

SARLACC controllable items (bjoerngiesler, 18.03.2013)

	Item	Number	Calls/Item	Total Calls	Explanation
Dome Motion	Dome turn	1	2	2	2 turn speed, rotation setpoint
	HP	3	1	3	3 two servos in one call -- do we need independent motion? Encode "random" as special value
	Pie Panels	4	1	4	4 excepting the HP and periscope panels
	Circular Panel	1	1	1	1 center
	Lower Panels	6	1	6	
	Periscope	1	2	2	2 raise/lower, +1 extra
	Lifeform scanner	1	3	3	3 raise/lower, turn, +1 extra
	Drink arm	1	4	4	4 expand/retract, open/close valve, sense glass, +1 extra
	Fire extinguisher	1	2	2	2 activate / deactivate, +1 extra
Dome Lights	HP	3	1	3	3 RGB is one DOF
	PSI	2	1	2	2 RGB is one DOF
	Logics	3	1	3	3 Potentially complicated API (random, text, bitmapped...) -- let's hide this behind one call
	Magic Panel	1	1	1	1 RGB is one DOF
Body Motion	Front arms	2	1	2	
	Long side doors	2	1	2	
	Extra front doors	3	1	3	
	Small panels front	7	1	7	
	Back panels	10	1	10	10 Guess; don't have a reference on hand right now
	CPU arm	1	4	4	4 Raise/lower, extend/retract, rotate, +1 extra
	Gripper arm	1	5	5	5 Raise/lower, extend/retract, rotate, open/close gripper, +1 extra
	Zapper	1	3	3	3 Expted/retract, zap, +1 extra
	Buzzsaw arm	1	5	5	5 Raise/lower, extend/retract, rotate, activate/deactivate, +1 extra
Legs / Feet	Foot motion	1	2	2	2 Speed, hardware brake
	Boosters	2	2	4	4 Open/close booster covers, extend/retract boosters
Sound	Sound	1	1	1	1 Play sound
	Amplifier	1	1	1	1 Set volume
2-3-2 System					??? clueless
Sensing Inner State	Battery voltage	4	1	4	4 Let's admit up to four battery circuits
	Odometry	1	1	1	
	Dome rotation	1	1	1	
	Subsystem capability	1	1	1	1 What capabilities does this droid have?
	Subsystem activation state	1	1	1	1 Which subsystems are active?
	Subsystem error state	1	1	1	1 Which subsystems are flagged as non-working?
Distance Sensing	Single sensor value	16	1	16	16 Is this enough?
	Vector of sensor values	1	1	1	1 You probably want this as often as possible anyway
Special	Send RC channels			1	1 How many channels are needed? 10? But we want so send them in one call.
	Change RC mapping			1	1 Change mapping of what channel does what.
	OSC			1	1 Send OSC packet
	Script			1	1
Sum				115	

Calls
MOTION_DOME_SPEED, MOTION_DOME_ROT_SETPOINT
MOTION_HP_0, MOTION_HP_1, MOTION_HP_2
MOTION_PIEPANEL_0, MOTION_PIEPANEL_1, MOTION_PIEPANEL_2, MOTION_PIEPANEL_3
MOTION_CIRCULARPANEL
MOTION_DOMEPANEL_0, MOTION_DOMEPANEL_1, MOTION_DOMEPANEL_2, MOTION_DOMEPANEL_3, MOTION_DOMEPANEL_4, MOTION_DOMEPANEL_5
MOTION_PERISCOPE_LIFT, MOTION_PERISCOPE_EXTRA
MOTION_SCANNER_LIFT, MOTION_SCANNER_TURN, MOTION_SCANNER_EXTRA
MOTION_DRINKARM_EXPAND, MOTION_DRINKARM_VALVE, MOTION_DRINKARM_SENSE, MOTION_DRINKARM_EXTRA
MOTION_EXTINGUISHER_ACTIVATE, MOTION_EXTINGUISHER_EXTRA

LIGHT_HP_0, LIGHT_HP_1, LIGHT_HP_2
LIGHT_PSI_FRONT, LIGHT_PSI_BACK

LIGHT_MAGICPANEL

MOTION_FRONTARM_TOP; MOTION_FRONTARM_BOTTOM
MOTION_ARMDOOR_LEFT; MOTION_ARMDOOR_RIGHT
MOTION_CHARGEBAY_DOOR;
MOTION_FRONT_PANEL_0..6

MOTION_CPUARM_RAISE; MOTION_CPUARM_EXTEND; MOTION_CPUARM_ROTATE; MOTION_CPUARM_EXTRA
MOTION_GRIPPERARM_RAISE; MOTION_GRIPPERARM_EXTEND; MOTION_GRIPPER_ROTATE; MOTION_GRIPPER_OPEN; MOTION_GRIPPERARM_EXTRA
MOTION_ZAPPER_EXTEND, MOTION_ZAPPER_ZAP; MOTION_ZAPPER_EXTRA
MOTION_SAW_RAISE; MOTION_SAW_EXTEND; MOTION_SAW_ROTATE; MOTION_SAW_ACTIVATE; MOTION_SAW_EXTRA

MOTION_FEET_SPEED; MOTION_FEET_BRAKE
MOTION_BOOSTERCOVER_LEFT; MOTION_BOOSTERCOVER_RIGHT; MOTION_BOOSTER_LEFT; MOTION_BOOSTER_RIGHT

SOUND_PLAY
SOUND_VOLUME

STATE_BATTERY_0; STATE_BATTERY_1; STATE_BATTERY_2; STATE_BATTERY_3
STATE_ODOMETRY
STATE_DOMEROTATION
STATE_SUBSYS_CAPABILITY
STATE_SUBSYS_ACTIVE
STATE_SUBSYS_ERROR

DISTANCE_SENSOR_0..15
DISTANCE_SENSORS

RC_CHANNELS
RC_MAPPING
OSC
SCRIPT