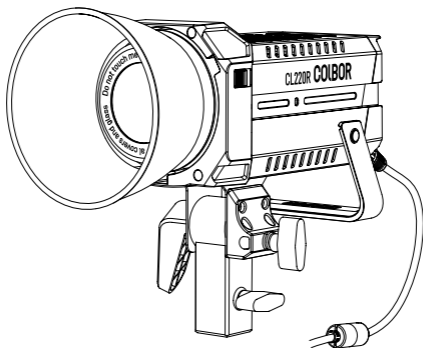# COLBOR

## CL220R Video Light   User Manual

Thank you for choosing COLBOR product. Please read this manual carefully before use and follow all instructions mentioned herein.

Caring For Your COLBOR Product

- Keep corrosive chemicals, liquids and heat source away from the product to prevent mechanics damage.
- The product is not waterproof.
- Do not leave the product unattended while in use. Keep out of reach of children.
- Do not handle with wet hands. Do not touch the hot COB surface.
- Please do not block the ventilation and do not look at the light directly when it is on.
- Do not attempt to disassemble or modify the product. Doing so voids warranty.
- Please have the product checked or repaired by authorized technicians if any malfunctions happened.
- Disconnect from the power supply when it is not in use.
- Do not cover, inverted COB and radiator for high temperature, do not cover, inverted, do not touch the lamp holder and radiator vent with your hands when the product in use.
- Do not use any power adapter of other products to avoid the lamp malfunction.
- Malfunction may be caused by dropping, impact of external force.
- Failure to follow all the instructions may result in mechanics damage.
- Our company reserves the right of final interpretation of the product.
- Product design and specifications are subject to change without prior notice.

Power Connection

- You must use the power adapter that comes with the product rather than other adapters to avoid damaging the lamp. The positive and negative connections of the power adapter interface(DC OUT) and the lamp power interface (DCIN) are shown below:
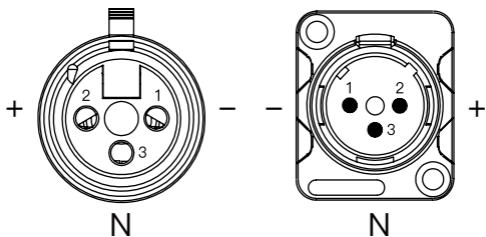
Product Instructions
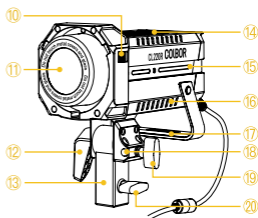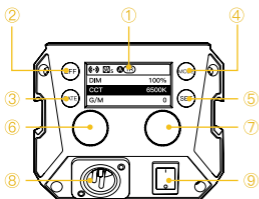
① LED Display Screen
② EFF Mode Button
③ EFF Rate Option Button
④ Mode Button
⑤ Settings Menu Button
⑥ Left Knob/Option Adjustment Knob
⑦ Right Knob/Parameter Adjustment Knob
⑧ DC 48V Power Port
⑨ Power Button
⑩ Bowens Mount Lock

⑪ Light Source
⑫ Lamp Angle Adjustment Locking Grip
⑬ Lamp Holder
⑭ Air Outlet
⑮ NATO Rail
⑯ Air Inlet
⑰ Lamp Handle
⑱ Umbrella Hole
⑲ Umbrella Hole Screw
⑳ Lamp Holder Screw

Light Installation

1. Removal of lamp cap protection cover

Hold the COB cover with the Bowens Mount tenon and rotate it in the direction of the arrow.

