

BLACKTIP SETTINGS POCKET GUIDE

The following settings are specific to BlackTip v0.4 (George)

User should only adjust orange settings (White settings are for factory adjustment)

Command	Definition	Description	Default
To change values, type the command code followed by a new value (example: "\$d4" sets default speed to 4)			
\$S	View Settings	Displays current BlackTip settings (no value required)	
\$#	Reset All	Resets all settings to default (no value required)	
\$w	Magic	Not used	27F3
\$d	Speed Default	Initial speed of the BlackTip at startup	3
\$M	Maximum Speed	Sets the number of speeds available (up to 8 speeds possible)	8
\$U	Use Safety	Turn safe start on or off (1 = On / 0 = Off)	1
\$T	Trigger On Time	Double click timing setting (should be no reason to change)	400
\$t	Trigger Off Time	Double click timing setting (should be no reason to change)	500
\$r	Ramp Rate	Speed ramp rate (the aggressiveness of acceleration between speeds)	1500
\$m	Migrate Rate	When you restart the scooter after releasing the trigger, the scooter resumes at a slower speed based on the time off the trigger. The longer the trigger is off, the closer the resumed speed gets to the default gear. This setting controls how fast the speed changes. Value is in milliseconds per gear.	5000
\$G	Guard High Value	Safe start high current setting (should be no reason to change)	6
\$g	Guard Low Value	Safe start low current setting (should be no reason to change)	0.5
\$h	Guard Current Limit	Max permissible battery current when in safe start mode (should be no reason to change)	0.3
\$j	Guard ERPM Limit	ERPM speed in safe start mode (should be no reason to change)	900
\$k	Guard Max ERPM	Max permissible ERPM in safe start mode (should be no reason to change)	1500
\$c	Safe Start Count	Number of current measurements setting the duration of safe start mode (50 is approx 3 sec)	50
\$F	Fail Count	Number of failed current measurements required to exit safe start mode (should be no reason to change)	5
\$a	Current Filter	Safe start current filter setting (should be no reason to change)	0.2
\$b	Display Brightness	Display brightness	6
\$R	Display Rotation	Rotation of display (0-3) Each number rotates display 90 degrees	0
\$p		How long to display battery status when initially connecting the power (milliseconds)	10000
\$f		How long to wait after coming off trigger until displaying the battery status (milliseconds)	3000
\$D		How long to display battery status when coming off trigger (milliseconds)	6000
\$n		How long to display the new speed when changing motor speeds (milliseconds)	3500
\$i	Battery Imbalance Voltage	Voltage difference at which display indicates there is a battery imbalance	2
\$x	Battery 2 Resistor Ratio	Set to 0 to disable if you keep getting battery errors	14
\$l	Logging Commands	Controls information shown in the terminal when monitoring controller on USB	
		\$l0 -> Turn all logging off	
		\$l1 = Speed log ON	
		\$l2 = Safety log ON	
		\$l4 = Display log ON	Includes battery voltages
\$l8 = Trigger log ON			
\$S1	Speed 1 ERPM	ERPM setting for this gear	1525
\$S2	Speed 2 ERPM	ERPM setting for this gear	2300
\$S3	Speed 3 ERPM	ERPM setting for this gear	3100
\$S4	Speed 4 ERPM	ERPM setting for this gear	3525
\$S5	Speed 5 ERPM	ERPM setting for this gear	3900
\$S6	Speed 6 ERPM	ERPM setting for this gear	4150
\$S7	Speed 7 ERPM	ERPM setting for this gear	4450
\$S8	Speed 8 ERPM	ERPM setting for this gear	4850
\$L1	Speed 1 Current Limit	Current limit for this gear	1
\$L2	Speed 2 Current Limit	Current limit for this gear	2.2
\$L3	Speed 3 Current Limit	Current limit for this gear	3.8
\$L4	Speed 4 Current Limit	Current limit for this gear	6.2
\$L5	Speed 5 Current Limit	Current limit for this gear	9.6
\$L6	Speed 6 Current Limit	Current limit for this gear	12.8
\$L7	Speed 7 Current Limit	Current limit for this gear	17
\$L8	Speed 8 Current Limit	Current limit for this gear	22.8
\$B1		Battery bar voltage settings (above this level = 2 bars)	34
\$B2		Battery bar voltage settings (above this level = 3 bars)	36
\$B3		Battery bar voltage settings (above this level = 4 bars)	38