

adamgreen Add odometer and volume notes 37792bd on Apr 1, 2015

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Please note that all received commands (MiP->Device) are prefixed with the command you sent. So if you send 0x14, then the response will contain 0x14 for the first byte, then it will follow the table below. We just ignore the returned response.

Name	Code	Direction	Length	Data	Notes
Play Sound	0x06	->MIP	1	BYTE 1 : Sound file index (1~106) or send 0xF7-0xFE for volume	Send 105 to stop playing
			2	BYTE 2 : Delay in intervals of 30ms (0~255)	
				... (repeat sound file index then delay for as many files as you want to play)	
			17	BYTE 17 : Number of times to repeat (0-255)	Only need to send if you w sequence to repeat
Set Mip Position	0x08	-> MIP	1	BYTE 1 : On back: 0x00, Face down: 0x01	
Distance Drive	0x70	->MIP	5	BYTE 1 : Forward: 0x00 or Backward: 0x01	20 commands are queued
				BYTE 2 : Distance (cm): 0x00-0xFF	No speed control
				BYTE 3 : Turn Clockwise: 0x01 or Anti-clockwise: 0x00	
				BYTE 4 : Turn Angle(High byte): 0x00~0x01	
				BYTE 5 : Turn Angle(Low byte): 0x00~0xFF	Note:0x0000(0)~0x0168(3
Drive forward with Time	0x71	->MIP	2	BYTE 1 : Speed (0~30)	
				BYTE 2 : Time in 7ms intervals (0~255)	35ms
Drive backward with Time	0x72	->MIP	2	BYTE 1 : Speed (0~30)	
				BYTE 2 : Time in 7ms intervals (0~255)	Time = Byte2 Value * 7ms

Turn left by Angle	0x73	->MIP	2	BYTE 1 : Angle in intervals of 5 degrees (0~255)	Angle = Byte1 Value * 5
				BYTE 2 : Speed (0~24)	
Turn right by Angle	0x74	->MIP	2	BYTE 1 : Angle in intervals of 5 degrees (0~255)	Angle = Byte1 Value * 5
				BYTE 2 : Speed (0~24)	
Continuous Drive	0x78	->MIP	2	BYTE 1 : Fw:0x01(slow)~0x20(fast)	Buffer = 0
				OR Bw:0x21(slow)~0x40(fast)	This command is for single turn
				BYTE 2 : Right spin:0x41(slow)~0x60(fast)	Note:Sending per 50ms if
				OR Left spin:0x61(slow)~0x80(fast)	
				BYTE 1 : Crazy Fw:0x81(slow)~0xA0(fast)	
				OR Crazy Bw:0xA1(slow)~0xC0(fast)	
				BYTE 2: Crazy Right spin:0xC1(slow)~0xE0(fast)	
				OR Crazy Left spin:0xE1(slow)~0xFF(fast)	
Set Game Mode	0x76	->MIP	1	BYTE 1 : 0x01 – App	The same as cancel Gesture Radar
				0x02 – Cage Play back	
				0x03 – Tracking	The same as enable Radar
				0x04 – Dance Play back	
				0x05 – Default Mip Mode	The same as enable Gesture
				0x06 – Stack Play back	
				0x07 – Trick programming and playback	
				0x08 – Roam Mode Play back	
Get current MIP Game Mode	0x82	-> MIP	-		
Current MIP Game Mode	0x82	iOS <-	1	BYTE 1 : 0x01 – App	
				0x02 – Cage	
				0x03 – Tracking	
				0x04 – Dance	
				0x05 – Default Mip Mode	
				0x06 – Stack	
				0x07 – Trick programming and playback	
				0x08 – Roam Mode	

