		6K Command	ACR Command*	Shorthand version	See Also	ACR Command Not
Scaling Setup		SCLA	PPU			Requires RES after changing PPU
		SCLD	PPU			"
		SCLV	PPU			"
		SCLMAS	GEAR PPU			
Limits		LH3,1	HLIM X3 Y1			
		INFNCn-mR	HLBIT Xn			Can only assign Positive EOT. Negative and home in
		INFNCn-mS	*no equivalent*			Negative automatically assigned as next contiguous ir
		INFNCn-mT	*no equivalent*			Home input automatically assigned as next contiguou
		LHAD100,200	HLDEC X100 Y200			
		LS2,3	SLIM X2 Y3			
		LSNEG -1: LSPOS +1	SLM X1			Could also set differently SLM X(-10,25)
		LIMLVL000	SET 16144 : SET 16145 : CLR16146			Axis0 bits shown. SET and CLR bits as appropriate (I
		TLIM	?BIT16132			Positive EOT (bit shown is for axis0)
			?BIT16133			Negative EOT
			?BIT 16130			Home Input
Homing		HOMZ	MSEEK			Home to a z-channel (mode 0)
		HOM0	JOG HOME X1			ACR90x0 only command
		HOM1	JOG HOME X-1			ACR90x0 only command
			MSEEK			Home to a trigger input (mode 2)
		HOMVF	JOG HOMVF			Home Backup Enable bit must be on (BIT 16152)
		HOMA	JOG ACC			
		HOMAA/HOMADA	JOG JRK			
		HOMAD	JOG DEC			
		HOMBAC1	SET16152			
		HOMDF1	SET16154			
		HOMEDG1	SET16153			
		PSET	RES		JOG RES, GEAR RES, CAM RES	Use to reset or preset the position counters for an axis
			REN		JOG REN	Zeroes the Current Position (MOV) register and adds parameter
Non-Interpolated Motion	*Incremental Motion*	D+4:MC0:MA0:GO1	JOG INC X4		JOG ACC, JOG DEC, JOG VEL	
		D+4,-3:MC00:MA00:GO11	JOG INC X4 Y-3			
	Absolute Motion	D:MC0:MA1:GO1	JOG ABS X4		JOG ACC, JOG DEC, JOG VEL	Move to the JOG OFFSET register's absolute position
	Continuous Motion	D+:MC1:GO1	JOG FWD X	SET 796	JOG ACC, JOG DEC, JOG VEL	Flags shown for Axis0
		D-:MC1:GO1	JOG REV X	SET 797		
		S1	JOG OFF X	CLR 796 CLR 797		
Non-Interpolate Motion Trajectory		A	JOG ACC			Scaled by PPU to user units/second^2
		AD	JOG DEC			Scaled by PPU to user units/second^2
		V	JOG VEL			Scaled by PPU to user units/second
		AA/ADA	JOG JRK			Scaled by PPU to user units/second^3. Pure S-Curve
Interpolated Motion		S	SET BIT 523	SET 523		Flags shown for Master0. Uses DEC setting
		K	SET BIT 522	SET 522		Uses no deceleration ramp.
