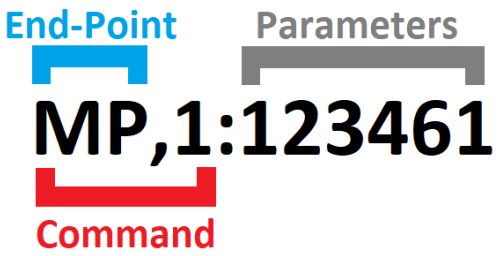
LipSync Gaming Command List

Command	Success Response	Failure Response	Description
SETTINGS	SUCCESS,0:SETTINGS	FAIL,{N}: Command	Enter Settings mode
EXIT	SUCCESS,0:EXIT	FAIL,{N}: Command	Exit Settings mode
MN,0:0	SUCCESS,0:MN,0:2	FAIL,{N}:Command	Get Model number (2=Gaming)
VN,0:0	SUCCESS,0:VN,0:V{N.NN}	FAIL,{N}:Command	Get version number (V{N.NN})
SS,0:0	SUCCESS,0:SS,0:{Joystick Sensitivity Level}	FAIL,{N}:Command	Get the joystick sensitivity value (Level)
SS,1:{Joystick Sensitivity Level:0-10}	SUCCESS,0:SS,1:{Joystick Sensitivity Level}	FAIL,{N}:Command	Set the joystick sensitivity value (Level)
	MANUAL,0:SS,1:{Joystick Sensitivity Level}		Set the joystick sensitivity value (Level)
PT,0:0	SUCCESS,0:PT,0:{Threshold 5% to 50%}:{Nominal Pressure V*100}	FAIL,{N}:Command	Get puff pressure threshold (threshold 5% to 50%) (Nominal Pressure)
PT,1:{threshold 10% to 50%}	SUCCESS,0:PT,1:{Threshold 5% to 50%}:{ Nominal Pressure V*100}	FAIL,{N}:Command	Set puff pressure threshold (threshold 5% to 50%) (Nominal Pressure)
ST,0:0	SUCCESS,0:PT,0:{Threshold 5% to 50%}:{Nominal Pressure V*100}	FAIL,{N}:Command	Get sip pressure threshold (threshold 5% to 50%) (Nominal Pressure)
ST,1:{threshold 5% to 50%}	SUCCESS,0:PT,1:{Threshold 5% to 50%}:{ Nominal Pressure V*100}	FAIL,{N}:Command	Set sip pressure threshold (threshold 5% to 50%) (Nominal Pressure)
PV,0:0	SUCCESS,0:PV,0:{Nominal Pressure}	FAIL,{N}:Command	Get pressure value (Nominal Pressure)
RA,0:0	SUCCESS,0:RA,0:{Rotation Angle}	FAIL,{N}:Command	Get rotation angle (deg)
RA,1:{Angle: 0-359}	SUCCESS,0:RA,1:{Rotation Angle}	FAIL,{N}:Command	Set rotation angle (0,90,180,270 deg)
DM,0:0	SUCCESS,0:DM,0:{Debug Mode}	FAIL,{N}:Command	Get debug mode value (0=debug mode disabled,1=debug mode enabled)
DM,1:0	SUCCESS,0:DM,1:0	FAIL,{N}:Command	Set debug mode value to 0 (Disabled)
DM,1:1	SUCCESS,0:DM,1:1	FAIL,{N}:Command	Set debug mode value to 1 (Enabled)
	LOG,1:{0,0,0,xHighNeutral,xLowNeutral,yHighNeutral,yLowNeutral}		Log initialization values once if debug mode is enabled
	LOG,2:{0,0,0,xHighMax,xLowMax,yHighMax,yLowMax}		Log calibration values once if debug mode is enabled
	LOG,3:{x,y,action,xHigh,xLow,yHigh,yLow}		Log cursor and FSR values if debug mode is enabled until debug mode is disabled
IN,0:0	SUCCESS,0:IN,0:{xHighNeutral,xLowNeutral,yHighNeutral,yLowNeutral}	FAIL,{N}:Command	Get joystick initialization values (xHighNeutral,xLowNeutral,yHighNeutral,yLowNeutral)
IN,1:1	SUCCESS,0:IN,1:{xHighNeutral,xLowNeutral,yHighNeutral,yLowNeutral}	FAIL,{N}:Command	Perform joystick initialization using command

