GOAT Communication Procol

For communication between the Raspberry Pi minicomputer and the Arduino controller.
The Raspberry Pi sends these commands. The Arduino responds with debug information and at the end of each commands responds with OK.

Syntax: <command><space><parameter><space><value>\n
Response when complete: OK\n

Command	Parameter	Value	Description
arm	initialize	0	Initialize arm to starting (and resting) position
arm	shutdown	0	Move arm to resting position, then release servos
arm	rest	0	Move arm to resting position
arm	up	0	Move arm straight up to get it out of the way of the camera
arm	waist	0 to 180	Move arm waist to <0 to 180> degrees
arm	shoulder	0 to 180	Move arm shoulder to <0 to 180> degrees
arm	elbow	0 to 180	Move arm elbow to <0 to 180> degrees
arm	wrist	0 to 180	Move arm wrist to <0 to 180> degrees
arm	twist	0 to 180	Move arm twist to <0 to 180> degrees
arm	grab	0 to 180	Move arm grabber to <0 to 180> degrees
arm	grab_open	0	Move arm grabber to open
arm	grab_tp_roll	0	Move arm grabber to tp roll grabby
arm	grab_close	0	Move arm grabber to close
armPW	waist	0 to 3000	Set arm waist to <0 to 3000> microseconds pulsewidth (for testing and calibration)
armPW	shoulder	0 to 3000	Set shoulder waist to <0 to 3000> microseconds pulsewidth (for testing and calibration)
armPW	elbow	0 to 3000	Set elbow waist to <0 to 3000> microseconds pulsewidth (for testing and calibration)
armPW	wrist	0 to 3000	Set wrist waist to <0 to 3000> microseconds pulsewidth (for testing and calibration)
armPW	twist	0 to 3000	Set twist waist to <0 to 3000> microseconds pulsewidth (for testing and calibration)
armPW	grab	0 to 3000	Set grabber waist to <0 to 3000> microseconds pulsewidth (for testing and calibration)
move	initialize	0	Initialize motion system
move	shutdown	0	Shut down motion system
move	forward	?	Move forward <?>
move	backward	?	Move backward <?>
move	left	?	Move left <?>
move	right	?	Move right <?>
move	rotateRight	?	Rotate right <?>
move	rotateLeft	?	Rotate left <?>