

**Error Messages**  
**Agilent Technologies**  
**ESG Family Signal Generators**

**Serial Number Prefixes:**

(Affix Label Here)



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## Introduction

If an error condition occurs in the signal generator, it is reported to both the front panel display error queue and the SCPI (remote interface) error queue. These two queues are viewed and managed separately.

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**NOTE** When there is an unviewed message in the front panel error queue, the **ERR** annunciator appears on the signal generator's display.

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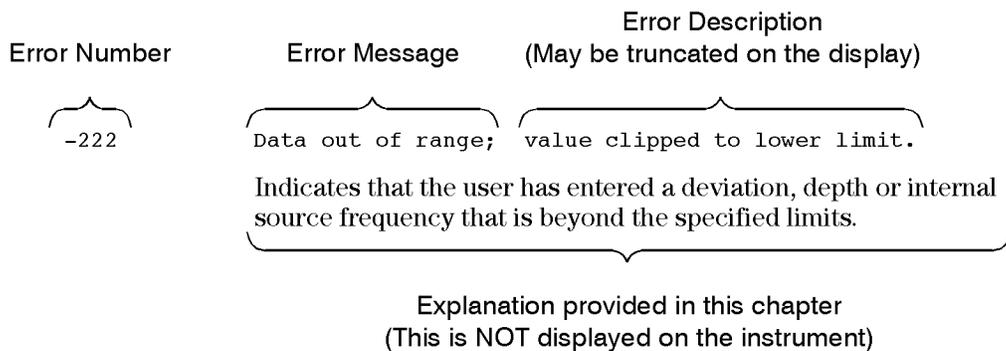
Characteristic	Front Panel Display Error Queue	SCPI Remote Interface Error Queue
Capacity (#errors)	30	30
Overflow Handling	Circular (rotating). Drops oldest error as new error comes in.	Linear, first-in/first-out. Replaces newest error with: -350, Queue overflow
Viewing Entries	Press: <b>Utility &gt; Error Info &gt; View Next</b> (or <b>Previous</b> ) <b>Error Message</b>	Use SCPI query SYSTem:ERRor? or STATus:QUEue?
Clearing the Queue	Press: <b>Utility &gt; Error Info &gt; Clear Error Queue(s)</b>	Power up Send a *CLS command Read last item in the queue
Permanent Errors (errors that must be resolved. For example: unlock, avalanched, and hi/lo)	Re-reported after queue is cleared.	Re-reported after queue is cleared.

## Error Message Format

The system-defined error numbers are chosen on an enumerated (“1 of N”) basis. The SCPI-defined error numbers and the <error\_description> portions of the error query response are displayed on the instrument.

In this chapter, an explanation is included with each error to further clarify its meaning. The first error described in each class (for example, -400, -300, -200, -100) is a “generic” error. In selecting the proper error number to report, more specific error codes are preferred.

Error messages appear in the lower-left corner of the display.



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## Error Message Types

Events do not generate more than one type of error. For example, an event that generates a query error will not generate a device-specific, execution, or command error.

**Query Errors (-499 to -400)** indicate that the instrument's output queue control has detected a problem with the message exchange protocol described in IEEE 488.2, Chapter 6. Errors in this class set the query error bit (bit 2) in the event status register (IEEE 488.2, section 11.5.1). These errors correspond to message exchange protocol errors described in IEEE 488.2, 6.5. In this case:

- Either an attempt is being made to read data from the output queue when no output is either present or pending, or
- data in the output queue has been lost.

**Device Specific Errors (-399 to -300 and 201 to 702)** indicate that a device operation did not properly complete, possibly due to an abnormal hardware or firmware condition. These codes are also used for self-test response errors. Errors in this class set the device-specific error bit (bit 3) in the event status register (IEEE 488.2, section 11.5.1).

The <error\_message> string for a *positive* error is not defined by SCPI. A positive error indicates that the instrument detected an error within the GPIB system, within the instrument's firmware or hardware, during the transfer of block data, or during calibration.

**Execution Errors (-299 to -200)** indicate that an error has been detected by the instrument's execution control block. Errors in this class set the execution error bit (bit 4) in the event status register (IEEE 488.2, section 11.5.1). In this case:

- Either a <PROGRAM DATA> element following a header was evaluated by the device as outside of its legal input range or is otherwise inconsistent with the device's capabilities, or
- a valid program message could not be properly executed due to some device condition.

Execution errors are reported *after* rounding and expression evaluation operations are completed. Rounding a numeric data element, for example, is not reported as an execution error.

**Command Errors (-199 to -100)** indicate that the instrument's parser detected an IEEE 488.2 syntax error. Errors in this class set the command error bit (bit 5) in the event status register (IEEE 488.2, section 11.5.1). In this case:

- Either an IEEE 488.2 syntax error has been detected by the parser (a control-to-device message was received that is in violation of the IEEE 488.2 standard. Possible violations include a data element that violates device listening formats or whose type is unacceptable to the device.), or
- an unrecognized header was received. These include incorrect device-specific headers and incorrect or unimplemented IEEE 488.2 common commands.

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## 0: No Error

- 0            No error, No Error Message(s) in Queue
- The queue is empty. Every error in the queue has been read, or the queue was purposely cleared using either the **Clear Error Queue(s)** softkey or \*CLS.

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## -499 to -400: Query Errors

The instrument's output queue control has detected a problem with the message exchange protocol described in IEEE 488.2, Chapter 6. Errors in this class set the query error bit (bit 2) in the event status register (IEEE 488.2, section 11.5.1). These errors correspond to message exchange protocol errors described in IEEE 488.2, 6.5.

In this case, either an attempt is being made to read data from the output queue when no output is either present or pending, or data in the output queue has been lost.

- 440**            Query UNTERMINATED after indefinite response
- A query was received in the same program message in which a query requesting an indefinite response was executed (see IEEE 488.2, 6.3.7.5).
- 430**            Query DEADLOCKED
- A condition causing a DEADLOCKED query error occurred (see IEEE 488.2, 6.3.1.7). For example, both the input buffer and the output buffer are full and the device cannot continue.
- Query DEADLOCKED
- A SCPI output queue has filled, preventing further SCPI command execution, and there is no more room left in the corresponding SCPI input queue to accept a query to read from the output queue. The system automatically discards output to correct the deadlock.
- 420**            Query UNTERMINATED
- A condition causing an UNTERMINATED query error occurred (see IEEE 488.2, 6.3.2.2). For example, the device was addressed to talk and an incomplete program message was received.
- 410**            Query INTERRUPTED
- A condition causing an INTERRUPTED query error occurred (see IEEE 488.2, 6.3.2.7). For example, a query was followed by DAB or GET before a response was completely sent.
- 400**            Query Error
- This is a generic query error for devices that cannot detect more specific errors. The code indicates only that a query error as defined in IEE 488.2, 11.5.1.1.7 and 6.3 has occurred.

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## **-399 to -300: Device-Specific Errors**

Some device operations did not properly complete, possibly due to an abnormal hardware or firmware condition. These codes are also used for self-test response errors. Errors in this class set the device-specific error bit (bit 3) in the event status register (IEEE 488.2, section 11.5.1).

- 362** Framing error in program message  
A stop bit was not detected when data was received (for example, a baud rate mismatch).
- 361** Parity error in program message  
The parity bit was not correct when data was received (for example, an incorrect parity bit on a serial port).
- 360** Communication error  
This is the generic communication error for devices that cannot detect the more specific errors described for errors -361 and -362.
- 350** Queue overflow  
This is a specific code entered into the queue in lieu of the code that caused the error. This message indicates that there is no more room in the queue and an error occurred but was not recorded.
- 340** Calibration failed  
The device has detected a failure during its calibration procedure.
- 330** Self-test failed  
The device has detected a failure during its self-test procedure.
- Self-test failed; Bad address position @ 0x\_\_\_\_  
The data generator memory failed. Modulation data produced by the data generator may not be correct. An address that appeared to have a failed address line was reported. Report this error to the nearest Agilent Technologies sales or service office.



Out of memory

**There was insufficient working memory during data generation pattern calculations. Reduce the size of any sweep lists and try again.**

Out of memory

**If this occurs during a memory catalog display, it means the system did not have enough free RAM to prepare the catalog.**

Out of memory; ARB communication failed.

**There was insufficient memory to complete the dual arbitrary waveform generator (Option UND) communications. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; ARB is not functional.

**There is insufficient memory to the ARB to generate the requested waveform.**

Out of memory; Burst shape RAM cannot hold specified burst shape.

**There is insufficient working memory available. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; Cannot create memory manager

**A file system memory manager detected an internal error condition. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; Cannot precalculate frequencies. Try fewer frequencies.

**Indicates that memory was exhausted during frequency precalculation (used to speed the process of sweep/list mode). List mode cannot run until either fewer frequencies have been supplied or more memory becomes available and the same set of frequencies are sent again, `FREQ:MODE CW` is executed, or `:FREQ:MODE LIST` is executed.**

Out of memory; Cannot uncompress file.

**A `STATE:` file cannot be uncompressed because there is not enough memory to run the decompression algorithm. Recall will fail and there will be no instrument state change. Reduce the size of any sweep lists and try again.**

Out of memory; Complementary Cumulative Distribution. Display cannot function.

**There is insufficient working memory available. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; Could not copy current istate.

**An instrument state operation, such as save/recall, could not allocate enough space to copy an instrument state. The operation is aborted.**

Out of memory; Display system out of memory. An abnormal display may result. Memory consumption should be reduced.

**There was not enough memory in the system to properly update the display. Some inconsistencies may be seen. The size of any list/sweep should be reduced, and the source should be preset to clear up any inconsistencies. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; FFT display cannot function.

**There is insufficient working memory available. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; FFT subsystem cannot function.

**There is insufficient working memory available. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; File exceeds digital modulation memory size.

**A digital modulation input file would result in more pattern data being generated than can fit in the pattern memory.**

Out of memory; FIR subsystem generated more coefficients than the hardware can handle.

**There is insufficient working memory available. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; FIR subsystem unable to operate.

**There is insufficient working memory available. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; Graph subsystem cannot function.

**There is insufficient working memory available. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; Histogram display cannot function.

**There is insufficient working memory available. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; Impulse response display cannot function.

**There is insufficient working memory available. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; There is insufficient memory to copy the current pattern. The secondary pattern is unchanged.

**There was insufficient room to copy or create the current data generation pattern data in order to make it a secondary pattern. To avoid this, set up the smaller of the two patterns first.**

Out of memory; There is insufficient memory to store the secondary frame in Pattern RAM. The secondary frame has been turned off.

**There was insufficient room to copy or create the current data generation pattern data in order to make it a secondary pattern. To avoid this, set up the smaller of the two patterns first.**

Out of memory; Insufficient RAM

**A memory comparison between a shadow RAM data area and the corresponding EEPROM data area could not be performed due to insufficient working RAM. This does *not* necessarily imply a memory problem, since this comparison is only used in stringent diagnostic situations.**

Out of memory; I/Q map display cannot function.

**There is insufficient working memory available. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; List formation

**The device was unable to allocate space for a lookup table, such as for list mode precalculation. List mode cannot run until either fewer frequencies have been supplied or more memory becomes available and the same set of frequencies are sent again, `FREQ:MODE CW` is executed, or `:FREQ:MODE LIST` is executed.**

Out of memory; Memory allocation error.

**There is insufficient working memory available. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; Memory catalog failed.

**There is not enough memory to complete a catalog listing. Reduce the size of any sweep lists and try again.**

Out of memory; Memory request failed, out of indices. Memory request greater than total memory size.

**A file system memory manager detected an internal error condition. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; Modulation subsystem unable to operate.

**There is insufficient working memory available. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; Not enough memory to buffer paging message.

**There is not enough memory to buffer the asynchronous paging message, so it will not be played. Reduce the size of any list/sweep, and preset the source to clear up any inconsistencies. If the problem persists report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; Not enough memory to create progress bar.

**There is not enough memory to create a progress bar. Reduce the size of any list/sweep, and preset the source to clear up any inconsistencies. If the problem persists report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; Not enough memory to read data file.

