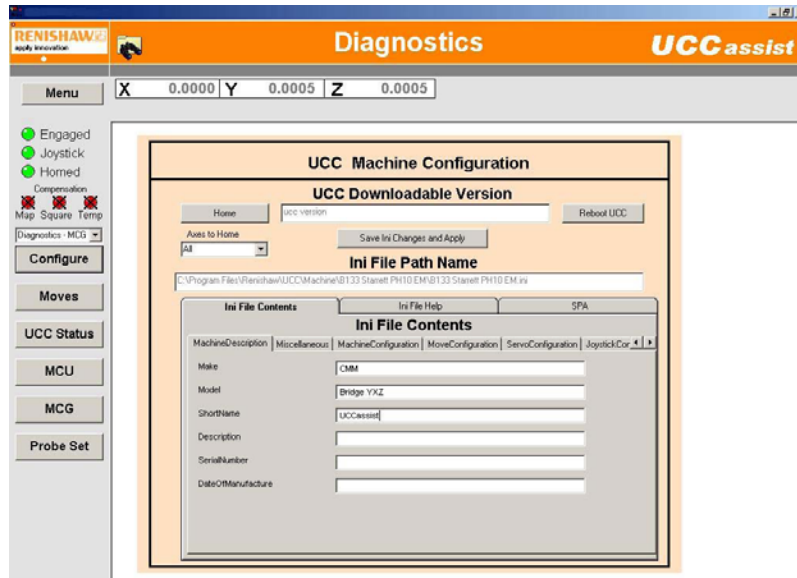


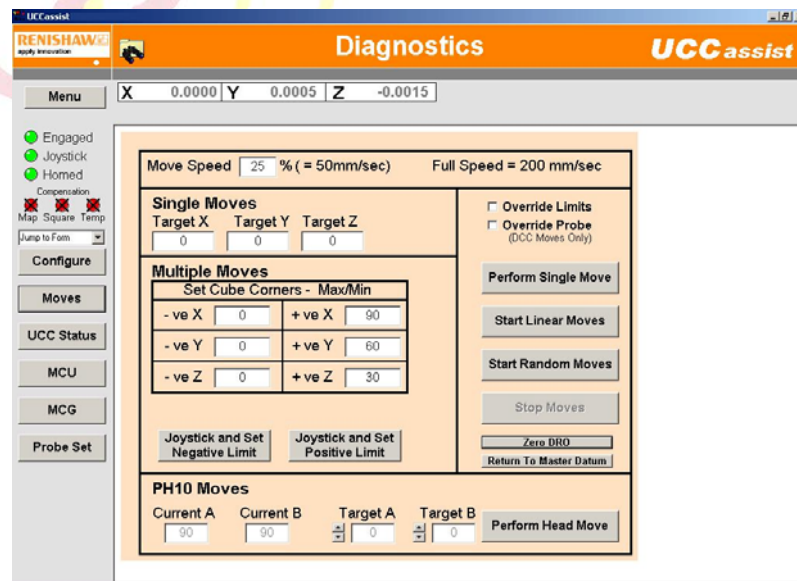
## Diagnostics Configure

The diagnostics configure screen permits access to the machine configuration file and various command buttons that will initiate the relative UCC COM command, refer to the UCC COM classes user guide for further details.



## Moves

The diagnostics moves screen, shown below, will allow the user to move the machine or cycle the machine within a specified area of the volume in a defined pattern.



## UCC status

The diagnostics UCC status screen displays the status of various aspects of the UCC system.

The screenshot shows the 'Diagnostics' window in UCCassist. At the top, it displays 'UCC Configuration' with details like 'UCC Type: UCC1' and 'Downloadable Version: (c) Renishaw plc 2006UCC Release: 06.01c13 ROM[U] 3.00'. Below this is the 'Fatal Faults' section, which lists several faults with their 'Current Latched' status. The 'Scale Reading Failure' fault is currently latched, indicated by a red 'X' icon. To the right, 'Limit Switches' for X, Y, and Z axes are shown with green status indicators. At the bottom, the 'Probe' section shows 'Probe Type: SP25 (+ Analogue Module)' and 'Probe Calibrated' status for Deflection - X, Y, and Z.

### Scale reading failure fatal fault

Version 7 of the UCC software introduces a new condition to the scale reading failure fatal fault, this is that when a scale reading fault occurs the system indicates that the system can no longer ensure that metrology has not been affected.

When a scale reading fatal fault has been detected an additional button, reason, will appear in the fatal fault screen as shown below:

This close-up shows the 'Fatal Faults' section. The 'Scale Reading Failure' fault is highlighted with a red 'X' icon. A 'Reason' button is visible next to the fault name, indicating that the system can no longer ensure that metrology has not been affected.

