



广州市番禺宝联实业有限公司

Bao-Lian Industry Co.,Ltd

规格书 Specification

品 名 Product: BL 超值摇杆

BL Locking Style Joystick

版 本 Revision: 1.5

呈 送 日 期 Issuing date: 2024.10.24



Address: 广州市番禺区市桥镇市新路 42 号 No.42 Shi Xin Road, Pan Yu District , Guangzhou City, Guangdong Province, China Tel: 020-84893809

020-84893819

Fax: 020-84894187

E-mail: ywb@bao-lian.com



BL Locking Style Joystick

型号 Ordering Information

结构类型 Type			球头 Knob		
微动结构 Switch Direct Install	带电子板 Comes With Switch PCB	带灯 Comes With LED	40mm 钻石球头 (有气泡) 40mm Diamond Ball with bubble	40mm 钻石球头(无 气泡) 40mm Diamond Ball without bubble	35mm 实色 圆球头 35mm Solid Ball
√			√		
√				√	
√					√
	√		√		
	√			√	
	√				√
	√	√	√		
	√	√		√	
	√	√			√

规格 Ratings(Switch)

开关部限定 Contact ratings

DC'30V 0.25A (最佳电阻负载 Best resistive load)

额定值是以下列条件进行实验的情况 Rated values are obtained from tests conducted under the below conditions:

1. 负载 Load: 电阻负载 Resistive load
2. 安装状态 Setup conditions: 无震动、无冲击状态 No vibration and shock
3. 温度 Temperature: 室温 Room temperature
4. 操作频率 Operating frequency: 420 次 times/min

摇杆摆动特性 Operating Characteristics

项目 Feature	规格 Spec.		单位 Unit
	配 40 钻石球头 40mm Diamond Ball	配 35mm 实色圆球头 35mm Solid Ball	
摆动力度 Operating force	短棒 Short shaft: 1.96 ± 0.35 长棒 Long shaft: 1.67 ± 0.35	短棒 Short shaft: 1.86 ± 0.3 长棒 Long shaft: 1.67 ± 0.35	N
摆动方向 Operating direction	8 ways/4 ways/2 ways	8 ways/4 ways/2 ways	度 degree
摆动外径 Operating diameter	短棒 Short shaft: 57 ± 3 长棒 Long shaft: 60 ± 3	短棒 Short shaft: 53 ± 3 长棒 Long shaft: 56 ± 3	mm



BL Locking Style Joystick

LED 灯电气特性 LED Characteristics

项目 Feature	规格 Spec.	单位 Unit
工作电压 Operating Voltage	12±2	V
工作电流 Operating Current	35~45	mA
工作温度 Operating Temperature	最大 MAX.60	℃

性能 Characteristics(Switch)

种类(Type)		摇杆开关(Switch)
容许操作频率 Allowable operating freq.	机械性 Mechanical	200 次 operations/min
	电气性 Electrical	200 次 operations/min
耐久性 Durability	机械性 Mechanical	500 万次以上 Over 5,000,000 operations
	电气性 Electrical	10 万次以上 Over 100,000 operations (测试条件 Test condition: 5V 1mA)
导通电阻 Conducting resistance		≤400 mΩ
使用环境温度 Operating temperature		-10~+55℃ (不可结冰、结霜 No icing and condensation)
使用环境湿度 Operating humidity		30~80±3%RH
保存环境温度 Storage temperature		-20~+55℃ (不可结冰、结霜 No icing and condensation)
保存环境湿度 Storage humidity		30~80±3%RH



