



Brook

ULTIMATE **+** **PLUS** **WITH RETRO**

USER MANUAL

Brook Retro Board



- Support
USB Interface :
 - SONY Playstation 3
 - SONY Playstation 4
 - SONY Playstation 5(for fighting game only)
 - XBOX
 - XBOX 360
 - XBOX Series
 - Nintendo Switch
 - Retro mini console :
 - PS Classic / MegaDrive mini /
 - NeoGeo mini / Astro city mini

Brook Retro Board



- Support RJ45 Interface :
 - SONY Playstation
 - SONY Playstation 2
 - SEGA Saturn
 - SEGA Dreamcast (★ Built-in VMU function)
 - Nintendo Entertainment System
 - Super Nintendo Entertainment System
 - Nintendo Game Cube
 - Nintendo 64
 - Turbografx 16(PC-Engine)
- MegaDrive & NeoGeo Interface :
 - SEGA Mega-Drive
 - SNK NeoGeo

Brook Retro Board



Support analogy stick control Interface

Support stick mapping to **LS/DP/RS**

Support **Turbo** function

Use **Screw Terminal** to Easy installed

Provide **4 pieces** Player LEDs

Support USB Interface **to update firmware**

★USB, RJ45 and 2.0mm Wafer interfaces, only one of them can be used at the same time.

Provide 4 pieces Player LED to indicate state



*Input by board

USB System	LED 【1、2、3、4】
XBOX 360/PC	■ ■ □ □
XBOX Original	■ □ ■ □
XBOX Series	□ □ ■ ■
PS 4 / PS 5	□ ■ ■ ■
Switch	■ □ ■ ■
NeoGeo mini	■ ■ □ ■
PS Classic	■ ■ ■ □
Astro city mini/MD mini	■ ■ ■ ■

Retro System	LED 【1、2、3、4】
NeoGeo	■ ■ □ □
Saturn	■ □ ■ □
Mega Drive	□ □ ■ ■
NES	□ ■ ■ ■
SNES	■ □ ■ ■
N64/GC	■ ■ □ ■
PC-Engine	■ ■ ■ □
PS/PS2	■ ■ ■ ■

*Input by controller

PS3/DC	LED 【1、2、3、4】
1P	■ □ □ □
2P	□ ■ □ □
3P	□ □ ■ □
4P	□ □ □ ■
5P	■ □ □ ■
6P	□ ■ □ ■
7P	□ □ ■ ■
* Max support 4P is on DC	

*Different light display by plug in to recognize platforms

■=LED ON , □=LED OFF

*Only shows Players in PS3/DC

Brook Retro Board

Button Mapping

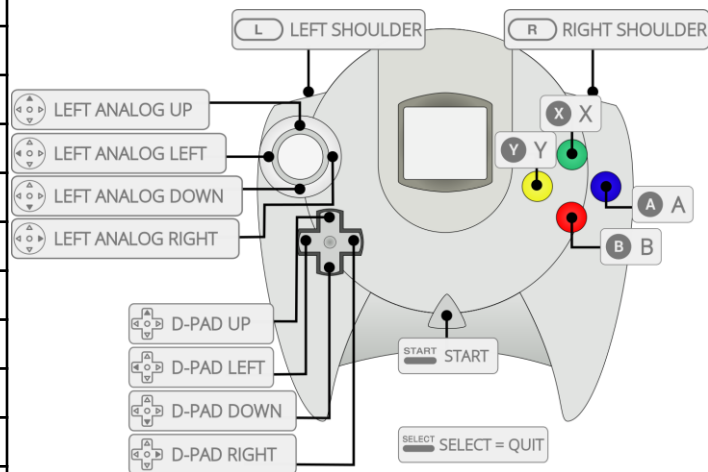


PS3	PS/PS2	XBOX Series	XBOX 360	XBOX	DC Stick	DC Pad	Saturn	GC	SNES	NES	PC-E	N64	Mega Drive	Neo Geo	PS Classic	Mega Drive mini
D-pad	D-pad	D-pad	D-pad	D-pad	D-pad	D-pad	D-pad	D-pad	D-pad	D-pad	D-pad	D-pad	D-pad	D-pad	D-pad	D-pad
□	□	X	X	X	X	X	X	Y	Y			B	X	A	□	X
△	△	Y	Y	Y	Y	Y	Y	X	X			C-left	Y	B	△	Y
R1	R1	RB	RB	Black	Z	R	Z	L	L			C-up	Z	C	R1	Z
L1	L1	LB	LB	White	X+Y+Z	X+Y+R	L	Z				L			L1	
×	×	A	A	A	A	A	A	B	B	B	II	A	A	D	×	A
○	○	B	B	B	B	B	B	A	A	A	I	C-down	B	2K	○	B
R2	R2	RT	RT	RT	C	L	C	R	R			C-right	C	3K	R2	C
L2	L2	LT	LT	LT	A+B+C	A+B+L	R					R			L2	
L3	L3	LTSB	LTSB	LTSB								Z				
R3	R3	RTSB	RTSB	RTSB								Z				
SELECT	SELECT	View	BACK	BACK					SELECT	SELECT	SELECT		Mode	SELECT	SELECT	Mode
START	START	Menu	START	START	START	START	START	START	START	START	RUN	START	START	START	START	START
V	V	V	V	V		V						V			V	
V	V	V	V	V											V	
ART		XBOX	Guide													
		Share														

