

Title:	Soft Reset Command ST 1800			ID:
				0017
Date in:	Response:	Model:	Author:	
2006-09-28	2006-09-28	-	CMa	

Soft Reset (1800)

1800	Execute General System Reset		
Flag Name	1800	Content	Perform recoverable reset for plate transfer process
Protocol	Legacy	Related	1814, 1904, 1905, 1906, 1907, 1908, 1909, 1915, DM0, DM5, DM200
FW Version	7.14+	Instrument	All
Default	0	Type	System Control
Read/Write	W	Range	0, 1

Flag 1800 forces a soft reset of the system plate access. The 1800 is intended to be written to only. The ST 1800 will affect specific flags and data memories. The ST 1800 command is used to implement error recovery procedures.

Action	Command String	Response	Comment
Set 1800	ST 1800	OK	

A “ST 1800” will force a reset of a plate access after an handling error has occurred allowing redefinition of a plate access. Therefore the values in DM0 and DM5 remain unchanged by the 1800 command.

Typically an ST 1800 is used when an error occurred during a plate transfer process (e. g. when the handling tries to put a plate on a location that is already occupied). In this case the system sets the error flag (1814) and writes an error number in the error register (DM200). The global ready flag (1915) remains ‘0’.

In this case the “ST 1800” allows recovery of the access without the need of re-initializing the entire system. After setting the 1800 (ST 1800) the ready flag (RD 1915) sends ‘1’ indicating that the system is ready to accept a new plate handling command. Note that the “ST 1800” will not change or reset the slot selection (DM0) or the level selection (DM5).

Example		Perform system reset
Command Sequence	Response	Comment
RD 1915	1	If request of System Ready status returns 1 the system is ready to accept a command
WR DMO 1 WR DM5 1 ST 1904	OK OK OK	Send a load plate command sequence
<i>Wait 10ms</i>		Allow the system some milliseconds to internally update the System Ready Flag before first System Ready status request
RD 1915	0	Read System Ready returns 0, system is busy executing the plate load operation
RD 1915	0	
RD 1814	0	No error occurred
RD 1915	0	
..		
RD 1915	0	Ready remains '0'
RD 1814	1	Error detected
RD DM200	05395	Error message converted to Hex format 1513 contains error 13. Shovel could not be extended
ST 1800	OK	Do soft reset
<i>Wait 10ms</i>		
RD 1915	1	System back in idle ready to accept next command.
WR DM5 2 ST 1909	OK OK	Change level in stacker Put plate in stacker
..		
RD 1915	0	Operation started

ST 1800 does not allow recovery from all error status. The list below gives all errors that may be recovered by using ST 1800. If an ST 1800 will not recover an error, a hard error is generated requiring the system to be reset using ST 1900 followed by a system initialization command (ST 1801) when ready (RD 1915 -> '1').

Soft Resettable Errors		
Error Code	Error	Comment
#10	Invalid stacker number	Checked at beginning of plate handling procedure 1904..1909 and BCR Mode 1910 resp. stacker selection / carousel positioning (WR DMO x)
#12	Invalid stacker level	Checked at beginning of plate handling procedure 1904..1909 and BCR Mode 1910
#13	Plate Trace Error	Checked when 1610 (Plate Trace) activated
#19	Shovel extending error	Occurs when shovel could not be extracted fully within 5 seconds