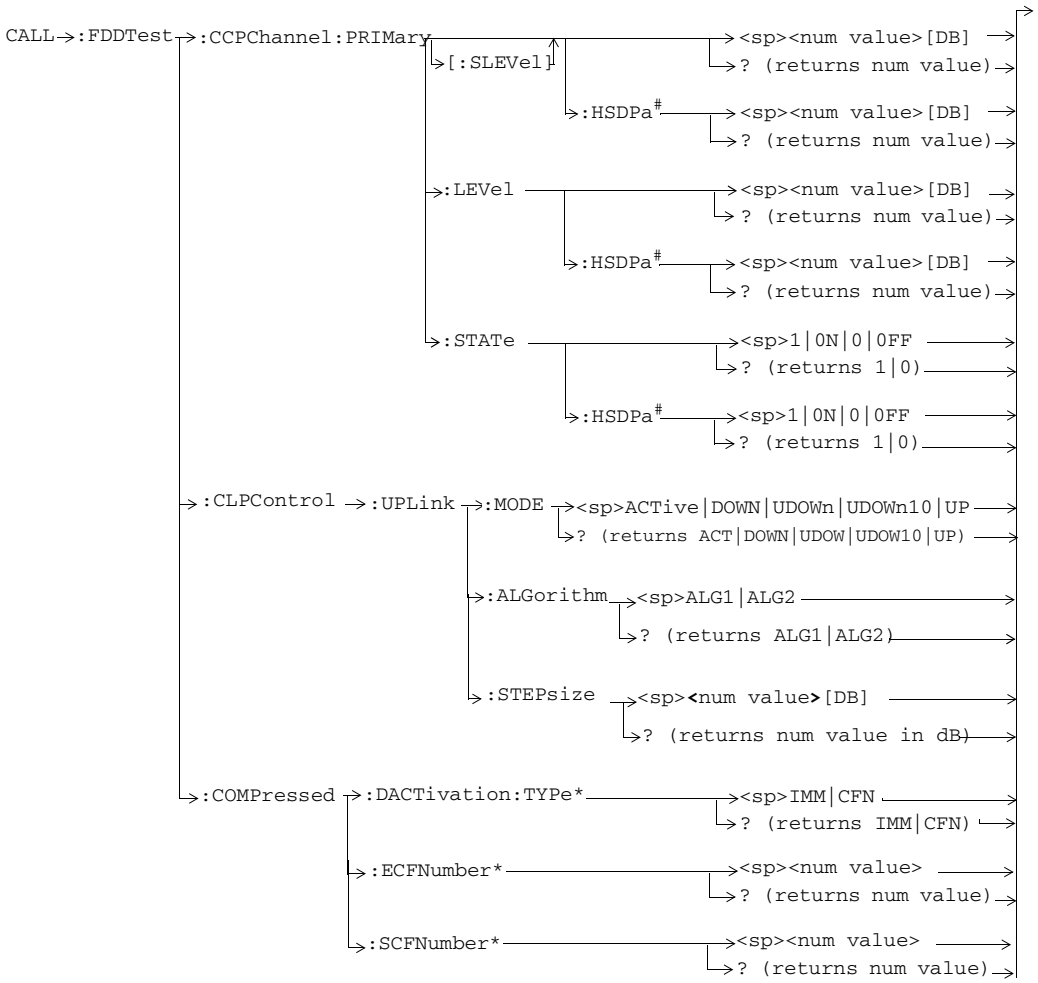
CALL:DTCHannel



CALL:END

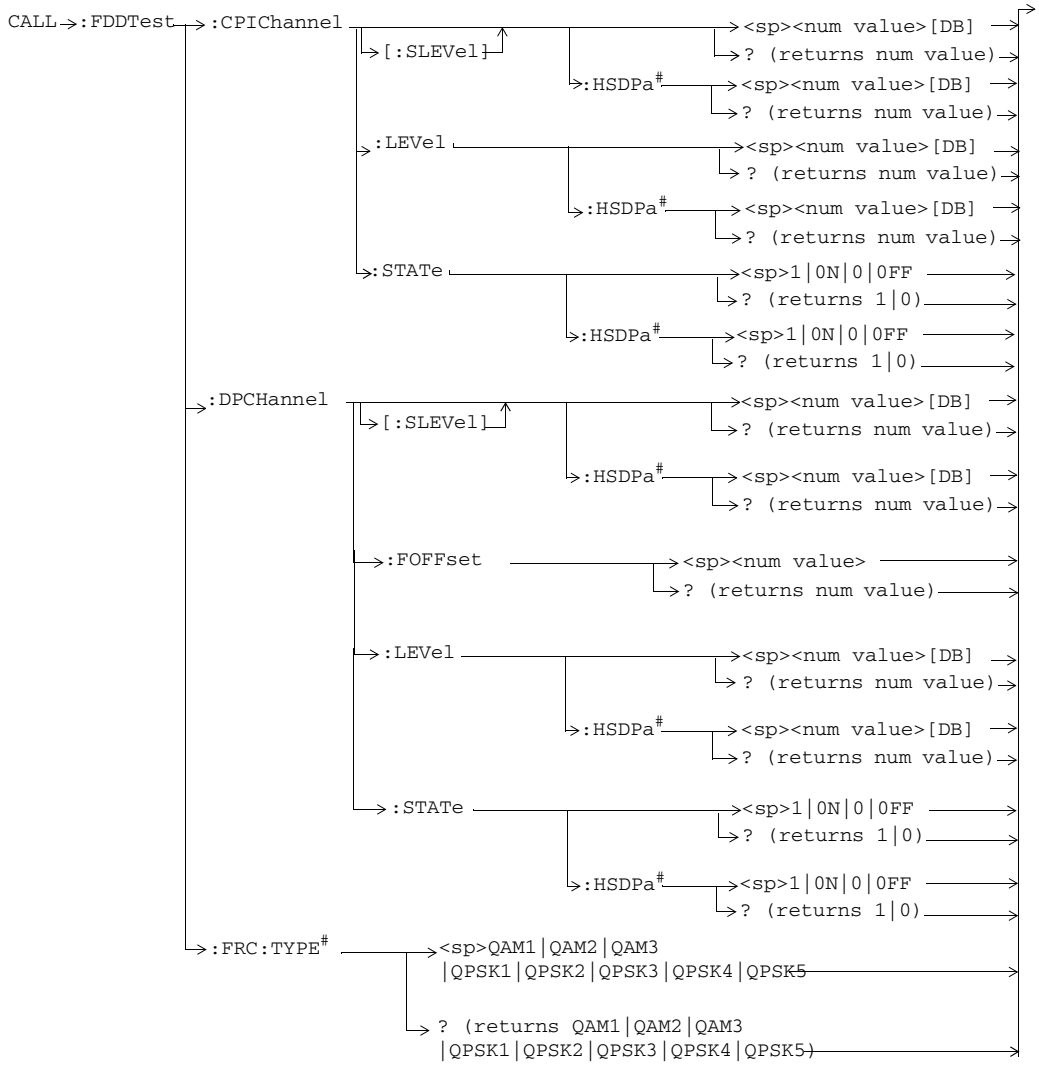


CALL:FDDTest

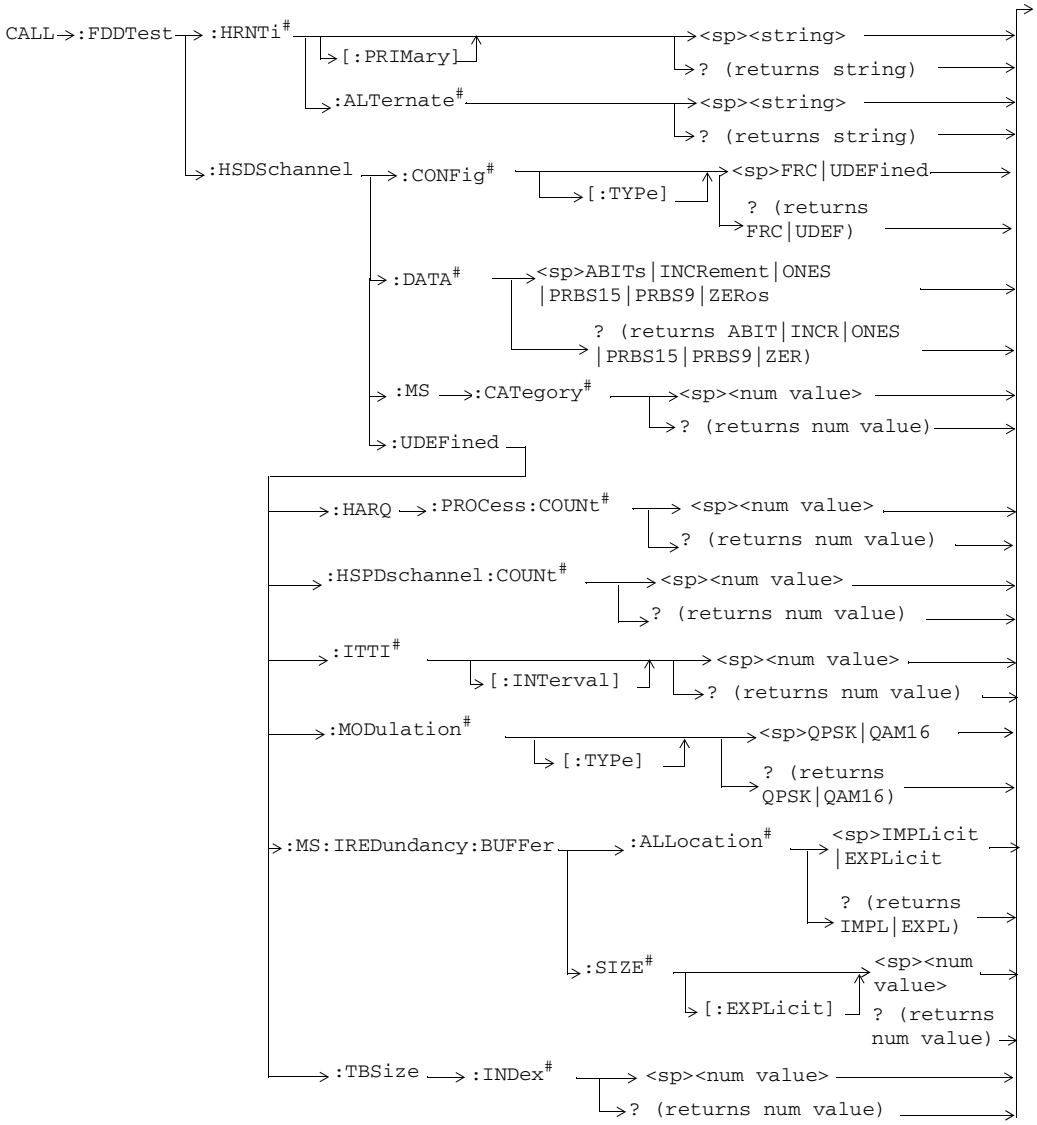


* Only applicable to the lab application.

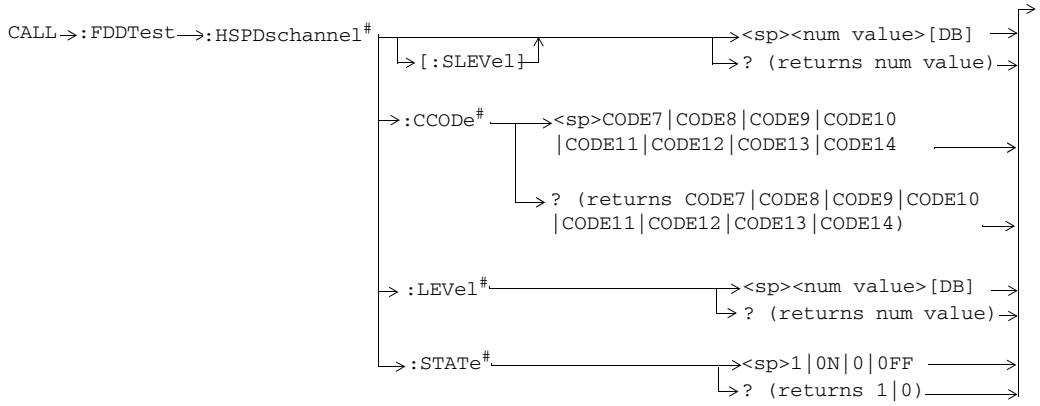
Only applicable to a feature-licensed test application.



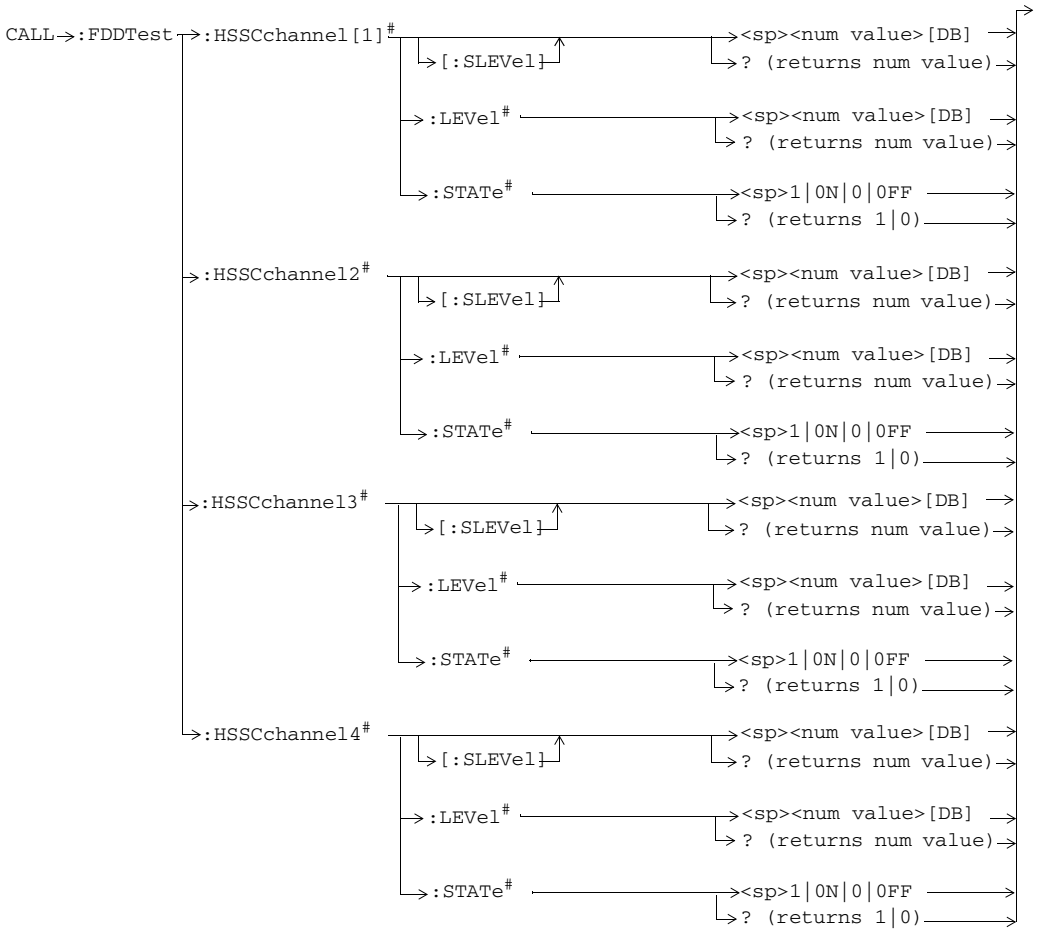
Only applicable to a feature-licensed test application.



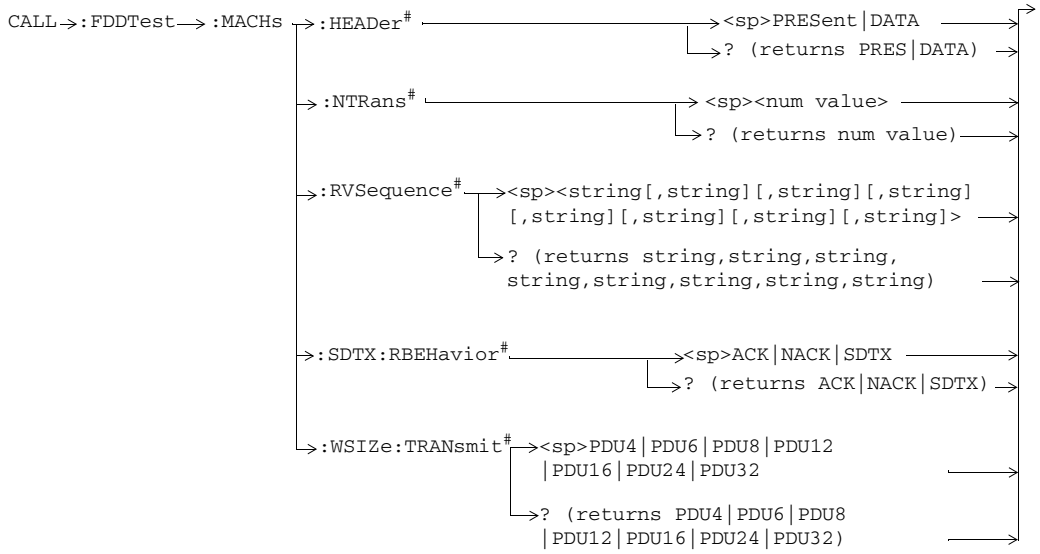
Only applicable to a feature-licensed test application.



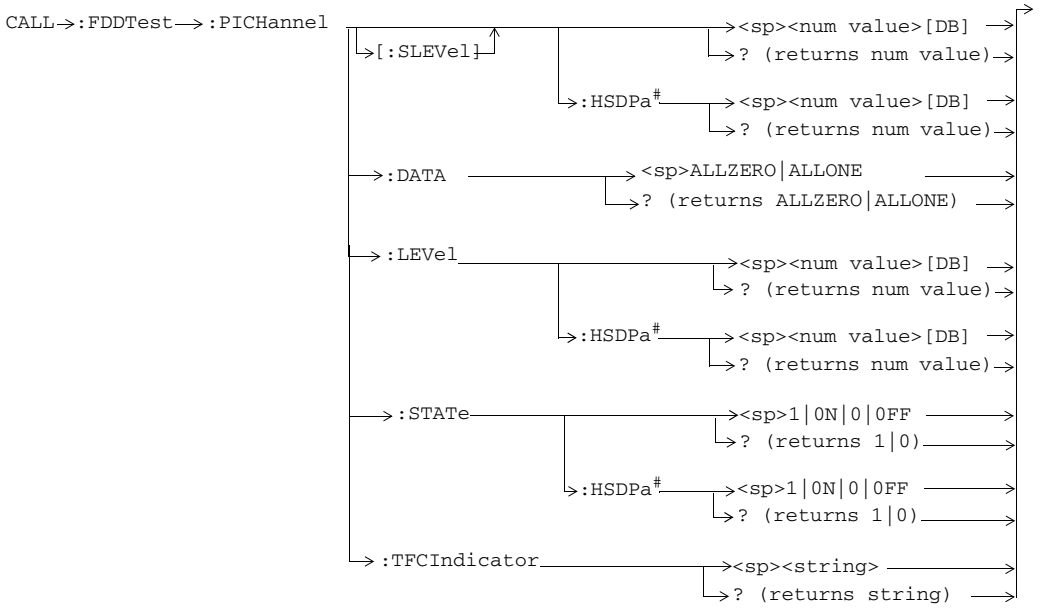
Only applicable to a feature-licensed test application.



Only applicable to a feature-licensed test application.

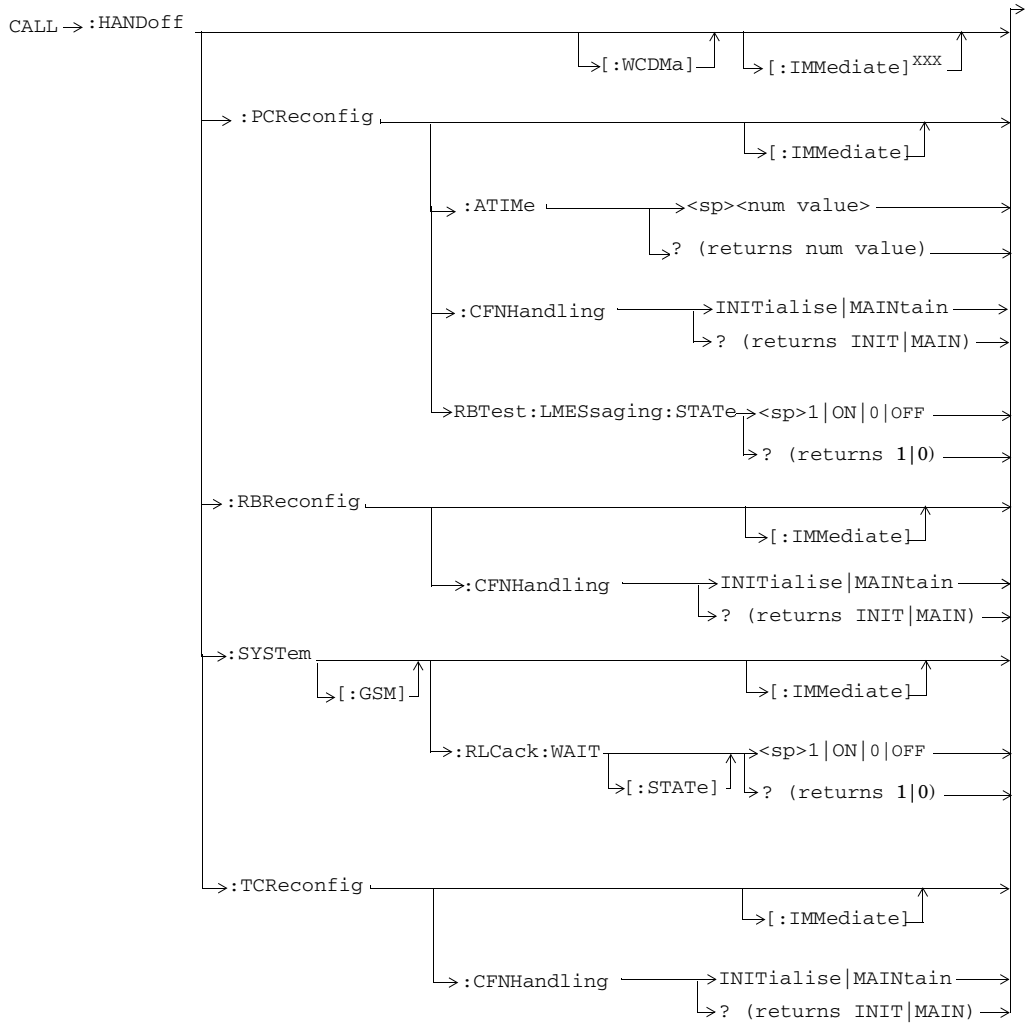


Only applicable to a feature-licensed test application.



Only applicable to a feature-licensed test application.

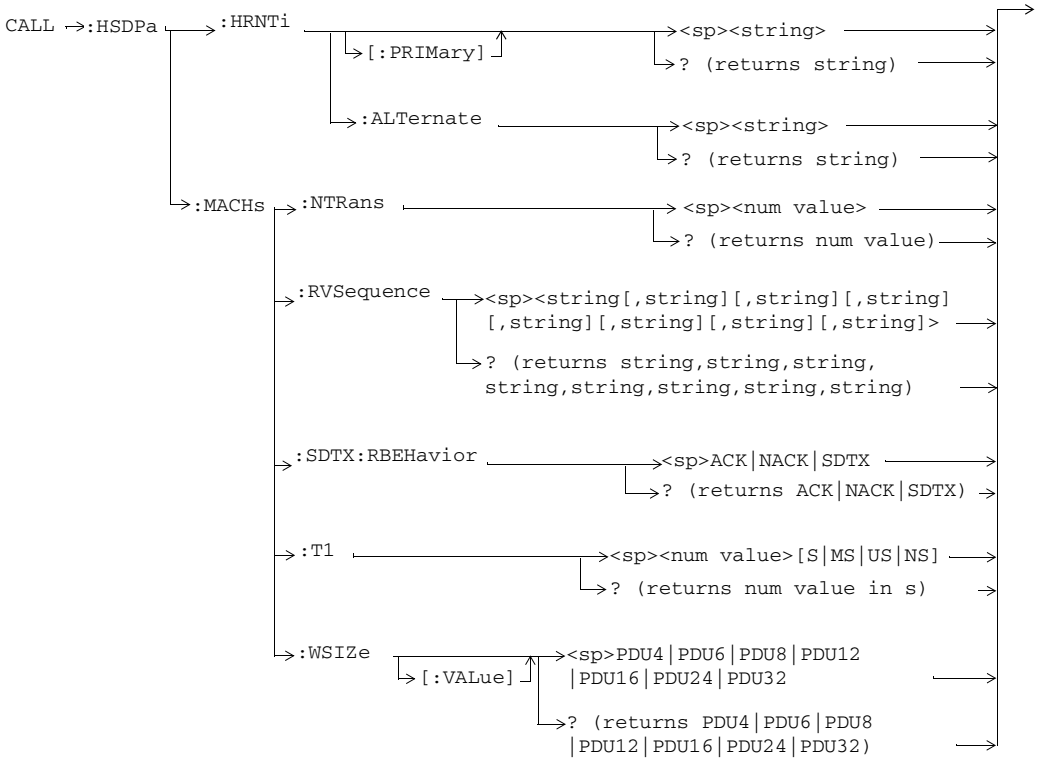
CALL:HANDoff

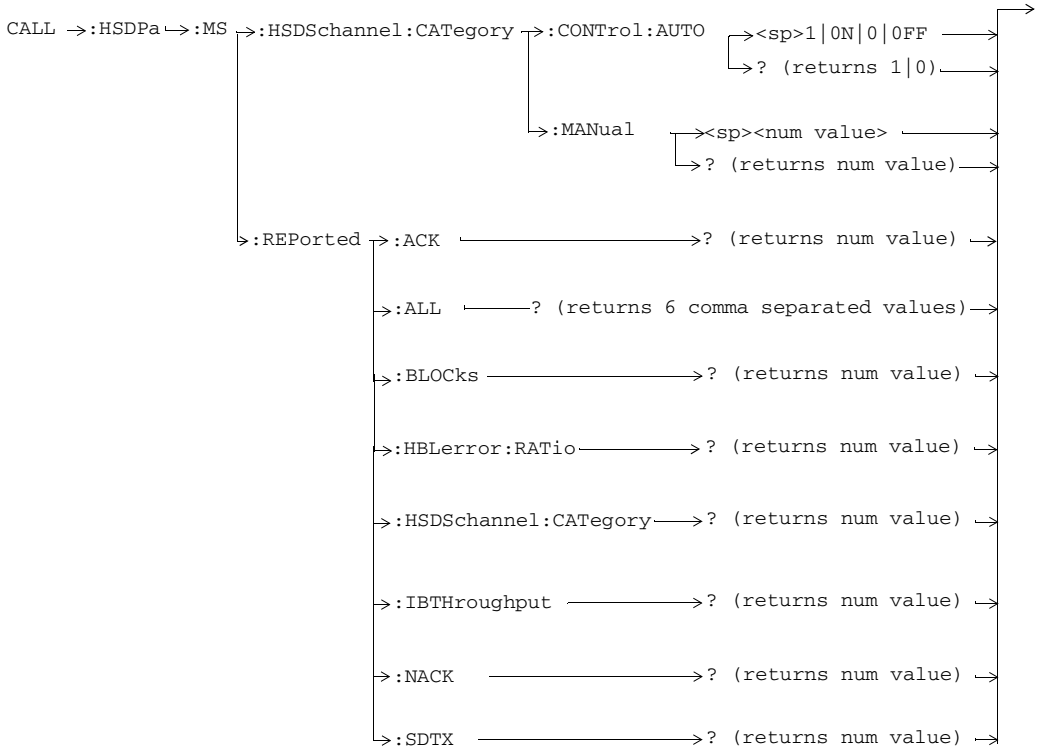


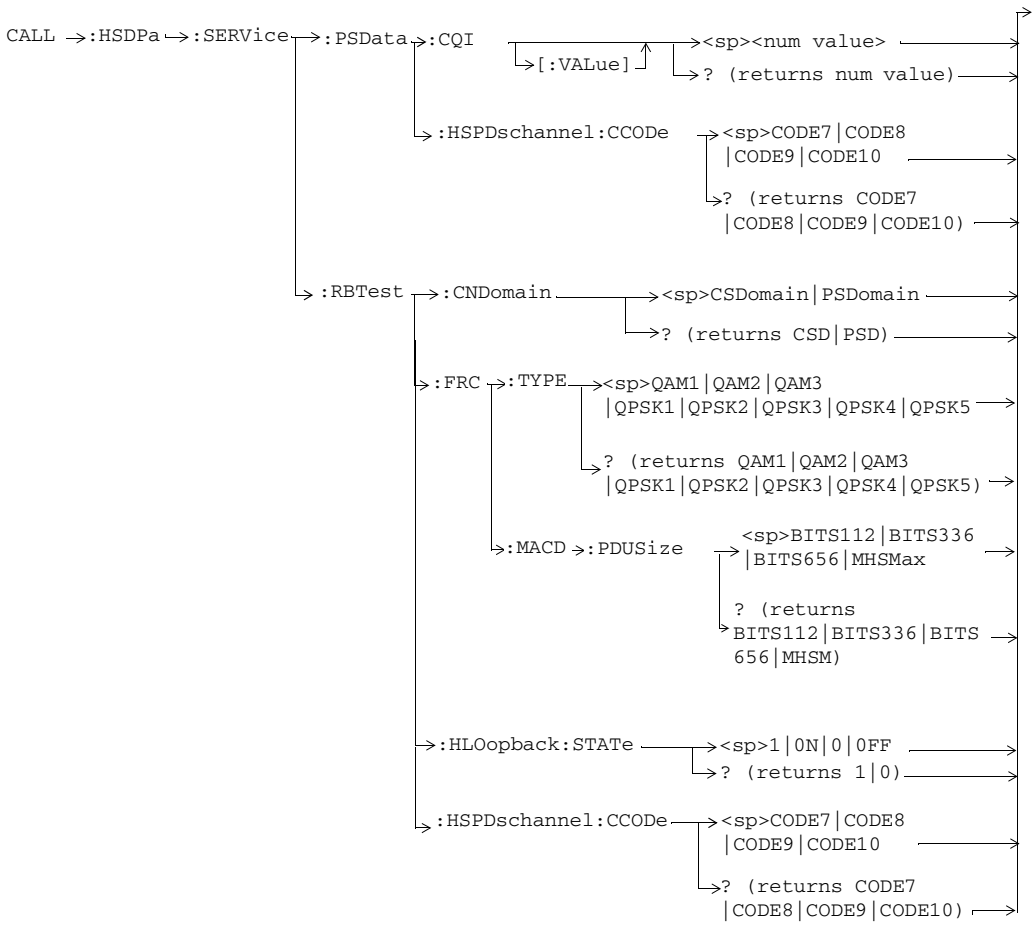
XXX This command is obsolete.

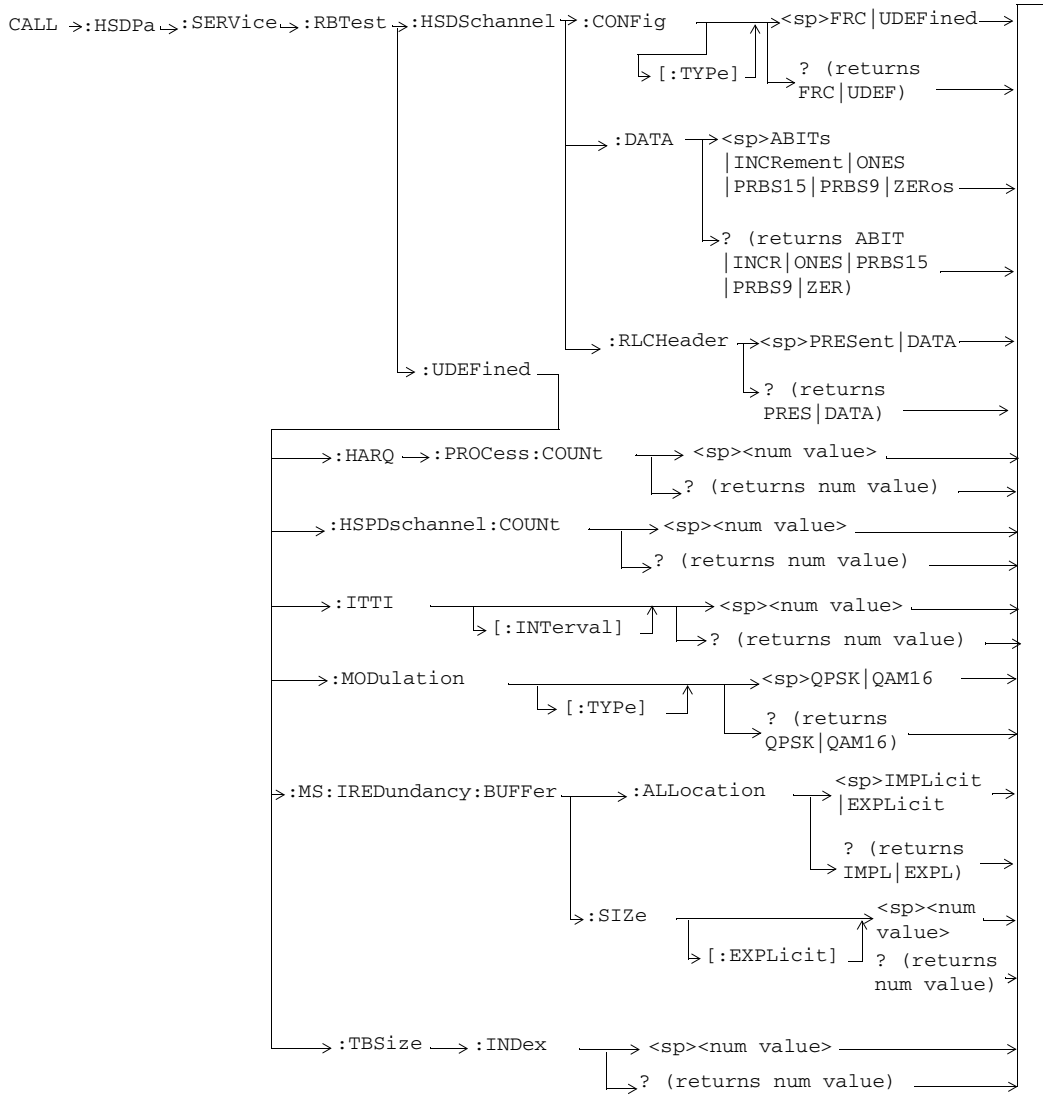
CALL:HSDPa

This section is only applicable to the lab application or a feature-licensed test application.



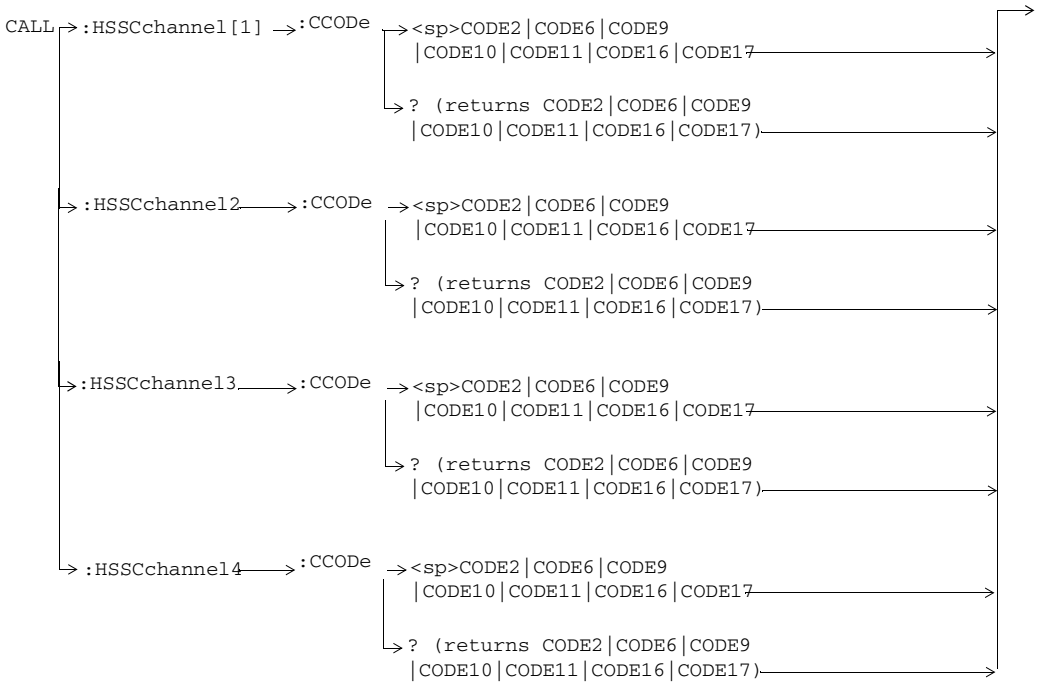

CALL
:HSDPa
:MS
:HSDSchannel:CATegory
:CONTrol:AUTO
<sp>1|0N|0|0FF
? (returns 1|0)
:MANual
<sp><num value>
? (returns num value)
:REPorted
:ACK
? (returns num value)
:ALL
? (returns 6 comma separated values)
:BLOCks
? (returns num value)
:HBLerror:RATio
? (returns num value)
:HSDSchannel:CATegory
? (returns num value)
:IBTHroughput
? (returns num value)
:NACK
? (returns num value)
:SDTX
? (returns num value)


CALL
:HSDPa
:SERVice
:PSData
:CQI
[:VALue]
<sp><num value>
? (returns num value)
:HSPDschannel:CCODe
<sp>CODE7|CODE8
|CODE9|CODE10
? (returns CODE7
|CODE8|CODE9|CODE10)
:RBTest
:CNDomain
<sp>CSDomain|PSDomain
? (returns CSD|PSD)
:FRC
:TYPE
<sp>QAM1|QAM2|QAM3
|QPSK1|QPSK2|QPSK3|QPSK4|QPSK5
? (returns QAM1|QAM2|QAM3
|QPSK1|QPSK2|QPSK3|QPSK4|QPSK5)
:MACD
:PDUSize
<sp>BITS112|BITS336
|BITS656|MHSMax
? (returns
BITS112|BITS336|BITS
656|MHSM)
:HLOopback:STATe
<sp>1|0N|0|0FF
? (returns 1|0)
:HSPDschannel:CCODe
<sp>CODE7|CODE8
|CODE9|CODE10
? (returns CODE7
|CODE8|CODE9|CODE10)


CALL
:HSDPa
:SERVice
:RBTest
:HSDSchannel
:CONFig
[:TYPe]
<sp>FRC|UDEFined
? (returns FRC|UDEF)
:DATA
<sp>ABITs |INCRement|ONES |PRBS15|PRBS9|ZERos
? (returns ABIT |INCR|ONES|PRBS15 |PRBS9|ZER)
:RLCHeader
<sp>PRESent|DATA
? (returns PRES|DATA)
:UDEFined
:HARQ
:PROCess:COUNt
<sp><num value>
? (returns num value)
:HSPDschannel:COUNt
<sp><num value>
? (returns num value)
:ITTI
[:INTerval]
<sp><num value>
? (returns num value)
:MODulation
[:TYPe]
<sp>QPSK|QAM16
? (returns QPSK|QAM16)
:MS:IREDundancy:BUFFer
:ALLocation
<sp>IMPLicit |EXPLicit
? (returns IMPL|EXPL)
:SIZe
[:EXPLicit]
<sp><num value>
? (returns num value)
:TBSize
:INDex
<sp><num value>
? (returns num value)

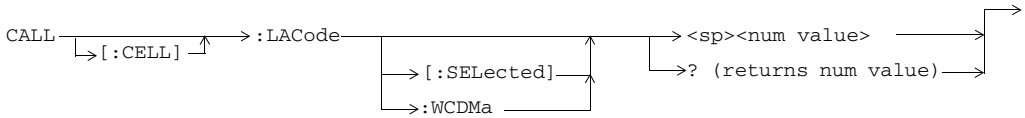
CALL:HSSCchannel

This section is only applicable to a feature-licensed test application.