Brook Retro Board



Retro PCB	DC Stick	DC pad
Stick in DP	D-pad	D-pad
1P	X	X
2P	Y	Y
3P	Z	R
4P	---	---
1K	A	A
2K	B	B
3K	C	L
4K	---	---
L3	---	---
R3	---	---
SELECT	---	---
START	START	START
Stick in LS		LS-Up/Dn
Stick in LS		LS-L/R
Stick in RS		---
Stick in RS		---
PS_KEY		---



Switch controller interface mode

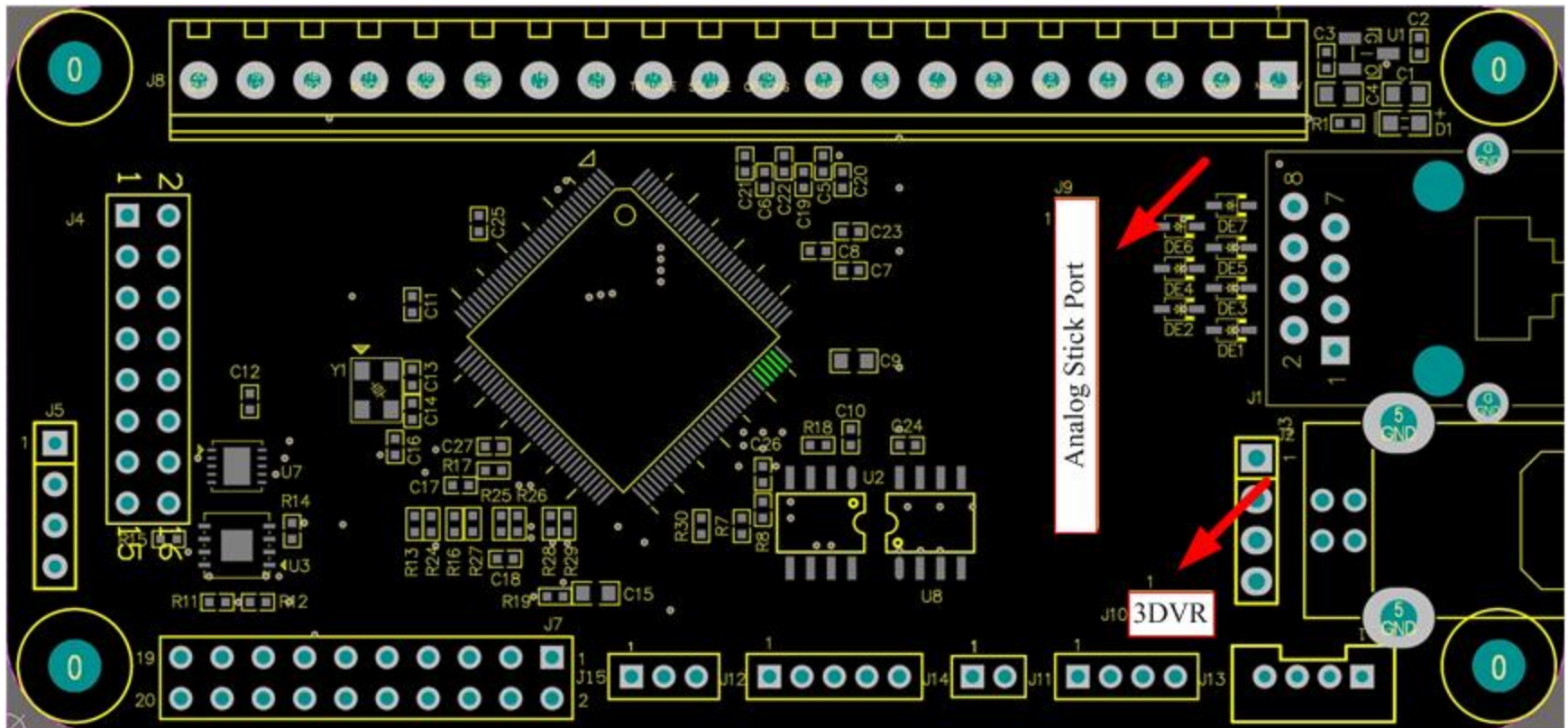
		Switch button
USB	SONY Playstation 3	1P
USB	SONY Playstation 4、 5	2P
USB	XBOX 360	3P
RJ45	SONY Playstation 、 SONY Playstation2	4P
USB	Nintendo Switch	1K
USB	XBOX Original	2K
USB	NeoGeo mini	3K
USB	XBOX one	4K
USB	PS Classic	1P+2P
USB	MegaDrive mini/Astro city mini	1P+1K
RJ45	SEGA Saturn	1P+3P
RJ45	SEGA Dreamcast	1P+4P
RJ45	Nintendo Entertainment System	1P+2K
RJ45	Super Nintendo Entertainment System	1P+3K
RJ45	Nintendo Game Cube	1P+4K
RJ45	Nintendo 64	2P+3P
RJ45	Turbografx 16(PC-Engine)	2P+4P
	NeoGeo	2P+1K
	Mega Drive	2P+2K