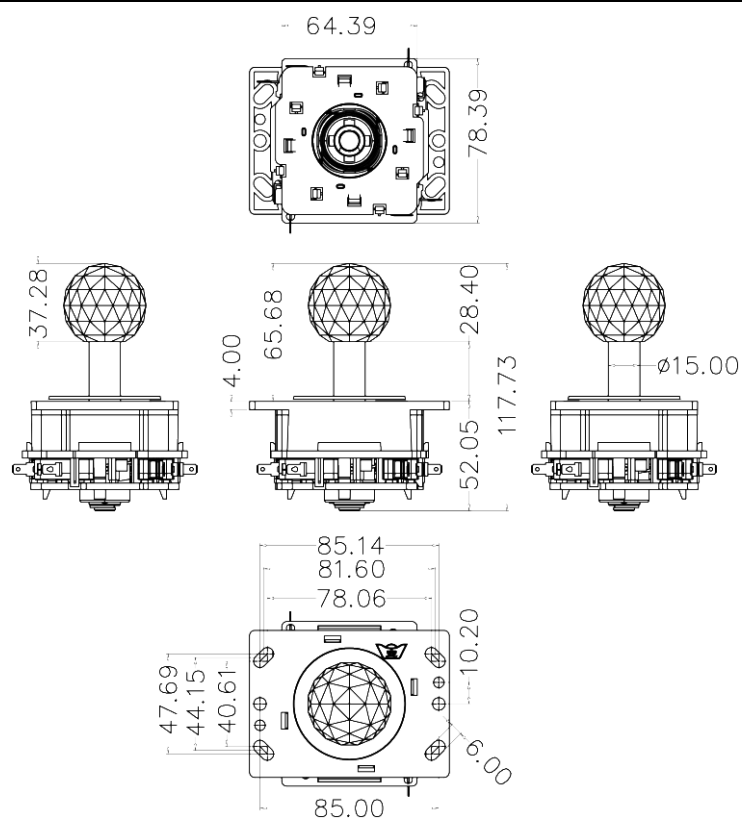
BL Locking Style Joystick

外观尺寸 Dimensions

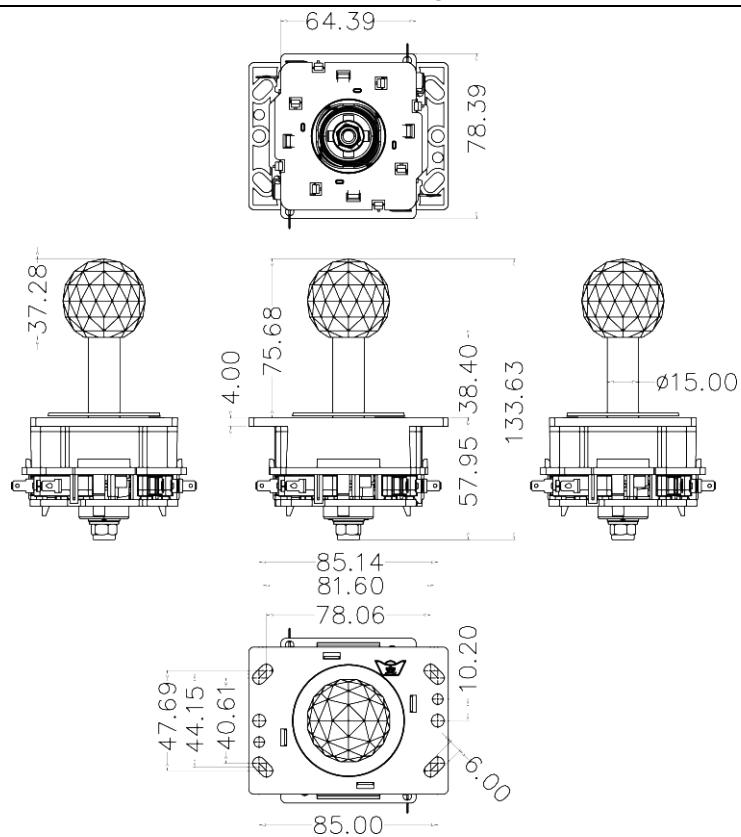
■ 微动结构 Switch Direct Install



配短铁棒 With short shaft



