Command Quick Reference

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NOTE Some [optional] commands have been included for clarity. All settings commands have a corresponding query. Not all commands apply to all models.

Abort Command

```
ABORt
  :TRANsient (@<ch>)
```

Cancels any transient trigger actions and returns the transient trigger state back to idle. Also resets the WTG transient bits in the Operation Condition Status register.

Configure Command

```
CONFigure
  :SSI <status>, (@<address_list>)
```

Sets the synchronization status when used in the U2781A modular instrument chassis.

Initiate Command

```
INITiate
  [:IMMediate]
    :TRANsient (@<ch>)
```

Enables the transient trigger system.

Measure Commands

MEASure	
[:SCALar]	
:CURRent [:DC]? (@<ch>)	Queries the current measured across the current sense resistor inside the U2722A/U2723A.
:VOLTage [:DC]? (@<ch>)	Queries the voltage measured at the sense terminals of the U2722A/U2723A for the specified channel.
:ARRay	
:CURRent [:DC]? (@<ch>)	Initiates and triggers a measurement and returns an array containing the digitized output current in amperes.
:VOLTage [:DC]? (@<ch>)	Initiates and triggers a measurement and returns an array containing the digitized output voltage in volts.
TEMPerature?	Queries the temperature measured at the measurement board in degree Celsius (° C).

Output Command

OUTPut	
[:STATe] <mode>, (@<ch>)	Enables/disables the output of the given channel(s).

Sense Commands

SENSe	
:CURRent	
[:DC]	
:APERture? (@<ch>)	Queries the sampling time for single current measurement point.
:NPLCycles <cycles>, (@<ch>)	Sets the number of power line cycles taken for the current measurement.
:SWEep	
:POINts <points>, (@<ch>)	Defines the number of points in a measurement on models that have measurement controls.
:TINTerval <interval>, (@<ch>)	Defines the time period between samples in milliseconds on models that have measurement controls.
:VOLTage	
[:DC]	
:APERture? (@<ch>)	Queries the sampling time for single voltage measurement point.
:NPLCycles <cycles>, (@<ch>)	Sets the number of power line cycles taken for the voltage measurement.

Source Commands

[SOURce:]	
CURRent	
[:LEVel]	
[:IMMediate]	
[:AMPLitude] <current>, (@<ch>)	Sets the actual current magnitude of the unswept output signal in terms of the present operating units.
:TRIGgered	
[:AMPLitude] <current> ,(@<ch>)	Sets the triggered current level of the specified output channel.
:LIMit <value>, (@<ch>)	Sets the maximum bounds on the output current value.
:RANGe <range>, (@<ch>)	Sets the output current range.
MEMory	
ARM (@<ch>)	Arms the specified channel where the commands in the channel active memory list will be executed once the external trigger signal is received by the transient system.
:CONFigure:POINts <start>,<end>,<loop>, (@<ch>)	Sets the start point, end point, and loop count for the channel active memory list.
:CURRent	
:LIMit <value>, (@<ch>)	Stores the CURRent:LIMit <value> command into the channel active memory list.
:MEASure (@<ch>)	Stores the MEASure:CURRent? command into the channel active memory list.
:SOURce <value>, (@<ch>)	Stores the CURRent <value> command into the channel active memory list.

:RANGe <range>, (@<ch>)	Stores the CURRent:RANGe <range> command into the channel active memory list.
:LIST <list>, (@<ch>)	Sets the channel active memory list.
:CLEar (@<ch>)	Clears the active memory list's command.
:POINts? (@<ch>)	Queries the total number of command in the channel active memory list.
:LOAD (@<ch>)	Loads the channel active memory list from the nonvolatile memory.
:READ? (@<ch>)	Reads the commands from the channel active memory list.
:STORe (@<ch>)	Stores the channel active memory list into the nonvolatile memory.
:OUTPut <mode>, (@<ch>)	Stores the OUTP <mode> command into the channel active memory list.
:LIST:DATA? (@<ch>)	Reads the data result after executing the commands in the channel active memory list through a remote or hardware trigger action.
:SOURce:DELay:AUTO <mode>, (@<ch>)	Turns on or off the auto source delay in channel active memory list's commands execution.
:SOURce:DELay <mode>,<value>, (@<ch>)	Sets the source delay time in ms for channel active memory list.
:TRIGger (@<ch>)	Executes the active memory list commands for the specified channel.
VOLTage	
:LIMit <value>, (@<ch>)	Stores the VOLTage:LIMit <value> command into the channel active memory list.
:MEASure (@<ch>)	Stores the MEASure:VOLTage? command into the channel active memory list.