Analog Stick

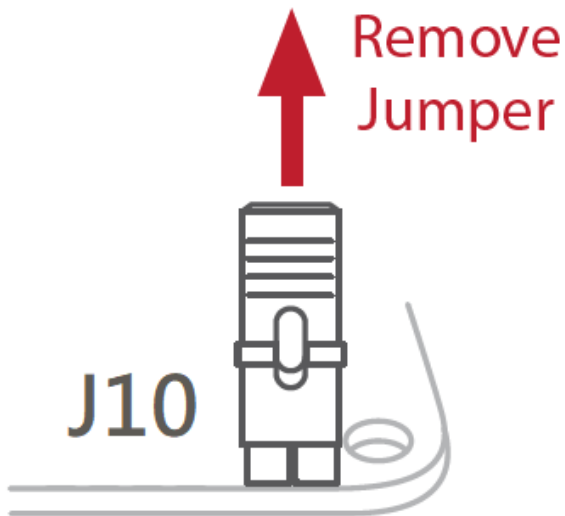
Use analog stick

- 1.Remove the short circuit component(J10 Jumper)
- 2.Connect the connector to the analog stick(J9)

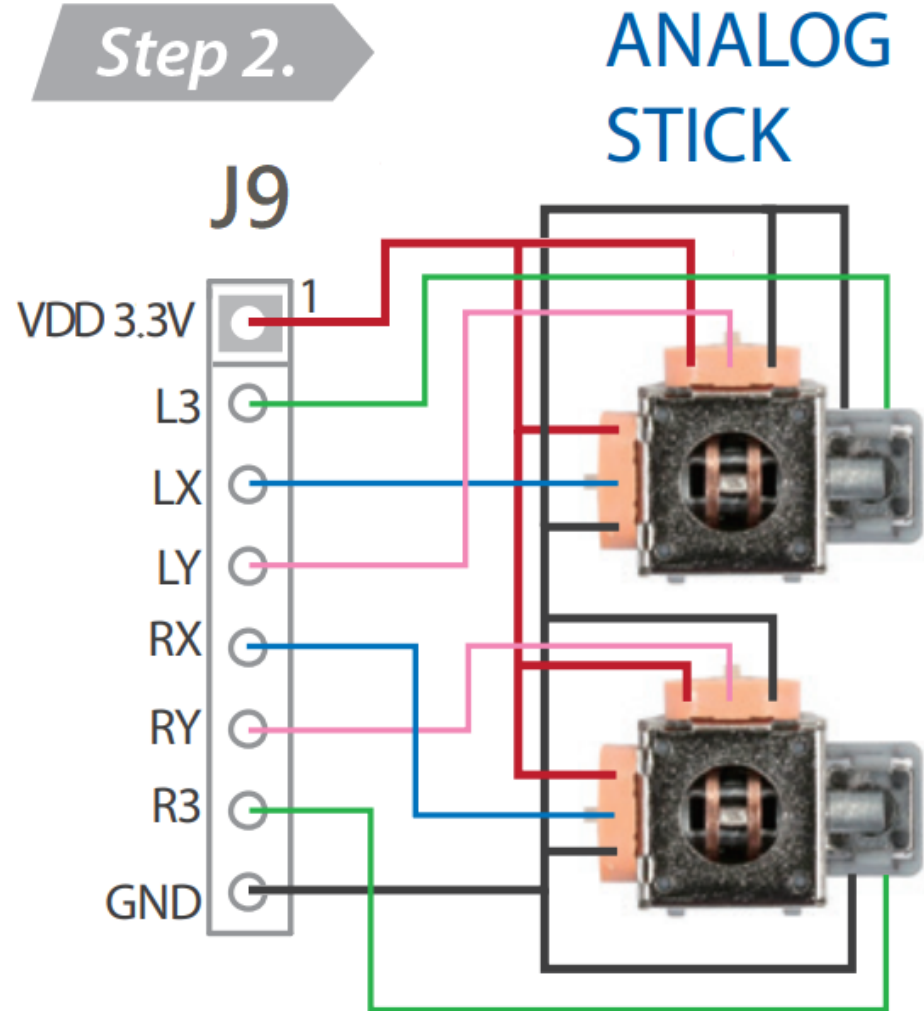


Use analog stick

Step 1.

