

## Mark-10 Software Functions

Individual Functions			
Function	Part No.	Description	Co-requirements
<b>Distance Measurement</b>	<b>EMF001-1</b>	Measure distance, with the ability to zero the reading.	-
<b>Distance Limits</b>	<b>EMF002-1</b>	Stop at user-defined upper and lower distance limits.	- Distance Measurement (EMF001-1)
<b>Preload</b>	<b>EMF003-1</b>	Zero the travel position automatically at a user-defined preload value.	- Distance Measurement (EMF001-1)
<b>High Speed Extension</b>	<b>EMF004-1</b>	Extend the high end of the speed range to 45 in/min [1,100 mm/min].	-
<b>Low Speed Extension</b>	<b>EMF005-1</b>	Extend the low end of the speed range to 0.02 in/min [0.5 mm/min].	-
<b>Cycling</b>	<b>EMF006-1</b>	Set up to 100,000 cycles, with user-defined upper and lower dwell times. Cycle between any combination of limit switches, travel limits, and load limits.	- If cycling to distance limits, add Distance Measurement (EMF001-1) and Distance Limits (EMF002-1)
<b>Break Detection</b>	<b>EMF007-1</b>	Stop when a user-defined drop in force occurs.	-

<b>Load Holding</b>	<b>EMF008-1</b>	Stop at, and maintain, a user-defined load for a specified period of time. For best performance, use a force sensor with a capacity as close as possible to the target load.	-
<b>FollowMe®</b>	<b>EMF009-1</b>	Push and pull on the sensor's loading shaft to move the crosshead up and down, ideal for manual positioning prior to a test. Speed increases with applied force.	-
<b>Graphing &amp; Reporting</b>	<b>EMF010-1</b>	Graph load vs. time or distance, view statistics, export data, and generate a report, including graph, results, run data, and other information.	- If graphing load vs. distance, add Distance Measurement (EMF001-1)
<b>PC Control</b>	<b>EMF011-1</b>	Control the test frame with your own application using a supplied library of motion control and data collection serial commands. While PC control is active, the control panel becomes a	-AC1107 cable, test frame to PC

		pendant, limited to basic, manual controls.	
<b>Coefficient of Friction Measurement</b>	<b>EMF012-1</b>	Measure static and dynamic coefficients of friction, with user-defined sled weight.	-G1086 coefficient of friction fixture (suggested)
<b>Spring Rate Measurement</b>	<b>EMF013-1</b>	Measure spring rate, with user-defined start and stop data collection triggers.	-Distance Measurement (EMF001-1) Suggested functions: -Distance Limits (EMF002-1) -Preload (EMF003-1)