



General

Product Type	Wireless, Constant Voltage Driver,
Length (mm)	292
Width (mm)	43
Height (mm)	30
Housing Color	White
Housing Material	Plastic
Mounting	Surface mounted
Weight (g)	300

Electronics

Input Domain	AC
Input Voltage	100 ~ 240V AC
Input Current max (A)	0.5A @ 230V AC
Output Voltage	24V DC
Output Current Max. (A)	4.17
Output Power Range (W)	0~100
Output Power (W)	100W @ 24V
Power Factor at Full Load	+0.98 @ 230VAC
Power Supply	Internal
LED Outputs	2
Anti Surge	L-N: 2kV
Efficiency	93%
Leakage current max. (mA)	0.5
Standby Power Loss Max. (W)	0.5
Input Frequency	50 ~ 60Hz
Inrush Current	45A @ 230VAC

Lighting

Color Range	Tunable White
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Control

Output Signal	PWM-CV
Control	Bluetooth
Dimming Range	0~100%, 0.1% dimming depth.
Number of Channels	2

Protection

Protection Class	II
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Environmental

Storage Temperature	-40 ~ +80 °C
Operating Temperature	-20 ~ +50 °C
Fire-retardant	V-0
Ingress Protection	IP20
Safety Standards	NEN-EN-IEC 61347-1, NEN-EN-IEC 61347-2-13,



Disclaimer

Due to the technical evolution and improvement of our products, the data provided in this document may be updated on a regular basis, and as such, confirmation of this information is strongly recommended prior to the order process. OneEightyOne is not responsible for any discrepancies in this document following changes in our products. We reserve the right to make technical changes to our products and to change information, at its sole discretion, without notice.



Intelligent Tunable White LED Driver (Constant Voltage)

- Adopt SAMSUNG/COVESTRO V0 flame resistant polycarbonate protective housings with small size and light weight.
- Bluetooth Mesh & Tuya application protocol with high networking capability are reliable and stable.
- With soft-on and fade-in dimming function enhancing visual comfort.
- Adjust brightness levels when lights are turned on or go to the brightness level adjusted last time.
- 0-100% flicker-free dimming with high frequency exemption level.
- Dimming from 0~100%, down to 0.1%.
- Innovative thermal management technology protects the power life intelligently.
- Overheat, overvoltage , overload, short circuit protection and automatic recovery.
- Suitable for indoor light applications of I /II/III type .
- Up to 50000-hour life time.
- 5 -year warranty (Rubycon capacitor).

LTECH | tuya
Strategic Partnership

Flicker-free
IEEE 1789

Dimmable:
.....
0.1%-100%


DIM/CT



SELV
RoHS



(The certification icons represent on-going certification applications only, and final certification qualification are subject to actual products.)



Technical Specs

Wireless type:	Tuya Bluetooth Mesh	Input voltage:	220-240Vac
Output voltage:	24Vdc	Frequency:	50/60Hz
Output voltage range :	24Vdc $\pm$ 0.5Vdc	Input current:	Max. 0.5A/230Vac
Output current :	Max. 4.17A	Power factor:	PF $\geq$ 0.98/230Vac (Full load)
Output power :	Max. 100W	THD :	230Vac@THD $\leq$ 12% (Full load)
Output power range:	0-100W	Efficiency (Typ):	93%
Strobe level:	High frequency exemption level	Standby power loss :	<0.5W
Dimming range:	0~100%, down to 0.1%	Inrush current :	Cold start45.2A/230Vac[Test twidth=372 us tested under 50%Ipeak]
Overload power limitation :	$\geq$ 102%	Anti surge:	L-N: 2kV
Ripple & noise:	$\leq$ 300mV	Leakage current :	Max. 0.5mA
PWM dimming frequency:	3600Hz	Vibration:	10~500Hz, 2G 12min/1cycle, 72 min for X, Y and Z axes respectively

Protection

Overvoltage protection :	Shut down the output when non-load voltage $\geq$ 26V, repower on to recover after fault conditon is removed.
Overload protection :	Shut down the output when load current $\geq$ 102%,and recover automatically
Overheat protection :	Intelligently adjust or turn off the output current if the PCB temperature $\geq$ 110°C,and recover automatically
Short circuit protection :	Enter hiccup mode if short circuit occurs,and recover automatically