★ Note: Be sure to remove cob protective cover and cob protective film before use.
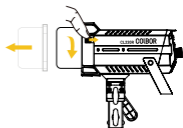
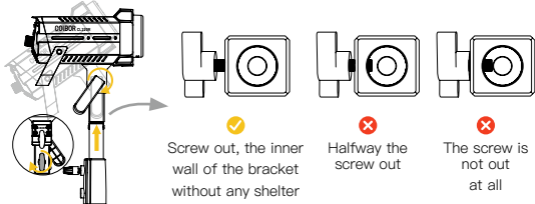## 2. Installation and removal of reflector

Installation of reflector: Align the reflector with the groove around the lamp head and clip it in, turn the reflector in the direction of the arrow, and the reflector installation will be completed after the top rod rebounds.

Removal of reflector: Please follow the instructions below.
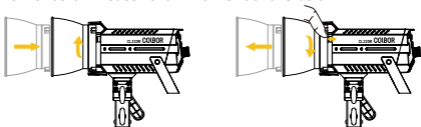
3. Installation of light

Rotate the lamp holder screw until the inner wall is not shielded and put the product on the top of the lamp holder to tighten the bracket screw for fixation. Adjust the lamp body irradiation angle and tighten the lamp holder angle grip.

✅ Screw out, the inner wall of the bracket without any shelter

❌ Halfway the screw out

❌ The screw is not out at all

4. Install the soft light umbrella

Insert the handle of the soft light umbrella into the umbrella hole and tighten the screw to lock.

✅ Screw out, the inner wall of the soft light cover without shelter

❌ The screw is not out at all
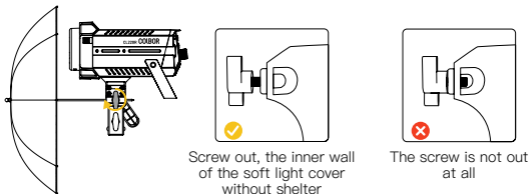
5. Power Supply

### (1) Power cord adapter fixation
Pass the attached wire rope through the snap ring of the power adapter and hang it on the stand.

(2) AC power supply
Connect the power adapter, aim the pin at the DC power interface of the lamp body, and then power on after the cable is well-placed.
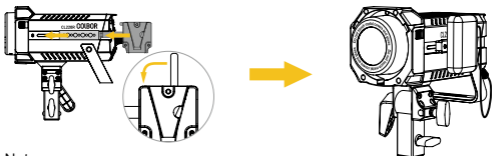
(3) Power cord storage
When pulling out the power cord of the lamp body, firstly press the spring beside the connector to unlock it. Do not pull out the wire forcefully without unlocking it.
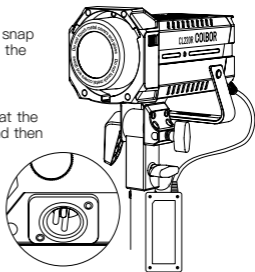
(4) Power with V–port battery

Attach the V–mount battery to the lamp with the NATO expansion bar and VM3 (optional), then connect the D–tap to XLR power cord, and power on the lamp.

Note:

* For one 14.8V battery powering, the maximum brightness is 50% of full power.

Operation Instructions

1. Remove the COB protective cover before powering the light.

2. Power On: After confirming that the power connection is finished, press the switch to "−", and the screen will display the brand and product module. (Default mode: CCT)

3. Power Off: Press the switch to "o" to turn it off.

1. Status Icon Description
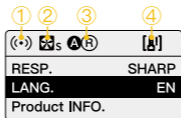
| ① APP Connection Status Icon	
• (•) ((•))	After selecting wireless connection in Settings menu, the icon will be displayed dynamically.
((•))	The icon is always on to indicate successful pairing with mobile APP. The icon disappears to indicate mobile APP pairing failure, or the product is unpaired.
② Fan Status Icon	
🔣s	Smart Mode. The product will adjust the fan speed according to the internal detected temperature to ensure that it is in optimal working condition.
🔣Q	Quiet Mode. The fan keeps running at low speed for minimum noise, and overheating protection will be activated if the product temperature is higher than the alarm value.
🔣P	Performance Mode. Fan runs at the highest speed to ensure heat dissipation.
③ Group Status Icon	
(NULL)	None grouping status. The product defaults to the factory status, and will not be affected by other groups.
ⒶⓉ	A stands for Group A. There are fifteen groups (A~O). T stands for Tx.
ⒶⓇ	A stands for Group A. There are fifteen groups (A~O). R stands for Rx.
Ⓐ(TR)	A stands for Group A. There are fifteen groups (A~O). TR stands for TxRx.

