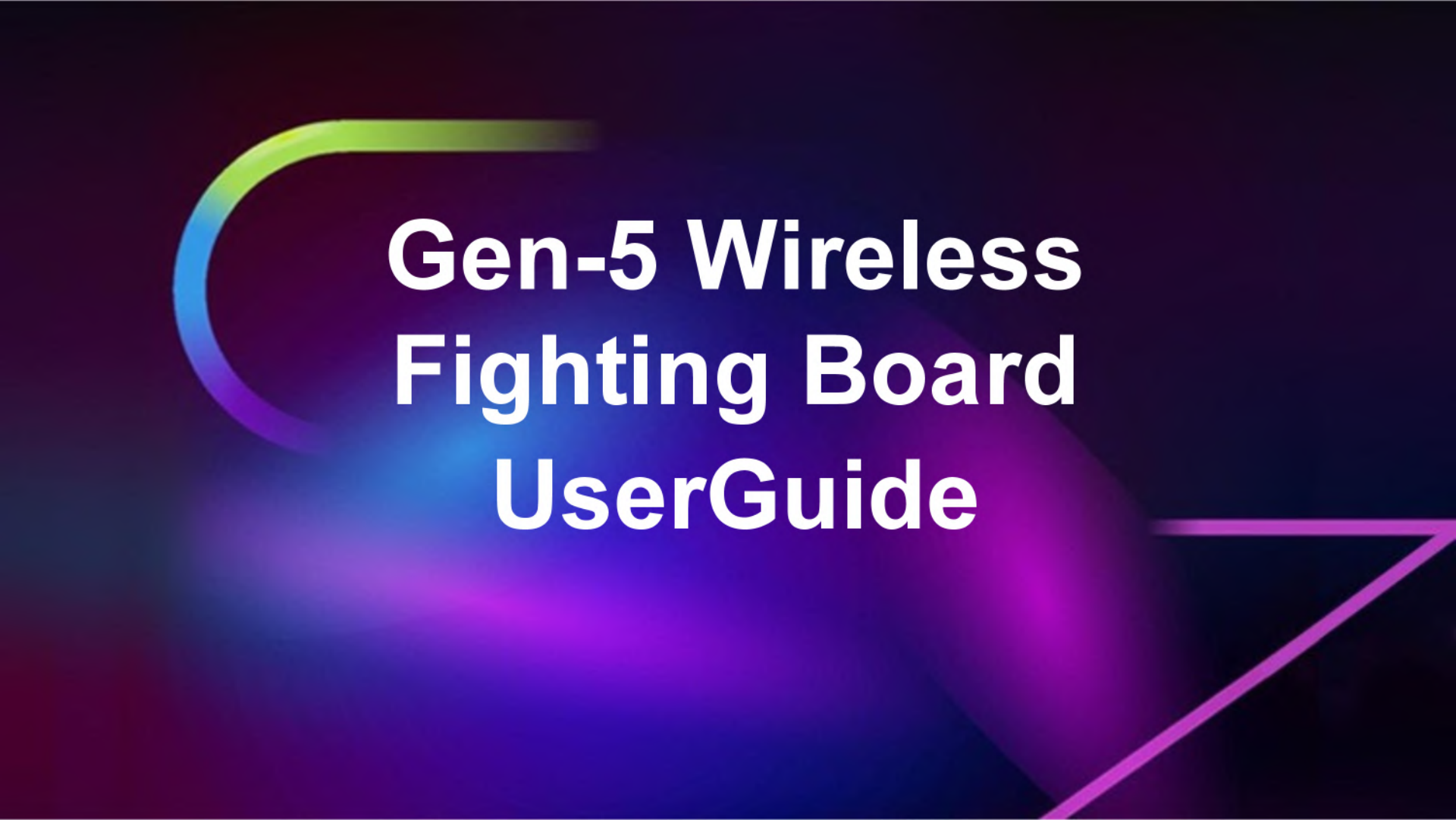




Gen-5 Wireless Fighting Board UserGuide

Gen-5 W Fighting Board

Support USB Interface :

