Table A-5:
Standard Event register

Bit	Decimal value	Description
5	32	Command syntax error exists.
6	64	Not used (always 0).
7	128	Power has been turned off and on. Event register is cleared.

SCPI command summary

NOTE	The list of IEEE-488.2 Common Commands for the Model 3390 is in the *IEEE-488.2 common commands* section.

Table A-6:
SCPI command summary

APPLy commands		
Command	**Parameters**	**Definition**
`APPLy`		
`:SINusoid`	`[<frequency>]` `[<amplitude>]` `[<offset>]`	See *Sine waveform*.
`:SQUare`		See *Square waveform*.
`:RAMP`		See *Ramp waveform*.
`:PULSe`		See *Pulse waveform*.
`:NOISe`	`[<frequency	DEF>]` `[<amplitude>] [<offset>]`	See *Noise waveform*.
`:DC`	`[<frequency	DEF>]` `[<amplitude	DEF>]` `[<offset>]`	Output a DC voltage at the specified offset level.
`:USER`	`[<frequency>]` `[<amplitude>] [<offset>]`	Output an arbitrary waveform currently specified by the `FUNC:USER` command with the set frequency, amplitude, and offset.
`:APPLy?`		Query the current configuration.
Output configuration commands		
Command	**Parameters**	**Definition**
`FUNCtion`	`{SINusoid	SQUare	RAMP |` `PULSe	NOISe	DC	USER}`	See *Sine waveform*, *Square waveform*, *Ramp waveform*, *Pulse waveform*, *Noise waveform*, *Amplitude modulation*, *Frequency modulation*, *Phase modulation*, *Frequency-shift keying modulation*, *Burst operation*.
`FUNCtion?`		Query the current output function.
`FREQuency`	`{<frequency>	MINimum	` `MAXimum}`	See *Sine waveform*, *Square waveform*, *Ramp waveform*, *Pulse waveform*, *Noise waveform*, *Amplitude modulation*, *Frequency modulation*, *Phase modulation*, *Frequency-shift keying modulation*, *Burst operation*.
`FREQuency?`	`[MINimum	MAXimum]`	Query the frequency setting for the current function.

Table A-6:
SCPI command summary

`VOLTage`	`{<amplitude> | MINimum | MAXimum}`	See *Sine waveform*, *Square waveform*, *Ramp waveform*, *Pulse waveform*, *Noise waveform*, *Amplitude modulation*, *Frequency modulation*, *Phase modulation*, *Frequency-shift keying modulation*, *Pulse width modulation waveform*.
`VOLTage?`	`[MINimum | MAXimum]`	Query the output amplitude for the current function.
`VOLTage`		
`:OFFSet`	`{<offset> | MINimum | MAXimum}`	See *Sine waveform*, *Square waveform*, *Ramp waveform*, *Pulse waveform*, *Noise waveform*, *Amplitude modulation*, *Frequency modulation*, *Phase modulation*, *Frequency-shift keying modulation*, *Pulse width modulation waveform*.
`:OFFSet?`	`[MINimum | MAXimum]`	Query the DC offset voltage for the current function.
`:HIGH`	`{<voltage> | MINimum | MAXimum}`	See *Setting pulse high and low levels*.
`:HIGH?`	`[MINimum | MAXimum]`	Query the high voltage level.
`:LOW`	`{<voltage> | MINimum | MAXimum}`	See *Setting pulse high and low levels*.
`:LOW?`	`[MINimum | MAXimum]`	Query the low voltage level.
`:RANGe:AUTO`	`{OFF | ON | ONCE}`	See *Setting voltage auto ranging*.
`:RANGe:AUTO?`		Query the auto-ranging state.
`:UNIT`	`{Vpp | Vrms | dBm}`	See *Setting amplitude*.
`:UNIT?`		Query the output amplitude units.
`FUNCtion`		
`:SQUare:DCYCle`	`{<percent> | MINimum | MAXimum}`	See *Square waveform*.
`:SQUare:DCYCle?`	`[MINimum | MAXimum]`	Query the current duty cycle percentage.
`:RAMP:SYMMetry`	`{<percent> | MINimum | MAXimum}`	See *Ramp waveform*.
`:RAMP:SYMMetry?`	`[MINimum | MAXimum]`	Query the current symmetry setting percentage.
`OUTPut`	`{OFF | ON}`	See *Controlling the output signal*.
`OUTPut?`		Query the on/off state of the Output connector.
`OUTPut`		
`:LOAD`	`{<ohms> | INFinity | MINimum | MAXimum}`	See *Setting output termination*.
`:LOAD?`	`[MINimum | MAXimum]`	Query the current load setting in ohms.
`:POLarity`	`{NORMal | INVerted}`	See *Setting waveform polarity*.
`:POLarity?`		Query the waveform polarity.
`:SYNC`	`{OFF | ON}`	See *Controlling the sync signal*.
`:SYNC?`		Query the on/off state of the Sync connector.
Pulse configuration commands		
Command	**Parameters**	**Definition**