④ Product Overheated Alarm Icon	
[≜!]	If the icon flashes, it means that the internal temperature of the product is too high, and cooling measures need to be taken. If the icon disappears, it means that the operation is normal.

2. CCT Mode (Short press Mode Button to switch CCT Mode and HSI Mode)
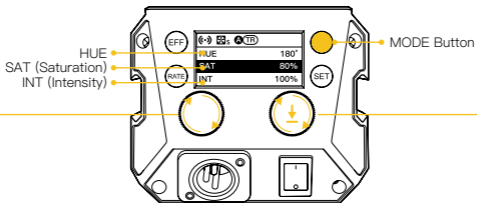* Default: CCT Mode

Brightness
Color Temperature
G/M Balance

MODE Button
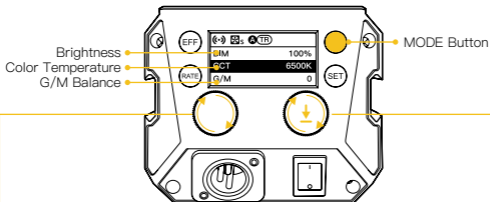
Option Adjustment Knob

↻ Rotate the Knob counterclockwise to adjust options: color temperature, brightness, G/M Balance.

Parameter Adjustment Knob/Parameter Preset

↻ Rotate the knob counterclockwise to adjust parameter of color temperature, brightness and G/M Balance:
Brightness (DIM): 0%~100%
Color temperature: 2700–6500K
G/M Balance: Green10~1–0–Magenta1~10

↓ Short press the knob to quickly switch the preset parameter of color temperature, brightness and G/M Balance:
Preset brightness: 0%、25%、50%、75%、100%
Preset color temperature: 2700K、3200K、4000K、5600K、6500K
G/M Balance: Short press return to zero.

3. HSI Mode (Short press Mode Button to switch)

HUE
SAT (Saturation)
INT (Intensity)

MODE Button

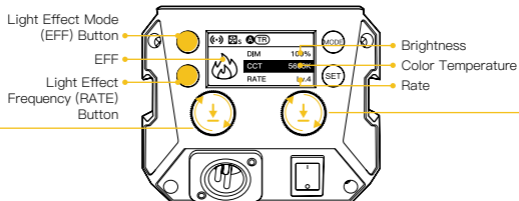|	
HUE	180°
SAT	80%
INT	100%

Option Adjustment Knob

↻ Rotate the Knob counterclockwise to adjust options:HUE – SAT – INT

Parameter Adjustment Knob/Parameter Preset

↻ Rotate the knob counterclockwise to adjust parameters of HUE, SAT, and INT:
SAT :0%~100%
HUE 0° ~359°
INT 0%~100%

↓ Short press the knob to quickly switch the preset parameter of HUE, SAT, and INT:
HUE： 0°/60°/120°/180°/240°/300°
SAT： 0%/25%/50%/75%/100%
INT： 0%/25%/50%/75%/100%

4. EFF-CCT Mode (Short press EFF Button)
*Default: EFF-CCT Mode

Light Effect Mode (EFF) Button

EFF

Light Effect Frequency (RATE) Button

Brightness

Color Temperature

Rate

DIM 100%
CCT 5600K
RATE Lv.4

Option Adjustment Knob

↻ Rotate the Knob counterclockwise to adjust options: brightness, color temperature.

