Settings

Web-configurable settings are split in multiple sub-pages. This page is meant to clarify the purpose of each setting.

WiFi Settings

This sub-page offers options to connect the ESP to different WiFi/WLAN devices. (This section applies to WLED 0.8.5.)

Setting name	Value Range	Description
Network Name	String 0..32	The name (SSID) of your home WiFi. Spaces and some other characters are not supported.
Network password	String 0..64	The password of your home WiFi
Static IP	4x 0..256	An optional static IPv4 address
Static gateway	4x 0..255	In a static config, your gateway's IPv4 address
Static subnet	4x 0..255	In a static config, this normally is 255.255.255.0
mDNS address	String 0..32	Name of your device for the Bonjour/Zeroconf protocol
Client IP	-	The current IP of the ESP in the home network
AP SSID	String 0..32	The name of the ESPs internal WiFi hotspot (Access Point)
Hide AP name	Y/N	The ESPs Access Point won't appear in WiFi lists of other devices

Setting name	Value Range	Description
AP password	String 0..64	The password of the ESPs WiFi Access Point
AP WiFi channel	1..13	The 2.4G WiFi band of the AP. For advanced users
AP opens	select	Condition on when to open the AP
AP IP	-	The Access Point IPv4 address of the ESP (is 192.168.4.1 in most cases)
WiFi sleep	Y/N	Disabling WiFi sleep can increase reliability, but increases power consumption

LED Preferences

This sub-page configures your LED & Hardware setup. (This section applies to WLED 0.14.1.)

Setting name	Value Range	Default	Description
Enable automatic brightness limiter	on/off	on	Have WLED automatically reduce overall brightness so that maximum current draw from the power supply stays below a specified level
Maximum current	300–65000 mA	850 mA	Maximum allowable current draw that WLED will target [*only appears if "Enable automatic brightness limiter" is on*]
LED voltage	multiple options	"5V default (55mA)"	Voltage/type of LEDs [*only appears if "Enable automatic brightness limiter" is on*]

Setting name	Value Range	Default	Description
Custom max. current	1–255	50	Current draw of a single LED pixel set to full white [*only appears if "LED voltage" is set to "Custom"*]

Hardware Setup

LED outputs

WLED supports multiple outputs. To add an output, click the plus button at the bottom of the "LED outputs": section; to remove the last output, click the minus button. Bellow the plus/minus buttons is an indication of how much of the memory allocated to LEDs is being used by the configuration.

All outputs share the same address space within WLED. By default, the first pixel of an output will be given an address that is one higher than the last pixel of the previous output, but this can be altered.

Each output has the following settings:

Setting name	Value Range	Default	Description
Type (represented by the output's number)	multiple options	WS281x	Select the type of LEDs this output will be controlling
Color order	muliple options	"GRB"	Select which order your LEDs process color information (e.g. if your LEDs display red and green swapped, try changing it) [*only appears if "Type" is set to a type that supports color order*]
Start/Index	integer	cummulative length of all previous outputs	Define which address this output (or its first pixel) should use within WLED's address space [*only editable if "Custom bus start indices" is on*]

Setting name	Value Range	Default	Description
Length	integer	1	Define how many pixels are connected to this output [*only appears if "Type" is set to a type that supports multiple pixels*]
(Data/Clk) GPIO(s)	integer	(blank)	Tell WLED which GPIO pin(s) this output is connected to [*number and description of GPIO settings will depend on the output's selected type*]
Reversed (rotated 180°)	on/off	off	Mirrors the LEDs (last LED is first) [*only appears if "Type" is set to a type that supports multiple pixels*]
Skip first LEDs	0–length	0	Will turn off the first one or more LEDs and shift those remaining by that number (e.g. if the first LEDs are only used as a signal repeater) [*only appears if "Type" is set to a type that supports multiple pixels*]
Off Refresh	on/off	off (typically)	WLED doesn't send out data if all of its outputs are off, but some pixels (notably TM1814) will go into a demo mode after a period of inactivity, and setting forces WLED to periodically send out additional "off" commands [*only appears if "Type" is set to a type that supports multiple pixels; default is "on" if "Type" is set to "TM1814"*]
Inverted output	on/off	off	Invert the output's state (i.e. if the output is bright when it's supposed to be dark, set this to "on") [*only appears if "Type" is set to a type that supports output inversion*]

