



Application Note #1219

Connections for the DMC-1414 controller

The DMC-1414 controller provides direct easy connections to system elements, such as amplifiers, encoders, and external switches. Connections are made via screw-type terminals. Each screw terminal is labeled for quick connection of system elements.

MAIN Terminal Connections:

TERMINAL #	LABEL	I/O	DESCRIPTION
1	GND		Signal Ground
2	5V	O	+ 5 Volts
3	AB-	I	Auxiliary encoder B-
4	AB+	I	Auxiliary encoder B+
5	AA-	I	Auxiliary encoder A-
6	AA+	I	Auxiliary encoder A+
7	IDX-	I	Main encoder index -
8	IDX+	I	Main encoder index +
9	5V	O	+ 5 Volts
10	MB-	I	Main encoder B-
11	MB+	I	Main encoder B+
12	MA-	I	Main encoder A-
13	MA+	I	Main encoder A+
14	GND		Signal Ground
15	ABORT	I	Abort Input
16	HOME	I	Home input
17	RLS	I	Reverse limit switch input
18	FLS	I	Forward limit switch input
19	IN1/LTCH	I	Input 1 / Input for Latch Function
20	IN2	I	Input 2
21	IN3	I	Input 3
22	IN4	I	Input 4
23	IN5	I	Input 5
24	IN6	I	Input 6
25	IN7	I	Input 7

26	GND		Signal Ground
27	5V	O	+ 5 Volts
28	CMP	O	Circular Compare output
29	OUT1	O	Output 1
30	OUT2	O	Output 2
31	OUT3	O	Output 3
32	ERROR	O	Error signal
33	RESET	I	Reset
34	GND		Signal Ground
35	SIGN	O	Direction output for input to stepper motor amp
36	PWM	O	Pulse output for input to stepper motor amp
37	ACMD	O	Motor command to amp input (w / respect to ground)
38	AMPEN	O	Amplifier enable
39	-12V	O	-12 Volts
40	+12V	O	+12 Volts

MOTOR / POWER Connections: 5 Pin Molex

TERMINAL #	LABEL	DESCRIPTION
1	EARTH	Chassis Connection
2	GND	Input Power Return
3	MOTOR2	Motor Connection
4	MOTOR1	Motor Connection
5	AMP V+	Input Power

RS232 - Main Port {P1} DATATERM

PIN	DESCRIPTION	PIN	DESCRIPTION
1	CTS – output	6	CTS - output
2	Transmit Data – output	7	RTS – input
3	Receive Data – input	8	CTS - output
4	RTS – input	9	No connect (Can be connected to sample clock with jumpers)
5	Ground		

RS232 - Auxiliary Port {P2} DATASET

PIN	DESCRIPTION	PIN	DESCRIPTION
1	CTS – input	6	CTS - input
2	Transmit Data - input	7	RTS - output
3	Receive Data - output	8	CTS - input
4	RTS – output	9	5V (Can be disconnected or connected to sample clock with jumpers)
5	Ground		