配长铁棒 With longer shaft



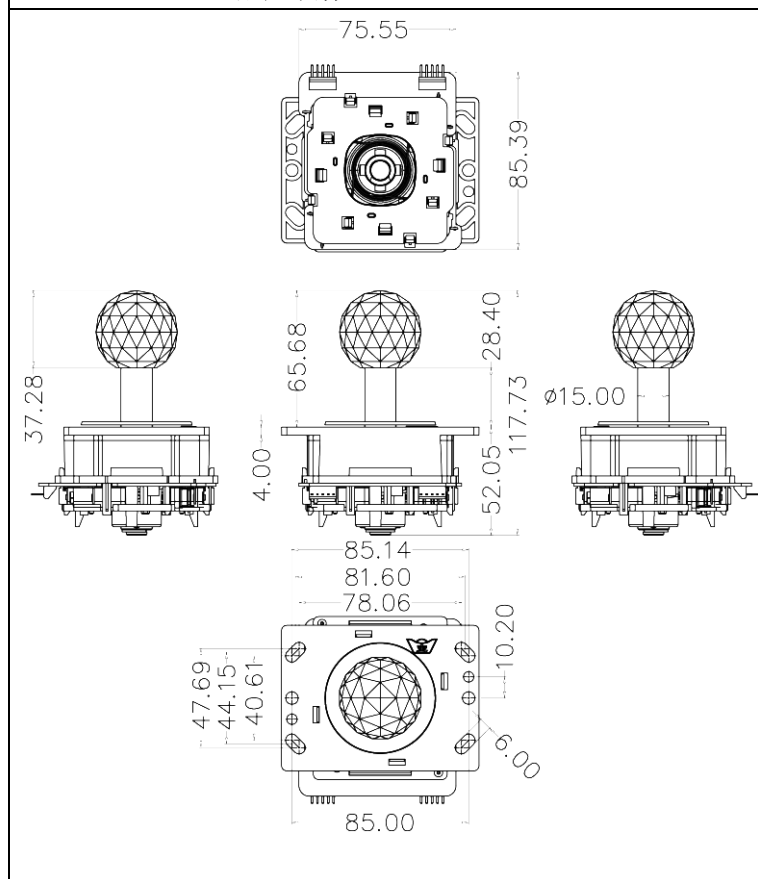


BL Locking Style Joystick

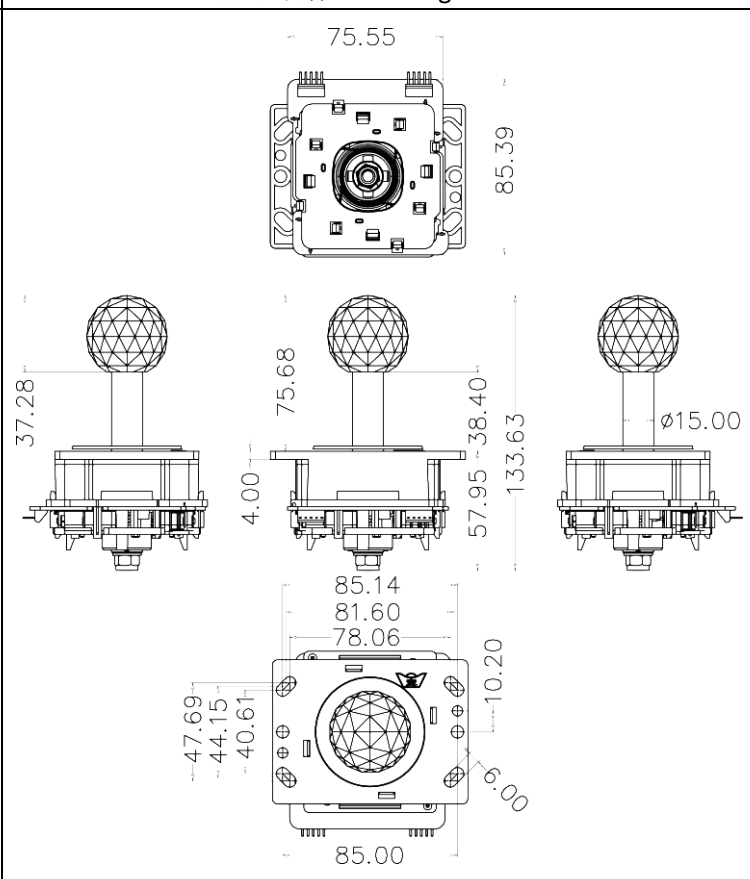
- 微动电子板结构，不带灯 Comes With Switch PCB



配短铁棒 With short shaft