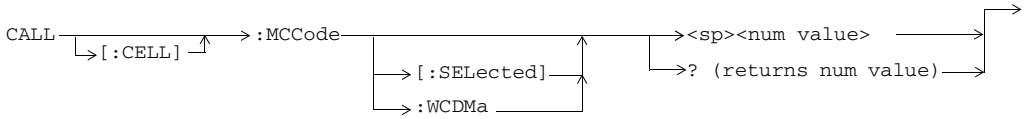


CALL:IDENtity

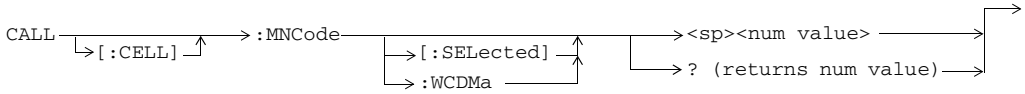
CALL:LACode



CALL:MCCode

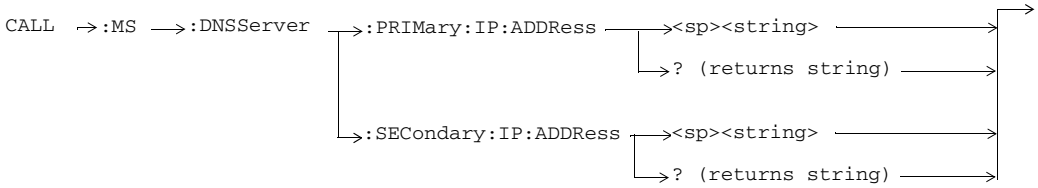


CALL:MNCode

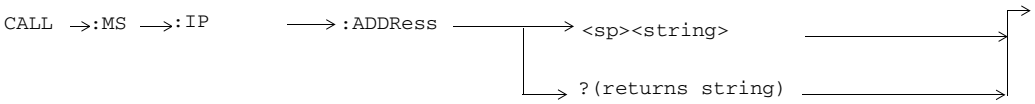


CALL:MS:DNSServer

This section is only applicable to the lab application.

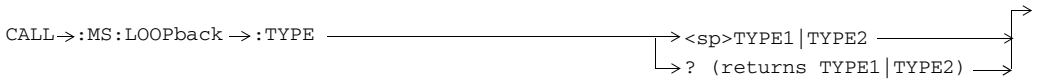


CALL:MS:IP:ADDRess

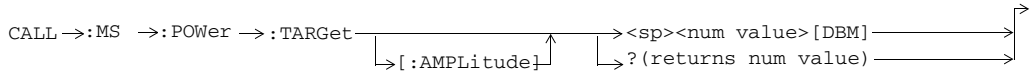


All commands shown in this diagram are only applicable to the lab application.

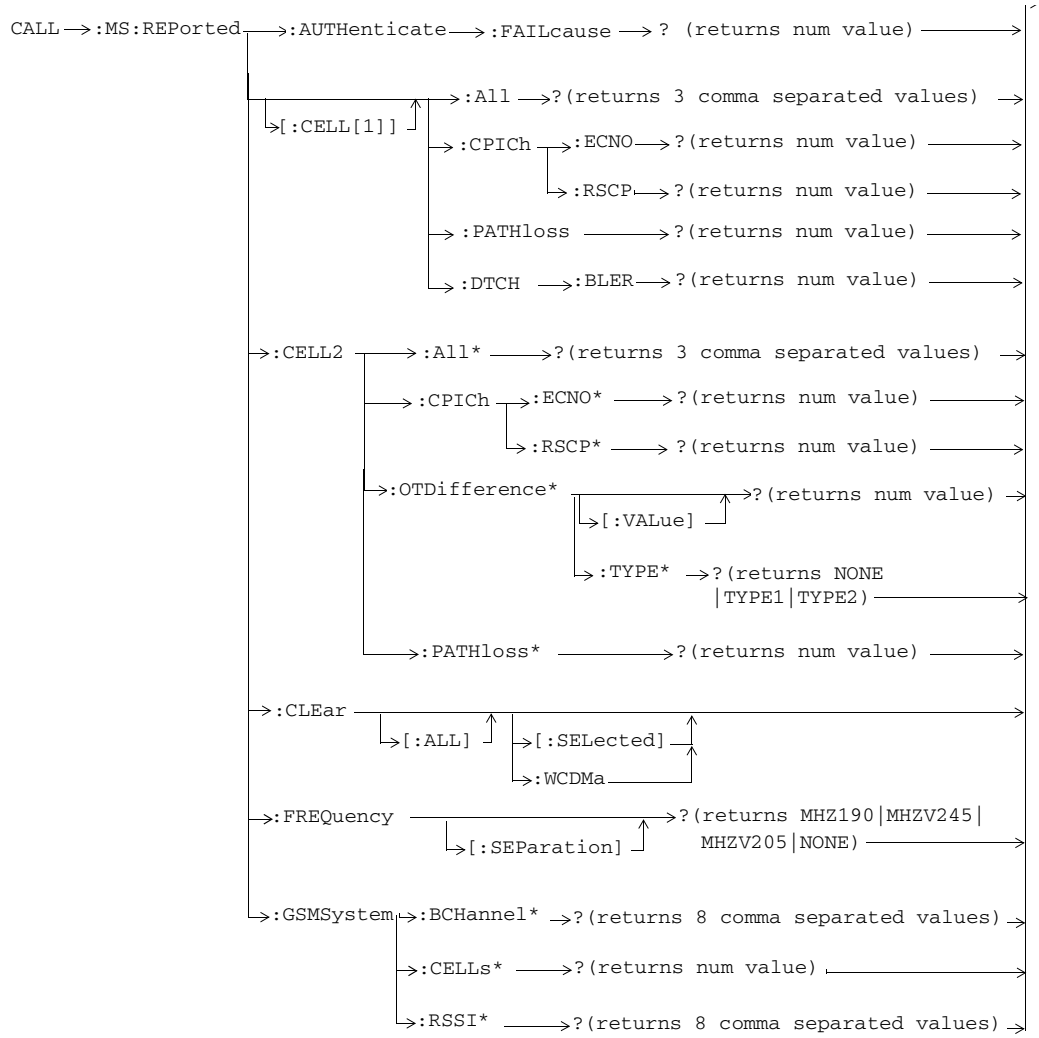
CALL:MS:LOOPback



CALL:MS:POWer

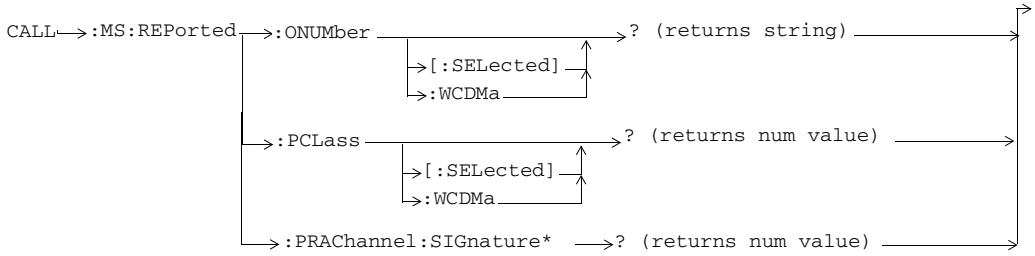


CALL:MS:REPorted



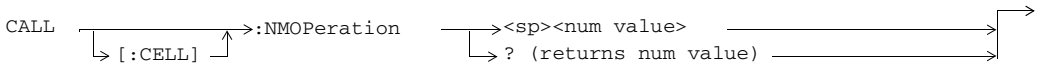
* This query is only applicable to the lab application.

* This command is only applicable to the lab application.

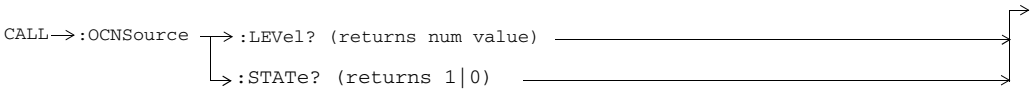


* This command is only applicable to the lab application.

CALL:NMOPeration

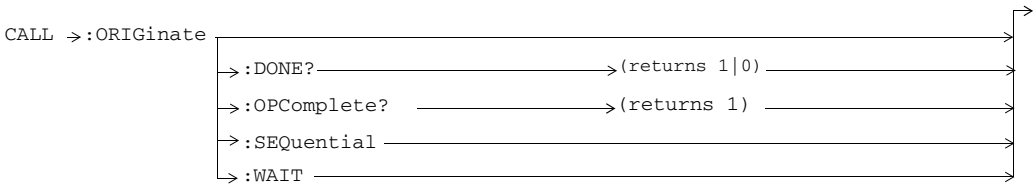


CALL:OCNSource

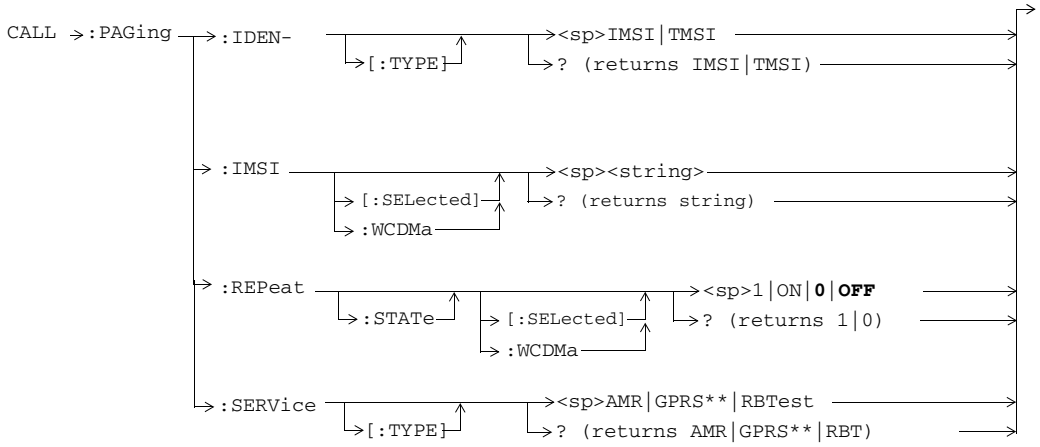


CALL:OPERating

CALL:ORIGinate

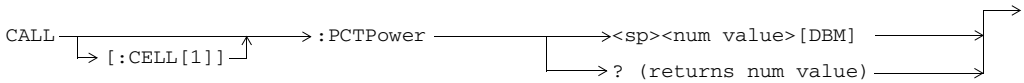


CALL:PAGing

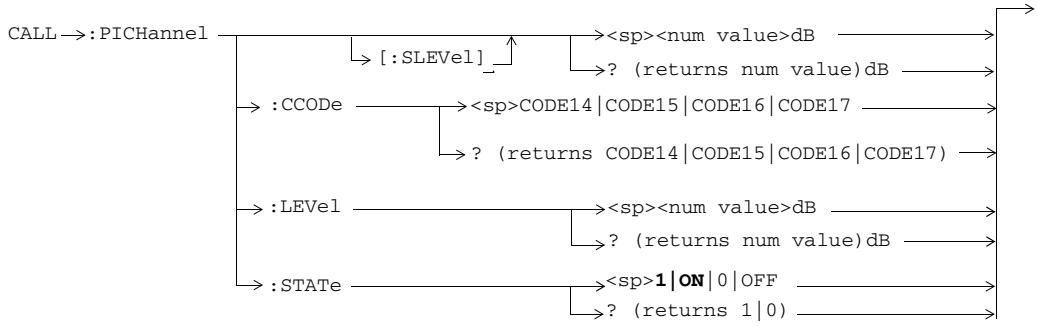


** This setting/query return is only applicable to the lab application.

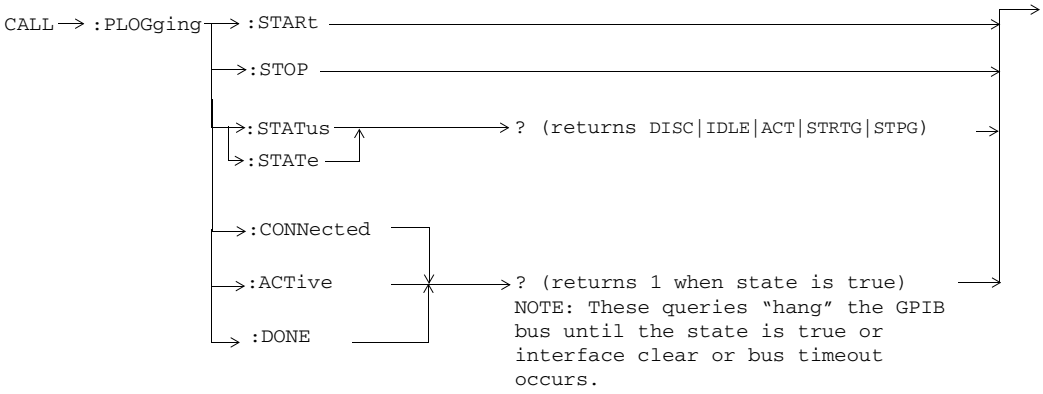
CALL:PCTPower



CALL:PICHannel

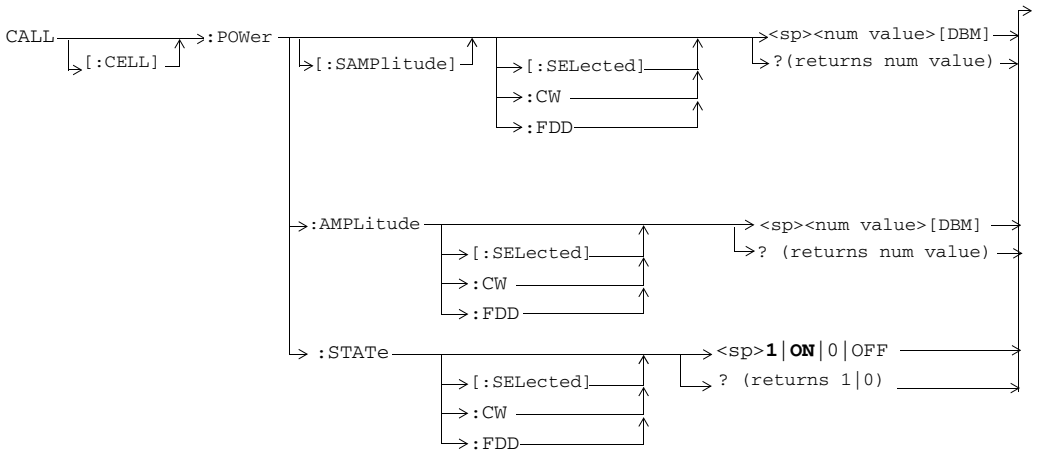


CALL:PLOGging

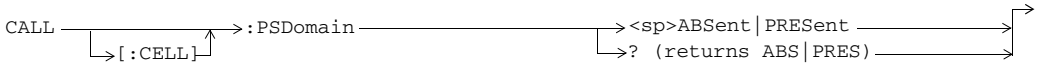


All commands shown in this diagram are only applicable to the lab application.

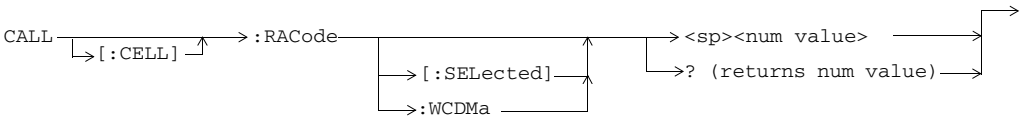
CALL:POWer



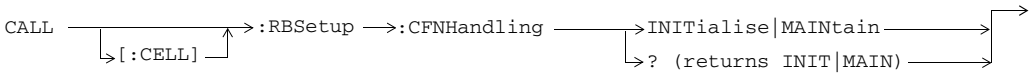
CALL:PSDomain



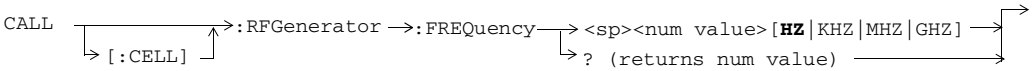
CALL:RACode



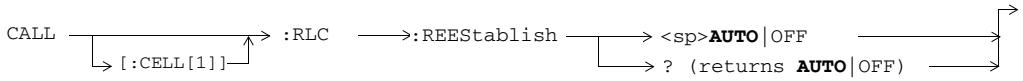
CALL:RBSetup



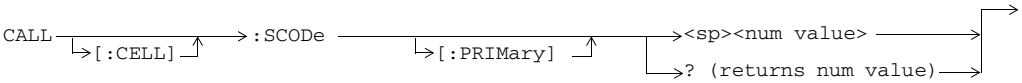
CALL:RFGenerator



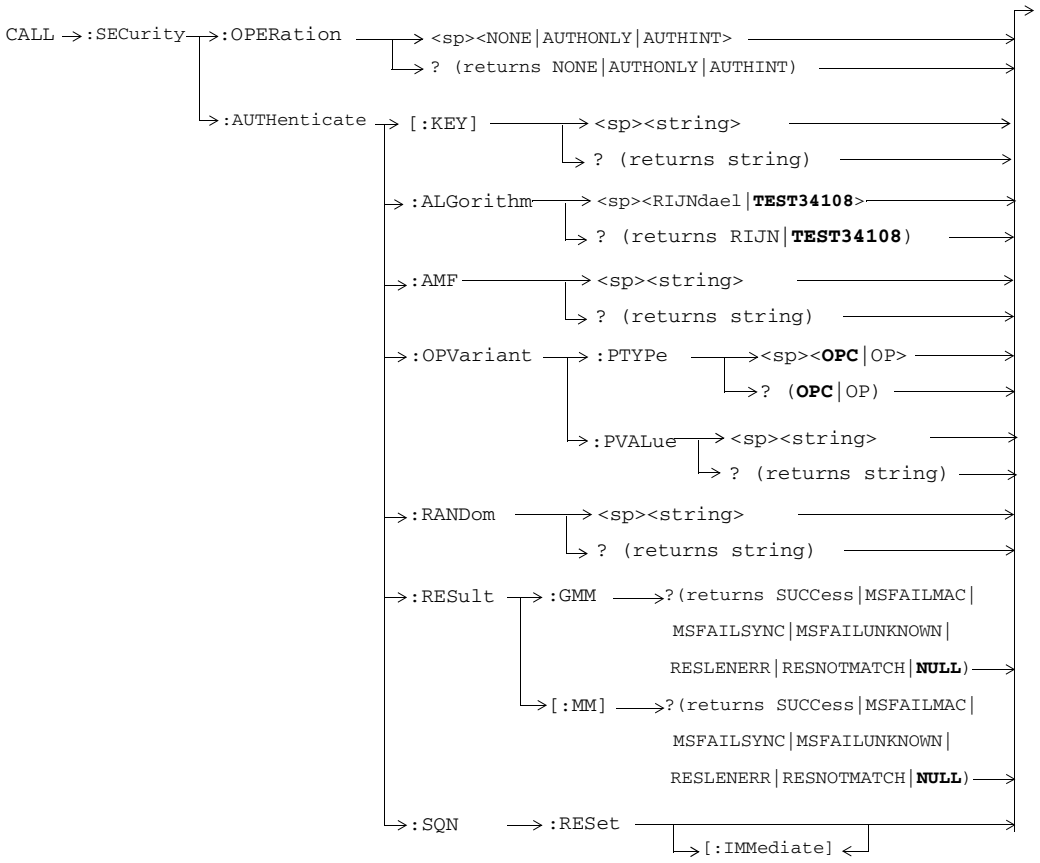
CALL:RLC



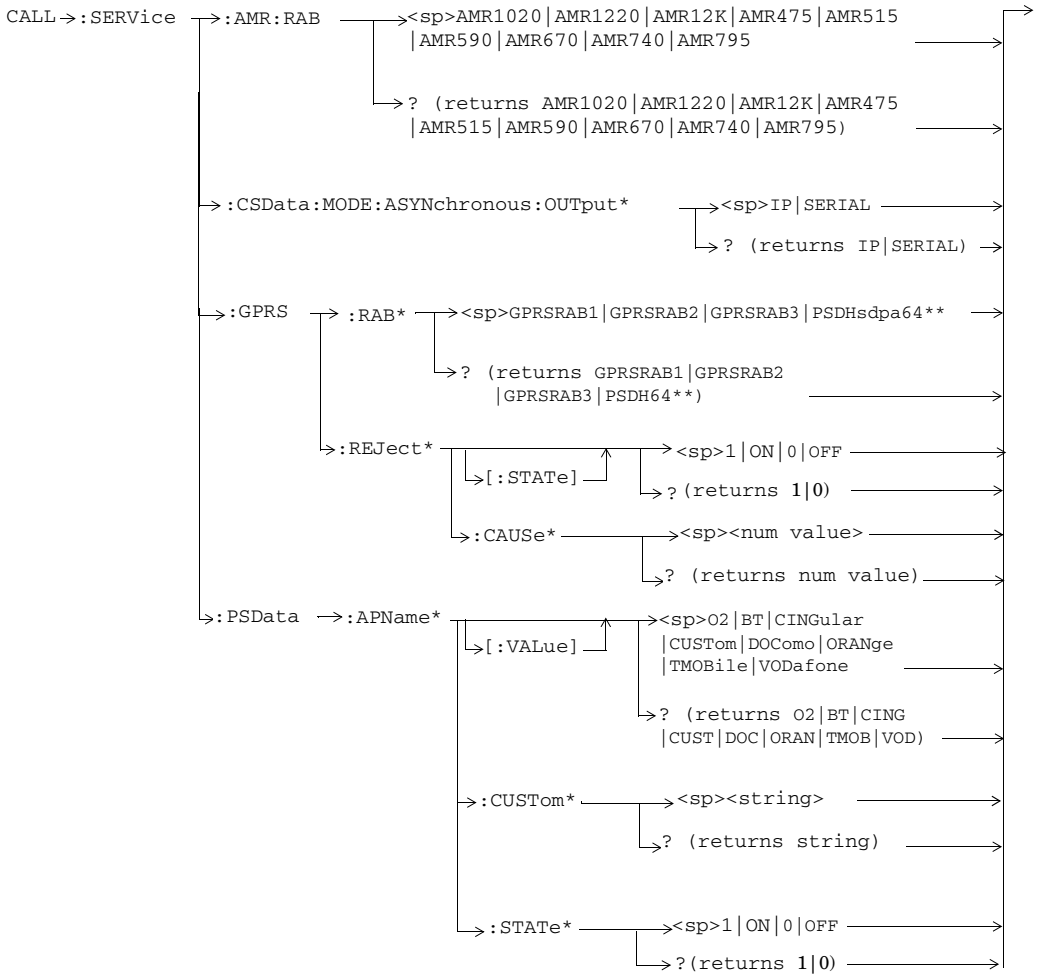
CALL:SCODe



CALL:SECurity

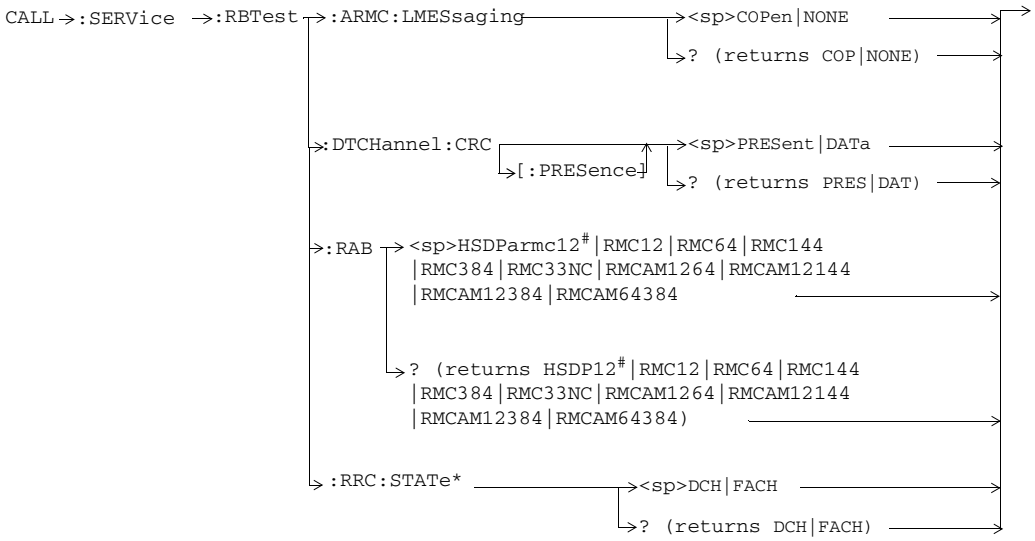


CALL:SERVice



* Only applicable to the lab application.

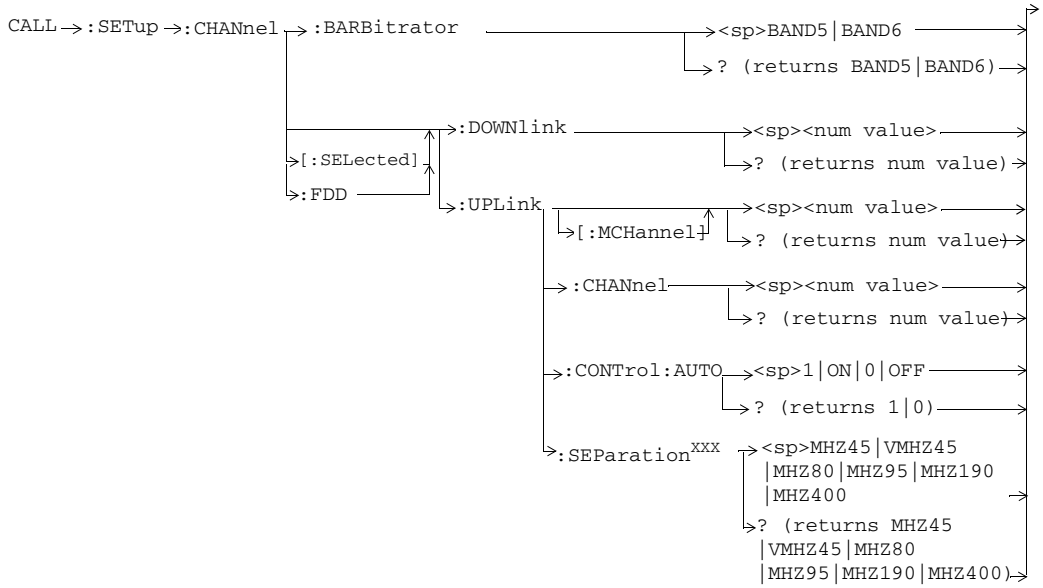
** Only applicable to the E6703D.



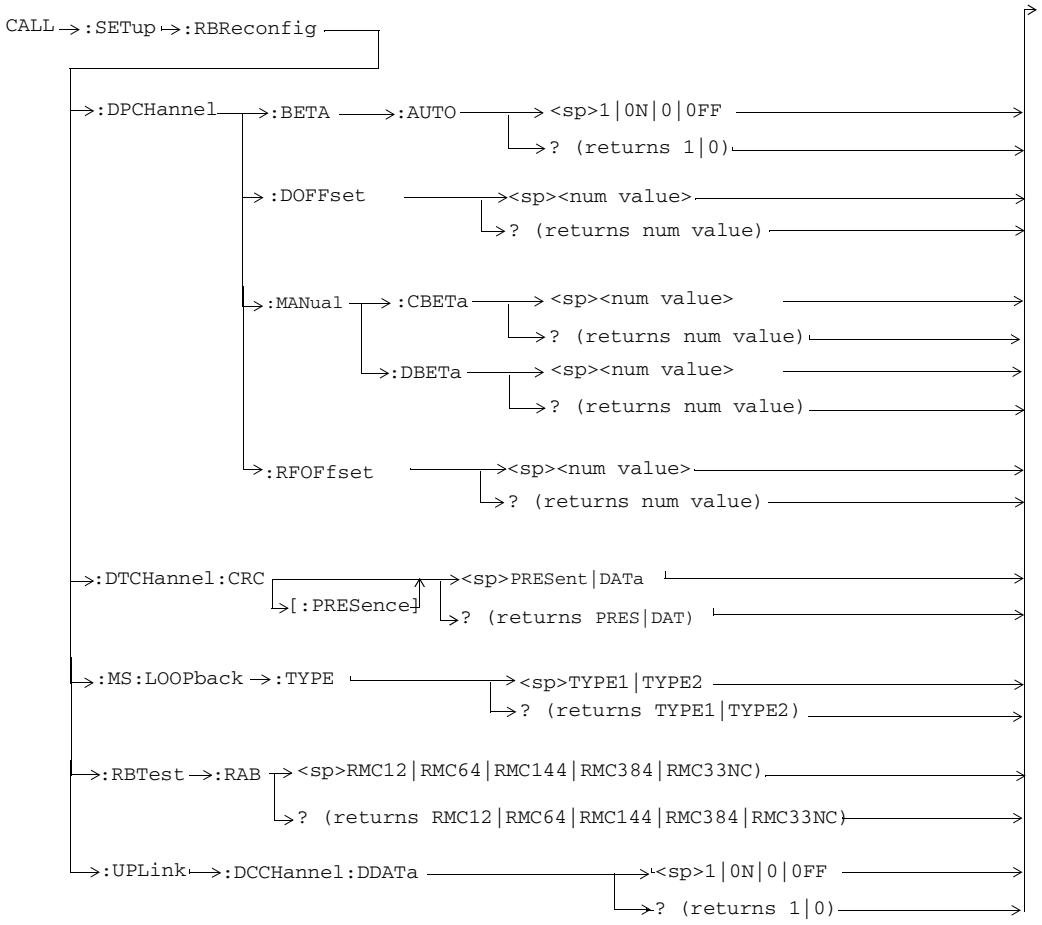
* Only applicable to the lab application.

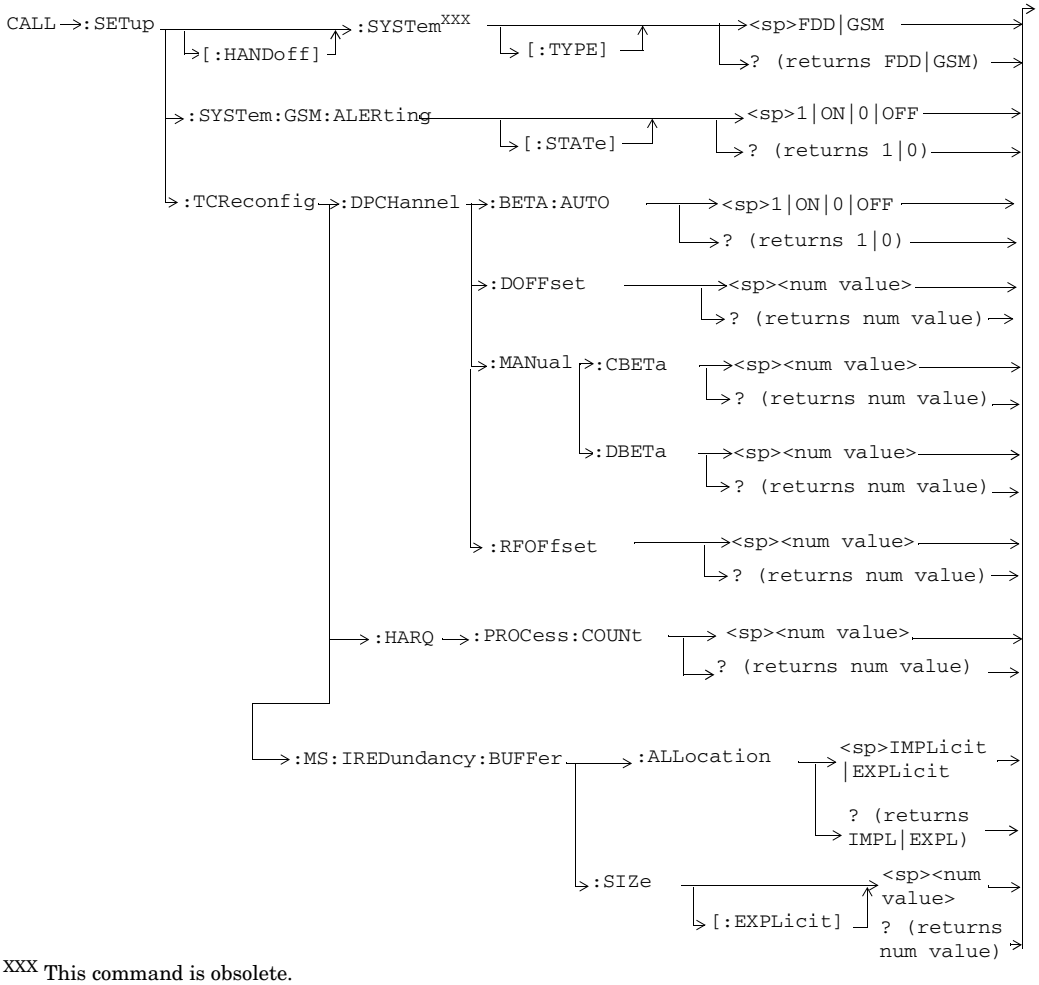
Only applicable to the lab application or feature-licensed test application.

CALL:SETup

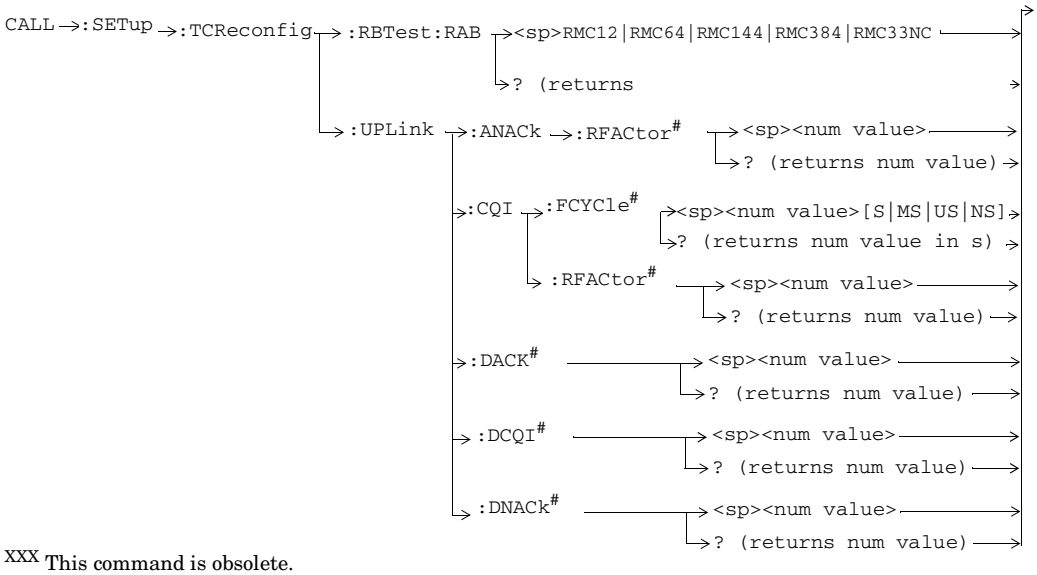


XXX This command is obsolete.


CALL
:SETup
:RBReconfig
:DPCHannel
:BETA
:AUTO
<sp>1|0N|0|0FF
? (returns 1|0)
:DOFFset
<sp><num value>
? (returns num value)
:MANual
:CBETa
<sp><num value>
? (returns num value)
:DBETa
<sp><num value>
? (returns num value)
:RFOFfset
<sp><num value>
? (returns num value)
:DTCHannel:CRC
[:PRESence]
<sp>PRESent|DATa
? (returns PRES|DAT)
:MS:LOOPback
:TYPE
<sp>TYPE1|TYPE2
? (returns TYPE1|TYPE2)
:RBTest
:RAB
<sp>RMC12|RMC64|RMC144|RMC384|RMC33NC)
? (returns RMC12|RMC64|RMC144|RMC384|RMC33NC)
:UPLink
:DCCHannel:DDATa
<sp>1|0N|0|0FF
? (returns 1|0)



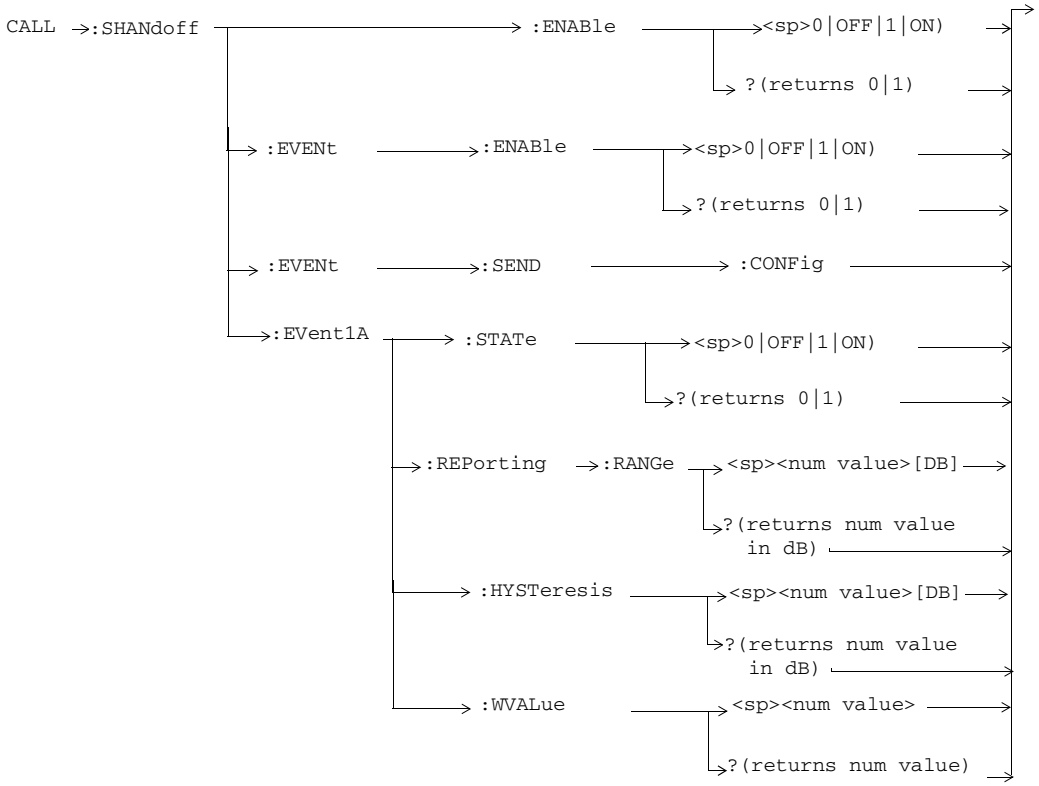
[XXX] This command is obsolete.



