Motion Commands

Command	Description	NV	write only	read only	Imme-diate	Compatibility
AC	Accel Rate	•				All drives
AM	Accel Max	•				All drives
CJ	Commence Jogging		•			All drives
DC	Distance for FC, FM, FO, FY	•				All drives
DE	Decel Rate	•				All drives
DI	Distance or Position	•				All drives
EG	Electronic Gearing	•				All drives
EP	Encoder Position					Servos and steppers with encoders
FC	Feed to Length with Speed Change		•			All drives
FD	Feed to Double Sensor		•			All drives
FE	Follow Encoder		•			All drives
FL	Feed to Length		•			All drives
FM	Feed to Sensor with Mask Dist		•			All drives
FO	Feed to Length & Set Output		•			All drives
FP	Feed to Position		•			All drives
FS	Feed to Sensor		•			All drives
FY	Feed to Sensor with Safety Dist		•			All drives
HW	Hand Wheel		•			All drives
JA	Jog Accel/Decel rate	•				All drives
JC	Velocity mode second speed	•				All drives
JD	Jog Disable		•			All drives
JE	Jog Enable		•			All drives
JL	Jog Decel rate	•				All drives
JM	Jog Mode	•				Al drives (see JM command)
JS	Jog Speed	•				All drives
SH	Seek Home		•			All drives
SJ	Stop Jogging		•		•	All drives
SM	Stop the Move		•			Q drives only
SP	Set Absolute Position					All drives
ST	Stop Motion		•		•	All drives
VC	Velocity for Speed Change (FC)	•				All drives
VE	Velocity Setting (For Feed Commands)	•				All drives
VM	Velocity Max	•				All drives
WM	Wait on Move		•			Q drives only
WP	Wait on Position		•			Q drives only

Configuration Commands

Command	Description	NV	write only	read only	Imme-diate	Compatibility
BD	Brake Disengage Delay time	•				All drives
BE	Brake Engage Delay time	•				All drives
CC	Change Current	•				All drives
CD	Idle Current Delay	•				Stepper drives only
CF	Anti-resonance Filter Frequency	•				Stepper drives only
CG	Anti-resonance Filter Gain	•				Stepper drives only
CI	Change Idle Current	•				Stepper drives only
CM	Control mode	•				All drives
CP	Change peak current	•				Servo drives only
DA	Define Address	•				All drives
DL	Define Limits	•				All drives
DR	Data Register for Capture		•			Q servo drives only
ER	Encoder or Resolution	•				Servos and steppers with encoders
HG	4th Harmonic Filter Gain	•				Stepper drives only
HP	4th Harmonic Filter Phase	•				Stepper drives only
KC	Servo Filter	•				Servo drives only
KD	Differential Constant	•				Servo drives only
KE	Differential Filter	•				Servo drives only
KF	Velocity Feed Forward Constant	•				Servo drives only
KI	Integrator Constant	•				Servo drives only
KK	Inertia Feed Forward Constant	•				Servo drives only
KP	Proportional Constant	•				Servo drives only
KV	Velocity Feed Back Constant	•				Servo drives only
KW	Velocity Feed Back Filter	•				Servo drives only
MO	Motion Output	•				All drives
OF	On Fault		•			Q drives only
OI	On Input		•			Q drives only
PC	Power up Current	•				All drives
PF	Position Fault	•				Servos and steppers with encoders
PI	Power up Idle Current	•				Stepper drives only
PL	In Position Limit	•				Servo drives only
PM	Power up Mode	•				All drives
PP	Power up peak current	•				Servo drives only
PW	Pass Word		•			Q drives only
SA	Save all NV Parameters		•			All drives
SF	Step Filter Frequency	•				Stepper drives only
SI	Enable Input usage	•				All drives
VI	Velocity Mode Integrator Constant	•				Servo drives only
VP	Velocity Mode Proportional Constant	•				Servo drives only
ZC	Regen Resistor Continuous Wattage	•				BLuAC5 and STAC6 drives only
ZR	Regen Resistor Value	•				BLuAC5 and STAC6 drives only
ZT	Regen Resistor Peak Time	•				BLuAC5 and STAC6 drives only

I/O Commands

Command	Description	NV	write only	read only	Immediate	Compatibility
AD	Analog Deadband	•				All stepper drives and SV servo drives
AF	Analog Filter	•				All drives
AG	Analog Velocity Gain	•				All stepper drives and SV servo drives
AI	Alarm Input usage	•				All drives
AO	Alarm Output usage	•				All drives
AP	Analog Position Gain	•				All drives
AS	Analog Scaling	•				All stepper drives and SV servo drives
AT	Analog Threshold	•				All drives
AV	Analog Offset	•				All drives
AZ	Analog Zero (Auto Zero)		•			All drives
BD	Brake Disengage Delay time	•				All drives
BE	Brake Engage Delay time	•				All drives
BO	Brake Output usage	•				All drives
DL	Define Limits	•				All drives
FI	Filter Input					All drives
IH	Immediate High Output		•		•	All drives
IL	Immediate Low Output		•		•	All drives
IS	Input Status request			•	•	All drives
MO	Motion Output	•				All drives
OI	On Input		•			Q drives only
SI	Enable Input usage	•				All drives
SO	Set Output		•			All drives
TI	Test Input		•			Q drives only
WI	Wait on Input		•			All drives

