

GPIB Command Syntax

for

E1966A 1xEV-DO Terminal Test Application Revision A.01

1000-1871 (to order use part number 5971-5985)



Agilent Technologies

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GPB Syntax for E1966A

Description

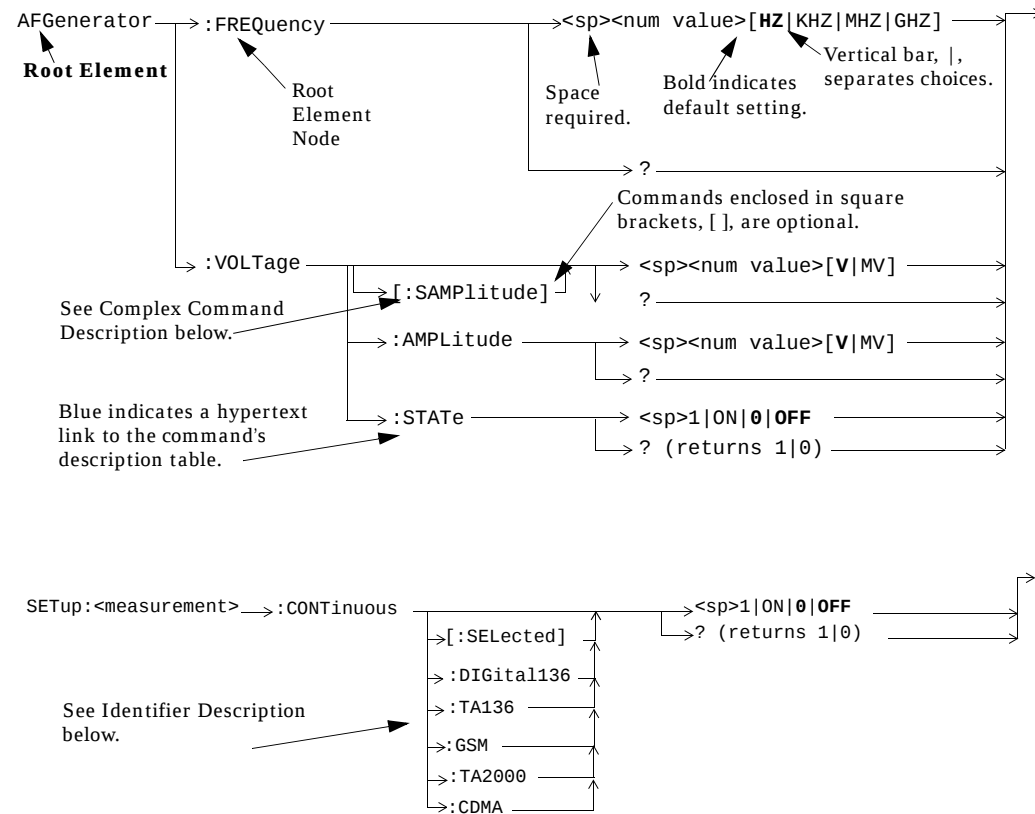


Diagram Description

Statement elements 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 statement elements that can be generated by starting at the **Root Element** and following the line the **direction of the arrow** is syntactically correct. The drawings show the proper use of spaces. Where spaces are required they are indicated by **<sp>**, otherwise no spaces are allowed between statement elements.

GPIB Syntax for E1966A

Complex Command Description

A complex command sets the state of the parameter to ON, and is used to set a value for that parameter. These parameters; amplitude, frequency, gain, number, time, and value can be used as a complex command. Refer to the specific command for the parameter that applies.

Identifier Description

Some test applications are able to test more than one radio format. There may be commands/queries that are shared by more than one radio format in the some of these test applications. Identifiers are used to specify the radio format for the command/query. The command/query is sent to the active radio format if you don't use an identifier. An identifier must be used when sending commands to the inactive radio format.

Developing Code

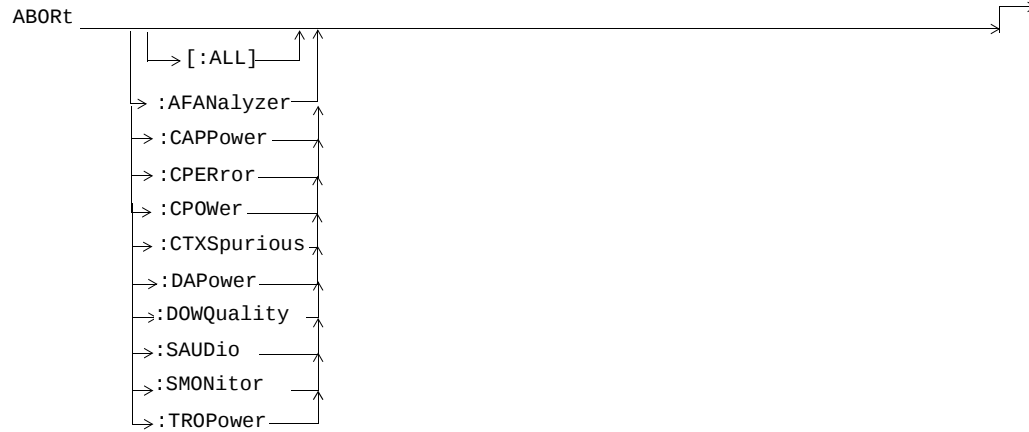
It is recommended that you set the Test Set's operating environment to debug. To set the Test Set debug mode to "ON" use the following syntax:

SYSTem:COMMunicate:GPIB:DEBug ON

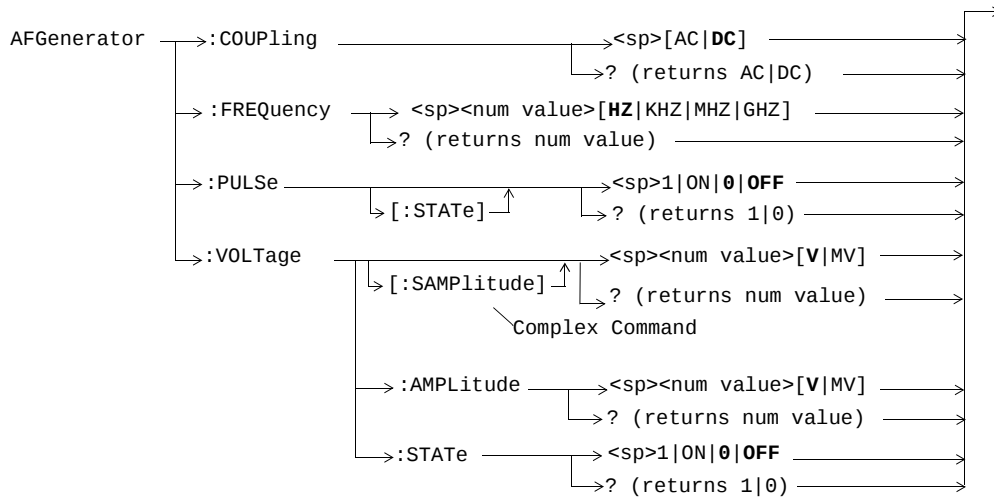
Units-of-Measure

Amplitude (linear)	V
Frequency	Hz
Power (logarithmic)	dBm
Time	s

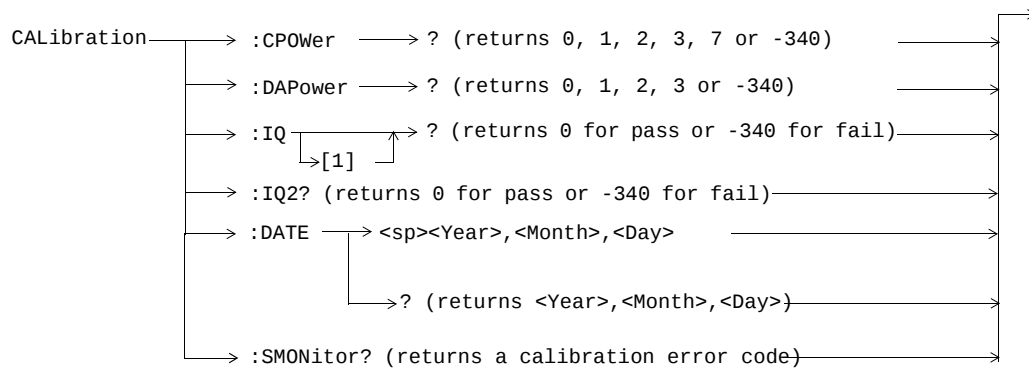
ABORT



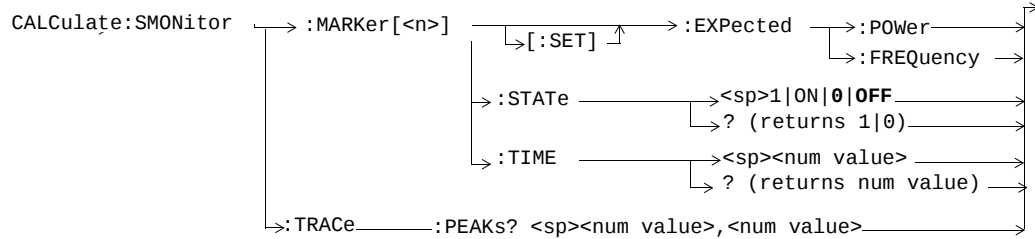
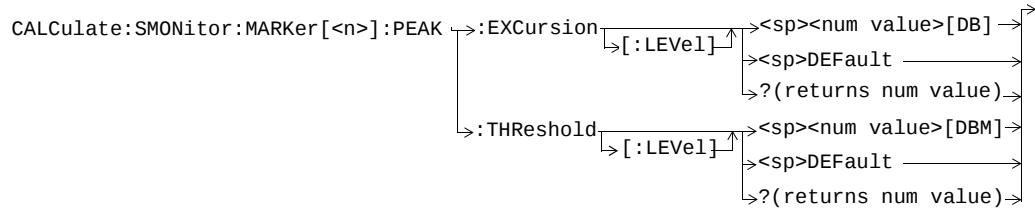
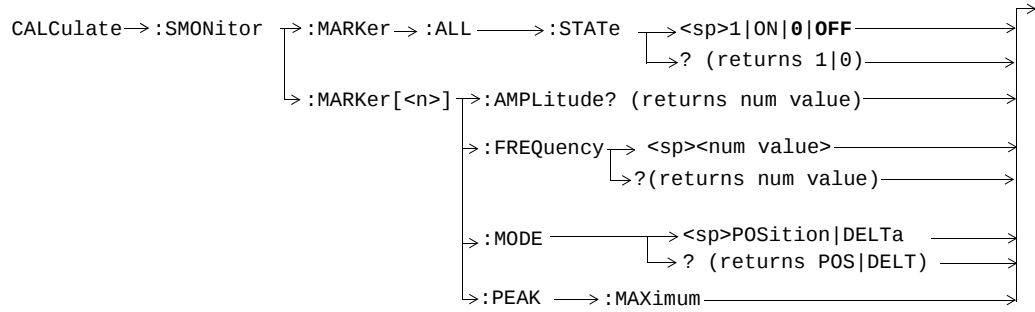
AFGenerator