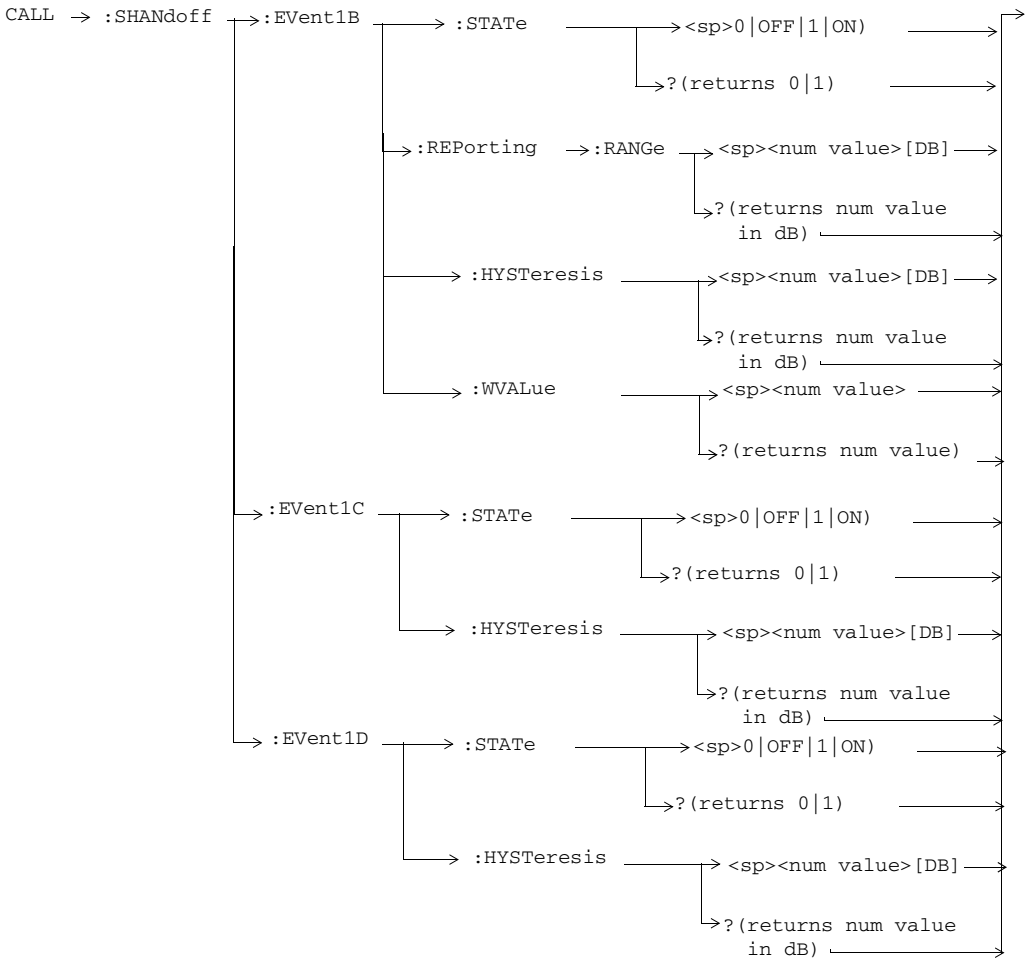
XXX This command is obsolete.

Only applicable to the lab application or feature-licensed test application

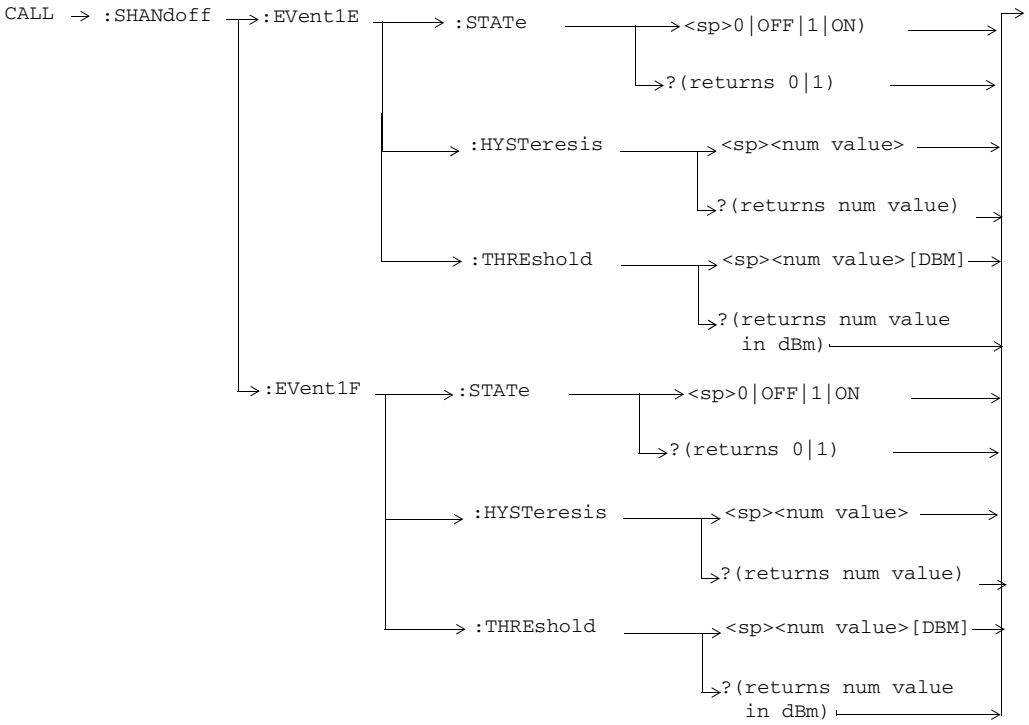
CALL:SHANdoff



All commands shown in this diagram are only applicable to the lab application.



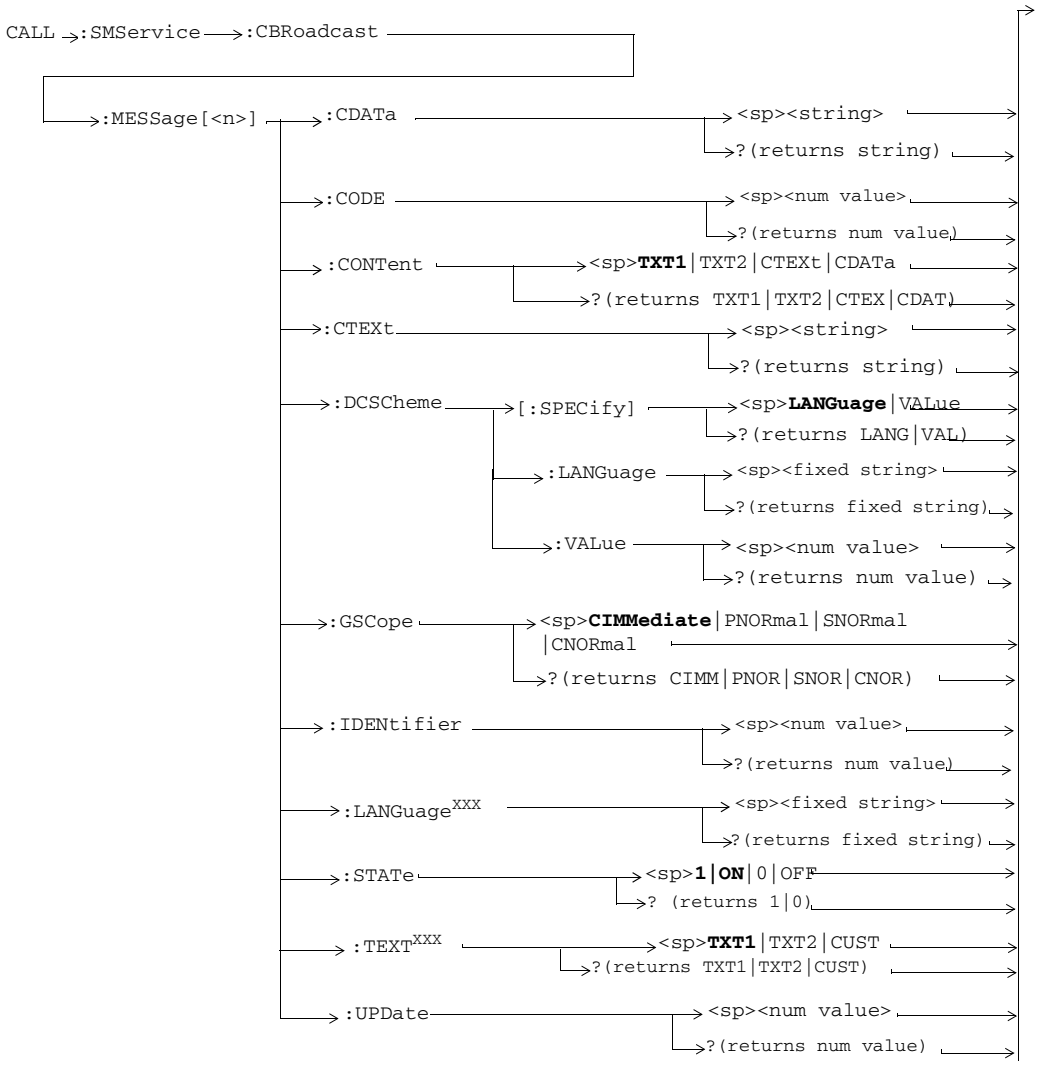
All commands shown in this diagram are only applicable to the lab application.



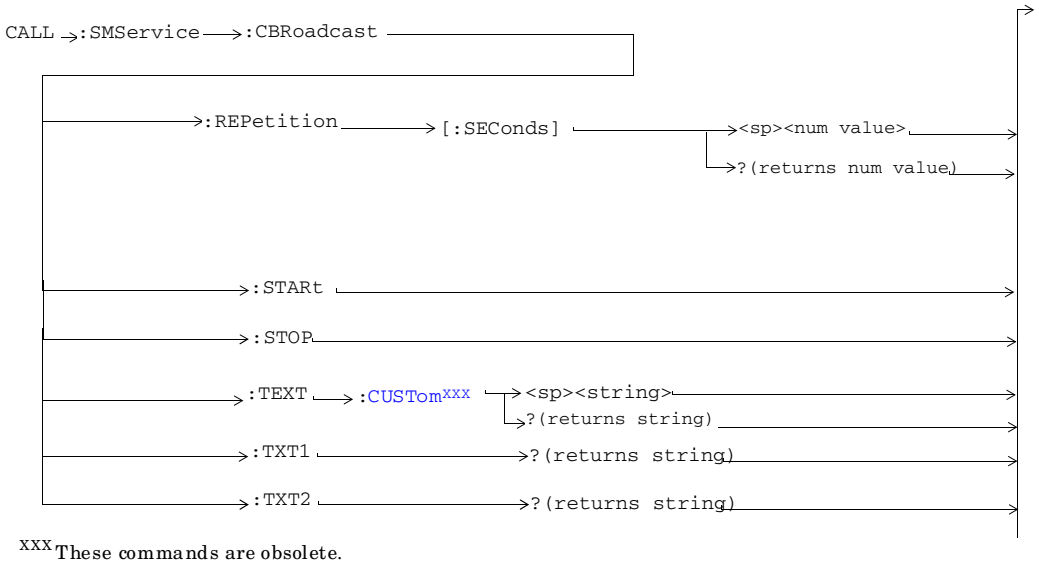
All commands shown in this diagram are only applicable to the lab application.

CALL:SMService

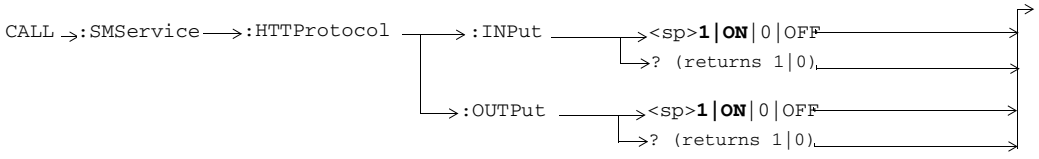
This section is only applicable to the lab application.

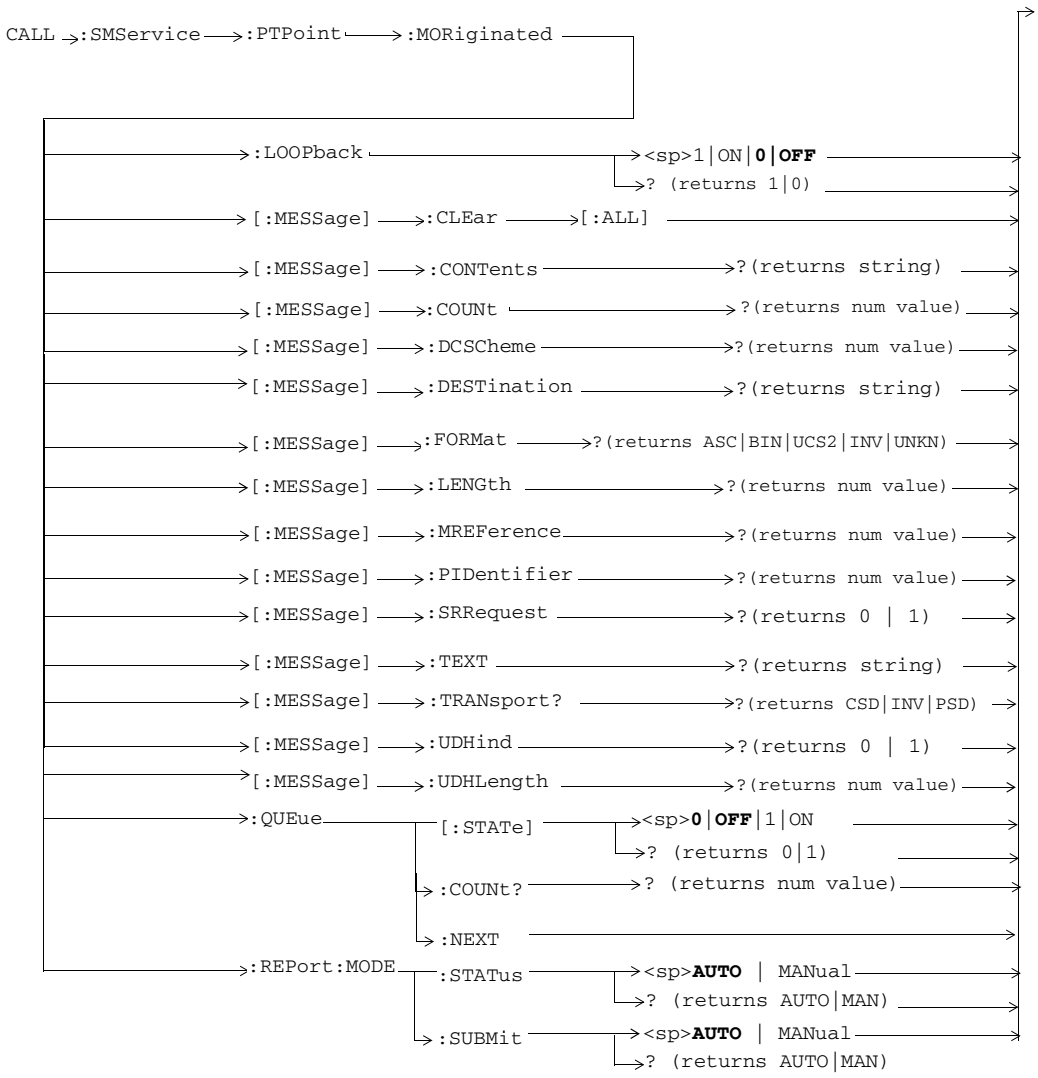


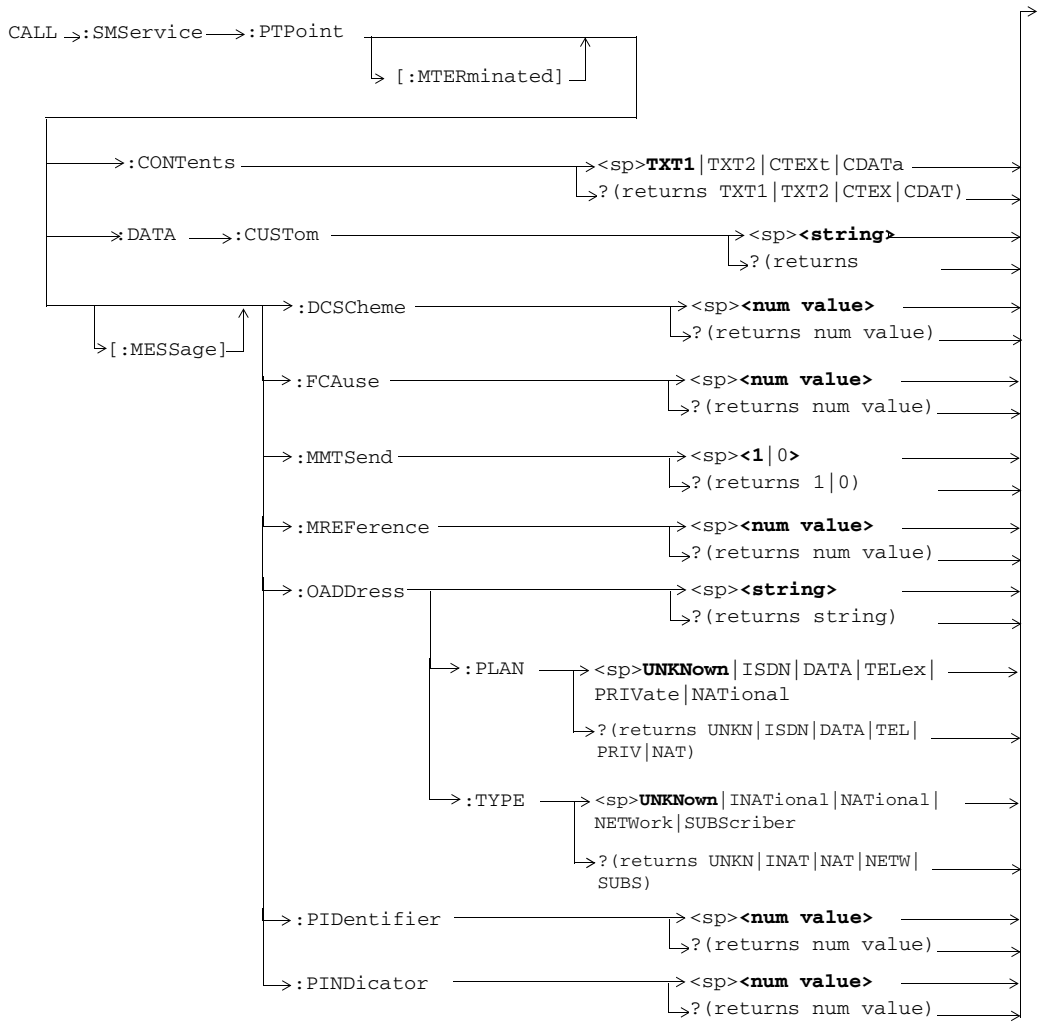
XXX These commands are obsolete.

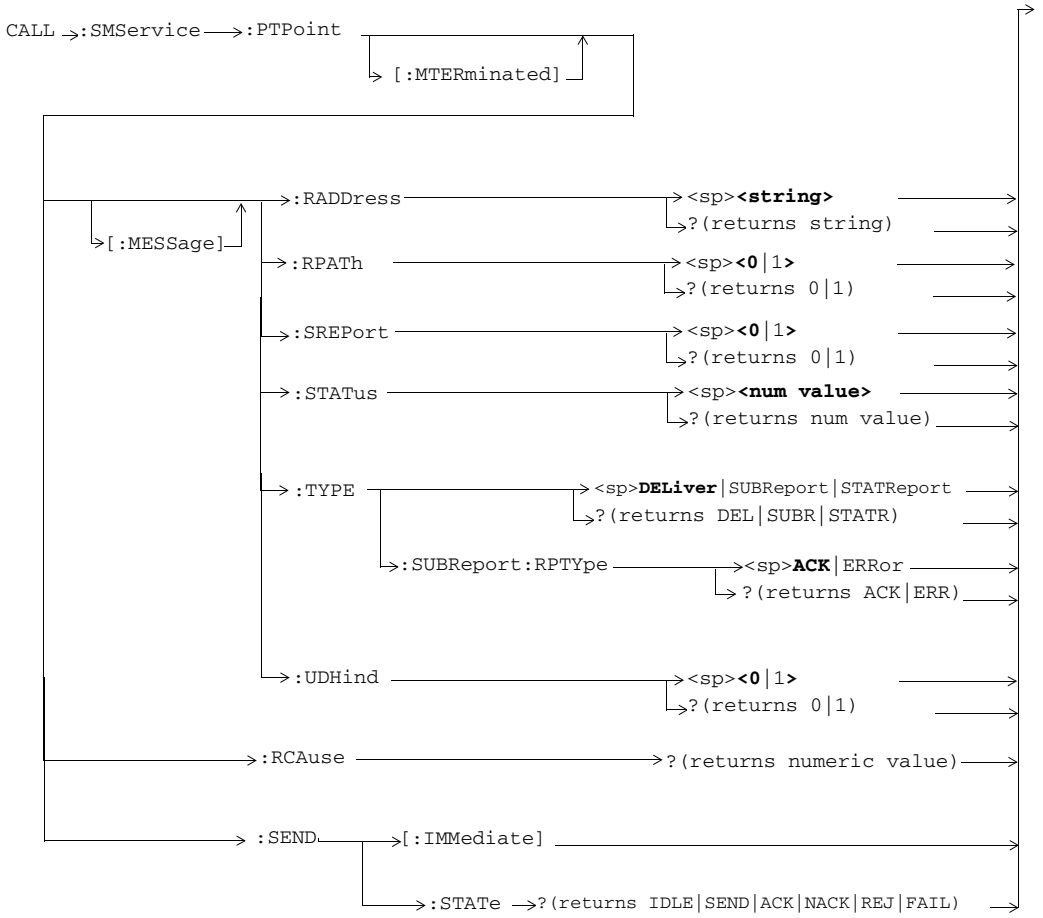


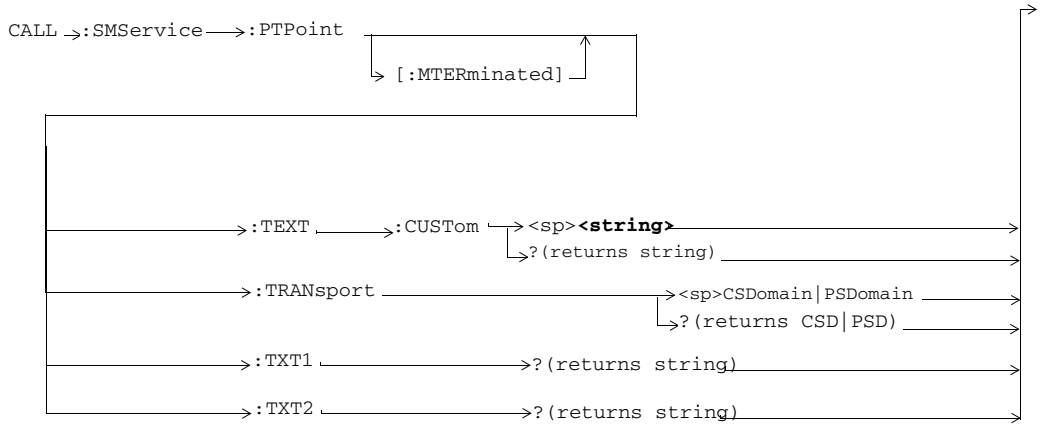
XXX These commands are obsolete.



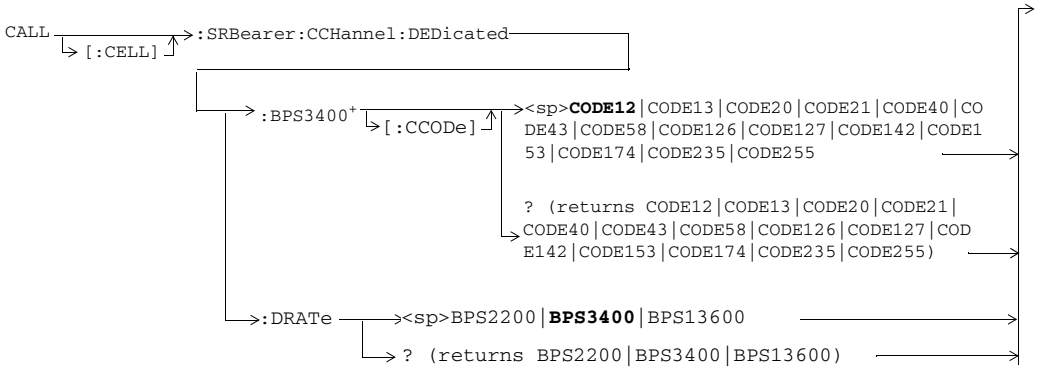

CALL
:SMService
:PTPoint
:MORiginated
:LOOPback
<sp>1|ON|0|OFF
? (returns 1|0)
[:MESSage]
:CLEar
[:ALL]
:CONTents
?(returns string)
:COUNt
?(returns num value)
:DCSCheme
:DESTination
:FORMat
?(returns ASC|BIN|UCS2|INV|UNKN)
:LENGth
:MREFerence
:PIDentifier
:SRRequest
?(returns 0 | 1)
:TEXT
:TRANsport?
?(returns CSD|INV|PSD)
:UDHind
:UDHLength
:QUEue
[:STATe]
<sp>0|OFF|1|ON
? (returns 0|1)
:COUNt?
? (returns num value)
:NEXT
:REPort:MODE
:STATus
<sp>AUTO | MANual
? (returns AUTO|MAN)
:SUBMit
<sp>AUTO | MANual
? (returns AUTO|MAN)


CALL
:SMService
:PTPoint
[:MTERminated]
:CONTents
<sp>TXT1|TXT2|CTEXt|CDATa
?(returns TXT1|TXT2|CTEX|CDAT)
:DATA
:CUSTom
<sp><string>
?(returns
[:MESSage]
:DCSCheme
<sp><num value>
?(returns num value)
:FCAuse
<sp><num value>
?(returns num value)
:MMTSend
<sp><1|0>
?(returns 1|0)
:MREFerence
<sp><num value>
?(returns num value)
:OADDress
<sp><string>
?(returns string)
:PLAN
<sp>UNKNown|ISDN|DATA|TELex|PRIVate|NATional
?(returns UNKN|ISDN|DATA|TEL|PRIV|NAT)
:TYPE
<sp>UNKNown|INATional|NATional|NETWork|SUBScriber
?(returns UNKN|INAT|NAT|NETW|SUBS)
:PIDentifier
<sp><num value>
?(returns num value)
:PINDicator
<sp><num value>
?(returns num value)


CALL
:SMService
:PTPoint
[:MTERminated]
[:MESSage]
:RADDress
<sp><string>
?(returns string)
:RPATh
<sp><0|1>
?(returns 0|1)
:SREPort
<sp><0|1>
?(returns 0|1)
:STATus
<sp><num value>
?(returns num value)
:TYPE
<sp>DELiver|SUBReport|STATReport
?(returns DEL|SUBR|STATR)
:SUBReport:RPTYpe
<sp>ACK|ERRor
?(returns ACK|ERR)
:UDHind
<sp><0|1>
?(returns 0|1)
:RCAuse
?(returns numeric value)
:SEND
[:IMMediate]
:STATe
?(returns IDLE|SEND|ACK|NACK|REJ|FAIL)

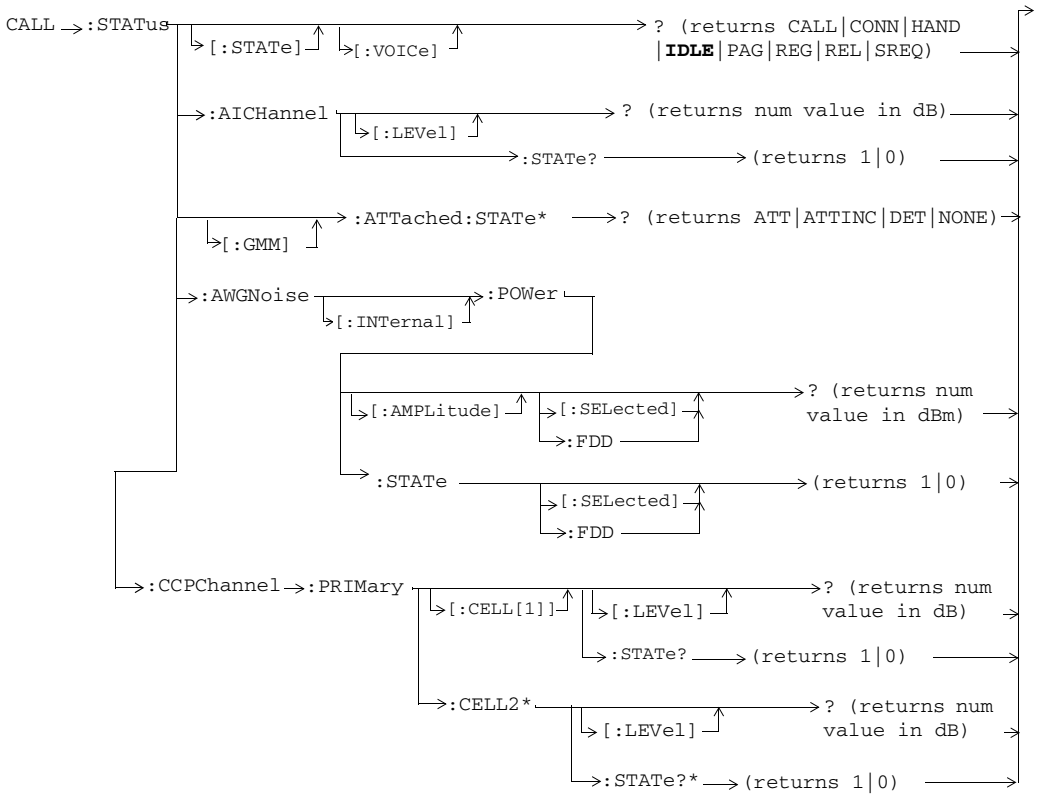


CALL:SRBearer

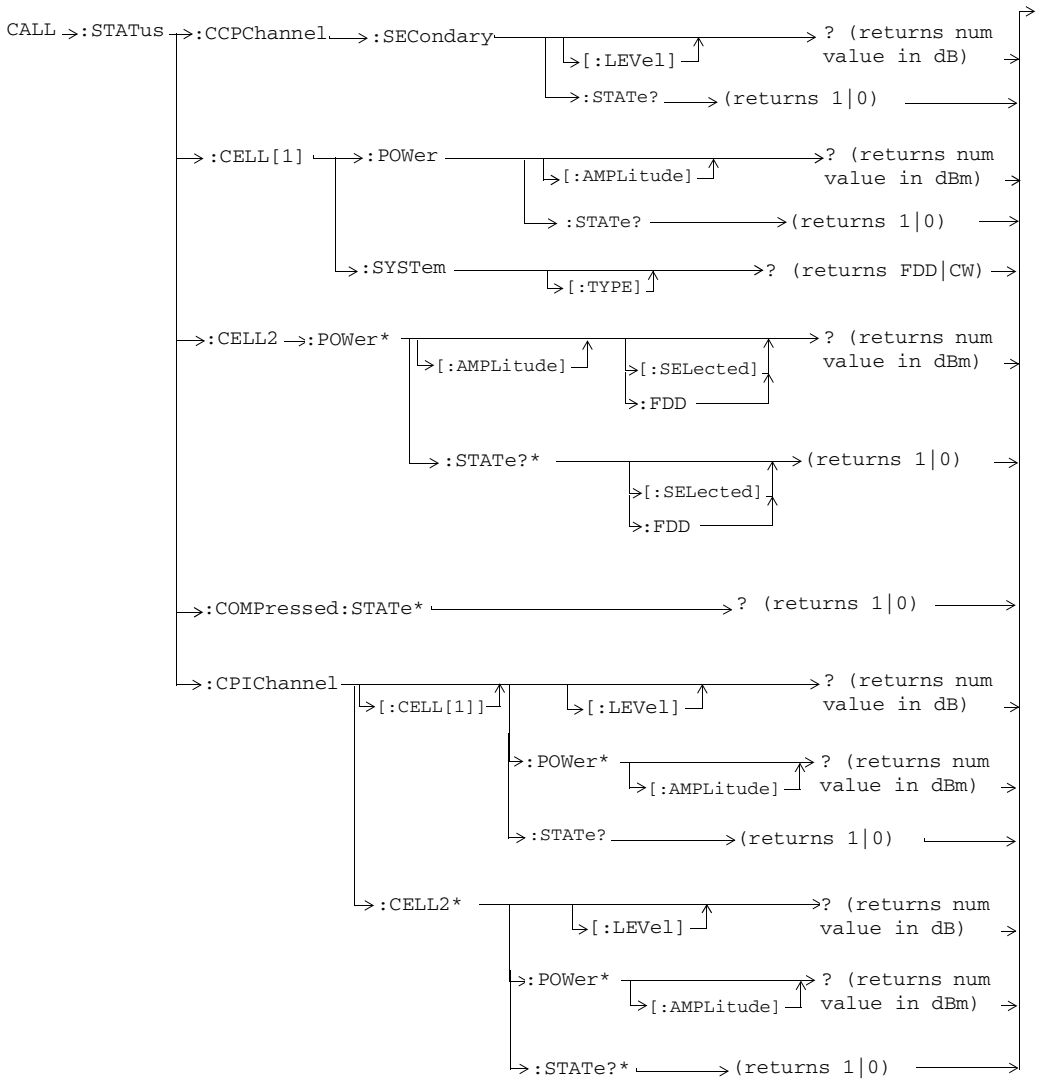


+ This command is only applicable to the test application.

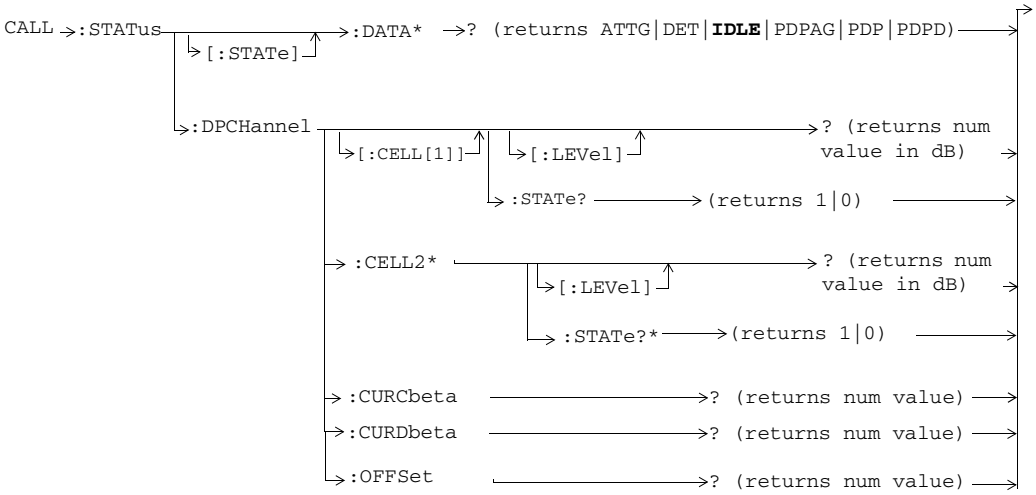
CALL:STATus



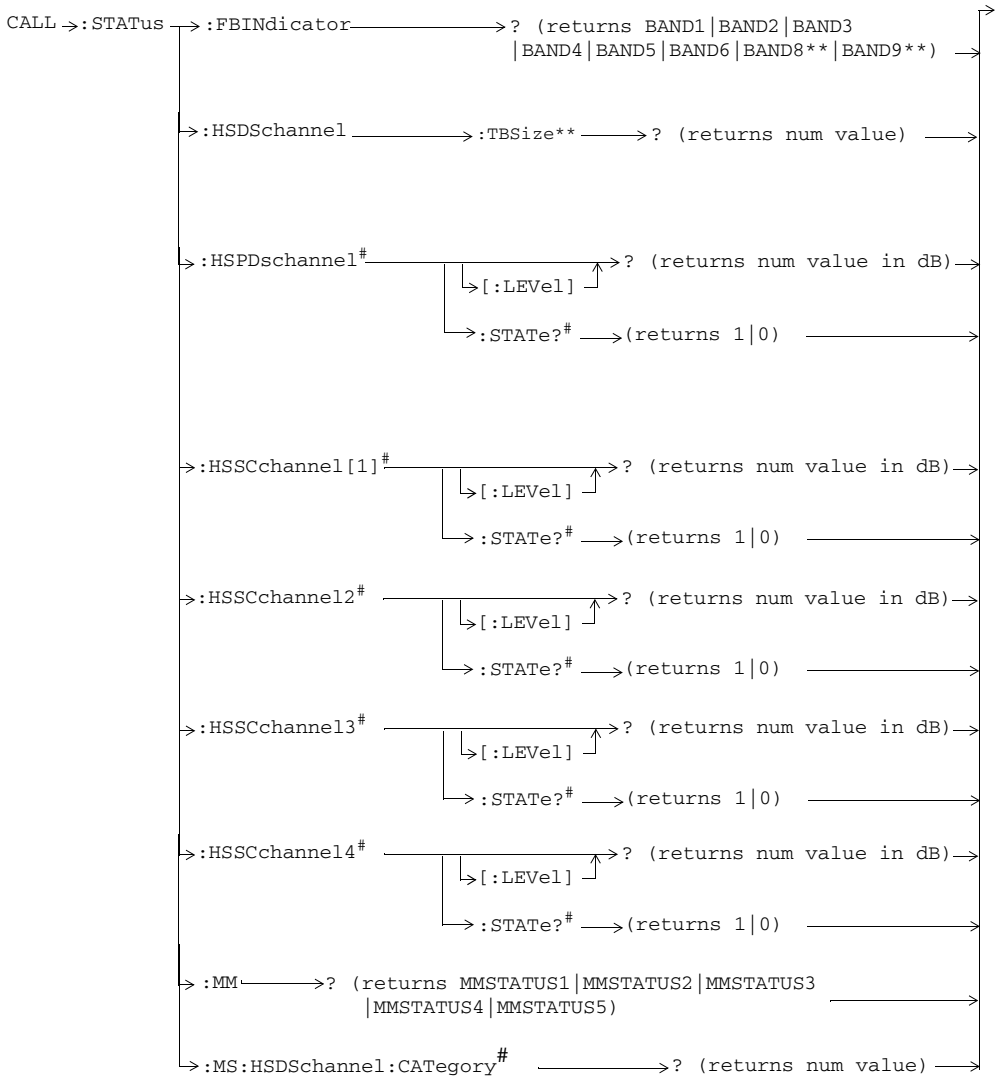
* Only applicable to the lab application.



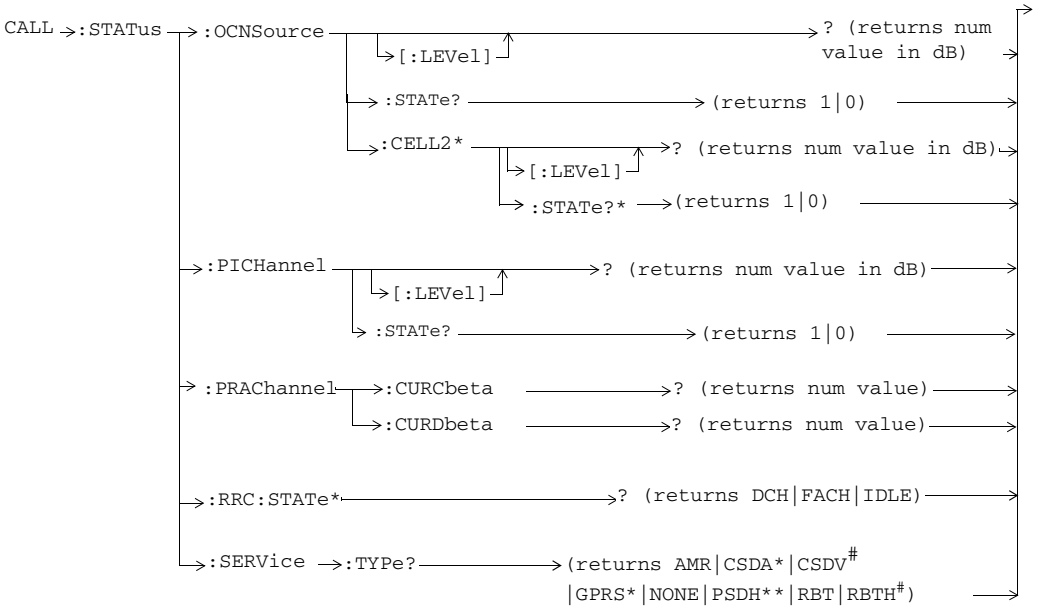
* Only applicable to the lab application.