Table A-6:
SCPI command summary

PULSe		
:PERiod	{<seconds> | MINimum | MAXimum}	See *Pulse waveform*, *Pulse width modulation waveform*.
:PERiod?	[MINimum | MAXimum]	Query the period of the pulse waveform.
FUNCtion		
:PULSe:HOLD	{WIDTh | DCYCle}	See *Pulse waveform*.
:PULSe:HOLD?	[WIDTh | DCYCle]	Query the value of the pulse width or duty cycle being held.
:PULSe:WIDTh	{<seconds> | MINimum | MAXimum}	See *Pulse waveform*, *Pulse width modulation waveform*.
:PULSe:WIDTh?	[MINimum | MAXimum]	Query the pulse width.
:PULSe:DCYCle	{<percent> | MINimum | MAXimum}	See *Pulse waveform*, *Pulse width modulation waveform*.
:PULSe:DCYCle?	[MINimum | MAXimum]	Query the pulse duty cycle.
:PULSe:TRANsition	{<seconds> | MINimum | MAXimum}	See *Pulse waveform*, *Pulse width modulation waveform*.
:PULSe:TRANsition?	[MINimum | MAXimum]	Query the edge time.
Arbitrary waveform commands		
Command	**Parameters**	**Definition**
FUNCtion USER		Output the waveform currently specified by the FUNC:USER command.
FUNCtion?		Query the current selection of the FUNC:USER command.
DATA VOLATILE,	<value>, <value>…	See *Arbitrary waveform*.
DATA		
:DAC VOLATILE	{<binary block> | <value>, <value>…}	See *Arbitrary waveform*.
:COPY	<destination arb name>, [VOLATILE]	Copy the currently specified waveform to non-volatile memory.
:CATalog?		Query for a list of all waveforms currently stored.
:NVOLatile:CATalog?		Query for a list of all waveforms currently stored in nonvolatile memory.
:NVOLatile:FREE?		Query for a list of open storage slots in nonvolatile memory.
:ATTRibute:AVERage?	[<arb name>]	Query for the average of all data points for the specified waveform.
:ATTRibute:CFACtor?	[<arb name>]	Query for the crest factor of all data points for the specified waveform.
:ATTRibute:POINts?	[<arb name>]	Query for the number of points for the specified waveform.
:ATTRibute:PTPeak?	[<arb name>]	Query for the peak-to-peak value of all data points for the specified waveform.
FORMat		
:BORDer	{NORMal|SWAPped}	See *Arbitrary waveform*.
FUNCtion		
:USER	{<arb name>|VOLATILE}	See *Arbitrary waveform*.
:USER?		Query the currently selected arbitrary waveform.
Amplitude modulation commands		

Table A-6:
SCPI command summary

Command	Parameters	Definition
AM		
:INTernal:FUNCtion	{SINusoid | SQUare | RAMP | NRAMp | TRIangle | NOISe | USER}	See *Amplitude modulation*.
:INTernal:FUNCtion?		Query the modulating function.
:INTernal:FREQuency	{<frequency> | MINimum | MAXimum}	See *Amplitude modulation*.
:INTernal:FREQuency?	[MINimum | MAXimum]	Query the internal modulating frequency.
:DEPTh	{<depth in percent> | MINimum | MAXimum}	See *Amplitude modulation*.
:DEPTh?	[MINimum | MAXimum]	Query the modulation depth.
:SOURce	{INTernal | EXTernal}	See *Amplitude modulation*.
:SOURce?		Query the modulating source.
:STATe	{OFF | ON}	See *Amplitude modulation*.
:STATe?		Query the on/off state of amplitude modulation.
Frequency modulation commands		
Command	**Parameters**	**Definition**
FM		
:INTernal:FUNCtion	{SINusoid | SQUare | RAMP | NRAMp | TRIangle | NOISe | USER}	See *Frequency modulation*.
:INTernal:FUNCtion?		Query the modulating function.
:INTernal:FREQuency	{<frequency> | MINimum | MAXimum}	See *Frequency modulation*.
:INTernal:FREQuency?	[MINimum | MAXimum]	Query the internal modulating frequency.
:DEViation	{<peak deviation in Hz> | MINimum | MAXimum}	See *Frequency modulation*.
:DEViation?	[MINimum | MAXimum]	Query the peak frequency deviation.
:SOURce	{INTernal | EXTernal}	See *Frequency modulation*.
:SOURce?		Query the modulating source.
:STATe	{OFF | ON}	See *Frequency modulation*.
:STATe?		Query the on/off state of frequency modulation.
Phase modulation commands		
Command	**Parameters**	**Definition**
PM		
:INTernal:FUNCtion	{SINusoid | SQUare | RAMP | NRAMp | TRIangle | NOISe | USER}	See *Phase modulation*.
:INTernal:FUNCtion?		Query the modulating function.
:INTernal:FREQuency	{<frequency> | MINimum | MAXimum}	See *Phase modulation*.
:INTernal:FREQuency?	[MINimum | MAXimum]	Query the internal modulating frequency.
:DEViation	{<peak deviation in degrees> | MINimum | MAXimum}	See *Phase modulation*.