ENVIRONMENT

Working temperature :	ta: -20 ~ 50°C tc: 80°C
Working humidity :	20 ~ 95%RH, non-condensing
Storage temperature, Humidity :	-40 ~ 80°C, 10~95%RH
Temperature coefficient :	$\pm$ 0.03%/°C(0-50°C)

Safety & EMC

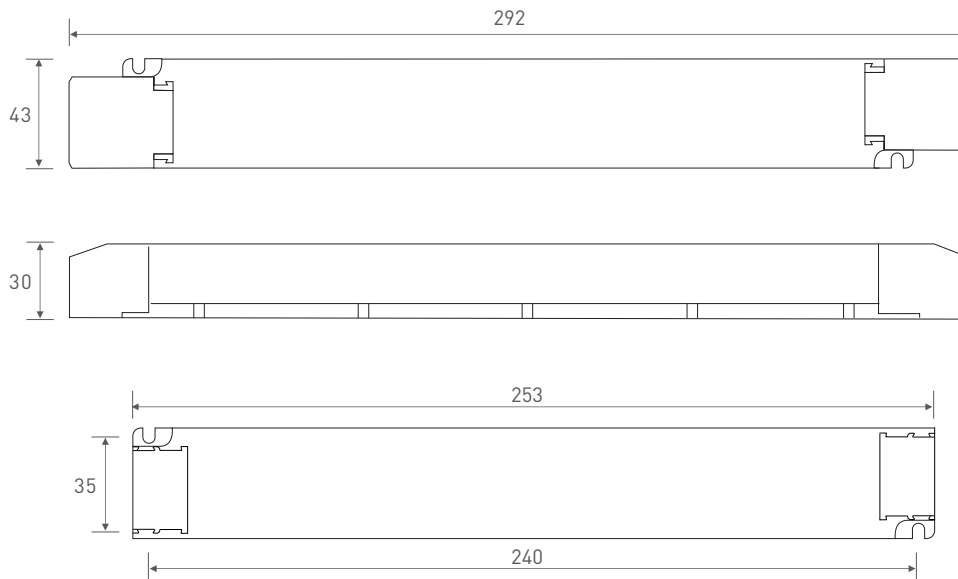
Withstand voltage :	I/P-O/P:3750Vac
Insulation resistance :	I/P-O/P:100M Ω /500VDC/25°C /70%RH
Safety standards:	IEC/EN61347-1, IEC/EN61347-2-13
EMC emission:	EN55015, EN61000-3-2 , IEC61000-3-3
EMC immunity:	EN61000-4-2,3,4,5,6,8,11, EN61547
Strobe test standard:	IEEE 1789

Others

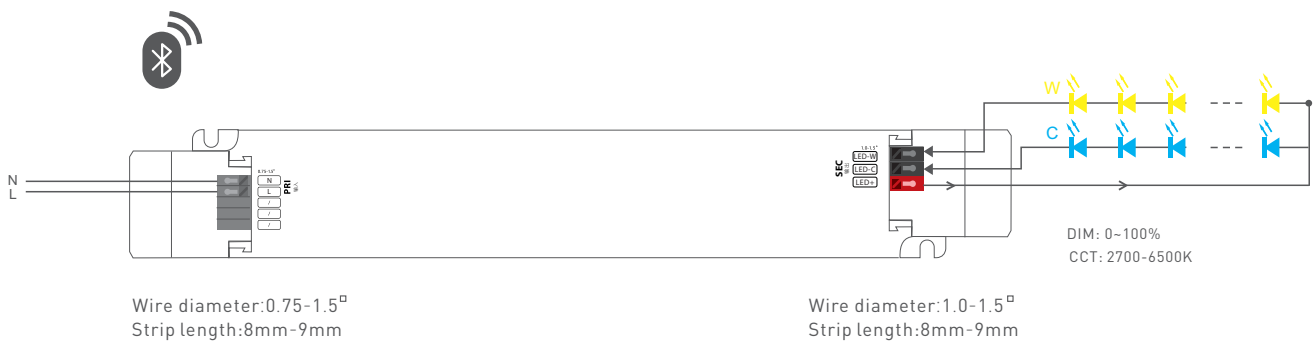
Dimensions(L×W×H) :	292×43×30mm(L×W×H)
Package size(L×W×H) :	296×44×33mm(L×W×H)
Gross weight:	300g $\pm$ 10g