↓ Short press to switch to EFF-HSI Mode

Parameter Adjustment Knob/Parameter Preset

↻ Rotate the knob counterclockwise to adjust parameters.
Color temperature: 2700~6500K
Brightness: 0%~100%

↓ Short press the knob to quickly switch the preset parameter.
Color temperature: 2700K/3200K/4300K/5600K/6500K
Brightness: 0%/25%/50%/75%/100%

Light Effect Mode (EFF) Button

↓ Press to switch light effect:
Fire → Spark → CCT Chase → Pulsing → Beacon → TV → Party → Explosion → Faulty Bulb → Welding → Strobe → Lightning → SOS.

5. EFF-HSI Mode (Short press EFF Button then press the left knob to switch to EFF-HSI Mode.)
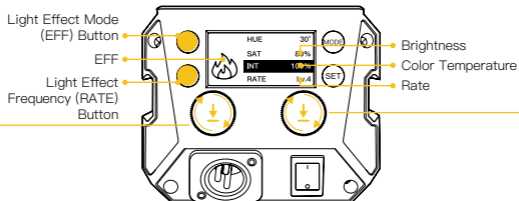
Light Effect Mode (EFF) Button

EFF

Light Effect Frequency (RATE) Button

HUE 30°
SAT 60%
INT 100%
RATE Lv.4

Brightness

Color Temperature

Rate

Option Adjustment Knob

↻ Rotate the Knob counterclockwise to adjust options: brightness, color temperature.

↓ Short press to switch to EFF-CCT Mode

Parameter Adjustment Knob/Parameter Preset

↻ Rotate the knob counterclockwise to adjust parameters.
HUE : 0˚~359˚
SAT : 0%~100%
INT : 0%~100%

↓ Short press the knob to quickly switch the preset parameter.
HUE: 0˚/60˚/120˚/180˚/240˚/300˚
SAT: 0%/25%/50%/75%/100%
INT: 0%/25%/50%/75%/100%

Light Effect Frequency (RATE) Button

↓ Short press to switch the frequency varies effect, Lv.1~Lv.5+ RANDOM.
Short press to switch the effect
according to different special effects. Some are color, some are speed, and some are strength.
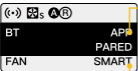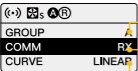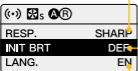
EFF	☍ Fire	CCT Mode	CCT: 1000K~10000K DIM: 0%~100% Rate: Lv1~5
		HSI Mode	HUE: 0°~359° SAT: 0%~100% INT : 0%~100% RATE: Lv1~5
	☼ Spark	CCT Mode	CCT: 2700K~6500K +RANDOM DIM: 0%~100%+ RANDOM RATE: Lv1~5+ RANDOM
		HSI Mode	HUE: 0°~359° +RANDOM SAT: 0%~100%+RANDOM INT: 0%~100%+RANDOM RATE: Lv1~5+RANDOM
	⊚ CCT Chase	CCT Mode	CCT: LOCK DIM: 0%~100% +RANDOM RATE: Lv1~5
		HSI Mode	HUE: LOCK SAT: 0%~100%+RANDOM INT: 0%~100%+RANDOM RATE: Lv1~5
	◌ Pulsing	CCT Mode	CCT: 2700K~6500K DIM: 0%~100% RATE: Lv1~5
		HSI Mode	HUE: 0°~359° SAT: 0%~100% INT: 0%~100% RATE: Lv1~5
	☼ Beacon	/	TYPE : Red and white, blue and white, red and blue DIM: 0%~100% RATE: Lv1~5
	▶ TV	CCT Mode	CCT: 2700K~6500K+RANDOM DIM: 0%~100%+RANDOM RATE: Lv1~5+RANDOM
		HSI Mode	HUE: 0°~359° +RANDOM SAT: 0%~100%+RANDOM INT: 0%~100%+RANDOM RATE: Lv1~5+RANDOM
	☌ Party	CCT Mode	CCT: 1000K~10000K+RANDOM Dim: 0%~100%+RANDOM Rate: Lv1~5+RANDOM
		HSI Mode	Hue: 0°~359° +RANDOM SAT: 0%~100%+RANDOM INT: 0%~100%+RANDOM RATE: Lv1~5+RANDOM
	☀ Explosion	CCT Mode	CCT: 1000K~10000K+RANDOM Dim: 0%~100%+RANDOM Rate: Lv1~35+RANDOM
		HSI Mode	Hue: 0°~359° +RANDOM SAT: 0%~100%+RANDOM INT: 0%~100%+RANDOM Rate: Lv1~5+RANDOM