Table A-6:
SCPI command summary

:DEViation?	[MINimum | MAXimum]	Query the phase deviation.
:SOURce	{INTernal | EXTernal}	See *Phase modulation*.
:SOURce?		Query the modulating source.
:STATe	{OFF | ON}	See *Phase modulation*.
:STATe?		Query the on/off state of phase modulation.

Frequency-shift keying commands		
Command	**Parameters**	**Definition**
FSKey		
:FREQuency	{<frequency> | MINimum | MAXimum}	See *Frequency-shift keying modulation*.
:FREQuency?	[MINimum | MAXimum]	Query the hop frequency.
:INTernal:RATE	{<rate in Hz> | MINimum | MAXimum}	See *Frequency-shift keying modulation*.
:INTernal:RATE?	[MINimum | MAXimum]	Query the frequency-shift keying rate.
:SOURce	{INTernal | EXTernal}	See *Frequency-shift keying modulation*.
:SOURce?		Query the frequency-shift keying source.
:STATe	{OFF | ON}	See *Frequency-shift keying modulation*.
:STATe?		Query the on/off state of frequency-shift keying.

Pulse width modulation commands		
Command	**Parameters**	**Definition**
PWM		
:INTernal:FUNCtion	{SINusoid | SQUare | RAMP | NRAMp | TRIangle | NOISe | USER}	See *Pulse width modulation waveform*.
:INTernal:FUNCtion?		Query the internal modulating function.
:INTernal:FREQuency	{<frequency> | MINimum | MAXimum}	See *Pulse width modulation waveform*.
:INTernal:FREQuency?	[MINimum | MAXimum]	Query the internal modulating frequency.
:DEViation	{< deviation in seconds> | MINimum | MAXimum}	See *Pulse width modulation waveform*.
:DEViation?	[MINimum | MAXimum]	Query the pulse width deviation.
:DEViation:DCYCle	{< deviation in percent> | MINimum | MAXimum}	See *Pulse width modulation waveform*.
:DEViation:DCYCle?	[MINimum | MAXimum]	Query the duty cycle deviation.
:SOURce	{INTernal | EXTernal}	See *Pulse width modulation waveform*.
:SOURce?		Query the modulating source.
:STATe	{OFF | ON}	See *Pulse width modulation waveform*.
:STATe?		Query the on/off state of PWM.

Sweep commands		
Command	**Parameters**	**Definition**
FREQuency		
:STARt	{<frequency> | MINimum | MAXimum}	See *Frequency sweep*.
:STARt?	[MINimum | MAXimum]	Query the sweep start frequency.

