

M5Stack Unit Step16 I2C Protocol																	V1 (FW Version)	
REG MAP (Addr: 0x48)		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	2025/7/4
																		note
Step16 Value	0x00 R	Value																Value: 0x00~0x0F
Step16 LED Configuration	0x10 R/W	Config																Config: 0~0xFE 0x00: Always Off 0xFE: Always On 0~0xFD: If the device's position, status, and brightness remain unchanged within the specified time, it will enter sleep mode and automatically wake up upon the next state change. Unit: seconds. default: 0xFE
Step16 LED Brightness	0x20 R/W	Brightness																Brightness: 0~100 default: 50
Step16 Switch	0x30 R/W	Value																Value: 0~1 0: Counterclockwise increase 1: Clockwise increase default: 1
Step16 RGB Configuration	0x40 R/W	Power	Brightness															Power: 0~1 0: OFF 1: ON default: 1 Brightness: 0~100 default: 50
Step16 RGB Color	0x50 R/W	RGB_R	RGB_G	RGB_B														RGB_R/G/B: RGB Value value: 0~255 default: 0
Save configuration to flash	0xF0 W	Write value																Write 1 to save the configuration of LED, and write 2 to save the configuration of RGB.
Firmware Version	0xF0 R															Version		Version: Software Version
I2C Address	0xF0 R/W															Address		Address: I2C Address value: 0x08~0x77 default: 0x48
Register Description 1、Step16 LED Configuration Controls the operating status of the indicator light, allowing it to be set to always on, always off, or turn off after a specified time. 2、Step16 LED Brightness Controls the brightness of the LED. 3、Step16 Switch Switches the rotation direction. The default is clockwise to increase, and counterclockwise to decrease. 4、Step16 RGB Configuration Enables RGB and sets its brightness. Note that after enabling RGB, wait approximately 50ms for voltage stabilization before refreshing it. 5、Save Configuration to Flash Write 1 to this register to save the current configuration to the internal Flash. Configuration content includes: Step16 LED Configuration Step16 LED Brightness Step16 Switch Write 2 to this register to save the current configuration to the internal Flash. The configuration includes: Step16 RGB power Step16 RGB brightness 7、I2C Address After successful configuration, the I2C address will be stored in internal Flash memory, will not be lost during power-down, and will take effect immediately. Notes: 1、Writing to Flash requires first erasing the internal Flash, which takes some time, approximately 20ms. 2、To extend the lifespan of the Flash, avoid frequent write operations. 3、If the value to be written is the same as the current value stored in Flash, the write operation will be skipped to avoid unnecessary erase cycles, further extending the Flash's lifespan.																		