EFF	Faulty Bulb	CCT Mode	CCT: 2700K~6500K DIM: 0%~100% RATE: Lv1~5
		HSI Mode	HUE: 0˚~359˚ SAT: 0%~100% INT: 0%~100% RATE: Lv1~5
	Welding	CCT Mode	CCT: 2700K~6500K DIM: 0%~100% RATE: Lv1~5
		HSI Mode	HUE: 0˚~359˚ SAT: 0%~100% INT: 0%~100% RATE: Lv1~5
	Strobe	CCT Mode	CCT: 2700K~6500K+RANDOM DIM: 0%~100%+RANDOM RATE: Lv1~5
		HSI Mode	HUE: 0˚~359˚ +RANDOM SAT: 0%~100%+RANDOM INT: 0%~100%+RANDOM RATE: Lv1~5
	Lightning	CCT Mode	CCT: 2700K~6500K DIM: 0%~100% RATE: Lv1~5
		HSI Mode	HUE: 0˚~359˚ SAT: 0%~100% INT: 0%~100% RATE: Lv1~5
	S.O.S	CCT Mode	CCT: 2700K~6500K DIM: 0%~100% RATE:LOCK
		HSI Mode	HUE: 0˚~359˚ SAT: 0%~100% INT: 0%~100% RATE:LOCK

4. Setting

1. Short press the SET bottom to enter settings menu.

2. Roll the Brightness Control Wheel to choose settings.

3. Press the setting bottom to adjust the corresponding setting(Short press the setting bottom to adjust the wireless connection mode).

	Settings	Options
(display: BT APP / PARED / FAN SMART)	Wireless Connection	APP/Remote Control/Group Short press the right knob to switch the paring mode (One mode for each time) **APP/Remote Mode:** Long press the SET button for pairing. **Group Mode:** Rotate the right knob to choose the group set(NULL/A~O *default NULL) and communication (TX/RX/TXRX *default :TXRX).
	Fan Mode	SMART/ QUIET/ PERFORMANEC **SMART:** The product will detect the current internal temperature to adjust the fan speed by itself. **QUIET:** The fan will run at up to 50% output. **PERFORMANEC:** Fan runs at the highest speed to ensure heat dissipation.
(display: GROUP A / COMM RX / CURVE LINEAR)	Group	NULL/ A~O (NULL by default)
	Communication	TX/ RX/ TXRX (TX by default)
	Curve	LINEAR, L.CURVE, E.CURVE, S.CURVE.
	Response	SHARP/ SMOOTH (SMOOTH by default)
(display: RESP. SHARP / INIT BRT DEF / LANG. EN)	Initial brightness setting	Default Brightness: The brightness set before power off. Short press the SET button then rotate the right knob to adjust the brightness. Short press the right knob to switch the brightness between default, 0%, 25%, 50%, 75%, 100%
	Language	EN/ CN

|		
INIT BRT DEF. LANG. EN Product INFO. HW.VER. 1.01 FMW.VER. 1.01 CS-VER. 1.01 B42E99939BB6	Product INFO.	Short press the setting button to enter the production information interface. Press the setting button again to go back to settings menu. ① Hardware Version ② Firmware Version ③ Protocol Version ④ MAC Address