**There is not enough memory to read the specified data file. Try a smaller file. Reduce the size of any list/sweep, and preset the source to clear up any inconsistencies. If the problem persists report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; The pre-coded bit data for this transport channel is not generated due to the memory overflow or memory allocation error.

**Reduce the amount of coding applied to data or decrease the amount of data.**

Out of memory; There is not enough memory to create the modulation. Baseband cannot function.

**There is not enough memory to create the modulation map. Reduce the size of any list/sweep, and preset the source to clear up any inconsistencies. If the problem persists report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; Object Memory Area

**Indicates that memory was exhausted during instrument power-on. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; Pattern exceeds digital modulation memory size. If a user file is selected, it may be too large.

**The user has specified a data file or other generation parameters that would require more data generation pattern memory than is available with the particular data generator installed in the instrument.**

Out of memory; PRBS xx/xx

**There was not enough memory to apply a scramble to data for the baseband generator. In this case, the scramble is not applied to the generator.**

Out of memory; Shape subsystem unable to operate.

**There is insufficient working memory available. Report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; The table editor cannot function properly until more memory is available.

**There is insufficient working memory available. Reduce the size of any sweep lists and try again.**

Out of memory; The table editor cannot function properly until more memory is available.

**There is insufficient memory for the ARB to generate the requested waveform.**

Out of memory; Unable to allocate memory for SCPI response.

**There is not enough memory to execute this SCPI query. Reduce the size of any list/sweep, and preset the source to clear up any inconsistencies. If the problem persists report this error to the nearest Agilent Technologies sales or service office.**

Out of memory; Unable to check Data Generator memory.

There was not enough memory in the system to properly complete the data generator memory test. This does *not* imply a data generator memory failure. Check all other error messages to identify possible causes, discontinue list/sweep mode to free some memory, and repeat the test.

Out of memory; Unable to display format window.

The instrument was unable to create part of the graphical user interface due to an inability to allocate memory (possibly due to fragmentation). Report this error to the nearest Agilent Technologies sales or service office. The instrument is still functional.

Out of memory; Unable to display protocol window.

The instrument was unable to create part of the graphical user interface due to an inability to allocate memory (possibly due to fragmentation). Report this error to the nearest Agilent Technologies sales or service office. The instrument is still functional.

Out of memory; Unable to display timeslot window.

The instrument was unable to create part of the graphical user interface due to an inability to allocate memory (possibly due to fragmentation). Report this error to the nearest Agilent Technologies sales or service office. The instrument is still functional.

Out of memory; Unable to verify instrument state file.

An instrument state file could not be accessed and verified because of insufficient memory. Reduce the size of any sweep lists and try again.

Out of memory; User burst shape could not be generated.

There is insufficient working memory available. Report this error to the nearest Agilent Technologies sales or service office.

-320

Storage fault

The firmware detected a fault when using data storage. This error is not an indication of physical damage or failure of any mass storage element.

-315

Configuration memory lost

Indicates that non-volatile configuration data saved by the device has been lost. The meaning of this error is device-dependent.

Configuration memory lost; Persistent state checksum is bad.  
Using factory defaults.

**The persistent state is corrupt and had to be reinitialized with the factory preset values.**

Configuration memory lost; Persistent state preset. Using factory defaults.

**The persistent state has been forced to return to factory preset values.**

Configuration memory lost; Persistent state version is bad.  
Using factory defaults.

**The persistent state version is not recognized as valid and is assumed to be corrupt. The persistent state is reinitialized with the factory preset values.**

-314 Save/recall memory loss

**The non-volatile data saved by the \*SAV? command has been lost.**

-313 Calibration memory lost

**Indicates that non-volatile calibration data has been lost.**

-312 PUD memory lost

**The protected user data saved by the \*PUD command has been lost.**

-311 Memory error

**An error was detected in the device's memory.**

Memory error; Unable to configure Save Recall registers from non-volatile memory. Save Recall registers re-initialized.

**Indicates that saved states are no longer usable. Delete explicitly using Catalog.**

-310 System error; Absolute I and Q voltages must be at most 1 volt.

**An internal error has occurred that results in the normalized I or Q voltage to be greater than 1 volt. Report this error to the nearest Agilent Technologies sales or service office.**

System error; Cannot change manual point until list mode error condition cleared.

**An error is keeping the sweep/list from being able to set the frequency and/or power. Until the problem is addressed, the manual point cannot be changed.**

System error; File Not Found.

**The specified file cannot be found. Verify that the file exists in the instrument file system.**

System Error; FIR subsystem generated more coefficients than the hardware can handle.

**The maximum number of coefficients for a given set of hardware has been exceeded. The filter must be created with fewer coefficients.**

System error; Hardware error. Unable to apply Phase inversion!

**There is an error with the UN8 option. Try turning CDMA2000 mode off and on again to reset the card. If the problem persists, report this error to the nearest Agilent Technologies sales or service office.**

System error; RS232 buffer overflow: character lost.

**The RS232 buffer has been exceeded. The most recent character has been dropped.**

System error; Unable to determine which attenuator is installed.

**An invalid attenuator identification code has been detected. Possible causes include a loose attenuator control cable. The instrument will likely not produce the proper output power levels. Report this error to the nearest Agilent Technologies sales or service office.**

## -300

Device-specific error

**This is a generic device-dependent error for devices that cannot detect more specific errors. The code indicates only that a device-dependent error as defined in IEEE 488.2, 11.5.1.1.6 has occurred.**

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## -299 to -200: Execution Errors

An error has been detected by the instrument's execution control block. Errors in this class set the execution error bit (bit 4) in the event status register (IEEE 488.2, section 11.5.1). In this case:

- Either a <PROGRAM DATA> element following a header was evaluated by the device as outside of its legal input range or is otherwise inconsistent with the device's capabilities, or
- a valid program message could not be properly executed due to some device condition.

Execution errors are reported *after* rounding and expression evaluation operations are completed. Rounding a numeric data element, for example, is not reported as an execution error.

- |      |   |
|------|---|
| -294 | Incompatible type<br>The type or structure of a memory item is inadequate.  |
| -293 | Referenced name already exists<br>A downloaded program attempted to define an element (a variable, constant, filename, etc.) that had already been defined. |
| -292 | Referenced name does not exist<br>A downloaded program attempted to access an undefined element (a variable, constant, filename, etc.).                     |
| -291 | Out of memory<br>A downloaded program required more memory than was available in the instrument.  |
| -290 | Memory use error<br>A user request has directly or indirectly caused an error related to memory or <data_handles>. This is not the same as "bad" memory.    |
| -286 | Program runtime error<br>A runtime error was detected in a downloaded program.  |

Program runtime error; Floating-Point Exception

A floating-point math error (such as a divide by zero) has been detected. The system will attempt to recover automatically. Report this error to the nearest Agilent Technologies sales or service office.

-285

Program syntax error

A syntax error appears within a downloaded program. The syntax used when parsing a downloaded program is device-specific.

-284

Program currently running

Indicates that certain operations related to programs may be illegal while the program is running. For example, deleting a running program may be illegal.

-283

Illegal variable name

An attempt was made to reference a nonexistent variable.

-282

Illegal program name

The name used to reference a program was invalid. For example, redefining an existing program, deleting a nonexistent program, or in general, referencing a nonexistent program.

-281

Cannot create program

An attempt to create a program was unsuccessful. This may be due to insufficient memory.

-280

Program error

A downloaded program-related execution error occurred. This error message is used when the device cannot detect the more specific errors described for errors -281 through -289. The syntax used in a program and the mechanism for downloading a program is device-specific.

-278

Macro header not found

A syntactically legal macro label in the \*GMC? query could not be executed because the header was not previously defined.

-277

Macro redefinition not allowed

The macro label defined in the \*DMC command could not be executed because the macro label was already defined (see IEEE 488.2, 10.7.6.4).

- 276           Macro recursion error  
A syntactically legal macro program data sequence could not be executed because the device found it to be recursive (see IEEE 488.2, 10.7.6.4).
- 275           Macro definition too long  
A syntactically legal macro program data sequence could not be executed because the string or block contents were too long for the device to handle (see IEEE 488.2, 10.7.6.1).
- 274           Macro parameter error  
The macro definition improperly used a macro parameter placeholder (see IEEE 488.2, 10.7.3).
- 273           Illegal macro label  
The macro label defined in the \*DMC command was a legal string syntax, but could not be accepted by the device (see IEEE 488.2, 10.7.3 and 10.7.6.2). For example, the label was too long, the same as a common command header, or contained invalid header syntax.
- 272           Macro execution error  
A syntactically legal macro program data sequence could not be executed due to an error within the macro definition (see IEEE 488.2, 10.7.6.3).
- 271           Macro syntax error  
A syntactically legal macro program data sequence, written in accordance with IEEE 488.2, 10.7.2, could not be executed due to a syntax error within the macro definition (see IEEE 488.2, 10.7.6.3).
- 270           Macro error  
A macro-related execution error occurred. This error message is used when the device cannot detect the more specific errors described for errors -271 through -279.
- 261           Math error in expression  
A syntactically legal expression program data element could not be executed due to a math error. For example, a divide-by-zero was attempted. The definition of a math error is device-specific.

- 260** Expression error
- An expression data element-related error occurred. This error message is used when the device cannot detect the more specific errors described for errors -261 through -269.
- 258** Media protected
- The device or user has attempted to write to a read-only memory subsystem (msus). The definition of a protected media is device-specific.
- 257** File name error
- A legal program command or query could not be executed because a file name on the device media was in error. For example, an attempt was made to copy to a duplicate filename. The definition of what constitutes a file name error is device-specific.
- File name error; Delete empty sequence <sequence\_name>. Delete sequence ignored.
- The user has attempted to delete a sequence that is empty (all registers unused). This is informational only. Typically this error is reported (several times) when the “Delete All Sequences” command is executed.
- File name error; Delete a non-saved state register. Delete register ignored.
- The user has attempted to delete a state that is empty (unused). This is informational only.
- File name error; Directory does not support extenders.
- An extender, which is specified by an @ sign followed by a memory subsystem name, has been specified for an explicit memory subsystem which does not allow the @ notation. Only the default (:) memory subsystem allows extenders.
- File name error; Empty filename
- A filename of " " was specified. This is not a legal filename.
- File name error; Illegal extender
- An illegal memory subsystem name was used after the @.

File name error; Illegal filename character

**An illegal character was used within a filename. \, :, @ and all non-printable ASCII characters are illegal in filenames.**

File name error; Only one ":" is allowed.

**Indicates that only one colon is allowed in any filename specification. The text before the colon is a user memory subsystem.**

File name error; Only one "@" is allowed.

**Indicates that only one @ is allowed in any filename specification. It specifies the memory subsystem that a user file actually resides in.**

-256

File name not found

**A legal program command or query could not be executed because the file name on the device media could not be found. For example, an attempt was made to read or copy a nonexistent file. The definition of what constitutes a file not being found is device-specific.**

File name not found; <filename>

**The user has attempted to delete a file that does not exist, or an internal table editor column file has been lost.**

File name not found; CDMA\_DATA FILE

**One of the internal working CDMA channel table files is missing.**

File name not found; CDMA\_WCODE FILE

**One of the internal working CDMA channel table files is missing.**

File name not found; CDMA\_PNOFS FILE

**One of the internal working CDMA channel table files is missing.**

File name not found; CDMA\_POW FILE

**One of the internal working CDMA channel table files is missing.**

File name not found; FCDMA2K\_CHAN\_FILE

**An internal table editor column file has been lost. A new one will have to be created.**

File name not found; The internal list file was not found.  
There is no list data to return

**The DWEL\_FILE, FREQ\_FILE, or POW\_FILE has been lost, so a new one will have to be created. These files are the persistent information for list/sweep mode. They contain the dwell list, the frequency list, or the power list. Invoking the list editor will recreate the missing file to a length of one element.**

File name not found; SYSTEM:FCDMA2K\_CHAN\_FILE

**An internal table editor column file has been lost. A new one will have to be created.**

File name not found; SYSTEM:MFWCDMA\_TYPE\_FILE

**An internal table editor column file has been lost. A new one will have to be created.**

File name not found; SYSTEM:RCDMA2K\_CHAN\_FILE

**An internal table editor column file has been lost. A new one will have to be created.**

File name not found; MCDMA\_TYPE\_FILE

**An internal table editor column file has been lost. A new one will have to be created.**

File name not found; MTONE\_FREQ\_FILE

**An internal table editor column file has been lost. A new one will have to be created.**

File name not found; WCDMA\_CHAN\_FILE

**An internal table editor column file has been lost. A new one will have to be created.**

-255

Directory full

**A legal program command or query could not be executed because the media directory was full. The definition of what constitutes a full media directory is device-specific.**

-254

Media full

A legal program command or query could not be executed because the media was full. For example, there is was no space left on the disk. The definition of what constitutes full media is device-specific.

