

Activity 1 : Self test sheet



Aim

To ensure that the robot is built and wired correctly and that there are no hardware faults in the robot.

Preparation

Add TWO wire links to the robot as follows





The links are provided in a pack in your teacher's kit. The pack is labelled "wire links".

Running the test

Put a ✓ or a × in the last column if the test was successful or failed.

Test	Action	Comments	√or x
1.	Place robot on the floor and	Display should shows the message	
	switch on.	tESt8	
	Press any switch to continue to the next test.		
2.	As each LED comes ON	LED A comes On → press SW-A	
	press the switch below	LED B comes On → press SW-B	
		LED C comes On \rightarrow press SW-C	
	SW-D SW-C SW-B SW-A DIN	LED D comes On \rightarrow press SW-D	
	LED D LED C LED B LED A	Tests the four LEDs and the four	
		switches	
3.	Ensure robot is on the floor	Robot should move forward for 5 seconds	
	then press switch A		
4.	Press switch A	Robot should turn left for 3 seconds	
		Display will now show the message SEt POtS	
5.	Set all 3 POTs to point to	If successful the display will show	
	the batteries.	tESt_End	
	Then press switch A		
	· Lavawya +	If there is a problem the display will show	
	POT-3 POT-2 POT-1	Err_Pot_1 or 2 or 3	

If five \checkmark 's then robot works and is correctly wired. If any \times 's then get copy of diagnostic sheet from your teacher.