* Only applicable to the lab application.



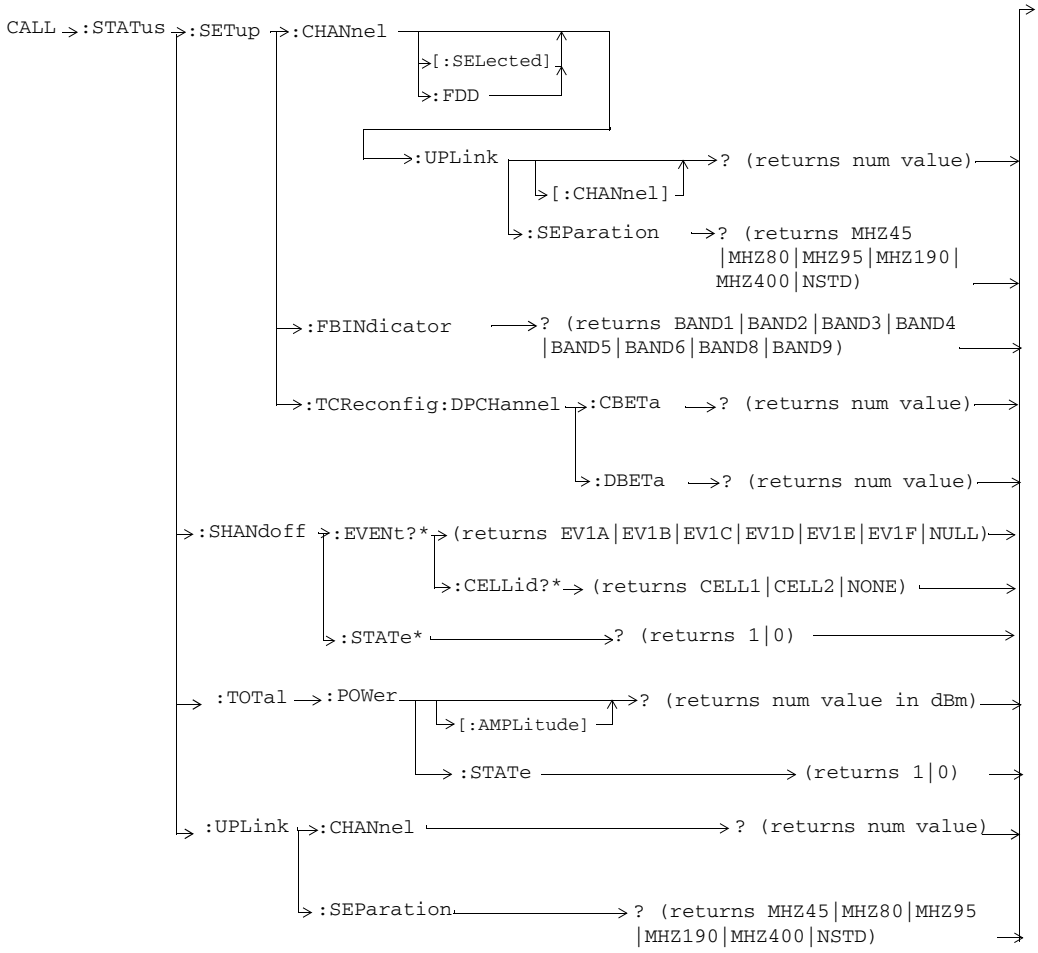
Only applicable to the lab application or feature-licensed test application.



* Only applicable to the lab application.

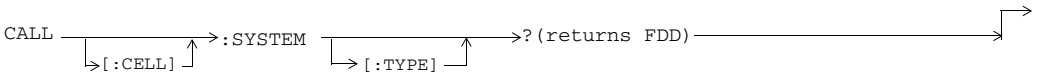
** Only applicable to the E6703D.

Only applicable to the lab application or feature-licensed test application.

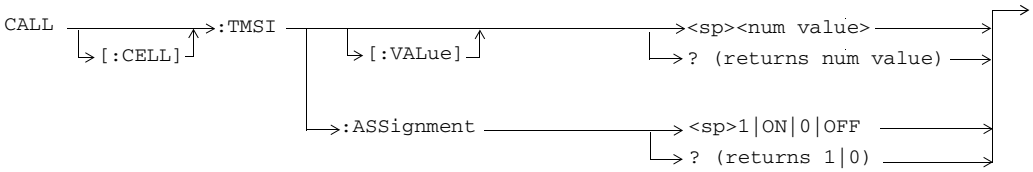


* Only applicable to the lab application.

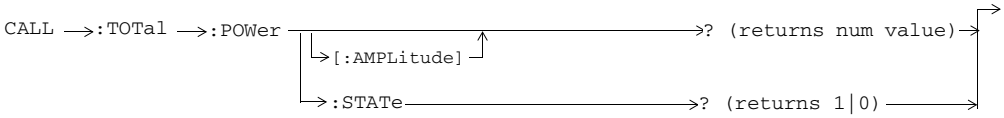
CALL:SYSTem



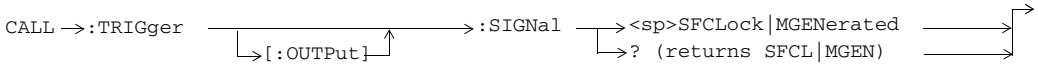
CALL:TMSI



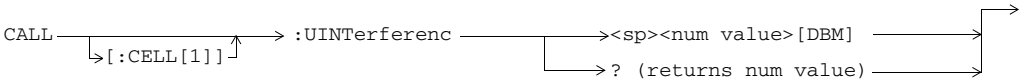
CALL:TOTal:POWer



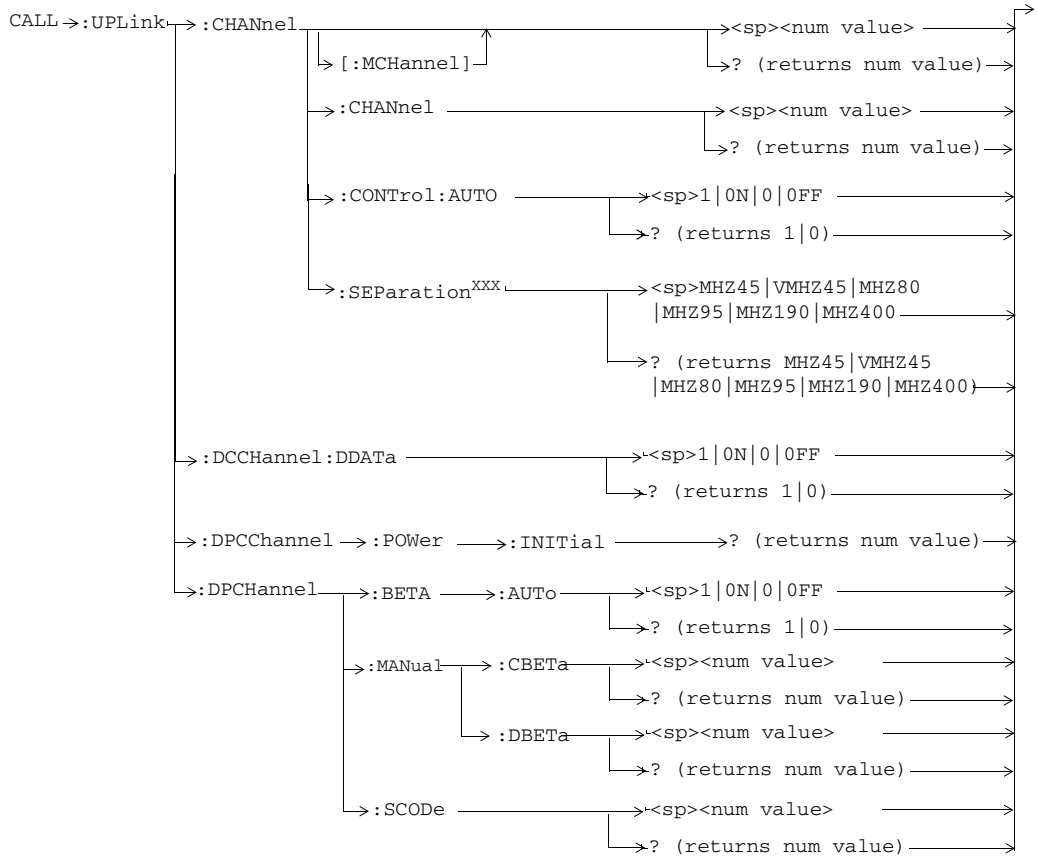
CALL:TRIGger



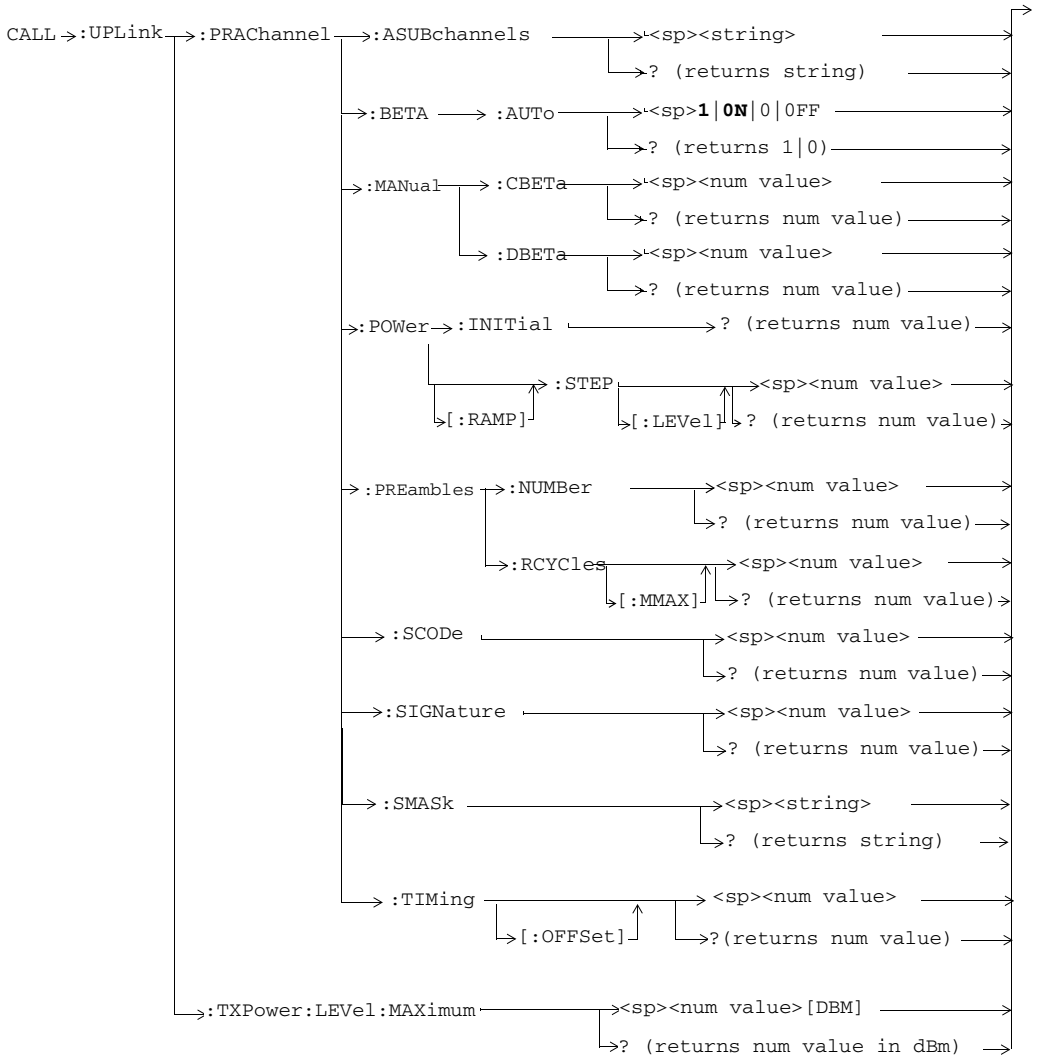
CALL:UINTerferenc



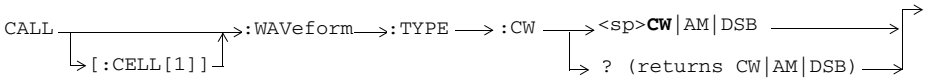
CALL:UPLink



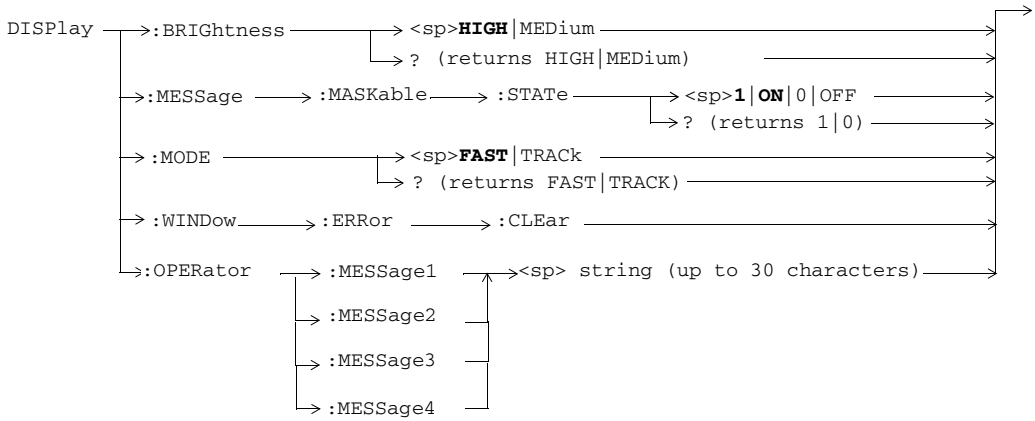
XXX This command is obsolete.


CALL
:UPLink
:PRAChannel
:ASUBchannels
<sp><string>
? (returns string)
:BETA
:AUTo
<sp>1|ON|0|OFF
? (returns 1|0)
:MANual
:CBETa
<sp><num value>
? (returns num value)
:DBETa
<sp><num value>
? (returns num value)
:POWer
:INITial
? (returns num value)
:STEP
<sp><num value>
[:RAMP]
[:LEVel]
? (returns num value)
:PREambles
:NUMBer
<sp><num value>
? (returns num value)
:RCYCles
<sp><num value>
[:MMAX]
? (returns num value)
:SCODe
<sp><num value>
? (returns num value)
:SIGNature
<sp><num value>
? (returns num value)
:SMASk
<sp><string>
? (returns string)
:TIMing
<sp><num value>
[:OFFSet]
?(returns num value)
:TXPower:LEVel:MAXimum
<sp><num value>[DBM]
? (returns num value in dBm)

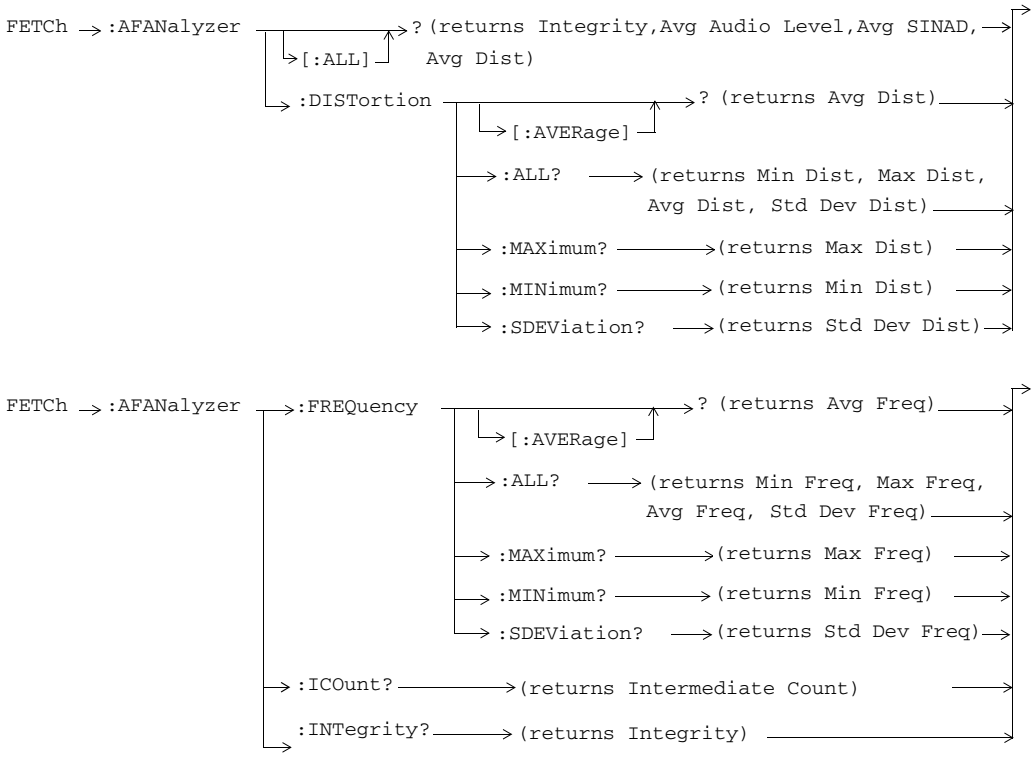
CALL:WAVeform

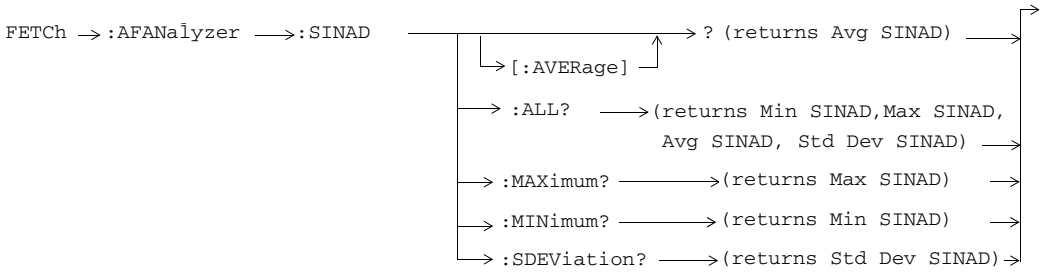


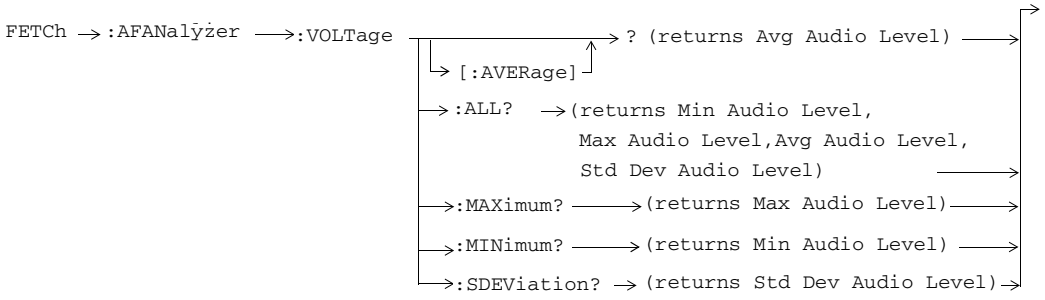
DISPlay


DISPlay
:BRIGhtness
<sp>HIGH|MEDium
? (returns HIGH|MEDium)
:MESSage
:MASKable
:STATe
<sp>1|ON|0|OFF
? (returns 1|0)
:MODE
<sp>FAST|TRACk
? (returns FAST|TRACK)
:WINDow
:ERRor
:CLEar
:OPERator
:MESSage1
:MESSage2
:MESSage3
:MESSage4
<sp> string (up to 30 characters)

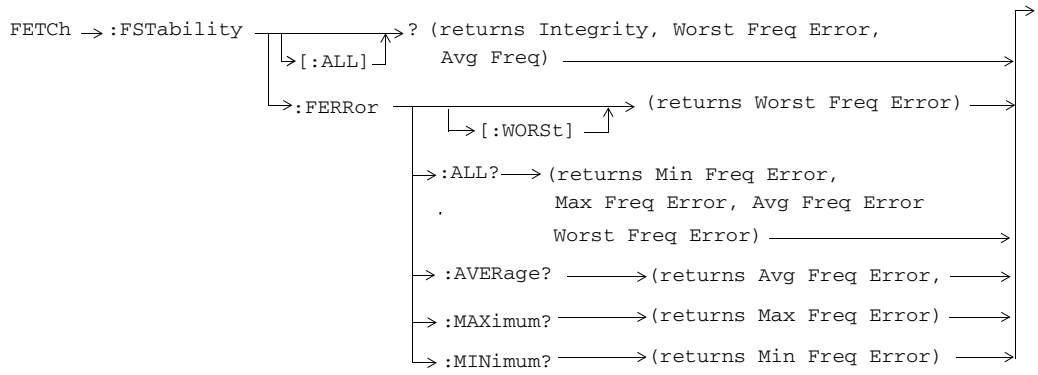
FETCh:AFANalyzer

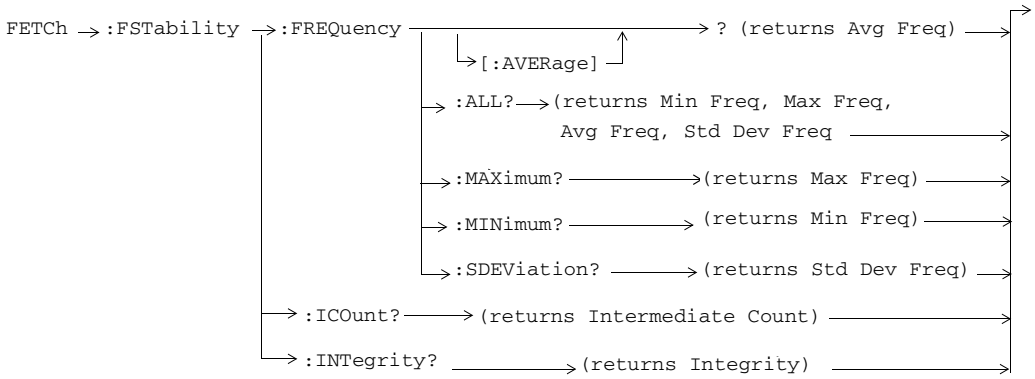



FETCh
:AFANalyzer
:SINAD
? (returns Avg SINAD)
[:AVERage]
:ALL?
(returns Min SINAD,Max SINAD,
Avg SINAD, Std Dev SINAD)
:MAXimum?
(returns Max SINAD)
:MINimum?
(returns Min SINAD)
:SDEViation?
(returns Std Dev SINAD)


FETCh
:AFANalyzer
:VOLTage
? (returns Avg Audio Level)
[:AVERage]
:ALL?
(returns Min Audio Level,
Max Audio Level,Avg Audio Level,
Std Dev Audio Level)
:MAXimum?
(returns Max Audio Level)
:MINimum?
(returns Min Audio Level)
:SDEViation?
(returns Std Dev Audio Level)

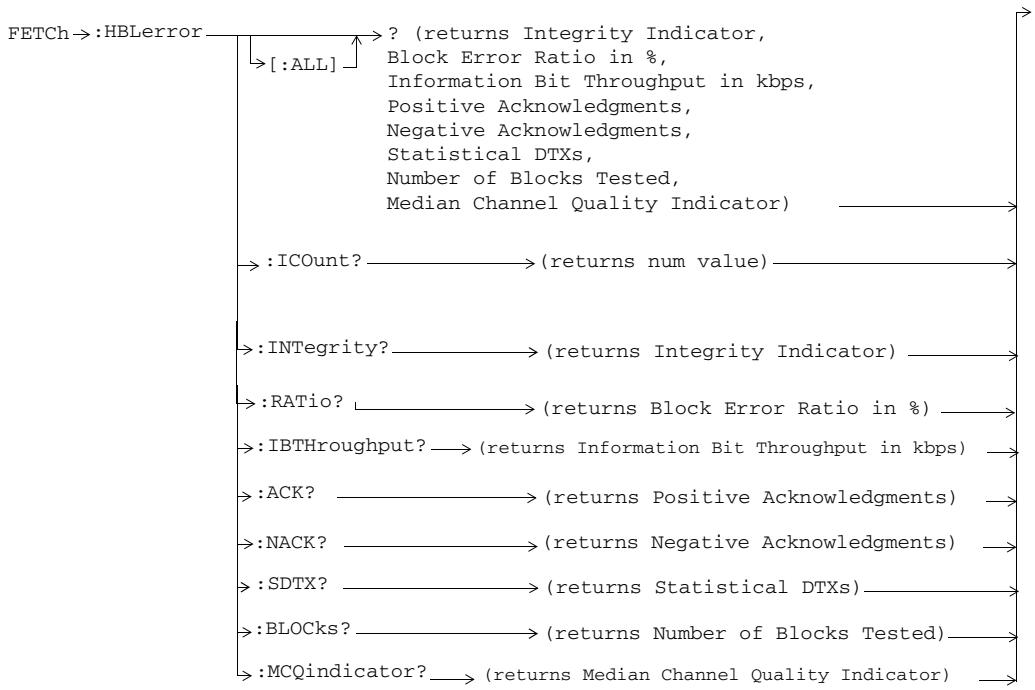
FETCh:FSTability



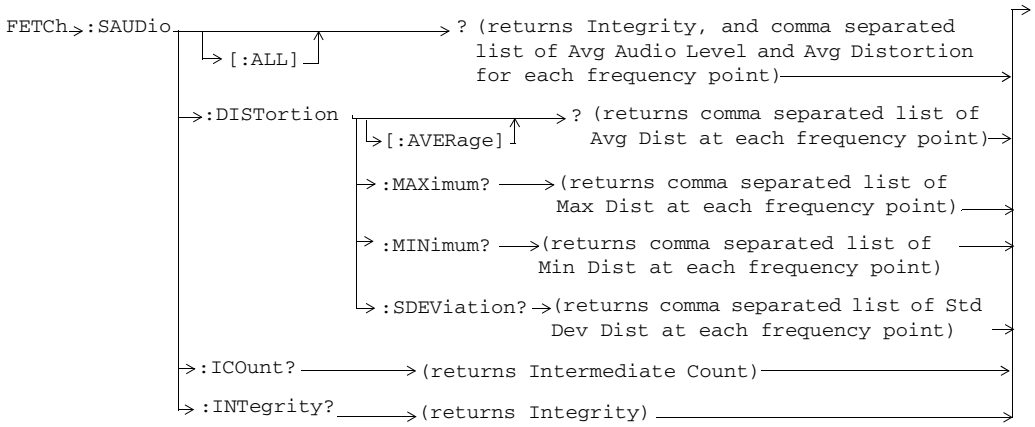


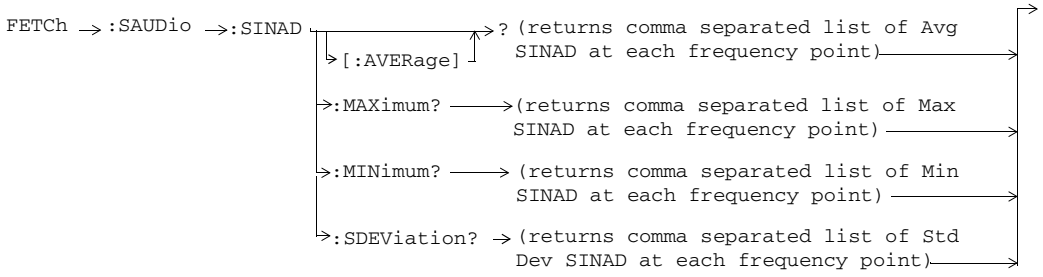
FETCh:HBLerror

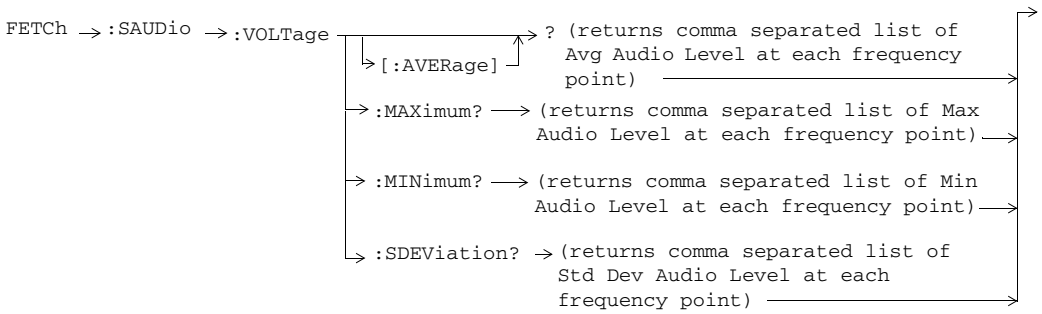
This section is only applicable to a test application with the required feature license.



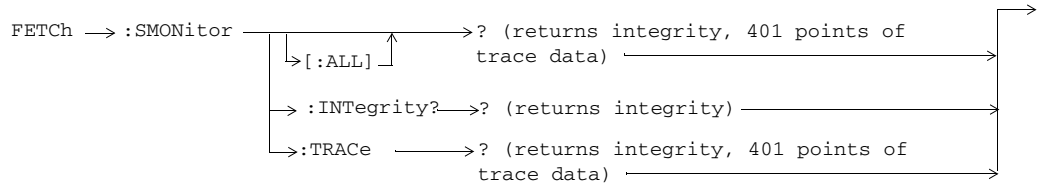
FETCh:SAUDio



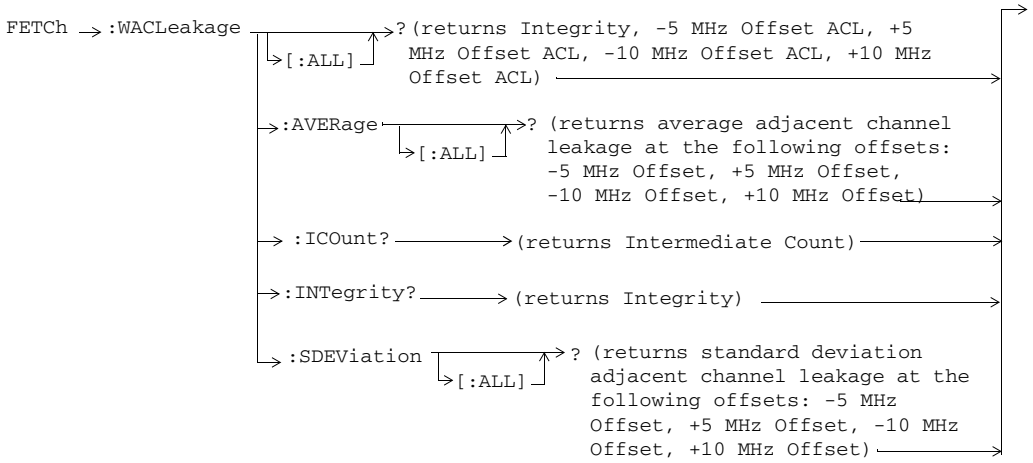



FETCh
:SAUDio
:VOLTage
[:AVERage]
? (returns comma separated list of Avg Audio Level at each frequency point)
:MAXimum?
(returns comma separated list of Max Audio Level at each frequency point)
:MINimum?
(returns comma separated list of Min Audio Level at each frequency point)
:SDEViation?
(returns comma separated list of Std Dev Audio Level at each frequency point)

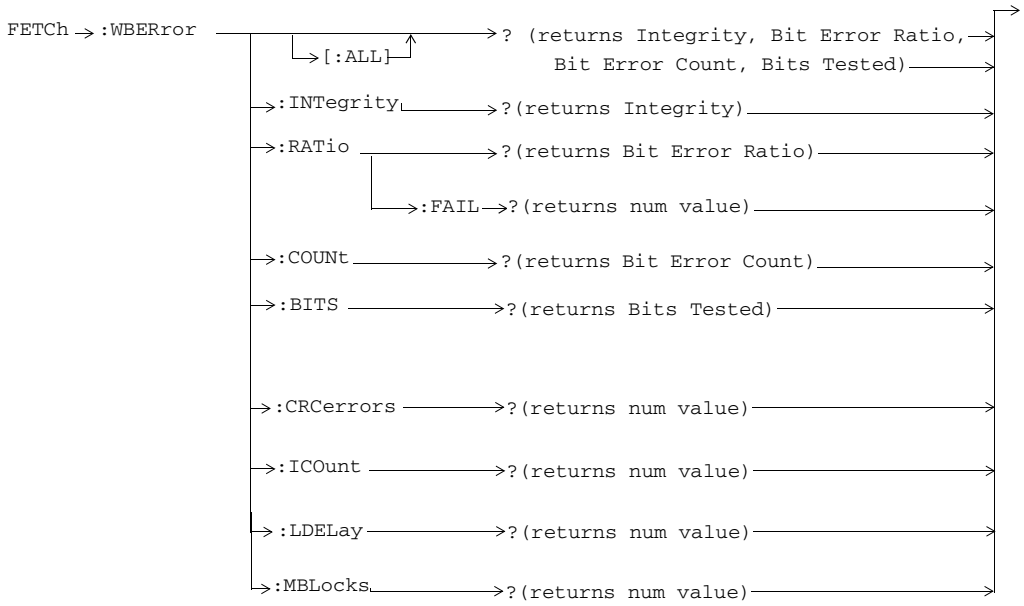
FETCh:SMONitor



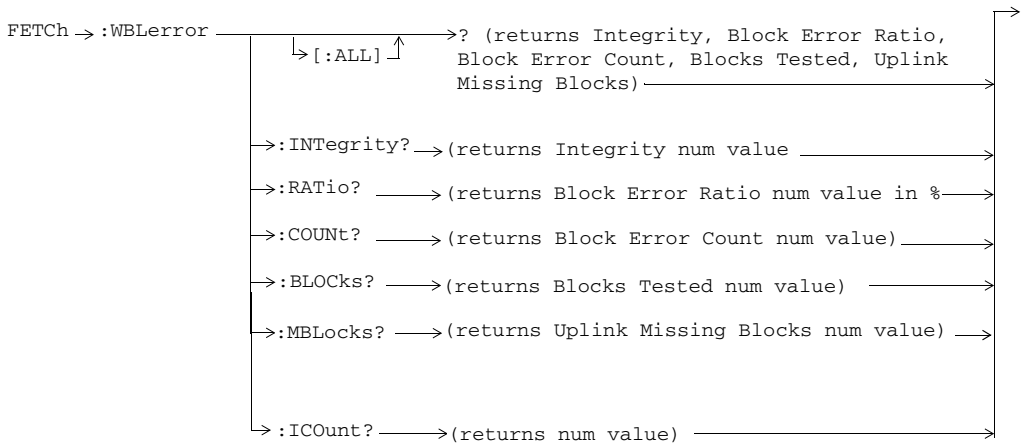
FETCh:WACLeakage



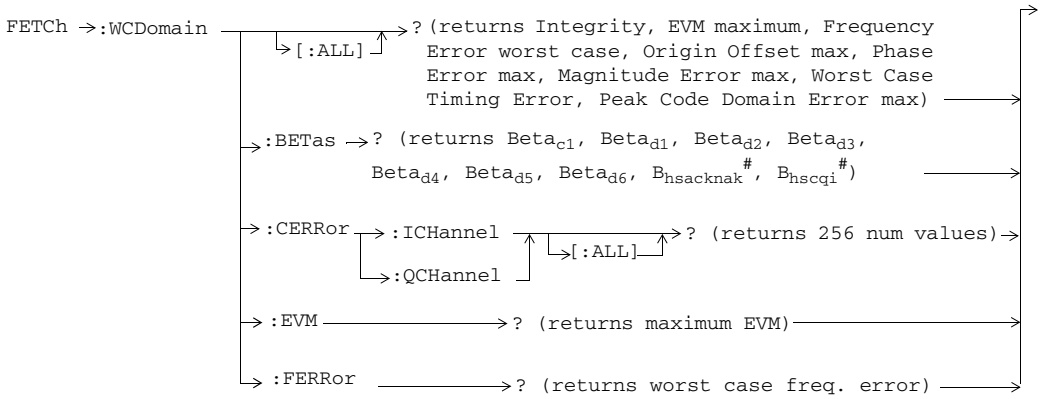
FETCh:WBERror



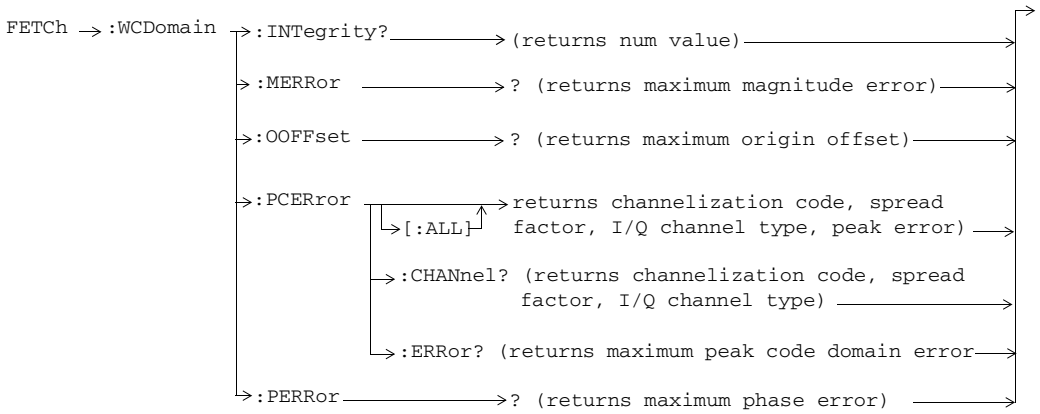
FETCh:WBLerror

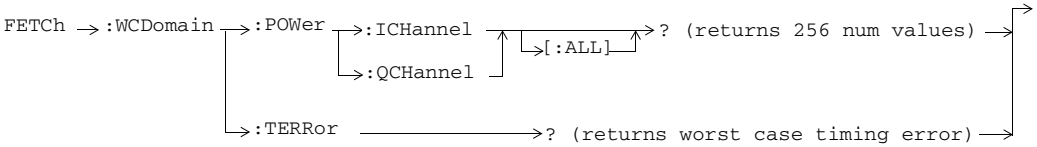


FETCh:WCDomain

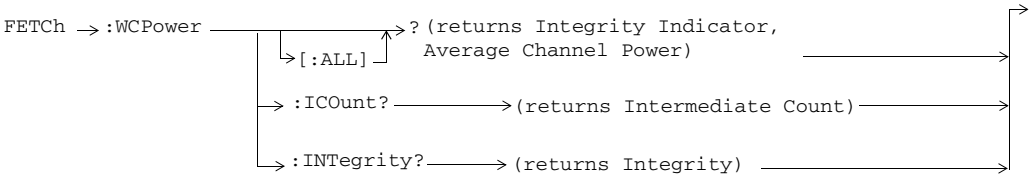


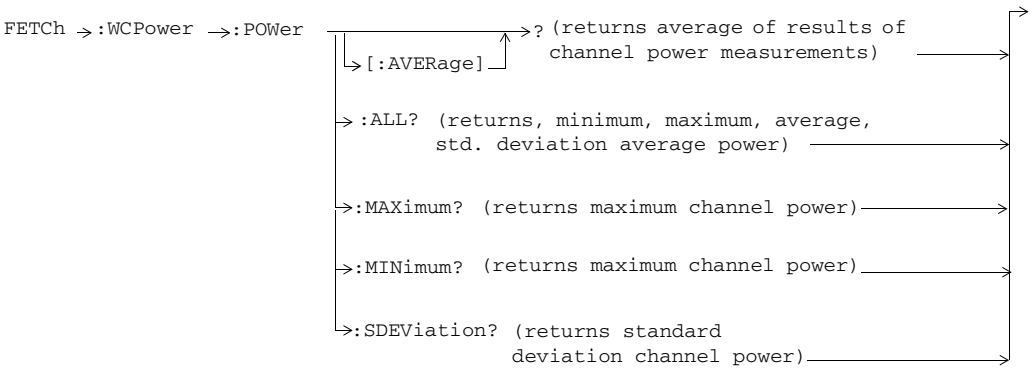
Only applicable to the lab application or feature-licensed test application





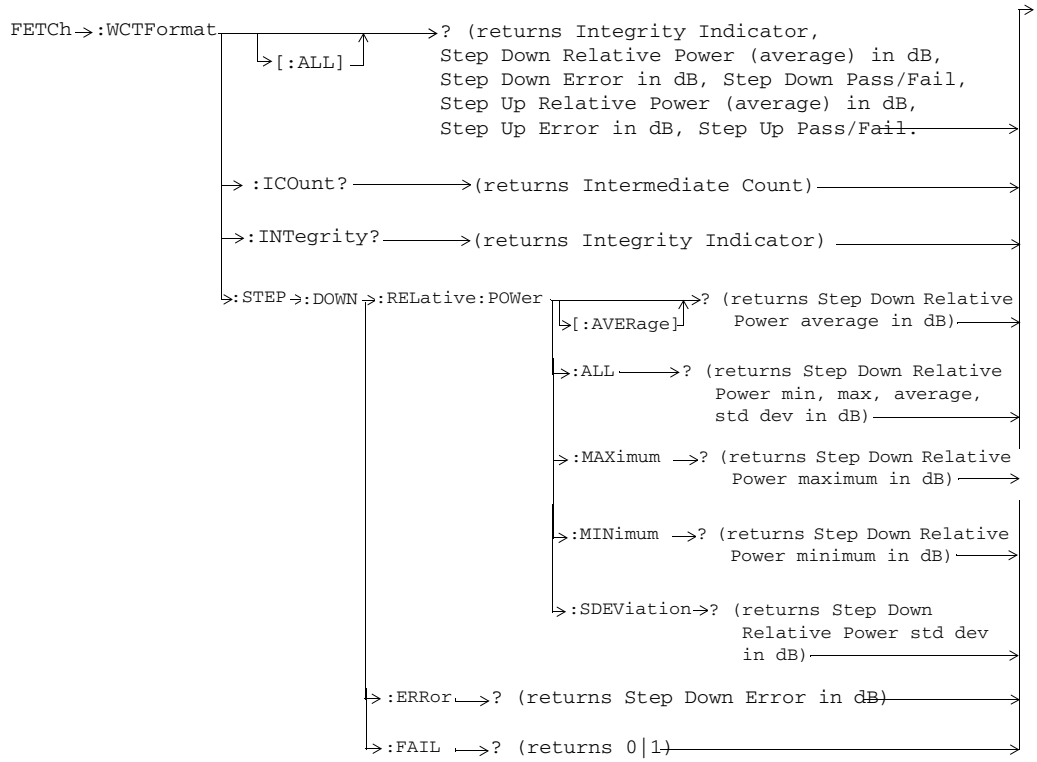
FETCh:WCPower

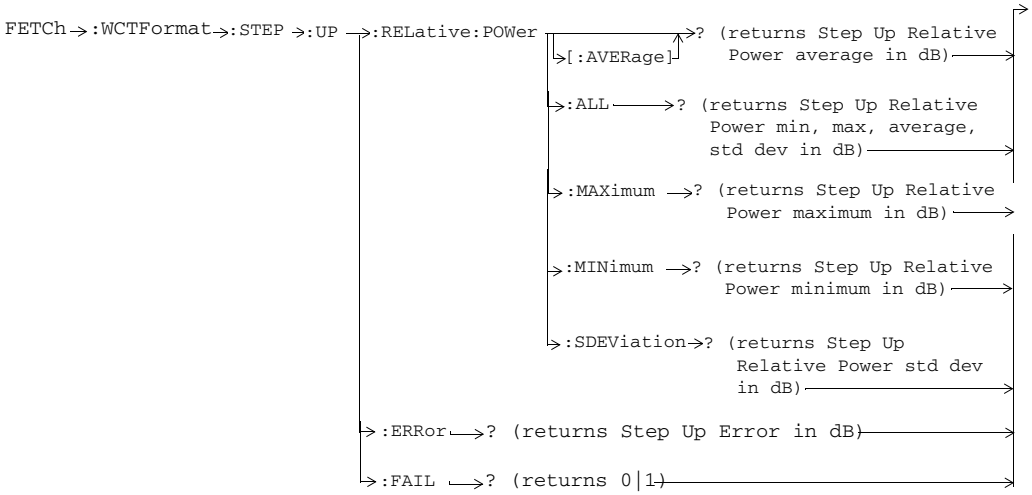




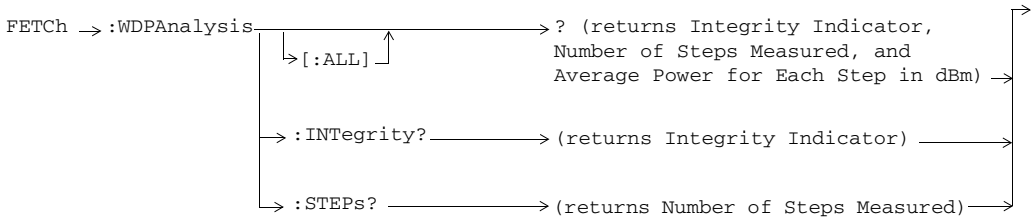
FETCh:WCTFormat

This section is only applicable to the lab application.

