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Parker Compumotor 6K Serial Master Driver

Information Sheet for Crimson v2.0

Compatible Devices

Parker Compumotor 6K Series.

Verified Device

Parker 6K4-NK

Accessing Data

Please note: ECHO should be disabled for the connected PORT in the Parker 6K device.

Cmd	Description	Access
A	Acceleration	R/W
AA	Average Acceleration	R/W
AD	Deceleration	R/W
ADA	Average Deceleration	R/W
CMDDIR	Commanded Direction Polarity	R/W
COMEXC	Continuous Command Processing Mode	R/W
COMEXL	Continue Execution on Limit	R/W
COMEXR	Continue Motion on Pause/Continue Input	R/W
COMEXS	Continue Execution on Stop	R/W
D	Distance	R/W
DACLIM	DAC Limit	R/W
DRES	Drive Resolution	R/W
DRFEN	Enable/Disable Checking Drive Input Fault	R/W
DRFLVL	Drive Fault Level	R/W
DRIVE	Drive Enable	R/W
EFAIL	Encoder Failure Detect	R/W
ENCCNT	Encoder Count Reference Enable	R/W
ENCPOL	Encoder Polarity	R/W
ENCSEND	Encoder Step and Direction Mode	R/W
ERES	Encoder Resolution	R/W
ESDB	Stall Backlash Deadband	R/W

Cmd	Description	Access
ESK	Kill On Stall	R/W
ESTALL	Enable Stall Detect	R/W
FFILT	Following Filter	R/W
FGADV	Following Geared Advance	W
FMAXA	Follower Axis Maximum Acceleration	R/W
FMAXV	Follower Axis Maximum Velocity	R/W
FMCLEN	Master Cycle Length	R/W
FMCNEW	Restart Master Cycle Counting	W
FMCP	Initial Master Cycle Position	R/W
FOLEN	Follower Mode Enable	R/W
FOLMD	Master Distance	R/W
FOLRD	Denominator of Follower-To-Master Ratio	R/W
FOLRN	Numerator of Follower-To-Master Ratio	R/W
FPPEN	Master Position Prediction Enable	R/W
FSHFC	Continuous Shift	W
FSHFD	Preset Shift	W
FVMACC	Virtual Master Count Acceleration	R/W
FVMFRQ	Virtual Master Count Frequency	R/W
GO	Initiate Motion	W
GOL	Initiate Linear Interpolated Motion	W
HALT	Terminate Program Execution	W
HOM	Go Home	W
HOMA	Home Acceleration	R/W
HOMAA	Homing Average Acceleration	R/W
HOMAD	Home Deceleration	R/W
HOMADA	Homing Average Decleration	R/W
HOMBAC	Home Backup Enabale	R/W
HOMDF	Home Final Direction	R/W
HOMDG	Home Reference Edge	W
HOMV	Home Velocity	R/W
HOMVF	Home Final Velocity	R/W
HOMZ	Home to Encoder Z-channel Enable	R/W
INDUSE	Enable/Disable User Status	R/W
JOG	Jog Mode Enable	R/W
JOGA	Jog Acceleration	R/W
JOGAA	Jogging Average Acceleration	R/W
JOGAD	Jog Deceleration	R/W
JOGADA	Jog Average Deceleration	R/W
JOGVH	Jog Velocity High	R/W
JOGVL	Jog Velocity Low	R/W
JOY	Joystick Mode Enable	R/W
JOYA	Joystick Acceleration	R/W
JOYAA	Joystick Average Acceleration	R/W
JOYAD	Joystick Deceleration	R/W
JOYADA	Joystick Average Deceleration	R/W
JOYVH	Joystick Velocity Select Input High	R/W
JOYVL	Joystick Velocity Select Input Low	R/W

Cmd	Description	Access
LH	Hardware End-of-Travel Limit	R/W
LHAD	Hard Limit Deceleration	R/W
LHADA	Hard Limit Average Deceleration	R/W
LS	Soft Limit Enable	R/W
LSAD	Soft Limit Deceleration	R/W
LSADA	Soft Limit Average Deceleration	R/W
LSNEG	Soft Limit Negative Travel Range	R/W
LSPOS	Soft Limit Positive Travel Range	R/W
MA	Absolute/Incremental Mode Enable	R/W
MC	Preset/Continuous Mode Enable	R/W
MEPOL	Master Encoder Polarity	R/W
MESND	Master Encoder Step and Direction Mode	R/W
OUT	Output State	W
PA	Path Acceleration	R/W
PAA	Path Average Acceleration	R/W
PAD	Path Deceleration	R/W
PADA	Path Average Deceleration	R/W
PV	Path Velocity	R/W
RE	Registration Enable	R/W
REGLOD	Registration Lock-Out Distance	R/W
REGSS	Registration Single-Shot	R/W
S	Stop Motion	W
SCALE	Enable/Disable Scale Factors	R/W
SCLA	Acceleration Scale Factor	R/W
SCLD	Distance Scale Factor	R/W
SCLMAS	Master Scale Factor	R/W
SCLV	Velocity Scale Factor	R/W
SFB	Select Servo Feedback Source	R/W
SGAF	Acceleration Feedforward Gain	R/W
SGI	Integral Feedback Gain	R/W
SGILIM	Integral Windup Limit	R/W
SGP	Proportional Feedback Gain	R/W
SGV	Velocity Feedback Gain	R/W
SGVF	Velocity Feedforward Gain	R/W
SINAMP	Virtual Master Sine Wave Amplitude	R/W
SINANG	Virtual Master Sine Wave Angle	R/W
SINGO	Virtual Master - Initiate Internal Sine Wave	R/W
SMPER	Maximum Allowable Position Error	R/W
SOFFS	Servo Control Signal Offset	R/W
STRGTD	Target Distance Zone	R/W
STRGTE	Enable Target Zone Settling Mode	R/W
STRGTT	Target Settling Timeout Period	R/W
STRGTV	Target Velocity Zone	R/W