Stop	0x77	->MIP	-	-	
Request MIP status	0x79	-> MIP	-		
MIP status	0x79	iOS <-	2	BTYE 1 : Battery Level :0x4D(4.0V)-0x7C(6.4V)	
				BYTE 2 : On back: 0x00	
				Face down 0x01	
				Upright: 0x02	Note:Send one time per 30 seconds
				Picked up: 0x03	Note:it will be sent after(connecting,falldown,)
				Hand stand: 0x04	
				Face down on tray: 0x05	
				On back with kickstand: 0x06	
Mip Get Up	0x23	-> MIP	1	BTYE 1 : 0x00 – Get up when mip has fallen front	Mip will attempt to get up if angle is correct
				0x01 – Get up when mip has fallen back	Mip will attempt to get up if angle is correct
				0x02 – Get up when mip has fallen back or front	
Request weight update	0x81	-> MIP			
Weight update	0x81	iOS <-	1	BYTE 1 : 0xD3(-45 degree) - 0x2D(+45 degree)	
				0xD3 (211) (max)~0xFF(min) (255) is holding the weight on the front	
				0x00(min)~0x2D(max) is holding the weight on the back	
Request Chest LED	0x83	->MIP	-	-	
Chest LED	0x83	iOS <-	5	BYTE 1 : Red (0~255)	
				BYTE 2 : Green (0~255)	
				BYTE 3 : Blue (0~255)	
				BYTE 4 : if flashing then, TIME ON in 10ms intervals (0~255) else Fade in time in 10ms intervals (0~255)	
				BYTE 5 : if flashing then, TIME OFF in 10ms intervals (0~255) else will only be 4 bytes	
Set Chest LED	0x84	->MIP	3	BYTE 1 : Red (0~255)	

				BYTE 2 : Green (0~255)	
				BYTE 3 : Blue (0~255)	
Flash Chest LED	0x89	->MIP	5	BYTE 1 : Red (0~255)	Value of 0 means LED col changed immediately
				BYTE 2 : Green (0~255)	
				BYTE 3 : Blue (0~255)	
				BYTE 4 : TIME ON in 20ms intervals (0~255)	
				BYTE 5 : TIME OFF in 20ms intervals (0~255)	
					Time on = Byte4 Value * 1
Set Head LED	0x8A	->MIP	4	BYTE 1 : LIGHT 1 (0=off, 1=on, 2=blink slow, 3=blink fast)	Time off = Byte5 Value * 1
				BYTE 2 : LIGHT2 (0=off, 1=on, 2=blink slow, 3=blink fast)	
				BYTE 3 : LIGHT3 (0=off, 1=on, 2=blink slow, 3=blink fast)	
				BYTE 4 : LIGHT4 (0=off, 1=on, 2=blink slow, 3=blink fast)	
Request Head LED	0x8B	->MIP	-		
Head LED	0x8B	iOS <=	4	BYTE 1 : LIGHT 1 (0=off, 1=on, 2=blink slow, 3=blink fast)	
				BYTE 2 : LIGHT2 (0=off, 1=on, 2=blink slow, 3=blink fast)	
				BYTE 3 : LIGHT3 (0=off, 1=on, 2=blink slow, 3=blink fast)	
				BYTE 4 : LIGHT4 (0=off, 1=on, 2=blink slow, 3=blink fast)	
Read Odometer	0x85	->MIP	-		
Odometer reading	0x85	iOS <=	4	BYTE 1 & 2 & 3 & 4 : Distance ((0~4294967296)/48.5) cm	Total distance travelled. N by power cycle.
				1cm=48.5, 0xFFFFFFFF=4294967295=88556026.7cm	
				BYTE 1 & 2 & 3 & 4 :Byte1 is highest byte	
Reset Odometer	0x86	->MIP	-		
					Sent only when requested is over 4294967296 then i app and resets
Gesture Detect	0x0A	IOS<=	1	BYTE 1 : Left: 0x0A	
				Right: 0x0B	

				Center Sweep Left: 0x0C	
				Center Sweep Right: 0x0D	
				Center Hold: 0x0E	
				Forward: 0x0F	
				Back: 0x10	(700ms hold)
Set Gesture Or Radar Mode	0x0C	-> MIP	1	BYTE 1 :	
				0x00: Disable Gesture and Radar	
				0x02: Gesture Mode on (Disable Radar)	Gesture mode is tracking gestures
				0x04: Radar Mode on (Disable Gesture)	
Get Radar Mode	0x0D	-> MIP	-	-	
Radar Mode Status	0x0D	iOS <-	1	BYTE 1: 0x00: Disable Gesture and Radar	
				0x02: Gesture Mode on (Disable Radar)	
				0x04: Radar Mode on (Disable Gesture)	
Radar Response	0x0C	iOS <-	1	BYTE 1 : 0x01: No object Or object disappear	
				0x02: See object in 10cm~30cm	
				0x03: See object less than 10cm	Used for radar
MIP Detection Mode	0x0E	-> MIP	2	BYTE 1 : Off: 0x00, On: 0x1-255 for ID number	
				BYTE 2 : Set IR Tx power(1~120)(About 1cm~300cm)	
Request MIP Detection Mode	0x0F	-> MIP	-	-	
Mip Detection Status	0x0F	iOS <-	2	BYTE 1 : Off: 0x00, On: 0x1-255 for ID number	This constantly 'pings' other devices to check if any are in range. If this is enabled it will automatically disable Radar mode & gesture mode
				BYTE 2 : Set IR Tx power(1~120)(About 1cm~300cm)	
Mip Detected	0x04	iOS <-	1	BYTE 1 : ID number, if got the 0x00 means find one MIP without setting number	
Shake					