Product Size

Unit : mm

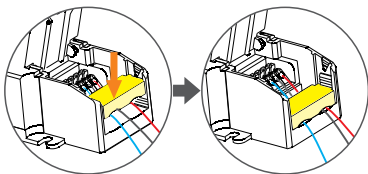


Wiring Diagram

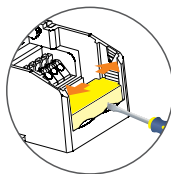


* Access the network to control through App and Bluetooth

Tension plate

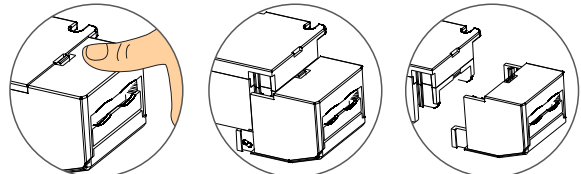


Push the tension plate down to fix the electric wire.



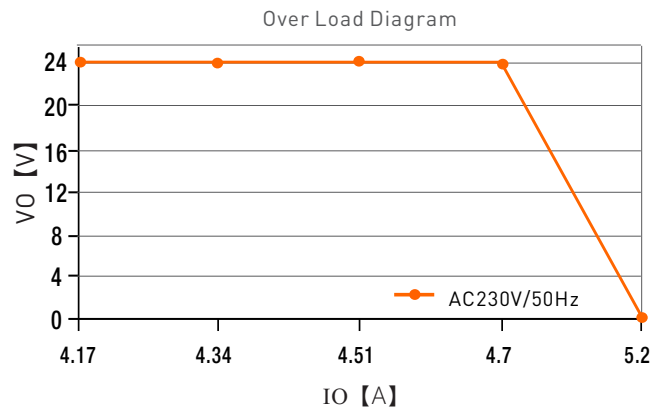
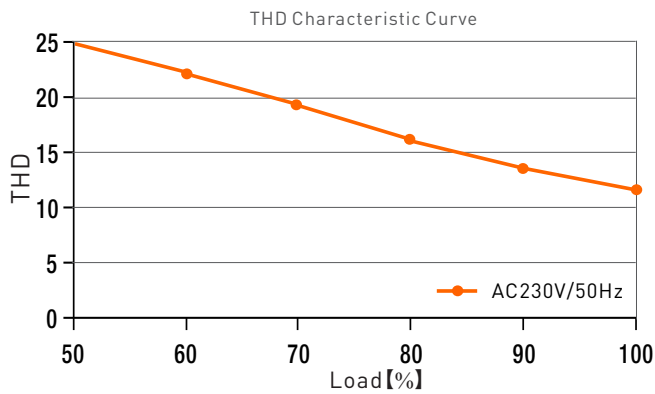
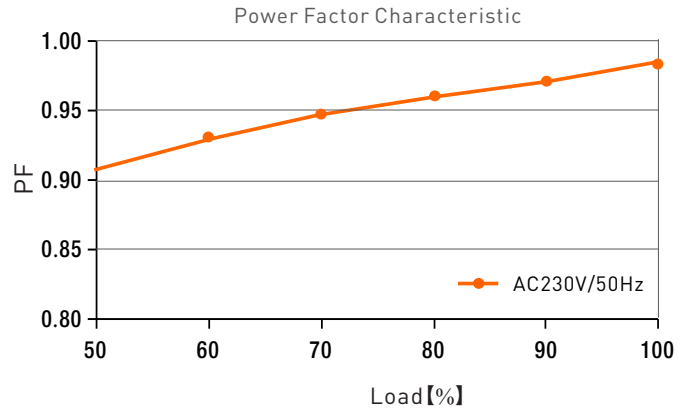
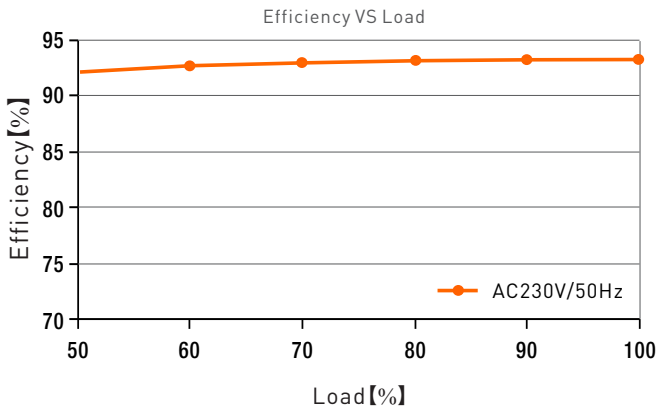
Push the side plate outwards and remove the tension plate by prying it up with a tool at the same time.

