

Command sequence (Firing)

- 0 MCAT subsystem is turned on
- 1 Set "Control Power Management" to ON
- 2 Choose from "Set Run Mode" to start IPD (A-F)
- 3 Wait 5 x Pulses (min.)
- 4 Activate Thrusters as needed (Z-K)

< CRITICAL

Command sequence (After a maneuver is complete)

- 0 Complete Firing sequence, or reach waypoint
- 1 Deactivate thrusters "Z" / reactivate (Y-K) as needed, no delay required.
- 2 When all thrusters use is finished, and deactivated "Z"
- 3 Wait 5 x Pulses (min.)
- 4 Deactivate IPD for the last mode (a-f)

< CRITICAL

Thruster Channel P18H activation table

selection word:
[Ch1Ch2Ch3Ch4]

decimal	binary	cmd (on)	cmd (off)	
0	0000	N/A	Z	DEFAULT
1	0001	Y	Z	
2	0010	X	Z	
3	0011	W	Z	
4	0100	V	Z	
5	0101	U	Z	
6	0110	T	Z	
7	0111	S	Z	ignore for Bricsat
8	1000	R	Z	
9	1001	Q	Z	
10	1010	P	Z	
11	1011	O	Z	ignore for Bricsat
12	1100	N	Z	
13	1101	M	Z	ignore for Bricsat
14	1110	L	Z	ignore for Bricsat
15	1111	K	Z	

Other Commands selection table

Command	action		cmd (on)	cmd (off)	
Show Menu	displays menu		J	N/A	
Control P18L	controls P18L1-4		I	i	
Control Power Management	controls PM-A		H	h	
I2C Master Send	multi-master I2C send		G	N/A	ignore for BricSAT
I2C Master Receive	multi-master I2C test		g	N/A	ignore for BricSAT
I2C Telemetry Test	telemetry msg send test		j	N/A	ignore for BricSAT
Set Run Mode to 50 Hz	Set F=50 Hz, enable P18L		F	f	
Set Run Mode to 40 Hz	Set F=40 Hz, enable P18L		E	e	
Set Run Mode to 30 Hz	Set F=30 Hz, enable P18L		D	d	
Set Run Mode to 20 Hz	Set F=20 Hz, enable P18L		C	c	
Set Run Mode to 10 Hz	Set F=10 Hz, enable P18L		B	b	
Set Run Mode to 1 Hz	Set F=1 Hz, enable P18L		A	a	