:SOURce <value>, (@<ch>)	Stores the VOLTage <value> command into the channel active memory list.
:RANGe <range>, (@<ch>)	Stores the VOLTage:RANGe <range> command into the channel active memory list.
VOLTage	
[:LEVel]	
[:IMMediate]	
[:AMPLitude] <voltage>,(@<ch>)	Sets the actual voltage magnitude of the unswept output signal in terms of the present operating units.
:TRIGgered	
[:AMPLitude] <voltage>,(@<ch>)	Sets the voltage trigger level of the specified output channel.
:LIMit <value>, (@<ch>)	Sets the maximum bounds on the output voltage value.
:RANGe <range>, (@<ch>)	Sets the output voltage range. At *RST, low voltage range is selected.

Status Commands

STATus	
:OPERation	
:CONDition?	Returns the value of the Operation Status Condition register.
:ENABle <value>	Sets and reads the value of the Operation Status Enable register.
[:EVENt]?	Returns the value of the Operation Status Event register.
:NTRansition <value>	Serves as a polarity filter between the Operation Condition and Operation Event registers.
:PTRansition <value>	Serves as a polarity filter between the Questionable Condition and Questionable Event registers.
:PRESet	Sets all defined bits in the status system's PTR registers and clears all bits in the NTR and Enable registers.
:QUEStionable	
:CONDition?	Returns the value of the Questionable Status Condition register.
:ENABle <value>	A mask for enabling specific bits from the Questionable Event register to set the questionable summary bit (QUES) of the Status Byte register.
[:EVENt]?	Returns value of the Questionable Status Event register.
:NTRansition <value>	Serves as a polarity filter between the Question Condition and Question Event registers.
:PTRansition <value>	Serves as a polarity filter between the Questionable Condition and Questionable Event registers.

System Commands

SYSTem	
:CDEScription?	Identifies which slot the U2722A/U2723A is plugged into the U2781A modular instrument chassis.
:CHANnel	
[:COUNt]?	Returns the next error number and its corresponding message string from the error queue.
:ERRor?	Returns the next error number and its corresponding message string from the error queue.
:LFRequency <mode>	Sets the power line frequency in the measurement.
:VERSion?	Returns the version of the SCPI (Standard Commands for Programmable Instruments) standard in which the instrument complies with.

Trigger Command

TRIGger	
:SOURce <NONE|STRG>	Selects the trigger source to NONE or STRG.

Common Commands

*CAL?	Performs self-calibration of the instrument and returns a pass/fail indication.
*CLS	Clears the event registers in all register groups and also clears the error queue.
*ESE <enable_value>	Enables bits in the enable register for the Standard Event register group.
*ESR?	Returns the value of the event register of the Standard Event Status group.
*IDN?	Reads the instrument's identification string which contains four comma-separated fields.
*OPC	Causes the instrument to set the OPC bit (bit 0) of the Standard Event Status register when the instrument has completed all pending operation sent before the *OPC command.
*RST	Resets the instrument to the default configuration.
*SRE <enable_value>	Enables the bits in the enable register for the Status Byte register group.
*STB?	Queries the condition register for the Status Byte register group.
*TST?	Performs a self-test of the instrument and returns a pass/fail indication.
*WAI	Configures the instrument to wait for the completion of all pending operation before executing any additional commands over the interface.