Remove the protective housing



Pull the housing left and right from the bottom to remove it.

Relationship Diagrams



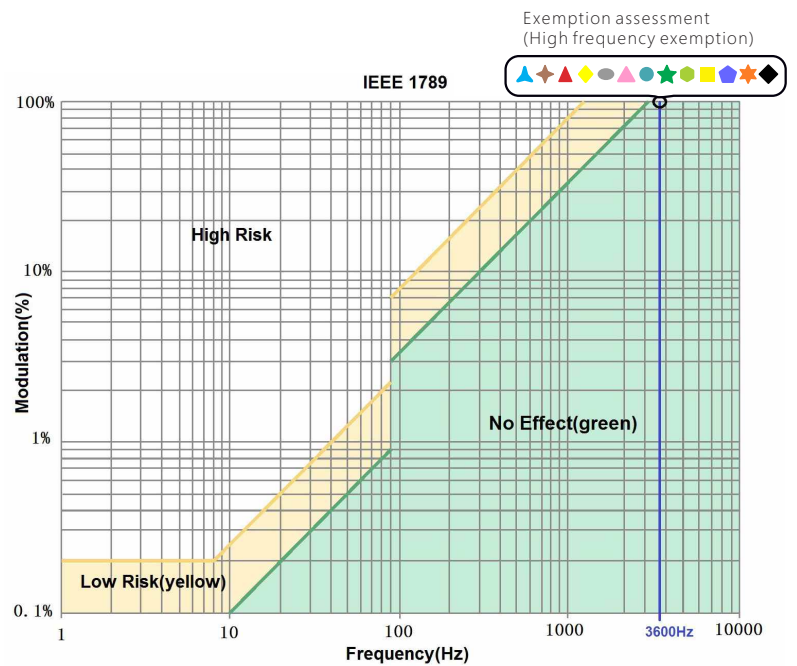
Flicker Test Table

IEEE 1789

Limit Value of Modulation in Low Risk Areas	
Waveform frequency of Optical output	Limit value (%)
$f \leq 8\text{Hz}$	0.2
$8\text{Hz} < f \leq 90\text{Hz}$	$0.025 \times f$
$90\text{Hz} < f \leq 1250\text{Hz}$	$0.08 \times f$
$f > 1250\text{Hz}$	Exemption assessment
Limit Value of Modulation in No Effect Areas	
Waveform frequency of Optical output	Limit value (%)
$f \leq 10\text{Hz}$	0.1
$10\text{Hz} < f \leq 90\text{Hz}$	$0.01 \times f$
$90\text{Hz} < f \leq 3125\text{Hz}$	$(0.08/2.5) \times f$
$f > 3125\text{Hz}$	Exemption assessment (High frequency exemption)

Brightness

- ▲ 0.1%
- ◆ 1%
- ▲ 5%
- ◆ 10%
- 20%
- ▲ 30%
- 40%
- ★ 50%
- 60%
- 70%
- ◆ 80%
- ★ 90%
- ◆ 100%



App Operating Instructions

1. Register an account

Tuya Smart App is compatible with iOS and Android systems. Scan the QR code below with you mobile phone and follow the prompts to complete the app installation. After installation being completed, you can log in or register an account.