Table A-6:
SCPI command summary

:STOP	{<frequency> | MINimum | MAXimum}	See *Frequency sweep*.
:STOP?	[MINimum | MAXimum]	Query the sweep stop frequency.
:CENTer	{<frequency> | MINimum | MAXimum}	See *Frequency sweep*.
:CENTer?	[MINimum | MAXimum]	Query the sweep center frequency.
:SPAN	{<frequency> | MINimum | MAXimum}	See *Frequency sweep*.
:SPAN?	[MINimum | MAXimum]	Query the sweep span frequency.
SWEep		
:SPACing	{LINear | LOGarithmic}	See *Frequency sweep*.
:SPACing?		Query the sweep spacing.
:TIME	{<seconds> | MINimum | MAXimum}	See *Frequency sweep*.
:TIME?	[MINimum | MAXimum]	Query the sweep time.
:STATe	{OFF | ON}	See *Frequency sweep*.
:STATe?		Query the on/off state of sweep.
TRIGger		
:SOURce	{IMMediate | EXTernal | BUS}	See *Frequency sweep*.
:SOURce?		Query the trigger source.
:SLOPe	{POSitive | NEGative}	See *Frequency sweep*.
:SLOPe?		Query the trigger slope.
OUTPut		
:TRIGger:SLOPe	{POSitive | NEGative}	See *Frequency sweep*.
:TRIGger:SLOPe?		Query the edge for the trigger out signal.
:TRIGger	{OFF | ON}	See *Frequency sweep*.
:TRIGger?		Query the on/off state of trigger out.
MARKer		
:FREQuency	{<frequency> | MINimum | MAXimum}	See *Frequency sweep*.
:FREQuency?	[MINimum | MAXimum]	Query the marker frequency.
MARKer	{OFF | ON}	See *Frequency sweep*.
MARKer?		Query the on/off state of the frequency marker.
Burst commands		
Command	**Parameters**	**Definition**
BURSt		
:MODE	{TRIGgered | GATED}	See *Burst operation*.
:MODE?		Query the burst mode.
:NCYCles	{<# cycles> | INFinity | MINimum | MAXimum}	See *Burst operation*.
:NCYCles?	[MINimum | MAXimum]	Query the burst count.
:INTernal:PERiod	{<seconds> | MINimum | MAXimum}	See *Burst operation*.
:INTernal:PERiod?	[MINimum | MAXimum]	Query the burst period.
:PHASe	{<angle> | MINimum | MAXimum}	See *Burst operation*.
:PHASe?	[MINimum | MAXimum]	Query the burst starting phase.

Table A-6:
SCPI command summary

`:STATe`	`{OFF │ ON}`	See *Burst operation*.
`:STATe?`		Query the on/off state of the burst mode.
`:GATE:POLarity`	`{NORMal │ INVerted}`	See *Burst operation*.
`:GATE:POLarity?`		Query the logic levels at the Ext Trig connector (`NORM` is true high).
`UNIT`		
`:ANGLe`	`{DEGree │ RADian}`	See *Burst operation*.
`:ANGLe?`		Query the unit of the starting phase for the burst.
`TRIGger`		
`:SOURce`	`{IMMediate │ EXTernal │ BUS}`	See *Burst operation*.
`:SOURce?`		Query the trigger source.
`:SLOPe`	`{POSitive │ NEGative}`	See *Burst operation*.
`:SLOPe?`		Query the trigger slope.
`OUTPut`		
`:TRIGger:SLOPe`	`{POSitive │ NEGative}`	See *Burst operation*.
`:TRIGger:SLOPe?`		Query the edge for the trigger out signal.
`:TRIGger`	`{OFF │ ON}`	See *Burst operation*.
`:TRIGger?`		Query the on/off state of trigger out.

Pattern commands

Command	Parameters	Definition
`FUNCtion`		
`:PATTern`	`{data name}`	See *Pattern output operation*.
`:PATTern?`		Query the file name of the pattern.
`DIGital`		
`:PATTern:FREQuency`	`{<frequency> │ MINimum │ MAXimum}`	See *Pattern output operation*.
`:PATTern:FREQuency?`	`[MINimum │ MAXimum]`	Query the minimum or maximum frequency of the pattern.
`:PATTern:STARt`	`{<address> │ MINimum │ MAXimum}`	See *Pattern output operation*.
`:PATTern:STARt?`	`[MINimum │ MAXimum]`	Query the start address of the pattern.
`:PATTern:STOP`	`{<address> │ MINimum │ MAXimum}`	See *Pattern output operation*.
`:PATTern:STOP?`	`[MINimum │ MAXimum]`	Query the end address of the pattern.
`:PATTern:REPeat`	`{OFF │ ON}`	See *Pattern output operation*.
`:PATTern:REPeat?`		Query the on/off state of the pattern mode.
`:PATTern:CLOCk`	`{POSitive │ NEGative}`	See *Pattern output operation*.
`:PATTern:CLOCk?`		Query the edge for the data clock.
`:PATTern:TRIGger:SOURce`	`{EXTernal │ BUS}`	See *Pattern output operation*.
`:PATTern:TRIGger:SOURce?`		Query the trigger source of the pattern.
`:PATTern:TRIGger:SLOPe`	`{POSitive │ NEGative}`	See *Pattern output operation*.
`:PATTern:TRIGger:SLOPe?`		Query the edge for the trigger slope.