Media full; Save a state register ignored.

The state memory subsystem STATE: did not have enough room to save a register. You must free some memory by deleting a file or register using Catalog. Afterwards, try again.

Media full; Save a state register failed. State marked available.

The state memory subsystem STATE: did not have enough room to save a register, so the register was lost and is now marked available. You must free some memory by deleting a file or register using Catalog. Afterwards, try again.

Media full; Unable to delete saved state from non-volatile memory. No instrument state change.

The state memory subsystem STATE: was unable to delete a register. You must free some memory by deleting a file or register using Catalog. Afterwards, try again.

-253

Corrupt media

A legal program command or query could not be executed because of corrupt media, for instance a bad disk or incorrect disk format. The definition of what constitutes corrupt media is device-specific.

Corrupt media; <media\_name>

A source media (possibly EEPROM) for a data file is corrupt. This error is usually seen in conjunction with errors concerning a certain file.

Corrupt media; Arb file system.

The Arb memory area, used for storing waveform files, is corrupt. The system will clear and reconfigure this memory area automatically. A potential cause is the loss of line power in the middle of a write operation.

Corrupt media; User File System

The main memory area, used for storing instrument states and sequences as well as other data files, is corrupt. The system automatically clears and reconfigures this memory area. Potential causes: failing backup battery; the loss of line power to the instrument during a write operation.

**-252**

Missing media

A legal program command or query could not be executed because of missing media, for instance no disk in the disk drive. The definition of what constitutes missing media is device-specific.

Missing media

If this occurs during a memory catalog display, it means the default memory system could not be located. The instrument is likely not functioning properly. Report this error to the nearest Agilent Technologies sales or service office.

**-250**

Mass storage error

A mass storage error has occurred. This message is used when a device cannot detect the more specific errors described for errors -251 through -259.

Mass storage error; EEPROM write timeout on &lt;filename&gt;.

The system was not able to program new data to an EEPROM. The system is still functional, but files written to EEPROM (such as updated calibration data) may be lost when the instrument's line power is cycled. Report this error to the nearest Agilent Technologies sales or service office.

**-241**

Hardware missing

A legal program command or query could not be executed because of missing device hardware. For example, an option was not installed.

Hardware missing; &lt;card\_name&gt;

A test communication to a hardware card failed. The instrument is most likely not functional. Report this error to the nearest Agilent Technologies sales or service office.

Hardware missing; Installed option boards do not match configuration information.

A set of option boards have been installed that do not match the information that was given to the instrument as part of the installation. If this is the result of a customer installed option, the wrong option was specified during installation. If this is seen at any other time, the likely cause is an EEPROM failure on the option card.

Hardware missing; no such SIO address

**The expected board is not installed. Report this error to the nearest Agilent Technologies sales or service office.**

-240

Hardware error

**A legal program command or query could not be executed because of a hardware problem in the device. The definition of what constitutes a hardware problem is completely device-specific. This error is used when the device cannot detect the more specific errors described for errors -241 through -249.**

-233

Invalid version

**A legal program data element was parsed but could not be executed because the version of the data is incorrect to the device. This particular error is used when file or block data elements are recognized by the instrument, but cannot be executed for reasons of version incompatibility. For example, a non-supported file version or a non-supported instrument version.**

-232

Invalid format

**A legal program data element was parsed but could not be executed because the data format or structure is inappropriate. For example, when loading memory tables or when sending a `SYSTEM:SET` parameter for an unknown instrument.**

-231

Data questionable

**The measurement accuracy is questionable.**

Data questionable; EEPROM copy of <filename>.

**The EEPROM copy of a file has a correctable error. The system automatically performs the correction. A potential cause is a failing EEPROM. Report this error to the nearest Agilent Technologies sales or service office.**

Data questionable; RAM copy of <filename>.

**The non-volatile RAM copy of a file has a correctable error. The system automatically performs the correction. A potential cause is a failing backup battery.**

-230

Data corrupt or stale

**Possibly invalid data. A new reading was started but not completed since last access.**

Data corrupt or stale; <filename>.

**The sequence file that you are attempting to run is the wrong size.**

Data corrupt or stale; <NAME> differs offset 0x<VALUE>: NVRAM 0x<VALUE>, EEPROM 0x<VALUE>.

**This message can occur only if full power-on EEPROM comparison mode is set by the factory. If this mode is set, this message indicates that the data that was retained by the EEPROM did not match the shadow data that was retained by the shadow non-volatile RAM, even though no uncorrectable errors or CRC mismatch was found in the shadow memory. This error usually indicates that the instrument lost power during EEPROM programming. If the instrument was quiescent when it was powered off, report this error to the nearest Agilent Technologies sales or service office.**

Data corrupt or stale; EEPROM @ offset 0x<VALUE>: wrote 0x<VALUE>, read 0x<VALUE>.

**After writing shadow RAM data to EEPROM, a memory comparison detected a difference. The EEPROM may not be retaining data properly. Report this error to the nearest Agilent Technologies sales or service office.**

Data corrupt or stale; EEPROM copy of <filename>.

**The EEPROM copy of a file is either corrupt or otherwise unusable. The system automatically updates the non-volatile RAM copy of the EEPROM copy using a default initialization. The actual EEPROM file is left as it is. Report this error to the nearest Agilent Technologies sales or service office.**

Data corrupt or stale; Either the file is not a bit file, or the number of bits specified does not match with the number of data bytes in the file.

**An error has occurred while downloading a user file to the Bit memory catalog. Either the user file is not a bit file, or the number of bits specified in the SCPI command does not match the number of bytes in the file. Ensure that the bit specifier matches the actual number of bits in the file.**

Data corrupt or stale; file @ offset 0x<VALUE>: wrote 0x<VALUE>, retained 0x<VALUE>.

**After writing shadow RAM data to EEPROM, a memory comparison detected a difference. The EEPROM may not be retaining data properly. Report this error to the nearest Agilent Technologies sales or service office.**

Data corrupt or stale; License file is obsolete, missing entries defaulted.

This error can only occur during the instrument's first power up after having downloaded new firmware. It indicates that the software license file is missing entries for options supported by the current revision of firmware. The missing entries have been added to the file, and their license key values have been defaulted to zero. This error will occur during the first power up after downloading new firmware into the instrument.

Data corrupt or stale; RAM copy of <filename>.

The non-volatile RAM copy of a file is either corrupt or is out of date with the EEPROM master copy (if one exists). The system automatically re-initializes the file from EEPROM (if appropriate) or from a default algorithm. A potential cause is a failing backup battery.

-226 Lists not same length

Attempted to use LIST structure having individual LISTs of unequal length.

-225 Out of memory

The device has insufficient memory to perform the requested operation.

-224 Illegal parameter value

Used where exact value, from a list of possibilities, was expected.

Illegal parameter value; Command requires at least one data value.

A modulation type cannot be created without data.

Illegal parameter value; Total user file bits must be greater than 0.

An attempt was made to select a user file that contains 0 bits. Select another user file that contains at least 1 bit.

Illegal parameter value; Total user file bits must be greater than 0 and smaller than 500000.

The current hardware supports user file size between 1 and 500000 bits. Select a different file with the correct size.

**-223**

Too much data

**A legal program data element of block, expression or string type was received that contained more data than the device could handle due to memory or related device-specific requirements.**

Too much data; The current setting results in too many data points. A new symbol map cannot be generated. CDMA2000 has been turned off.

**Due to a hardware limitation, only a certain number of unique data points can be created for the IQ map. CDMA2000 mode turns off when the power combination of all channels exceed that limit. Adjust the channel power level and try again.**

Too much data; The current setting results in too many data points. A new symbol map cannot be generated. The IQ Rotation has been restored to previous value.

**Due to a hardware limitations, only a certain number of unique data points can be created for the IQ map. IQ rotation is designed to alleviate this problem, but used incorrectly can result in undesirable effects. This error indicates that the current IQ rotation is optimal and cannot be changed.**

Too much data; The current setting results in too many data points. A new symbol map cannot be generated. The format has been turned off.

**Due to a hardware limitation, only 256 unique data points can be created for the IQ map. W-CDMA mode turns off when the power combination of all channels exceeds that limit. Adjust the channel power level and try again.**

Too much data; The current setting results in too many data points. A new symbol map cannot be generated. The current channel has been restored to its previous type.

**Due to a hardware limitations, only a certain number of unique data points can be created for the IQ map. This channel type, together with its power setting, has exceeded that limit. The channel type reverts to its previous type to retain a valid signal. To try a different power setting, turn the channel off, switch to the desired type, change the power setting, and then turn the channel back on.**

Too much data; The current setting results in too many data points. A new symbol map cannot be generated. The current channel has been turned off.

Due to a hardware limitations, only a certain number of unique data points can be created for the IQ map. This channel power level has resulted in an IQ map that exceeds the hardware limit when turned on, and cannot be accommodated. The channel has been turned off to retain a valid signal. To turn this channel on, try a different power setting or turn some other channel off.

Too much data; The number of CDMA channels exceeds the maximum allowed.

The maximum number of CDMA channels is defined in the technical specifications document.

Too much data; The number of CDMA carriers exceeds the maximum allowed.

The maximum number of CDMA carriers is defined in the technical specifications document.

Too Much Data; The number of list points exceeds the maximum allowed.

Some tables have a maximum number of entries. Sweep/List can only have 401 points, for example.

Option UN8 cannot use an I/Q map that has more than 16 unique values for both I and Q. You can use global search and replace to replace all occurrences of a given value (in both I and Q) with a different value.

Too Much Data; The number of list points in the table exceeds the maximum allowed.

Some tables have a maximum number of entries. Sweep/List can only have 401 points, for example.

Too much data; The number of points in the table exceeds the maximum allowed.

This occurs when you try to create a table that is too big. For example, if you enter a list in SCPI that is longer than the maximum allowed length, or if you attempt to expand a table and the table is already at its maximum length.

Too Much Data; Only 16 distinct values are allowed for I and Q values.

The current hardware allows a maximum of 16 unique values for I and Q. Try a different modulation.

Too much data; Only 16 distinct values are allowed for I and Q values.

**Option UN8 cannot use an I/Q map that has more than 16 unique values defined for I and Q (distinct values are listed in the I/Q table editor).**

**You can use global search and replace to replace all occurrences of a given value (in both I and Q) with a different value.**

Too Much Data; Only 16 distinct values are allowed for I and Q values.

**Although up to 256 I and Q pairs can be configured, only 16 unique I and 16 unique Q values are allowed. If there are more than 16 I and Q pairs, some of the pairs must use I and Q values that are also used by other pairs. For example, two I and two Q values can still define four unique I and Q pairs.**

Too Much Data; Only 16 distinct values are allowed for I and Q values.

**The current hardware only allows a maximum of 16 unique values for I and Q. Try a different modulation.**

Too Much Data; PRAM download exceeds the size of PRAM memory. Download aborted.

**You attempted to download a data block to PRAM memory that was larger than PRAM memory. Either use a smaller pattern, or get more memory by ordering the appropriate hardware option. Option UN8 has 1 Mbyte of PRAM, which can store 1 Mbit of data bits. Option UN8 with UN9 contains 8 Mbytes of PRAM, which can store 8 Mbits of data bits.**

Too much data; User filter has too many symbols.