配长铁棒 With longer shaft



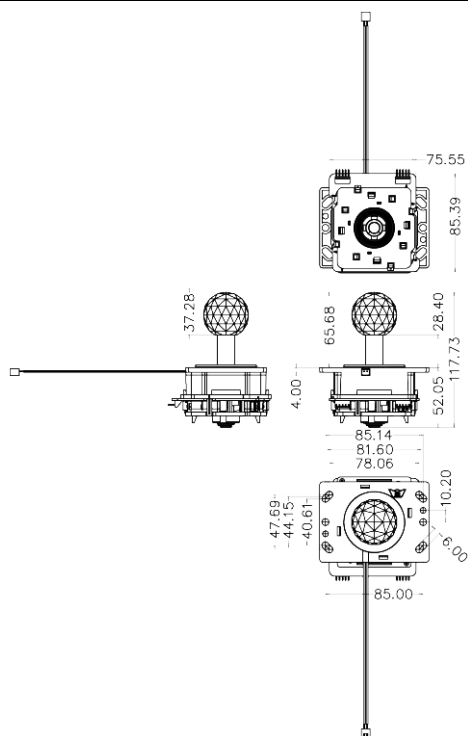


BL Locking Style Joystick

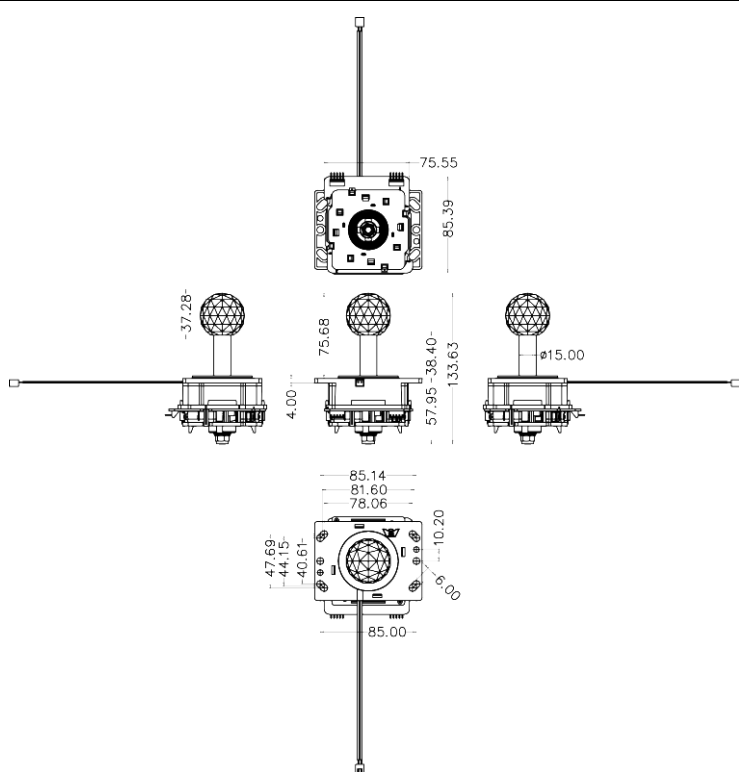
- 微动电子板结构，带灯 Comes With Switch PCB & LED