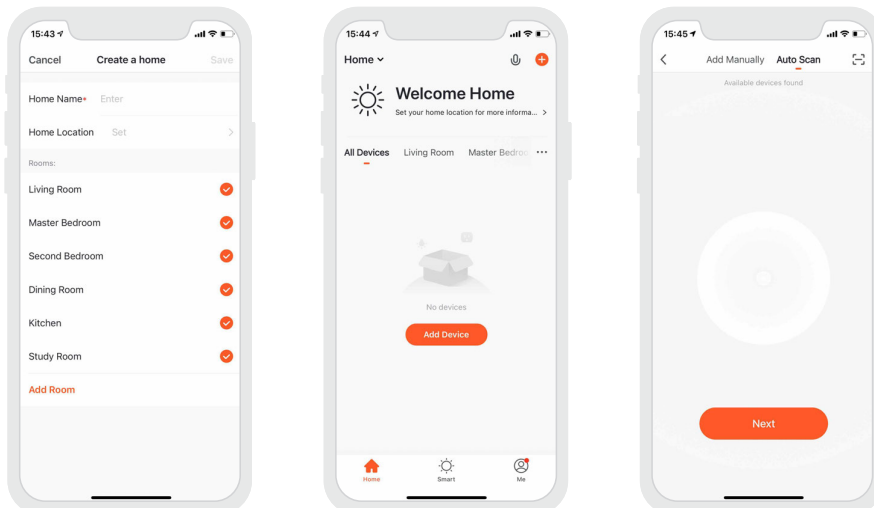
APP support



App download

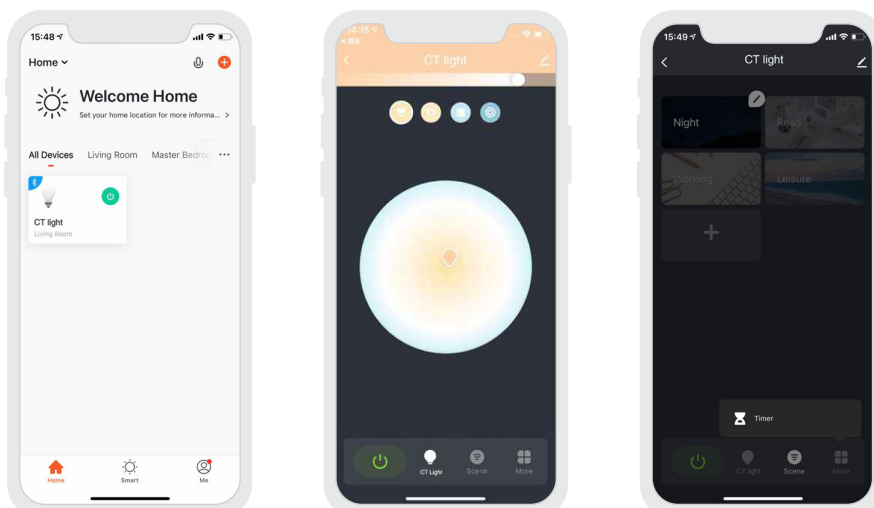
2. Paring instructions

A new user clicks "Me" → "Home Management" → "Create a Home", give a name to your home and confirm your home location, then add the rooms you need. Click "Add Device" - "Auto Scan" and enable permissions for automatically scanning Bluetooth/Wi-Fi/Zigbee/wired devices. Follow the prompts to add the device [Ensure that the device is ready for network connection].



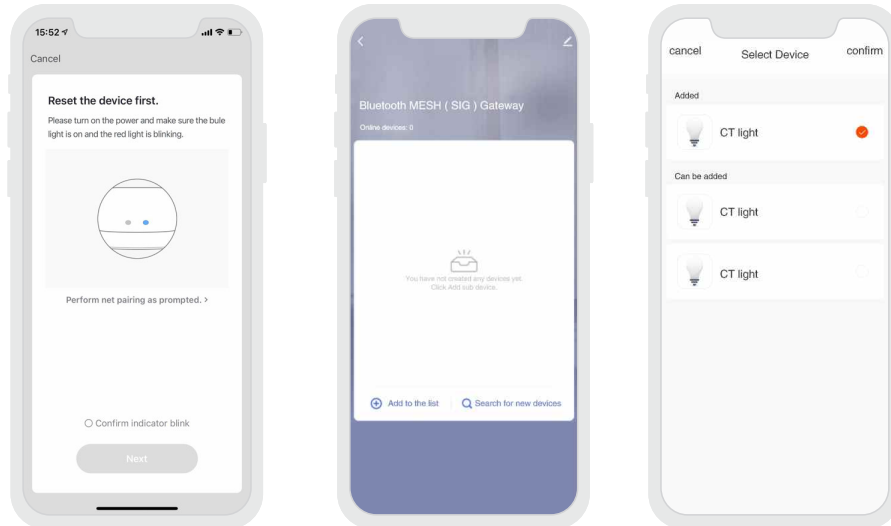
3. Lighting control settings

After paring up your device, click the device you add and adjust to your desired lighting status by brightness changing and color temperature adjustment. In "Settings", there are also lighting alarm clock (Tuya Bluetooth Gateway needs to be added) and countdown functions.

