

ShopBot Control Software COMMAND QUICK REFERENCE GUIDE

Parameters in Blue available in Version 3 only

File Category Commands		
File: execute Part File	FP	<i>/Nm, {pX,pY,pZ,Rp,Ofst,plnge, Tb, z0, pA, pB}</i>
File: Edit	FE	<i>/Nm</i>
File: New blank Part File	FN	
File: Goto/Single Step	FG	<i>/Nm, { pX, pY, pZ, Rp, Ofst, plnge, Tb, z0}</i>
File: Conversion	FC	<i>/Nm</i>
File: Set drive/directory	FS	<i>Path, mask</i>
Move Category Commands		
Set Mode to Absolute Distance (SA) or Relative Distance (SR)		
Move X axis	MX	<i>new-X</i>
Move Y axis	MY	<i>new-Y</i>
Move Z axis	MZ	<i>new-Z</i>
Move 2 axis	M2	<i>new-X, new-Y</i>
Move 3 axis	M3	<i>new-X, new-Y, new-Z</i>
Move Home	MH	(Move to 0, 0 in X, Y; with Safe-Z pull-up if enabled)
Move Acc axis	MA	<i>new-Acc value</i>
Move B Axis	MB	<i>new-B</i>
Move 4 Axis	M4	<i>new-X, new-Y, new Z, new-A</i>
Move 5 Axis	M5	<i>new-X, new-Y, new Z, new-A, new-B</i>
Motors OFF	MO or M0	
Move Speeds	MS	<i>X,Y-Move-Speed, Z-Move-Speed (see also [VS])</i>
Jog Category Commands		
Set Mode to Absolute Distance (SA) or Relative Distance (SR)		
Jog X axis	JX	<i>new-X</i>
Jog Y axis	JY	<i>new-Y</i>
Jog Z axis	JZ	<i>new-Z</i>
Jog 2 axes	J2	<i>new-X, new-Y</i>
Jog 3 axes	J3	<i>new-X, new-Y, new-Z</i>
Jog Home	JH	(Jog to 0, 0 in X, Y; with Safe-Z pull-up if enabled)
Jog Acc axis	JA	<i>new-Acc value</i>
Jog B Axis	JB	<i>new-B</i>
Jog 4 Axis	J4	<i>new-X, new-Y, new Z, new-A</i>
Jog 5 Axis	J5	<i>new-X, new-Y, new Z, new-A, new-B</i>
Jog Speeds	JS	<i>X-Jog-Speed, Z-Jog-Speed (see also [VS])</i>
Cut Category Commands		
CUTS Outside, Inside, or True; Set Cutter Diameter with [VC]		
Cut Circle	CC	<i>Dia {,O-I-T,Dir, B<, E<, Plunge, Rep, pX, pY [1-Tab 2-Pckt 3-Spr 4-SprBp], 1-no pullup, 1-plgfrom0}</i>
Center Point Circle	CP	<i>Dia {x,y, O-I-T, Dir, B<, E<,Plunge, Rep, pX, pY, [1-Tab 2-Pckt 3-Spr 4-SprBp], 1-no pullup,1-plgfrom0}</i>
Cut quick Arch	CA	<i>Width,Height {,O-I-T, Dir, Alignmnt<, Plng, Rep, pX, pY, 1-Tab, 1-no pull-up, 1-plgfrom0}</i>
Cut G-code Circle	CG	<i>Dia, endX, endY, Xcent, Ycent {,O-I-T, Dir,Plg,Rep,pX, pY, [1-Tab 2-Pckt 3-Spr 4-SprB], 1-no-up, 1-plgfrm0}</i>
Cut Rectangle	CR	<i>LengthX {,LengthY, O-I-T, Dr, Strt, Plg, Rp, [1-Tab 2-Pckt], 1-plunge from 0}</i>
Custom Cut Setup	CS	
Zero Category Commands		
Carefull! No Parameters Required. Zeroing Happens on 2 nd Letter of Command		
Zero X axis	ZX	
Zero Y axis	ZY	
Zero Z axis	ZZ	
Zero Acc Axis	ZA	
Zero B Axis	ZB	
Zero X & Y (2D)	Z2	
Zero X, Y, & Z (3D)	Z3	
Zero All 4 Axes	Z4	
Zero All 5 Axes	Z5	
Zero Table Base Coordinates	ZT	(Resets Location in terms of Base Values)