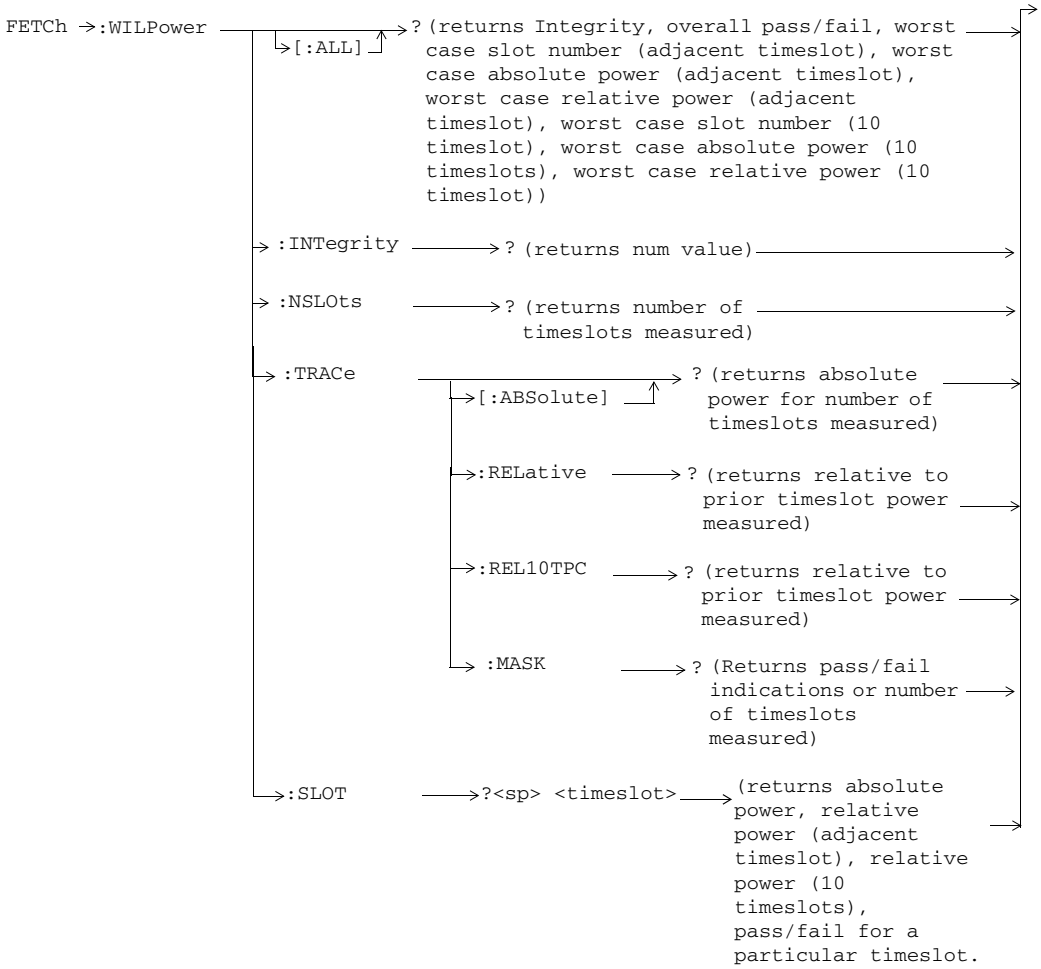



FETCh
:WCTFormat
:STEP
:UP
:RELative:POWer
[:AVERage]
? (returns Step Up Relative Power average in dB)
:ALL
? (returns Step Up Relative Power min, max, average, std dev in dB)
:MAXimum
? (returns Step Up Relative Power maximum in dB)
:MINimum
? (returns Step Up Relative Power minimum in dB)
:SDEViation
? (returns Step Up Relative Power std dev in dB)
:ERRor
? (returns Step Up Error in dB)
:FAIL
? (returns 0|1)

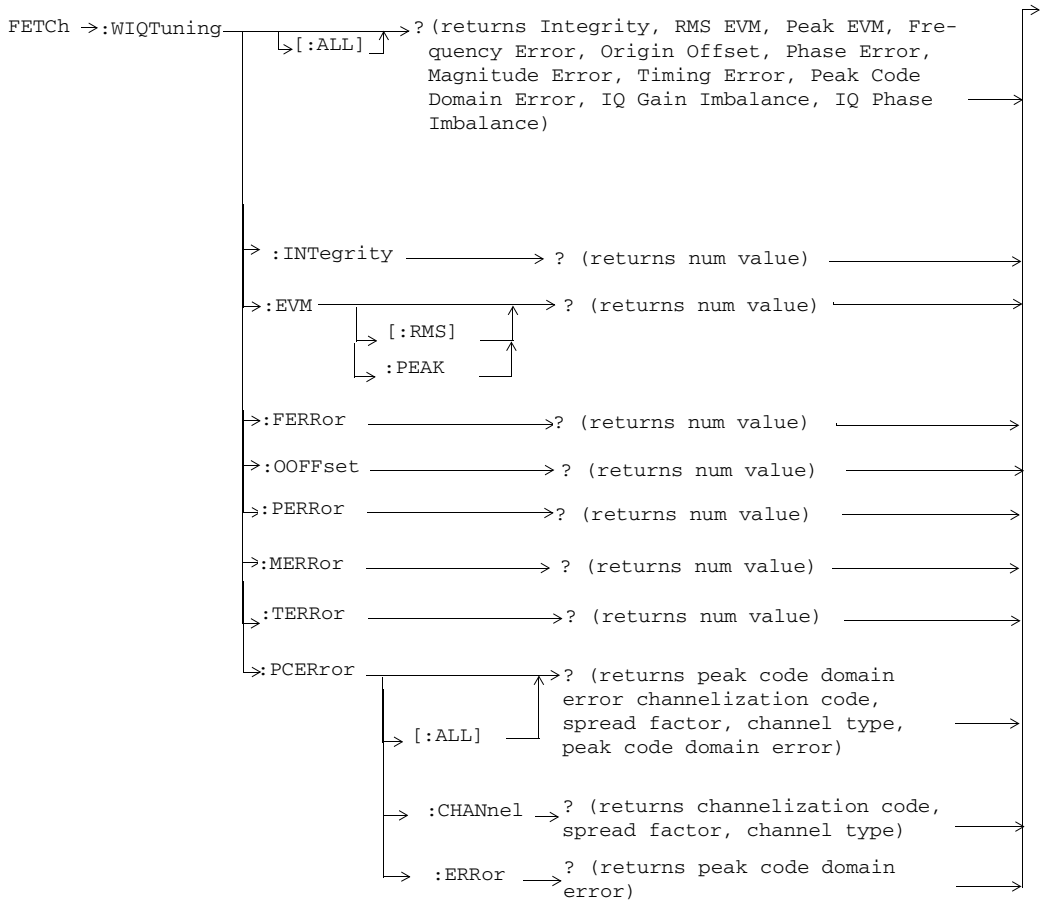
FETCh:WDPAnalysis

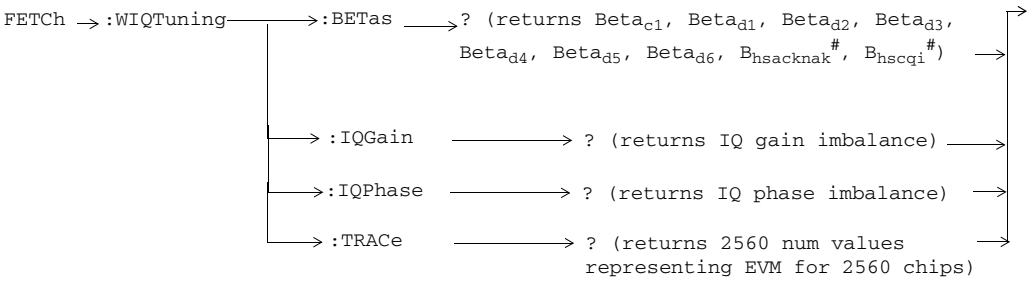


FETCh:WILPower



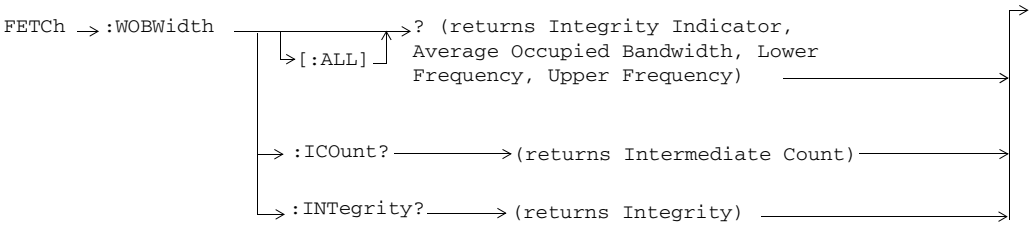
FETCh:WIQTuning

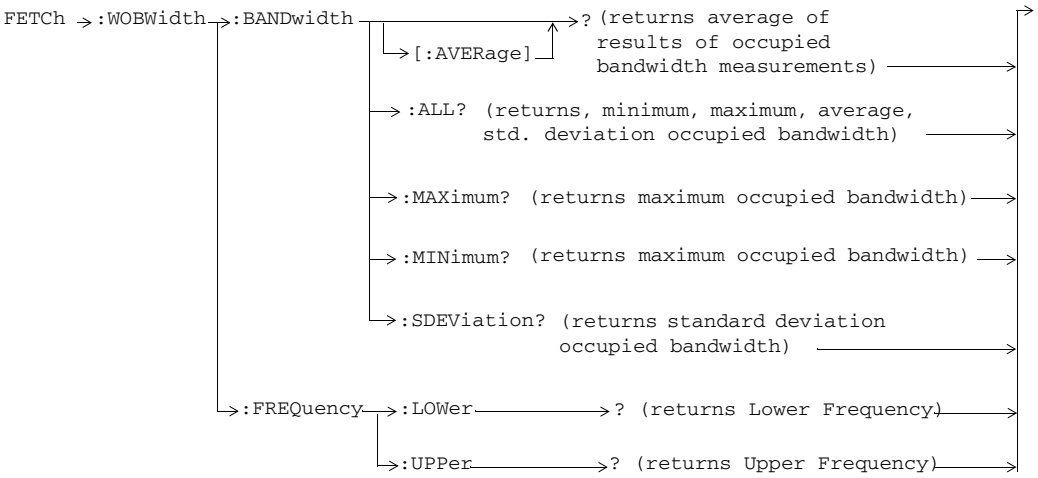




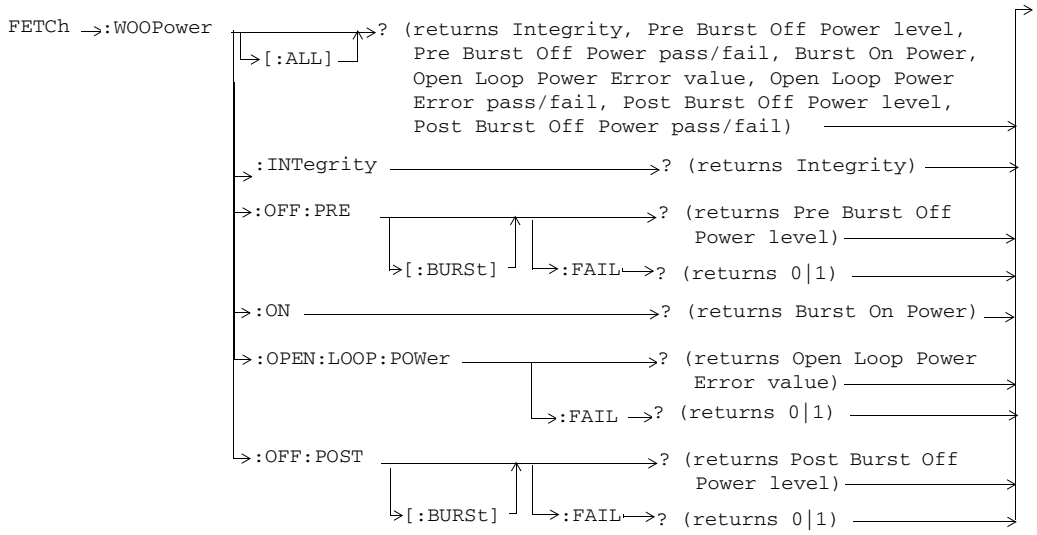
Only applicable to the lab application or feature-licensed test application

FETCh:WOBWidth

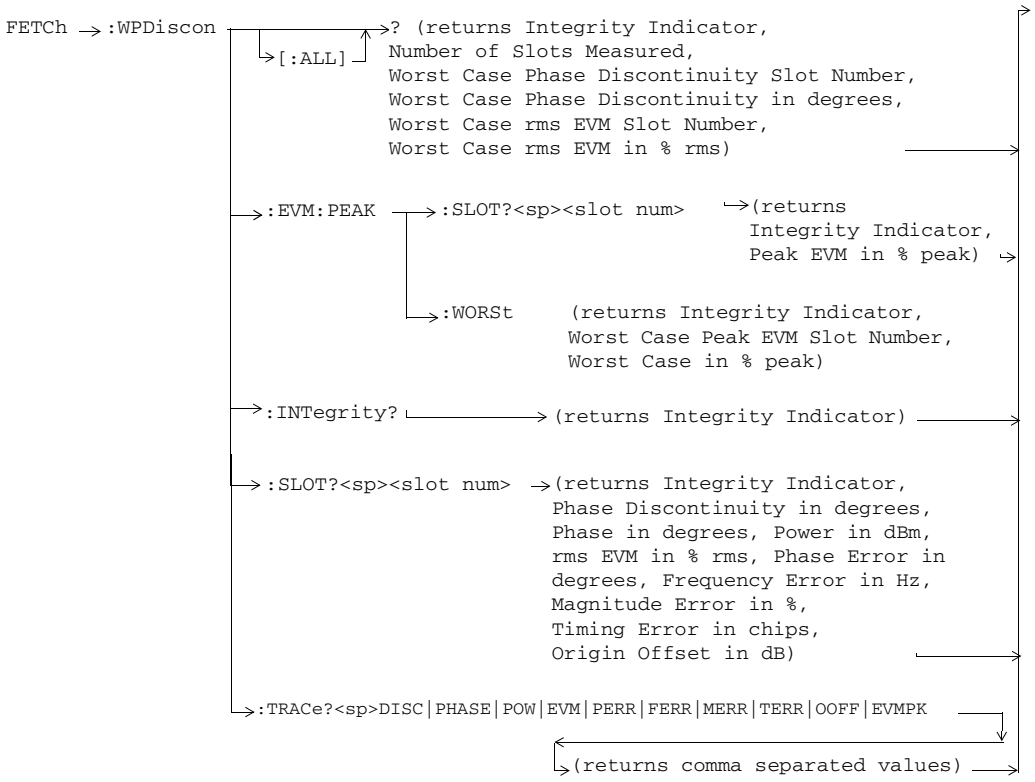




FETCh:WOOPower

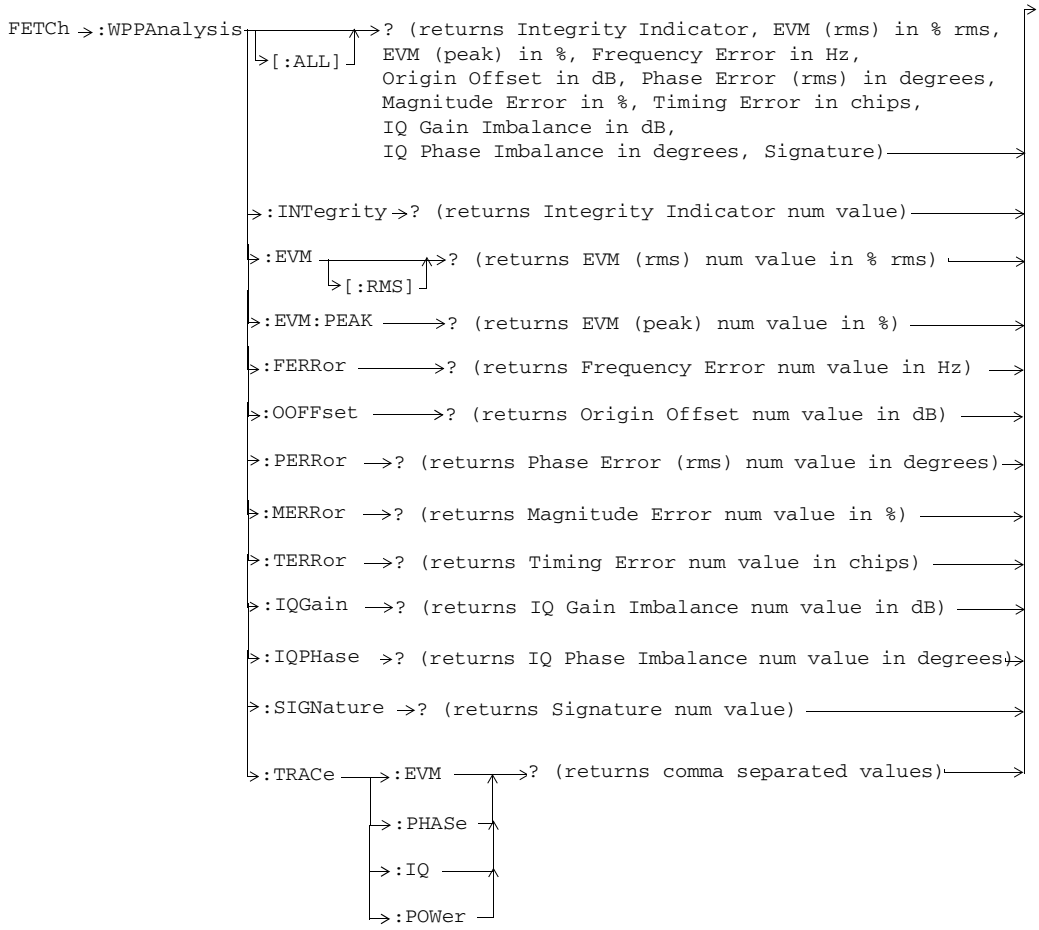


FETCh:WPDiscon

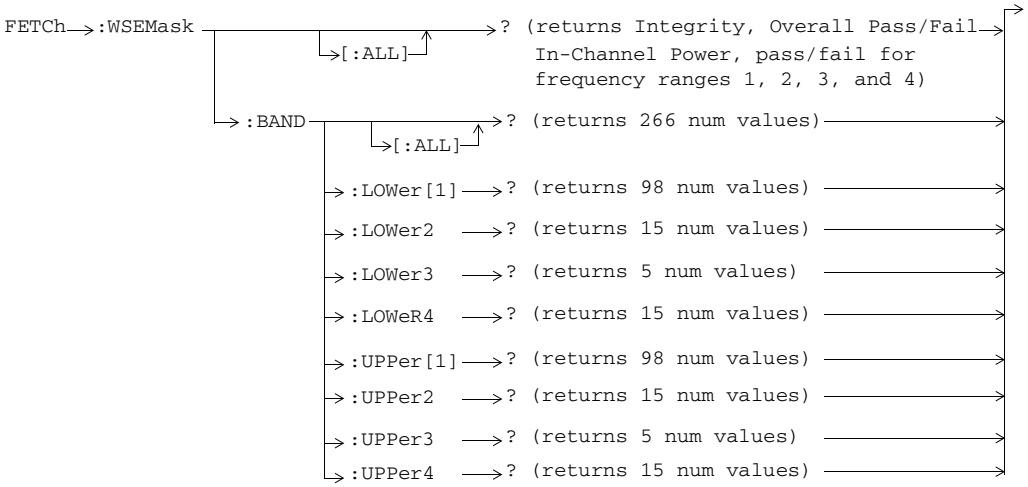


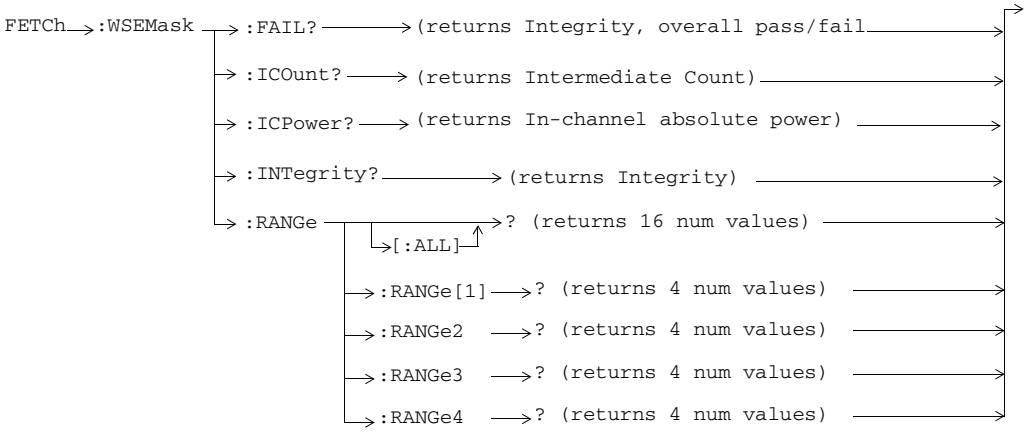
FETCh:WPPAnalysis

This section is applicable to the lab application only.

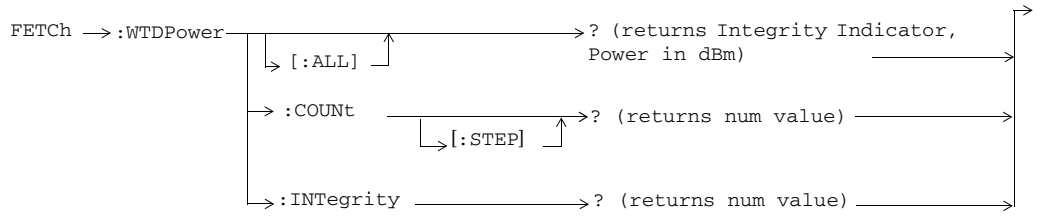


FETCh:WSEMask

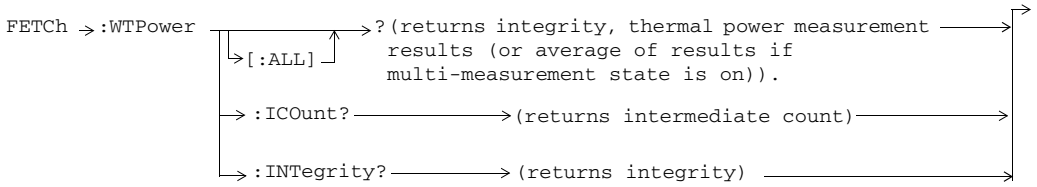


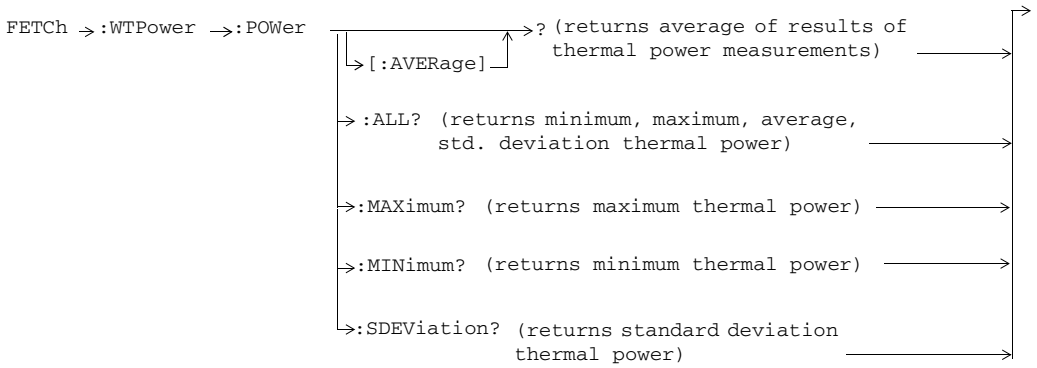


FETCh:WTDPower

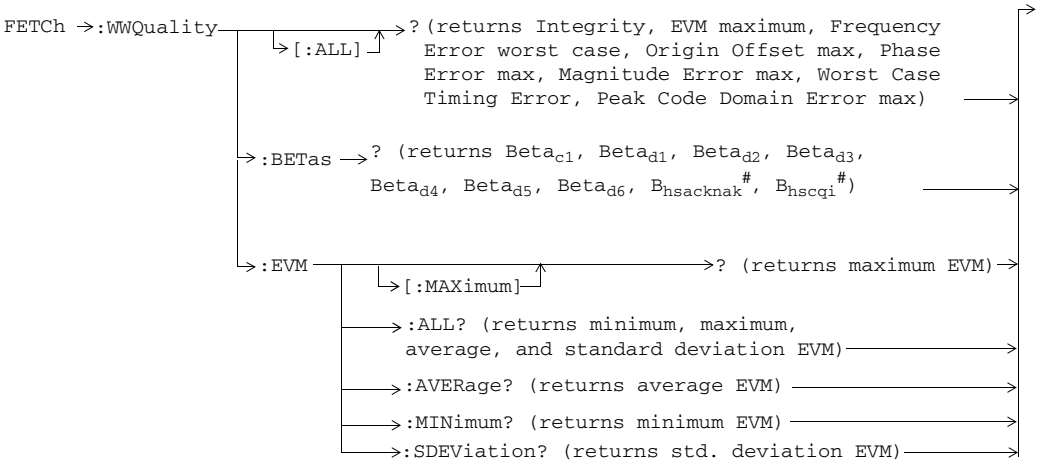


FETCh:WTPower

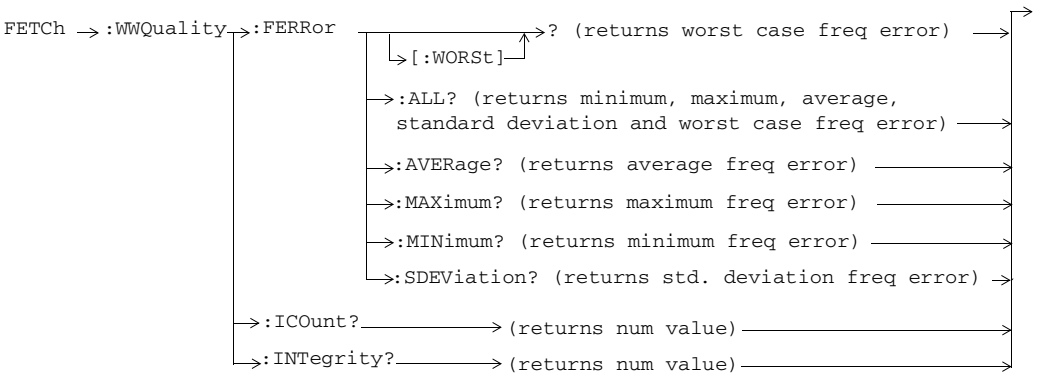


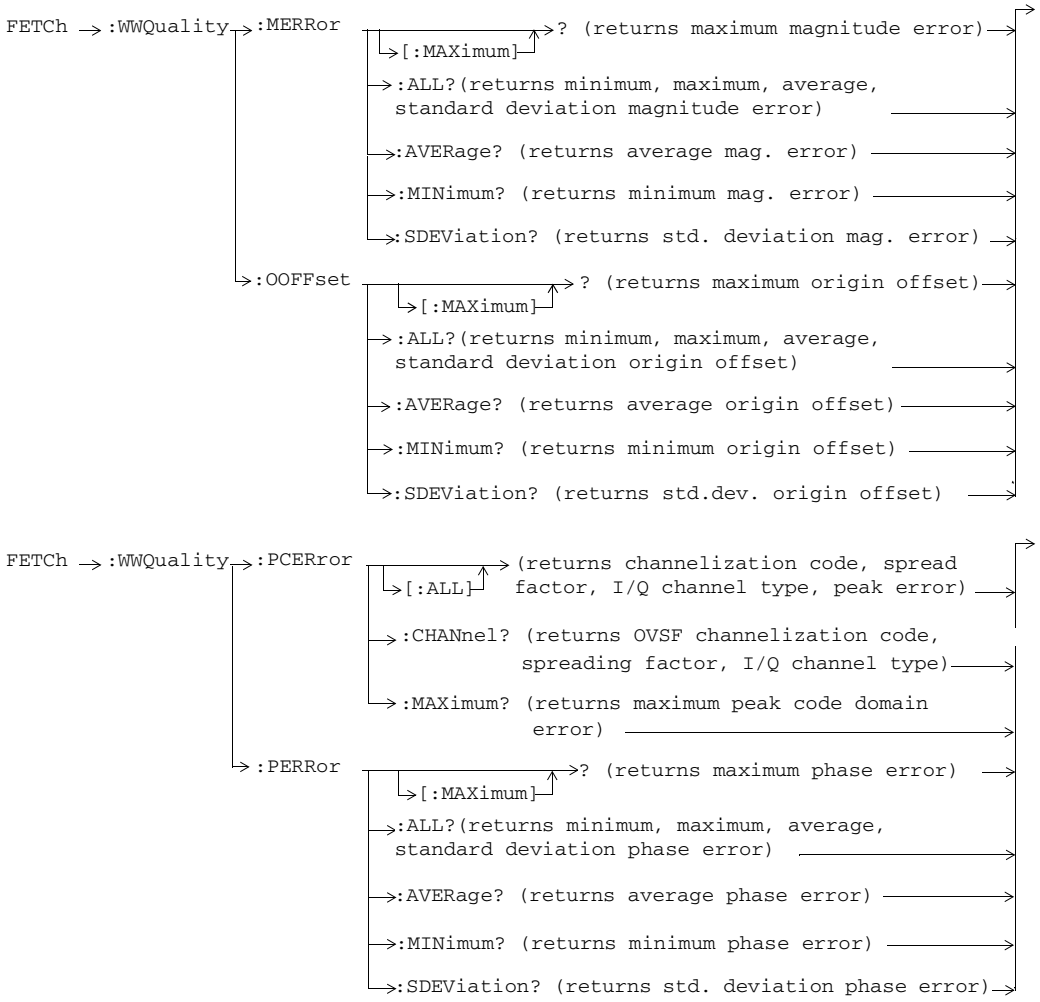


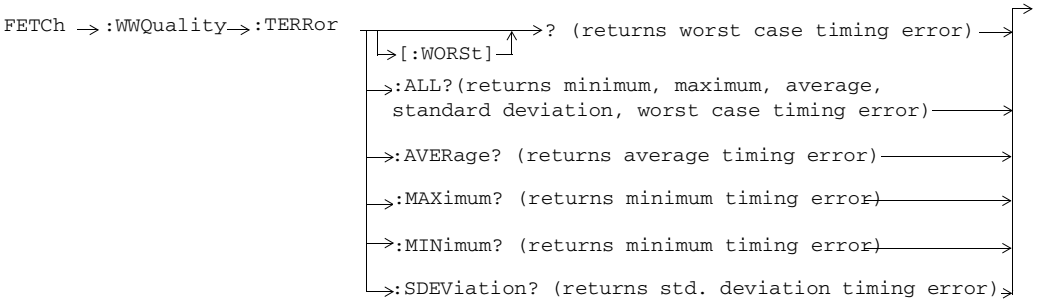
FETCh:WWQuality



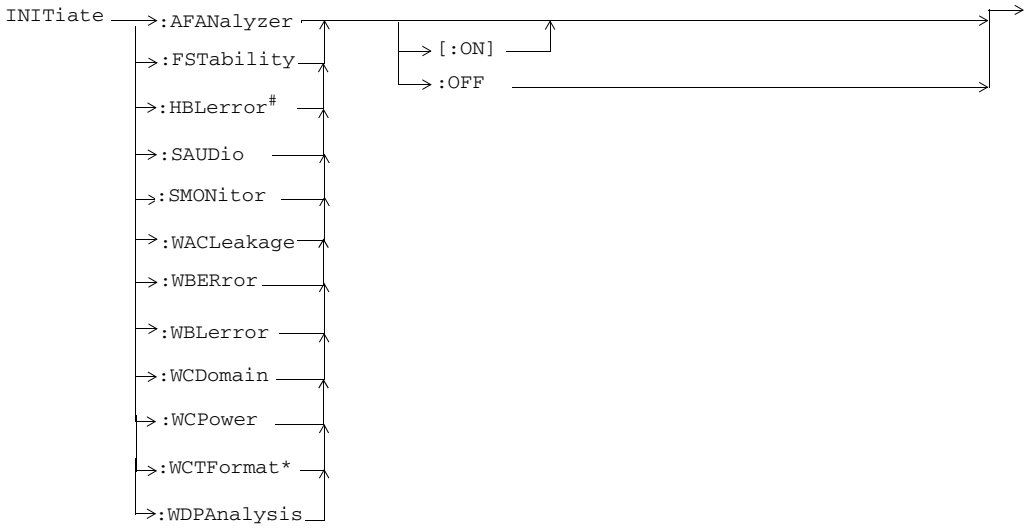
Only applicable to the lab application or feature-licensed test application




FETCh
:WWQuality
:MERRor
[:MAXimum]
? (returns maximum magnitude error)
:ALL?(returns minimum, maximum, average, standard deviation magnitude error)
:AVERage? (returns average mag. error)
:MINimum? (returns minimum mag. error)
:SDEViation? (returns std. deviation mag. error)
:OOFFset
[:MAXimum]
? (returns maximum origin offset)
:ALL?(returns minimum, maximum, average, standard deviation origin offset)
:AVERage? (returns average origin offset)
:MINimum? (returns minimum origin offset)
:SDEViation? (returns std.dev. origin offset)
FETCh
:WWQuality
:PCERror
[:ALL]
(returns channelization code, spread factor, I/Q channel type, peak error)
:CHANnel? (returns OVSF channelization code, spreading factor, I/Q channel type)
:MAXimum? (returns maximum peak code domain error)
:PERRor
[:MAXimum]
? (returns maximum phase error)
:ALL?(returns minimum, maximum, average, standard deviation phase error)
:AVERage? (returns average phase error)
:MINimum? (returns minimum phase error)
:SDEViation? (returns std. deviation phase error)

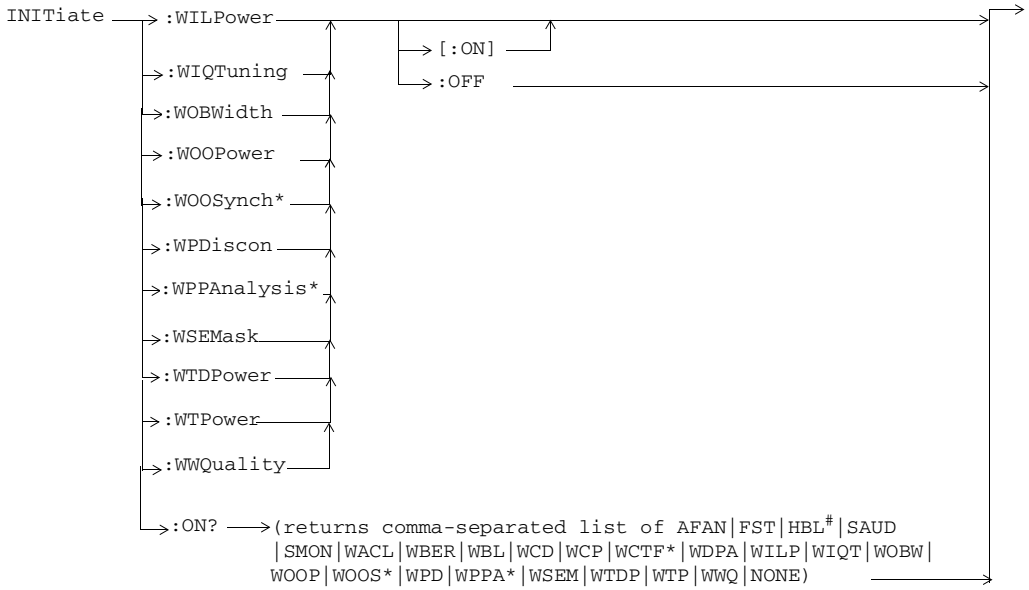


INITiate



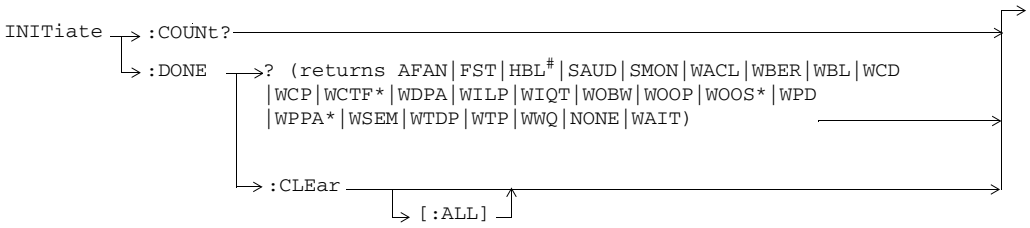
Only applicable to a feature-licensed test application.