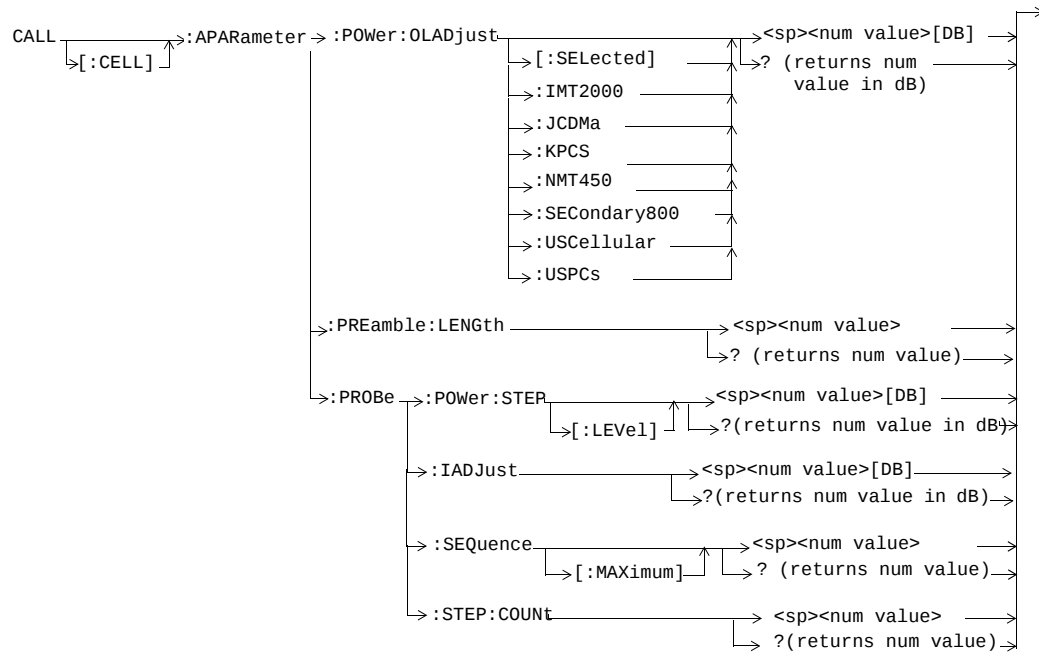
CALibration

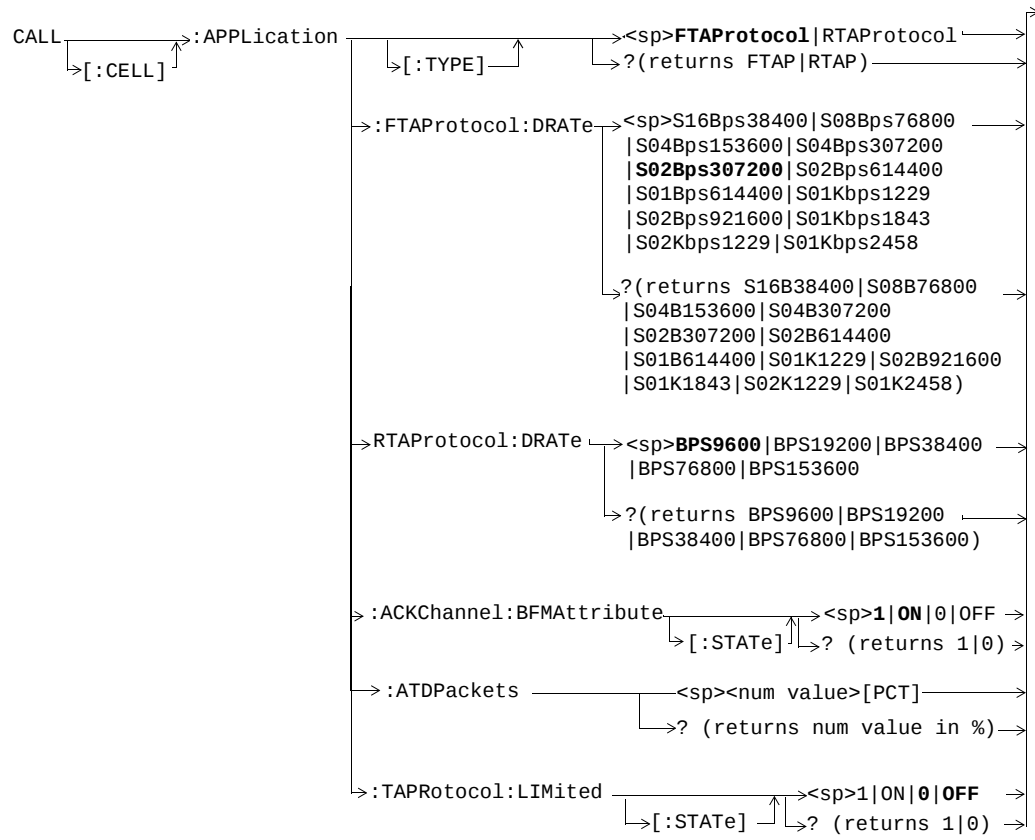


CALCulate:SMONitor

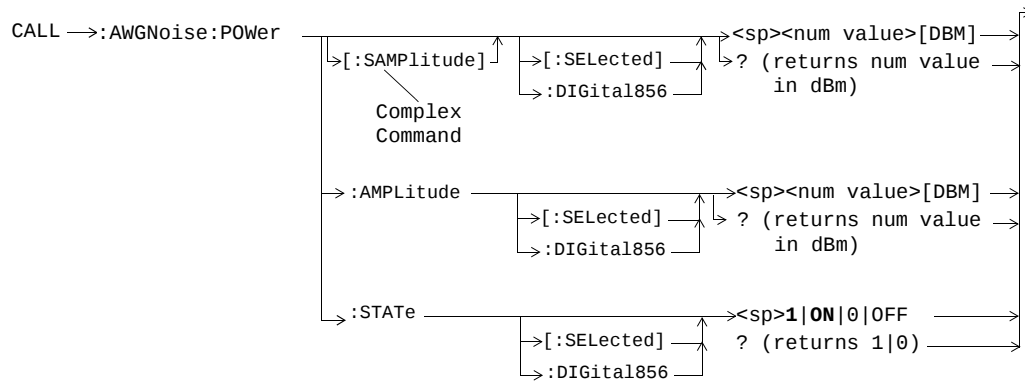


CALL:APARameter

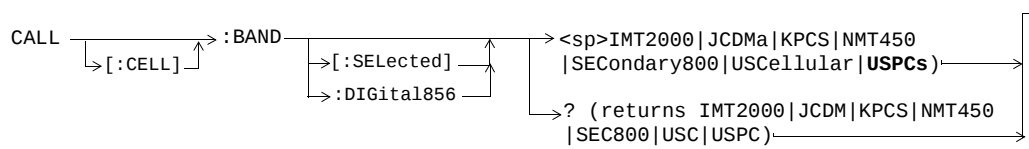


CALL:APPLication

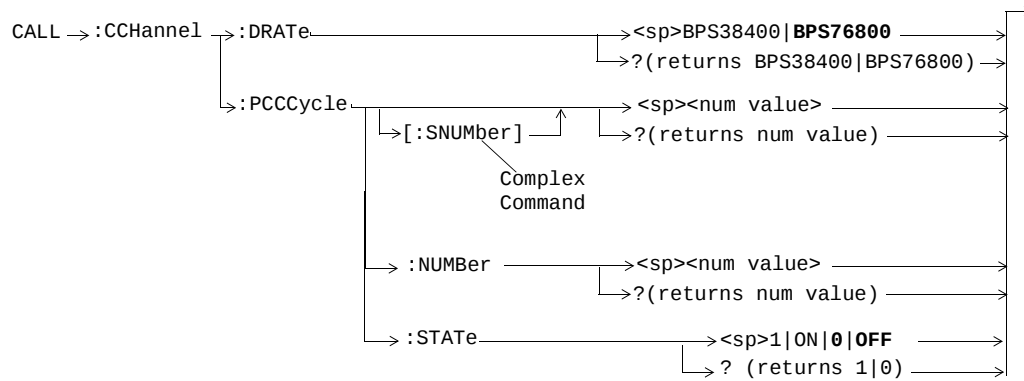
CALL:AWGNoise



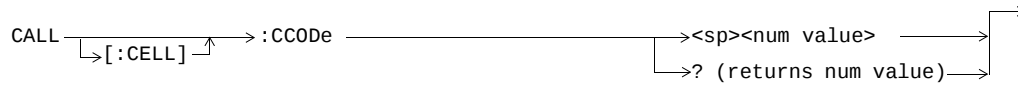
CALL:BAND



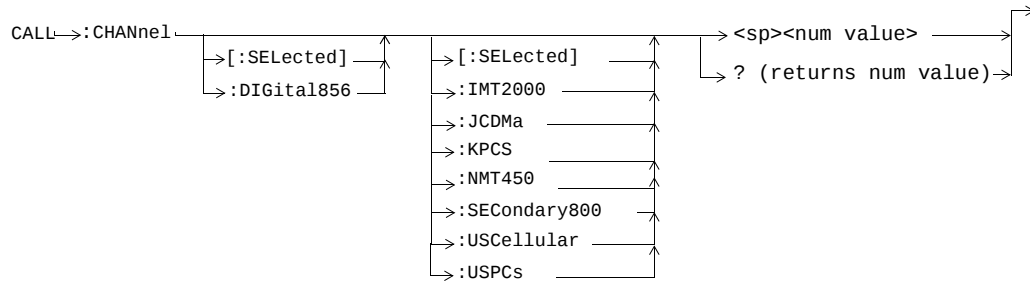
CALL:CCHannel



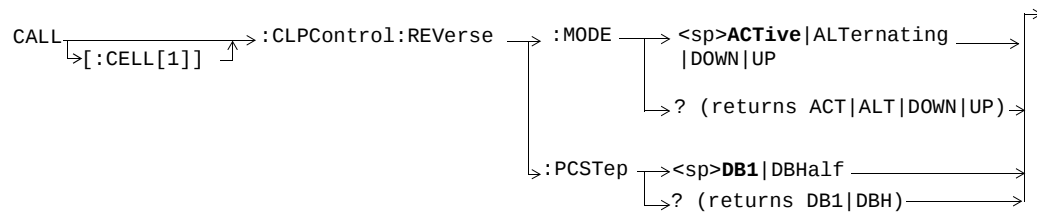
CALL:CCODE



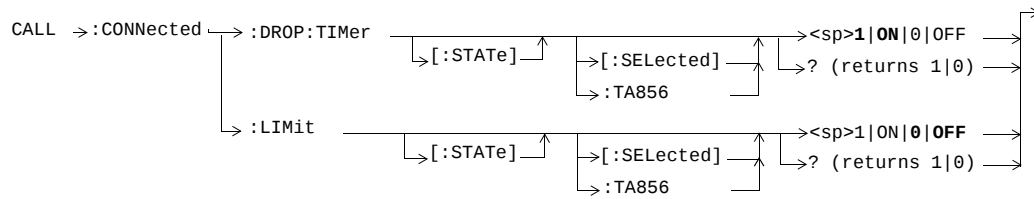
CALL:CHANnel



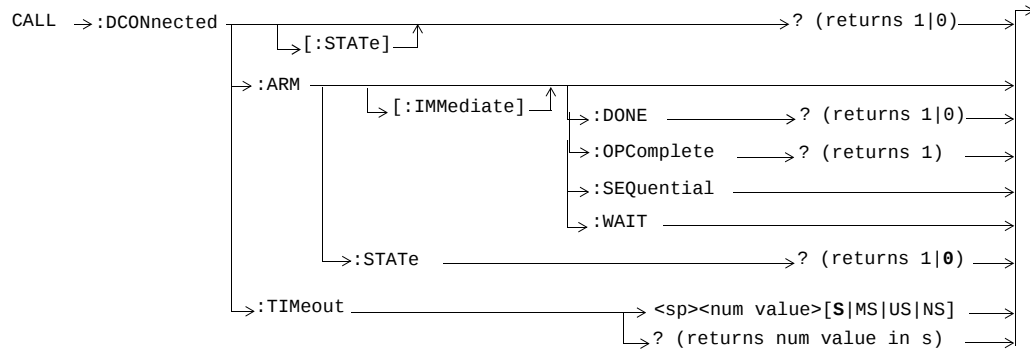
CALL:CLPControl



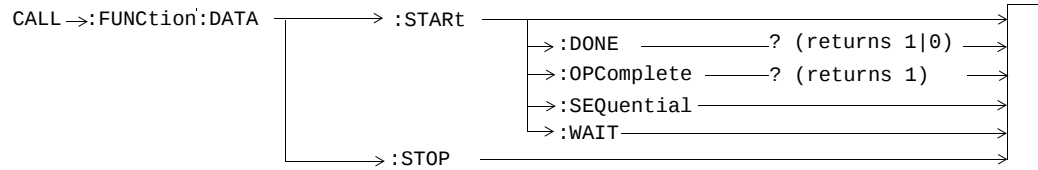
CALL:CONNected



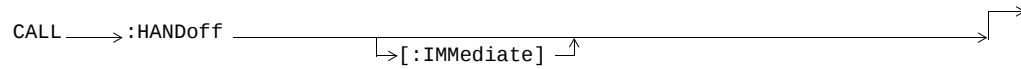
CALL:DCONnected



CALL:FUNCTION:DATA

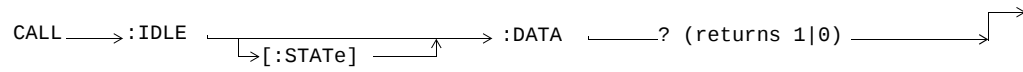


CALL:HANDoff

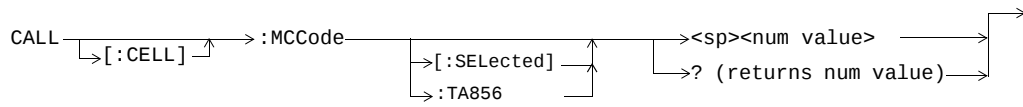


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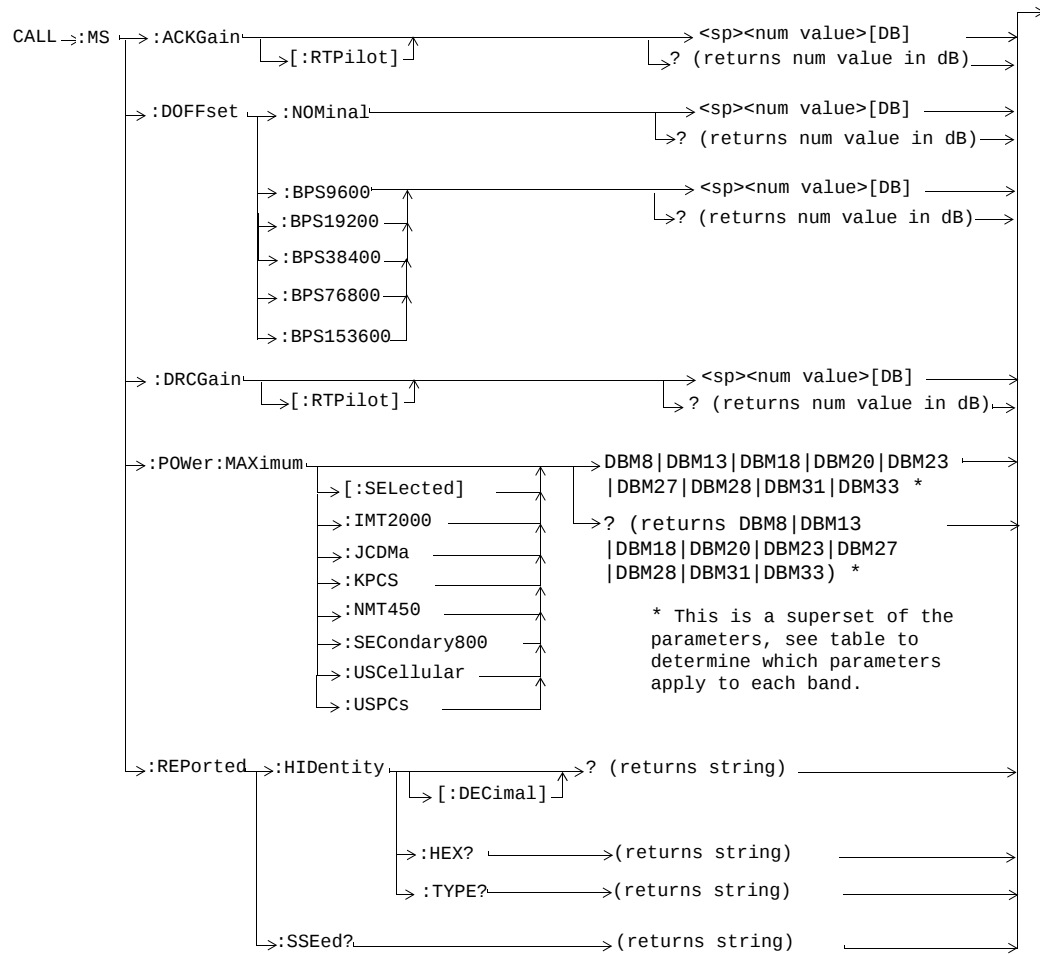
CALL:IDLE:DATA?



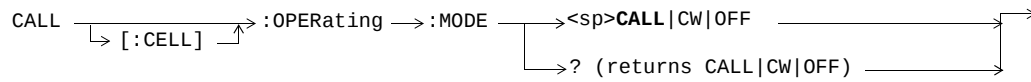
CALL:MCCode



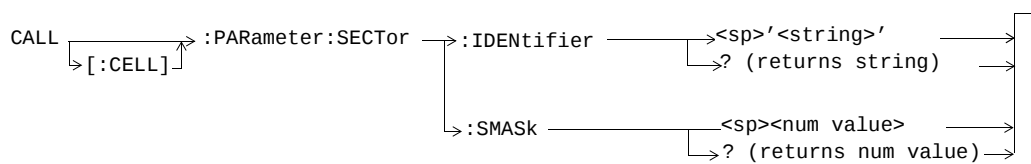
CALL:MS



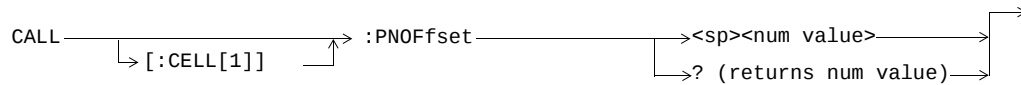
CALL:OPERating:MODE



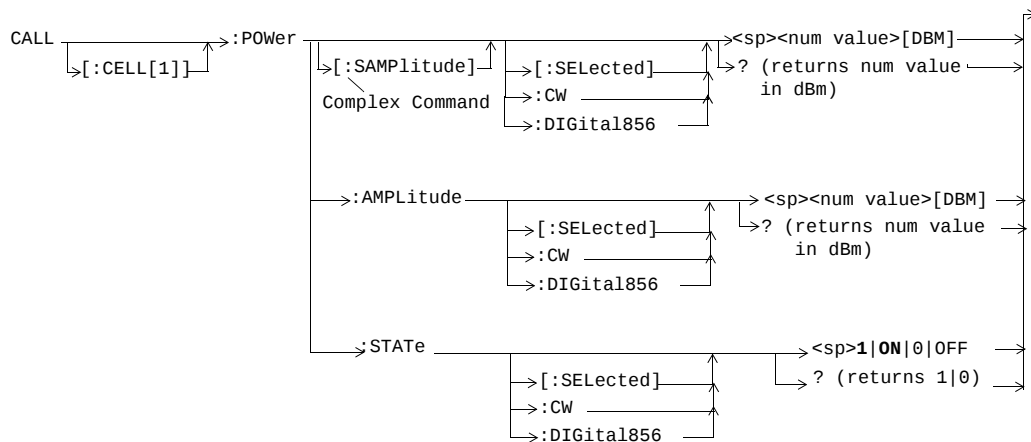
CALL:PARAmeter:SECTor



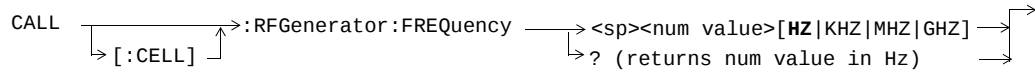
CALL:PNOffset



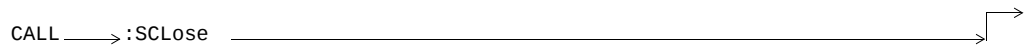
CALL:POWer



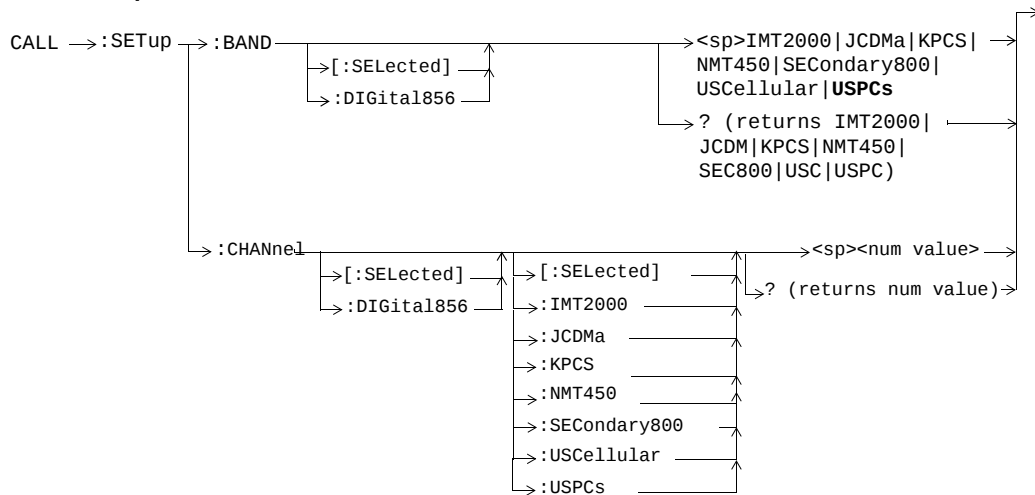
CALL:RFGenerator



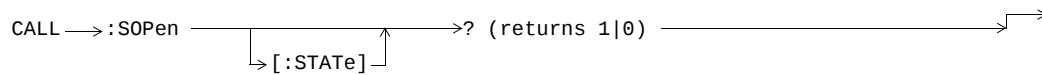
CALL:SClose



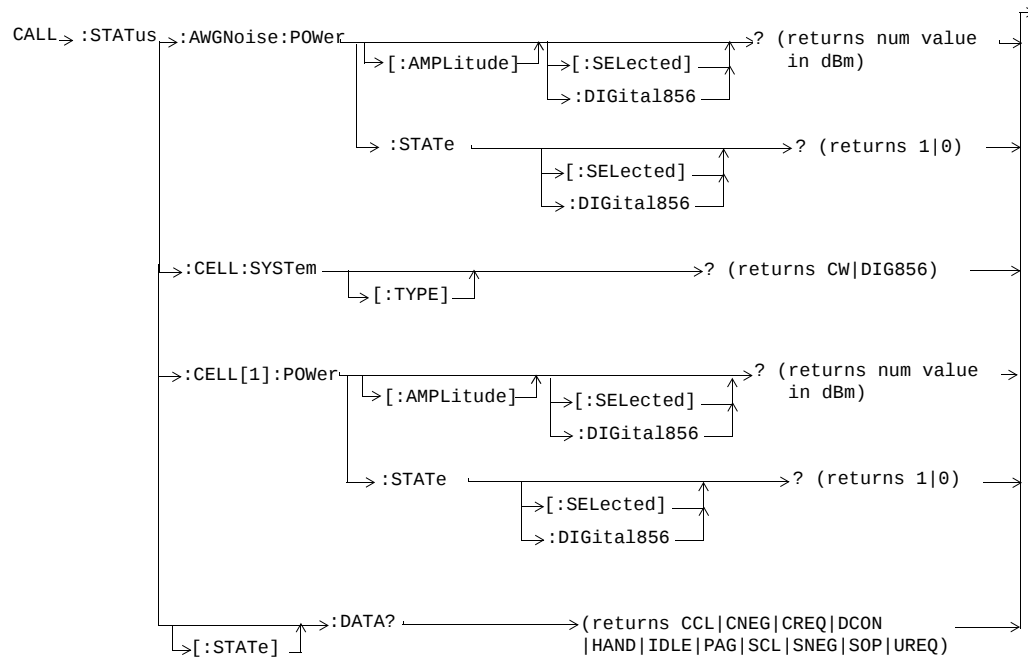
CALL:SETup

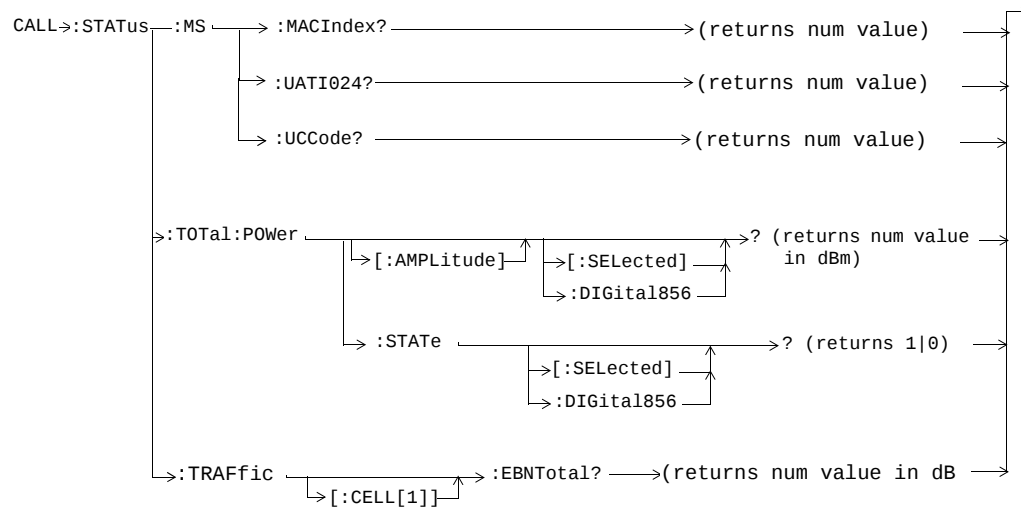


CALL:SOPen?

