

Interface Protocol for 619-20-064 (HPRL Premium)

- Valid for FW-Versions \geq 619-74-005 (HPRL) v1.13 and 619-74-006 (Remote) v1.13
- Serial communication: USB virtual serial port (9600 Baud, 8 data bits, 1 stop bit, no parity bits)
- Each command must be ended with <CR> (ASCII code 13 decimal) or <LF> (ASCII code 10 decimal) character, or both.
- There is no receive timeout for serial communications; only <CR> and <LF> are used to end input.
- Commands and parameters are case sensitive.
- Numeric parameters and return data are in ASCII decimal representation.
- Most commands are echoed in standard format to confirm execution, if they have been accepted.
- "Error:<reason>"<CR> is returned if a command or parameter is invalid, or the transmission has been disturbed. <reason> is "syntax" for unknown or misspelled commands and data, "value" for wrong parameter data.
- Commands without data = get commands
- Commands are always letters or special characters

Example:

command "B75"<CR> sets brightness to 75%, and returns "B75"<CR>

command "P"<CR> returns "P1"<CR> (turned on)

Command	Parameter(s)	Mode	Function	Data	Default value	Valid Examples:
basic commands:						
B	1 ... 100 or: -1 ... -99 or +1 ... +99 (relative mode)		Brightness (effective until power down)	Brightness in %	50	"B75" -> set brightness to 75% (returns "B75"<CR>) "B" -> get current brightness value (returns "B75"<CR>) relative mode: "B+5" -> increase brightness value by 5% -> returns new brightness value (returns "B80"<CR>)
A	5.5 ... 0.0 (0.0 = max) Or: -0.1 ... -5.5 +0.1 ... +5.5 (relative mode) Only aperture (0 ... 5) or decimal place (.05) also allowed		Logarithmic Brightness (effective until power down)	Brightness in apertures	1.0	"A3.2" -> set brightness to 3.2 aperture values (returns "A3.2"<CR>) "A+0.1" -> decrease brightness by a factor 1.122 -> Returns new brightness value (returns "A3.3"<CR>) -1.0 doubles the current brightness until 0.0 (max brightness) -0.1 increases the brightness by a factor 1.122 "A" -> get aperture value (returns "A3.3"<CR>)
L	0 ... 31		Panel Lock (effective until power down), incl. on/off button	Value locked input 1 On/Off 2 Enc1-Button (left) 4 Enc2-Button (right) 8 Enc1-Rotation (left) 16 Enc2-Rotation (right) Every combination via addition is allowed	0	"L31" -> lock all inputs (returns "L31"<CR>) (user can no longer do anything with controls at device) "L24" -> locks encoder rotation on both sides (returns "L24"<CR>) "L0" -> unlock all inputs (returns "L0"<CR>) "L" -> get current lock value (returns "L0"<CR>)
P	0 ... 1		Change Power Mode	0 = Standby 1 = On	0	"P1" -> switch on device (returns "P1"<CR>) "P" -> get current power mode (returns "P1"<CR>) "P0" -> switch off device (returns "P0"<CR>)
V?			Device Type and Version	ASCII String	"HPRL v1.13, 1.13"	"V?" -> returns ASCII string with device name and version of remote and led pcb
S	1.. 5		Segment pattern	1 = All On 2 = Half 3 = Quarter 4 = Eighth 5 = Opposite Quarters	1	"S2" -> set segment pattern to half circle (returns "S2"<CR>) "S" -> get current segment pattern (returns "S2"<CR>)

R	0 ... 7		Segment Rotation	Segment Position 0... 7, (first position of pattern) View from top: 7 0 6 1 5 2 4 3	0	"R3" -> set segment position to 3 (returns "R3"<CR>) "R" -> get current segment position (returns "R3"<CR>)
R*	0 ... 9000		Segment Autorotation in period length of 1 rotation	Autorotation period (1 rotation) in ms Autorotation is always clockwise Allowed values: 0 autorotation off 50 67 100 111 125 143 167 200 250 333 500 1000 2000 3000 4000 5000 6000 7000 8000 9000	0	"R*250" -> set autorotation speed to 4rps (returns "R*250"<CR>) "R*" -> get current autorotation speed (returns "R*250"<CR>) "R*0" -> turn autorotation off (returns "R*0"<CR>)