* Only applicable to the lab application.



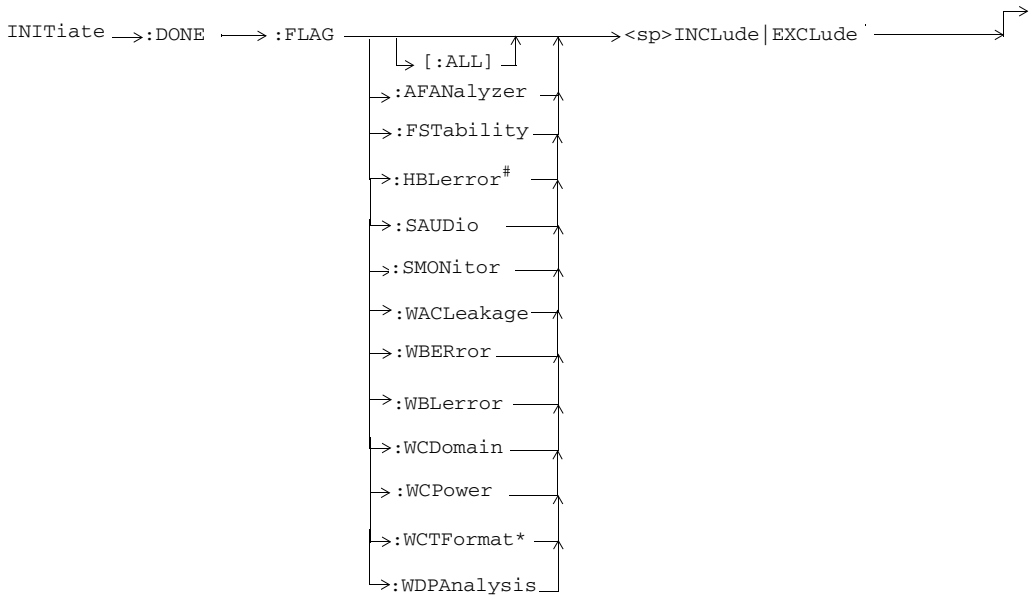
* Only applicable to the lab application.

Only applicable to a feature-licensed test application.



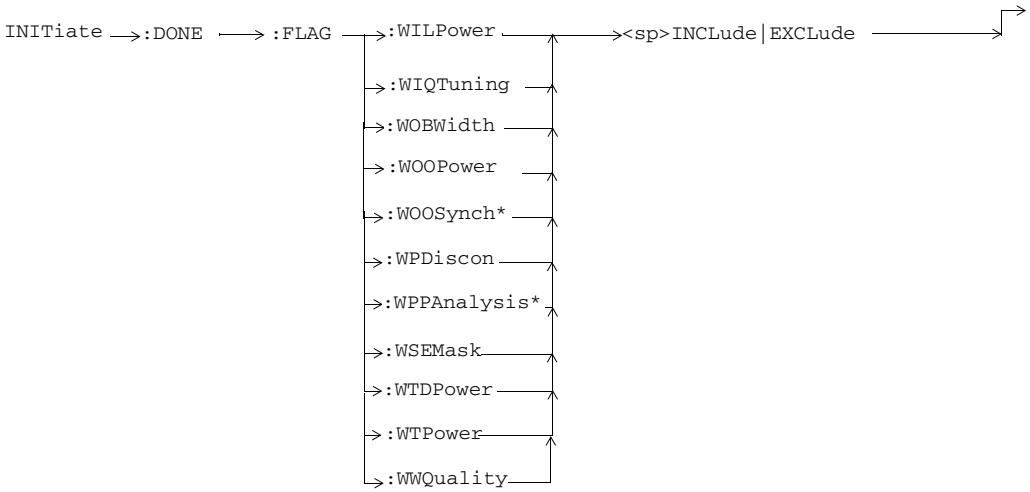
Only applicable to a feature-licensed test application.

* Only applicable to the lab application.



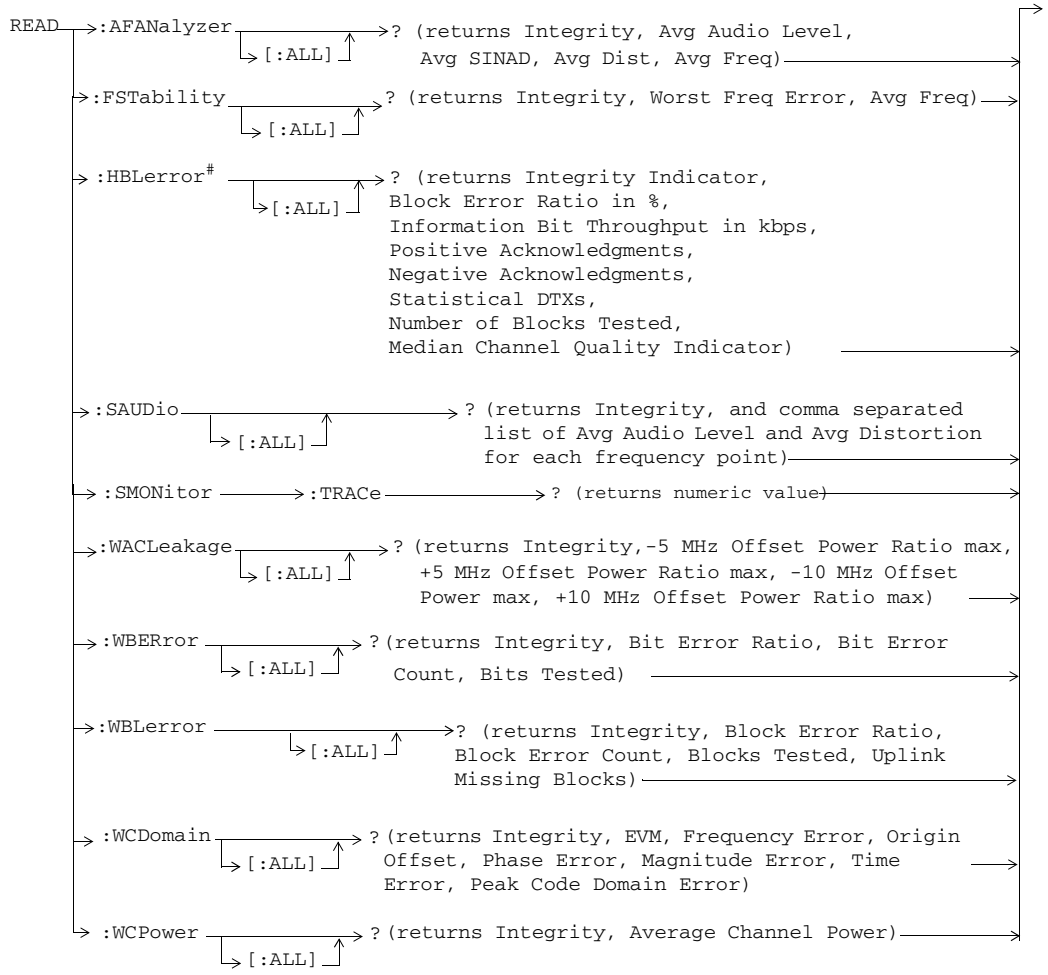
Only applicable to a feature-licensed test application.

* This command is only applicable to the lab application.

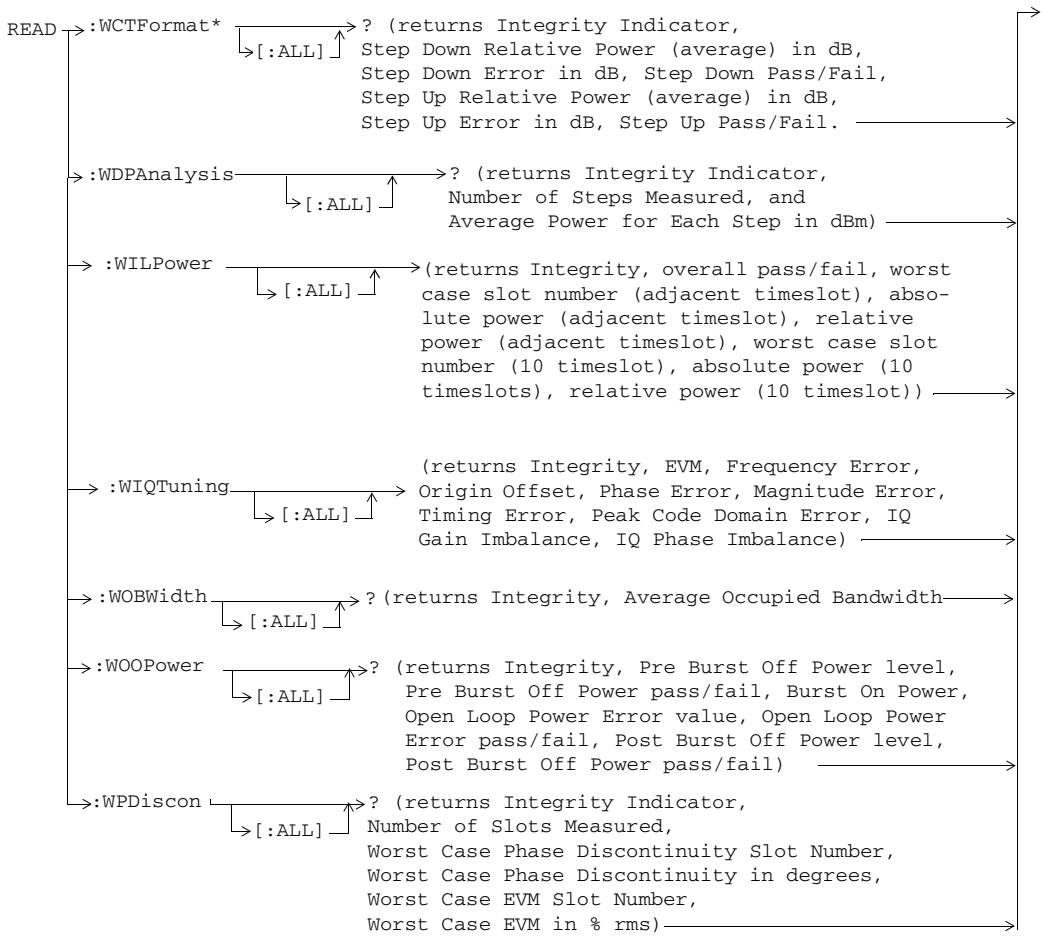


* This command is only applicable to the lab application.

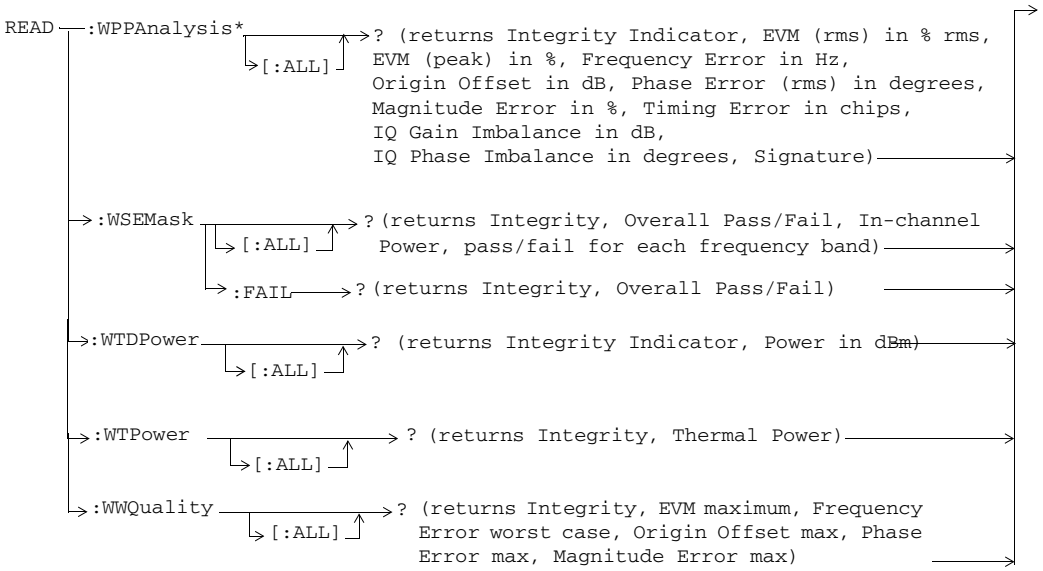
READ



Only applicable to a feature-license test application.

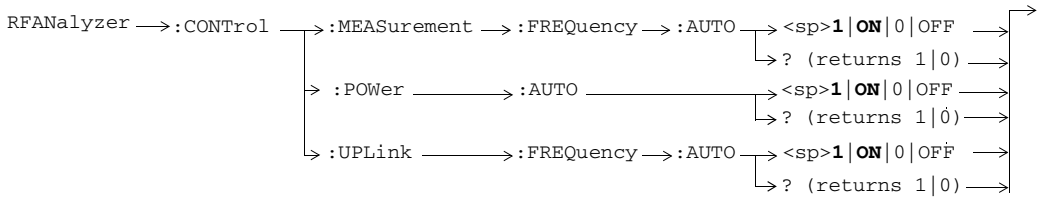


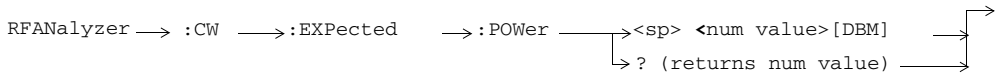
* Only applicable to the lab application.

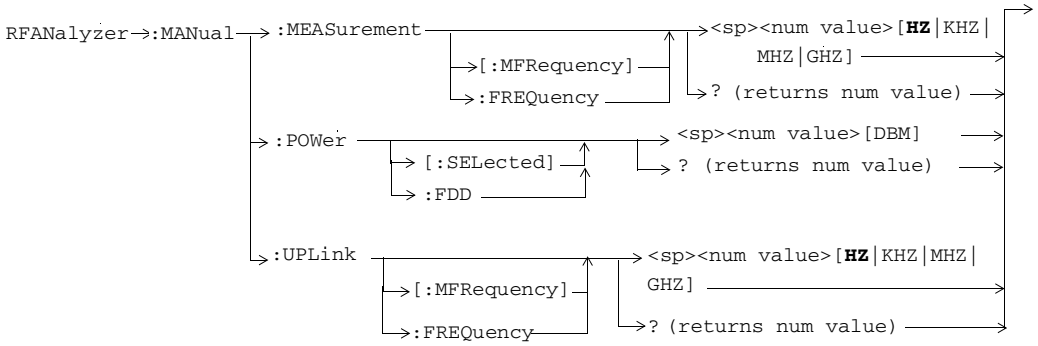


* Only applicable to the lab application.

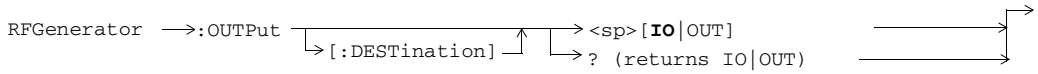
RFANalyzer



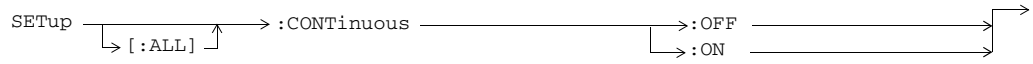




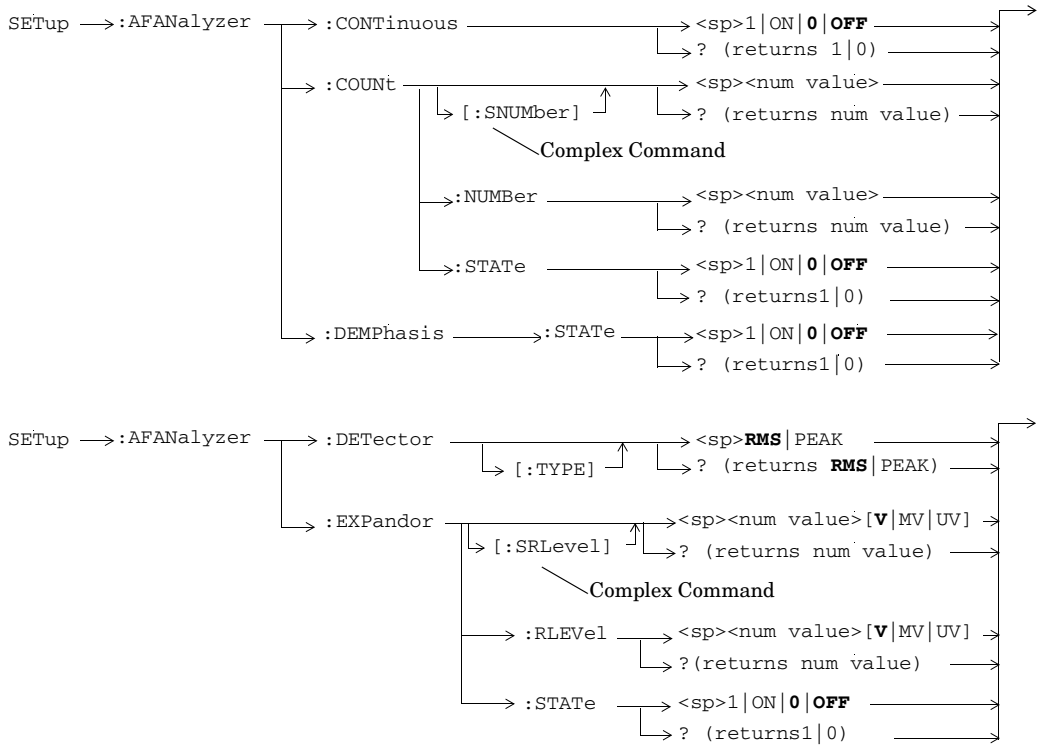
RFGenerator:OUTPut

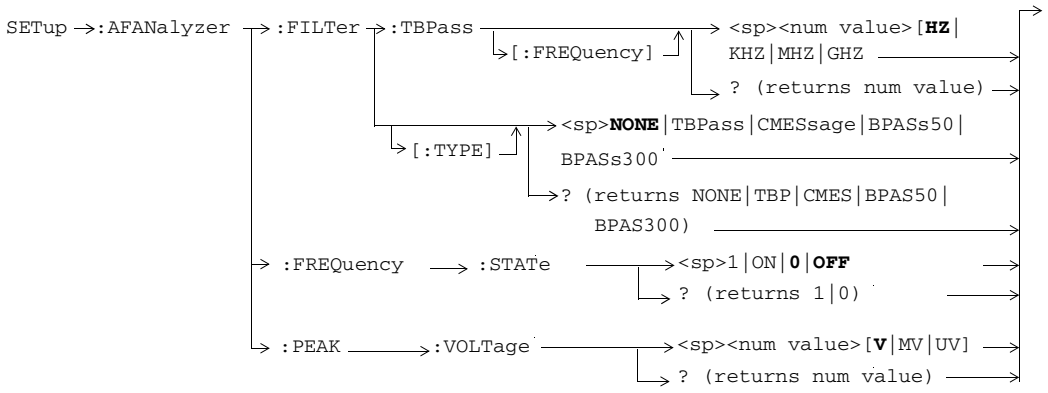


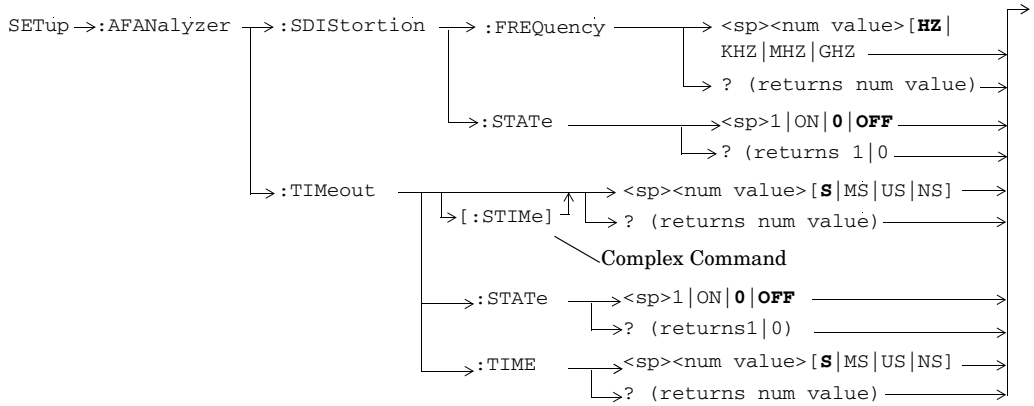
SETup:CONTinuous



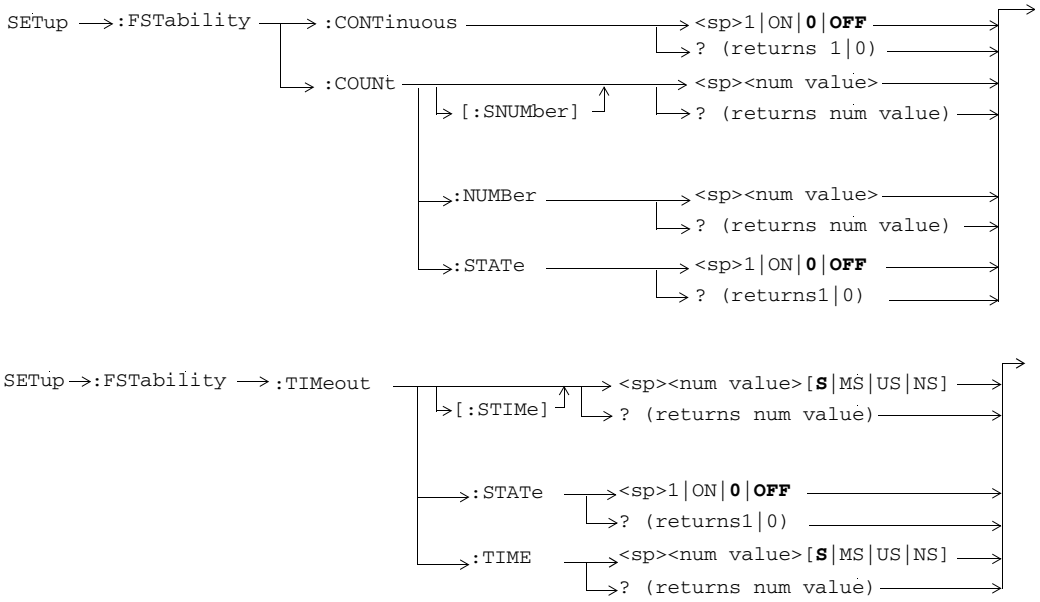
SETup:AFANalyzer




SETup
:AFANalyzer
:FILTer
:TBPass
[:FREQuency]
<sp><num value>[HZ|
KHZ|MHZ|GHZ
? (returns num value)
[:TYPE]
<sp>NONE|TBPass|CMESsage|BPASs50|
BPASs300
? (returns NONE|TBP|CMES|BPAS50|
BPAS300)
:FREQuency
:STATe
<sp>1|ON|0|OFF
? (returns 1|0)
:PEAK
:VOLTage
<sp><num value>[V|MV|UV]
? (returns num value)

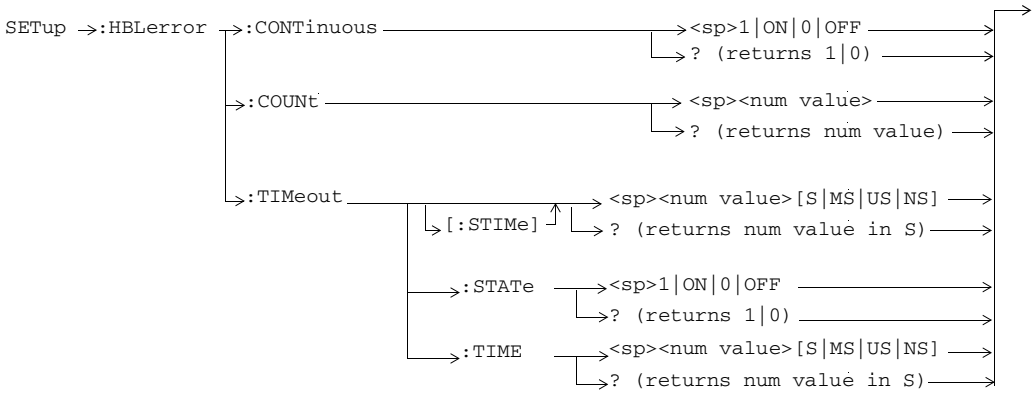

SETup
:AFANalyzer
:SDIStortion
:FREQuency
<sp><num value>[HZ|
KHZ|MHZ|GHZ
? (returns num value)
:STATe
<sp>1|ON|0|OFF
? (returns 1|0
:TIMeout
[:STIMe]
<sp><num value>[S|MS|US|NS]
? (returns num value)
Complex Command
:STATe
<sp>1|ON|0|OFF
? (returns1|0)
:TIME
<sp><num value>[S|MS|US|NS]
? (returns num value)

SETup:FSTability

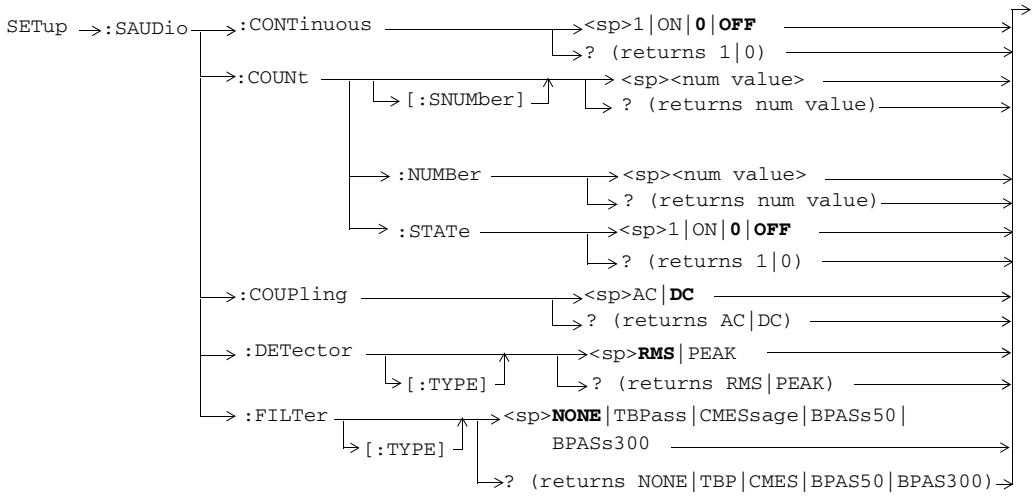


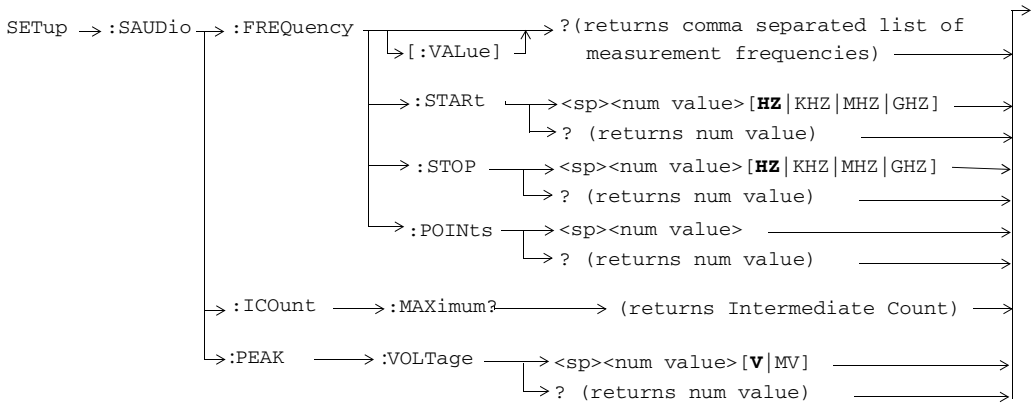
SETup:HBLerror

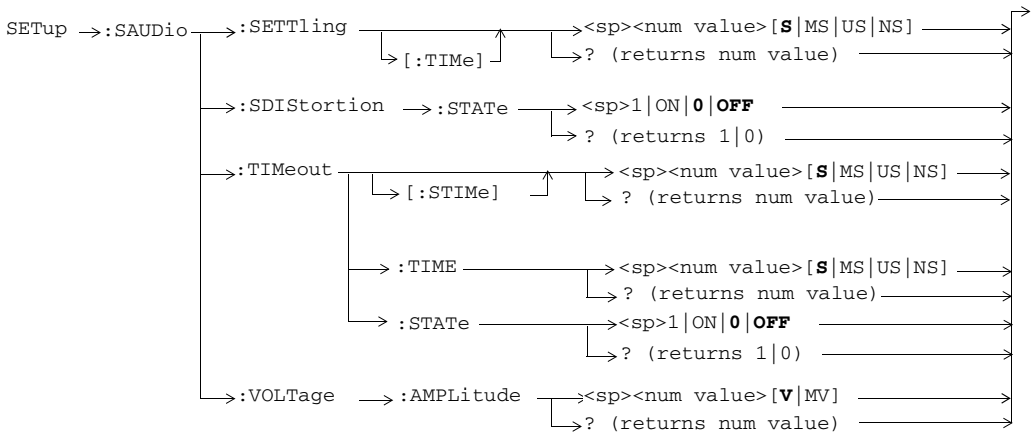
This section is only applicable to a test application with the required feature license.



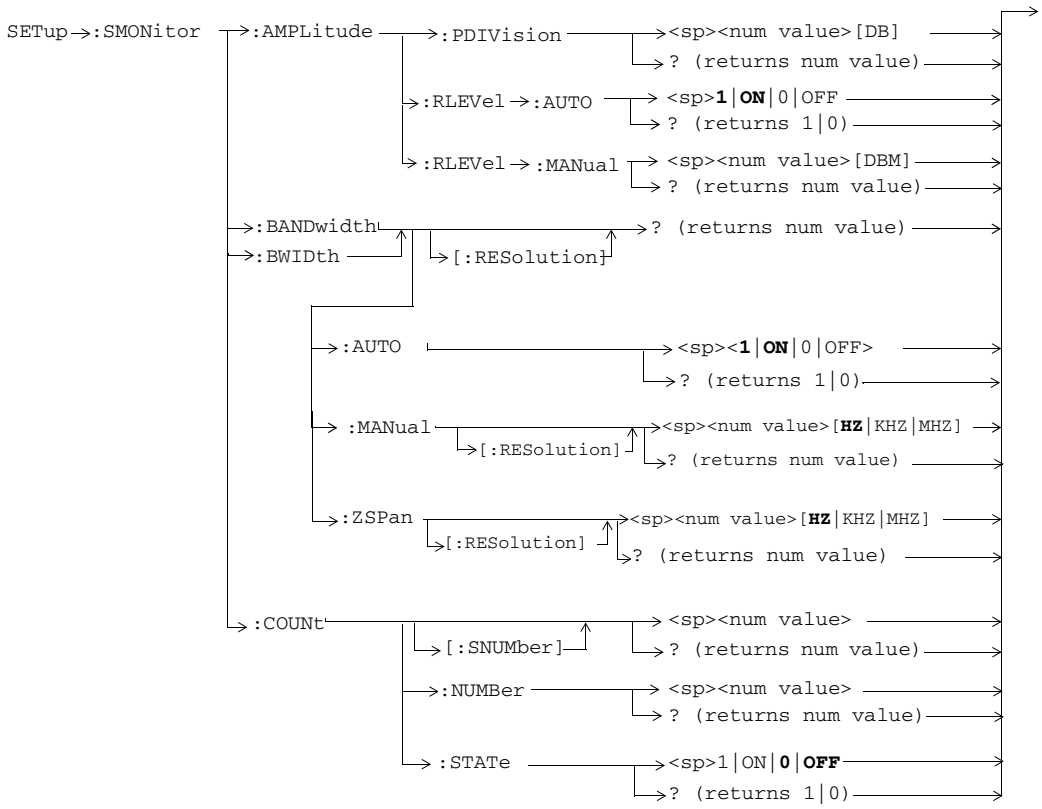
SETup:SAUDio

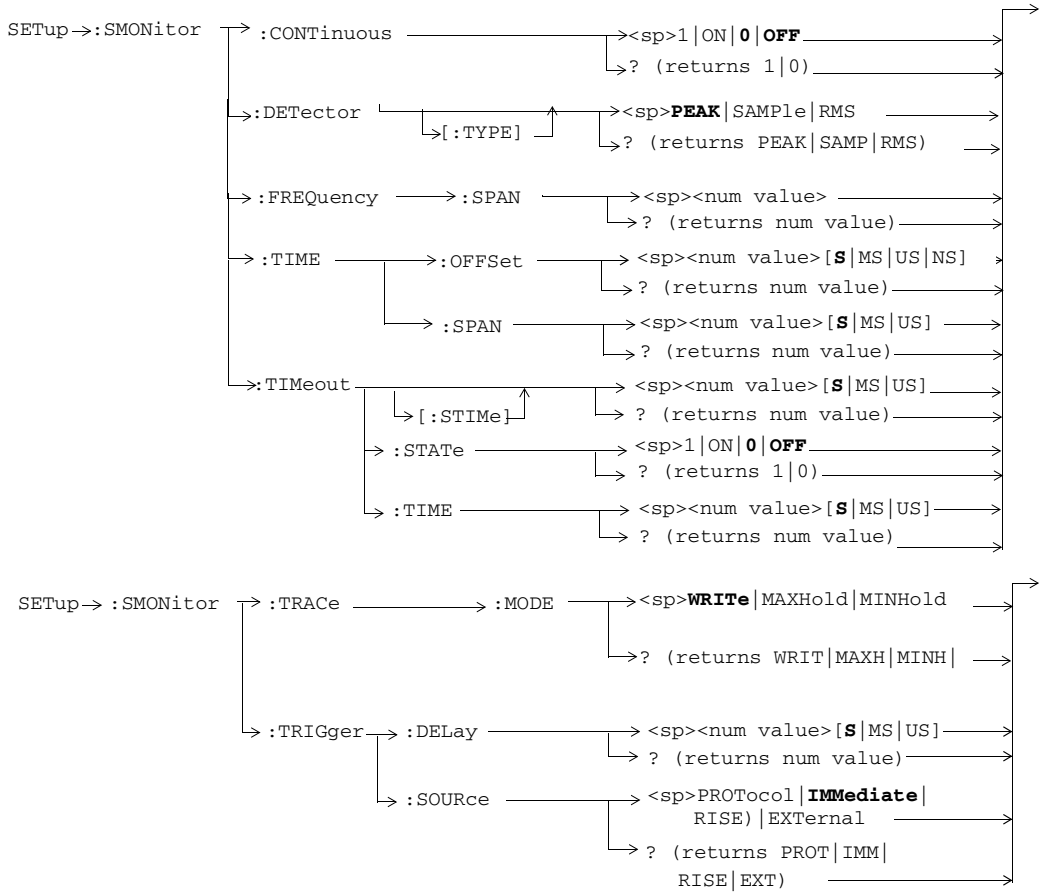





SETup
:SAUDio
:SETTling
[:TIMe]
<sp><num value>[S|MS|US|NS]
? (returns num value)
:SDIStortion
:STATe
<sp>1|ON|0|OFF
? (returns 1|0)
:TIMeout
[:STIMe]
<sp><num value>[S|MS|US|NS]
? (returns num value)
:TIME
<sp><num value>[S|MS|US|NS]
? (returns num value)
:STATe
<sp>1|ON|0|OFF
? (returns 1|0)
:VOLTage
:AMPLitude
<sp><num value>[V|MV]
? (returns num value)