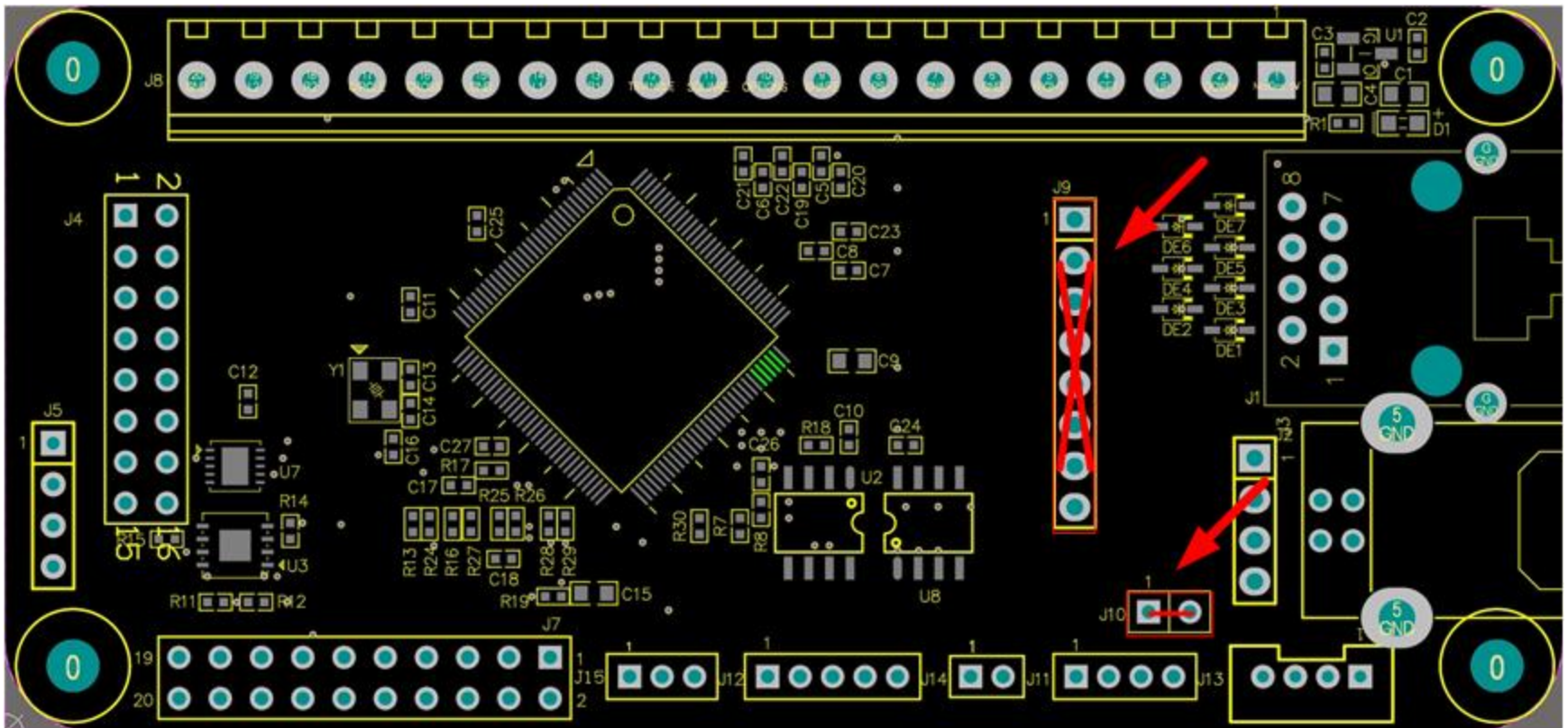


Step 2.