**Option UN8 cannot use a filter that has more than 32 symbols. You may have specified an incorrect over-sample ratio in the filter table editor.**

-222

Data out of range

**A legal program data element was parsed but could not be executed because the interpreted value was outside the legal range defined by the device (see IEEE 488.2 11.5.1.1.5).**

Data out of range; Channel type not allowed for current link/config.

**The channel type you are trying to add is not supported by the current cdma2000 link and/or radio configuration.**

Data out of range; Manual point exceeds list sizes. Limiting to maximum point.

**The sweep/list manual point has been reassigned to a smaller number value due to the longest list decreasing in size or being turned off. Its new value is the length of the longest enabled list (frequency or power).**

Data out of range; Manual point exceeds frequency list size. Limiting to maximum point.

**The sweep/list manual point has been reassigned to a smaller number value due to the longest list decreasing in size or being turned off. Its new value is the length of the frequency list that is the longest enabled list.**

Data out of range; Manual point exceeds power list size. Limiting to maximum point.

**The sweep/list manual point has been reassigned to a smaller number value due to the longest list shrinking, or being turned off. Its new value is the length of the power list, that is the longest enabled list.**

Data out of range; Only DEFAULT or USER FILE data type is allowed. Data type is changed to DEFAULT

**Only Default data or user file is valid for Paging channel. Paging data is now set to default.**

Data out of range; The specified filter has too many symbols. The baseband cannot function.

**The filter is in a state that is inappropriate for the hardware. Although no damage to the hardware will occur, the output is in an unknown state. Report this error to the nearest Agilent Technologies sales or service office.**

Data out of range; Synthesizer: Frequency out of bounds.

**The signal generator received an internal request for a frequency outside of its supported frequency range. Report this error to the nearest Agilent Technologies sales or service office.**

Data out of range; value clipped to lower limit.

**An input value is below the minimum value allowed. Examples are: frequency setting, reference, or offset; output power; power reference and offset; modulation depth, deviation, or modulation source frequency; number of points and start/stop values for list mode; start/stop values for internal I/Q calibration; sequence or register values (save/recall); dwell time.**

Data out of range; value clipped to upper limit.

**An input value is above the maximum value allowed. Examples: frequency setting, reference, or offset; output power; power reference and offset; modulation depth, deviation, or modulation source frequency; number of points and start/stop values for list mode; start/stop values for internal I/Q calibration; sequence or register values (save/recall); dwell time.**

-221

Settings conflict

**A legal program data element was parsed but could not be executed due to the current device state (see IEEE 488.2 11.5.1.1.5).**

Settings conflict; At least one of the channels must be on in order to turn the mode on. CDMA2000 has been turned off.

**To output a valid RF signal, at least one channel must be turned on. Since all channels are off, CDMA2000 mode has been turned off to avoid undefined behavior.**

Settings conflict; At least one of the channels must be on in order to turn the mode on. WCDMA has been turned off.

**To output a valid RF signal, at least one channel must be turned on. Since all channels are off, W-CDMA mode has been turned off to avoid undefined behavior.**

Settings conflict; BBG Data Clock is fixed to EXTERNAL to synchronize Data Gen to Demodulator.

**With both the GSM format and the BERT GSM activated, an attempt was made to toggle the baseband data clock from external to internal. The baseband data clock is fixed to external in order to synchronize the data generator to the demodulator.**

Settings conflict; Cannot have a secondary frame with a non-framed data pattern. The secondary frame is unchanged.

**The secondary frame feature has many potential conflicts. Some of the conflicts leave the secondary pattern and its state as they were prior to the command that led to the error message, and some turn off the secondary state, since the primary state is not compatible and it has priority.**

Settings conflict; Cannot have a secondary frame with all timeslots off. The secondary frame is unchanged.

**The secondary frame feature has many potential conflicts. Some of the conflicts leave the secondary pattern and its state as they were prior to the command that led to the error message, and some turn off the secondary state, since the primary state is not compatible and it has priority.**

Settings conflict; Cannot have a secondary frame with alternate amplitude. The secondary frame is unchanged.

**The secondary frame feature has many potential conflicts. Some of the conflicts leave the secondary pattern and its state as they were prior to the command that led to the error message, and some turn off the secondary state, since the primary state is not compatible and it has priority.**

Settings conflict; Cannot have a continuous and discontinuous frame at the same time. The secondary frame has been turned off.

**The secondary frame feature has many potential conflicts. Some of the conflicts leave the secondary pattern and its state as they were prior to the command that led to the error message, and some turn off the secondary state, since the primary state is not compatible and it has priority.**

Settings conflict; Cannot have a secondary frame with a non-framed data pattern. The secondary frame has been turned off.

**The secondary frame feature has many potential conflicts. Some of the conflicts leave the secondary pattern and its state as they were prior to the command that led to the error message, and some turn off the secondary state, since the primary state is not compatible and it has priority.**

Settings conflict; Cannot have a secondary frame with all timeslots off in the primary frame. The secondary frame has been turned off.

**The secondary frame feature has many potential conflicts. Some of the conflicts leave the secondary pattern and its state as they were prior to the command that led to the error message, and some turn off the secondary state, since the primary state is not compatible and it has priority.**

Settings conflict; Cannot have a secondary frame while the primary frame has alternate amplitude. The secondary frame has been turned off.

**The secondary frame feature has many potential conflicts. Some of the conflicts leave the secondary pattern and its state as they were prior to the command that led to the error message, and some turn off the secondary state, since the primary state is not compatible and it has priority.**

Settings conflict; Cannot have a secondary frame with a different modulation type than the primary frame. The secondary frame has been turned off.

**The primary and secondary frames must have the same modulation types. If they do not, the secondary frame is turned off.**

Settings conflict; Cannot have more than 4 EDGE multiframe timeslots on simultaneously. The selected timeslot has been turned off.

**An unsupported timeslot type was encountered. EDGE does not support the simultaneous activation of more than four multiframe timeslots.**

Settings conflict; Cannot have uplink protocols while the control frame is on. Frames 1-17 timeslots changed to downlink.

**Indicates that, in TETRA mode, some of the timeslots are set to uplink. When the control frame is turned on in TETRA, all timeslots in all frames must use downlink protocols. The instrument enforces this by reconfiguring the timeslots that are not using downlink protocols when the control frame is switched on.**

Settings conflict; Cannot select uplink protocols while the control frame is on. Selection changed to custom.

**Indicates that in TETRA mode, an attempt has been made to select uplink protocols while the control frame is switched on. TETRA requires that the control frame be switched off in order to select uplink protocols.**

Settings conflict; Carrier formats must be the same.

**All digital modulation multicarriers must be the same format.**

Settings conflict; Channel #<NUMBER> must be on for any transport channel following it to be on. All transport channels following channel #<NUMBER> have been turned off.

**Transport channels must be turned on sequentially. Therefore, all transport channels with a higher number than a channel that is turned off will be automatically turned off.**

Settings conflict; Channel #<NUMBER> must be turned on before channel #<NUMBER> can be turned on. Channel #<NUMBER> has been turned off.

**Transport channels must be turned on sequentially. For example, channels 1, 2, and 3 must be turned on before channels 4 through 6 can be activated.**

Settings conflict; The current data rate is not valid for this radio configuration. Data rate changed to the default rate.

**The new radio configuration does not support the current data rate. The data rate changes to the default rate for the new radio configuration, which is 1× for F-FCH and 2× for F-SCH.**

Settings conflict; Current file length does not have an integer number of symbols. User file size must have symbol boundary in order to transmit the file.

**A user-defined file must end with a symbol. If it does not, transmission is aborted.**

Settings conflict; The current paging indicator (PI) is not valid for 2400 bps data rate. The PI has been changed to 0, the default.

**QPCH channel with a data rate of 2400 bps only supports up to 191 paging indicators. The PI has been set to 0 (default value) to remain valid for this data rate.**

Settings conflict; The current RC or data rate does not support turbo coding. Turbo Coding has been turned off.

**Either specification or hardware does not support turbo coding for this data rate. Turbo coding is now turned off. If you wish to use turbo coding, select a valid data rate and then turn turbo coding on. For F-SCH channels, data both rates below 14.4 kbps, and the highest data rates for each RC are not valid for turbo coding.**

Settings conflict; Clipping not allowed for CDMA2000 reverse radio configs 1 and 2. Clipping set to 100%.

**The clipping function is not available for the cdma2000 reverse link radio configs 1 and 2. The value is automatically reset to 100% (no clipping).**

Settings conflict; Continuous protocol timeslots cannot be turned off.

**A continuous protocol timeslot is switched off while in TETRA mode. When a continuous protocol has been selected for a timeslot in TETRA mode, all of the timeslots must be switched on.**

Settings conflict; Continuous & Discontinuous setting conflict. All selected Continuous timeslots are now switched to Discontinuous.

**Indicates that while in TETRA mode, an attempt has been made to simultaneously assign continuous and discontinuous protocols to the timeslots. Continuous and discontinuous protocols cannot coexist in TETRA mode. If a discontinuous protocol is selected for any timeslot, all timeslots' protocols are changed to discontinuous protocols.**

Settings conflict; Current frame length does not have symbol boundary. End of frame has been patched with extra bits to allow an integer of symbols in a frame.

**With Option UN8, in TDMA format you can select from many different modulations with different bits per symbol. Because all TDMA formats have a fixed frame size, in some modulations end-of-frame and end-of-symbol do not happen at the same time. This message indicates that end-of-frame has been patched with extra bits to allow an integer of symbols per frame.**

Settings conflict; Discontinuous & Continuous setting conflict. All selected Discontinuous timeslots are now switched to Continuous.

**Indicates that while in TETRA mode, an attempt has been made to simultaneously assign discontinuous and continuous protocols to the timeslots. Discontinuous and continuous protocols cannot coexist in TETRA mode. If a continuous protocol is selected for any timeslot, all timeslots' protocols are changed to continuous protocols.**

Settings conflict; Downlink & Uplink setting conflict. All selected Downlink timeslots are now set to Uplink.

**A Downlink timeslot type has been selected while another timeslot(s) has Uplink selected. In NADC and PDC digital modulation for bursted data, only either Uplink (base to mobile) or Downlink (mobile to base) Traffic Channel type can be selected for all timeslots at any one moment. To continue data transmission, all Downlink timeslots have been changed to the Uplink configuration.**

Settings conflict; EDGE BERT requires Multiframe PN Sequence in Timeslot E field.

**An unsupported data type was encountered. The measurement timeslot requires a multiframe PN sequence in the E field.**

Settings conflict; EDGE BERT requires Normal as Timeslot Type.

**An unsupported timeslot type was encountered. The measurement timeslot must be designated Normal.**

Settings conflict; Enabled mod source conflicts with previously enabled mod source. Previous mod disabled.

**The signal generator has three sources: INT, EXT1, and EXT2 that are shared by the FM1/PM1, AM1/AM2, FM2/PM2, pulse (INT and EXT2), and burst envelope (EXT1 only). Each source can be used by only one modulation at a time. If a source is being used by an active modulation, and a request for the source is made by another modulation, the first modulation is turned off and the second modulation is turned on.**

Settings conflict; External burst cannot be on while using AM.

**There is a hardware conflict for the burst envelope using the EXT1 source (I/Q menu) and AM1/AM2. The most recently requested modulation will be turned on, the previous modulation will be turned off.**

Settings conflict; External data cannot be selected for multiple channels. PN9 is automatically selected for <CHANNEL NAME>.

**The current hardware supports only one external data source at a time. The <CHANNEL NAME> data source has been changed to the default data source, PN9.**

Settings conflict; FFCH/OCNS and QPCH cannot be on at the same time. QPCH has been tuned off.

**QPCH is generated using both channel 3 and 4. Channel 3 has been turned on to generate FFCH or OCNS. Channel 4 can no longer generate QPCH. Therefore, QPCH must be turned off.**

Settings conflict; FM1/PM1 value set less than FM2/PM2 value. FM2/PM2 changed to match FM1/PM1 value.