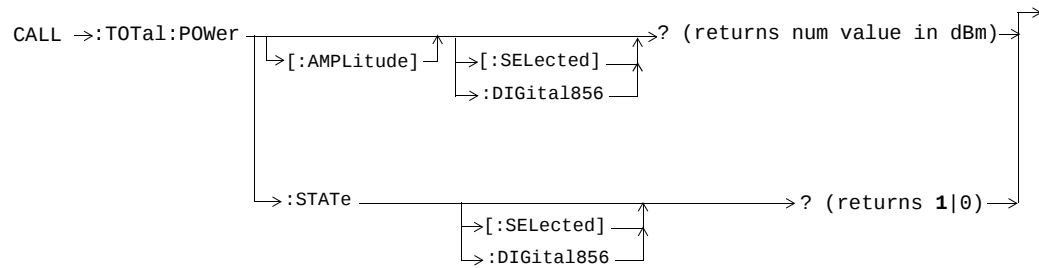


CALL:STATus

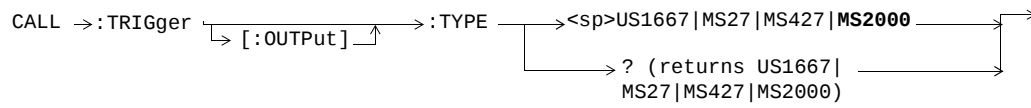


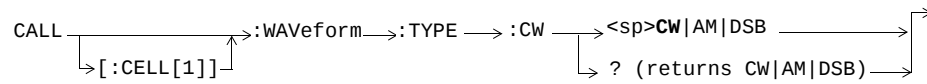


CALL:TOTal:POWer

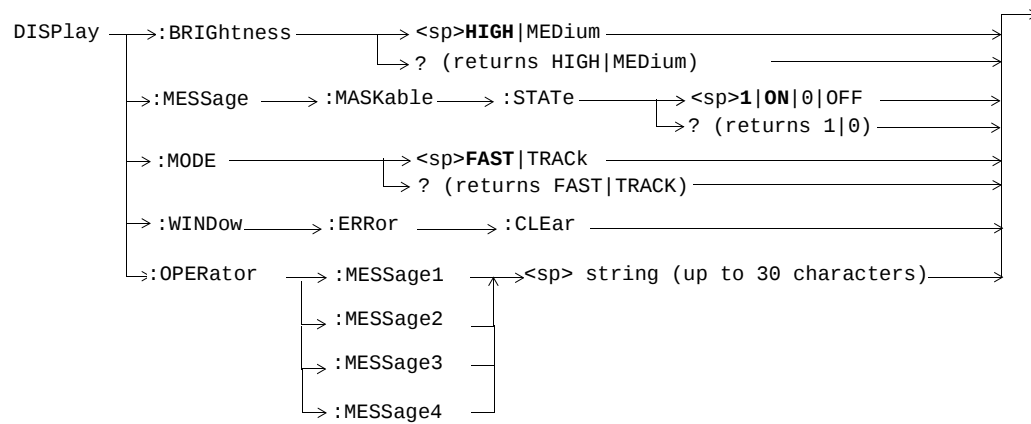


CALL:TRIGger

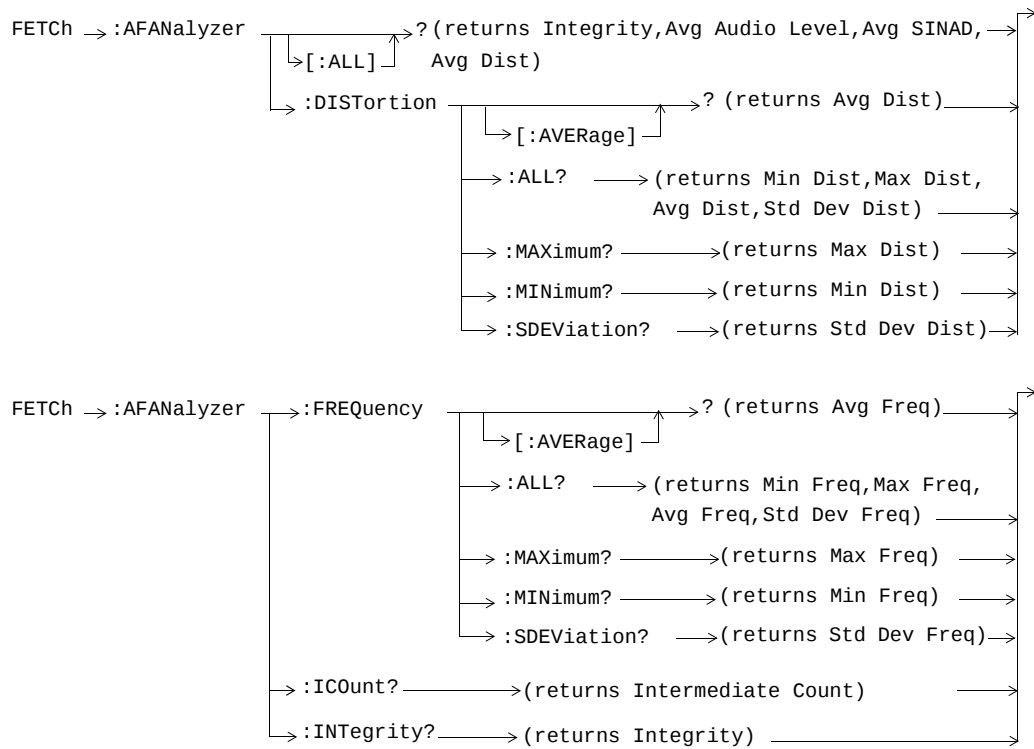


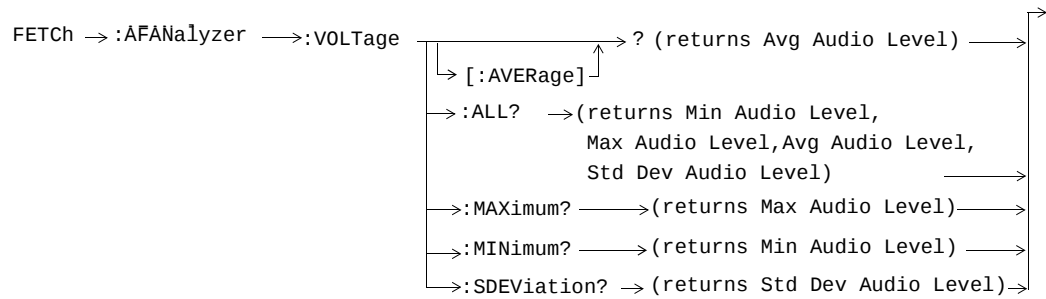
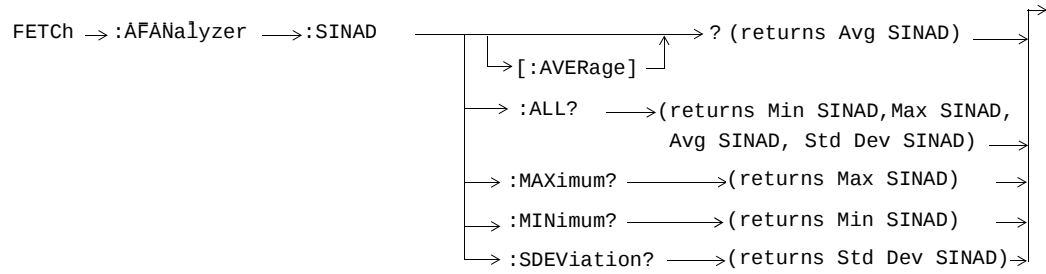
CALL:WAVeform

DISPlay

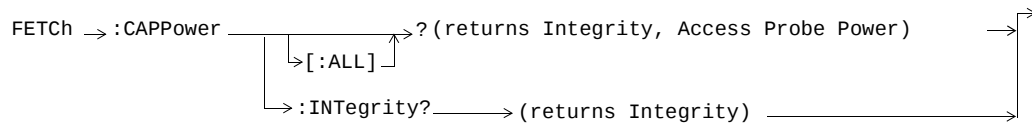


FETCH:AFANalyzer

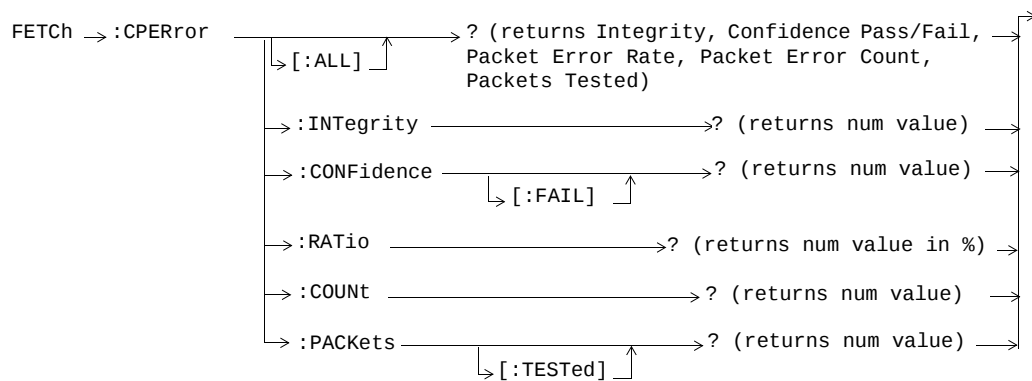




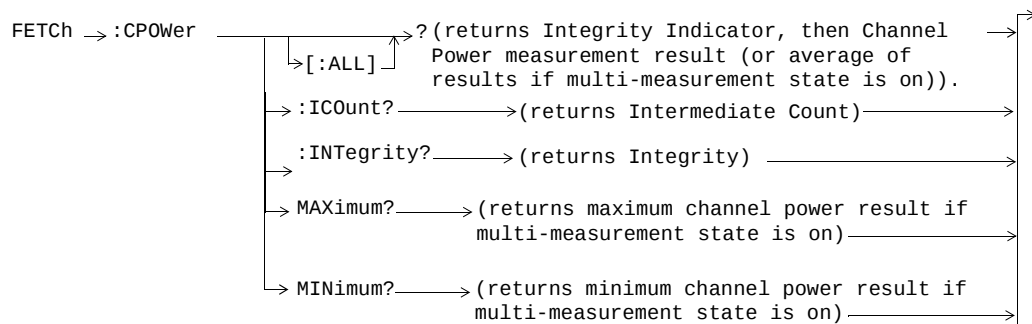
FEtCh:CAPower



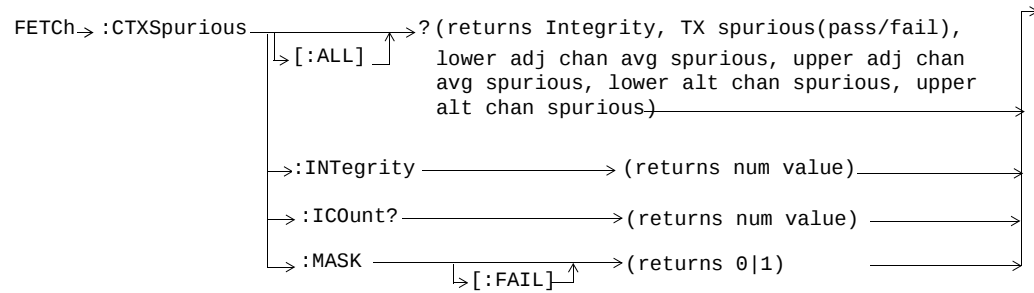
FEtCh:CPERror



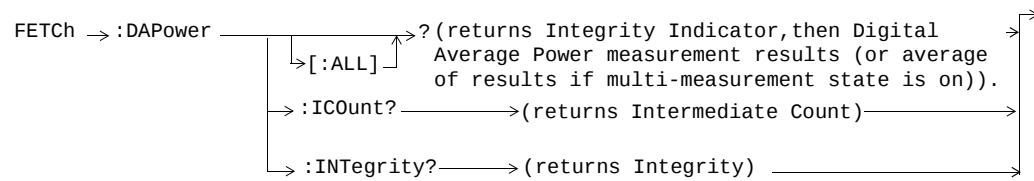
FEtCh:CPower



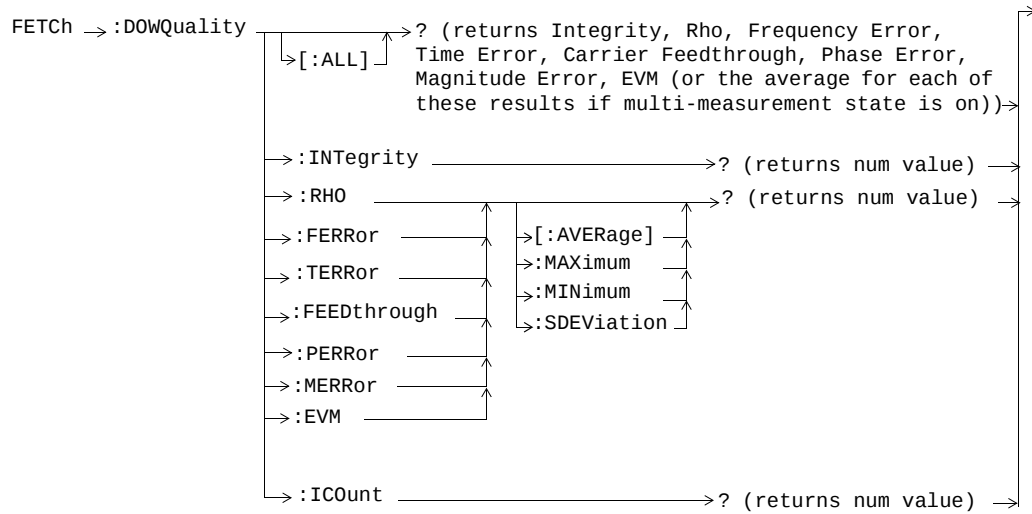
FETCH:CTXSpurious

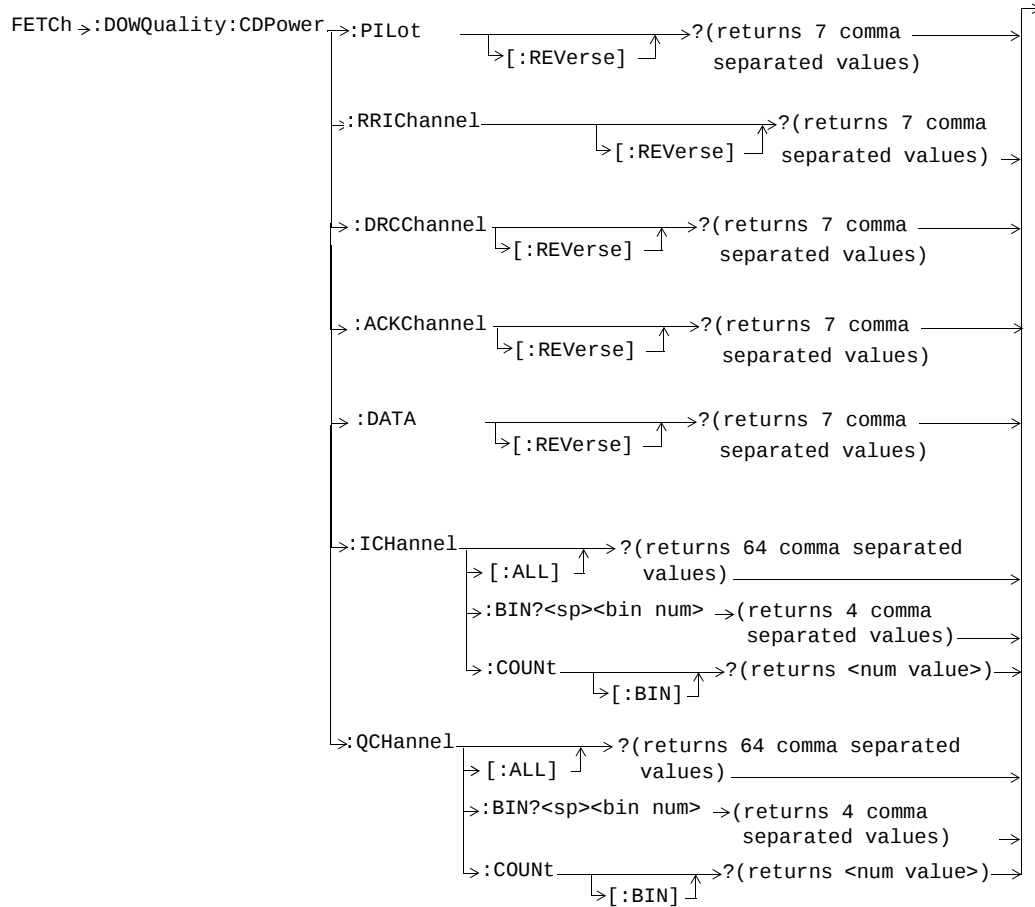


FETCH:DAPower

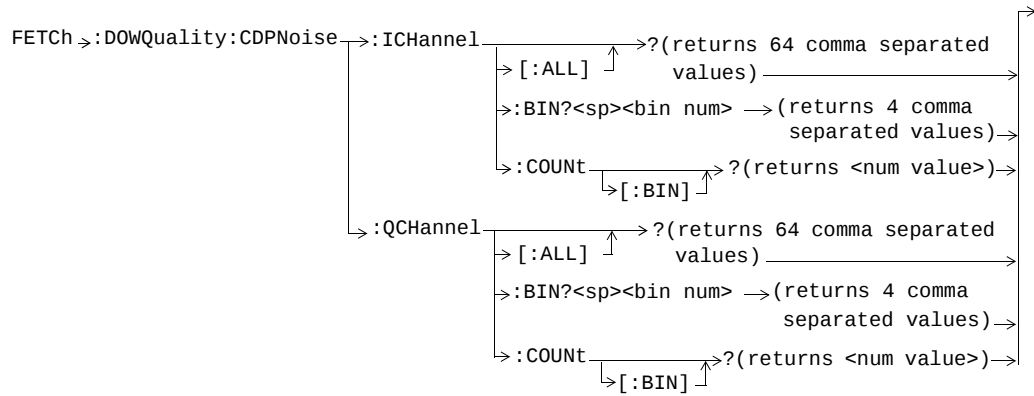


FETCh:DOWQuality

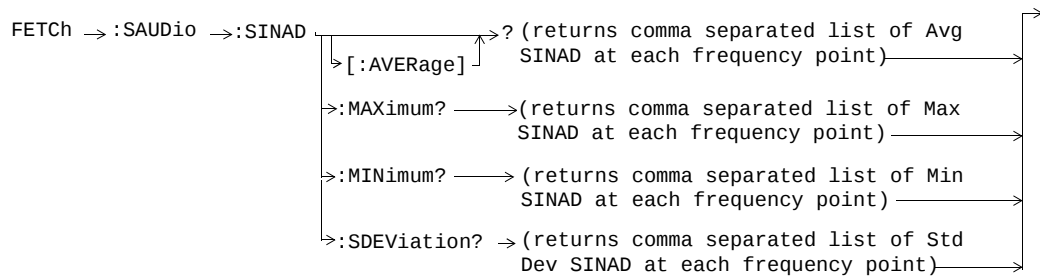
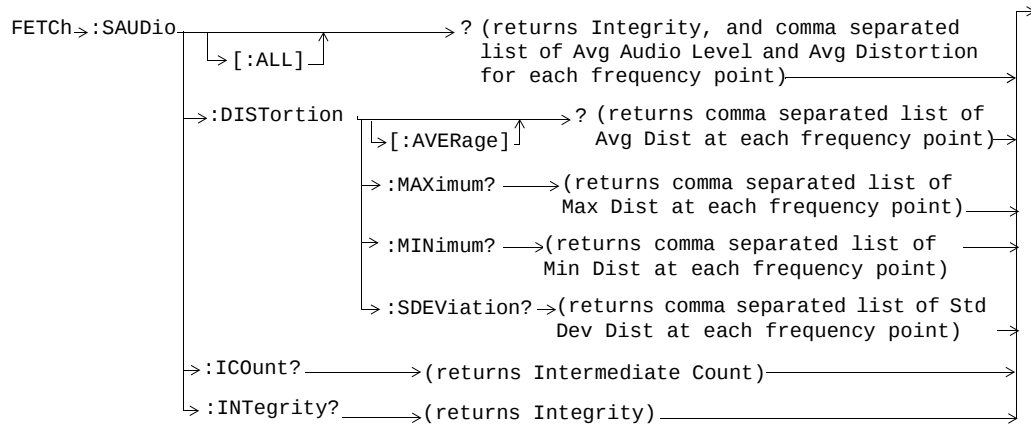