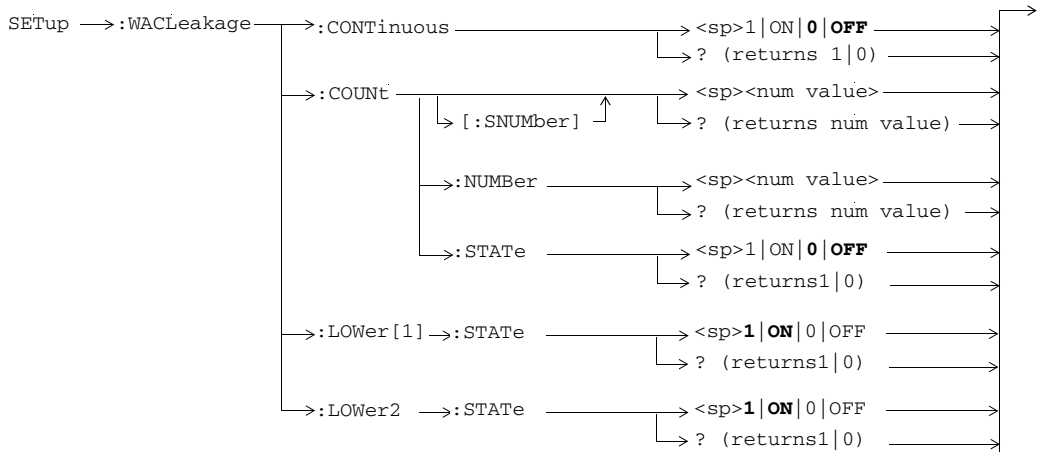
SETup:SMONitor

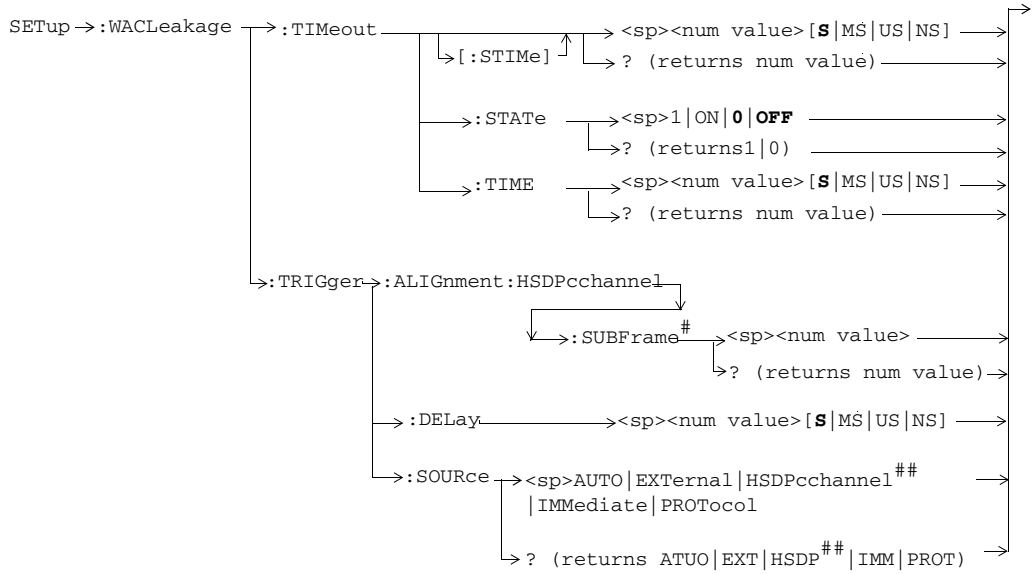



SETup
:SMONitor
:CONTinuous
<sp>1|ON|0|OFF
? (returns 1|0)
:DETector
[:TYPE]
<sp>PEAK|SAMPle|RMS
? (returns PEAK|SAMP|RMS)
:FREQuency
:SPAN
<sp><num value>
? (returns num value)
:TIME
:OFFSet
<sp><num value>[S|MS|US|NS]
? (returns num value)
:SPAN
<sp><num value>[S|MS|US]
? (returns num value)
:TIMeout
[:STIMe]
<sp><num value>[S|MS|US]
? (returns num value)
:STATe
<sp>1|ON|0|OFF
? (returns 1|0)
:TIME
<sp><num value>[S|MS|US]
? (returns num value)

SETup
:SMONitor
:TRACe
:MODE
<sp>WRITe|MAXHold|MINHold
? (returns WRIT|MAXH|MINH|
:TRIGger
:DELay
<sp><num value>[S|MS|US]
? (returns num value)
:SOURce
<sp>PROTocol|IMMediate|
RISE)|EXTernal
? (returns PROT|IMM|
RISE|EXT)

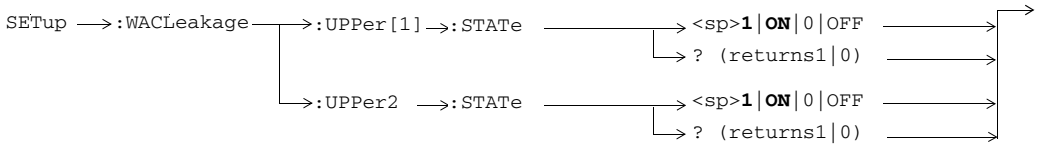
SETup:WACLeakage



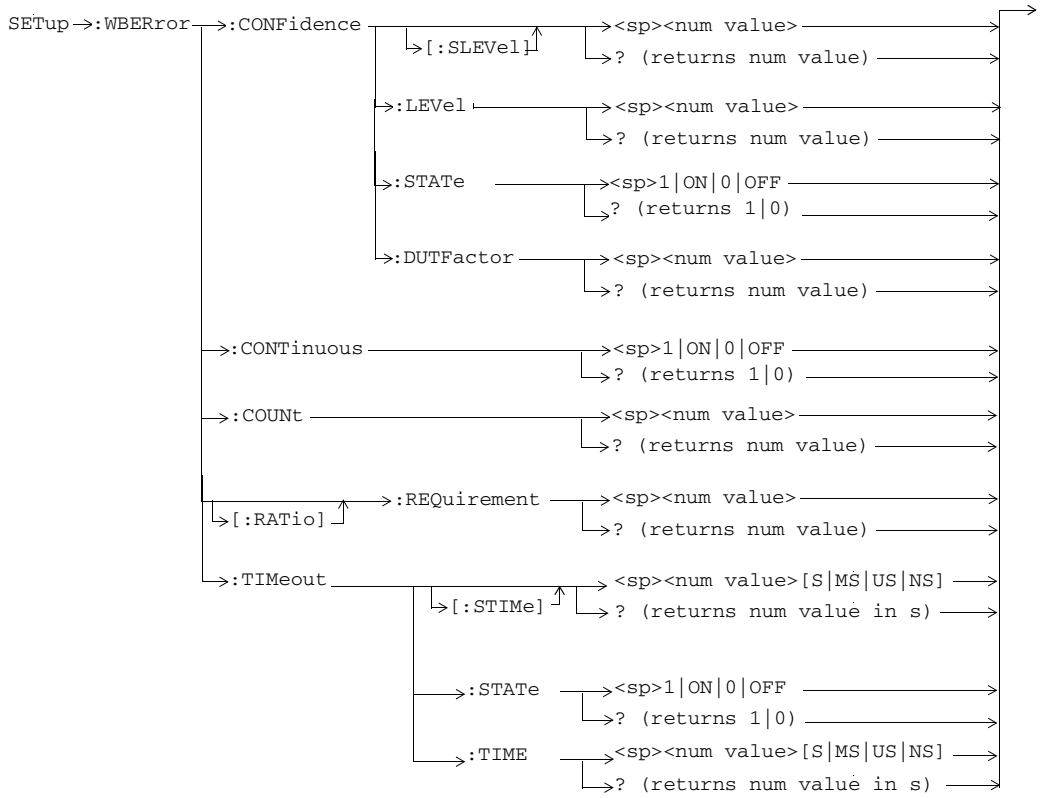


This command is only applicable to a feature-licensed test application

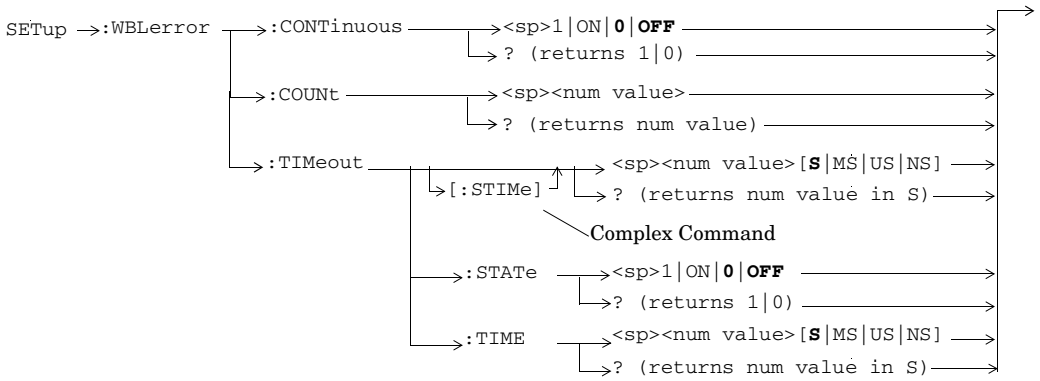
This setting/query return is only applicable to a feature-licensed test application



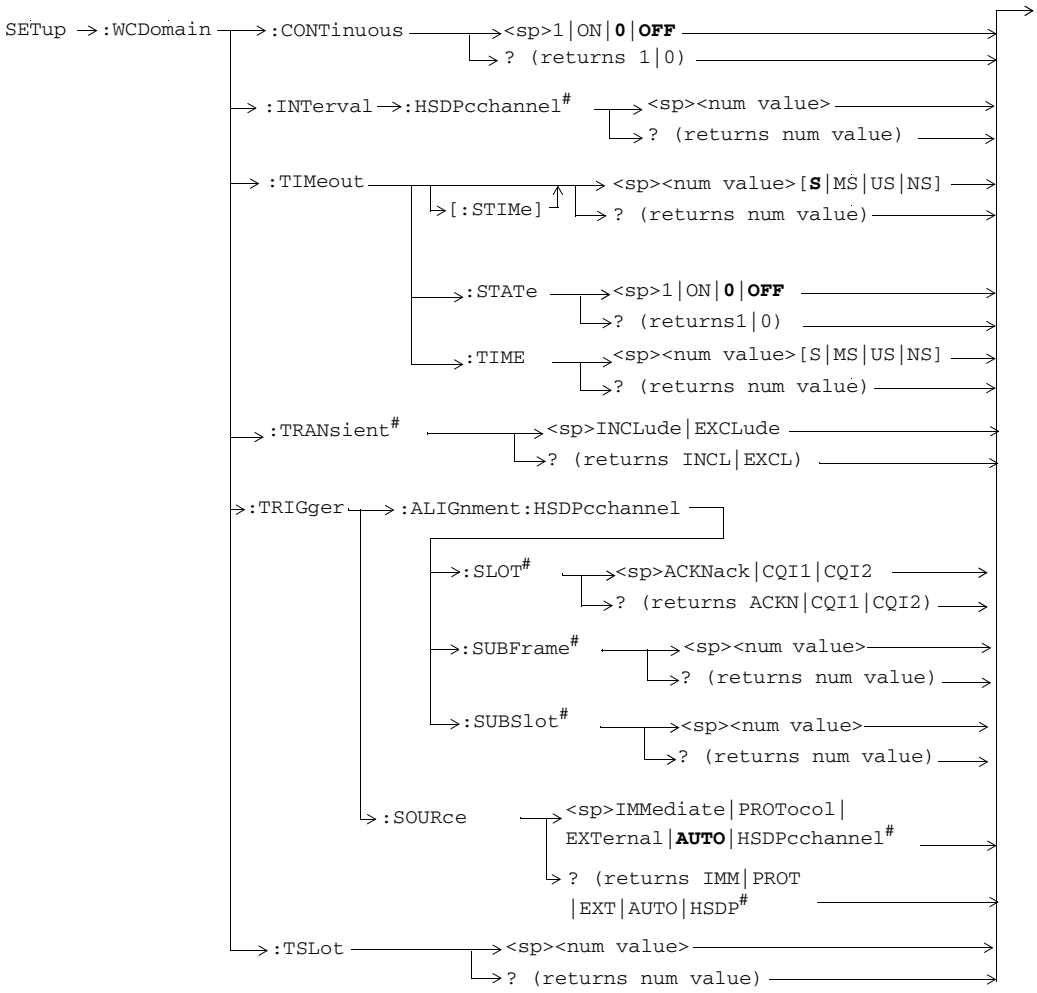
SETup:WBERror



SETup:WBLerror

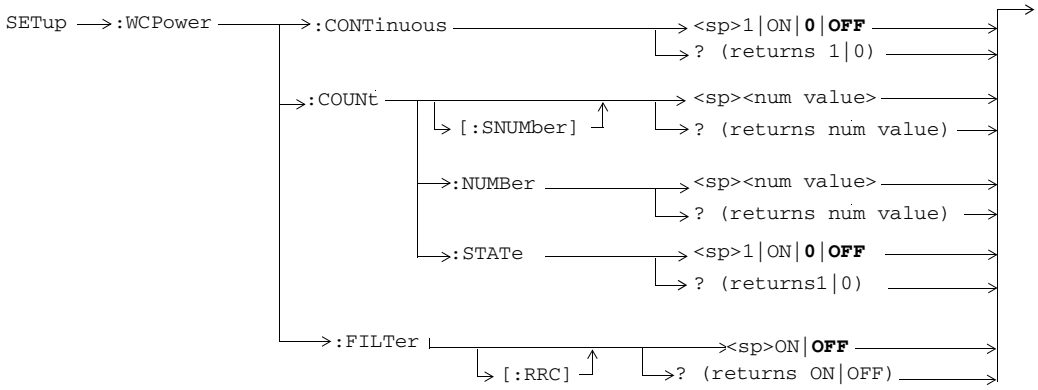


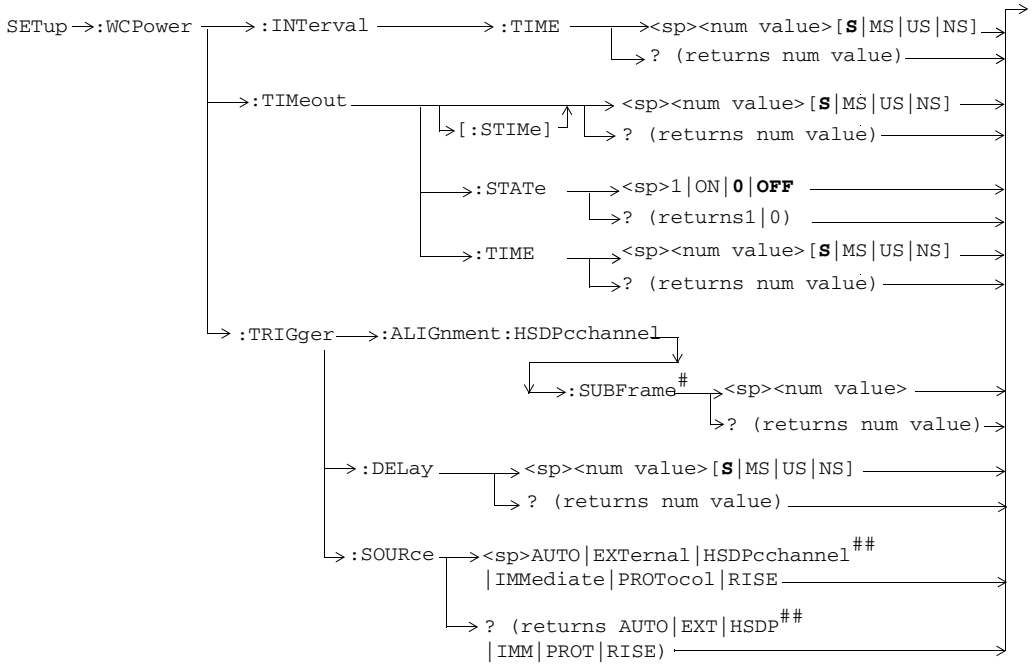
SETup:WCDomain



Only applicable to the lab application or feature-licensed test application.

SETup:WCPower



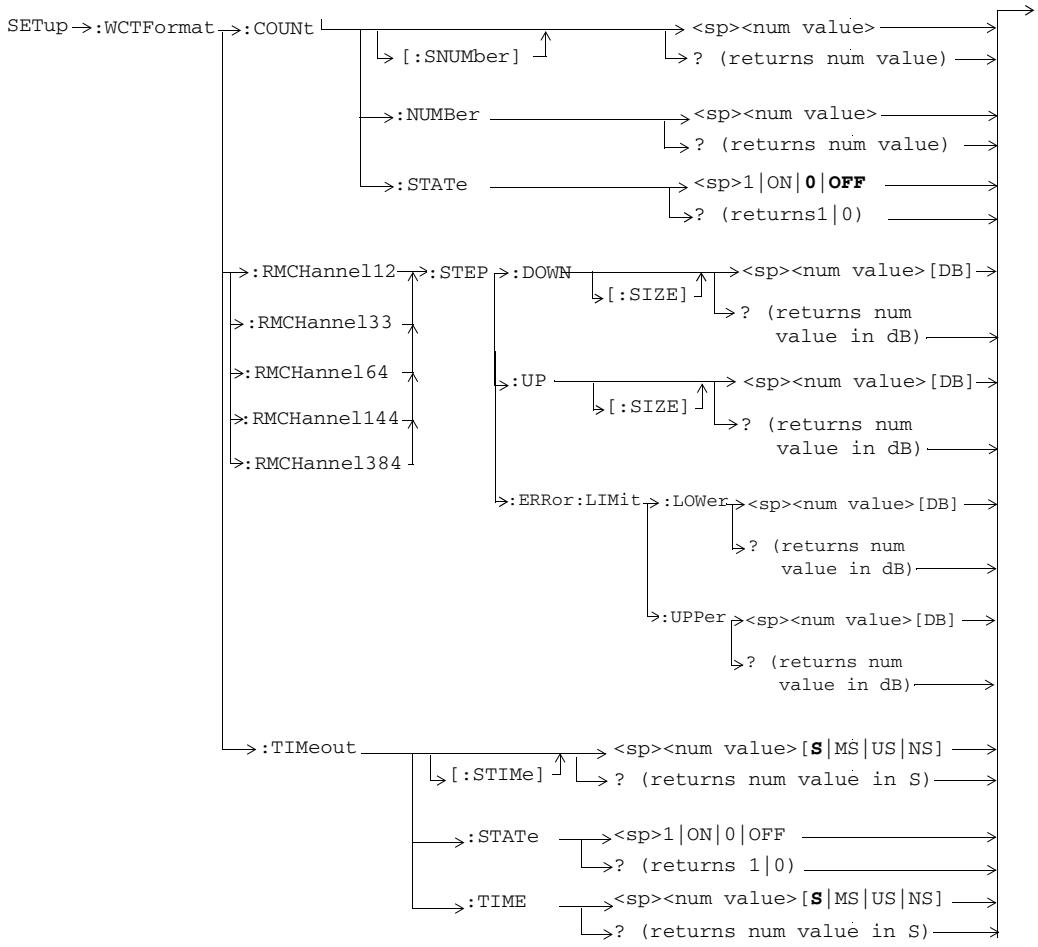


This command is only applicable to a feature-licensed test application

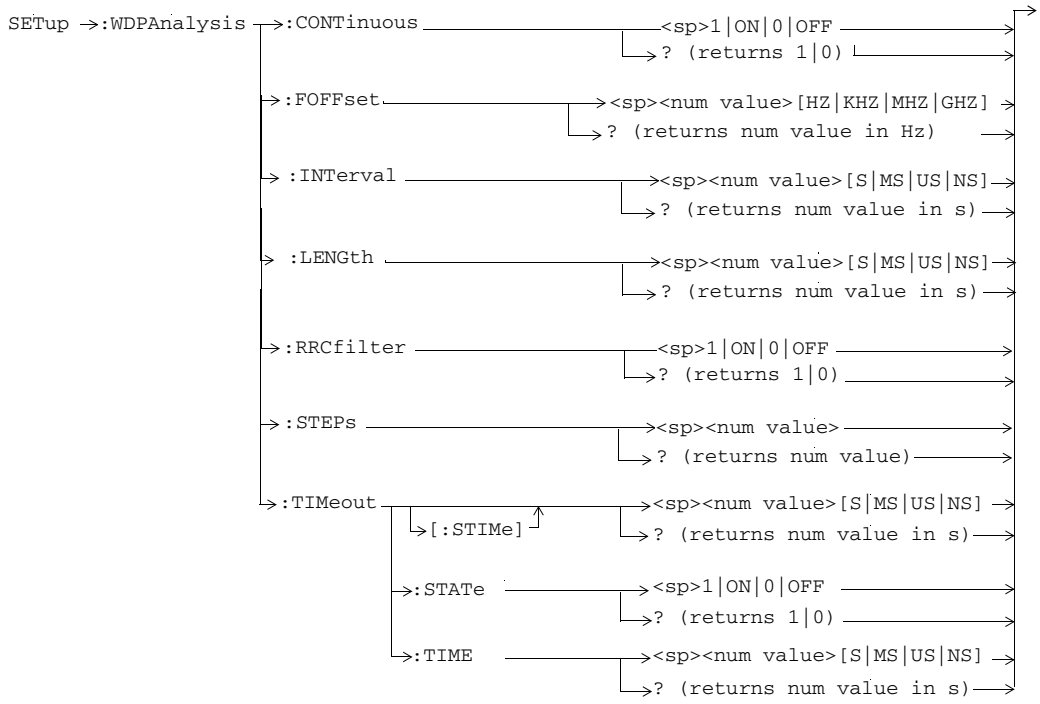
This setting/query return is only applicable to a feature-licensed test application

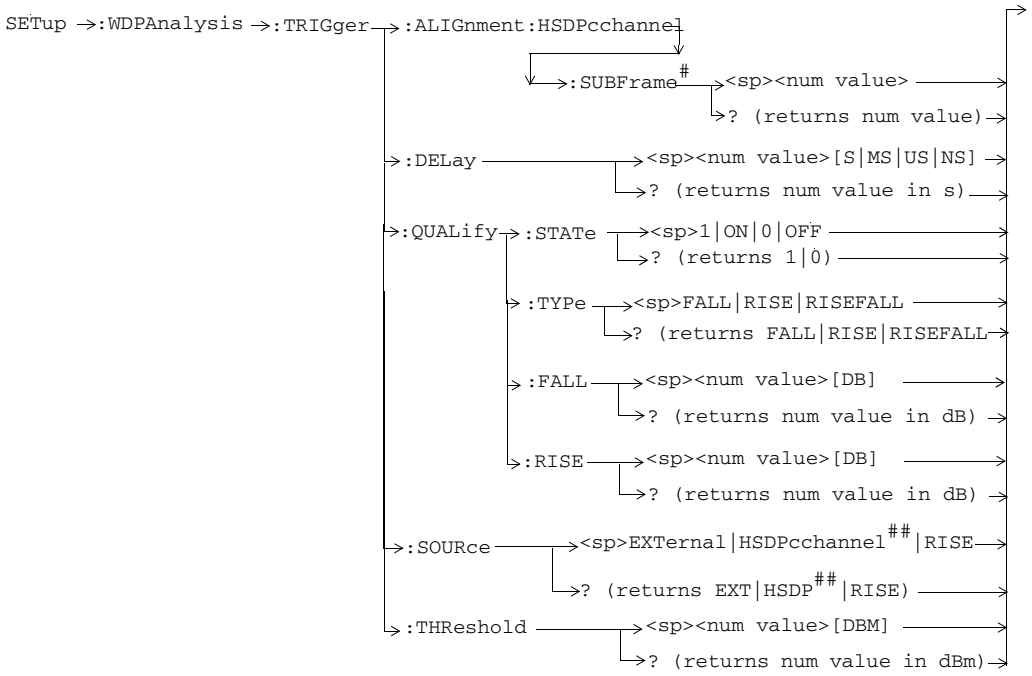
SETup:WCTFormat

This section is only applicable to the lab application.



SETup:WDPAnalysis

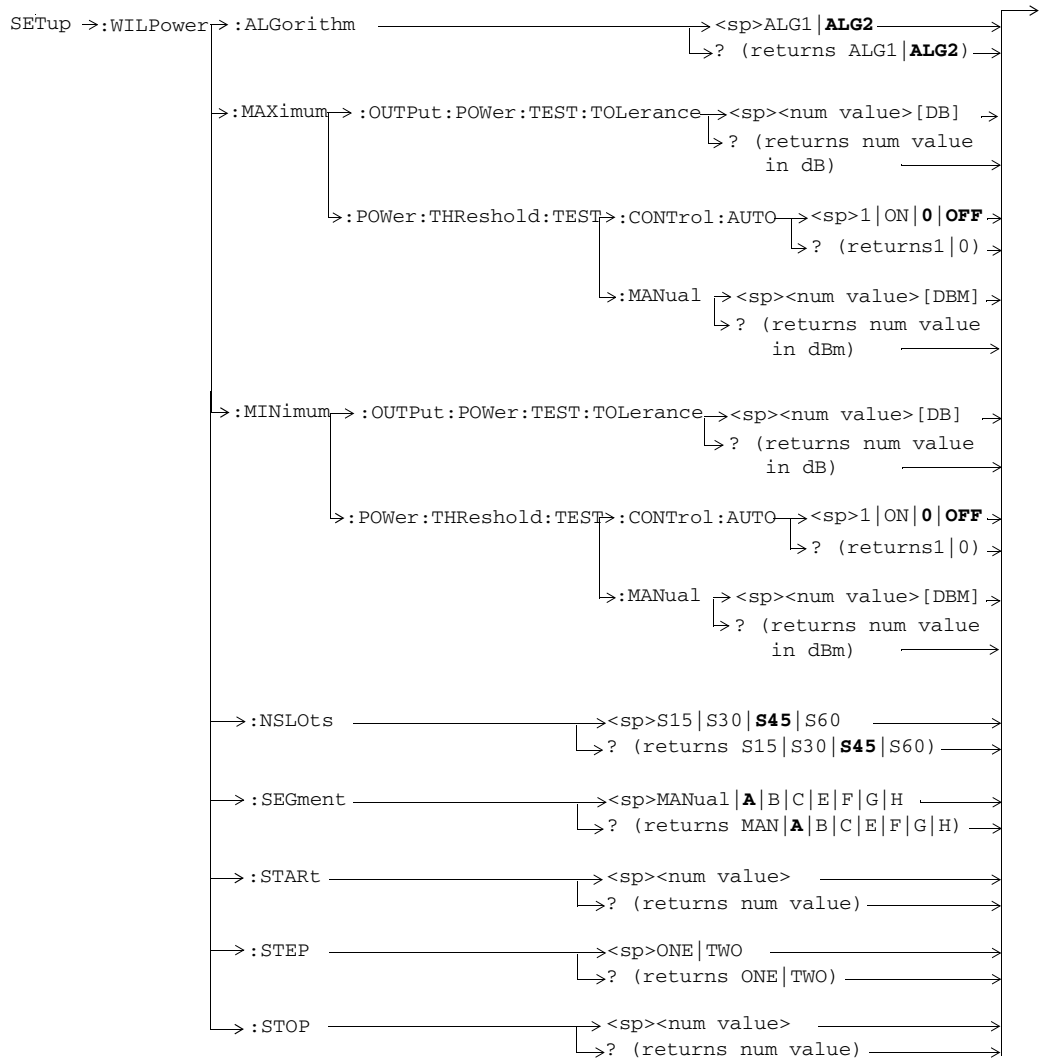


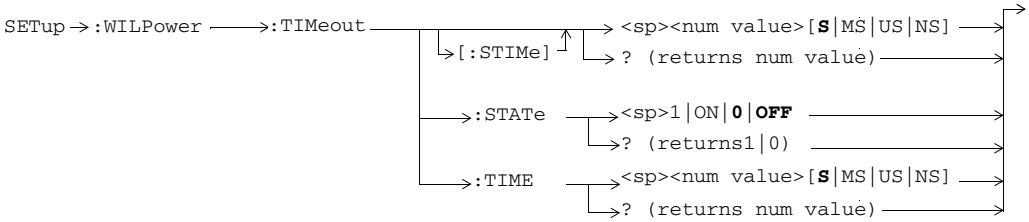


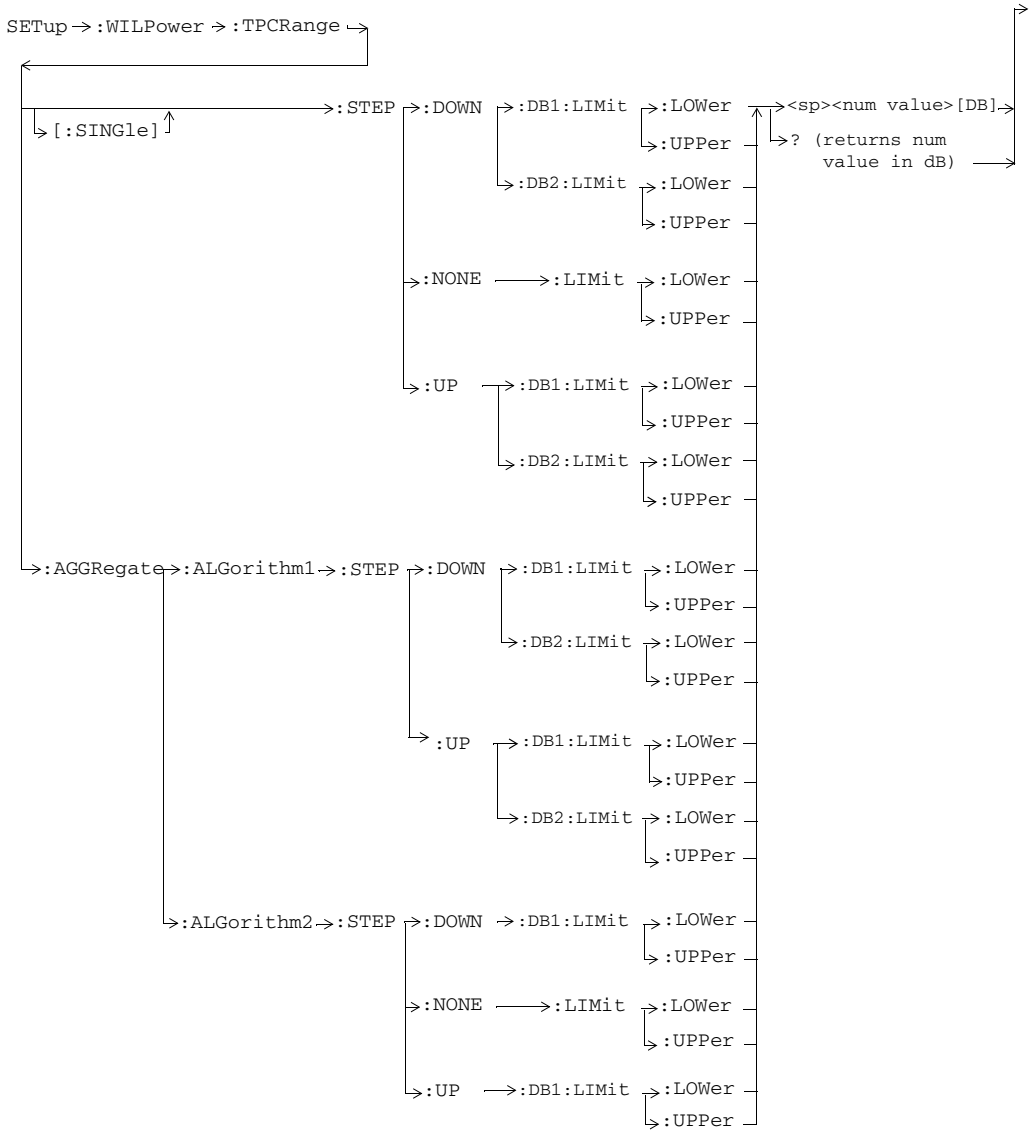
This command is only applicable to a feature-licensed test application

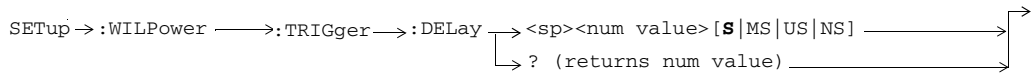
This setting/query return is only applicable to a feature-licensed test application

SETup:WILPower

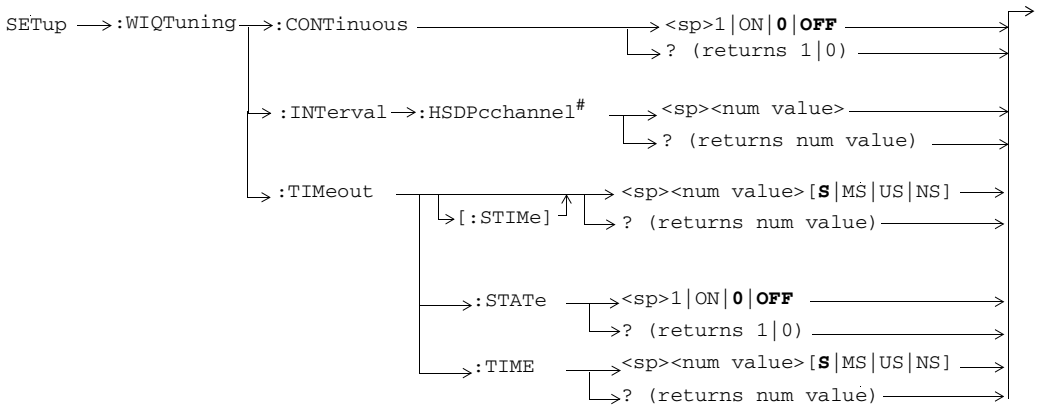



SETup
:WILPower
:TIMeout
[:STIMe]
<sp><num value>[S|MS|US|NS]
? (returns num value)
:STATe
<sp>1|ON|0|OFF
? (returns1|0)
:TIME
<sp><num value>[S|MS|US|NS]
? (returns num value)

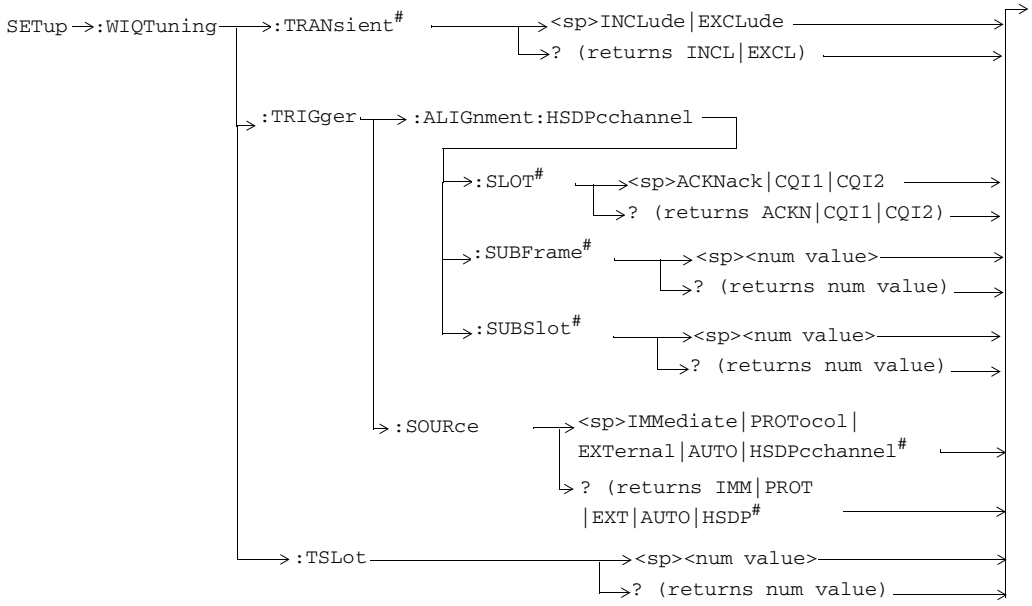

SETup
:WILPower
:TPCRange
[:SINGle]
:STEP
:DOWN
:DB1:LIMit
:LOWer
:UPPer
:DB2:LIMit
:LOWer
:UPPer
:NONE
:LIMit
:LOWer
:UPPer
:UP
:DB1:LIMit
:LOWer
:UPPer
:DB2:LIMit
:LOWer
:UPPer
<sp><num value>[DB]
? (returns num value in dB)
:AGGRegate
:ALGorithm1
:STEP
:DOWN
:DB1:LIMit
:LOWer
:UPPer
:DB2:LIMit
:LOWer
:UPPer
:UP
:DB1:LIMit
:LOWer
:UPPer
:DB2:LIMit
:LOWer
:UPPer
:ALGorithm2
:STEP
:DOWN
:DB1:LIMit
:LOWer
:UPPer
:NONE
:LIMit
:LOWer
:UPPer
:UP
:DB1:LIMit
:LOWer
:UPPer



SETup:WIQTuning

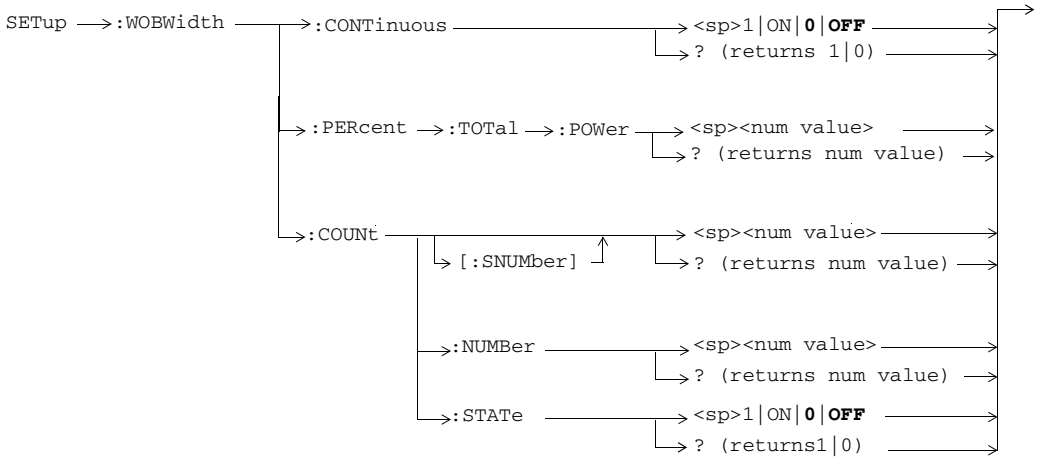


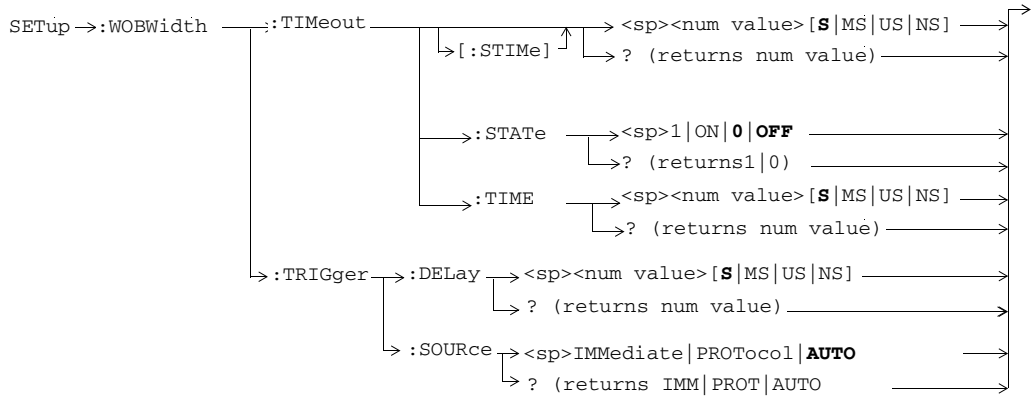
Only applicable to the lab application or feature-licensed test application



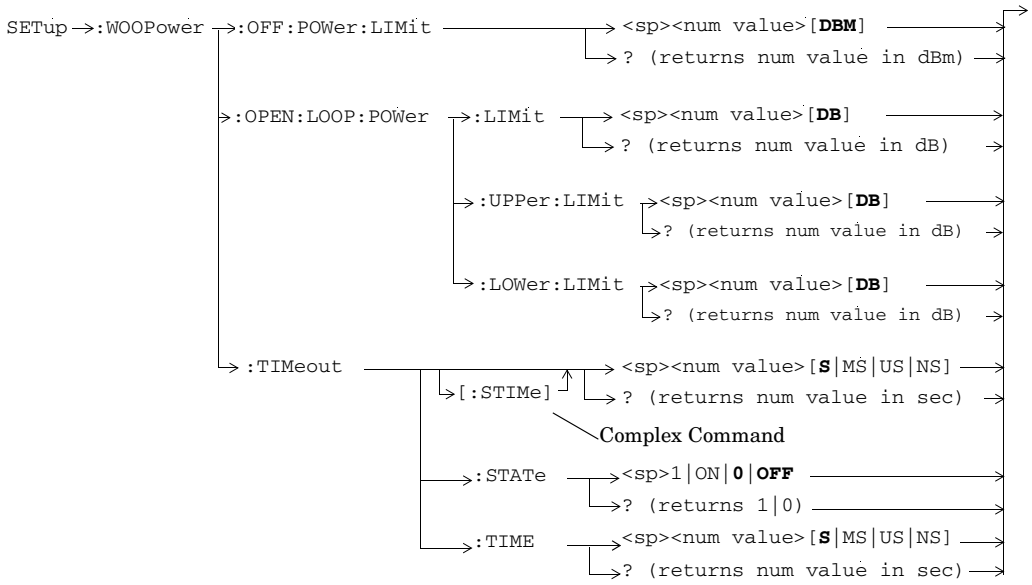
Only applicable to the lab application or feature-licensed test application

SETup:WOBWidth



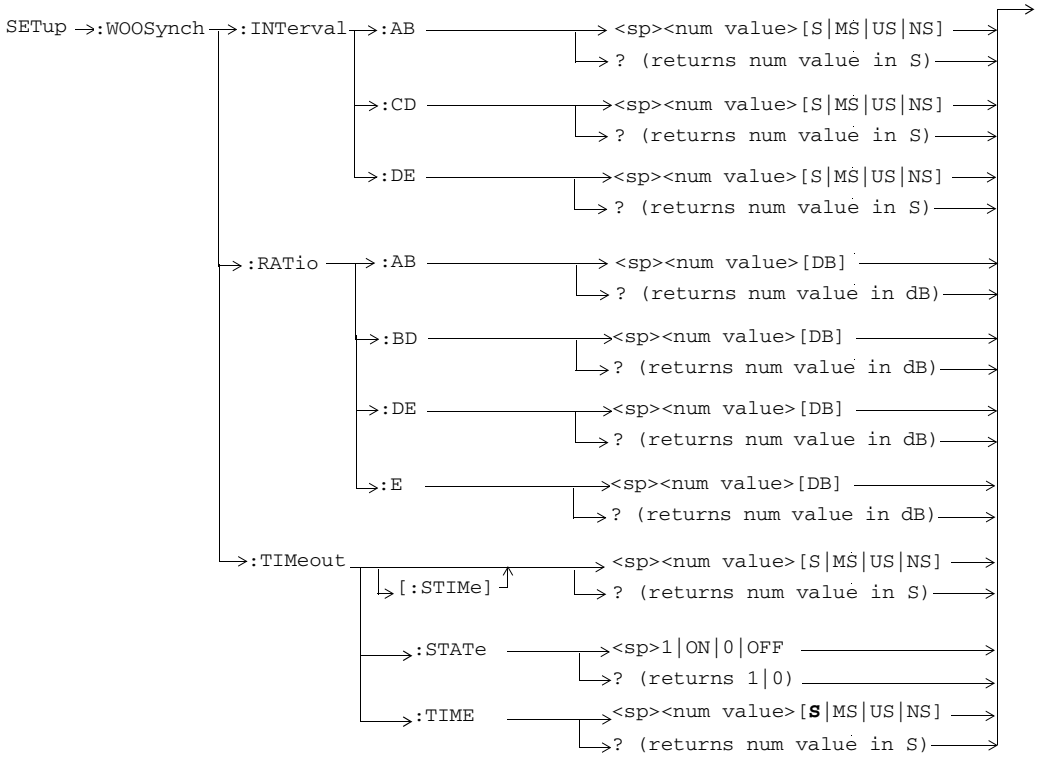


SETup:WOOPower

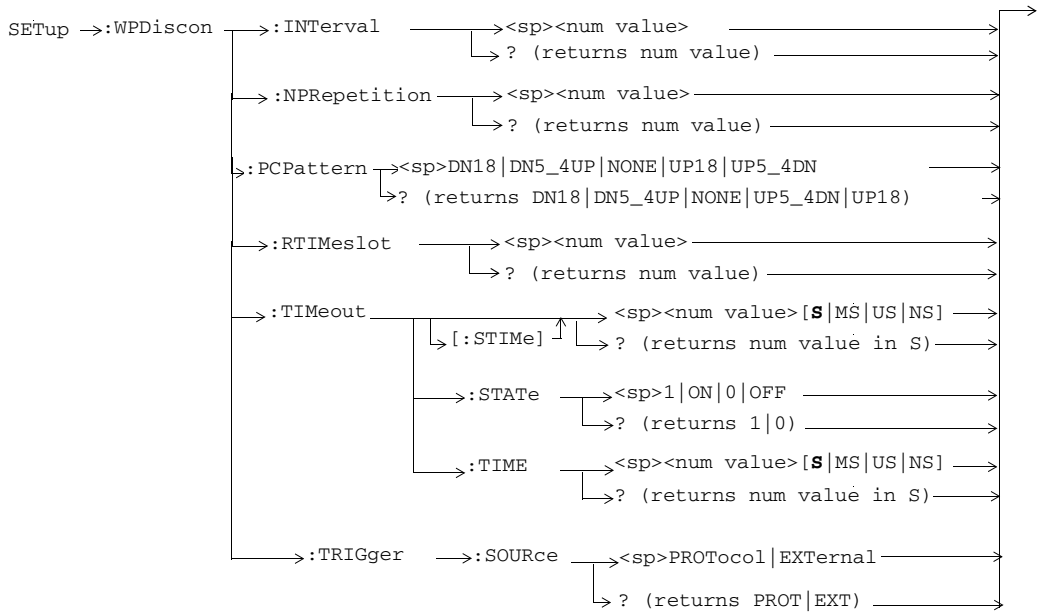


SETup:WOOSynch

This section is only applicable to the lab application.