**The deviation of FM2/PM2 must always be less than or equal to the deviation settings for FM1/PM1. This error will be reported to the queue when FM2/PM2 is enabled and FM1/PM1 is also enabled and an adjustment to either FM1/PM1 deviation causes the FM1 or PM1 deviation to be less than the FM2 or PM2 deviation. It will also be reported when FM1/PM1 is being turned on, and the last FM2/PM2 deviation setting is greater than the current FM1/PM1 deviation setting. In both cases the FM2/PM2 deviation will be adjusted to match the FM1/PM1 deviation.**

Settings conflict; FM2/PM2 value set greater than FM1/PM1 value. FM1/PM1 changed to match FM2/PM2 value.

**FM2/PM2 deviation must be FM1/PM1 deviation. This error is reported when both FM1/PM1 and FM2/PM2 are enabled and an adjustment to either FM2/PM2 deviation causes the FM2 or PM2 deviation to be greater than the FM1 or PM1 deviation. It is also be reported as FM2/PM2 is turned on, and the last FM1/PM1 deviation setting is less than the current FM2/PM2 deviation setting. In both cases the FM1/PM1 deviation is adjusted to match the FM2/PM2 deviation.**

Settings conflict; FM & PM not allowed.

**There is a hardware conflict between FM and PM. The most recently requested modulation will be turned on, the previous modulation will be turned off.**

Settings conflict; The format must be on and fully configured for use before being specified as the secondary frame. The secondary frame is unchanged.

**The secondary frame setup must be completely configured as a stand-alone setup before being selected for use as a secondary frame. It must have a format, framing, and at least one timeslot turned on.**

Settings conflict; Frame in Pattern RAM is from a different format. The secondary frame is unchanged.

**The secondary frame feature has many potential conflicts. Some of the conflicts leave the secondary pattern and its state as they were prior to the command that led to the error message, and some turn off the secondary state, since the primary state is not compatible and it has priority.**

Settings conflict; Frame repeat changed to continuous.

**Single is not a valid repeat setting for an external data source.**

Settings conflict; Frequency list and dwell list are of unequal size. Set one list equal to size one, or make their sizes equal.

**The frequency list has more than one element and the dwell list has more than one element, and they are not of equal size. If any of the frequency, power, or dwell lists have more than one element, they must all have the same number of elements. A list of a single element is the same as a list of an equal size with the single element repeated the necessary number of times.**

Settings conflict; Frequency list and power list are of unequal size. Turn one list off, set one to size one, or make their sizes equal.

**The frequency list has more than one element and the power list has more than one element, and they are not of equal size. If any of the frequency, power, or dwell lists have more than one element, they must all have the same number of elements. A list of a single element is the same as a list of an equal size with the single element repeated the necessary number of times.**

Settings conflict; The frequency spacing has been limited by the number of tones.

**The product of the multitone number of frequencies and frequency spacing must be less than or equal to 15 MHz.**

Settings conflict; FSK frequency deviation cannot exceed the symbol rate.

**If the FSK frequency deviation exceeds the symbol rate, the deviation is changed to match the value of the symbol rate.**

Settings conflict; GSM BERT requires Multiframe PN Sequence in Timeslot E field.

**An unsupported data type was encountered. The measurement timeslot requires a multiframe PN sequence in the E field.**

Settings conflict; GSM BERT requires Normal as Timeslot Type.

**An unsupported timeslot type was encountered. The measurement timeslot must be designated Normal.**

Settings conflict; High Amplitude is less than Low Amplitude.

**The specified High Amplitude value is smaller than the Low amplitude value for a Sensitivity Search MEASurement? query. No measurement is performed.**

Settings conflict; In this configuration the parameter is a constant. It may not be set.

**An attempt was made to enter a value into a fixed parameter for the current radio configuration or channel setup. For example, the frame length parameter for the R-FCH has a fixed value in RC1 and RC2. However, in RC3 and RC4 this parameter is adjustable.**

Settings conflict; Incompatible step sweep frequency setting. Start, stop, center or span setting changed to be compatible with last command.

**Incompatible step sweep frequency setting. Start, stop, center or span setting changed to be compatible with last command.**

Settings conflict; Incompatible step sweep power setting. Start, stop, center or span setting changed to be compatible with last command.

**Incompatible step sweep power setting. Start, stop, center or span setting changed to be compatible with last command.**

Settings conflict; Internal burst cannot be on with pulse modulation.

**There is a hardware conflict between internal burst and pulse modulation. The most recently requested modulation will be turned on, the previous modulation will be turned off.**

Settings conflict; Invalid Channel Code. Channel code has been changed to the highest channel code for this symbol rate.

**An attempt was made to input a channelization code beyond the limitations imposed by the symbol rate. The channelization code is reset to the highest allowable code for the present symbol rate setting.**

Settings conflict; Invalid Channel Code on channel <NUMBER>. The channel code has been set to <NUMBER>.

**The channelization code range has been changed due to new slot format constraints. The channelization code has been set to the new upper limit. The new slot format may affect all DPCH channels.**

Settings conflict; Invalid channel combination. Valid configurations are 'PSCH SSCH P-CCPCH CPICH' or any combination of 'DPCH OCNS and PICH'. The two groups should not be mixed.

**The signal generator is not capable of generating certain channel combinations. Change the present combination to one of the allowable combinations suggested by the error message.**

Settings conflict; I/Q & AM WB cannot be on at the same time.

**The modulation types I/Q and AM WB cannot be used at the same time. This error is reported when the user attempts to activate one type of modulation while the other is activated. The modulation type that was most recently requested will be turned on and the modulation that was on at the time will be turned off.**

Settings conflict; Only ONE user file can be selected for all traffic channels. <CHANNEL NAME> is now using <FILE NAME> file.

**All traffic channels (F-FCH, F-SCH) can use a user file as a data source, but they must all use the same user file. The <CHANNEL NAME> data has been changed to <FILE NAME> file.**

Settings conflict; Pattern repeat is changed to continuous because data source is external.

**Single is not a valid repeat setting for an external data source.**

Settings conflict; PDC and NADC Custom protocols are now uplink protocols, so the timeslots with Custom selected were changed to Downlink Custom.

**Because PDC or NADC has downlink protocols selected and also has Custom in one or more timeslots, the timeslots with Custom are set to Downlink Custom. Otherwise, the timeslots with Custom are set to Uplink Custom. Downlink Custom has its own instrument state information for the Data type and Fix 4 value.**

Settings conflict; PHS or TETRA scramble can not be on when the currently selected modulation type has more than 2 bits per symbol.

**Option UN8 provides modulations with more than 2 bits/symbol. For these modulations, PHS and TETRA scramble are disabled.**

Settings conflict; Power list and dwell list are of unequal size. Set one to size one, or make their sizes equal.

**Both the dwell list and the power list have more than one element, and they are not of equal size. If any frequency, power, or dwell lists have more than one element, they must all have the same number of elements. A list of a single element is the same as a list of an equal size with the single element repeated the necessary number of times.**

Settings conflict; Pulse modulation cannot be on with internal burst.

**There is a hardware conflict between pulse modulation and internal burst. The most recently requested modulation is turned on, the previous modulation is turned off.**

Settings conflict; Pulse period set less than pulse width. Pulse width changed to match period value.

**A pulse period has been entered that is smaller than the pulse width. The instrument automatically adjusts the pulse period to match the pulse width.**

Settings conflict; The puncture rate is  $\geq 100\%$  on DCH channel <NUMBER>, increase the DPCH Slot Format or edit the DCH fields to reduce the puncture %. All DPCH channels were turned off.

**Transport channels cannot be punctured more than 100%. The slot format needs to be increased (which in turn increased the symbol rate) on the underlying DPCH channel, or the transport channel parameters must be changed to reduce the puncture percentage. The underlying DPCH channel has been turned off.**

Settings conflict; QPCH and FFCH/OCNS cannot be on at the same time. FFCH/OCNS has been tuned off.

**QPCH is generated using both channel 3 and 4. Channel 4 is now used to generate QPCH. Channel 3 can no longer generate FFCH/OCNS therefore, FFCH/OCNS must be turned off.**

Settings conflict; RACH is only defined for Radio Configuration 1 and 2. You must set one of these Radio Configurations before configuring or using this code channel.

**An attempt was made to setup the R-ACH while in a radio configuration that does not support this channel. This channel is only available in RC1 and RC2. If the R-ACH is the desired channel, you must change to the proper radio configuration before continuing.**

Settings conflict; RCCCH is only defined for Radio Configuration 3 and 4. You must set one of these Radio Configurations before configuring or using this code channel.

**An attempt was made to setup the R-CCCH while in a radio configuration that does not support this channel. This channel is only available in RC3 and RC4. If the R-CCCH is the desired channel, you must change to the proper radio configuration before continuing.**

Settings conflict; RDCCH is only defined for Radio Configuration 3 and 4. You must set one of these Radio Configurations before configuring or using this code channel.

**An attempt was made to setup the R-DCCH while in a radio configuration that does not support this channel. This channel is only available in RC3 and RC4. If the R-DCCH is the desired channel, you must change to the proper radio configuration before continuing.**

Settings conflict; REACH is only defined for Radio Configuration 3 and 4. You must set one of these Radio Configurations before configuring or using this code channel.

**An attempt was made to setup the R-EACH while in a radio configuration that does not support this channel. This channel is only available in RC3 and RC4. If the R-EACH is the desired channel, you must change to the proper radio configuration before continuing.**

Settings conflict; The requested operation is not allowed in a two box CDMA2000 setup.

**Certain operations, such as setting to equal powers, are not allowed in a two-ESG setup. A two-ESG setup exists when either Voltage Other ESG or Percent Power Other ESG are greater than 0.0.**

Settings conflict; RPICH is only defined for Radio Configuration 3 and 4. You must set one of these Radio Configurations before configuring or using this code channel.

**An attempt was made to setup the R-PICH while in a radio configuration that does not support this channel. This channel is only available in RC3 and RC4. If the R-PICH is the desired channel, you must change to the proper radio configuration before continuing.**

Settings conflict; RSCH with Turbo coding is only available in Radio Configurations 3 and 4. You must set one of these Radio Configurations to proceed.

**Turbo coding is only allowed with the R-SCH in RC3 and 4. If turbo coding is needed, change to the appropriate radio configuration, set up the proper channels in addition to the R-SCH, and turn on turbo coding.**

Settings conflict; RSCH is only defined for Radio Configuration 1 and 2. You must set one of these Radio Configurations before configuring or using this code channel.

The command attempted to enter a value or setting for the R-SCH in RC1 or 2. If this is the correct R-SCH, change to the desired radio configuration and resend the command. If not, select the command for the desired R-SCH. Use the following list to determine the correct R-SCH command to use:

- R-SCH        Used in RC1 and 2
- R-SCH1      Used in RC3 and 4 for channel 4
- R-SCH2      Used in RC3 and 4 for channel 2

Refer to chapter 5 in the Option 201 user's and programming guide for more information.

Settings conflict; RSCH1 is only defined for Radio Configuration 3 and 4. You must set one of these Radio Configurations before configuring or using this code channel.

The command attempted to enter a value or setting for the R-SCH1 in RC3 or 4. If this is the correct R-SCH, change to the desired radio configuration and resend the command. If not, select the command for the desired R-SCH. Use the following list to determine the correct R-SCH command to use:

- R-SCH        Used in RC1 and 2
- R-SCH1      Used in RC3 and 4 for channel 4
- R-SCH2      Used in RC3 and 4 for channel 2

Refer to chapter 5 in the Option 201 user's and programming guide for more information.

Settings conflict; RSCH2 is only defined for Radio Configuration 3 and 4. You must set one of these Radio Configurations before configuring or using this code channel.

The command attempted to enter a value or setting for the R-SCH in RC3 or 4. If this is the correct R-SCH, change to the desired radio configuration and resend the command. If not, select the command for the desired R-SCH. Use the following list to determine the correct R-SCH command to use:

- R-SCH        Used in RC1 and 2
- R-SCH1      Used in RC3 and 4 for channel 4
- R-SCH2      Used in RC3 and 4 for channel 2

Refer to chapter 5 in the Option 201 user's and programming guide for more information.

Settings conflict; The selected external trigger setting conflicts with the previous setting.