The screenshot shows the 'UCCassist Message Box - V1.14' dialog. It displays the 'Reason For Scale Error :-' section with the following error counts: Probe Error - 0, X axis Error - 1, Y axis Error - 0, Z axis Error - 0, and Y2 axis Error - 0. Below this, it asks 'If you wish to OVERRIDE the scale error then click YES' and provides two buttons: 'Yes' (labeled F1) and 'No' (labeled F4).

## Temperature sensors

If the temperature sensor daughter card is fitted to the UCC installation then the section as shown below of the UCC status screen will be visible.

Temperature Summary						
	X	Y	Z	Workpiece	Sensor/Alarm Status	
Gradient Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Temporal Alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Range Alarm <input checked="" type="checkbox"/>	
Temperature (°C)	21.111	20.661	20.722	22.650	Temp Card Version: 01.07	
Compensation (mm)	00.000	00.000	00.000	<input type="text" value="Workpiece Material"/>		

Clicking on the sensor/alarm status button will open a new screen that has a more detailed report of the temperature system status as shown below.

**Diagnosics** **UCC assist**

Menu X 12.0056 | Y 430.0709 | Z 243.9409

Engaged  
 Joystick  
 Homed  
 Compensation  
 Map Square Temp  
 Pump to Form

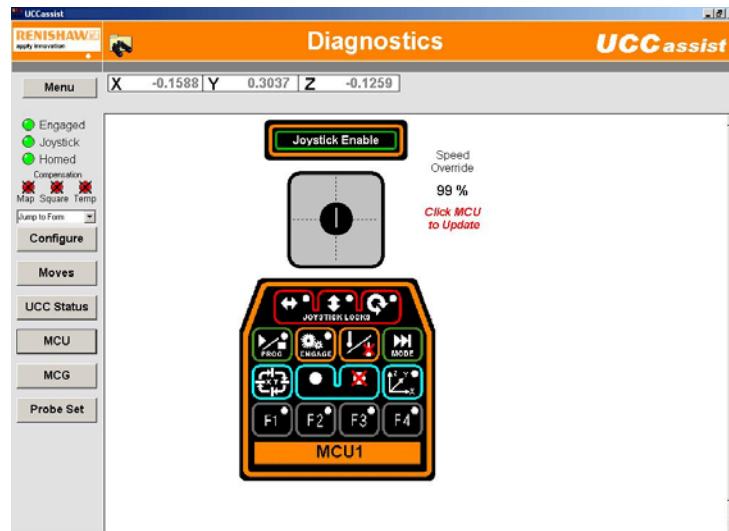
Axis Temperature Configuration						
Not Connected: 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.						
	Sensor Numbers	Present	Gradient	Temporal	Range (Etc. W/Piece)	
X Axis	1, 2, 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="button" value="Disable Range"/>
Y Axis	4, 5, 6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="button" value="Disable Grad"/>
Z Axis	7, 8, 9	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="button" value="Disable Temp"/>
Dual Axis	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Workpiece	10, 11	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Sensor and Alarm Status									
		Alarm		Reset All Alarms		Alarm			
Sensor	Temp	Location	Status	Latch	Sensor	Temp	Location	Status	Latch
1	21.103	X Axis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	13	No Sig	Workpiece	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	21.073	X Axis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	14	No Sig	Workpiece	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	21.101	X Axis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	15	No Sig	Workpiece	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	20.760	Y Axis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	16	No Sig	Workpiece	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	20.703	Y Axis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	17	No Sig	Workpiece	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	20.528	Y Axis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	18	No Sig	Workpiece	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7	20.994	Z Axis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	19	No Sig	Workpiece	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8	20.995	Z Axis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	20	No Sig	Workpiece	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9	20.308	Z Axis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	21	No Sig	Workpiece	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10	21.008	Workpiece	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	22	No Sig	Workpiece	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11	21.195	Workpiece	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	23	No Sig	Workpiece	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
12	No Sig	Workpiece	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	24	No Sig	Workpiece	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## MCU General

The diagnostics MCU screen displays a visual representation of the MCU1 joystick and permits most outputs from the MCU1 joystick to be tested off line.



Video of MCG (Machine Checking Gage) <http://www.youtube.com/watch?v=zt8MEQNLHyw>

ALL MSS CMM's and retrofitted CMM's comes with the capabilities listed above, WITHOUT any additional charges or fees.

Make sure to ask your OEM for the above access when purchasing any CMM or retrofit.

Website: [www.mss-i.com](http://www.mss-i.com) Phone: 317-485-6744

Email information: [retrofits@mss-i.com](mailto:retrofits@mss-i.com) or [sales@mss-i.com](mailto:sales@mss-i.com)