

Spider-81 Random Test Quick Start Guide

Start Up

Power button is on the left side of the front panel of the Spider-81.

- Press the power button.
- Use an Ethernet cable to connect the Spider-81 to a PC running the EDM software.



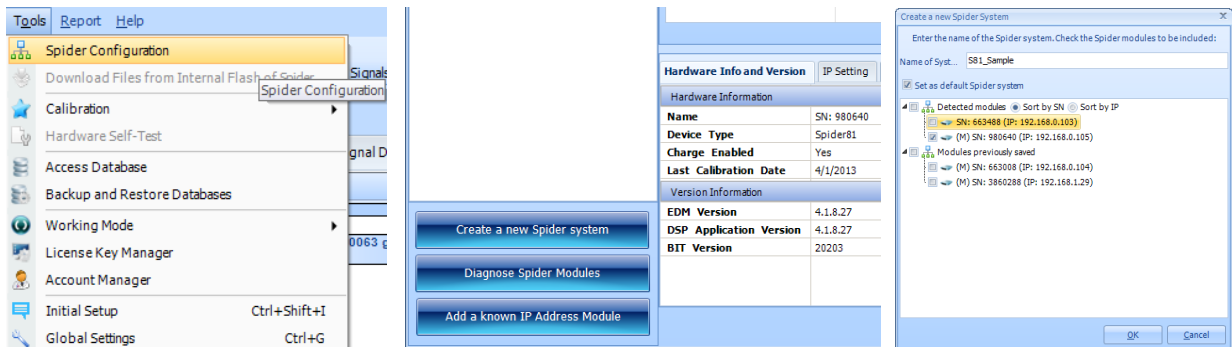
Start EDM Software

- Click on **Random** to create a new random test.



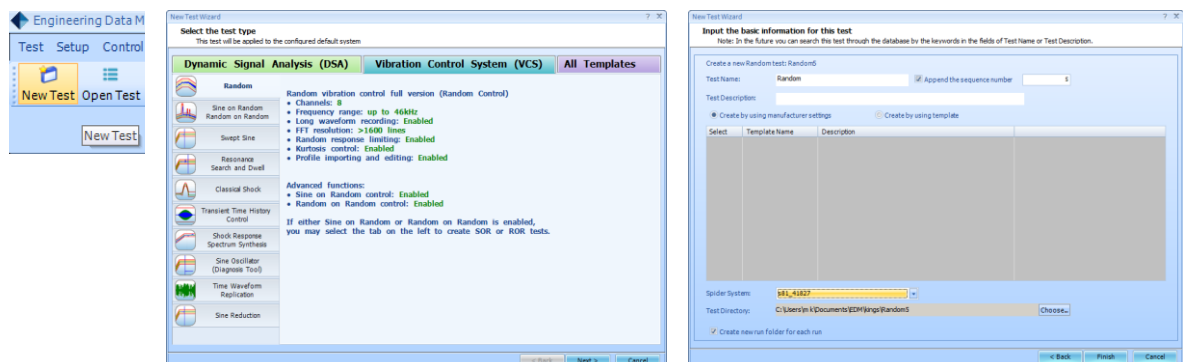
Spider Configuration

- Click **Tools->Spider Configuration**
- On the next screen, click **Create a new Spider System**.
- Select one or more detected Spider module(s) to create a new system.



Create A New Test

- Press **New Test** button in the upper left to start creating a new test.
- Click on **VCS** tab to create a VCS test.
- Click on **Random** to create a random test.
- Select **Spider System** to be involved in this new test and press **Finish** to proceed to a new test window.



Input Channels

- Click **Setup->Input Channels** to setup input channels.
- All input channels related parameters can be edited at this step.

On/Off	Channel Type	Location ID	Measurement Quantity	Unit	Sensitivity	Input Mode	Sensor	Max. Sensor Range
On	Control	Ch1	Acceleration	g	100.0000 (mV/g)	AC-Single End		20.0000 (V)
On	Monitor	Ch2	Acceleration	g	100.0000 (mV/g)	AC-Single End		20.0000 (V)
Off	Monitor	Ch3	Acceleration	g	100.0000 (mV/g)	AC-Single End		20.0000 (V)
Off	Monitor	Ch4	Acceleration	g	100.0000 (mV/g)	AC-Single End		20.0000 (V)
Off	Monitor	Ch5	Acceleration	g	100.0000 (mV/g)	AC-Single End		20.0000 (V)
Off	Monitor	Ch6	Acceleration	g	100.0000 (mV/g)	AC-Single End		20.0000 (V)
Off	Monitor	Ch7	Acceleration	g	100.0000 (mV/g)	AC-Single End		20.0000 (V)
Off	Monitor	Ch8	Acceleration	g	100.0000 (mV/g)	AC-Single End		20.0000 (V)

Measured Signals

- Click **Setup->Measured Signals** to select signals to be measured and recorded.

Signal Name	Measure	Save/Record List	Signal Color
Ch1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Blue
Ch2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Green
drive	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Blue
Block(Ch-1)	<input type="checkbox"/>	<input type="checkbox"/>	Green
Block(Ch-2)	<input type="checkbox"/>	<input type="checkbox"/>	Blue
Block(drive)	<input type="checkbox"/>	<input type="checkbox"/>	Green
APS(Ch-1)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Green
APS(Ch-2)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Blue
APS(drive)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Green
FRF(Ch-2,Ch1)	<input type="checkbox"/>	<input type="checkbox"/>	Blue
HighAlarm(f)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Red
HighAlarm(t)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Yellow
LowAlarm(f)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Red
LowAlarm(t)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Yellow
H(f)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Green
control(f)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Blue
profile(f)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Green
noise(f)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Green
control_his(t)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Green

Test Configuration

- Click **Config** button from the control panel to open a dialogue.
- Click **Shaker Parameters** to edit shaker parameters.
- Click other tabs to edit additional parameters if necessary.

Parameter	Value	Parameter	Value
Random Max. Force RMS (LBF)	100.000	Random Max. Acc. RMS (g)	16.66667
Shk Max. Force Peak (LBF)	2205.866	Shk Max. Acc. Peak (g)	75
Shock Max. Force Peak (LBF)	100.022	Shock Max. Acc. Peak (g)	50
Max. Positive Displacement (in)	0.25	Max. Negative Displacement (in)	0.25
Max. Drive Voltage Peak (V)	10	Max. Velocity (in/s)	70
Min. Drive Frequency (Hz)	1	Max. Drive Frequency (Hz)	2500
Shaker Orientation	Vertical		
Diameter (in)	59.05512	Armature Mass (LBS)	0.4409245

Run A Test

- Press **Run** button from the control panel to start the test.
- Click window tabs to switch displayed signals.

Event Time	Event Type	Location ID
6:20:20 PM	Schedule Level	1.000
6:20:20 PM	Schedule Level	0.750
6:20:20 PM	Schedule Level	0.500
6:20:20 PM	Schedule Level	0.250
6:20:40 PM	Start Schedule	
6:21:40 PM	Pretest Finished	0.000