



HyMax



Genie Lights L700

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What's included

- a L700 IoT Device
- a Micro-b USB Cable
- a 3-foot 5V RGB Strip

Power Supply needed

- a 5VDC USB Phone Charger or
- a 5V Power Bank Battery or
- a USB Type-A port on any PC

What options to add

- 1- 5- 10- 20- 25-foot LED strip
- USB accessory Y connector
- Device standing base
- www.hymaxiot.com

Features

1. Individually chose brightness, color, speed for each light on USB LED strip 1 inch ~ 200 feet, with music volume changeable
2. Unlimited patterns, multiple songs. Portable for home, school, sport safety, party, festival, forest, beach, park, car.
3. 24x7 safe, kid skin friendly, low volt like 5V DC, low power consumption from 1.1 watts to 12watts. Partially waterproof.
4. Various Control methods thanks to WiFi b/g/n 2.4GHz support:
 - Voice control via Amazon Echo series
 - Voice control via Google Home
 - Classic finger controls via 2 hard buttons
 - Browser controls in WiFi-AP mode or WiFi-STA mode
 - MobileApp wireless control in either AP-mode with standalone network, or STA-mode with Internet connection

Instructions

1. Power On/Off

There is no "Power" button. Just connect the microUSB cable's big head (Type A) to any 5V DC power support (PC USB port, phone charger, power bank), the little head (Type micro-B) to L700 device, the device is automatically powered on.

To turn off the device, press and hold MODE button until it's off (or release after 1.5seconds).

To turn on the device, press and hold MODE again until it's on (or release after 1.5s)

2. MODE key

Short (normal) click MODE button to toggle between <A. light pattern mode> mode and <B. music mode>

Long click is for Power off/on as above.

3. ADJUST key.

Short click ADJUST is a general ++, while long click is a general --.

When device is in <A. light pattern mode> mode , short-click for next light pattern; long-click for next light patterns, both will cycle through all the patterns.

When device is in <B. music mode>, short-click for next song, long-click for previous song, both will cycle the songs.

4. Micro-b USB female port

This is the power supply 5V DC input port for the device which will further provide power for connect LED strips.

The power drain for this port will depend on how long the LED strip is, the light pattern and music volume, normally in a range of 1.1 watts ~ 12.5watts.

Do NOT connect higher volt into this port to avoid damage, and safety risk.

5. Type-A USB female port

It's a data output port driven by software, with 5V DC power source output for USB LED strip.

6. PIR sensor

This Motion sensor is used by software to detect 2.5meter range human body, providing opportunity for automation, security, animal dispel, pet tracking etc. User does not operate directly.

7. Light sensor

This is a digital binary input to distinguish environment brightness/darkness change, for software to use, no user direct operation.

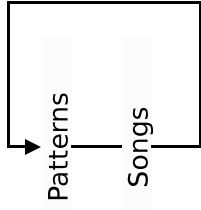
Quick Setup

This below diagram shows the actual connection, basic use case, typical use case.

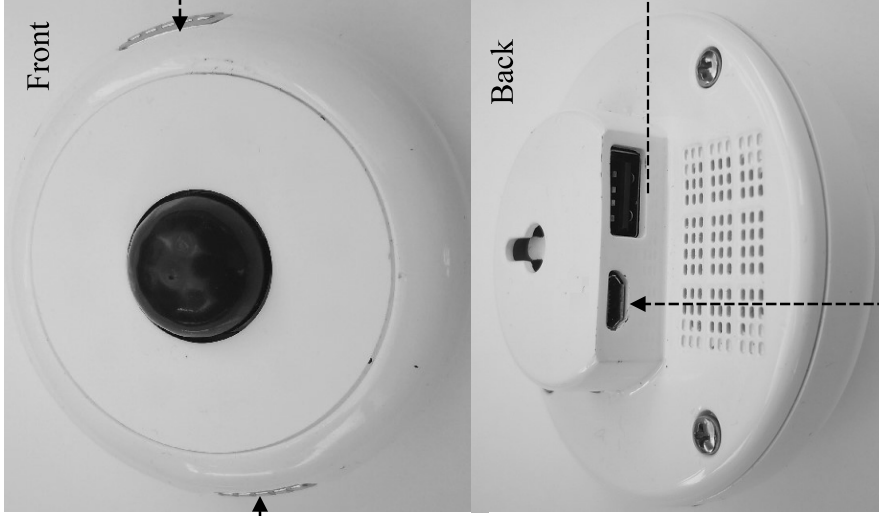
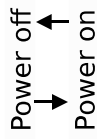
Genie Lights L700 Quick Setup