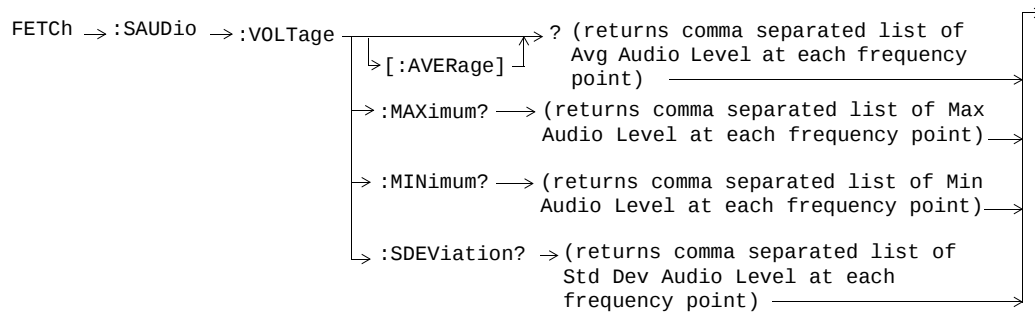
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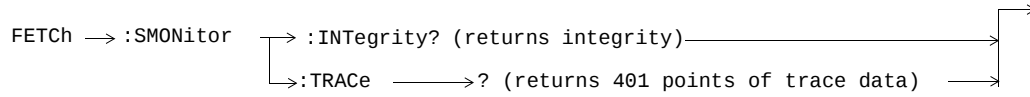
FETCH:SAUDio



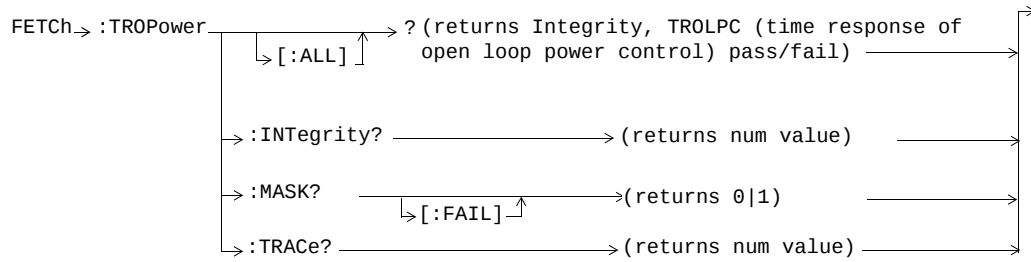
GPIB Syntax for E1966A



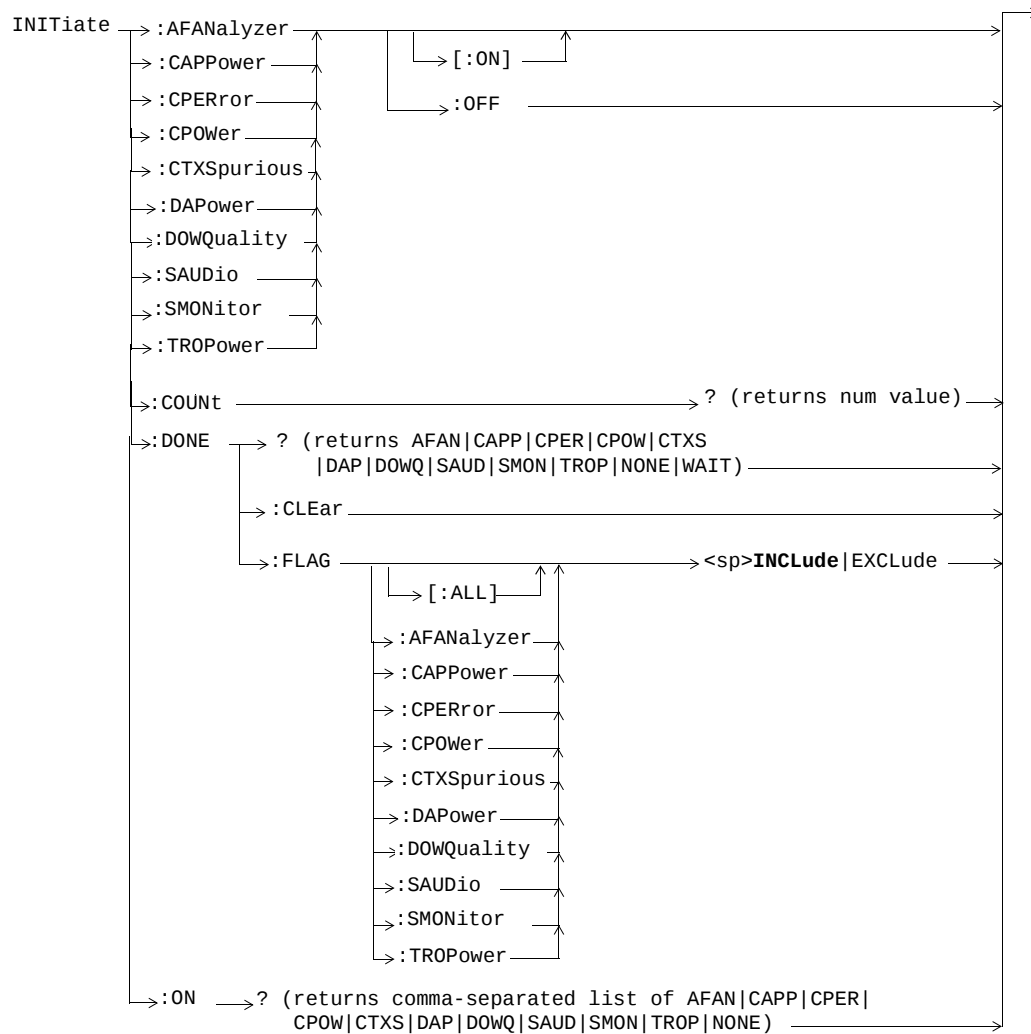
FETCh:SMONitor



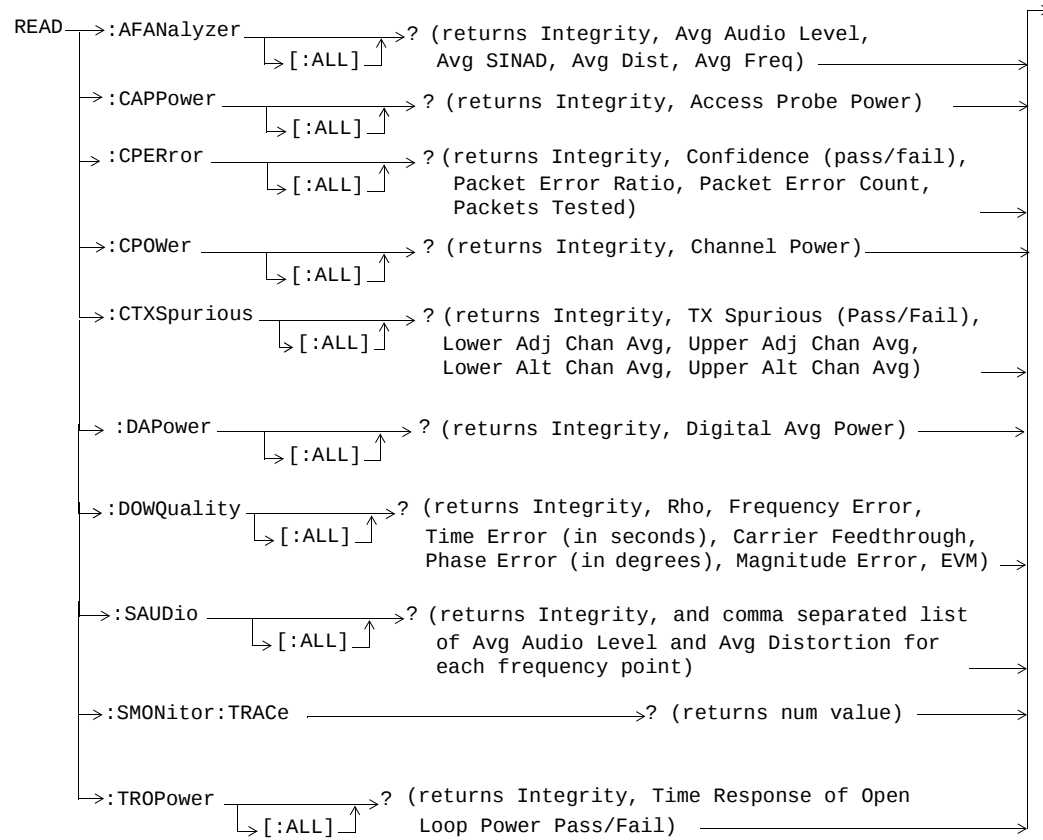
FETCh:TROPower



INITiate



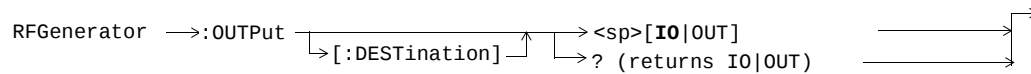
READ



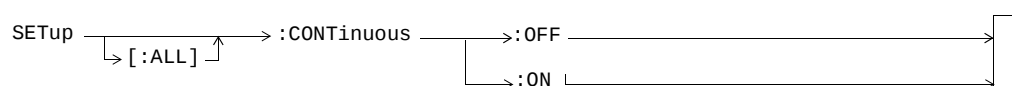
RFAnalyzer



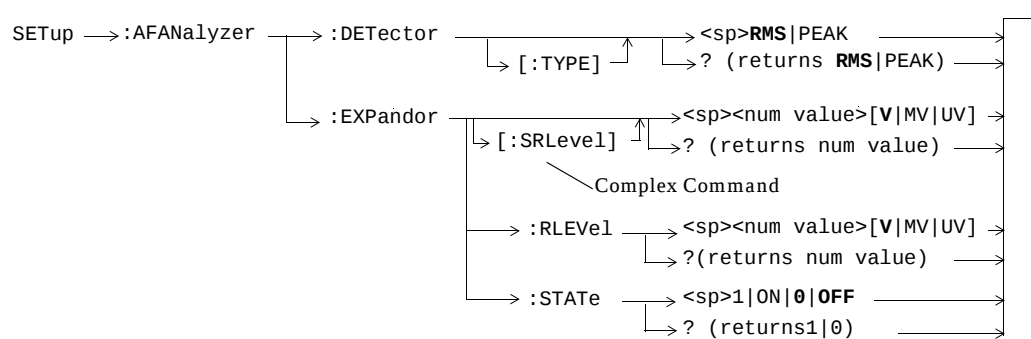
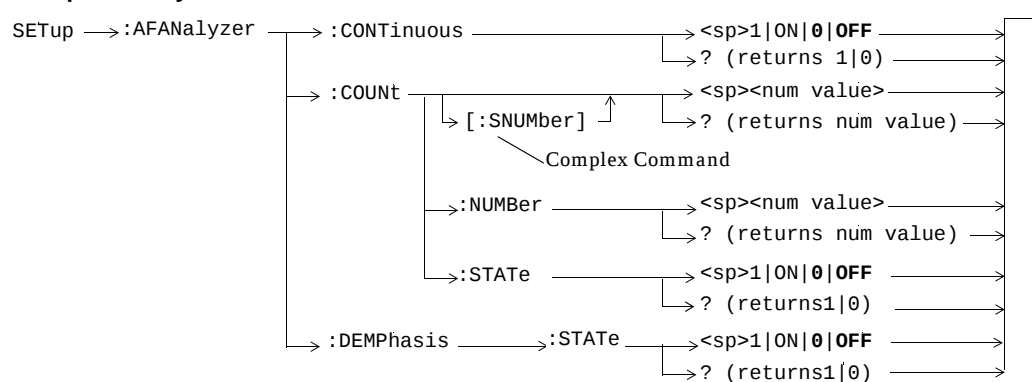
RFGenerator:OUTPut