Settings Category Commands		
Mostly toggles Settings without parameters		
Set to Absolute Distances	SA	
Set to Relative Distances	SR	
Set to PREVIEW Mode	SP	
Set to MOVE/CUT Mode	SM	
Set to Keyboard Arrow Control	SK	(shortcut = 'K')
cLear All Variables	SL	
Set Output Switch	SO	<i>Switch#(1-4), 1-ON, 0-Off (#4 has options)</i>
Set Warning Duration	SW	<i>Secs</i>
Set Continuous Movement Block	SC	(files only) <i>0-OFF, 1-ON, 2-update & reset</i>
revert to Table Base Coordinates	ST	(current location values will be lost)
Set File and Move Limit Check	SF	<i>0-OFF, 1-ON</i>
Switch to Table Top View	SV	(also Space-Bar)
Values Category Commands		
<i>Version 3 listed below: *see other side for parameters in Version 2</i>		
Values for Cutter, etc	VC	<i>CutterDia, kX, kY, sZ, dirZplng, pk%, sfA</i>
Values for Preview Screen	VP*	<i>grid, tblX, tabLY, tblZ, sim, rot, center, show jog, rnd</i>
Variable Define	VV	<i>Name, Value</i>
Values of Speeds	VS	<i>mvXY, mvZ, mvA, mvB, jXY, jZ, jA, jB</i>
Values of Ramp	VR	<i>mrXY, mrZ, mrA, mrB, jrXY, jrZ, jrA, jrB</i>
Values for taBbing	VB	<i>dist pull-up, dist next, size, dist leads,1-ON 0-Off,#</i>
Values of locAtion	VA	<i>NEW value for locX, locY, locZ, locA, locB, NEW value for baseX, baseY, baseZ, baseA, baseB</i>
Values for Units	VU	<i>unX, unY, unZ, unA, CirRes, sCyX, sCyY, SmCir,unB</i>
Values for Display	VD*	<i>prmts, #axes, units, unitsA, unitsB, consl, com, fDist, remote, wr part log, wr sys log</i>
Values for table Limits	VL	<i>loX, hiX, loY, hiY, loZ, hiZ, loA, hiA, 0-OFF 1-ON, loB, hiB</i>
Values Input addresses (Change Axis address)	VI*	<i>com#, iniSeg, regSeg, corRate, drv1, drv2, drv3, drv4, spd, drv5</i>
Values iNput switch mode	VN	<i>limOn, Stop Switch setting</i>
Value Height Control	VH	<i>modeH, spd, noChg</i>
Not used in Version 3	VT, VE, VK	<i>See other side or Com Ref for more info</i>
Record Category Commands		
Record Replay	RR	<i>{#CommandsBack [blank=1] [A=ALL], #Reps</i>
Replay All	RP	
Record Save & edit	RS	<i>{Filename, #CommandsBack [blank=ALL]}</i>
Record Activate	RA	
Record Inactivate	RI	
Reset Record	RZ	
Utility Category Commands		
Utility: Name Editor	UN	<i>{Path &} filename [default=EDIT] (Notepad OK)</i>
Utility: calcUlator	UU	
Utility: List Variables	UL	<i>(list can be edited and/or saved)</i>
Utility: display Values & settings	UV	
Utility: Reset Defaults	UR	<i>{A=All values including calibration and location}</i>
Utility: Save current config	US	
Utility: Diagnostic display	UD	(UV and UD are automatically saved in PROBLEM.LOG)
Utility: Install Firmware	UI	<i>(Install Control Box Firmware)</i>
Utility: Calibrate	UC	<i>Not used in Version 3, see Command Reference</i>
Virtual Tools		
Part Wizard	TP	<i>Launch Part Wizard from ShopBot Control Software</i>
Typesetter	TT	<i>V-Carve Fonts on your computer</i>
Copy Machine	TC	<i>Use with Digitizing Probe to copy existing models</i>
Drill Press	TD	<i>Create routines for drilling holes</i>
Header Writer	TH	<i>Insert notes about bits, ,zeroing locations, etc to .sbp files</i>