		!K	CTRL-X or CTRL-Z			CTRL-X stops all motion for all programs , CTRL-Z als
						clears KAMR bits
		KDRIVE	SET BIT 8471	SET 8471		BITS 8471, 8503, 8535, 8567, 8599, 8631, 8663, 869
	Linear	D2,3:MC00:MA11:GOL11	MOV X2 Y3	X2 Y3		Absolute moves
		D7,8:MC00:MA00:GOL11	MOV X/7 Y/8	X/7 Y/8		Incremental moves
		D4,5:MC00:MA10:GOL11	MOV X4 Y/5	X4 Y/5		Mixed moves
	Circular 2D	PARCOM	CIRCCW			Counter-clockwise
		PARCOP	CIRCW			Clockwise
		PARCOM/PARCOP	SINE			
		PARCM	no equivalent			
		PARCP	no equivalent			
	Circular 3D	no equivalent	TARC			Axes must have same PPU
Interpolated Motion Trajectory		PA	ACC			Scaled by PPU to user units/second^2
		PAD	DEC/STP			Scaled by PPU to user units/second^2

		6K Command	ACR Command*	Shorthand version	See Also	ACR Command Not
		PV	VEL		IVEL, FVEL, F	Scaled by PPU to user units/second
		PAA/PADA	JRK			Scaled by PPU to user units/second^3. Pure S-curve ACC**2/VEL"
Interpolated Motion (cont'd)		PAXES	TANG			
Following		FOLEN	GEAR ON/OFF		LOCK can be used for gantry axes	Control flags may be used to control gearing
		FOLMAS	GEAR SRC		GEAR RATIO	GEAR RATIO sign determines direction
		FOLRN	GEAR RATIO			Use ratio rather than decimal number, ex. "(1/10)" inst
		FOLRD	GEAR RATIO			GEAR RATIO is a 64-bit floating point value
		FOLMD	GEAR ACC/DEC			GEAR ACC/DEC is change in **ratio** over time
		SCLMAS	GEAR PPU			
		FMCLEN	No direct equiv. Use MOD			EncPos MOD PPU
		NMCY	No direct equiv.			Can use simple division algorithm and use whole num
Tuning		SGP (mV)	PGAIN			PGAIN = SGP/1000
		SGV (uV)	DGAIN		Scale gains accordingly. All ACR gains are in volts, 6K gains are in volts, millivolts or microvolts. See Torque Mode Tuning document on "Sample Files" webpage for tuning tutorial.	DGAIN = SGV/1e6
		SGI (mV)	IGAIN			IGAIN = SGI/1000
		SGILIM (mV)	ILIMIT			ILIMIT = SGILIM/1000
		SGVF (uV)	FFVEL			FFVEL = SGVF/1e6
		SGAF (uV)	FFACC			FFACC = SGAF/1e6
		DACLIM (V)	TLM			TLM = DACLIM
		TDAC	PRINT P6400	?P6400		?P*nnnn* prints the value in parameter nnnn
		DAC	P6400			
Communications *(defaults shown)*		NTADDR192,168,10,30	IP "192.168.10.40"			Requires ESAVE and REBOOT to take effect
		NTMASK255,255,255,0	IP MASK "255.255.255.0"			
		BAUD	uses autobaud detect		P7013, P7029	Use P7013 to disable autobaud detect. Example "P7(no parity, 8 data bits,1 stop bit. ESAVE!
Variables		VARB1	*User Flag Parameters*		P4100-4104, P4156-4159	Must dimension variables first. DIM SV(10) would dim
		VARI1	LV0			Variables start at "0" for ACR controllers. LV, SV, DV programs.
		VARS1	$V0			Must dimension number and length of string variables ension 10 variables at 80 characters each.
		VAR1 - 255	SV0 or DV0			32/64-BIT floating point local variables. Dimension in
		VAR1 - 255	P0 - P4095			64-BIT floating point global variables. Need to dimens
		No Equivalent	DIM			Used at various prompts to find variables dimensioned
Position Counters		1TPC	?P12295			"Secondary Setpoint" in raw counts. IT is the sum off and BSC
		1TPE	?P12290			Actual Position in raw counts, depends upon ENC SR
		1TPER	?P12291			Following Error in raw counts
		!TPCE	?P12292		INTCAP, HSINT, GEAR ON/OFF TRG	Hardware Position capture in raw counts
		ENCPOL1	ENC0 MULT -4			valid values are "4" and "-4" for ACR9000. EPL axes
		SMPER 0.25,0.33	EXC X0.25 Y0.33			Does not get changed when PPU changed
		SMPER0	CLR 8469			EXC X0 does disable excess error checking
Program		BREAK	END			Used to terminate program
		COMMENT (;)	REM			Comment is stored
			Apostrophe (')			Comment is stripped. MUST be on it's own line in pro
		DEL	NEW			Automatically performed by ACR-View, not needed in
		DEF	PROGRAM			Starts program definition
		END	ENDP			Used to terminate program definition
		GOTO *label*	GOTO *label*			If using auto-numbered programs
			GOTO *line number*			If using manual-numbered programs
		GOTO *program*	GOTO *label*			
		GOSUB *label*	GOSUB *label*		RETURN	
		GOSUB *program*	GOSUB *label*		RETURN	You cannot GOSUB to another program with ACR cor denoted by label in the same program.