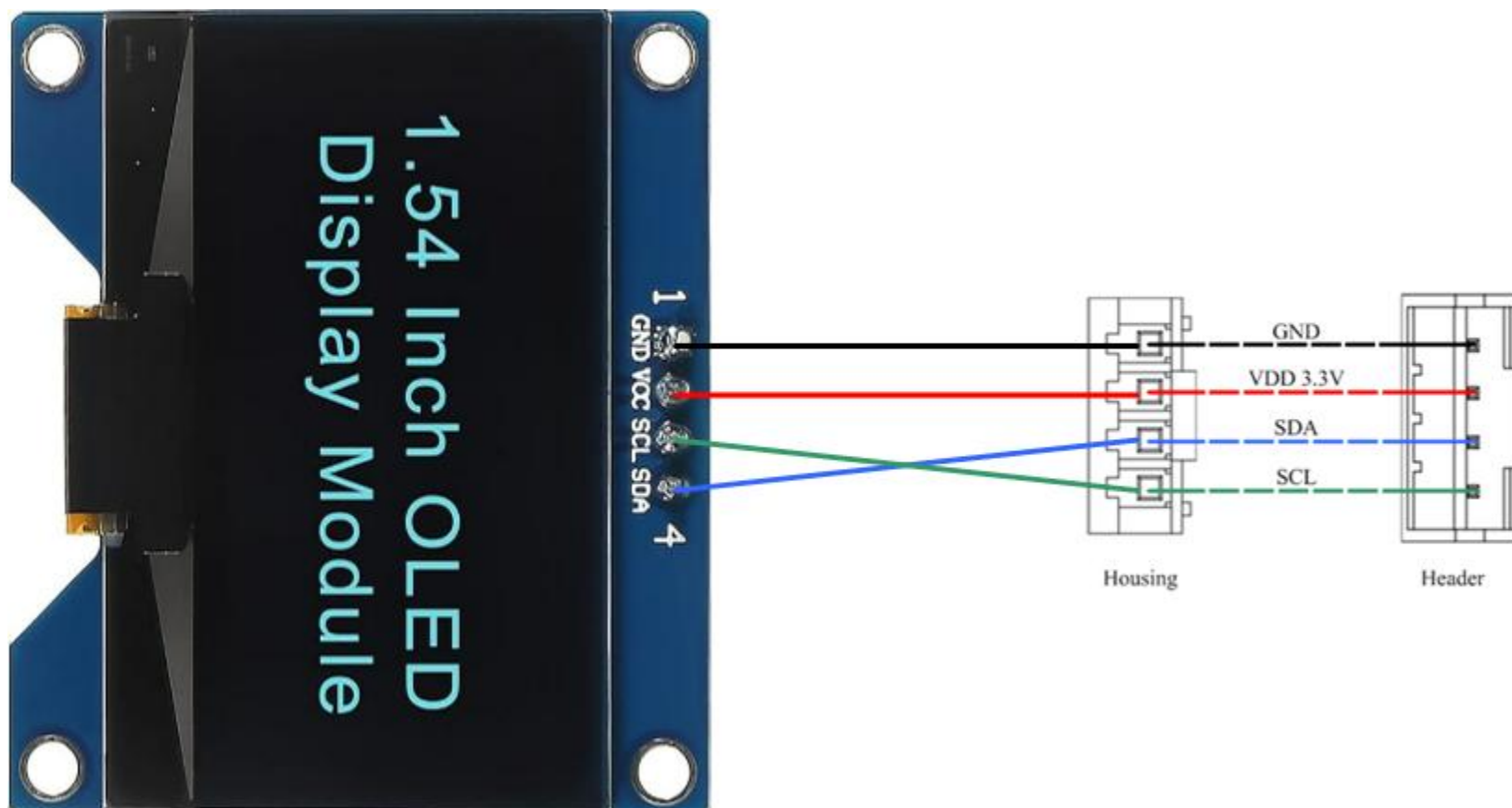
Not use analog stick

- 1.Remove the connector to the analog stick(J9)
- 2.Connect the short circuit component (J10 Jumper)