			(xHighNeutral,xLowNeutral,yHighNeutral,yLowNeutral)
	MANUAL,0:IN,1:{xHighNeutral,xLowNeutral,yHighNeutral,yLowNeutral}		Perform joystick initialization using push button or sip/puff (xHighNeutral, xLowNeutral,yHighNeutral,yLowNeutral)
JV,0:0	SUCCESS,0:JV,0:{xHigh,xLow,yHigh,yLow}	FAIL,{N}:Command	Get joystick FSR values: {xHigh,xLow,yHigh,yLow}
CA,0:0	SUCCESS,0:CA,0:{xHighMax,xLowMax,yHighMax,yLowMax}	FAIL,{N}:Command	Get joystick calibration values (xHighMax,xLowMax,yHighMax,yLowMax)
CA,1:1	SUCCESS,0:CA,1:0	FAIL,{N}:Command	Perform joystick calibration using command
	SUCCESS,0:CA,1:1	FAIL,{N}:Command	Perform joystick calibration using command (Step 1)
	SUCCESS,0:CA,1:2	FAIL,{N}:Command	Perform joystick calibration using command (Step 2)
	SUCCESS,0:CA,1:3	FAIL,{N}:Command	Perform joystick calibration using command (Step 3)
	SUCCESS,0:CA,1:4	FAIL,{N}:Command	Perform joystick calibration using command (Step 4)
	SUCCESS,0:CA,1:5:{xHighMax,xLowMax,yHighMax,yLowMax}	FAIL,{N}:Command	Perform joystick calibration using command (Step 5) (xHighMax,xLowMax,yHighMax,yLowMax)
	MANUAL,0:CA,1:0		Perform joystick calibration using push button
	MANUAL,0:CA,1:1		Perform joystick calibration using push button (Step 1)
	MANUAL,0:CA,1:2		Perform joystick calibration using push button (Step 2)
	MANUAL,0:CA,1:3		Perform joystick calibration using push button (Step 3)
	MANUAL,0:CA,1:4		Perform joystick calibration using push button (Step 4)
	MANUAL,0:CA,1:5:{xHighMax,xLowMax,yHighMax,yLowMax}		Perform joystick calibration using push button (Step 5) (xHighMax,xLowMax,yHighMax,yLowMax)
CT,0:0	SUCCESS,0:CT,0:{changeTolerance}	FAIL,{N}:Command	Get drift change tolerance value
CT,1:{Change Tolerance: 0-30}	SUCCESS,0:CT,1:{changeTolerance}	FAIL,{N}:Command	Set drift change tolerance value
MP,0:0	SUCCESS,0:MP,0:{NNNNNN}	FAIL,{N}:Command	Get Button mapping (Example: SUCCESS,0:MP,0:123465)
MP,1:{NNNNNN}	SUCCESS,0:MP,1:{NNNNNN}	FAIL,{N}:Command	Set Button mapping (Example: MP,1:123465)
DZ,0:0	SUCCESS,0:DZ,0:{Deadzone Value}	FAIL,{N}:Command	Get the deadzone value
DZ,1:{ Deadzone :30-250}	SUCCESS,0:DZ,1:{ Deadzone Value}	FAIL,{N}:Command	Set the deadzone value (Example: SUCCESS,0:DZ,1:30)

BM,0:0	SUCCESS,0:BM,0:{Button Mode Value}	FAIL,{N}:Command	Get the button mode value (1 = Digital Mode , 2 = Analog Mode)
BM,1:{ Button Mode Value:1-2}	SUCCESS,0:BM,1:{Button Mode Value}	FAIL,{N}:Command	Set the button mode value (1 = Digital Mode , 2 = Analog Mode)
FR,1:{Rest Type: 0-1}	SUCCESS,0:FR,1:{Reset Type: 0-1}	FAIL,{N}:Command	Perform factory reset (0 = Hard Reset , 1 = Soft Reset)

API Format



Response Code

Response Status	Response Code	Description
SUCCESS	**0**	The command has successfully performed.
FAIL	**0**	The serial API mode is not enabled. Please enter the serial API mode.
FAIL	**1**	The requested command does not exist. Returns the response code and the requested parameter.
FAIL	**2**	The requested command exists, but the entered parameter is in incorrect format. Returns the response code and the requested parameter.
FAIL	**3**	The requested command exists, but the entered parameter is out of range. Returns the response code and the current value stored in the EEPROM.

Input Actions

Input Action	Description
Short Puff	< 3 seconds
Short Sip	< 3 seconds
Long Puff	3-5 seconds
Long Sip	3-5 seconds
Very Long Puff	> 5 seconds
Very Long Sip	> 5 seconds

Output Digital Actions Options

Action Number	Output Action	Description
0	(No action)	No action
1	Button 1 Click	Presses and immediately releases Button 1.
2	Button 2 Click	Presses and immediately releases Button 2.
3	Button 3 Click	Presses and immediately releases Button 3.
4	Button 4 Click	Presses and immediately releases Button 4.
5	Button 5 Click	Presses and immediately releases Button 5.
6	Button 6 Click	Presses and immediately releases Button 6.
7	Center Reset	Initiates center reset routine to set joystick center position.
8	Calibration	Initiates joystick calibration routine to set joystick limits and reset joystick center.

Output Analog Actions Options

Action Number	Output Action	Description
0	(No action)	No action
1	Button 1 Press	Presses Button 1.
2	Button 2 Press	Presses Button 2.
3	Button 3 Press	Presses Button 3.
4	Button 4 Press	Presses Button 4.
5	Button 5 Press	Presses Button 5.
6	Button 6 Press	Presses Button 6.
7	Center Reset	Initiates center reset routine to set joystick center position.
8	Calibration	Initiates joystick calibration routine to set joystick limits and reset joystick center.

Digital Action Mapping

Input Action	LipSync Gaming Action
Short Puff	1 : Button 1 Press and Release
Short Sip	2 : Button 2 Press and Release
Long Puff	3 : Button 3 Press and Release
Long Sip	4 : Button 4 Press and Release
Very Long Puff	7 : Center Reset
Very Long Sip	0 : No action

Analog Action Mapping

Input Action	LipSync Gaming Action
Puff	1 : Button 1 Press
Sip	2 : Button 2 Press

Example

INPUT	RESPONSE	ACTION
SETTINGS	SUCCESS,0:SETTINGS	LipSync Ready for API Command
VN,0:0	SUCCESS,0:VN,0:30	LipSync return firmware version 3.0

INPUT	RESPONSE	ACTION
SETTINGS	SUCCESS,0:SETTINGS	LipSync Ready for API Command
PT,0:0	SUCCESS,0:PT,0:10	LipSync return current puff pressure threshold of 10%
PT,1:20	FAIL,0:PT,1:20	(Attempt to set puff pressure threshold failed – need to resend SETTINGS for each command)
SETTINGS	SUCCESS,0:SETTINGS	LipSync Ready for API Command
PT,1:20	SUCCESS,0:PT,1:20:266	LipSync set new puff pressure threshold of 20% and returned current nominal pressure of