Parameter Ordering for Extended ShopBot Commands

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	param #													
===== FILE COMMANDS														
FP	Part File Load & Execute	pX	pY	pZ	Rp	Ofst	plnge	Tb	z0	pA	pB			
FE	Edit a Part File													
FG	Go To a Line in a Part File	pX	pY	pZ	Rp	Ofst	plnge	Tb	z0	pA	pB			
FC	Convert a file to sbp	dxf or gcode or hpgl filename (.dxf, etc)												
FS	Set Directory for PART Files	mask												
===== CUT COMMANDS														
CC	Circle/Arc	O-I-T	Dr	B<	E<	Plg	Rp	pX	pY	t-p-s-b	0Up	z0		
CP	Circle/Arc from Center Point	cX	cY	O-I-T	Dr	B<	E<	Plg	Rp	pX	pY	t-p-s-b	0Up	z0
CA	Arch (Quick Define)	Ht	O-I-T	Dr	A<	Plg	Rp	pX	pY	tab	0Up	z0		
CG	Code Format Circle Arc	eX	eY	cX	cY	O-I-T	Dr	Plg	Rp	pX	pY	t-p-s-b		
CR	Rectangle	lenY	O-I-T	Dr	B<	Plg	Rp	fb-pkt	z0	R<				
===== VALUE COMMANDS VERSION 3 (WINDOWS)														
If you are using Version 3 on your design computer, and Version 2 on your ShopBot computer, use the Version 2 parameters in your .sbp file (see below)														
VC	Cutter Diameter and Safe Z Pull Up	kX	kY	sfZ	dirZ/plng	pkt%	sfA	sfB						
VP	Preview Screen Set Up	tblX	tblY	tblZ	sim	rot	center	jog	md					
VV	Variable Define	value												
VX	Speed Settings	mvA	mvB	mvC	jXY	jZ	JA	JB						
VR	Ramp Values	mrZ	mrA	mrB	jrXY	jrZ	jrA	jrB	distM	distrJ	%T	minD		
VB	Tabbing Values	next	size	leads	ON-OFF	num	dist							
VA	Axis Location Reset (Careful)	locX	locZ	locA	locB	baseX	baseY	baseZ	baseA	baseB				
VU	Unit Values (Calibration)	unX	unZ	unA	CirRes	sCyx	sCyy	SmallCir	unB					
VD	Display Settings	#axes	units	unitsA	unitsB	consl	com	fDist	remote	write part	write sys log			
VL	Limits for Table or Work Area	hiX	loY	hiY	loZ	hiZ	loA	hiA	ON	loB	hiB			
VI	Changes Axis Address	iniSeg	regSeg	corRate	drv1	drv2	drv3	drv4	spd	drv5				
VN	iNput Switch	Stop												
VH	Height Control Plasma	spd												
===== COMMANDS THAT ARE DIFFERENT IN VERSION 2 (DOS)														
If you are using Version 3 on your design computer, and Version 2 on your ShopBot computer, use the Version 2 parameters in your .sbp file														
VP	Preview Screen Setup	ZoomScale	botmX	botmY	MaterialThick/delay	aspect	1-track ON							
VS	Speed Settings	xy-MoveSpd	z-MoveSpd	a-MoveSpd	xy-JogSpd	z-JogSpd	a-JogSpd							
VR	Vamp Values	mvXY-ramp	mvZ-ramp	mvA-ramp	jogXY-ramp	jogZ-ramp	jogA-ramp	move ramp dis	log ramp dis	Thresh%	min			
VT*	Tolerances (encoder sensitivity 1000)	StepStall1000/StepSlip[20]												
VA	Axis Location Reset (Careful!!!)	StepStall100/StepSlip[10]												
VD	Display Settings	NEW value for Y	Z	acc	TableBase X	Y	Z	acc						
VE*	End Angle Default for Circle Command	Prompts (1-Of) ColorScheme Units (0-inches 1-metric)												
VK*	Backlash Settings (...not implemented)	1 1 1-spec full as str +360deg 0-also allow 0deg full (old vers)												
VI	Addresses (rarely need changing)	EncX	EncY	MchX	MchZ	MchA	RunAv	A#						
FK*	check Syntax in a PART File	8 COMM Port# iniSeg regSeg corRate Z# A#												
*these commands are not used in Version 3														