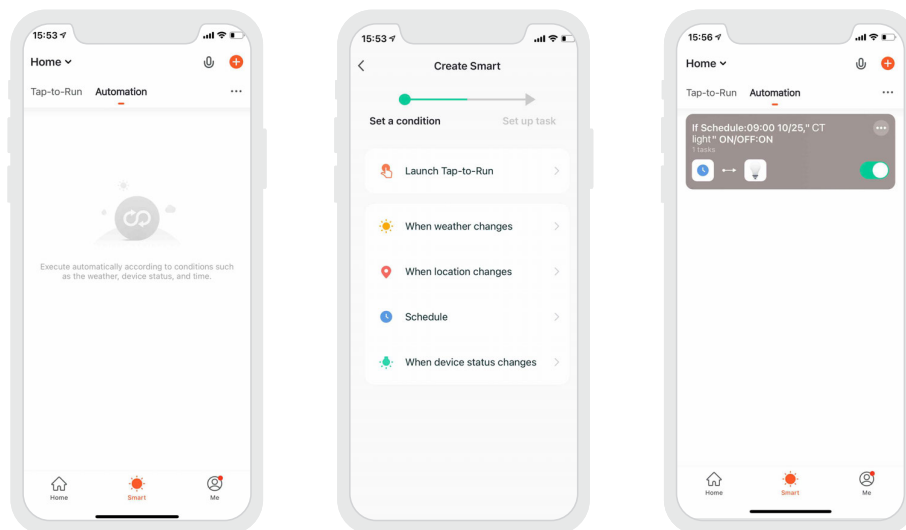


4. Remote control and automation

4.1 Remote control: Add Tuya Bluetooth MESH (SIG) Gateway by search bluetooth devices, and follow the prompts to configure the gateway to the network. After configuring the network, access the gateway interface and click "Add to the list" or "Search for new devices" to add the device to the gateway, and then the device can be controlled remotely.

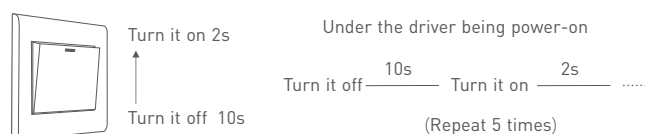


4.2 Automation settings: After adding Tuya Bluetooth MESH (SIG) Gateway, you'll be able to control the lighting remotely by clicking "Automation" in the "Smart" menu. In "Automation", set up conditions from weather, location and timing to other device status so as to trigger the lighting effects you preset and realize the lighting automation.



Reset The Device (Reset to factory defaults)

When the driver is power-on, turn it off and after 10s turn it on. After 2s, turn it off again. Repeat the same operation 5 times and then turn on the driver again. When the lamp is flashing (2 flashes/s), reset the device successfully.



Attentions

- Please use in spacious and open space. Avoid metal obstructions above and in front of products.
- Please use in a cool and dry environment.
- No disassembly of products so as not to affect the warranty.
- Please keep away from heat.
- Please do not open, modify, repair or maintain products , otherwise warranties are not allowed.

Warranty Agreement

Thanks for your purchasing. Our products offer a 5-year warranty and you can enjoy free maintenance services within 5 years from the date of receiving products. Please contact your suppliers before sending products back to repair.

Warranty exclusions below:

- Any failure or damage of products caused by improper installation, operation, maintenance and storage ,which results from failing to follow manuals.
- Beyond warranty periods.
- Alter or tear up product bar codes without authorization.
- Change configuration files of products or dismantle products for repair without authorization.
- Artificial damage of products, such as Improper voltage, high temperature, water damage, mechanical damage, smash, serious oxidation, and rust.
- Failures or damage of products caused by force majeure , such as earthquake, fire disaster, flood, and electric shock.
- Failures or damage of products not caused by product designs, technology, manufacturing, or quality.

* This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.