		6K Command	ACR Command*	Shorthand version	See Also	ACR Command Not
		IF-NIF	IF-THEN			
		IF-NIF	IF-ELSE-ENDIF			
		JUMP	No equivalent command			Use GOTO, but nesting is not destroyed.
Program (cont'd)		PASSWD	PASSWORD			
		PLCP	PLCn			n = PLC number 0 - 7
		RESET	REBOOT			
		RETURN	RETURN			
		STEP1	BLK			
		STEP0	AUTO			
		STARTP	PBOOT			All PROG's and PLC's can PBOOT
		T	DWL			Minimum dwell time is 1 millisecond
		TPROG	LIST		BIT 5651	"SET5651" to show line numbers with LIST command
		TRACE1	TRON		*must then LISTEN or LRUN	Use ESC key to get out of listen mode. TRON only s SET5651 then LIST program to see program line num
		TRACE0	TROFF			
		WAIT (IN.1 = b1)	INH 0			
		WAIT (1PE > 10)	IHPOS P6144(10*P12375,0)			Position values are in raw counts in ACR. Position va (P12375) before using. The ",0" denotes timeout peri
		WHILE	WHILE			
		NWHILE	WEND			
		REPEAT/UNTIL	No equivalent command			
Drive Commands		DRIVE0	DRIVE OFF X	CLR 8465		AXIS0 DRIVE OFF
		DRIVE1	DRIVE ON X	SET 8465		AXIS0 DRIVE ON, start EPLC first on 9030/9030 EPL *Axis LED: Green = Enabled, Red = Disabled and Fau*
		No equivalent	DRIVE RES X			AXIS0 DRIVE RES, toggles reset input on certain driv
I/O Control		OUT1	SET 32	BIT32 = 1		Could also use P4097 = P4097 OR 1
		OUT0	CLR 32	BIT32 = 0		Could also use P4097 = P4097 AND 2**31
		OUTXXX1	SET 35			
		OUTXXX0	CLR 35			
		TIN	?P4096			Response is a decimal representation of binary bit pat
		TIN.1	?BIT0			Reports back a 0 (zero) for inactive, -1 for active input
		1TIN	?P4104			Response is a decimal representation of binary bit pat
		TOUT	?P4097			Response is a decimal representation of binary bit pat
		1TOUT	?P4105			Response is a decimal representation of binary bit pat
		TOUT.1	?BIT32			Reports back a 0 (zero) for inactive, -1 for active outpu
Other		SSFR	PERIOD		AXISn OFF/ON	Turn off unused axes to reduce DSP load
		BAUD	P7013 = nnnnn		ESAVE required	P7013 = 33664 : ESAVE : REBOOT will force 38400,n
		TREV	VER			Also can use P7042 and P7043 to retrieve VER and U
		TCOM	HELP			Shows a list of reserved words to not be used as alias
		ENCSND0	ENC0 SRC0			Quadrature encoder mode
		ENCSND1	ENC0 SRC1			Step and Direction encoder mode
			ENC0 SRC2			CW/CCW Encoder mode
			ENC0 SRC3		ENC WIDTH, ENC CLOCK, ENC LIMIT, ENC WIDTH	SSI Encoder mode
		CMDDIR	SCALE			Could also use ENC MULT and DAC GAIN together t
		EPM	PM		PM REN, PM SCALE, PM VEL, PM ACC, PM ON, PM OFF	PM REN will also set MULT command
		ANI	P6408			ADC object parameters
		ANO	P6400			DAC object parameters
		AS, ASX	P4120, 4168, 4296, 4360, 4600			There are five groups of flags for ACR9000

* "P" parameters and flags will show the first axis or master flag. The others can be found in help file.