配短铁棒 With short shaft



配长铁棒 With longer shaft





BL Locking Style Joystick

产品组装图 Assembly

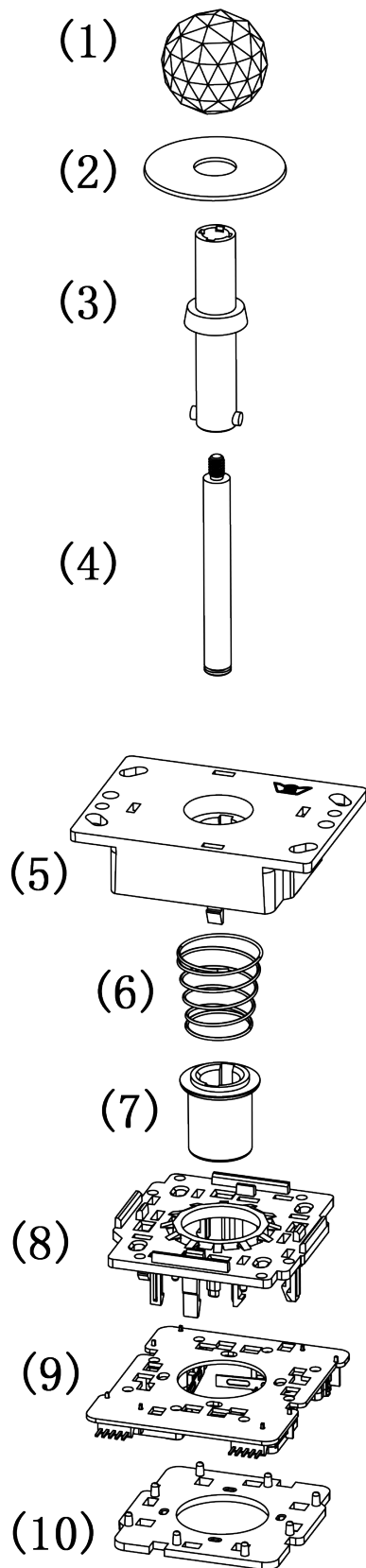
■ 微动结构 Switch Direct Install	Part list:
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10)	(1) 20627011*1 or 20627010*1 or 20606014 *1 (2) 20601040*1 (3) 20606304*1 or 20606314*1 (4) 20606306*1 Or 20606324*1 (5) 20606300*1 (6) 20606305*1 (7) 20606303*1 (8) 20606309*1 (9) 10345022*4 (10) 20606302*1



BL Locking Style Joystick

■ 微动电子板结构，不带灯 Comes With Switch PCB

Part list:

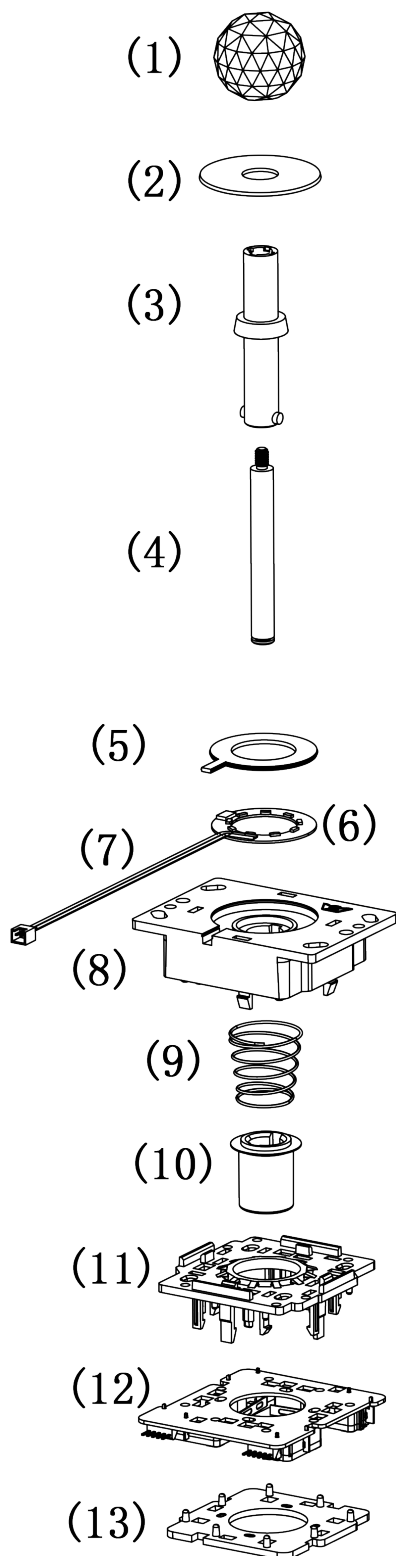


- (1) 20627011*1
or 20627010*1
or 20606014 *1
- (2) 20601040*1
- (3) 20606304*1
or 20606314*1
- (4) 20606306*1
Or 20606324*1
- (5) 20606300*1
- (6) 20606305*1
- (7) 20606301*1
- (8) 20606309*1
- (9) 20606307*1
- (10) 20606302*1



BL Locking Style Joystick

■ 微动电子板结构，带灯 Comes With Switch PCB & LED



Part list:

- (1) 20627010*1
or 20627011*1
or 20606014 *1
- (2) 20606312*1
- (3) 20606304*1
or 20606314*1
- (4) 20606306*1
Or 20606324*1
- (5) 20606300*1
- (6) 20606312*1
- (7) 20606237*1
- (8) 20606310*1
- (9) 20606305*1
- (10) 20606316*1
- (11) 20606317*1
- (12) 20606307*1
- (13) 20606315*1

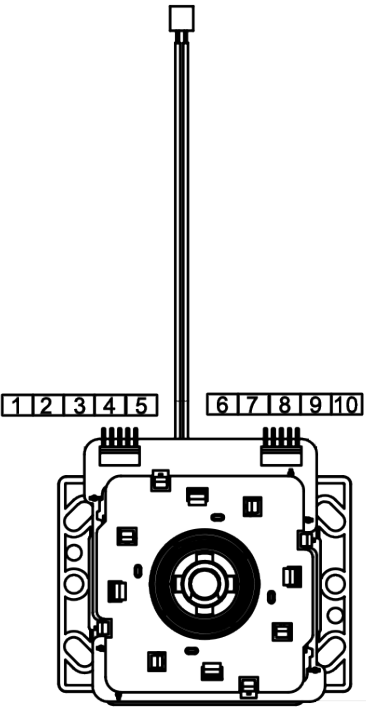


BL Locking Style Joystick

使用须知 Usage guide

接线说明 Wiring instructions:

1. 接上电路板上的 5PIN 接口，控制摇杆上、下、左、右工作信号。
Connect the 5PIN connector to the PCB, control the joystick working directions: front, back, left and right.
2. 红、黑两条灯线，焊接到 12V DC 供电电源
For the LED lighting, connect the 2PIN connector to a 12V DC power supply.

	5pin Connectors	1	GND
		2	D
		3	U
		4	R
		5	L
		6	R
		7	U
		8	GND
		9	L
		10	D
	LED Wires	red	+
		black	-

清洁说明 Cleaning instructions:

摇杆清洁时可拆下铁棒，用干净的软布擦拭铁棒、弹簧座，擦拭干净后按原有结构装回后即可；当摇杆回位性有点缓慢或灵敏度不够时,是时候该清洁啦!

Disassemble the Shaft; use a clean soft cloth to wipe the area where the shaft and joystick body contact. After cleaning, assemble the shaft back to the initial position. Cleaning is suggested when lagging is present at use or sensitivity is low.



BL Locking Style Joystick

清洁注意事项 Cleaning precautions:

1. 准备清洁时需断开接线 Before cleaning, please disconnect all electrical input.
2. 清洁时不要使用腐蚀剂 Please do not use preservatives while cleaning
3. 清洁时注意不要让液体流入微动内 Do not put micro-switches in contact with any liquid.