Communications Commands

Command	Description	NV	write only	read only	Immediate	Compatibility
BR	Baud Rate	•				All drives
PB	Power up Baud Rate	•				All drives
PR	Protocol	•				All drives
TD	Transmit Delay	•				All drives

Q Program Commands

Command	Description	NV	write only	read only	Imme-diate	Compatibility
MT	Multi-Tasking					Q drives only
OF	On Fault		•			Q drives only
OI	On Input		•			Q drives only
PS	Pause		•			All drives
QC	Queue Call		•			Q drives only
QD	Queue Delete		•			Q drives only
QG	Queue Goto		•			Q drives only
QJ	Queue Jump		•			Q drives only
QK	Queue Kill		•			Q drives only
QR	Queue Repeat		•			Q drives only
QX	Queue Load & Execute		•			Q drives only
NO	No Operation		•			Q drives only
SM	Stop Move		•			Q drives only
SS	Send String		•			All drives
TI	Test Input		•			Q drives only
WD	Wait Delay using Data Register		•			Q drives only
WI	Wait for Input		•			All drives
WM	Wait for Move to complete		•			Q drives only
WP	Wait for Position in complex move		•			Q drives only
WT	Wait Time		•			Q drives only

Drive Commands

Command	Description	NV	write only	read only	Imme-diate	Compatibility
AL	Alarm Code			•	•	All drives
AX	Alarm Reset (BUFFERED)	•				All drives
EP	Encoder Position					Servos and steppers with encoders
MD	Motor Disable		•			All drives
ME	Motor Enable		•			All drives
MN	Model Number			•	•	All drives
SA	Save Non-Volatile Parameters		•			All drives
SC	Status Code			•	•	All drives

Register Commands

Command	Description	NV	write only	read only	Immediate	Compatibility
CR	Compare Register		•			Q drives only
DR	Data Register for Capture		•			Q drives only
RC	Register Counter		•			Q drives only
RD	Register Decrement		•			Q drives only
RI	Register Increment		•			Q drives only
RM	Register Move		•			Q drives only
RR	Register Read		•			Q drives only
RW	Register Write		•			Q drives only
RX	Register Load (BUFFERED)					Q drives only
R+	Register Addition		•			Q drives only
R-	Register Subtraction		•			Q drives only
R*	Register Multiplication		•			Q drives only
R/	Register Division		•			Q drives only
R&	Register Logical AND		•			Q drives only
R|	Register Logical OR		•			Q drives only
TR	Test Register		•			Q drives only
TS	Time Stamp read		•			Q drives only

Immediate Commands

Com-mand	Description	NV	write only	read only	Imme-diate	Compatibility
AL	Alarm Code			•	•	All drives
AR	Alarm Reset (IMMEDIATE)		•		•	All drives
BS	Buffer Status			•	•	All drives
CE	Comm Error			•	•	All drives
CS	Change Speed	•			•	All drives
CT	Continue		•		•	All drives
GC	Current Command	•			•	Servo drives only
IA	Immediate Analog value			•	•	All drives
IC	Immediate Commanded Current			•	•	Servo drives only
ID	Immediate Distance request, in hex			•	•	All drives
IE	Immediate Encoder request, in hex			•	•	Servos and steppers with encoders
IF	Immediate Format			•	•	All drives
IH	Immediate High output		•		•	All drives
IL	Immediate Low output		•		•	All drives
IO	Immediate output status request				•	All drives
IP	Immediate position request, in hex			•	•	All drives
IQ	Immediate Current value			•	•	Servo drives only
IS	Input Status request			•	•	All drives
IT	Immediate Temperature			•	•	All drives
IU	Immediate DC Bus Voltage			•	•	All drives
IV	Immediate Velocity			•	•	All drives
IX	Immediate Position Error			•	•	Servos and steppers with encoders
MN	Model Number			•	•	All drives
QE	Queue Execute		•		•	Q drives only
QL	Queue Load		•		•	Q drives only
QS	Queue Save		•		•	Q drives only
QU	Queue Upload (to serial port)			•	•	Q drives only
RE	Re-start or Reset		•		•	All drives
RL	Register Load (IMMEDIATE)				•	All drives
RS	Request Status			•	•	All drives
RU	Register Upload		•		•	Q drives only
RV	Revision Level request			•	•	All drives
SC	Request Status in Hexadecimal			•	•	All drives
SJ	Stop Jogging		•		•	All drives
SK	Stop & Kill Buffer / Queue		•		•	All drives
ST	Stop		•		•	All drives