MODE key operation
A. short/normal click



MODE key operation
B. long pressed click



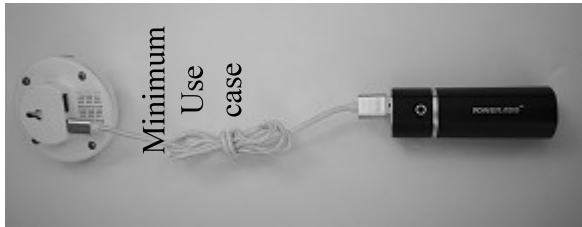
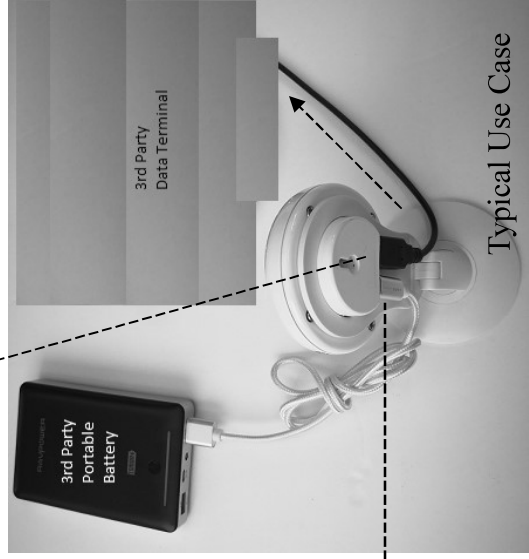
ADJUST key operation:
-Short/normal click as ++
-Long pressed click as --
for the corresponding **MODE**

++ Next Pattern
-- Previous Pattern

++ Next Song
-- Previous song

Type A USB

microUSB **Power Input Port**
+5v DC from phone charger or battery bank



WiFi Setup

8. AP mode

L700 enters WiFi-AP mode automatically after ~15seconds if there is no or wrong WiFi credential, or target WiFi router is not turn on, or too far away in between.

Go to Phone/PC WiFi setting UI, you will see “**HyMax20B696E**” like AP name, that’s our L700 AP ssid (“Hymax” + 7 Hex digits which is the part of this L700’s MAC address). Each L700 will have a different but similar AP ssid.

Connect a phone/PC to L700 AP quickly as L700’s client(s), as there is no password for L700 AP by default. User can enable/input password later.

Open a Browser on the connected client Phone/PC/tablet, type “**192.168.4.1**”. A bunch of information, commands will be provided for direct AP mode controls, or WiFi Internet connection setup.

<http://192.168.4.1/scan> has wifi setup UI.
<http://192.168.4.1/me> lists all the supported control command:

scan, wifi, /, help, h, songnext, songprev, speedup, slow, bright, dim, volup, voldown, clean

and list all light pattern commands, music cmds:

Barin, Barout, Bario, Baroi, Bardots, Barall, Rollingone, Flashing, Chasing, Red, Green, Blue, Fading, Rainbow, Circle, All, On, Off, White, Touch, Yellow, Pink, Purple, Orange

Example, “*chasing*” cmd, should be input as *192.168.4.1/chasing*; “*scan*” shall be typed as “*192.168.4.1/scan*”

All commands are insensitive, e.g. “/scan” “/SCAN” “/Scan” “/sCan” are all accepted for the same action.

Note: If any problem in any step, waiting time over 60s, still unable to do WiFi AP connection or controls, just power off/on L700 or unplug/plug power USB cable.

192.168.4.1 brings up the WiFi setup via its own UI procedure.