Table A-6:
SCPI command summary

Command	Parameters	Definition
`:PATTern:OUTPut:` `TRIGger`	{OFF | ON}	See *Pattern output operation*.
`:PATTern:OUTPut:` `TRIGger?`		Query the on/off state of the trigger.
`:PATTern:OUTPut:` `TRIGger:SLOPe`	{POSitive | NEGative}	See *Pattern output operation*.
`:PATTern:OUTPut:` `TRIGger:SLOPe?`		Query the edge for the output trigger slope.
`DATA`		
`:PATTERN VOLATILE`	<binary block>	See *Pattern output operation*.

Trigger commands

> **NOTE**   All other trigger commands are included in the applicable Sweep or Burst section.

Command	Parameters	Definition
`TRIGger`		Issue a trigger from the remote interface.
`*TRG`		Issue a trigger from the remote interface.

State storage commands

Command	Parameters	Definition
`*SAV`	{0|1|2|3|4}	See *Instrument system operations*.
`*RCL`	{0|1|2|3|4}	See *Instrument system operations*.
`MEMory`		
`:STATe:NAME`	{0|1|2|3|4} [<name>]	See *Instrument system operations*.
`:STATe:NAME?`	{0|1|2|3|4}	Query the name of the specified storage location.
`:STATe:DELete`	{0|1|2|3|4}	See *Instrument system operations*.
`:STATe:RECall:AUTO`	{OFF | ON}	Enable or disable automatic recall of the power-down state from the "0" location when power is turned on. See *Default settings*.
`:STATe:RECall:AUTO?`		Query the on/off state of automatic recall of the power-down state.
`:STATe:VALid?`	{0|1|2|3|4}	See *Instrument system operations*.
`:NSTates?`		Query the number of available state storage locations.

System-related commands

> **NOTE**   All other system-related commands are included in the applicable *IEEE-488.2 common commands* section.

Command	Parameters	Definition
`DISPLay`	{OFF | ON}	See *Instrument system operations*.
`DISPLay?`		Query the on/off state of the display.
`DISPlay`		
`:TEXT`	<quoted string>	See *Instrument system operations*.
`:TEXT?`		Query the message sent to the front panel display.
`:TEXT:CLEar`		See *Instrument system operations*.
`SYSTem`		
`:ERRor?`		Query and clear one error from the error queue.

Table A-6:
SCPI command summary

:VERSion?		Query the instrument's current SCPI version.
:BEEPer		Issue a single beep tone.
:BEEPer:STATe	{OFF | ON}	See *Instrument system operations*.
:BEEPer:STATe?		Query the on/off state of the system sound.
:KLOCk[:STATe]	{OFF | ON}	Disable or enable the front panel key lock.
:KLOCk:EXCLude	{NONE | LOCal}	Choose to include or exclude the Local key when locking the front panel keys.
:KLOCk:EXCLude?		Query if Local key is included or excluded when locking the front panel keys.
:SECurity:IMMediate		Clear all memory except startup parameters and calibration constants. Reset all settings to their *RST values.

Interface configuration commands

Command	Parameters	Definition
SYSTem		
:COMMunication: RLSTate	{LOCal | REMote | RWLock}	Set the instrument state to local, remote, or remote with lock.

Phase-lock commands

Command	Parameters	Definition
PHASe	{<angle> | MINimum | MAXimum}	See *10 MHz Out and In connectors*.
PHASe?	[MINimum | MAXimum]	Query the phase offset value.
PHASe		
:REFerence		See *10 MHz Out and In connectors*.
:UNLock:ERRor:STATe	{OFF | ON}	See *10 MHz Out and In connectors*.
:UNLock:ERRor:STATe?		Query the on/off state of the unlock error setting.
UNIT		
:ANGLe	{DEGree | RADian}	See *10 MHz Out and In connectors*.
:ANGLe?		Query the phase offset value.

Status reporting commands

NOTE	All other status reporting commands are included in the applicable *IEEE-488.2 common commands* section.

Command	Parameters	Definition
STATus		
:PREset		See *Questionable Data Register*.
:QUEStionable: CONDition?		Query the condition register.
:QUEStionable: ENABle	<enable value>	See *Questionable Data Register*.
:QUEStionable: ENABle?		Query the enable register.
:QUEStionable [:EVENt]?		Query the event register.