Setting name	Value Range	Default	Description
IP address	IPv4	(blank)	Set the IP address where the output data should be sent to [*only appears if "Type" is set to a type that supports network output*]
Auto-calculate white chanel from RGB	multiple options	"None"	Selects whether WLED should attempted to generate white-channel information for colors that are only defined as red, green, and blue values [*only appears if "Type" is set to a type that has more than three color channels*]

The following settings apply to all LED outputs:

Setting name	Value Range	Default	Description
Make a segment for each output	on/off	off	Will automatically create a segment for each output, including the correct Start LED and Stop LED settings
Custom bus start indices	on/off	off	When on, custom "Start" or "Index" values can be set for each output (e.g. output 2 can be set so that it shows up as LED address 200 regardless of output 1's length)
Use global LED buffer	on/off	on	Improves the performance of WLED-wide brightness controlls (including Automatic Brightness Limiting) at the expense of additional memory usage

Additionally, one or more Color Order Overrides can be defined by clicking the plus button. This is useful when you have LEDs with two different color orders sharing the same output. The following

settings are available for each override:

Setting name	Value Range	Default	Description
Start	integer	0	Define which address this color override should start it
Length	integer	1	Define how many pixels in a row should have their color setting overridden
Color order	muliple options	"GRB"	Same as "Color order" above

Other settings

(This section applies to WLED 0.8.5; some of these settings no longer appear in 0.14.1.)

Setting name	Value Range	Description
Turn on after power up	Y/N	Whether the lights should turn on after a reset
Apply preset	0..16	Preset to load at boot (0 = none)
Use Gamma for brightness	Y/N	Will correct brightness changes to make it appear more linear. Advised to leave off
Use Gamma for color	Y/N	Will correct colors to match those on a monitor. Strongly advised to keep on
Brightness factor	1..255	Factor to change master brightness if it is to dim/bright for a certain configuration
Crossfade	Y/N	Whether to have a smooth fading transitional effect when changing colors/brightness

Setting name	Value Range	Description
Transition time	0..65535	How many milliseconds the transition lasts
Enable transition for secondary color	Y/N	
Enable Palette transitions	Y/N	Enable transitions for palettes (not affected by transition time)
Timed light duration	1..255	How long the nightlight should stay on
Target brightness	0..255	What brightness the light should have after time is over. 0=off.
Fade down	Y/N	Gradually fades down the light over the duration instead of turning it off at the end
Palette blending	select	Choose how the palette wraps at the end (seam)

User Interface settings

This sub-page changes the look of the web interface. (This section applies to WLED 0.8.5.)

Setting name	Value Range	Description
Server description	String 1..32	The name of the device as shown on the top of the UI. Differs from Alexa device name
Sync button toggles...	Y/N	If enabled, both send and receive are toggled by the button in UI. If disabled, only sending is toggled and receiving is kept as configured in Sync settings.

Sync settings

This sub-page configures external software synchronization interfaces. (This section applies to WLED 0.8.5.)

Setting name	Value Range	Description
On/Off button enabled	Y/N	Check if there is a physical pushbutton connected to GPIO0
Infrared receiver type	select	Type of infrared receiver
Broadcast UDP port	1..65535	All WLED lights you want to group together must have the same port
Receive Brightness	Y/N	If there is a sync notification, whether its brightness should be applied
Color	Y/N	Whether the color of the synced device should be applied
Effects	Y/N	Whether the effect settings should be applied
Send on direct change	Y/N	Whether to send a sync notification when state changed via web UI or API
Send on button press	Y/N	Whether to send sync when toggled by button or IR
Send Alexa notifications	Y/N	Whether to send sync after changed by Alexa (you may use Alexa groups instead)
Send Hue notifications	Y/N	Whether to send sync after a connected Philips light changed
Send Macro notifications	Y/N	Whether to send sync after a macro was triggered
Send notifications	Y/N	Sends notifications twice (if you have issues with