Detected	0x1A	iOS <-	1	-	
IR Remote Control Enabled	0x10	-> MIP	1	BYTE 1 : Off: 0x00, On: 0x01	
Request IR Control Enabled	0x11	-> MIP	-	-	
IR Control Status	0x11	iOS <-	1	BYTE 1 : Off: 0x00, On: 0x01	
Sleep	0xFA	MIP<->IOS	-		Power down bluetooth.
Disconnect App	0xFE	->MIP	-	-	Mip should switch off app and return to previous mode
Force BLE disconnect	0xFC	->MIP	-	-	
Set User Data	0x12	-> MIP	2	BYTE 1 : Data address(0x20~0x2F)	
				BYTE 2 : Data	
Get User Or Other Eeprom Data	0x13	-> MIP	1	BYTE 1 : User Data address(0x20~0x2F) and other data is in Eeprom	
MIP User Or Other Eeprom Data	0x13	iOS <-	2	BYTE 1 : User Data address(0x20~0x2F) and other data is in Eeprom	
				BYTE 2 : Data	
Get Mip Software Version	0x14	-> MIP	-	-	
Mip Software Version	0x14	iOS <-	4	BYTE 1: Year (software ver)	
				BYTE 2: Month (software ver)	Gets some software version
				BYTE 3: Day (software ver)	Date of the software release
				BYTE 4: Unique Version #	
Get Mip Hardware Info	0x19	-> MIP	-	-	this is used if more than one release on one day, normally 0x00
Mip Hardware Info	0x19	iOS <-	2	BYTE 1: Voice chip version	
				BYTE 2: Hardware Version	

Set Mip Volume	0x15	-> MIP	1	BYTE 1: Volume level between 0-7	Sets the MIP volume level 7=loudest, Power off save
Get Mip Volume	0x16	-> MIP	-	-	
Mip Volume	0x16	iOS <-	1	BYTE 1: Volume level between 0-7	Reads the current MIP vol
Send IR Dongle code	0x8C	-> MIP	6	BYTE1:IR data bit31~bit24	
				BYTE2:IR data bit23~bit16	
				BYTE3:IR data bit15~bit8	
				BYTE4:IR data bit7~bit0	
				BYTE5:IR data numbers(1~32):e.g. BYTE5=0x08 means BYTE4 is useful.	
				BYTE6:IR Tx power(1~120)(About 1cm~300cm)	
				Note:It can be useful in shooting game.	
Receive IR Dongle code	0x03	iOS <-	3~5	BYTE 1 : 0x02,0x03,0x04	Receive an IR command
				BYTE2~BYTE5 are the datas of Transmitting.	
				Byte2 is high byte,Byte5 is low byte	
				(0x03,0x02,0xNN,0xNN)	
				(0x03,0x03,0xNN,0xNN,0xNN)	
				(0x03,0x04,0xNN,0xNN,0xNN,0xNN)	
Clap times	0x1D	iOS <-	1	BYTE 1: 0x01 – 0xFF times	
Clap Enabled	0x1E	-> MIP	1	BTYE 1 : Off: 0x00, On: 0x01(Default is disable after App connecting)	
Request Clap Enabled	0x1F	-> MIP	-	-	
Clap Status	0x1F	iOS <-	3	BTYE 1 : Off: 0x00, On: 0x01	
				BYTE2~BYTE3(Delay time by two clap)	
Delay time between two claps	0x20	-> MIP	2	BYTE1(high)~BYTE2(low)(Delay time by two clap)	