Display Module

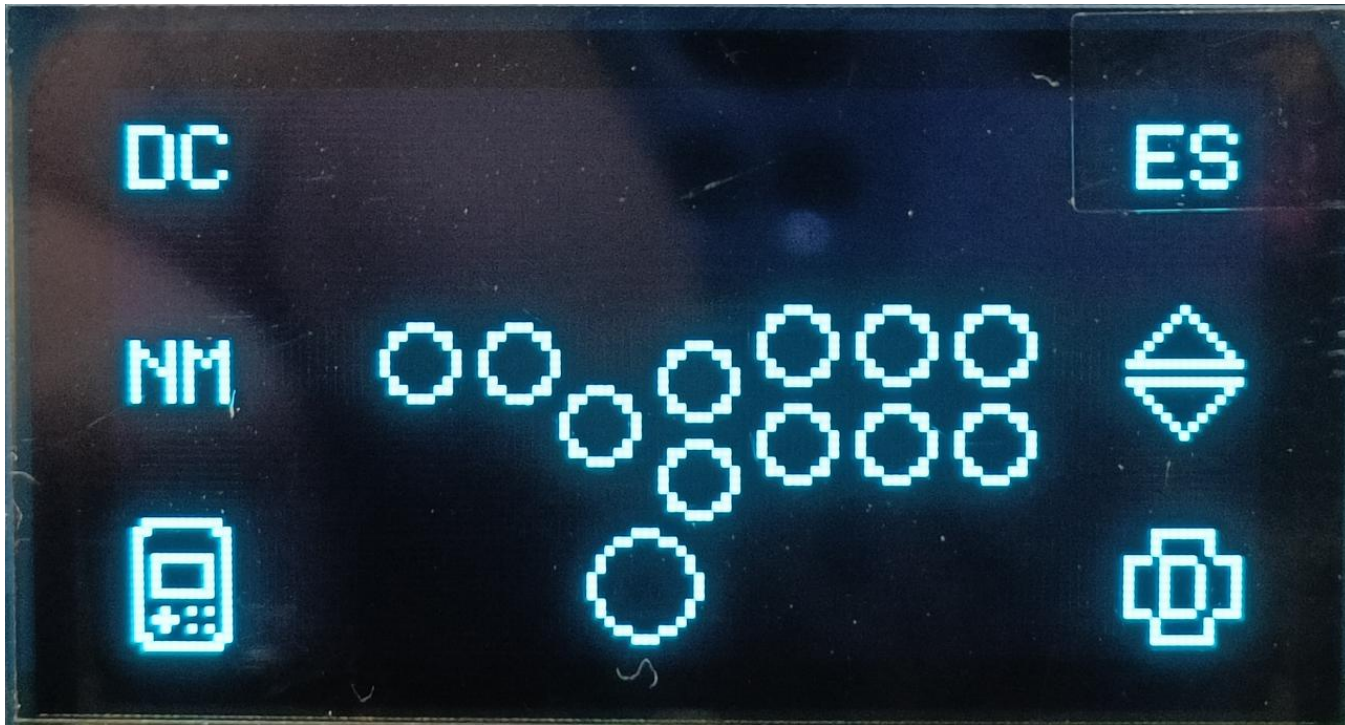
Display module



OLED Display Block

1	9	5
2		6
3		7
4		8

OLED Display Block



Block display instructions

- 1. Controller interface code name
- 2. Reserve
- 3. Operation mode :
- 4. VMU State
- 5. Reserve
- 6. Setting Check for E-Sport
- 7. SOCD mode
- 8. Direction stick control mode
- 9. Main screen

Controller interface code name

- Product operating mode display code name (as shown on the right)
- XBOX Original 、XBOX 360
- PS1 、PS2 、PS3 、PS4
- Nintendo entertainment system 、 Super nintendo entertainment system 、 Nintendo game cube 、 Nintendo 64 、 Nintendo Switch
- Maga Drive 、 Sega Saturn 、 Dreamcast 、 PC-Engine
- Maga Drive mini 、 NeoGeo mini 、 PS Classic mini

XB	X3			
OX	60			
PS	PS	PS	PS	
1	2	3	4	
N	SN	N	N	N
ES	ES	GC	64	SW
MD	SS	DC	PC	
			E	
MD	NE	PS		
m	Om	Cm		

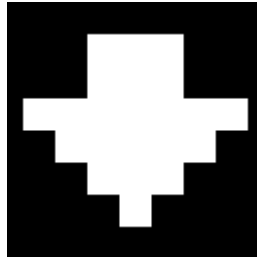
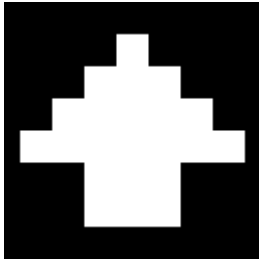
Operation mode

- normal mode
- setting mode(Turbo)



VMU State

- Up arrow: Export VMU data
- Down arrow: Import VMU data
- VMU card number Image



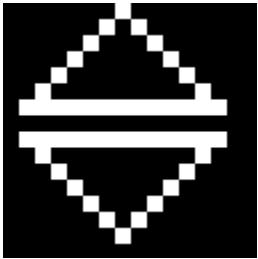
Setting Check for E-Sport

- Set whether it meets the competition standards .
if Turbo is set, it will all show that it does not meet the competition standards.



