Command Name	**Command Code**	**Setting Value**	**Description**
Future use	0x00 0x02-0x04	NA	Command codes 0 and 2 to 4 are reserved for future functions, and have no effect.
Back-light	0x01	0-255	Where 0=off through 255=full on
Hitachi LCD Command Pass-through	0x05	0x01 = Clear display 0x02 = Home display 0x08 = Display off 0x0C = Cursor off / Blink off 0x0E = Blink on 0x0D = Cursor on / Blink on	Use this command to pass actual Hitachi commands through the Message Pump into the LCD. See the Hitachi specs sheets for a full list.
Set Serial Baud rate °	0x06	0 = 300 baud 1 = 1200 2 = 2400 3 = [9600]* 4 = 19.2k 5 = 57.6k 6 = 115.2k	Used to set the baud rate for the serial port.
Set LCD Size °	0x07	0 = 1x16 1 = 2x40 2 = 4x20 3 = [2x16]*	Used to change the LCD size. Where 1x16 would be an LCD with one row of sixteen characters, etc.
Move cursor to position	0x08	0 to size-1	0 to size of display-1 (eg. 2x16 LCD = 0 to 31)
Save Custom Splash Screen	0x09	0-255 (does not matter)	After this command is sent, the next sixteen characters will be stored to make a custom splash screen.
Splash Screen °	0x0A	0 = off 1 = [Show Default]* 2 = Show Custom	Used to show or hide the welcome splash screen. If a custom splash screen is saved, it will only show if this setting is set to value 2.
Set MPTH Command Character °	0x0B	0-255 [0x80]*	Every MPTH command is a three byte package. The first byte is the Command Character which lets the MPTH know if it is receiving a command. You may change this value if it conflicts with your application.
I2C Address °	0x0C	0-254 [0x40 Hex]*	Use this command to set a new I2C Address. The I2C Address is used on an I2C Bus to identify specific devices. (Never use 0xFF (255 Dec))
GPIO TRIS °	0x0D	0x00 - 0x0F (0 to 15) b'0000nnnn' where n is either: 0 = output 1 = input [0x0F - all inputs]*	Set the port direction of the MPTH's GPIO port (input or output). Each of the pins on the GPIO port may be configured individually. The GPIO TRIS value is the four lower bits of the settings value were a set bit "1" is an input and a clear bit "0" is an output.
GPIO	0x0E	0x00 - 0x0F	Sets the value to output on the GPIO port. Note: Outputs will not function unless the corresponding GPIO TRIS bits are clear (set to zero).
Request current GPIO value	0x0F	0-255 (does not matter)	Requests the MPTH to output the most recent GPIO value via the serial port, at the current baud rate. Can be used to check if an input (button) is pressed. --- It is also possible to read the GPIO port using I2C. But, to get the GPIO value over I2C vs serial, simply have your microprocessor do a single I2C read request. An I2C read request is performed by sending an I2C message which is just the I2C address but with the read / write bit set "1".
Auto Output of GPIO changed value °	0x10	1 = on [0 = off]*	When auto output of the GPIO value is on, every time the inputs (buttons) of the GPIO change a byte will be sent out via the serial port. Note: If a button is pressed and released it will produce two bytes, one when the GPIO changes due to the press and another when the GPIO changes due to the release. Also, if PWM is active GPIO pin 1 will be ignored (it is constantly changing).
Echo display to Serial °	0x11	1 = on [0 = off]*	When this option is set to "1", any text that is sent to the LCD for display will also be "echoed" out of the serial port. The source of the display text may be either serial or I2C.
PWM Active °	0x12	1 = on [0 = off]*	The GPIO One "1" pin is also a PWM (pulse width modulation) output pin. When set to on, the pin will output a 1.19khz square PWM signal. Note: No signal will be output if the GPIO TRIS value for pin one is not set to be an output.
PWM Value	0x13	0-255	This value sets the duty cycle of the PWM signal. Where 0 is full off and 255 is full on. Any value from 0 to 255 is acceptable.
° Setting will be saved to EEPROM and used every time the MPTH is powered up until either the settings are changed again or the MPTH is reset.		[value]* denotes a factory default value	