**The external trigger has been set to positive edge for one trigger source and negative edge for another trigger source.**

Settings conflict; Uplink & Downlink setting conflict. All selected Uplink timeslots are now set to Downlink.

**An Uplink timeslot type has been selected while another timeslot(s) has Downlink selected. In NADC and PDC digital modulation for bursted data, only either Uplink (base to mobile) or Downlink (mobile to base) Traffic Channel type can be selected for all timeslots at any one moment. To continue data transmission, all Uplink timeslots have been changed to the Downlink configuration.**

Settings conflict; The symbol rate is too high for a > 16 symbol filter. Baseband cannot function.

**The filter is in a state that is inappropriate for the hardware. Although no damage to the hardware will occur, the output is in an unknown state. Report this error to the nearest Agilent Technologies sales or service office.**

Settings conflict; Unsupported configuration for Pilot Gating. Pilot Gating can only be used for the Pilot alone or in conjunction with REACH or RCCCH.

**Changing the R-PICH gating from full is only allowed in three channel structures: R-PICH, R-PICH with the R-CCCH, or R-PICH with the R-EACH.**

Settings conflict; User FSK file has deviations which are incompatible with the current symbol rate. The modulation type has been defaulted.

**A frequency in the selected user FSK file exceeds the maximum possible deviation for the current symbol rate. The default modulation type for the mode has been selected to resolve the conflict.**

Settings conflict; Walsh conflict between: <CHANNEL NAME1> and <CHANNEL NAME2>.

**There is a Walsh collision between two channels specified. Either one Walsh code is equal to the other, or it falls under the other Walsh's tree. A Walsh collision results in an invalid signal. Select a different Walsh code according to Walsh selection rule.**

Settings conflict; Walsh length invalid! Changed to default Walsh number.

**The current Walsh length is invalid for the current data rate. For data rate 2X and above, doubling the rate halves the Walsh space. The channel Walsh number has been changed to the highest valid Walsh code.**

Settings conflict; You may not set Forward Link values while in Reverse Link. Reset Link Direction to proceed.

**Values or settings for forward link were entered while in reverse link. If forward link is the desired link direction, set the ESG to forward link first, and then re-enter the values or settings. However, if reverse link is the correct link direction, consult the Option 201 user's and programming guide for the correct values or settings to enter.**

Settings conflict; You may not set Reverse Link values while in Forward Link. Reset Link Direction to proceed.

**Values or settings for reverse link were entered while in forward link. If reverse link is the desired link direction, set the ESG to reverse link first, and then re-enter the values or settings. However, if forward link is the correct link direction, consult the Option 201 user's and programming guide for the correct values or settings to enter.**

Settings conflict; You may only setup channels that are part of your current radio configuration.

**An attempt was made to enter a value or setting for a channel that is not supported in the current radio configuration. The R-FCH and R-SCH are supported in all the radio configurations for reverse link. However, the values or settings allowed for these channels vary according to the radio configuration used. Refer to the Option 201 user's and programming guide to determine the supported channels by radio configuration.**

-220           Parameter error

**A program data element related error has occurred. This particular error message is used if the device cannot detect a more specific error described for errors -221 through -229.**

Parameter error; <modulation file name>

**The specified file is not a modulation file type.**

-215           Arm deadlock

**The arm source for the initiation of a measurement is set to GET and a subsequent measurement query is received. The measurement cannot begin until a GET is received, but the GET would cause an INTERRUPTED error.**

-214           Trigger deadlock

**A trigger source for the initiation of a measurement is set to GET and a subsequent measurement query is received. The measurement cannot begin until a GET is received, but the GET would cause an INTERRUPTED error.**

Trigger deadlock

TRIGger:SOURce BUS was selected when a MEASurement? query was executed. No data is returned.

-213           Init ignored

**A request for a measurement initiation was ignored as another measurement was already in progress.**

Init ignored; Cannot initiate sweep in manual mode.

**The manual mode is on and therefore the instrument cannot sweep.**

Init ignored; Sweep is already initiated.

**The list/sweep is currently initiated and sweeping, therefore the command is not legal according to SCPI.**

Init ignored; Sweep is already continuously initiated.

**The list/sweep is continuously initiated and sweeping, therefore the command is not legal according to SCPI.**

Init ignored; Unable to sweep due to sweep being in an error state. The sweep error should be fixed.

The number of list, power, and/or dwell points are in conflict, or a serious system error has occurred in list/sweep. A previous error report should have described the error that is stalling list/sweep.

- 212            Arm ignored  
An arming signal was received and recognized by the device but was ignored.
- 211            Trigger ignored  
A GET, \*TRG, or triggering signal was received and recognized by the device, but was ignored because of device timing considerations. For example, the device was not ready to respond.
- 210            Trigger error  
A GET, \*TRG, or a triggering signal could not be executed due to an error.
- 202            Settings lost due to rtl  
A setting associated with a hard local control (see IEEE 488.2, 5.6.15) was lost when the device changed to LOCS from REMS or to LWLS from RWLS.
- 201            Invalid while in local  
A command is not executable while the device is in local mode due to a hard local control (see IEEE 488.2, 5.6.1.5). For example, a device with a rotary switch receives a message which would change the switch's state, but the device is in local so the message cannot be executed.
- 200            Execution Error  
For devices that cannot detect more specific errors, this code indicates only that an execution error as defined in IEEE 488.2, 11.5.1.1.5 has occurred.

Execution Error; Cannot transmit paging message to FlexDG.

There is an error with the cdma2000 hardware. Try turning CDMA2000 mode off and on again to reset the card. If the problem persists, report this error to the nearest Agilent Technologies sales or service office.

Execution Error; Cannot update FlexDG with Even Second Delay.

**There is an error with the cdma2000 hardware. Try turning CDMA2000 mode off and on again to reset the card. If the problem persists, report this error to the nearest Agilent Technologies sales or service office.**

Execution Error; Cannot write user file to FlexDG.

**There is a hardware error associated with the current CDMA format (cdma2000 or W-CDMA). Try turning the current CDMA format mode off and on again to reset the card. If the problem persists, report this error to the nearest Agilent Technologies sales or service office.**

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## -199 to -100: Command Errors

The instrument's parser detected an IEEE 488.2 syntax error. Errors in this class set the command error bit (bit 5) in the event status register (IEEE 488.2, section 11.5.1). In this case:

- Either an IEEE 488.2 syntax error has been detected by the parser (a control-to-device message was received that is in violation of the IEEE 488.2 standard. Possible violations include a data element which violates device listening formats or whose type is unacceptable to the device.), or
- an unrecognized header was received. These include incorrect device-specific headers and incorrect or unimplemented IEEE 488.2 common commands.

-184            Macro parameter error

A command inside the macro definition had the wrong number or type of parameters.

-183            Invalid inside macro definition

The program message unit sequence, sent with a \*DDT or a \*DMC command, is syntactically invalid (see IEEE 488.2, 10.7.6.3).

-181            Invalid outside macro definition

A macro parameter placeholder ( $\$<number>$ ) was encountered outside of a macro definition.

-180            Macro error

This error, as well as errors -181 through -189, are generated when defining a macro or executing a macro. This particular error message is used if the device cannot detect a more specific error.

-178            Expression data not allowed

A legal expression data was encountered, but was not allowed by the device at this point in parsing.

-171            Invalid expression

The expression data element was invalid (see IEEE 488.2, 7.7.7.2). For example, unmatched parentheses or an illegal character.

- 170** Expression data error  
This error, as well as errors -171 through -179, are generated when parsing an expression data element. This particular error message is used if the device cannot detect a more specific error.
- 168** Block data not allowed  
A legal block data element was encountered, but not allowed by the device at this point in the parsing.
- 161** Invalid block data  
A block data element was expected, but was invalid (see IEEE 488.2, 7.7.6.2). For example, an END message was received before the end length was satisfied.  
  
Invalid block data; Arb file must be even length, file deleted  
An Arb waveform file must be an even number of bytes in length. Adjust the file length and repeat the download.
- 160** Block data error  
This error, as well as errors -161 through -169, are generated when parsing a block data element. This particular error message is used if the device cannot detect a more specific error.
- 158** String data not allowed  
A string data element was encountered, but not allowed by the device at this point in the parsing.
- 151** Invalid string data  
A string data element was expected, but was invalid (see IEEE 488.2, 7.7.5.2). For example, an END message was received before the terminal quote character.  
  
Invalid string data; filename exceeds maximum of 23 characters.  
The specified filename exceeds the maximum length.  
  
Invalid string data; filename plus msus exceeds maximum of 30 characters.  
The specified filename exceeds the maximum length.

- 150**           String data error
- This error, as well as errors -151 through -159, are generated when parsing a string data element. This particular error message is used if the device cannot detect a more specific error.
- 148**           Character data not allowed
- A legal character data element was encountered where prohibited by the device.
- 144**           Character data too long
- The character data element contains more than twelve characters (see IEEE 488.2, 7.7.1.4).
- 141**           Invalid character data
- Either the character data element contains an invalid character or the particular element received is not valid for the header.
- 140**           Character data error
- This error, as well as errors -141 through -149, are generated when parsing a character data element. This particular error message is used if the device cannot detect a more specific error.
- 138**           Suffix not allowed
- A suffix was encountered after a numeric element which does not allow suffixes.
- 134**           Suffix too long
- The suffix contained more than twelve characters (see IEEE 488.2, 7.7.3.4).
- 131**           Invalid suffix
- The suffix does not follow the syntax described in IEEE 488.2, 7.7.3.2, or the suffix is inappropriate for this device.
- 130**           Suffix error
- This error, as well as errors -131 through -139, are generated when parsing a suffix. This particular error message is used if the device cannot detect a more specific error.

- 128            Numeric data not allowed  
**A legal numeric data element was received, but the device does not accept one in this position for the header.**
- 124            Too many digits  
**The mantissa of a decimal-numeric data element contained more than 255 digits excluding leading zeros (see IEEE 488.2, 7.7.2.4.1).**
- 123            Exponent too large  
**The magnitude of an exponent was greater than 32000 (see IEEE 488.2, 7.7.2.4.1).**
- 121            Invalid character in number  
**An invalid character for the data type being parsed was encountered. For example, an alpha in a decimal numeric or a “9” in octal data.**
- 120            Numeric data error  
**This error, as well as errors -121 through -129, are generated when parsing a data element which appears to be numeric, including non-decimal numeric types. This particular error message is used if the device cannot detect a more specific error.**
- 114            Header suffix out of range  
**The value of a header suffix attached to a program mnemonic makes the header invalid.**
- 113            Undefined header  
**The header is syntactically correct, but it is undefined for this specific device. For example, \*XYZ is not defined for any device.**
- 112            Program mnemonic too long  
**The header contains more than twelve characters (see IEEE 488.2, 7.6.1.4.1).**
- 111            Header separator error  
**A character that is not a legal header separator was encountered while parsing the header.**

- 110**            Command header error
- An error was detected in the header. This message is used when the device cannot detect the more specific errors described for errors -111 through -119.
- 109**            Missing parameter
- Fewer parameters were received than required for the header. For example, the \*ESE common command requires one parameter, so receiving \*ESE is not allowed.
- 108**            Parameter not allowed
- More parameters were received than expected for the header. For example, the \*ESE common command only accepts one parameter, so receiving \*ESE 0,1 is not allowed.
- 105**            GET not allowed
- A Group Execute Trigger was received within a program message (see IEEE 488.2, 7.7). Correct the GPIB controller program so that the GET does not occur within a line of GPIB program code.
- 104**            Data type error
- The parser recognized a data element that is not allowed. For example, numeric or string data was expected, but block data was encountered.
- 103**            Invalid separator
- The parser was expecting a separator and encountered an illegal character. For example, the semicolon was omitted after a program message unit.
- 102**            Syntax error; Bad compatibility language character  
<character>.
- In 8656/57 compatibility mode, illegal language input was received.
- Syntax error; Bad compatibility language token <token>.
- In 8656/57 compatibility mode, a known command or termination specifier was received when it was not expected. For example, a termination specifier was received with no currently active function.