Cmd	Description	Access
TAS	Transfer Axis Status	R
TASX	Transfer Extended Axis Status	R
TDAC	Transfer DAC Voltage	R
TFB	Transfer Selected Feedback Device Position	R
TFS	Transfer Following Status	R
TIN	Transfer Onboard Input Status	R
TINO	Transfer Other Input Status	R
TLIM	Transfer Limits	R
TOUT	Transfer Output Status	R
TPC	Transfer Position Commanded	R
TPCME	Transfer Captured Master Encoder Position	R
TPE	Transfer Position of Encoder	R
TPER	Transfer Position Error	R
TPM	Transfer Position of Motor	R
TPMAS	Transfer Current Master Cycle Position	R
TPME	Transfer Position of Master Encoder	R
TPSHF	Transfer Net Position Shift	R
TPSLV	Transfer Position of Follower Axis	R
TRGLOT	Trigger Interrupt Lockout Time	R/W
TSS	Transfer System Status	R
TSTLT	Transfer Settling Time	R
TTASK	Transfer Task Number	R
TTIM	Transfer Timer	R
TUS	Transfer User Status	R
TVEL	Transfer Current Commanded Velocity	R
TVELA	Transfer Current Actual Velocity	R
TVMAS	Transfer Current Master Velocity	R
V	Velocity	R/W
VAR	Numeric Variable Assignment	R/W
VARB	Binary Variable Assignment	R/W
VARCLR	Variable Clear	W
VARI	Integer Variable Assigment	R/W

Ethernet Communications

Settings

Enable ethernet communications in the Parker 6K by the NTFEN1 command.

Cable Information

Standard 10-Base-T Ethernet Cable

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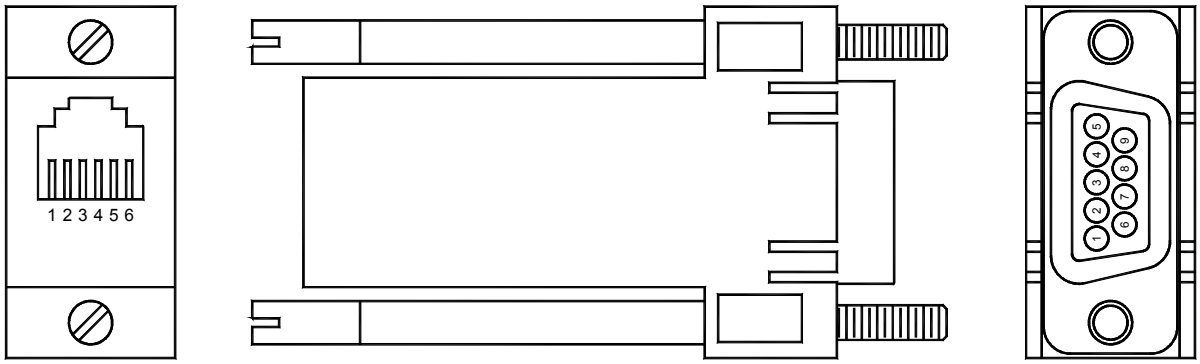
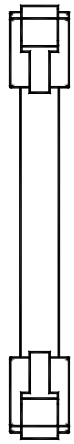
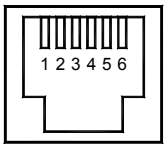
Communication Cable, G3 / Modular Controller / Data Station Plus to Parker 6K RS232.







RS232 PORT
(FROM RLC UNIT)

Connections			
FROM RLC UNIT	Name	CONNECTER PINOUT	
		RJ12	DB9 MALE
1	CTS	1	-
2	Rx	2	3
3	COMM	3	5
4	COMM	4	-
5	Tx	5	2
6	RTS	6	-

The above table denotes the pin names of the RS232 port. When connecting, the pin name at the RS232 port is connected to the opposite of that pin name at the destination device.