5. APP Connection & Light Control

Scan the QR code, or search "COLBOR STUDIO" in app store to download the app for light control.
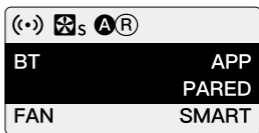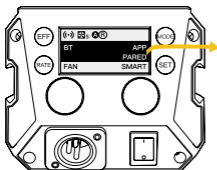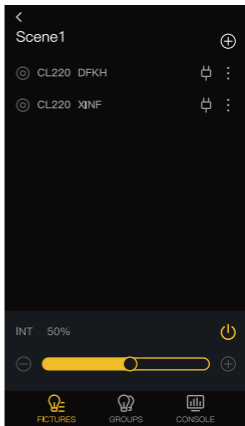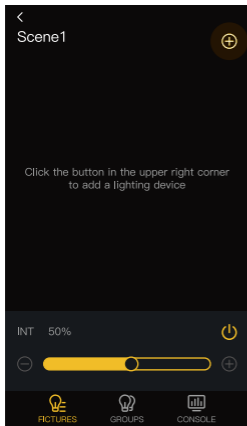

CL220R Pairing:

1. Press the setting button and enter the pairing mode. Short press the setting button to choose "APP", then long press the setting button for 3 seconds for pairing.
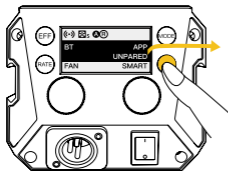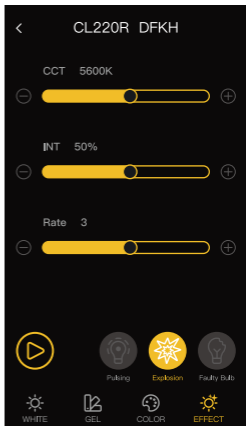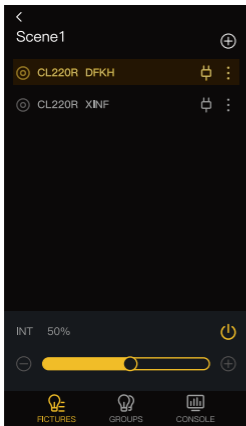
2. Open the APP and click the " + " on the upper right, then click the scene one and click the + on the upper right. Showing CL220R means successfully pairing.
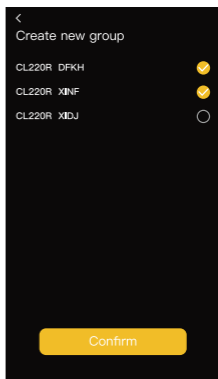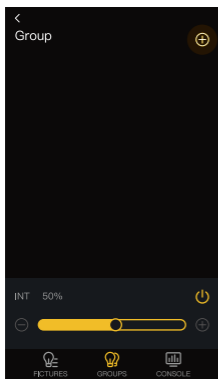
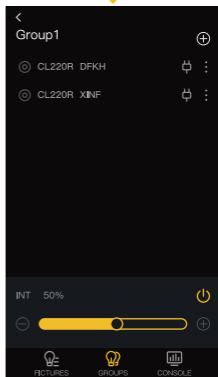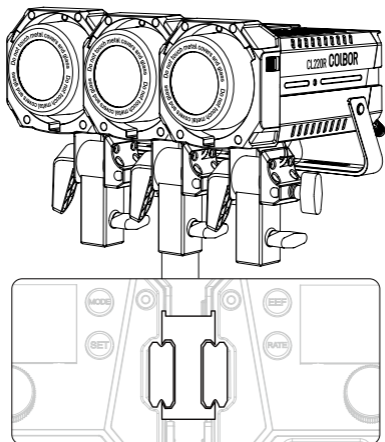3. Click the CL220R for control.

CL220R Group Control:

1. After successfully pairing the CL220R, click the group then click the " + " on the top right. Choose the light for grouping and click the confirm bottom. Showing Group One means successfully grouping.