Syntax error

**An unrecognized command or data type was encountered. For example, a string was received when the device does not accept strings.**

-101

Invalid character

**A syntactic command contains a character that is invalid for that type. For example, a header containing an ampersand, SETUP&. This error might be used in place of error numbers -114, -121, -141 and some others.**

-100

Command error; Unable to set new frequency with UP/DN command.

**The instrument is unable to obtain the necessary information to calculate the new frequency in compatibility mode with the UP/DN command.**

Command error; Unable to set new amplitude with UP/DN command.

**The instrument is unable to obtain the necessary information to calculate the new amplitude in compatibility mode with the UP/DN command.**

Command error; Remote active function IS not available.

**The instrument only supports the Increment Set (IS) command for Frequency (FR) and Amplitude (AP) in compatibility mode. All other uses of IS are invalid.**

Command error; R0:No standby mode allowed.

**In 8656/57 compatibility mode, R0 was received via GPIB. This command is not supported by the compatibility mode.**

Command error; Remote active function DN/UP not available.

**In 8656/57 compatibility mode, either DN or UP was received via GPIB. These commands are not supported by the compatibility mode.**

Command error; LO: No low bandwidth ALC mode allowed.

**In 8656/57 compatibility mode, LO was received via GPIB. This command is not supported by the compatibility mode.**

Command error

**This is a generic syntax error for devices that cannot detect more specific errors. The code indicates only that a command error as defined in IEEE 488.2, 11.5.1.1.4 has occurred.**

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## 201 to 702: Device-Specific Errors

Some device operations did not properly complete, possibly due to an abnormal hardware or firmware condition. These codes are also used for self-test response errors. Errors in this class set the device-specific error bit (bit 3) in the event status register (IEEE 488.2, section 11.5.1).

The <error\_message> string for a *positive* error is not defined by SCPI. A positive error indicates that the instrument detected an error within the GPIB system, within the instrument's firmware or hardware, during the transfer of block data, or during calibration.

- 201           Bad file number; Unable to check Data Generator memory.  
The instrument was not able to generate the pattern necessary to perform the data generator memory test. This does NOT imply a data generator memory failure. Report this error to the nearest Agilent Technologies sales or service office.
- 208           I/O Error; <file name>  
Invalid file name.  
  
I/O error; Delete a non-saved state register. Delete register ignored.  
The user has attempted to delete an unused (empty) state. This error message is informational only.  
  
I/O error; Delete empty sequence <sequence\_name>. Delete sequence ignored.  
The user has attempted to delete a sequence that is empty. This error message is informational only. Typically, this error is reported several times when the "Delete All Sequences" command is executed. If the file is displayed by Catalog, delete explicitly.  
  
I/O error; Directory does not have a default file type.  
Report this error to the nearest Agilent Technologies sales or service office.  
  
I/O error; Directory refuses to release ownership.  
Report this error to the nearest Agilent Technologies sales or service office.  
  
I/O error; Save a state register ignored.

**A STATE: file could not be saved due to insufficient space, file corruption, or another related problem.**

I/O error; Trailing zero found in <filename>. Fixing...

**A compressed state file has a zero at its end. This is a sign of file corruption. The device fixes the problem by concealing the zero such that it no longer triggers an error message. The file may be corrupt or unusable.**

I/O error; The user file is too large.

**The user file selected for transmission as the DCH data must be less than or equal to 4096 bytes. Select a smaller user file.**

I/O error; The user file is too large.

**The user file selected for transmission as the TPC pattern must be less than or equal to 256 bytes. Select a smaller user file.**

I/O error; Unable to delete saved state from non-volatile memory. No instrument state change.

**A STATE: file could not be deleted due to the file not being found, file corruption, or another file-related problem. If the file is displayed by a memory catalog, delete it explicitly.**

I/O error; Unable to read bit file.

**There is an error reading the specified bit file. Try selecting the file again.**

I/O error; Unable to recall from non-volatile memory. No instrument state change.

**The state file is not readable and the recall was aborted.**

**214** Not owner; Unable to delete saved state from non-volatile memory. No instrument state change.

**The user has attempted to write to a read-only memory subsystem.**

**218** I/O error; filename

**An invalid file name was detected during ARB segment or sequence processing.**

**501** Attenuator hold setting over range; Frequency change forced attenuator adjust.

The firmware has changed the attenuator setting because, while in attenuator hold mode, a change in frequency setting has forced the ALC beyond its range.

Attenuator hold setting over range; Power set to lower limit.

The firmware has changed the power setting to a value other than the requested value due to the fact that, while in attenuator hold mode, the user has requested a power setting that is below the ALC range for the attenuator setting. The power has been set to the lower limit.

Attenuator hold setting over range; Power set to upper limit.

The firmware has changed the power setting to a value other than the requested value due to the fact that, while in attenuator hold mode, the user has requested a power setting that is above the ALC range for the attenuator setting.

508

Frac-N Loop unlocked

The synthesizer is unlocked. Service may be needed.

Sampler Loop unlocked

The synthesizer is unlocked. Service may be needed.

YO Loop unlocked

The synthesizer is unlocked. Service may be needed.

509

Output Section input overdrive

Internal error: report to factory.

510

I/Q Modulator overdrive

Internal error: report to factory.

511

Output unlevelled

The instrument's output is unlevelled.

512

Reference unlocked

The instrument's reference is unlocked. If an external reference is connected, check the frequency and power. It is possible for this to occur during a poor connection/disconnection of an external reference. If this error reoccurs when no external reference is connected, the instrument may require service.

- 513            1 GHz Oscillator unlocked
- The 1 GHz reference oscillator is unlocked. If an external reference is connected, check the frequency. If this error reoccurs when no external reference is connected, the instrument may require service.
- 514            Reference Oven cold
- The reference oven is not at the required operating temperature. This is normal if the instrument has been powered down for a while. If the error persists, the instrument may require service.
- 515            Reference board: 10 Mhz reference signal bad or missing
- The instrument's reference is unlocked. If an external reference is connected, check the frequency and power. It is possible for this to occur during a poor connection/disconnection of an external reference. If this error reoccurs when no external reference is connected, the instrument may require service.
- 516            Baseband Generator unlocked; refer to manual.
- The digital modulation board is unlocked. If this error occurs and the status indicator on the front panel is not on, the board is operational. There are legitimate reasons for the front panel indicator to be on: if External Data mode was selected and no clock was provided for the data clock input, or if there was an incorrect setting selected for data clock/symbol clock.
- Baseband Generator unlocked; Clear the error queue. If error persists, refer to manual.
- The digital modulation board is unlocked. If this error occurs and the status indicator on the front panel is not on, the board is operational. There are legitimate reasons for the front panel indicator to be on: if External Data mode was selected and no clock was provided for the data clock input, or if there was an incorrect setting selected for data clock/symbol clock.
- 517            Calibration failure; Baseband Generator Cal
- The Baseband Generator calibration portion of an internal I/Q calibration has failed.
- Calibration failure; Cal aborted by user.
- While executing the internal I/Q calibration, either a DCAS was sent over the GPIB, or the **Abort** key on the front panel was pressed.

Calibration failure; DCFM DC overrange

The instrument was unable to perform a DCFM or DCΦM calibration due to the input signal being outside of the offset range that can be calibrated for.

Calibration failure; I/Q cal.

While executing the internal I/Q calibration, the attempt to allocate memory for the calibration failed.

Calibration failure; I/Q cal failed to allocate memory.

While executing the internal I/Q calibration, a failure occurred during the section indicated.

Calibration failure; 'Marble Cal', 'Offset Cal', 'Other Cal', 'Gain Cal', 'BEG Cal', 'ARB Cal'

While executing the internal I/Q calibration, a failure occurred during the section indicated.

Calibration failure; Upgrade calibration failed. Data not stored.

The calibration stage of the instrument upgrade was not executed successfully. The calibration data has not been stored. The upgrade is not functional. Report this error to the nearest Agilent Technologies sales or service office.

518 Arbitrary Waveform Generator unlocked; refer to manual.

The instrument's dual arbitrary waveform generator is unlocked. This error will occur when the **ARB Reference** key is set to **Ext** and there is no external signal applied to the instrument. It may also occur if there is a problem with the A5 dual arbitrary waveform generator board.

519 Uncalibrated signal; IQ Adjustments not calibrated. Refer to manual.

A calibration is required to use the IQ adjustments feature. The I/Q adjustments may be functional, but are not guaranteed to meet specifications until an I/Q calibration is performed. Refer to the user's guide.

Uncalibrated signal; Quadrature Skew Not Calibrated

A calibration is required to use the quadrature skew feature. The quadrature skew may be functional, but is not guaranteed to meet specifications until the I/Q impairment adjustment is performed. Refer to the calibration guide.

520

Sampler unlocked

One of the signal generator's samplers is unlocked or one of the sampler circuits are malfunctioning. The instrument may require service.

521

Yig unlocked

The Yig oscillator phase lock loop is unlocked. Problem may be due to a bad calibration. If not, then the instrument may require service.

522

Demodulator Unleveled; Input amplitude overrange.

The signal level is too high. Adjust the signal level for the VSA input.

Demodulator Unleveled; Input amplitude underrange.

The signal level is too low. Adjust the signal level for the VSA input.

600

RPP has tripped.

The reverse power protection circuit has been triggered. Repeated tripping of this circuit can cause damage to the instrument.

\*\*\*\* CAUTION \*\*\*\*

**REVERSE POWER PROTECTION (RPP) TRIPPED**

**Repeated RPP tripping may damage the instrument!**

Damage can occur if an external signal was applied at the RF Output or ESD is detected at RF Output.

Damage will not occur if a poor RF output port match exists when the power level is set beyond the specified range.

601

Power search failed.

While executing power search, the level meter circuit failed to return a meaningful value. This event indicates that the power is in a range that the leveling loop cannot properly level. The power will be set to the last properly leveled power.

604

DSP FW download failed.

An external bus download of a digital signal processor (DSP) program failed.

605

DSP FW download failed.

The instrument's firmware was unable to successfully initialize the internal digital signal processor (DSP) on the A14 CPU/Motherboard. Report this error to the nearest Agilent Technologies sales or service office.

DSP FW download failed; Demodulator board

The instrument's firmware was unable to successfully initialize the internal digital signal processor (DSP) on the Demodulator board (Option 300). Report this error to the nearest Agilent Technologies sales or service office.

DSP FW download failed; Opt 300 BERT capability

The instrument's firmware was unable to successfully initialize the internal digital signal processor (DSP) on the A6 bit error rate tester board for Option 300 capability. Report this error to the nearest Agilent Technologies sales or service office.

DSP FW download failed; Opt UN7

The instrument's firmware was unable to successfully initialize the internal digital signal processor (DSP) on the A6 bit error rate tester board (Option UN7). Report this error to the nearest Agilent Technologies sales or service office.

606

DSP times out.

The digital signal processor (DSP) on the A14 CPU/Motherboard failed to respond within the appropriate amount of time. Report this error to the nearest Agilent Technologies sales or service office.

DSP times out.

The digital signal processor (DSP) on the A6 bit error rate tester board (Option UN7) failed to respond within the appropriate amount of time. Report this error to the nearest Agilent Technologies sales or service office.

DSP times out; ARB communication failed

The communication to the dual arbitrary waveform generator (Option UND) failed. The dual arbitrary waveform generator may not be functional. Report this error to the nearest Agilent Technologies sales or service office.

DSP times out; Demodulator communication failed

The digital signal processor (DSP) on the Demodulator board (Option 300) failed to respond within the appropriate amount of time. If cycling power does not correct the problem, report this error to the nearest Agilent Technologies sales or service office.

DSP times out; FlexDG communication failed

The instrument is unable to communicate with the FLEXDG data generator board. The baseband generator can not function.

DSP times out; FPGA download failed: DUAL ARB BOARD

The initialization of hardware necessary for the operation of the dual arbitrary waveform generator (Option UND) failed. The dual arbitrary waveform generator is not functional. Report this error to the nearest Agilent Technologies sales or service office.

DSP times out; Option 300 BERT capability

The digital signal processor (DSP) on the bit error rate tester board failed to respond while Option 300 is operating. Report this error to the nearest Agilent Technologies sales or service office.