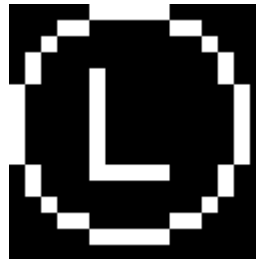
S OCD mode

- All Neutral
- Up priority
- Last Priority
- All Bypass



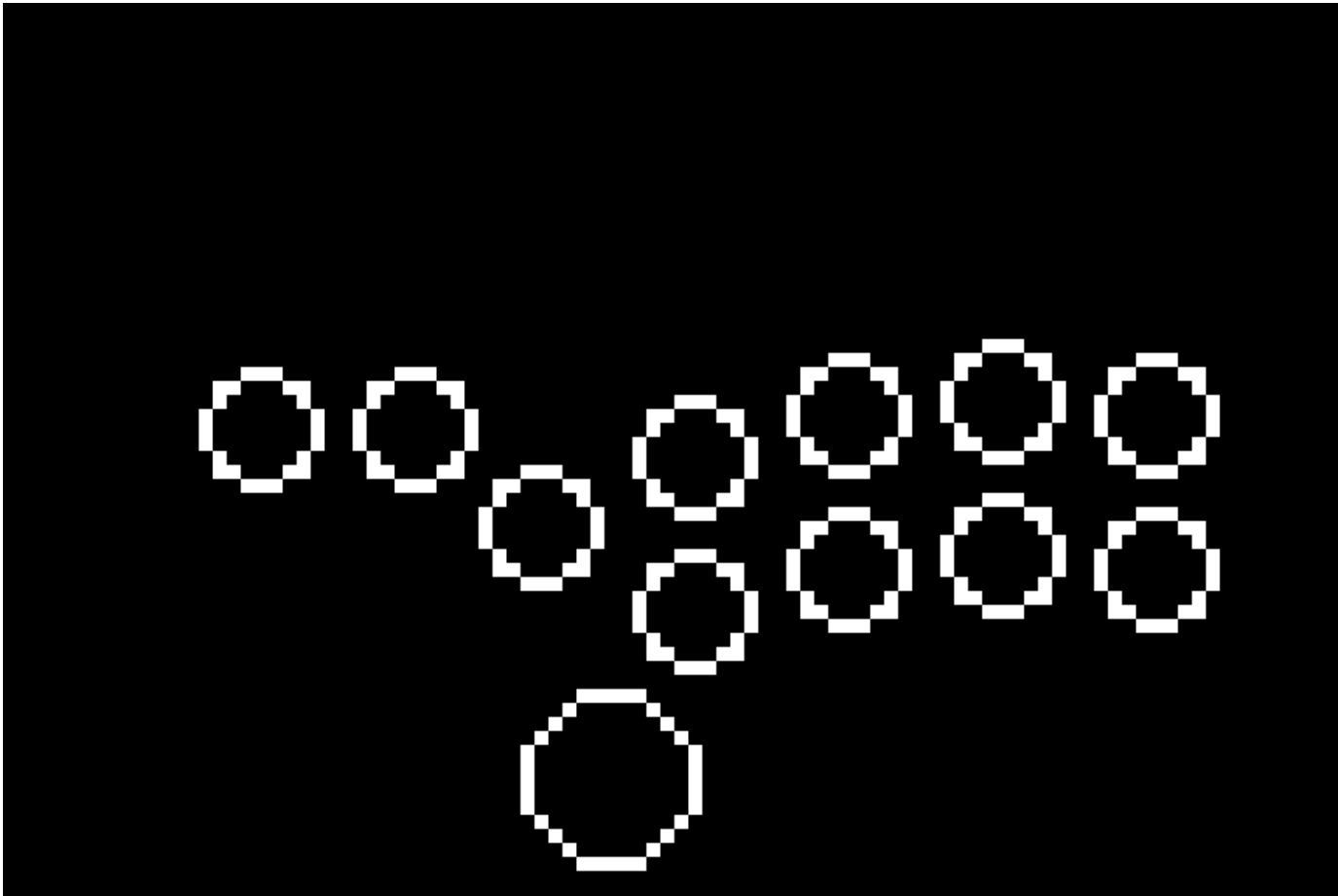
Direction stick control mode

- Direction Pad
- Left Stick
- Right Stick



Main screen

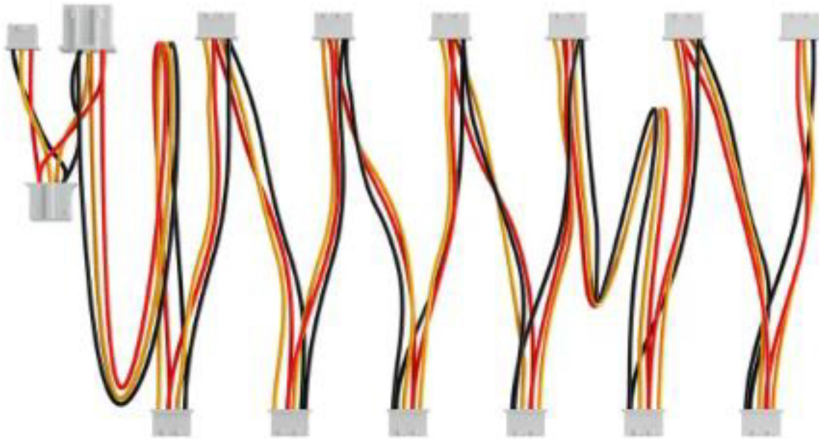
- Main screen: Arcade stick diagram (for setting and status display)
, Dreamcast VMU display screen, Product Logo, customized image