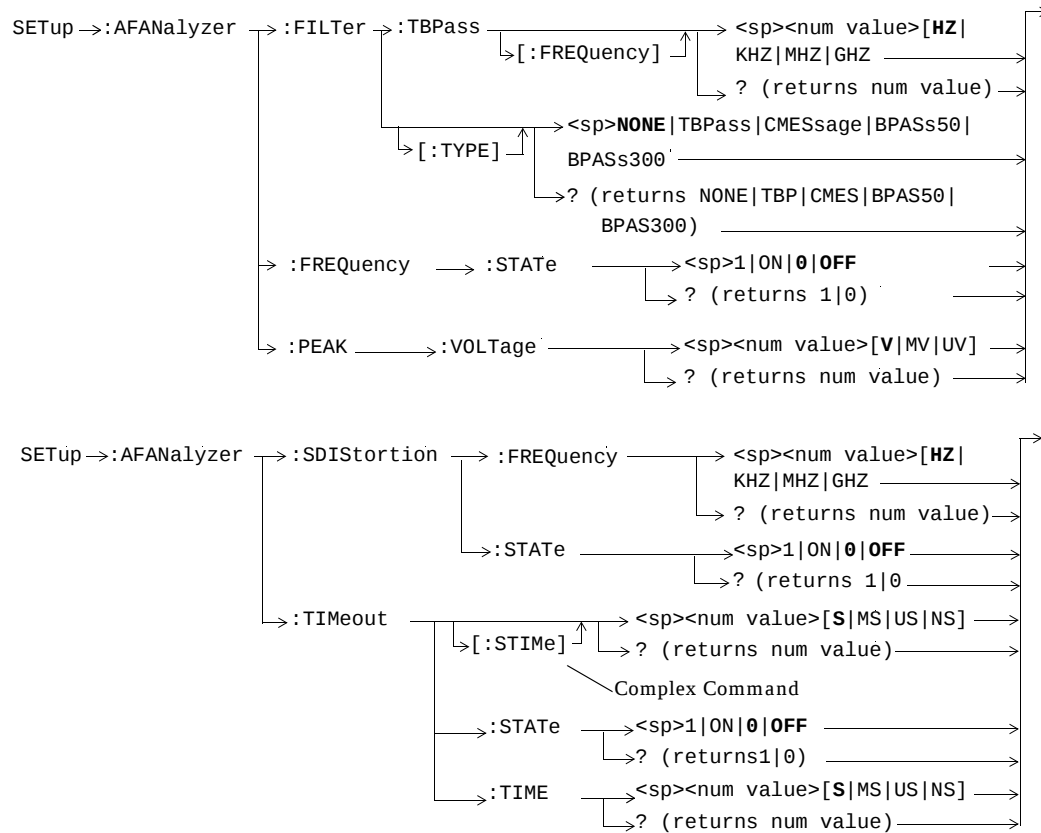
SETup:CONTinuous



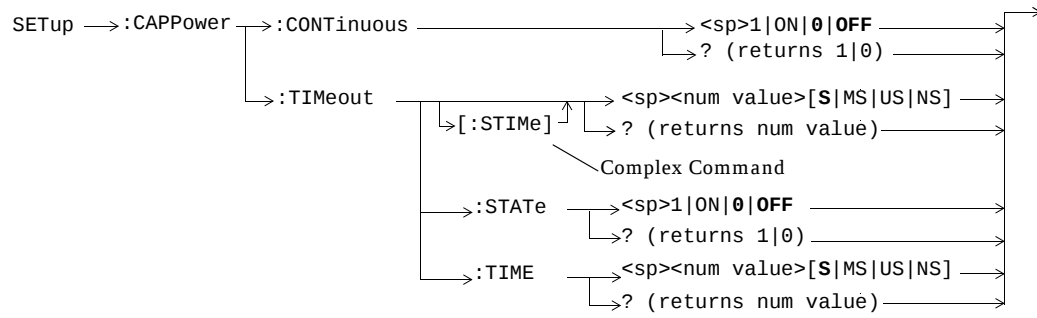
SETup:AFANalyzer



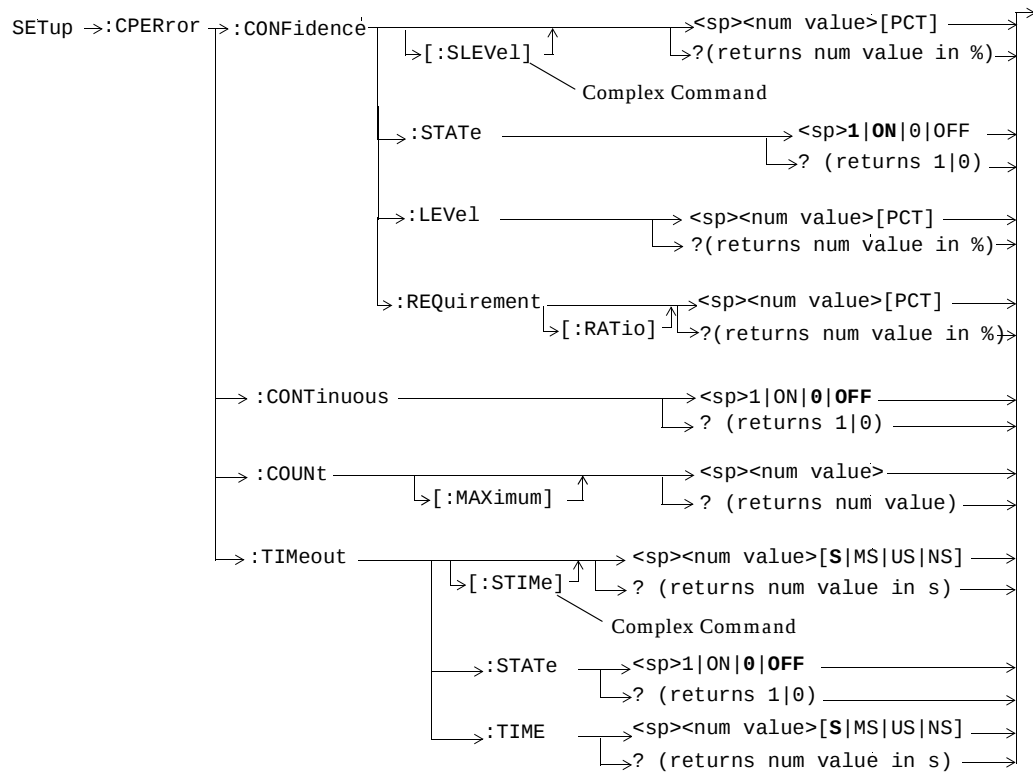
GPIB Syntax for E1966A



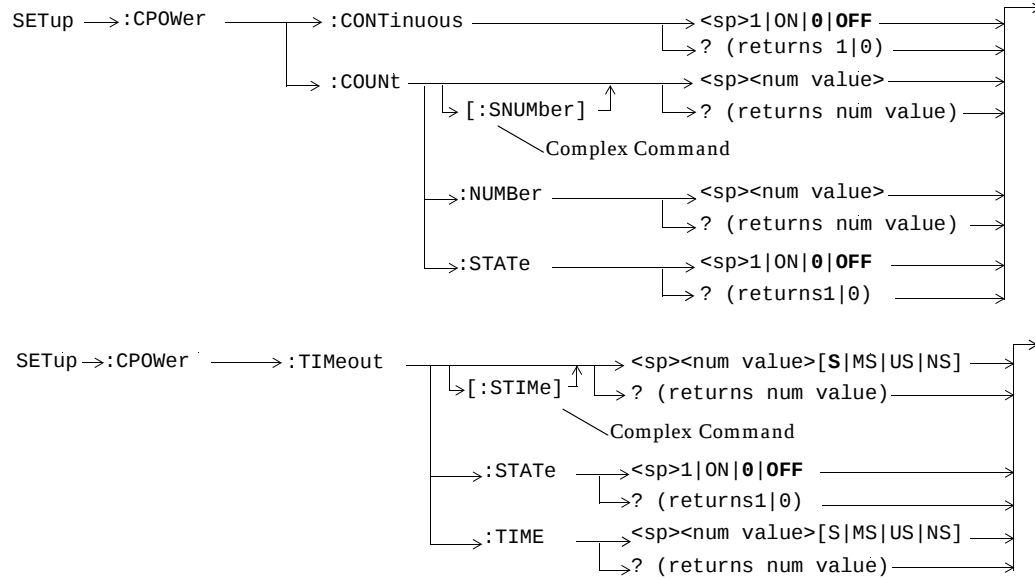
SETup:CAPPower



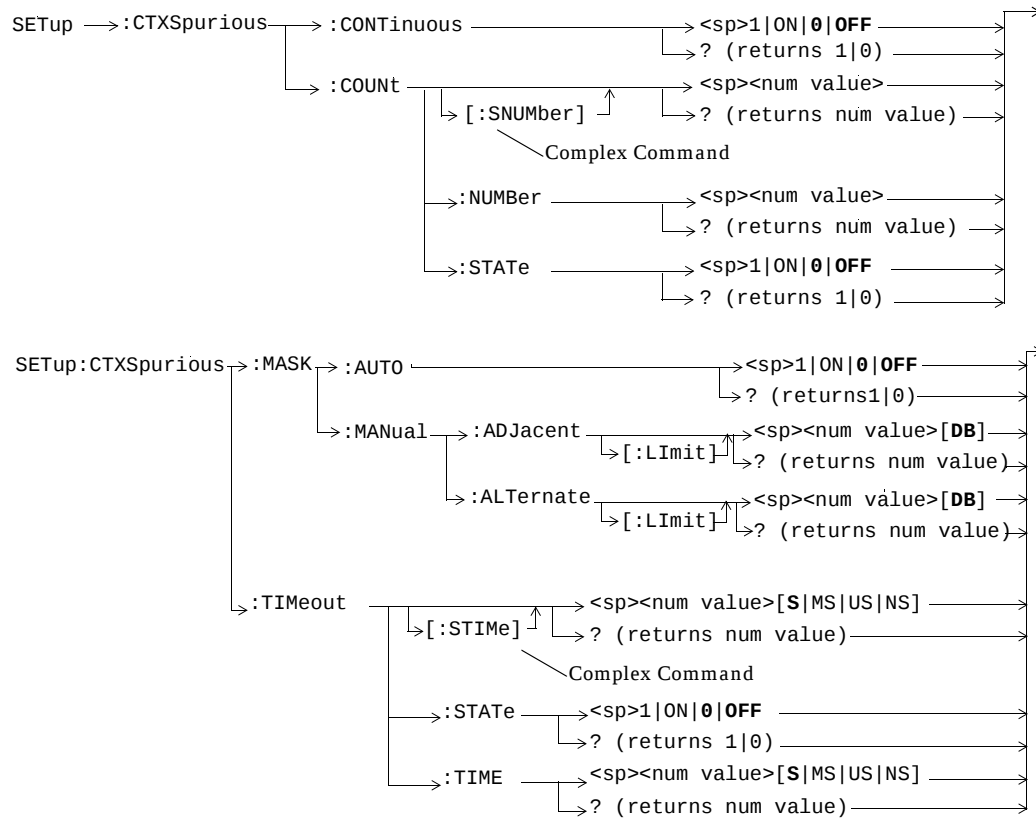
SETup:CPERror



SETup:CPower

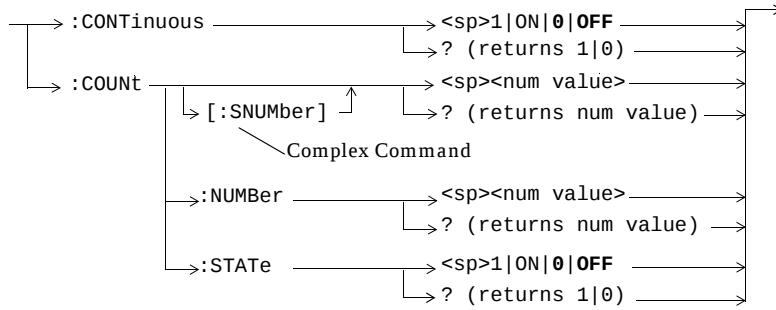


SETup:CTXSpurious



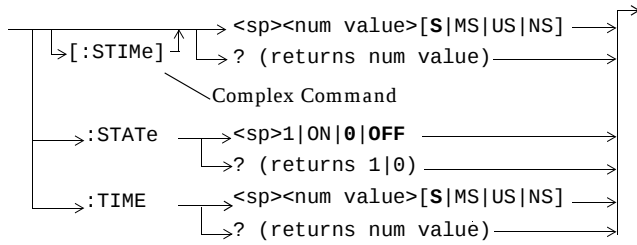
SETup:DAPower

SETup → :DAPower

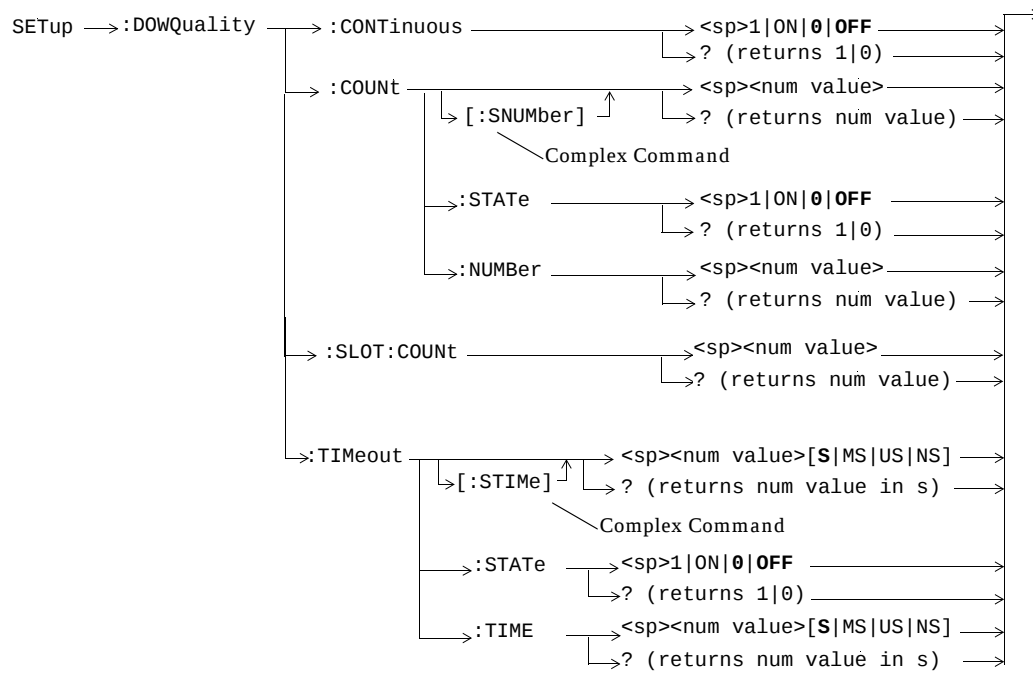


SETup → :DAPower

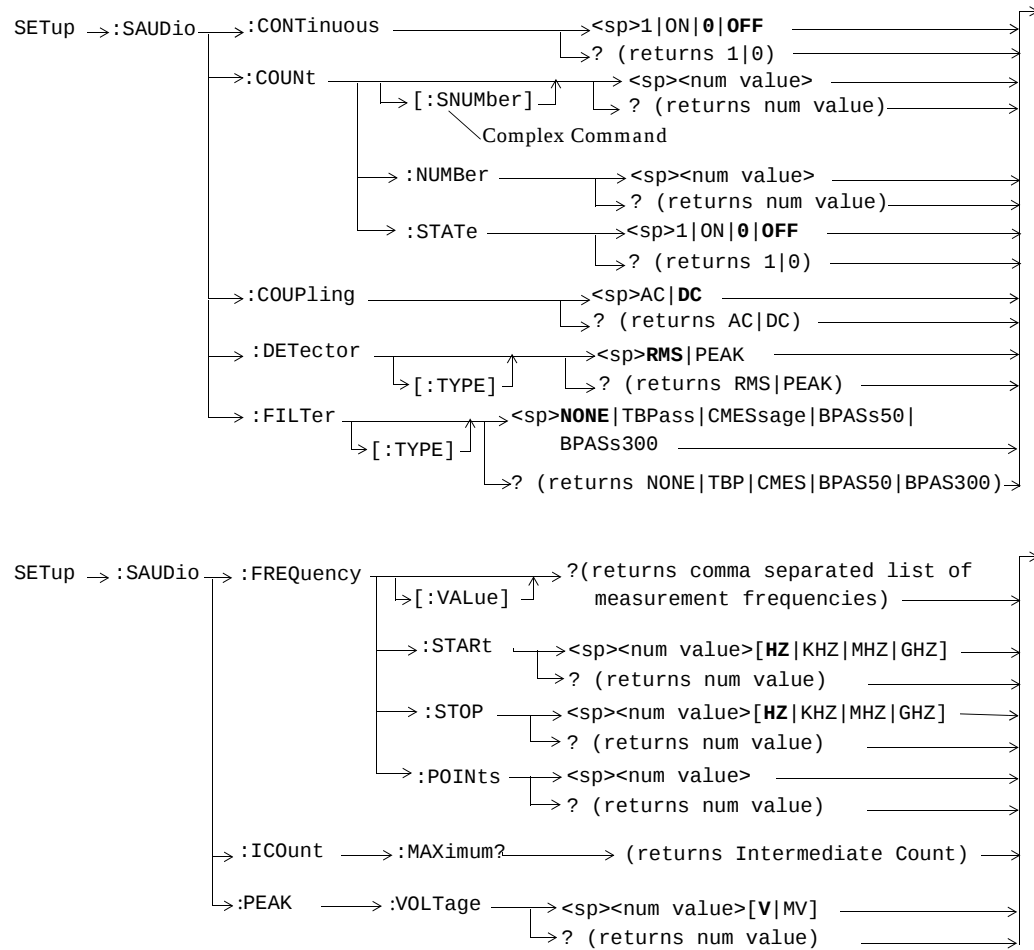
→ :TIMEout



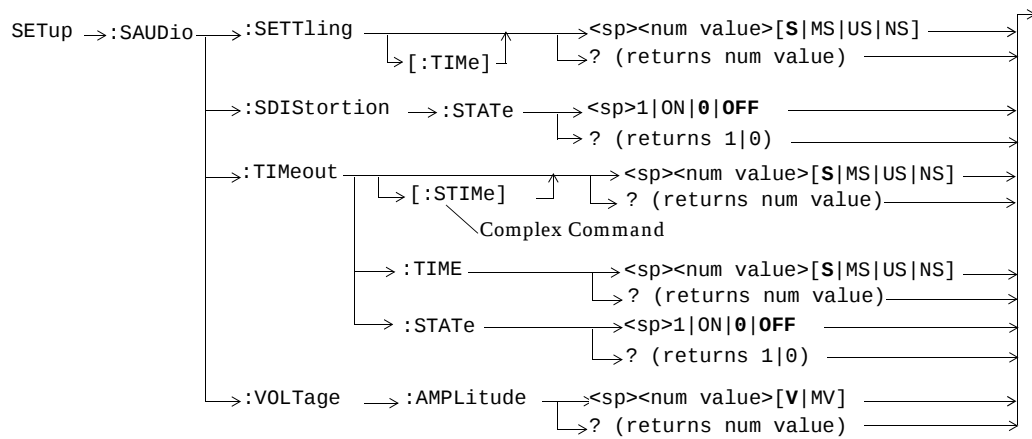
