

OpenVFD Software Development Guide: Serial Protocol Documentation

Functionality	Type (C/R)	p[0]	p[1]	p[2]	p[3]	p[4]	p[5]	p[6]	p[7]	p[8]	p[9]	p[10]	p[11]	p[12]	p[13]	p[14]	p[15]	p[16]	p[17]	p[18]	p[19]	p[20]	p[21]	p[22]	p[23]	p[24]	p[25]	p[26]
Set custom color information	C	0x24	0x00	led[0].r	led[0].g	led[0].b	led[0].w	led[1].r	led[1].g	led[1].b	led[1].w	led[2].r	led[2].g	led[2].b	led[2].w	led[3].r	led[3].g	led[3].b	led[3].w	led[4].r	led[4].g	led[4].b	led[4].w	led[5].r	led[5].g	led[5].b	led[5].w	0x25
Set custom color information (smoothly)	C	0x24	0x01	led[0].r	led[0].g	led[0].b	led[0].w	led[1].r	led[1].g	led[1].b	led[1].w	led[2].r	led[2].g	led[2].b	led[2].w	led[3].r	led[3].g	led[3].b	led[3].w	led[4].r	led[4].g	led[4].b	led[4].w	led[5].r	led[5].g	led[5].b	led[5].w	0x25
Light pattern set (preset)	C	0x24	0x04	instance	setting[0]	setting[1]	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	0x25
Enable/disable light pattern presets	C	0x24	0x05	enabled instances	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	0x25
Enable/disable random light pattern presets	C	0x24	0x06	enabled instances	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	0x25
Random changing speed set	C	0x24	0x07	speed	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	0x25
GUI set	C	0x24	0x10	instance	setting[0]	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	0x25
Time date set	C	0x24	0x20	second	minute	hour	day	month	year%100	0x23	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	0x25
Brightness set	C	0x24	0x21	disp led	dim-factor	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	0x25
Night shift set	C	0x24	0x22	hr_start	min_start	hr_stop	min_stop	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	0x25
Welcome text custom set	C	0x24	0x25	m[0]	m[1]	m[2]	m[3]	m[4]	m[5]	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	0x25
Message display	C	0x24	0x26	m[0][0]	m[0][1]	m[0][2]	m[0][3]	m[0][4]	m[0][5]	m[1][0]	m[1][1]	m[1][2]	m[1][3]	m[1][4]	m[1][5]	m[2][0]	m[2][1]	m[2][2]	m[2][3]	m[2][4]	m[2][5]	m[3][0]	m[3][1]	m[3][2]	m[3][3]	m[3][4]	m[3][5]	0x25
Clock control	C	0x24	0x30	control	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	reserved 0	0x25
Time date set response	R	0x24	0x30	0x54	0x69	0x6D	0x65	0x20	0x53	0x79	0x25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Firmware version response	R	0x24	0x31	fw_str[0]	fw_str[1]	fw_str[2]	fw_str[3]	fw_str[4]	fw_str[5]	0	0x25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hardware version response	R	0x24	0x32	hw_str[0]	hw_str[1]	hw_str[2]	hw_str[3]	0	0	0	0x25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Enabled light pattern instance request	R	0x24	0x33	enabled instances	enabled rnd inst.	0	0	0	0	0	0x25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
What the colors mean	Command /Response	Static control	Dynamic data	Dynamic control	Reserved Value	n/a																						

Functionality	Type (C/R)	Comments
Set custom color information	C	
Set custom color information (smoothly)	C	
Light pattern set (preset)	C	Instance according to <i>light_pattern_instance_t</i>
Enable/disable light pattern presets	C	enabled instance 0x{COPITCODE MUSIC CHASE RAINBOW SPECTRUM BLISS STATIC}
Enable/disable random light pattern presets	C	enabled instance 0x{COPITCODE MUSIC CHASE RAINBOW SPECTRUM BLISS STATIC}
Random changing speed set	C	speed 0: minutely 1: Every other min 2: Every ten min 3: Every 1/2 hr 4: Every hr
GUI set	C	Instance according to <i>gui_instance_t</i>
Time date set	C	
Brightness set	C	disp/led display or led
Night shift set	C	
Welcome text custom set	C	
Message display	C	
Clock control	C	control 0: HW Version Req. 1: SW Version Req. 2: Save Req. 3: Default Req.
Time date set response	R	
Firmware version response	R	
Hardware version response	R	
Enabled light pattern instance request	R	
What the colors mean	Command /Response	