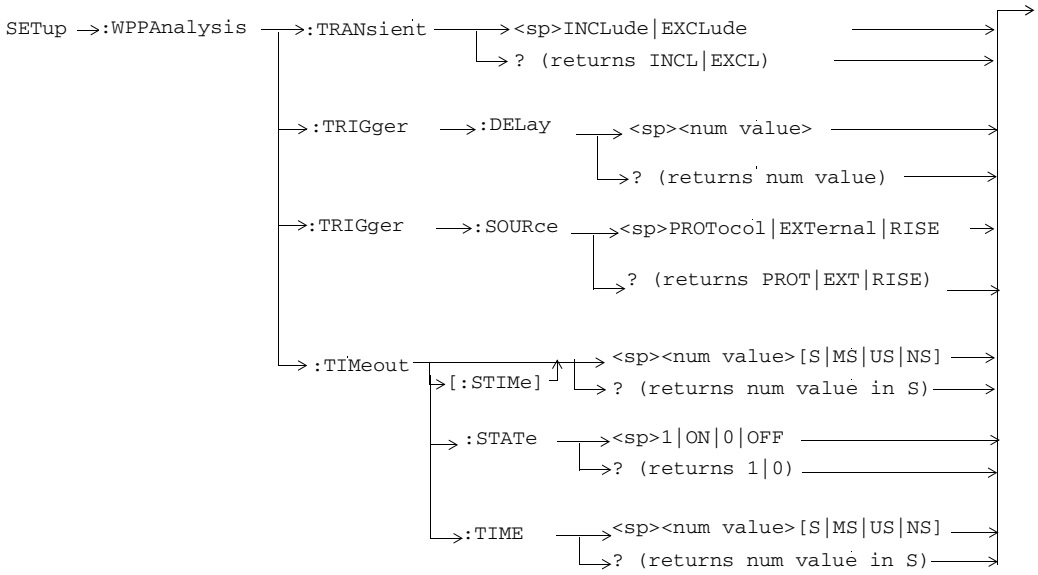


SETup:WPDiscon

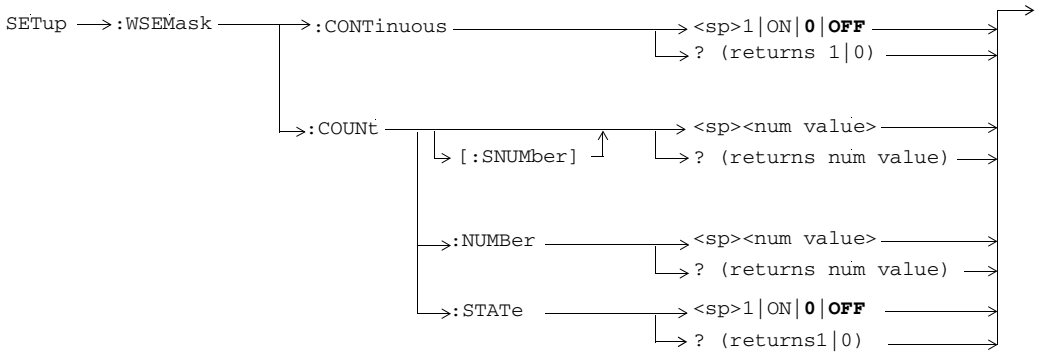


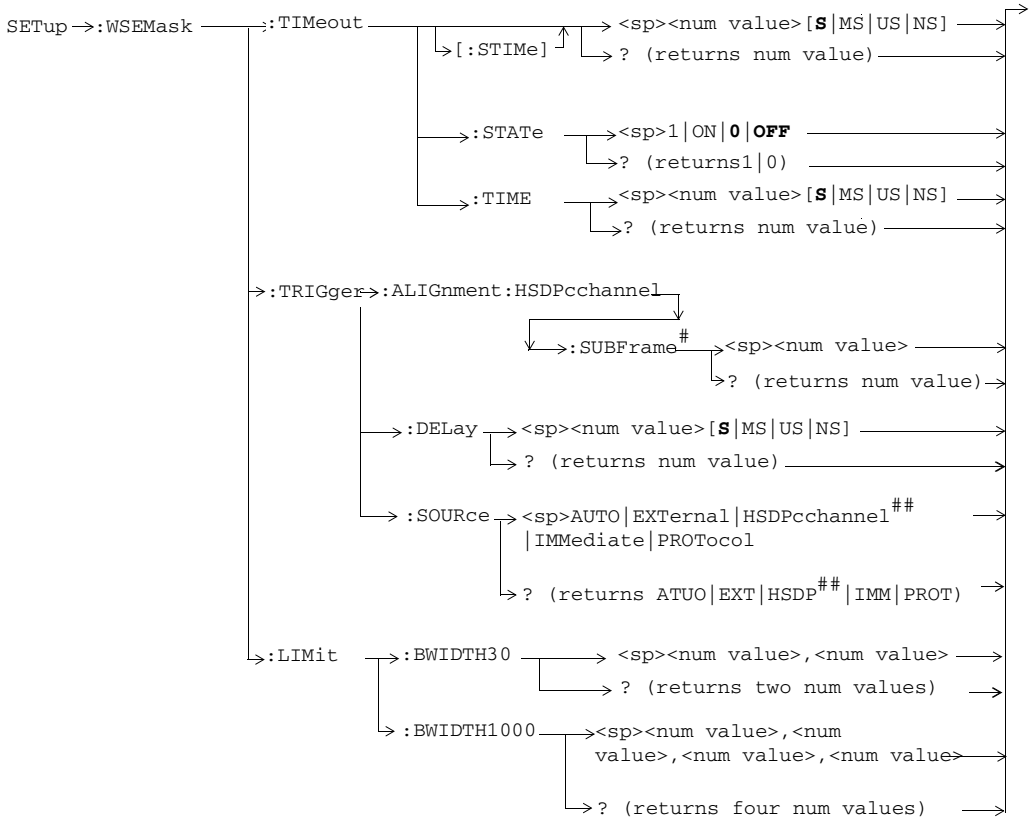
SETup:WPPAnalysis

This section is only applicable to the lab application.



SETup:WSEMask

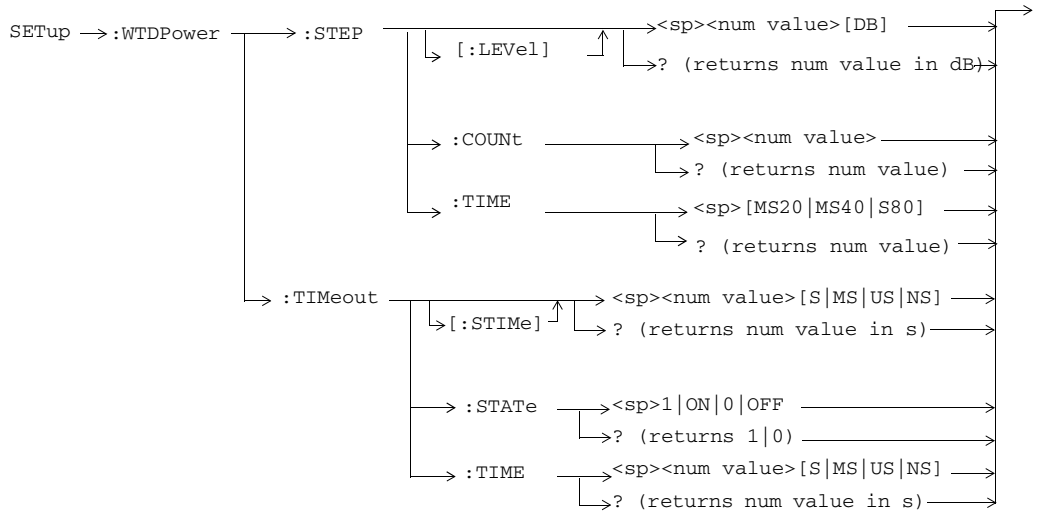




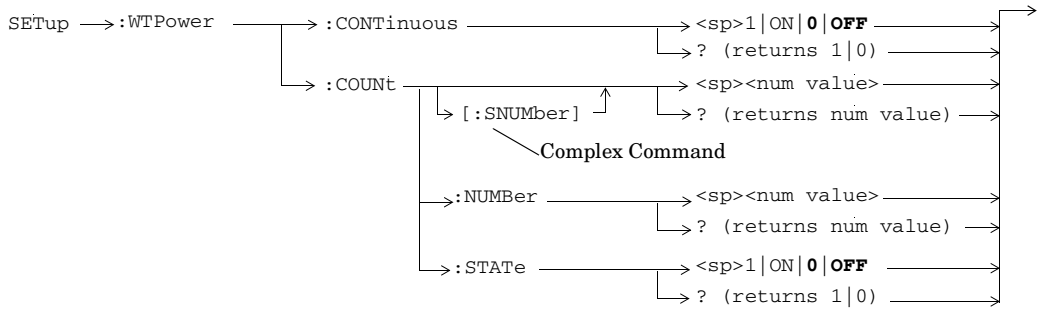
This command is only applicable to a feature-licensed test application

This setting/query return is only applicable to a feature-licensed test application

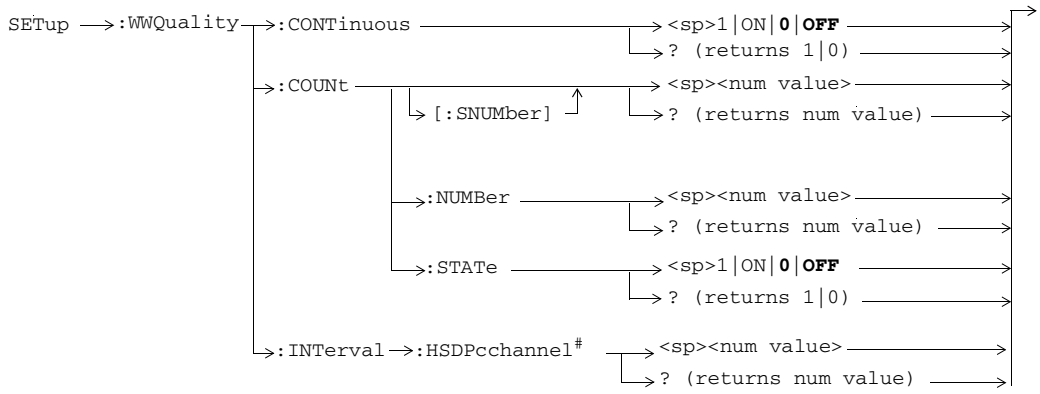
SETup:WTDPower



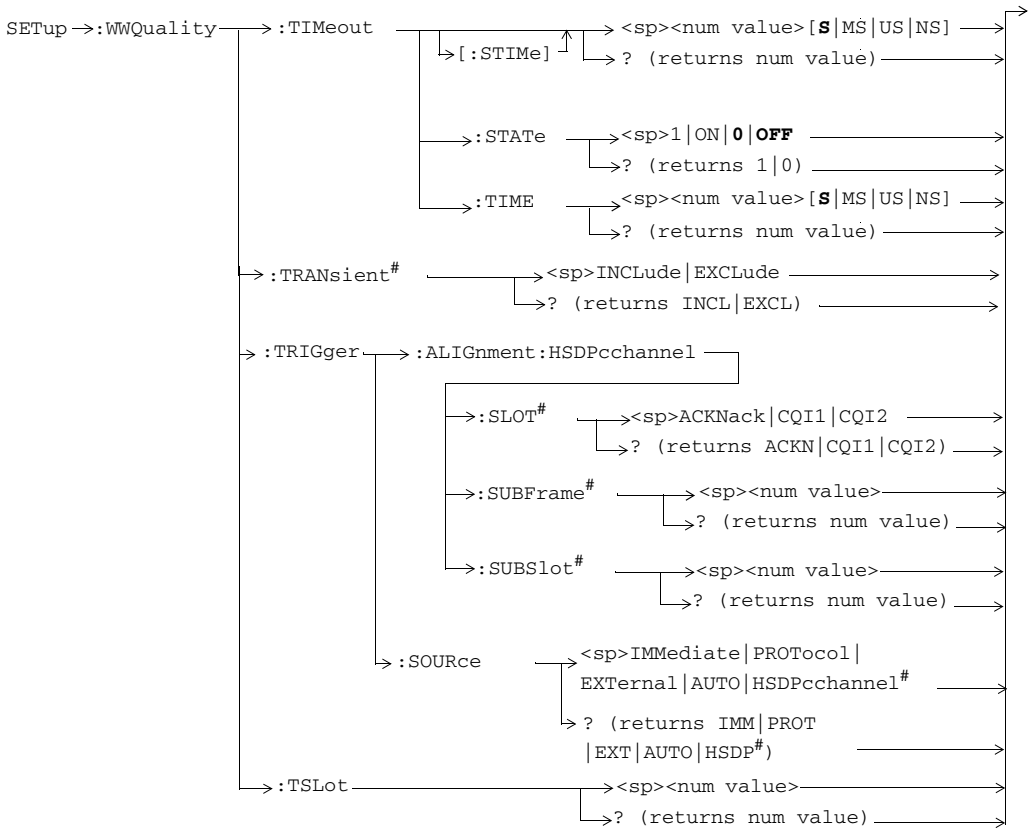
SETup:WTPower



SETup:WWQuality

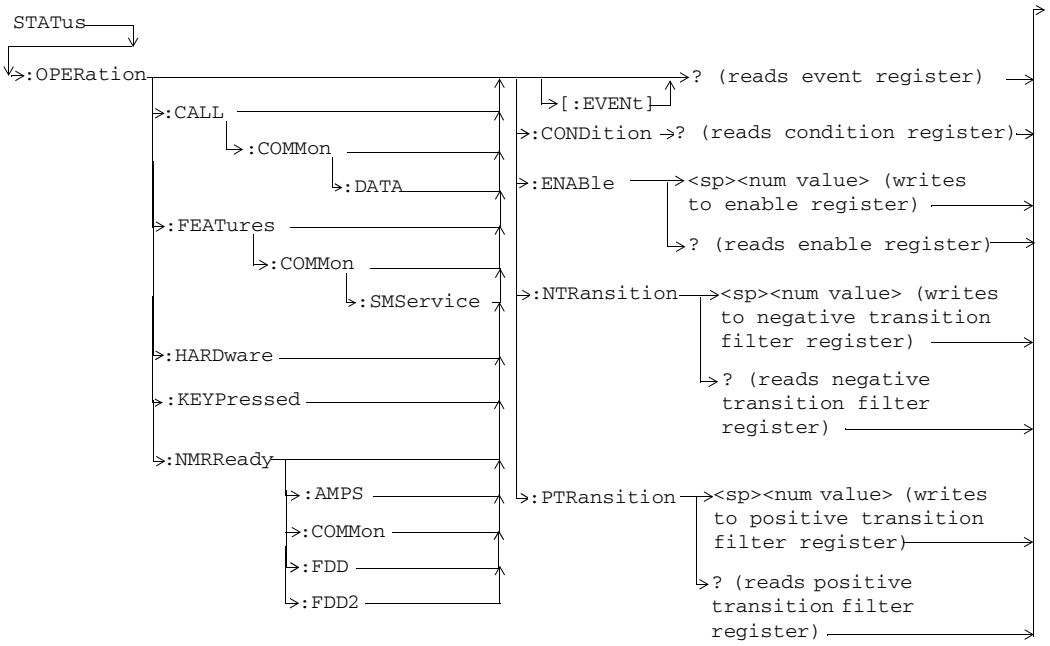


Only applicable to the lab application or feature-licensed test application

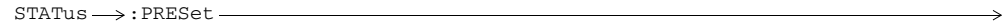


Only applicable to the lab application or feature-licensed test application

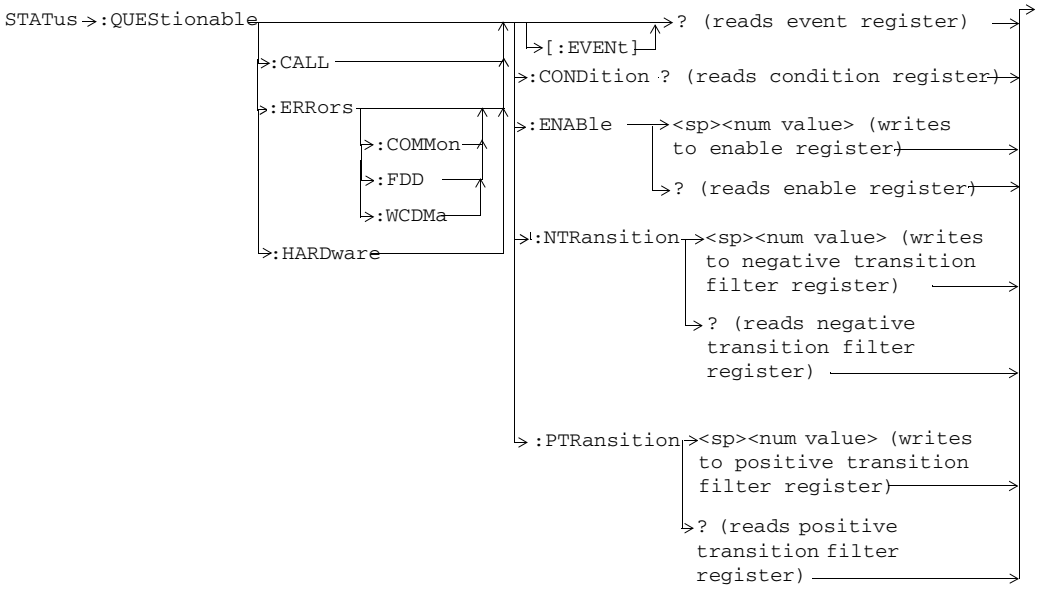
STATus:OPERation



STATus:PRESet

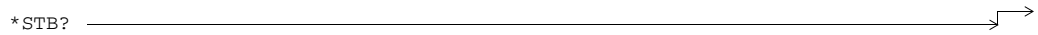


STATus:QUEStionable



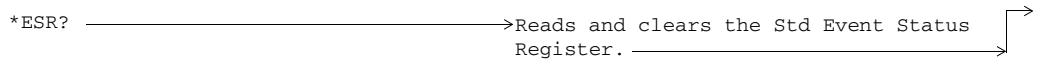
Status Byte Register

*STB?

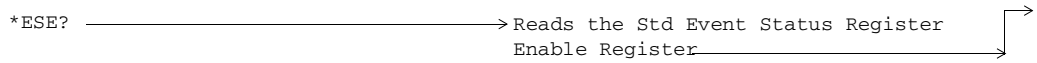


Standard Event Status Register

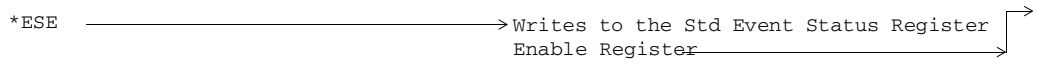
***ESR?**



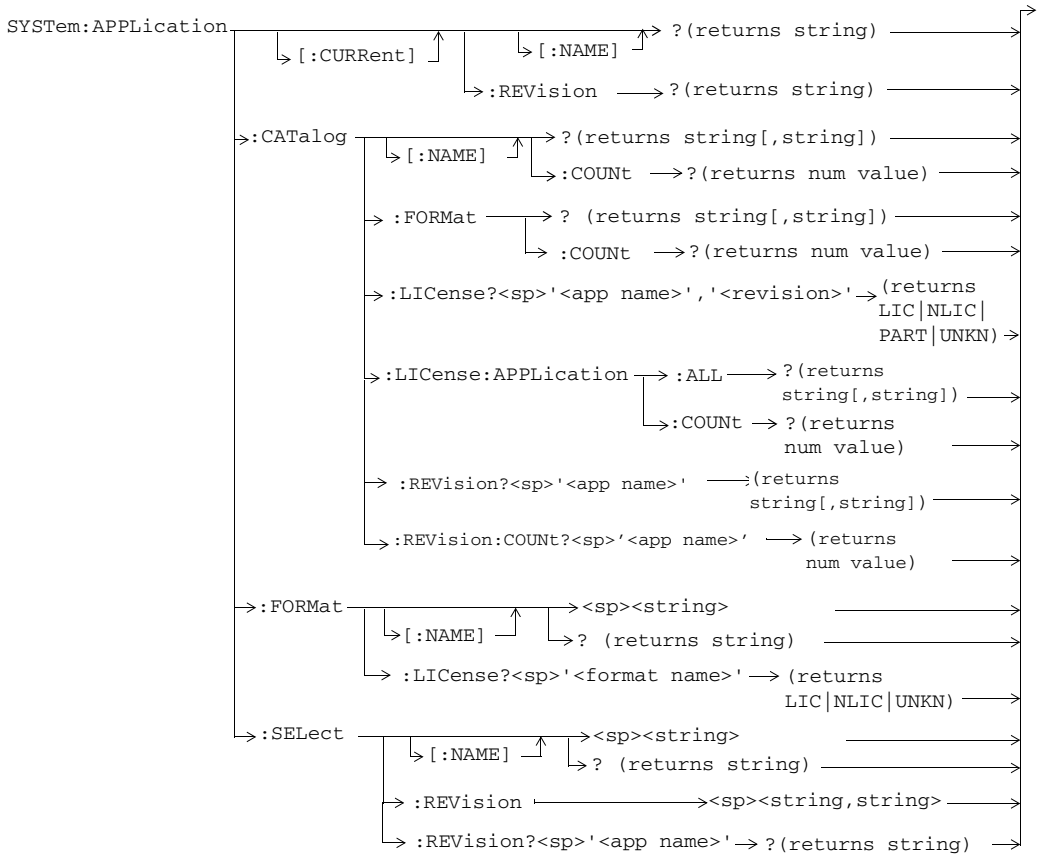
***ESE?**



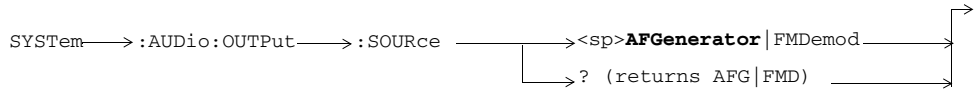
***ESE**

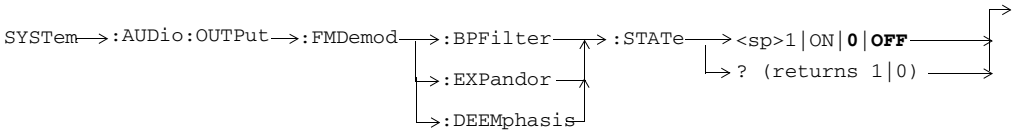


SYSTem:APPLication

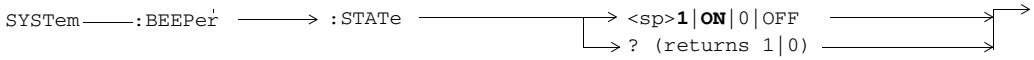


SYSTem:AUDio

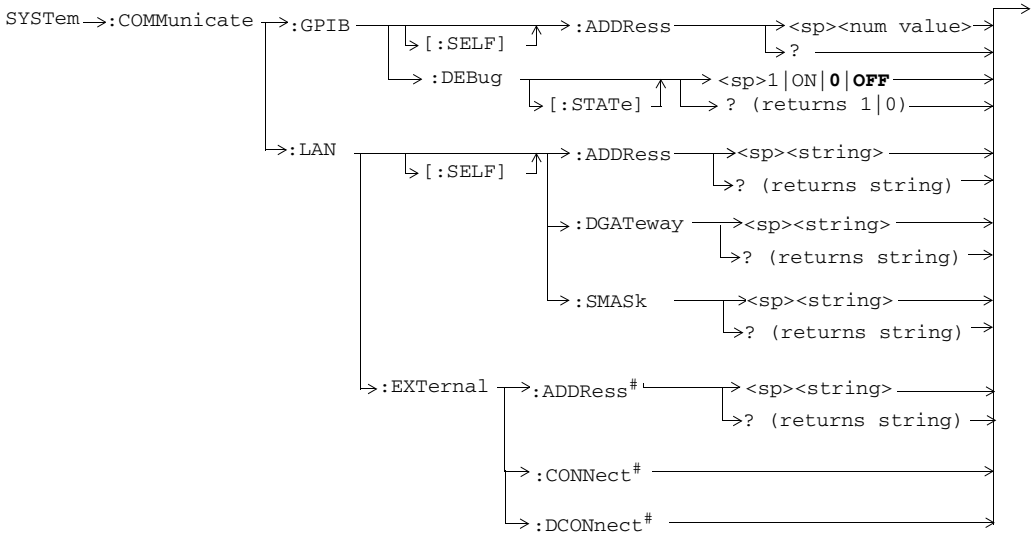




SYSTem:BEEPer

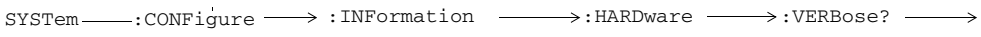


SYSTem:COMMunicate

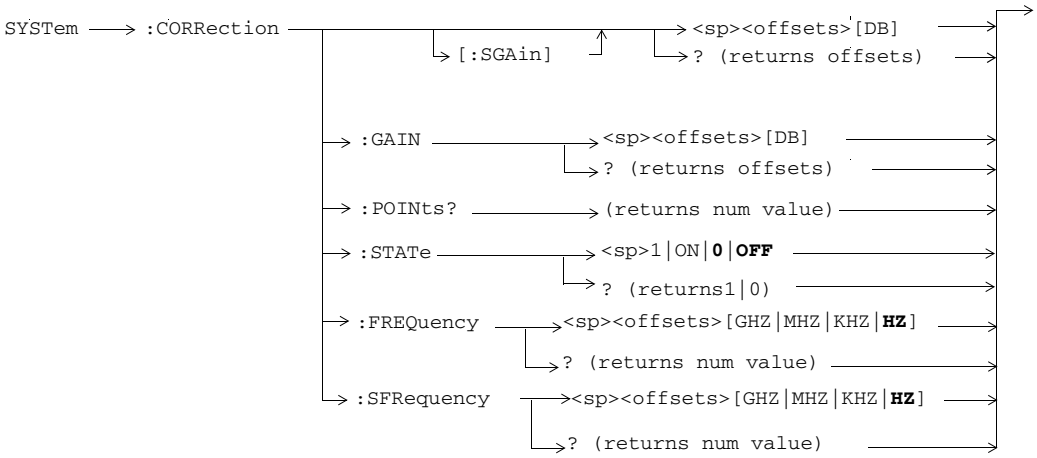


This command is only applicable to the lab application or feature-licensed test application.

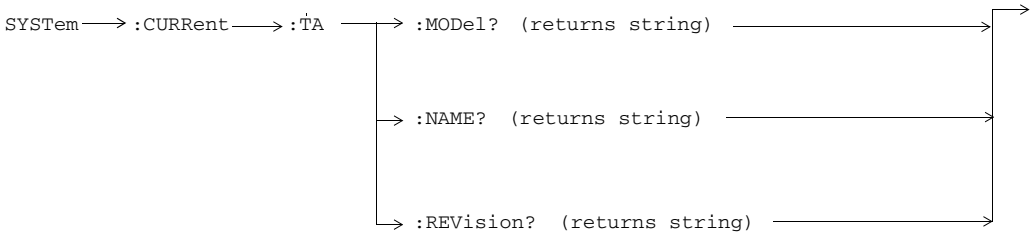
SYSTem:CONFigure



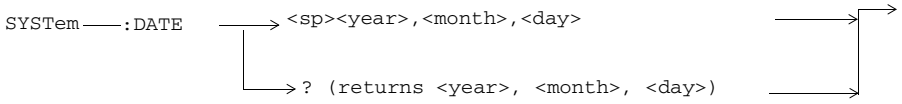
SYSTem:CORRection



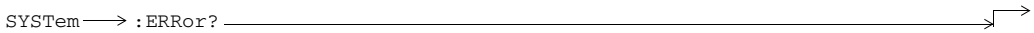
SYSTem:CURRent:TA



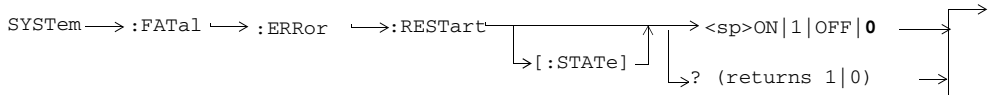
SYSTem:DATE



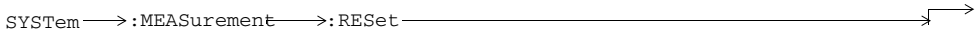
SYSTem:ERRor?



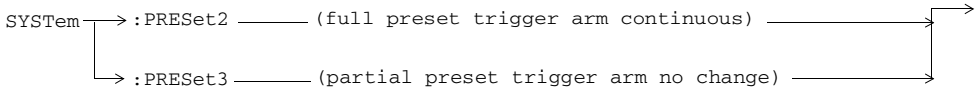
SYSTem:FATal



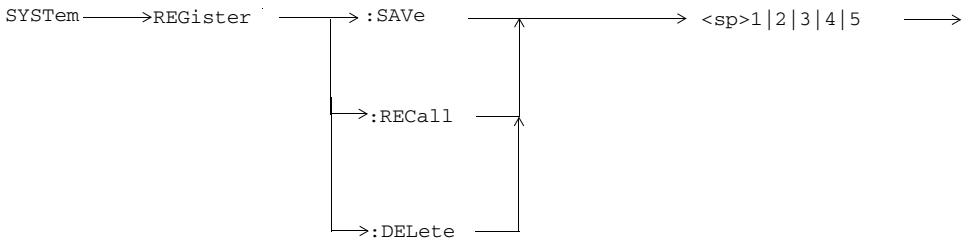
SYSTem:MEASurement:RESet



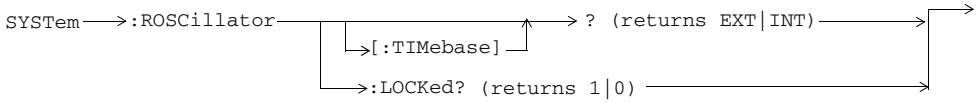
SYSTem:PRESet



SYSTem:REGister

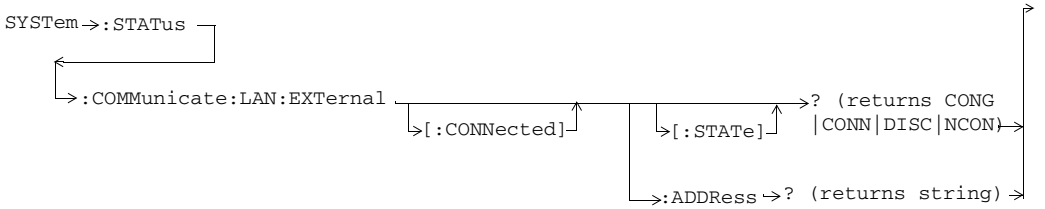


SYSTem:ROSCillator

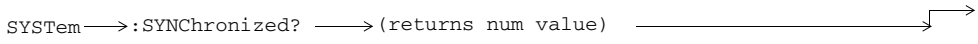


SYSTem:STATus

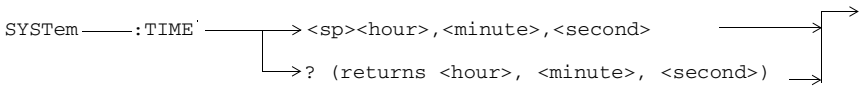
This section is only applicable to the lab application and to a test application with the required feature license.



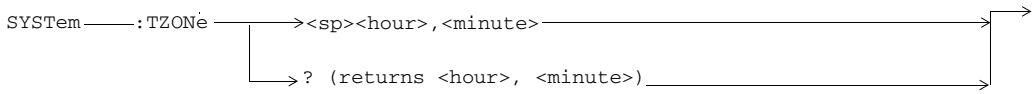
SYSTem:SYNChronized



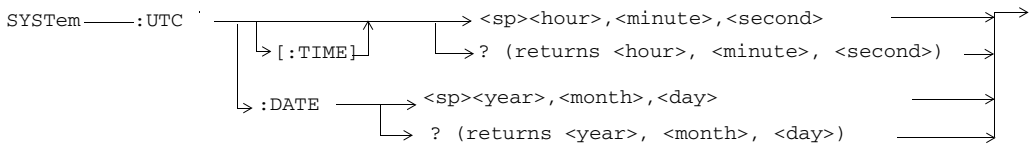
SYSTem:TIME



SYSTem:TZONe



SYSTem:UTC



IEEE 488.2 Common Commands

Description

***CLS** The *CLS, clear status command, is defined in “IEEE Std 488.2-1992”, 10.3. This command will also clear and close the error message screen on the test set’s display.

***ESE** The *ESE, standard event status enable command, is defined in “IEEE Std 488.2-1992”, 10.10.

***ESE?** The *ESE?, standard event status enable query, is defined in “IEEE Std 488.2-1992”, 10.11.

***ESR?** The *ESR?, standard event status register query, is defined in “IEEE Std 488.2-1992 “,10.12.

***IDN?** The *IDN?, identification query, is defined in “IEEE Std 488.2-1992”, 10.14.*IDN? is used to retrieve information about the test set in ASCII format.

*IDN?, returns ASCII codes 32 through 126 excluding comma and semicolon in four comma separated fields. Field 1 returns the manufacturer, field 2 returns the instrument model number, field 3 returns the serial number, field 4 returns 0.

***OPC** The *OPC, operation complete command, is defined in “IEEE 488.2-1992”, 10.18. *OPC causes the test set to continuously sense the No Operation Pending flag. When the No Operation Pending flag becomes TRUE, the OPC event bit in the standard event status register (ESR) is set to indicate that the state of all pending operations is completed. The *OPC common command is not recommended for use as an overlapped command.

***OPC?** The *OPC?, operation complete query, is defined in “IEEE Std 488.2-1992”, 10.19. The *OPC? query allows synchronization between the controller and the test set using either the message available (MAV) bit in the status byte, or a read of the output OPC?. The *OPC? query does not effect the OPC event bit in the Standard Event Status Register (ESR). The *OPC? common command is not recommended for use as an overlapped command.

***OPT?** The *OPT?, option identification query, is defined in “IEEE Std 488.2-1992”, 10.20. Each option will have a unique name, that name will be retuned with the query.

***RST** The *RST, full preset command, is defined in “IEEE Std 488.2-1992”, 10.32. *RST is the recommended command when performing a full preset on the test set. A *RST restores the majority of settings to their default values.

- *RST sets trigger arm to single
- PRESet2 sets trigger arm to continuous

***SRE** The *SRE, service request enable command, is defined in “IEEE Std 488.2-1992”, 10.34. The parameter range for this command is 0 through 255.

***SRE?** The *SRE?, service request enable query, is defined in “IEEE Std 488.2-1992”, 10.35. Values returned by this query range from 0 through 255.

***STB?** The *STB?, read status byte query, is defined in “IEEE Std 488.2-1992”, 10.36. Values returned by this query range from 0 through 255.

***WAI** The *WAI, wait-to-continue command, is defined in “IEEE Std 488.2-1992”, 10.39. The *WAI command prevents the test set from executing any further commands or queries until all pending operation flags are false. The *WAI common command is not recommended for use as an overlapped command.

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