SETup:DOWQuality



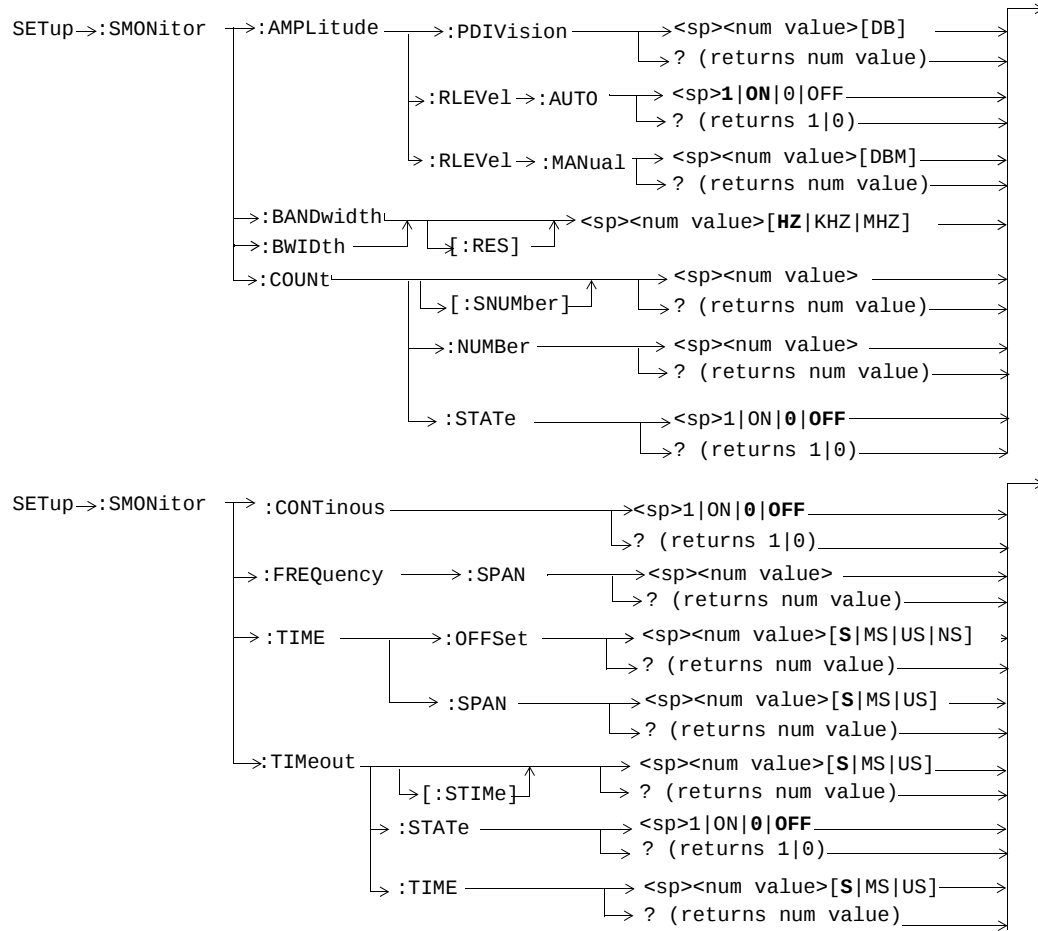
SETup:SAUDio



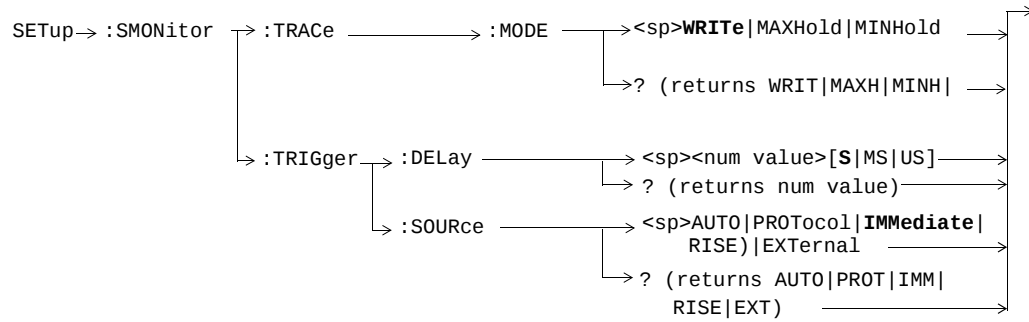
GPIB Syntax for E1966A



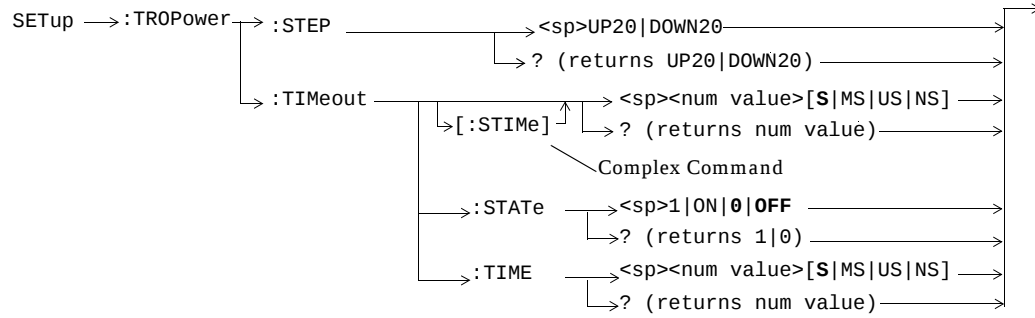
SETup:SMONitor



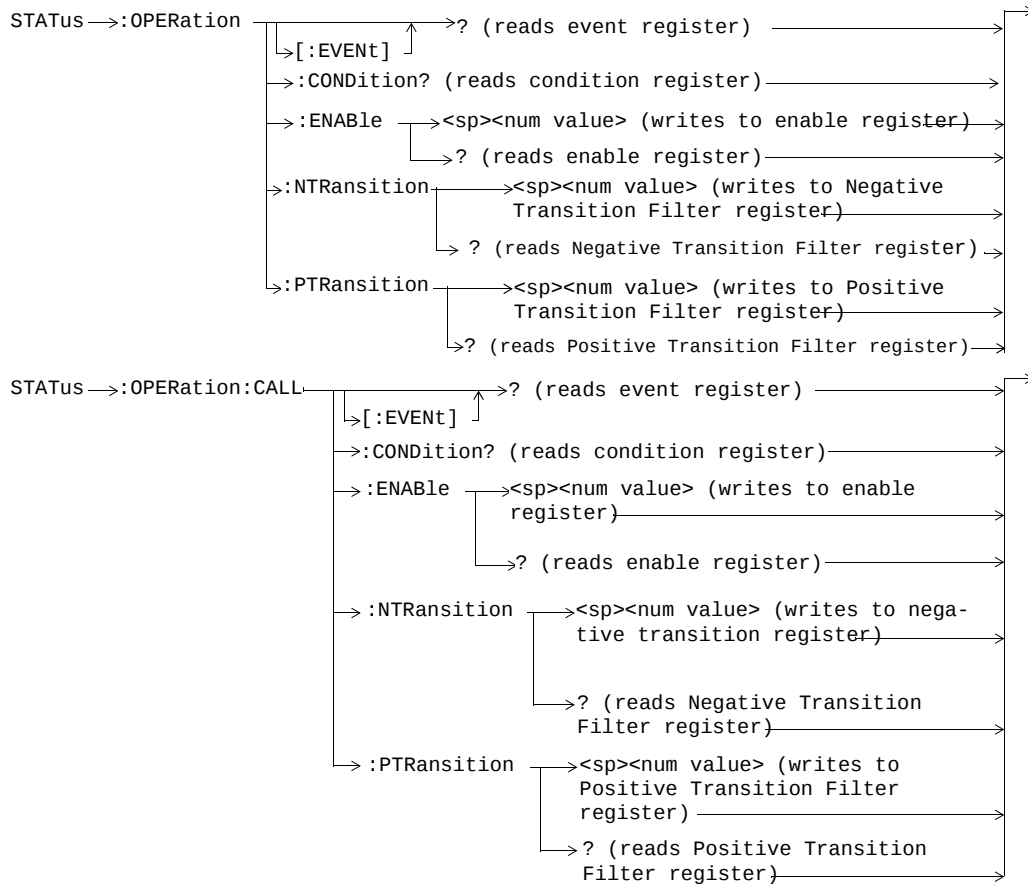
GPIB Syntax for E1966A

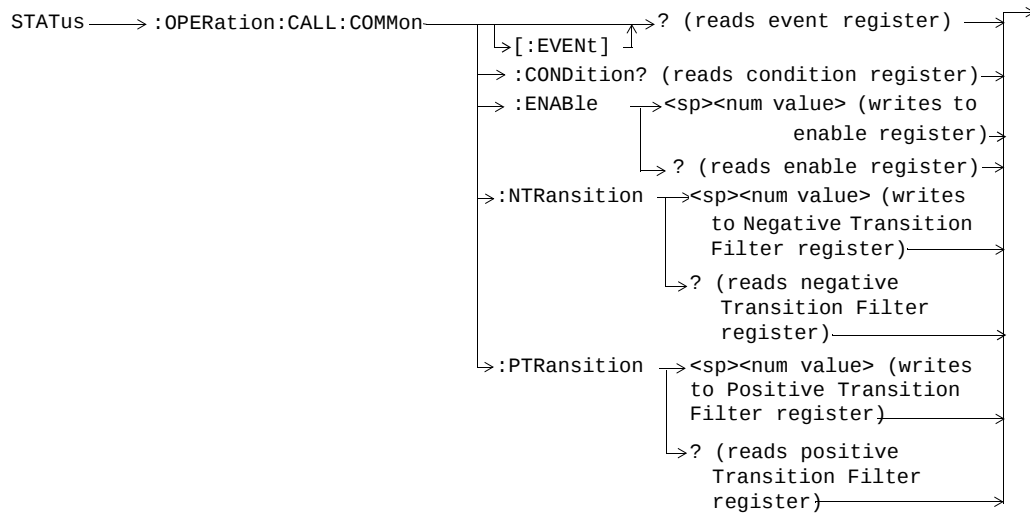
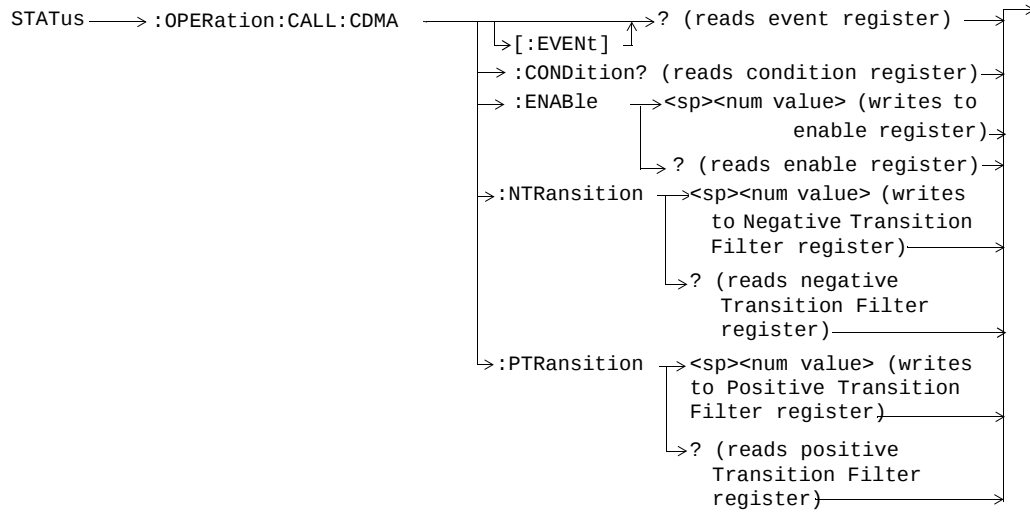


SETup:TROPower

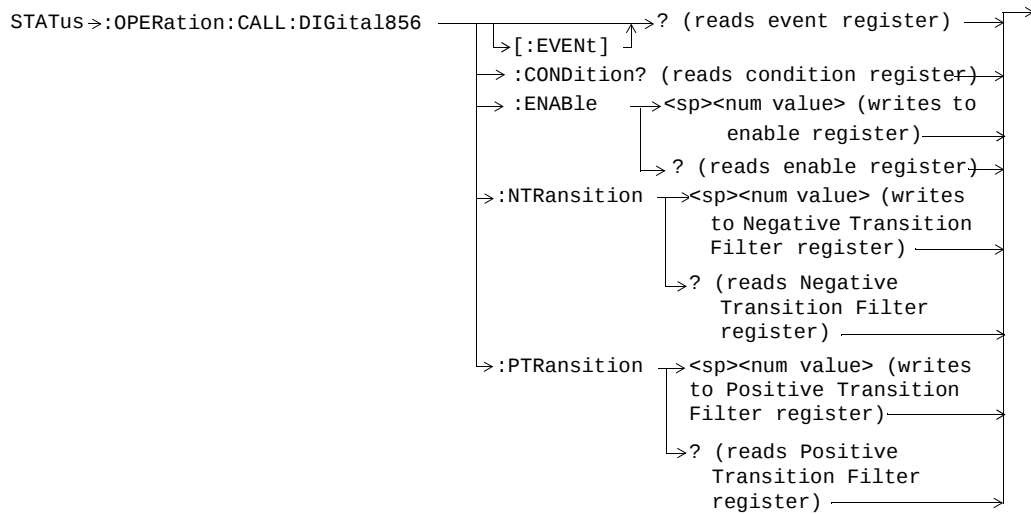
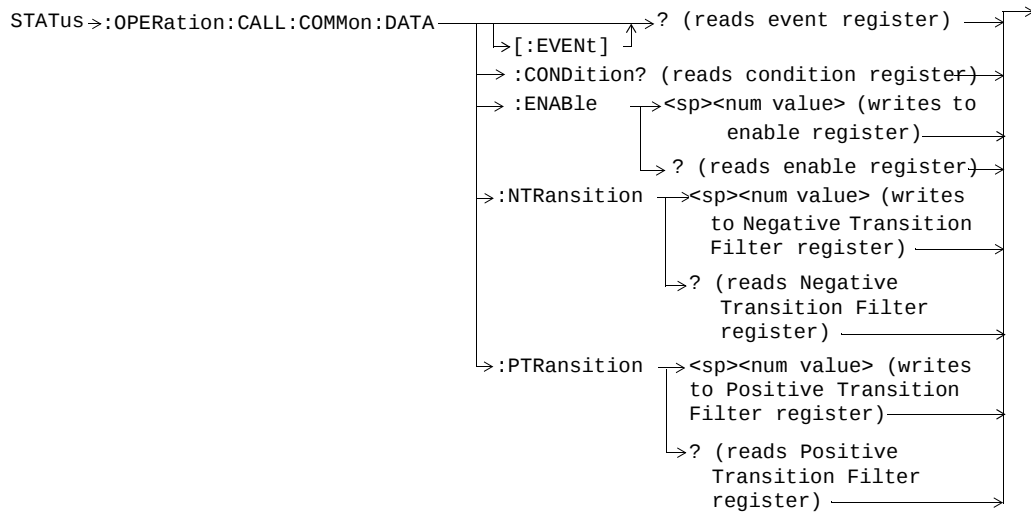


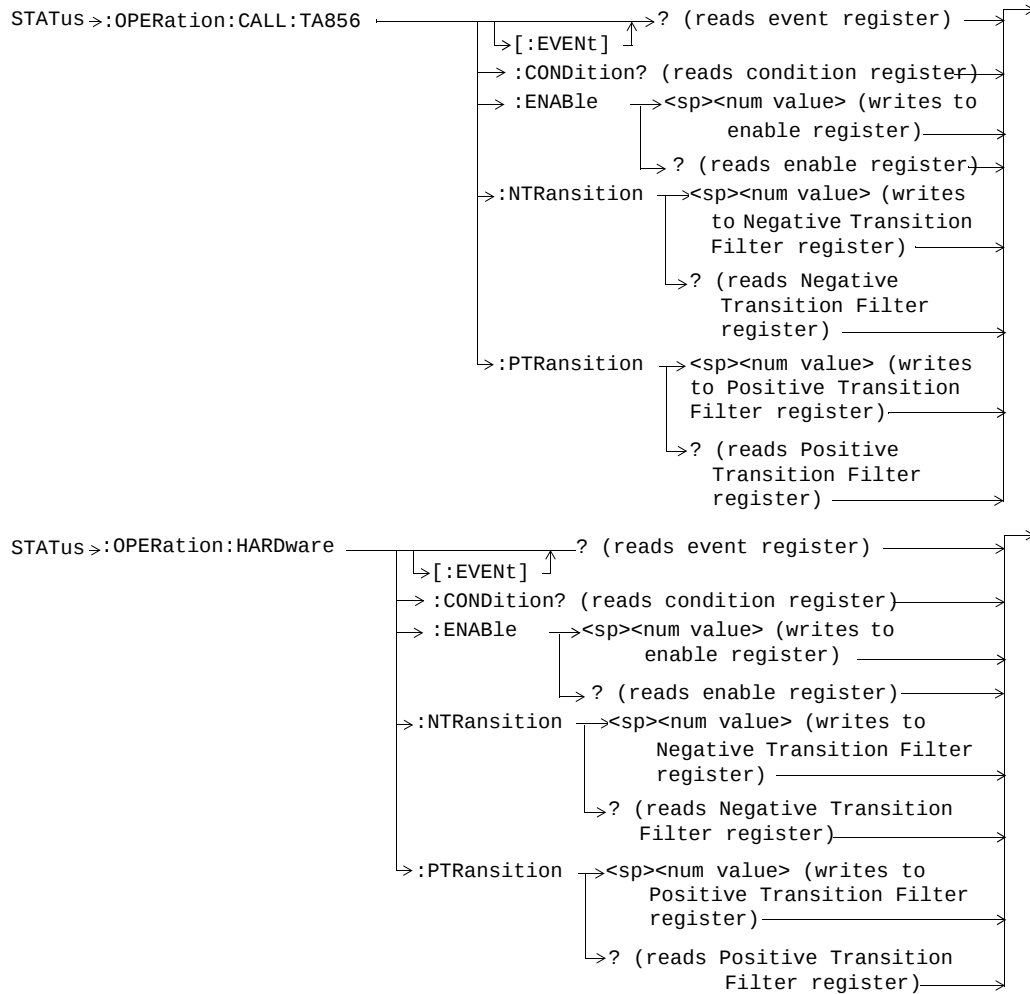
STATUS:OPERation



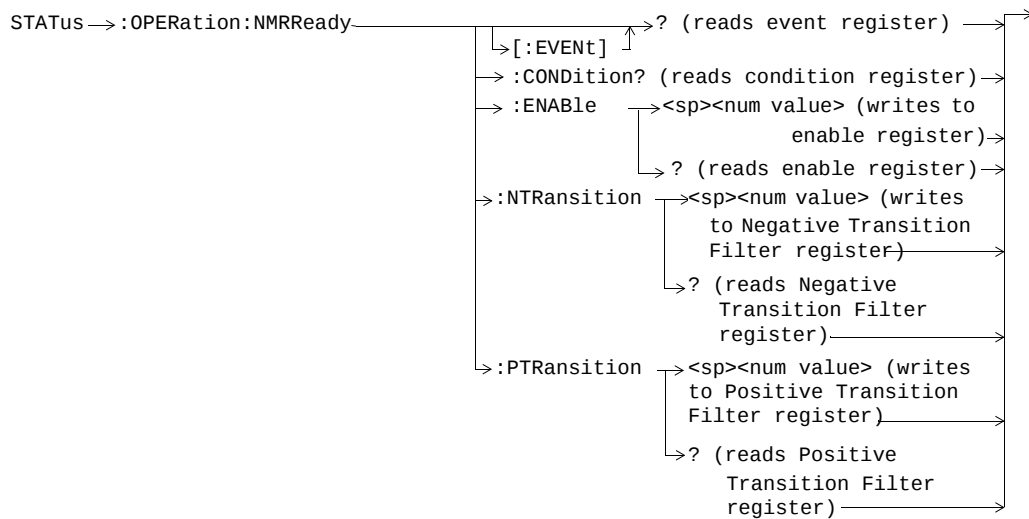
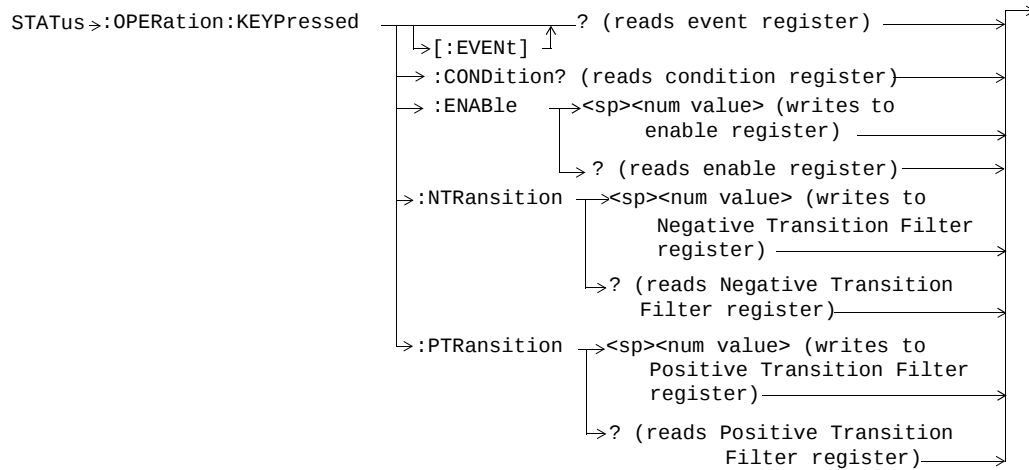