Setting name	Value Range	Description
twice		UDP packet loss)
Receive UDP realtime	Y/N	Receive live UDP stream data (DRGB, WARLS, ...)
Use E1.31 multicast	Y/N	Listen on multicast IP instead of unicast
E1.31 start universe	1..63000	Only applies for multicast. If you want to set different content, set ESPs at least 8 universes apart
Timeout	100..65000	Time after which to resume normal mode once stream has stopped. 65000 will keep the data indefinitely
Force max brightness	Y/N	Realtime stream with max. brightness (unless limited by power brightness limiter)
Disable realtime gamma correction	Y/N	Check if your host software does gamma correction already
Realtime LED offset	-255..255	Shift the realtime input by how many LEDs
Emulate Alexa device	Y/N	Allows you to control the light via the Amazon Echo voice assistant. Requires reboot
Alexa Invocation name	String 1..32	The name you want the device to have for control via Alexa. Choose something easy she can understand
Device Auth token	String 40	You will get this in an e-mail during Blynk setup
MQTT Broker	IP or String 0..32	Connect to this host MQTT broker
Device topic	String 0..32	MQTT topic unique to this light

Setting name	Value Range	Description
Group topic	String 0..32	MQTT topic for all lights in a group (room, floor, ...)
Hue Bridge IP	4x 0..255	Your Hue bridge IPv4 address. Should be static to avoid reassigning
Poll Hue light	0..99	The ID of the hue lamp you want to sync WLED to
every x ms	100..65000	How often to poll. Smaller numbers decrease lag but might hurt bridge responsiveness
...	Y/N	Turn polling on/off
Receive On/Off	Y/N	Turn on/off like the hue light
Brightness	Y/N	Set brightness to that of the hue light
Color	Y/N	Set color to that of the hue light
Hue status	-	Shows the current connection status to a hue bridge
Baud rate	Various	Set the default Serial connection Baud Rate

Time settings

This sub-page configures automation tasks. (This section applies to WLED 0.8.5.)

Setting name	Value Range	Description
Get time from NTP	Y/N	Whether to get the current time from the internet
Use 24h format	Y/N	Use 24h clock format instead of AM/PM

Setting name	Value Range	Description
Time zone	-	Your time zone. Open an issue if yours is unsupported. DST is applied automatically
UTC offset	-65000..65000	Seconds to offset. If you want e.g. 1h offset, use 3600
Current local time	-	The local time the ESP has acquired. If set up correctly, should equal actual time
Clock overlay	-	The special overlay to use. Allows to display a clock on the strip
Countdown mode	Y/N	Allows to have a visual countdown towards a specific date
API macro fields	16x String 0..64	Allows you to define custom API calls which can be triggered by events
Boot Macro	0..16	Which macro to trigger after WiFi connected (0 is default action)
Alexa On/Off Macros	2x 0..16	Which macros to trigger when turning on/off via Alexa
Button Macro	0..16	Macro to trigger if button is short pressed. Default action is on/off toggle.
Long Press	0..16	Macro to trigger if button is long pressed (>0.7s). Default action is random color.
Double press	0..16	Macro for double click on button.
Countdown-Over Macro	0..16	Macro to trigger when the countdown is over

Setting name	Value Range	Description
Timed-Light-Over Macro	0..16	Macro to trigger when timed light is done

Security settings

This sub-page manages permissions and updates. (This section applies to WLED 0.8.5.)

Setting name	Value Range	Description
Enable OTA lock	Y/N	If enabled, no firmware updates may be done via WiFi and some settings can't be changed.
Passphrase	String 0..32	To disable OTA lock, you need a password. The default is "wledota". Change it!
Deny access to WiFi settings	Y/N	Disables changes to WiFi settings while locked
Disable recovery AP	Y/N	If enabled, the module will not open an Access Point if connection to home WiFi failed.
Factory reset	Y/N	Deletes all custom settings data (passwords, configuration, macros, presets)
Manual OTA	-	If OTA is enabled, you can upload new binary firmware
Enable ArduinoOTA	Y/N	Useful for developers. Be careful, can even be left on when OTA locked!