

Command			Input	Output	Notes	Standard Notes
Firmware Update	1				See usb2lcd-util for use	Non-standard
Reset Device	2				Has many problems	Non-standard
Read Display	3			1 byte: dis, blink, cur		Non-standard
Read Display Min	4			1 byte: mins or 0		Non-standard
Read Contrast	5			1 byte: contrast		Non-standard
Read Backlight	6			1 byte: backlight		Non-standard
Read Custom	7		[0-7]	8 bytes: char data		Non-standard
Read Message	8			80 chars: text		Non-standard
Read GPO	9		[1-5]	1 byte: 1 for on		Non-standard
Read GPO PWM	10		[1-5]	1 byte: PWM		Non-standard
Read Saved Display	13			1 byte: dis, blink, cur		Non-standard
Read Saved Dis Min	14			1 byte: mins or 0		Non-standard
Read Saved Contrast	15			1 byte: contrast		Non-standard
Read Saved BL	16			1 byte: backlight		Non-standard
Read Saved Custom	17		[0-7]	8 bytes: char data		Non-standard
Read Saved Message	18			80 chars: text		Non-standard
Read Saved GPO	19		[1-5]	1 byte: 1 for on		Non-standard
Read Saved GPO PWM	20		[1-5]	1 byte: PWM		Non-standard
Set serial number	52		[2 bytes]			Standard says allow only once
Read serial number	53			2 bytes: serial num		
Read version num	54			1 byte: firmware ver		Not sure what version this is supposed to be for
Read module type	55			1 byte: 0x5B		Just made up a module number
Save Startup Screen	64	X	[80 chars]			Only 40 chars, but we want to support 20x4
Display on	66	R	[0-255]		0 means forever	Max at 100 min
Display off	70	R				
Position	71		[col] [row]			
Home	72					
Cursor on	74	R				
Cursor off	75	R				
Cursor left	76				Untested	
Cursor right	77				Untested	
Define custom	78		[0-7] [8 bytes]			
Contrast	80	R	[0-255]			
Blink on	83	R				
Blink off	84	R				
GPO off	86		[1-5]			Range is 1-6
GPO on	87		[1-5]			Range is 1-6
Clear Display	88					
Backlight *	89	R	[0-255]		Duplicate of 152	
GPO PWM	102		[1-5] [0-255]			Range is 1-3, ch424 only goes to 100
Set/save backlight	145	X	[0-255]		Untested	Equivalent to 147 1, 89 x, 147 0
Remember	147		[0-1]			
Backlight	152	R	[0-255]			
GPO PWM *	192		[1-5] [0-255]		Duplicate of 102	Range is 1-3,
Return button state	193		[1-5]	1 char: upper is on		Meant for returning fan RPM
Remember Custom	194	X	[0-7] [8 bytes]			
Remember GPO PWM	195	X	[1-5] [0-255]			Range is 1-3
Remember GPO on/off	196	X	[1-5] [0-1]			Non-standard
The character 254	254					

All commands need to be preceded by "254". Make sure you always send enough data otherwise the LCD will lock up.

Buttons do not need to be polled, as they send data whenever their state changes.

R means that if remembering is on that command will be remembered in the EEPROM.

X means that the command always sets the EEPROM.