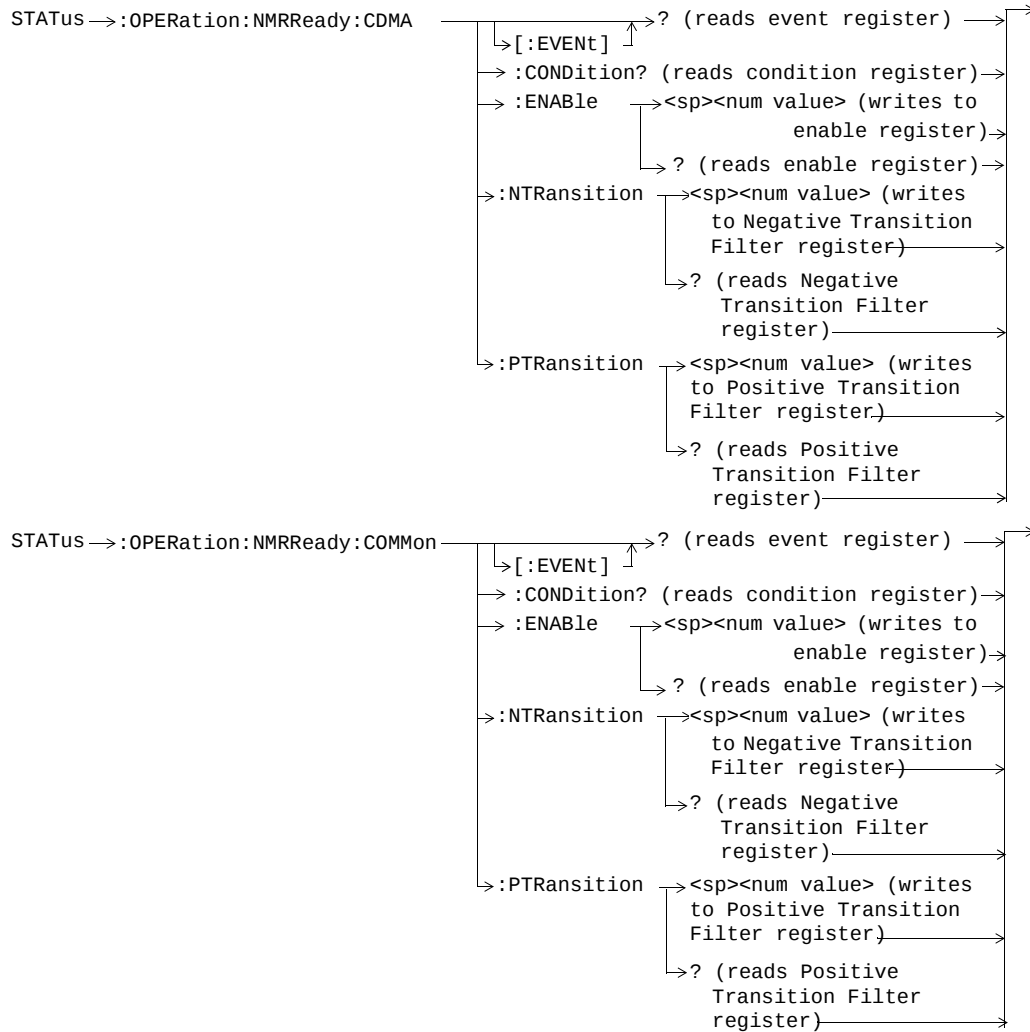
GPIB Syntax for E1966A



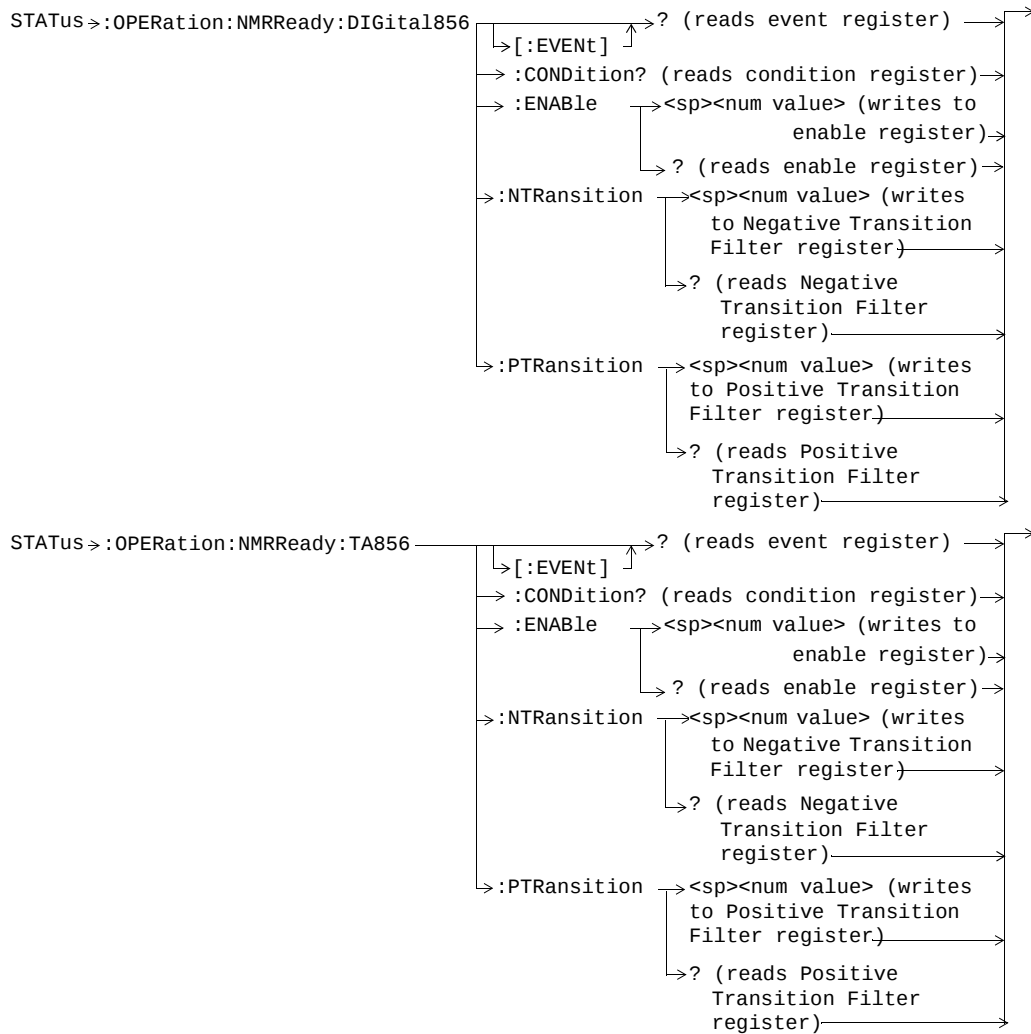


GPIB Syntax for E1966A





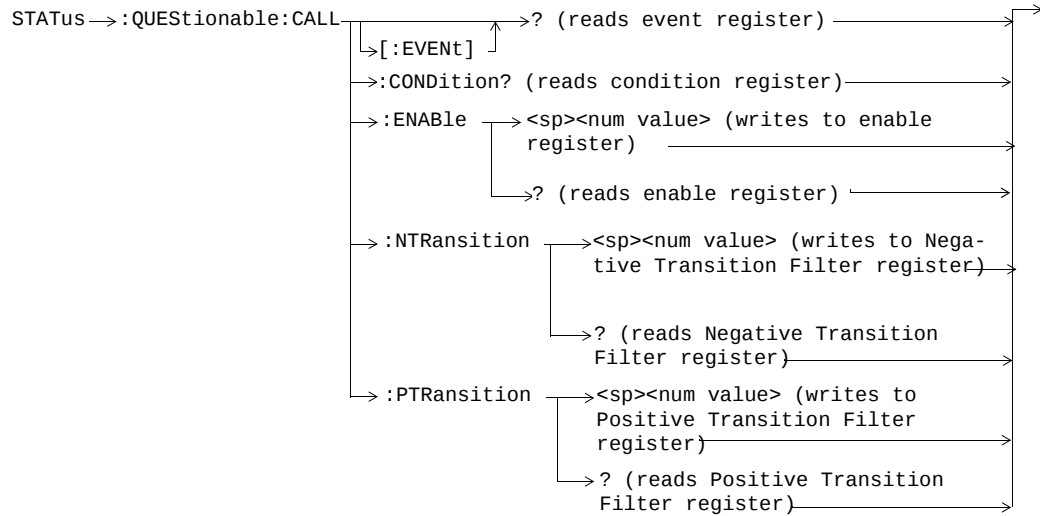
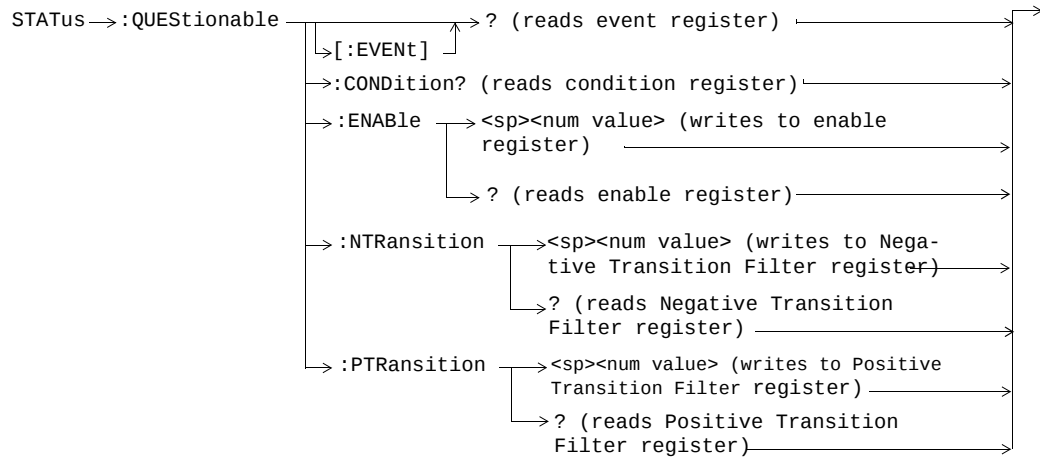
GPIB Syntax for E1966A



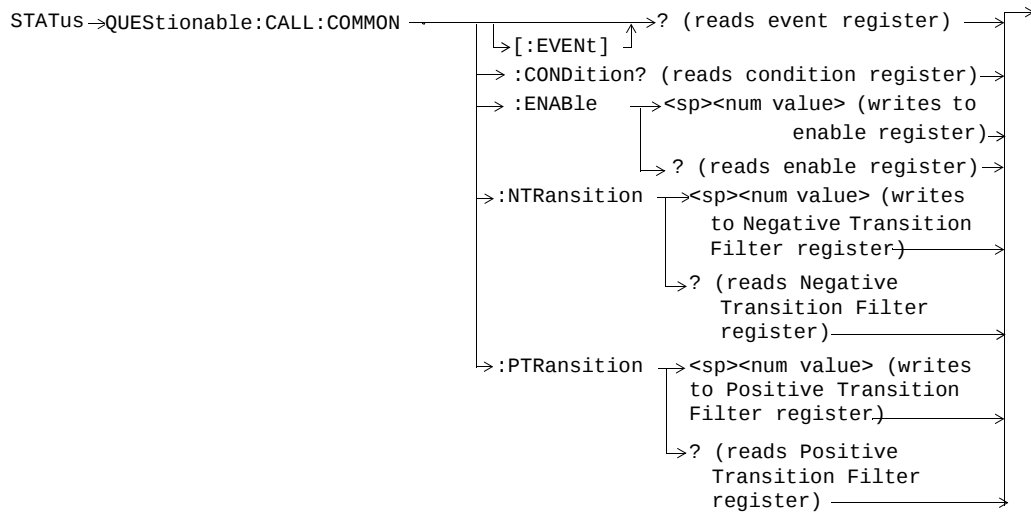
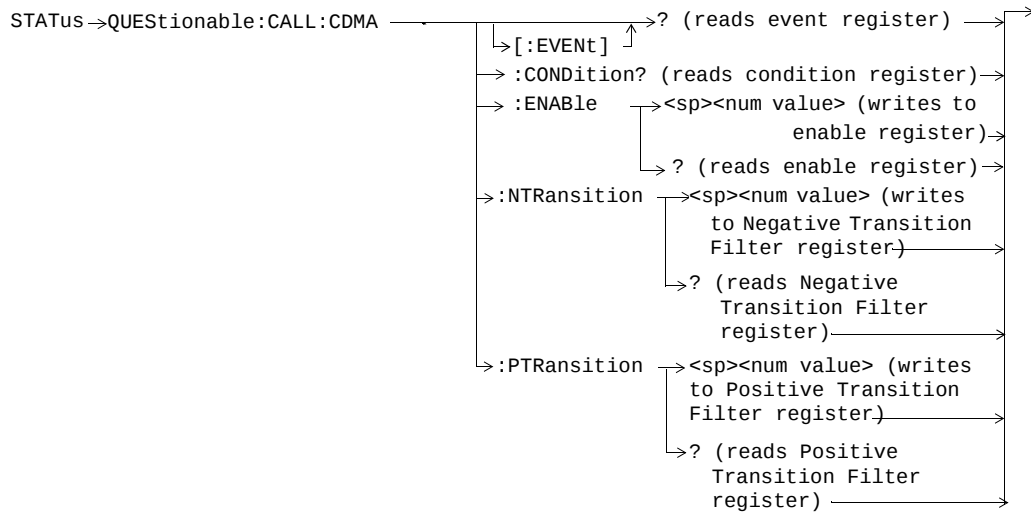
STATUS:PRESet

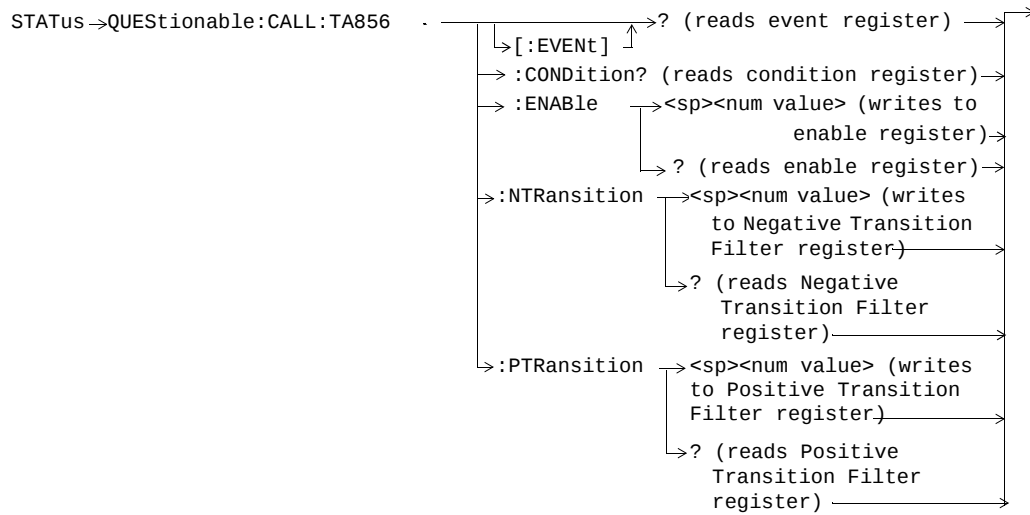
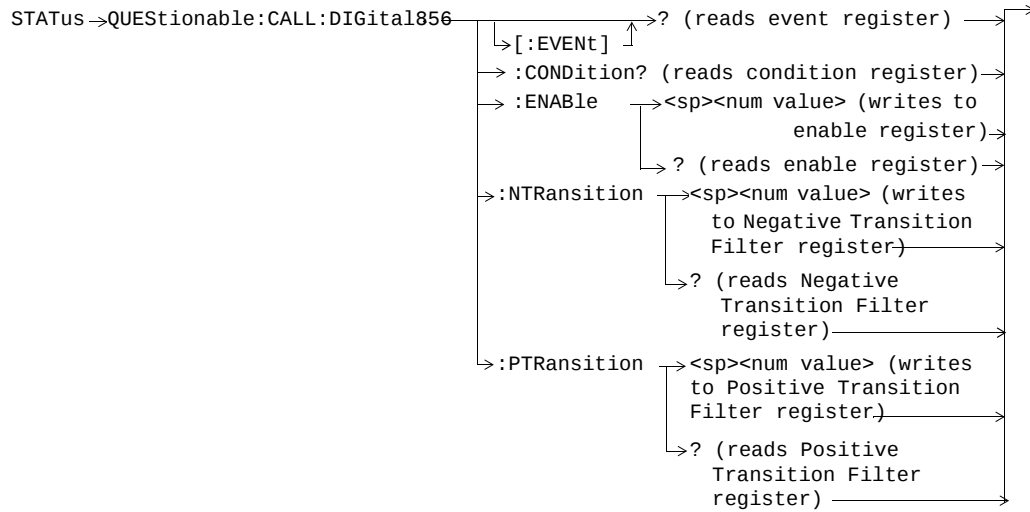
STATUS → :PRESet

STATUS:QUEStionable

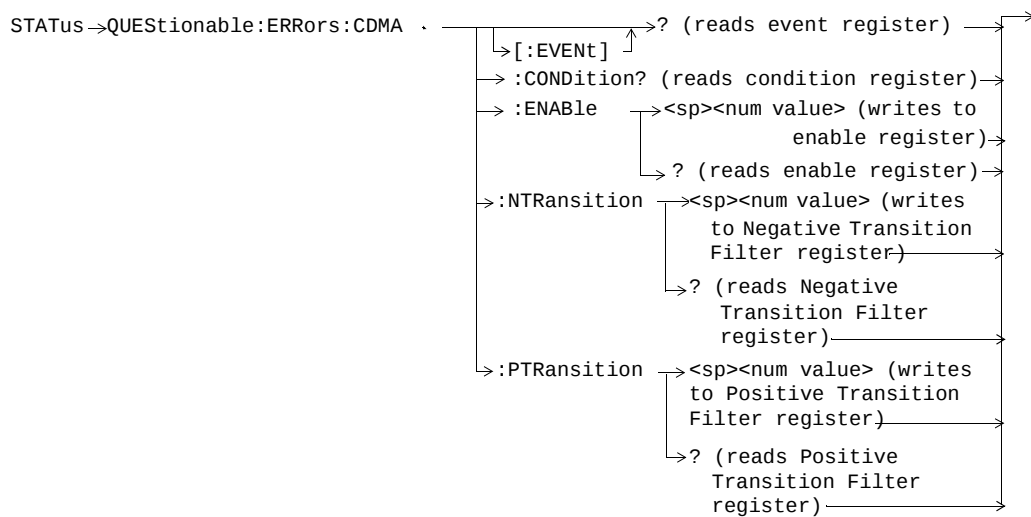
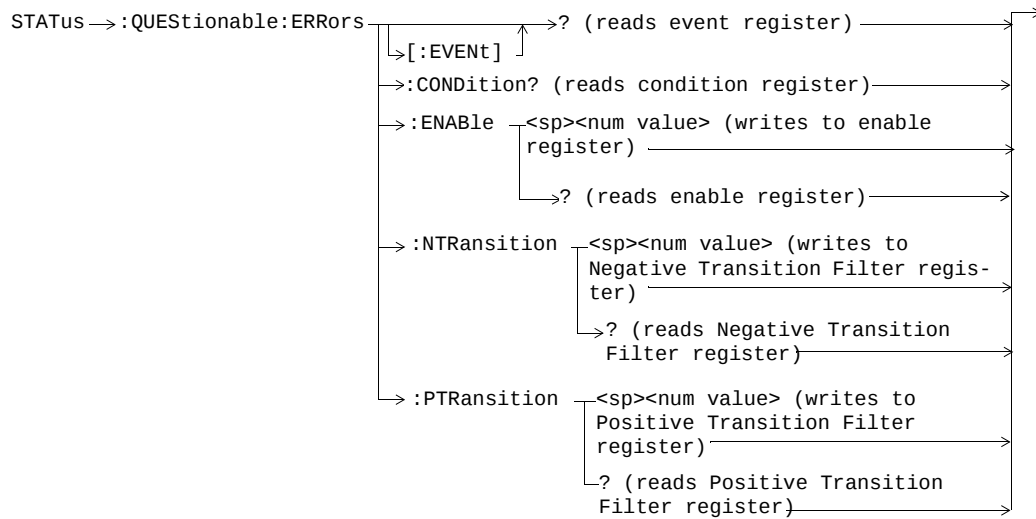