HyMax20B696E

WiFiManager

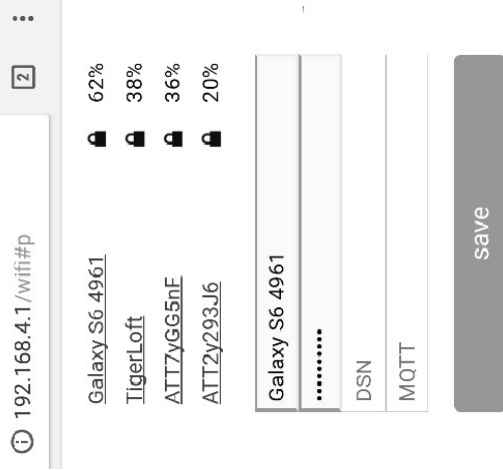
Configure WiFi

Configure WiFi (No Scan)

Info

Reset

If the first button is clicked, WiFi scan is conducted and the collected AP list is provided:

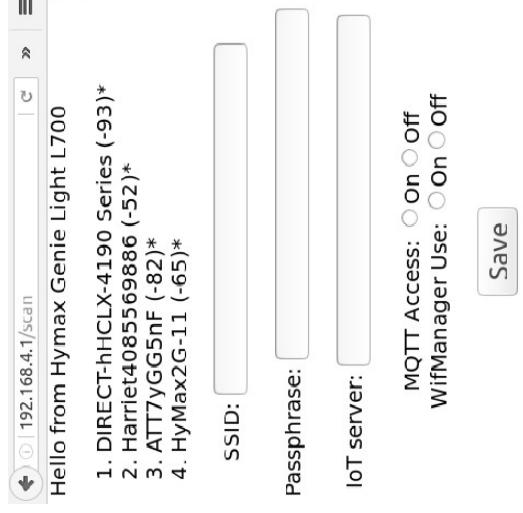


Select a WiFi router or hotspot via clicking it, input its passphrase, click button “save”.

IoT server is an optional, input only if it's changed, otherwise leave it empty

After 30s L700 should be connected to the selected router with Internet access. IF NOT, please unplug/plug USB power cable.

The direct “192.168.4.1/scan” command generates WiFi scan list (after a 10s or so waiting) and the input form on a single web page for a quick setting as well.



Once “save” button is clicked to submit the form, all the settings are sent to L700, stored there across power cycles.

9. STA mode

Once connected to WiFi Internet, L700 is in STA mode. MODE, ADJUST buttons are always ok for classic operation anytime!

Browser on Phone/PC is good to control L700 only when it's on the same network, plus L700's IP address must be known via Hymax IoT PhoneApp, e.g. 10.100.56.9 (not 192.168.4.1 any more) is reported to the user's PhoneApp.

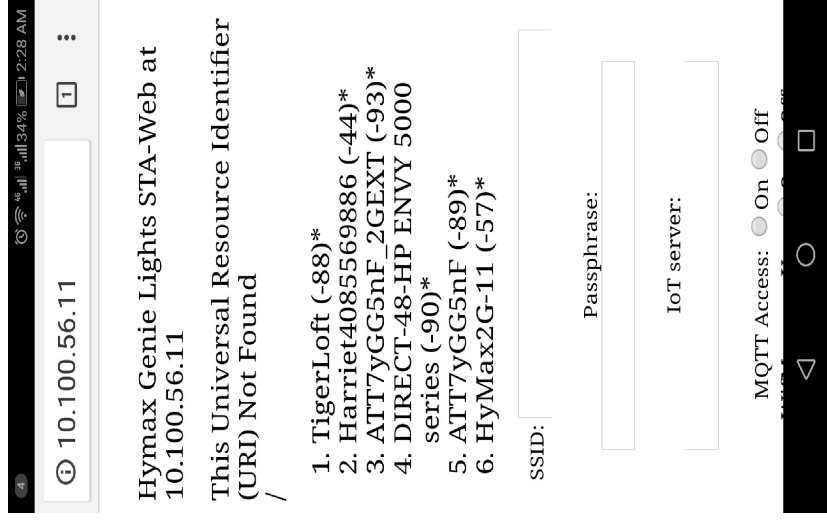
Support Light pattern commands:

Barin, Barout, Bario, Baroi, Bardots, Barall, Rollingone, Flashing
Chasing, Red, Green, Blue, Fading, Rainbow, Circle, All,
On, Off, White, Touch, Yellow, Pink, Purple, Orange

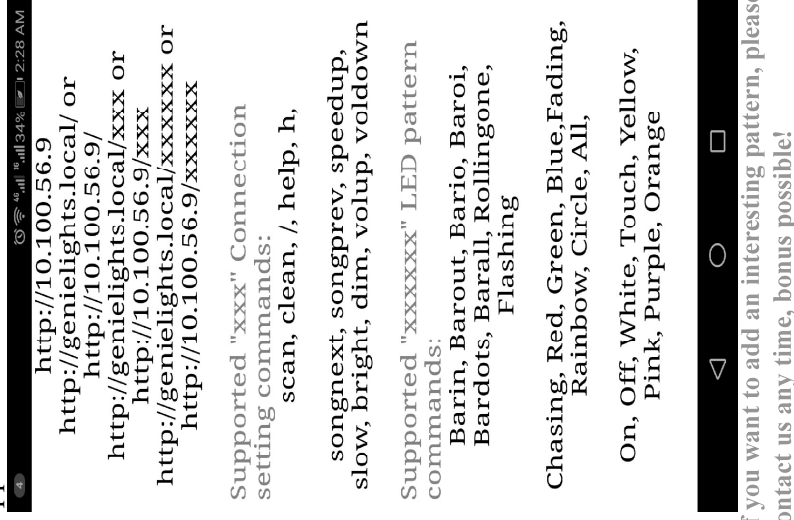
Control commands: **scan, /, clean, help**

The real IoT capability is achieved only when L700 is connected to Internet (automatically enter STA mode).

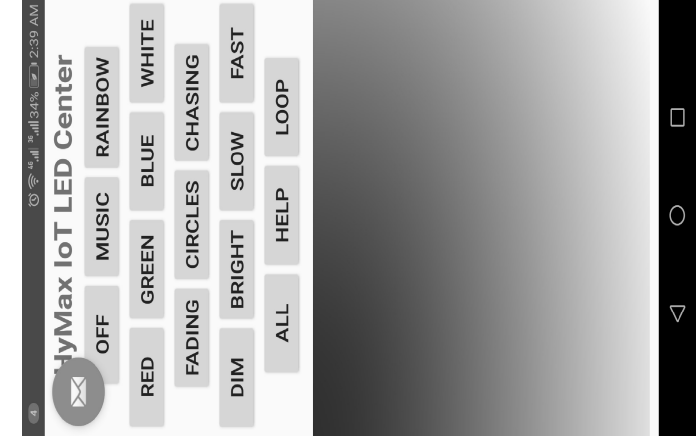
This page head part show the setting option.



And the page bottom part show all the supported commands



Almost all the Browser commands have a matching function on Hymax PhoneApp, e.g.



Different App versions may have slight different UI but all have the same functions.

10. Hymax MobileApp

Go to Google Store, search for “Hymax Neon” and install it for free. This App will have the MOST controls, much more available controls and functionalities than the Browser operation and Classic button operation.

Amazon Alexa

The setup with Alexa is very detailed, please refer to Amazon link or 3rd party link or www.hymaxiot.com.

Google Home

Google Home device support with L700 also need user's own Heroku account setup, with IFTTT configuration. L700 has the prebuilt commands in its firmware.

Developer Features

- A. Support Arduino IDE e.g. v1.8.5
- B. Use as STEM learning toolkit for anyone, programming your own light patterns for Christmas, Halloween, Birthday, dancing parties
- C. Support OTA software update in defined steps.

Attention

Do NOT dip L700 device into water. L700 is not waterproof.

LED Strip is not waterproof as a whole piece, however it can be used carefully with tail sealed, and with head stored inside a dry waterproof box, then the majority strip body can be used in the up to 3-foot water.

Limited Warranty

For more detail about the limited warranty, please visit

http://www.hymaxiot.com/products/1700/limited_warranty

Stick label here

MAC address:

XXXXXXXXXXXXXXXX

SN:

XXXXXXXXXXXXXXXXXXXX

FCC Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by

one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help important announcement

Important Note:

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 0cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.