

# R164 Controller

64 MICROSTEPPING CONTROLLER



Windows Application User Manual  
Version 1.03

Download the Windows Application from [www.linengineering.com](http://www.linengineering.com) → Products → Drivers & Controllers → Controllers → R164.

Select the correct COM Settings, and begin typing commands:

	Address	Command	Loop
1	1	A5000A0R	
2	End		

This will make motor #1 go to Absolute Position 5000, then back to Absolute position 0.

## Useful Commands:

P5000 run motor in the positive direction for 5000 steps  
D5000 run motor in the negative direction for 5000 steps  
A5000 moves motor to Absolute Position to 5000  
A0 moves motor back to Absolute position 0  
M500 waits for 500 milliseconds  
T terminates the current command  
z0 sets the current position to 0 (Note: you cannot move in the negative direction now)  
Z5000 sets the current position to 5000 steps away from 0  
l50 sets the current to 50% of the max. current  
h50 sets the holding current to 50% of the max. current  
j2 sets the step resolution to be half stepping  
v200 sets the starting velocity to be 200 pps  
V5000 sets the top velocity to be 5000 pps

**Loops: (Case Sensitive)**

1	1	A5000A0R	
2	Loop	1	5
3	End		

This will run line 1, five times.

**Wait statements, and the 'W' command:**

1	1	A5000A0R	W
2	2	A5000A0R	W
3	Wait	5	
4	End		

This will execute line 1 first, and line 2 will not execute until line 1 has finished. Then the program will wait for 5 milliseconds.

**Goto statement:**

1	1	A5000A0R	W
2	Goto	1	
3	End		

This will execute line 1, then it will continuously execute line 1 until you click 'End'

## Windows Application Examples

**This will simulate a dispensing unit. Addresses 1, 2 and 3 correspond to the x, y, and z axis.**

	Address	Command	Loop
1	3	A5000A0R	W
2	1	P5000R	W
3	3	A5000A0R	W
4	Loop	2	5
5	2	P5000R	W
6	3	A5000A0R	W
7	1	D5000R	W
8	3	A5000A0R	W
9	Loop	7	5
10	2	P5000R	W
11	Loop	1	2
12	Wait	3	
13	3	A0R	
14	1	A0R	
15	2	A0R	W
16	Goto	1	
17	End		