607

DSP returns error.

The digital signal processor (DSP) is in an indeterminate state. Report this error to the nearest Agilent Technologies sales or service office.

DSP returns error; ARB address line error (code)

The dual arbitrary waveform generator (Option UND) digital signal processor (DSP) detected an internal error when processing a command. The DSP specific error code is displayed in the parenthesis. Report this error to the nearest Agilent Technologies sales or service office.

DSP returns error; ARB Command not recognized (code)

The dual arbitrary waveform generator (Option UND) digital signal processor (DSP) detected a communications error with the command sent to it. The DSP specific error code is displayed in the parenthesis. Report this error to the nearest Agilent Technologies sales or service office.

DSP returns error; ARB communications failed. (code)

The dual arbitrary waveform generator (Option UND) digital signal processor (DSP) detected an error and it is in an indeterminate state. The DSP specific error code is displayed in the parenthesis. Report this error to the nearest Agilent Technologies sales or service office.

DSP returns error; ARB data line error (code)

The dual arbitrary waveform generator (Option UND) digital signal processor (DSP) detected an internal error when processing a command. The DSP specific error code is displayed in the parenthesis. Report this error to the nearest Agilent Technologies sales or service office.

DSP returns error; ARB FLASH memory error (code)

The dual arbitrary waveform generator (Option UND) digital signal processor (DSP) detected an internal error when processing a command. The DSP specific error code is displayed in the parenthesis. Report this error to the nearest Agilent Technologies sales or service office.

DSP returns error; ARB parameters error (code)

The dual arbitrary waveform generator (Option UND) digital signal processor (DSP) detected a communications error with the command sent to it. The DSP specific error code is displayed in the parenthesis. Report this error to the nearest Agilent Technologies sales or service office.

DSP returns error; ARB self test error (code)

The dual arbitrary waveform generator (Option UND) digital signal processor (DSP) detected an internal error when processing a command. The DSP specific error code is displayed in the parenthesis. Report this error to the nearest Agilent Technologies sales or service office.

DSP returns error; Option 300 BERT capability

Option 300 DSP for BERT capability returns an error.

608 DSP in use by other process.

The digital signal processor (DSP) is in an indeterminate state. Report this error to the nearest Agilent Technologies sales or service office.

615 New wave shape changes limit for internal frequency; frequency changed to new limit.

When using the internal modulation source, the upper limit varies for the different waveforms. If the user changes the waveform when the internal source frequency is higher than that allowed for the new waveform, the frequency for the source will be changed, and the user informed of that change with this message.

**616** Configuration Error; Attenuator configuration does not match actual installed attenuator type.

**A mismatch was found between the configured and detected attenuator types. The instrument may not be fully functional. Report this error to the nearest Agilent Technologies sales or service office.**

Configuration Error; Option reconfiguration failed.

**As a part of option reconfiguration, the instrument reboots. If the reconfiguration failed, it is reported when the instrument completes the reboot. Try repeating the option reconfiguration. Report this error to the nearest Agilent Technologies sales or service office.**

**617** Configuration error; Could not start license system.

**The Software License System has failed to operate. The software option cannot be enabled. Report this error to the nearest Agilent Technologies sales or service office.**

Configuration error; Data Generator Memory configuration does not match installed board.

**The memory configuration for an option board does not match the known memory limits of the board. If this error has occurred as the result of a customer-installed option, uninstall all options and then reinstall the correct options. Report this error to the nearest Agilent Technologies sales or service office.**

Configuration error; Illegal combination of installed option boards.

**An option board or board combination that is not supported by the installed firmware has been specified or detected. Be sure that you have the proper instrument and firmware to support the option board, and that you have specified a supported combination of options.**

Configuration error; Incorrect demodulator board revision.

**An invalid Demodulator board is installed.**

Configuration error; Incorrect downconverter board revision.

**An invalid Downconverter board is installed.**

Configuration error; Installed board not supported.

**An option board or board combination that is not supported by the installed firmware has been specified or detected. Be sure that you have the proper instrument and firmware to support the option board, and that you have specified a supported combination of options.**

Configuration error; Invalid Data Generator memory configuration.

**The memory configuration for an option board does not match the known memory limits of any supported option board. If this error has occurred as the result of a customer-installed option, uninstall all options and then reinstall the correct options. Report this error to the nearest Agilent Technologies sales or service office.**

Configuration error; Invalid file system configuration block size defaulted.

**A block size configuration error was detected by the file system. A default value has been used. Report this error to the nearest Agilent Technologies sales or service office.**

Configuration error; Invalid file system configuration max files defaulted.

**A maximum files configuration error was detected by the file system. A default value has been used. Report this error to the nearest Agilent Technologies sales or service office.**

Configuration error; Invalid file system configuration memory size defaulted.

**A memory size configuration error was detected by the file system. A default value has been used. Report this error to the nearest Agilent Technologies sales or service office.**

Configuration error; Invalid option board configuration.

**An invalid combination of option boards has been configured. If this error has occurred as the result of a customer-installed option, uninstall all options and then reinstall the correct options. Report this error to the nearest Agilent Technologies sales or service office.**

Configuration error; Old bootrom detected. File system and instrument state re-initialized due to firmware upgrade. Replace bootrom to avoid this in the future.

**The firmware has detected that the instrument contains an old bootrom version. As a result the user file system, arb file system (if present), and instrument states have been re-initialized. Instrument calibration files have not been affected. In the future, to avoid re-initialization of the file system and instrument states that will occur with firmware upgrades, return the instrument to Agilent Technologies for bootrom replacement.**

Configuration error; <OPTION>, Invalid (inconsistent) license key.

**The License Key for the indicated software option is invalid. If the option has not been purchased, then enter a value of zero for its key to disable the option, otherwise enter the correct value from the License Key Certificate.**

**618** RS232 times out; RS232 reset.

**If further input is not received within the timeout time while a SCPI command is being processed, the command is aborted and the input buffer is cleared.**

**619** DSP code is invalid; Bert board FPGA.

**The host reads an unexpected FPGA version number from the Bert board. The FPGA version check is done by the DSP, so this error message is not generated if a DSP download Fail error message has already been generated. In this case, we do not know if the FPGA code stored in flash memory is correct.**

DSP code is invalid; Bert DSP code is invalid.

**The host reads an unexpected DSP version number from the demodulator board.**

DSP code is invalid; Demodulator board FPGA.

**The demodulator's FPGA code is not the revision that the firmware expects.**

DSP code is invalid; Demodulator DSP code is invalid.

**The host reads and unexpected DSP version number from the demodulator board.**

DSP code is invalid; Demodulator main DSP code is invalid.

**The demodulator board has an invalid revision of DSP firmware code.**

DSP code is invalid; Flex DG DSP code is invalid.

The version number of the DSP firmware in the FlexDG data generator is not the version expected by the instrument firmware. The instrument must be upgraded to a matching set of DSP and instrument firmware.

DSP code is invalid; Incorrect demodulator boot code revision.

The demodulator board has an invalid revision of DSP boot code.

DSP code is invalid; Incorrect FPGA revision on Option UN7.

The Option UN7 hardware has an invalid revision of FPGA code.

DSP code is invalid; Running boot code only.

ARB is not functional.

The dual arbitrary waveform generator (Option UND) is running boot code only. The dual arbitrary waveform generator commands will not function. Report this error to the nearest Agilent Technologies sales or service office.

DSP code is invalid; Running boot code only, Demodulator is not functional.

The demodulator DSP ROMs have only boot code loaded: the DSP will not function. Report this error to the nearest Agilent Technologies sales or service office.

DSP code is invalid; Unrecognized version.

Some ARB commands may not function.

The dual arbitrary waveform generator (Option UND) is running an unsupported version of digital signal processor (DSP) code. The dual arbitrary waveform generator may not function correctly. Report this error to the nearest Agilent Technologies sales or service office.

DSP code is invalid; Unrecognized program.

ARB is not functional.

The dual arbitrary waveform generator (Option UND) is running an unknown digital signal processor (DSP) program. The dual arbitrary waveform generator commands will not function. Report this error to the nearest Agilent Technologies sales or service office.

620

Clock rate error.

The input clock rate for the bit error rate was too fast. Maximum clock rate is 2 Mbps for the 2 Mbps mode, and 10 Mbps for the 10 Mbps mode.

- 621**            FPGA download failed; Demodulator board.  
**The download of the field programmable gate array code to the Demodulator board failed.**
- FPGA download failed; Opt UN7.  
**The download of the field programmable gate array code to the RAM on the A6 bit error rate tester board failed. Report this error to the nearest Agilent Technologies sales or service office.**
- 622**            Sequence references self; <Sequence Name>.  
**The specified sequence is not allowed because it contains a reference to itself.**
- 623**            Out of Lock; Demodulator VCO  
**The A/D 26 MHz clock is not correct. The problem may be with either the 10 MHz reference, or the 13 MHz GSM clock.**
- Out of Lock; Downconverter LO  
**There is a problem with the downconverter. The problem may be with either the 10 MHz reference, or the 13 MHz GSM clock.**
- 700**            State Save Recall Error; Delete empty sequence <sequence\_name>. Delete sequence ignored.  
**You have attempted to delete a sequence that is empty (all registers unused). This message is informational only. Typically this error is reported several times when the “Delete All Sequences” command is executed. If the file is displayed by catalog, delete explicitly.**
- State Save Recall Error; Delete sequence <sequence\_name> ignored.  
**A STATE: file in a sequence that is being deleted could not be deleted due to the file not being found, data corruption, etc. If state file exists, delete explicitly using the memory catalog.**
- State Save Recall Error; Recall aborted. Unable to recall the state from non-volatile memory.  
**The state file was not readable, so the recall was aborted. If state file exists, delete explicitly using the memory catalog.**

State Save Recall Error; Recall data different from FW revision. No instrument state change.

**An attempt was made to recall a state that was saved with an incompatible version of the instrument firmware. This typically occurs when a state file is copied from an instrument with a newer version of firmware to an instrument with an older version of firmware. Newer versions of instrument firmware can read older state files.**

State Save Recall Error; Recall non-saved state register. Recall ignored.

**A recall was attempted for a state register that is unused. If state file exists, delete explicitly using catalog.**

State Save Recall Error; Recalled state has a bad checksum. No instrument state change.

**The state file was corrupt or out-of-date, so the recall was ignored. If state file exists, delete explicitly using the memory catalog.**

State Save Recall Error; The state file is from a different firmware revision that does not support comments.

**An attempt was made to write a comment to a state file revision that does not support comments. Comments in saved state files are not supported by the A.01.00 and A.01.01 releases of the instrument firmware.**

State Save Recall Error; Unable to read the secondary frame instrument state file. The secondary frame has been turned off.

**The format that is currently active needed the secondary frame instrument state file to generate the secondary frame in pattern RAM, but the instrument state file was either not previously saved or it was deleted. You must create and save a secondary frame instrument state.**

702

Load/Store Error; Cannot create a filter with no coefficients.

**A filter must have at least one coefficient specified.**

Load/Store Error; Cannot create a Modulation with less than one bit per symbol.

**A modulation must have at least two states specified.**

Load/Store Error; Cannot create a shape with less than 2 points.

**Burst shape files must have two or more points for both the rise and the fall shape specification.**

Load/Store Error; Invalid modulation file.

**The user modulation file is invalid. The file is either corrupt or is not a modulation file.**

Load/Store Error; Operation not allowed in Fail-Safe Preset Mode.

**This informs you that software or hardware options cannot be configured while in Fail-Safe Preset Mode. Cycle the instrument power and try again.**

Load/Store Error; Operation not allowed in Fail-Safe Preset Mode.

**A hardware option was installed while in fail-safe preset mode. After a fail-safe preset, the power must be cycled before a hardware option is installed.**

Load/Store Error; Unrecognized FIR file version.

**The file is either corrupt or is not a FIR file.**

Load/Store Error; Unrecognized modulation file version.

**The user modulation file has an unrecognized version. The file is either corrupt or is not a modulation file.**

Load/Store Error; Unrecognized shape file version.

**The burst shape file is corrupted, or is not in the proper format.**