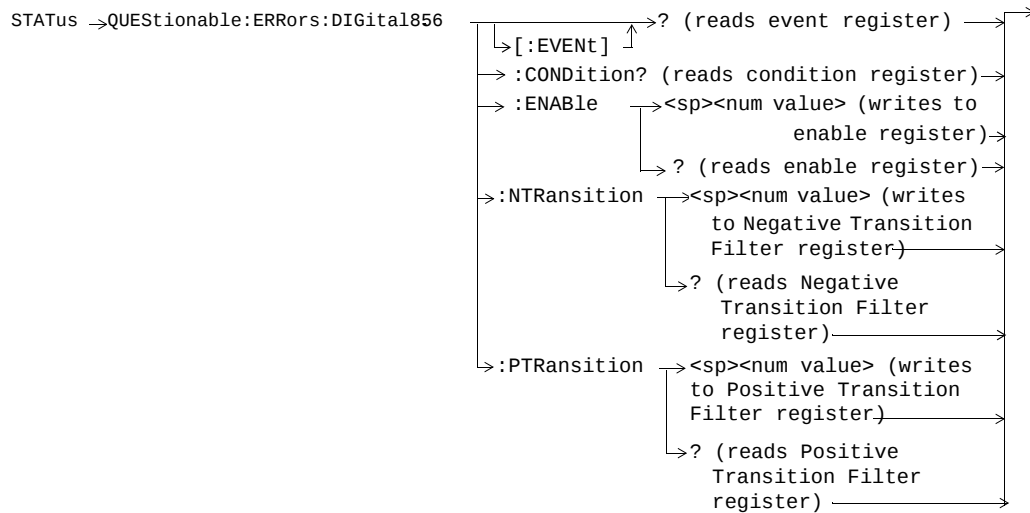
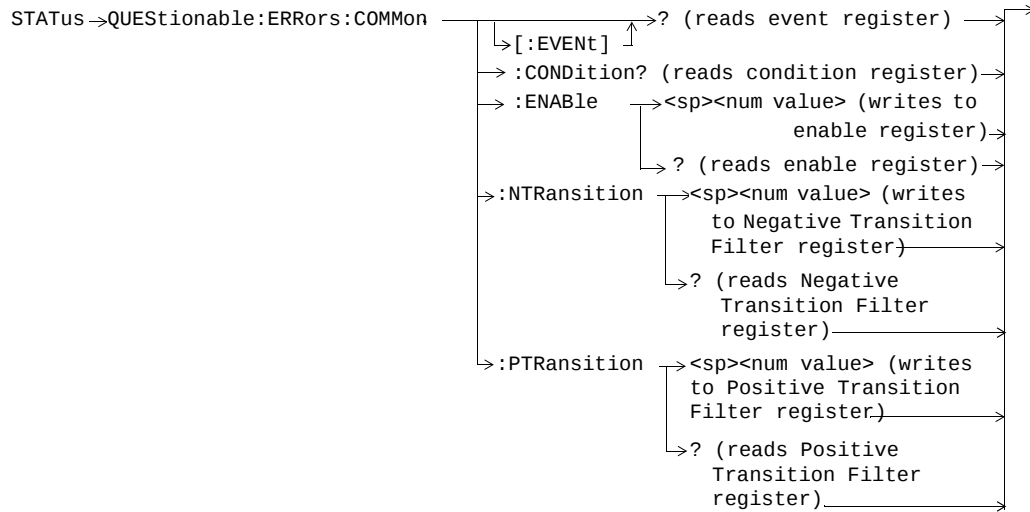
GPIB Syntax for E1966A



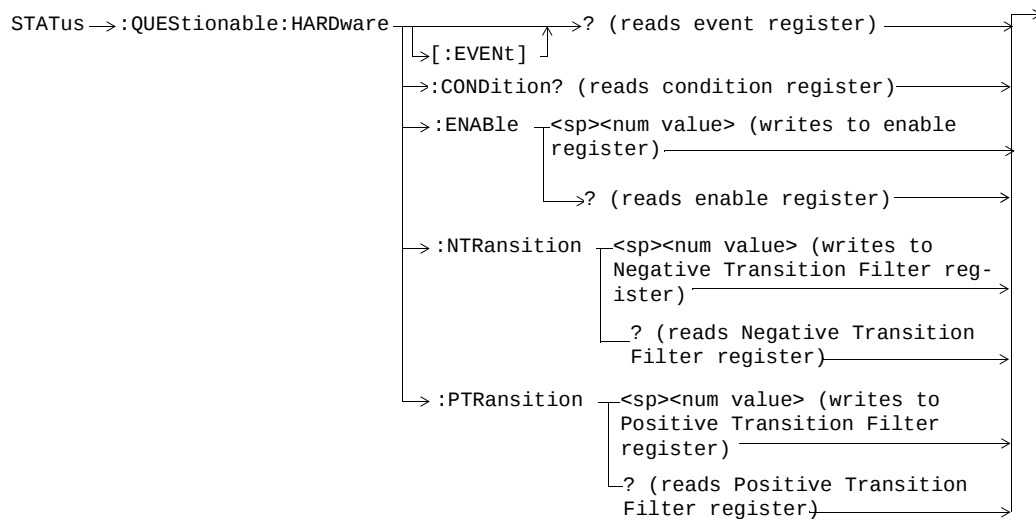
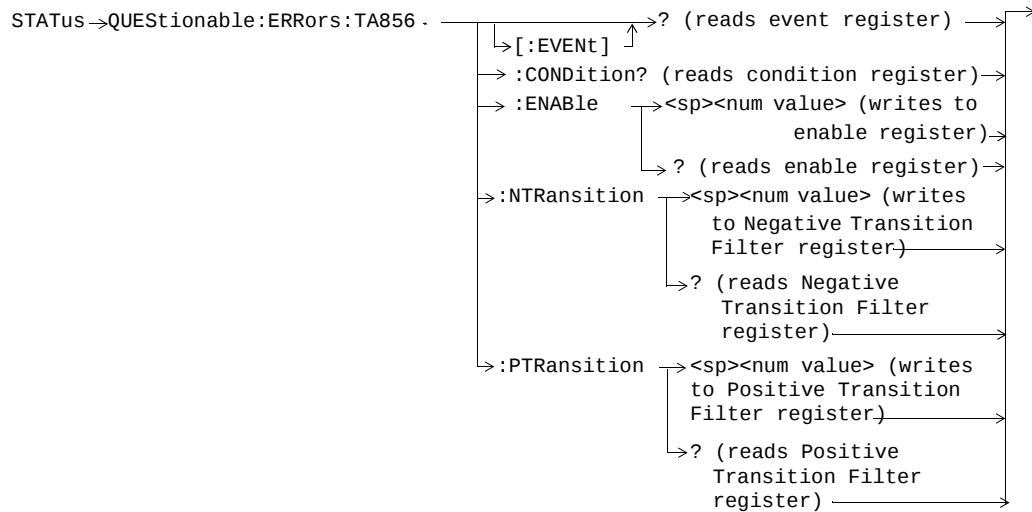


GPIB Syntax for E1966A





GPIB Syntax for E1966A



Status Byte Register

***STB?**

*STB? _____ ↘→

NOTE The Status Byte Register can also be read with a serial poll. For example, the command “Status_byte = SPOLL(714)” would perform a serial poll of the Status Byte Register, returning and releasing RQS (bit 6).

Standard Event Status Register

***ESR?**

*ESR? —————> Reads and clears the Std Event Status Register. —————>

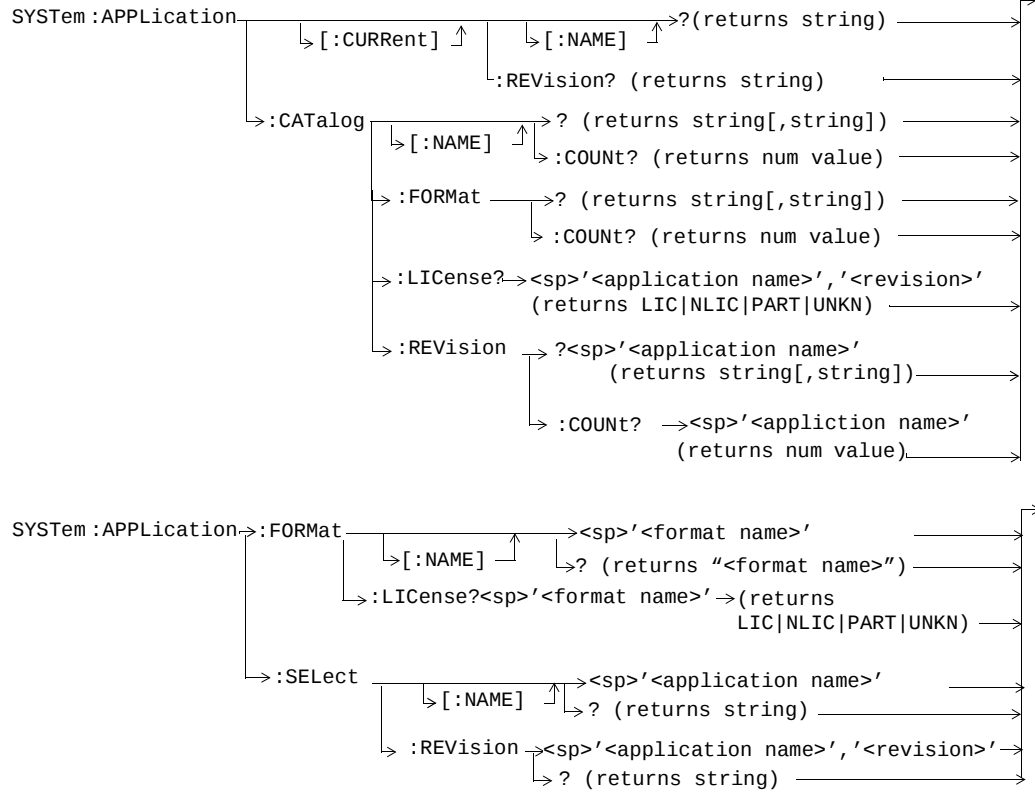
***ESE?**

*ESE? —————> Reads the Std Event Status Register Enable Register —————>

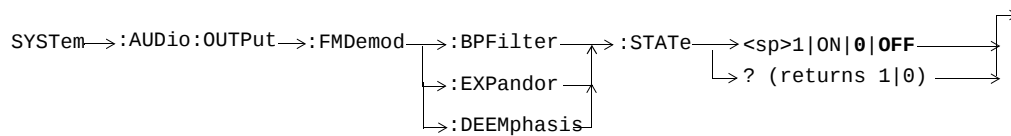
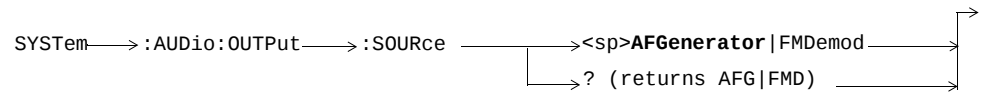
***ESE**

*ESE —————> Writes to the Std Event Status Register Enable Register —————>

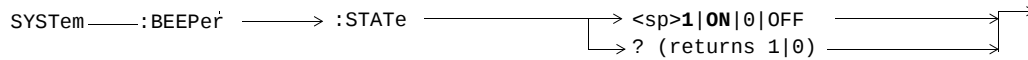
SYSTem:APPLication



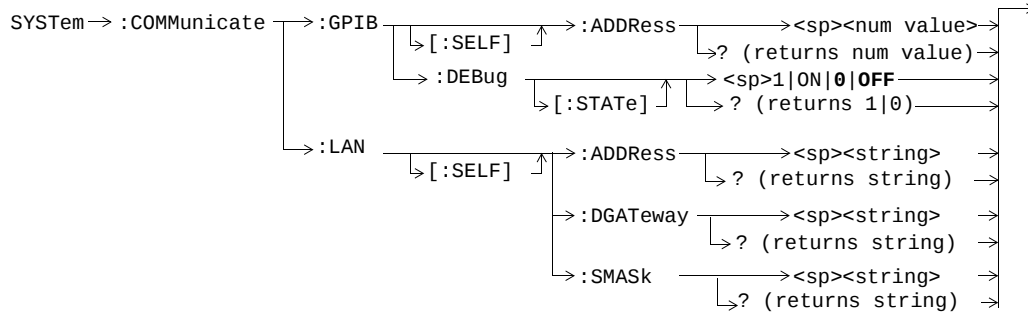
SYSTem:AUdio



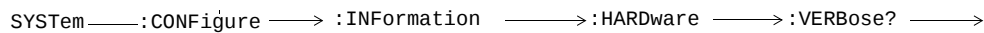
SYSTem:BEEPer



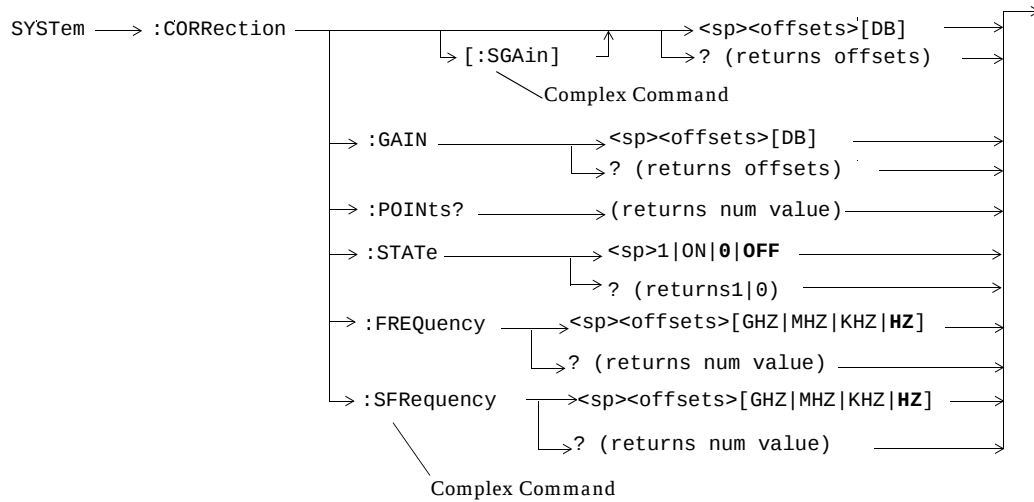
SYSTem:COMMunicate



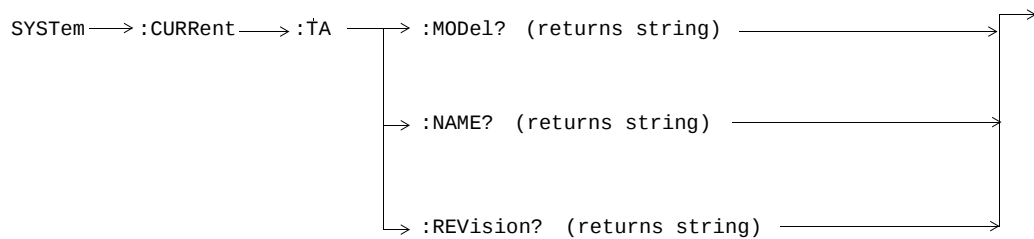
SYSTem:CONFIgure



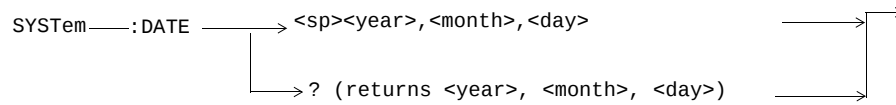
SYSTem:CORRection



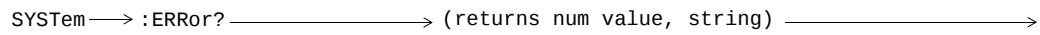
SYSTem:CURRent:TA



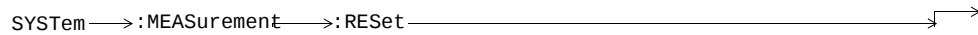
SYSTem:DATE



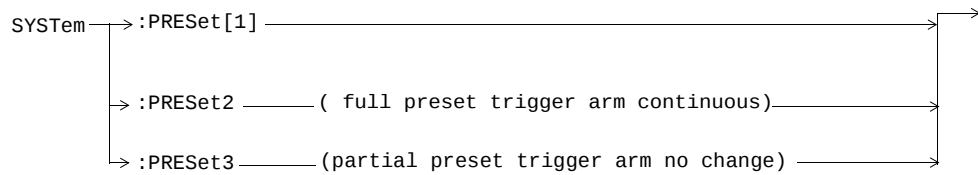
SYSTem:ERRor?



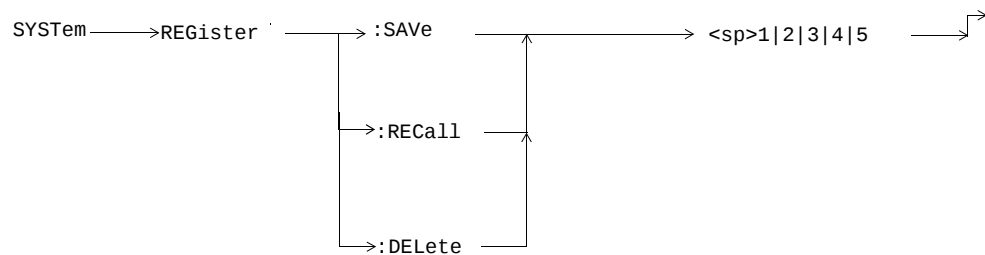
SYSTem:MEASurement:RESet



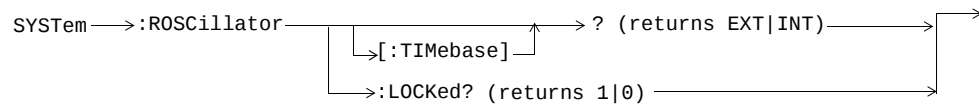
SYSTem:PRESet



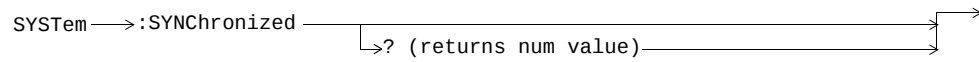
SYSTem:REGister



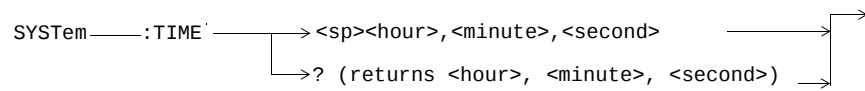
SYSTem:ROSCillator



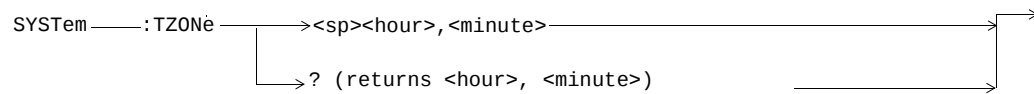
SYSTem:SYNChronized



SYSTem:TIME



SYSTem:TZONE



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 returned 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.

GPIB Syntax for E1966A

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To find a syntax equivalent for a field on the Test Set's display.

1. Find the field name on the Test Set's display.
2. Look up the name in the alphabetical listing.
3. Turn to the page indicated.

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