RGB LED

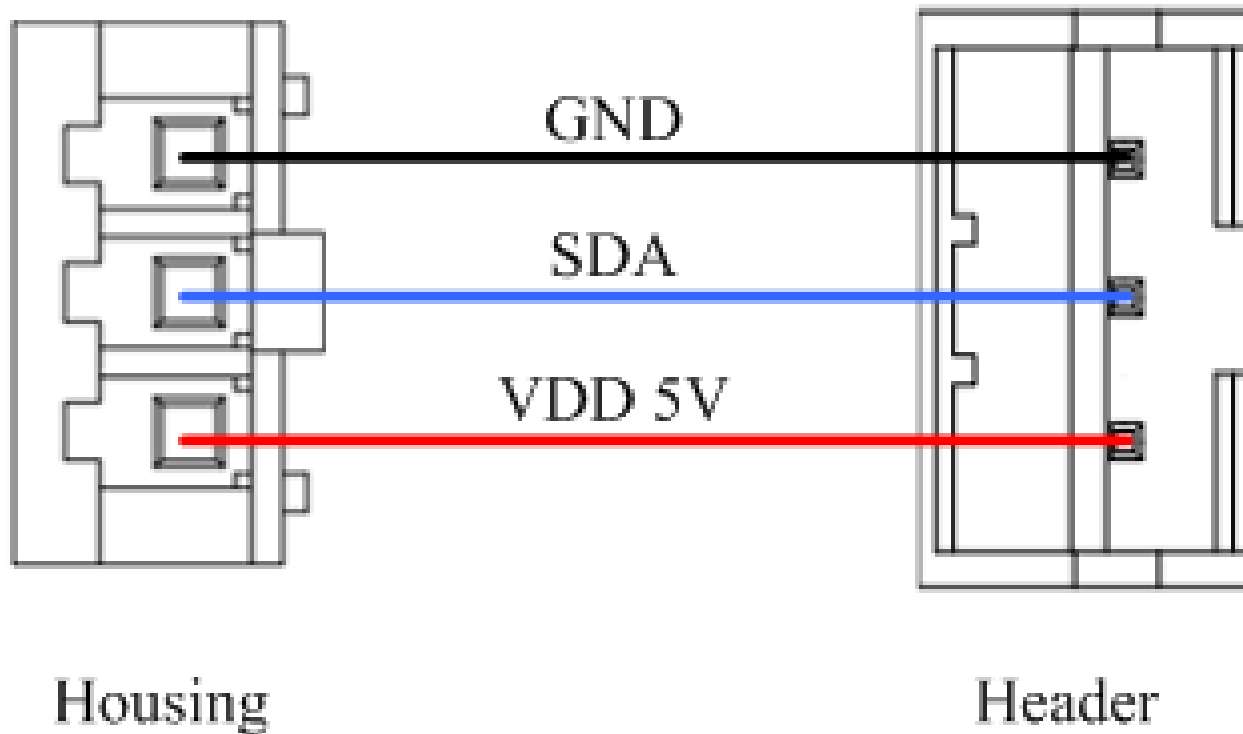
Modification of customer requirements

- RGB LED interface compatible with Qanba Gravity KS RGB LED illuminated buttons



Modification of customer requirements

RGB LED Interface Pin Name



RGB LED display mode

1. When the button is pressed, the light turns off
 2. When the button is pressed, the light turns on
 3. Breathing light
 4. Marquee(from left to right)
 5. Marquee(from right to left)
 6. Turn off all RGB LEDs
- ★ After holding down the turbo button, press the PS button to switch the RGB LED display mode

RGB LED display mode

- ★ After holding down the turbo button, press the Select button to decrease the RGB LED display brightness.
- ★ After holding down the turbo button, press the Start button to increase the RGB LED display brightness.

Marquee light sequence

- RGB LED series connection sequence
Left → down → right → up → 1P → 2P → 3P → 4P →
4K → 3K → 2K → 1K
- from left to right
Left → down → right → up → 1P → 2P → 3P → 4P →
4K → 3K → 2K → 1K
- from right to left
1K → 2K → 3K → 4K → 4P → 3P → 2P → 1P → up →
right → down → Left



Breek

Thank you!