2. Click the group for lighting control.

* Equipped with a NATO extension bar and an NQD quick–release device, the lights can be spliced together, and up to three lights can be spliced.

Specifications

|	
Type	Bi–Color + RGB
Color Temperature Range	2700K–6500K (±200K)
CRI/TLCI	96±2/97±2
TM–30–18	Rf:94±2/Rg:102±2
SSI	83(D32)/73(D56)
Illumination	See the Form 1 Below
Beam Angle	No Reflector ≈∠ 120°
Power	250W (Max)
COB Output Power	C/W:220W R/G/B: 100W
	*Constant Power Output
Input	DC 48V 5.2A 3 Pin XLR
Body Material	Aluminum Alloy+ABS
Size (L*W*H)	240*128*219mm (9.4"*5"*8.6")
Weight	1.6kg(3.52lbs)
Op. Temp.	–10~40℃

Package List
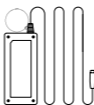
CL220R Video Light x1

Reflector (Bowens Mount) BSR70 x1 (not included in CL220R Lite)
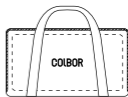
Carrying Bag x1 (not included in CL220R Lite)
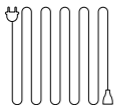
3m Plum Tail Cable x1

Power Adapter (with Wire Lanyard) x1

Warranty Card x1

NB3.58(Optional) x1

COB Cover x1

★ Power adapters may vary according to sales region.

Form 1

Illumination

CCT	Distance	Light Base	BHR15 Reflector	BHR45 Reflector	BSR70 Reflector	BSR70 +Softbox
2700K	1m	6100	47200	26200	7570	3980
	3m	915	4800	2380	1020	529
	5m	424	1890	1040	492	257
3200K	1m	6370	49400	27400	7950	4140
	3m	938	5020	2490	1070	552
	5m	443	1980	1090	514	269
4300K	1m	6840	53100	29500	8550	4420
	3m	1090	5390	2670	1150	588
	5m	475	2130	1170	551	284
5600K	1m	7100	55300	30600	8920	4570
	3m	1130	5590	2770	1190	608
	5m	493	2210	1220	572	295
6500K	1m	7260	56300	31400	9070	4770
	3m	1150	5680	2840	1220	621
	5m	505	2260	1240	582	300

★ The data is given from testing in a laboratory.

WARRANTY

Warranty Period

Thank you for purchasing COLBOR products.

1.Customers are entitled to free replacement or repair service in case of quality defect(s) found in the product under normal use within 30 days upon receipt of the product.

2.Original COLBOR products are entitled to 12–month limited warranty service. The warranty period begins on the date of purchase of brand new, unused products by the first end–user.

Within the warranty period, if product defect or failure is attributable to material defection or technological problem, the defective product or defective part will be repaired or replaced without charge (service and materials fee).

Warranty Exclusions and Limitations

1.Faults resulted from inappropriate use of a product without following its operation specification

2.Artificial damage, e.g. crash, squeeze, scratch, soaking, exposing to rain or damp

3.Modifications to a product by its user or a third party without prior written consent of COLBOR, e.g. replacement of element or circuit, label alteration

4.The code on product is inconsistent with that of warranty certificate, or the code on the product or warranty certificate is altered or torn off

5.All consumable accessory attached to a product, like cable, cover

6.Faults as a result of force majeure, such as fire, flood, lightning, etc.

Warranty Claim Procedure

1.If failure or any problem occurs to your product after purchase, please contact a local agent for assistance, or you can always contact COLBOR's customer service through email.

2.Please retain your sales receipt and warranty certificate as proof of purchase. If any of these documents is missing, only sales return or chargeable service will be provided.

3.If the COLBOR product is out of the warranty coverage, the service and the parts cost will be charged.

Guangzhou Zhiying Technology Co., Ltd