- Sony Playstation 5
- Steam Deck
- PC

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Pin Connection Description

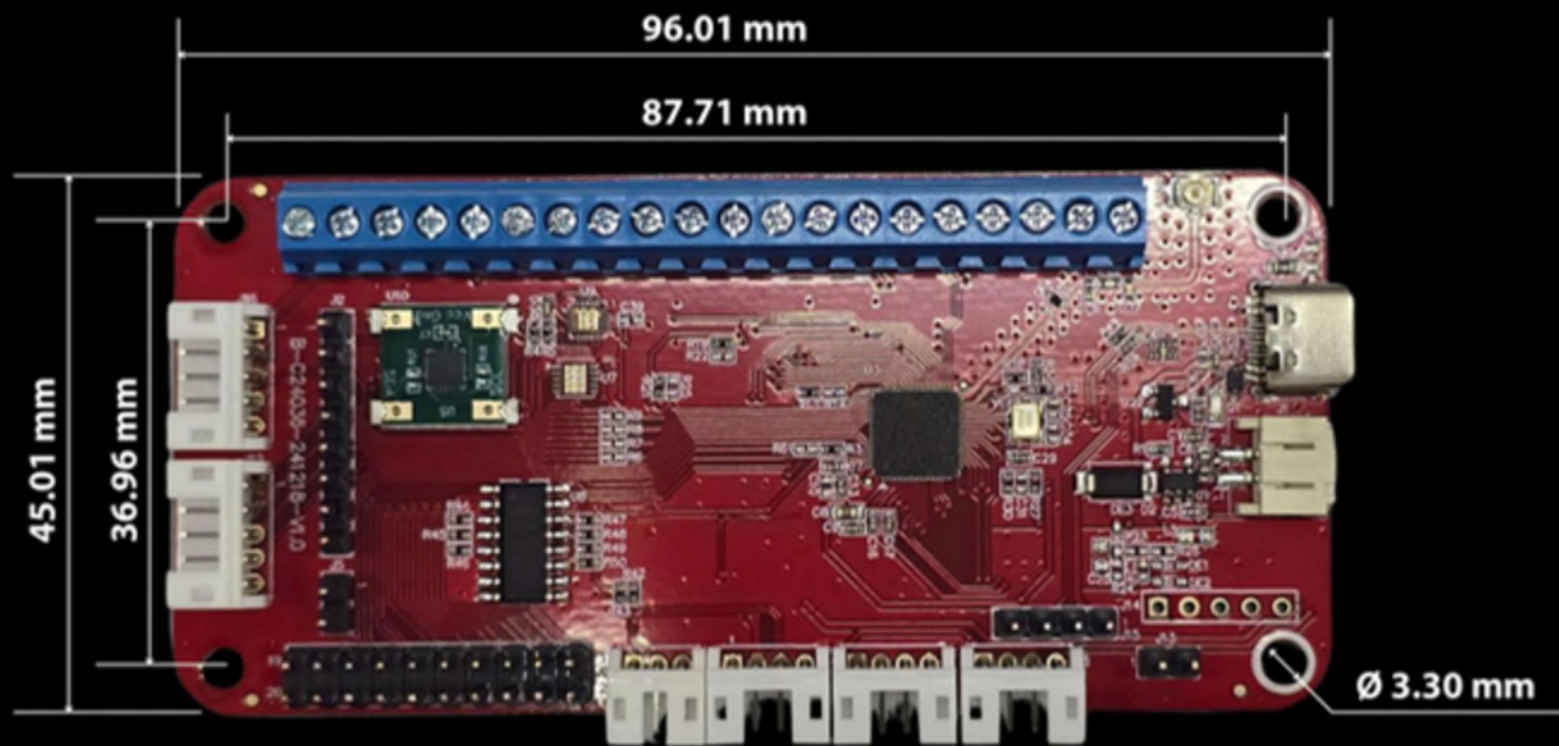


Breek

Arcade stick case



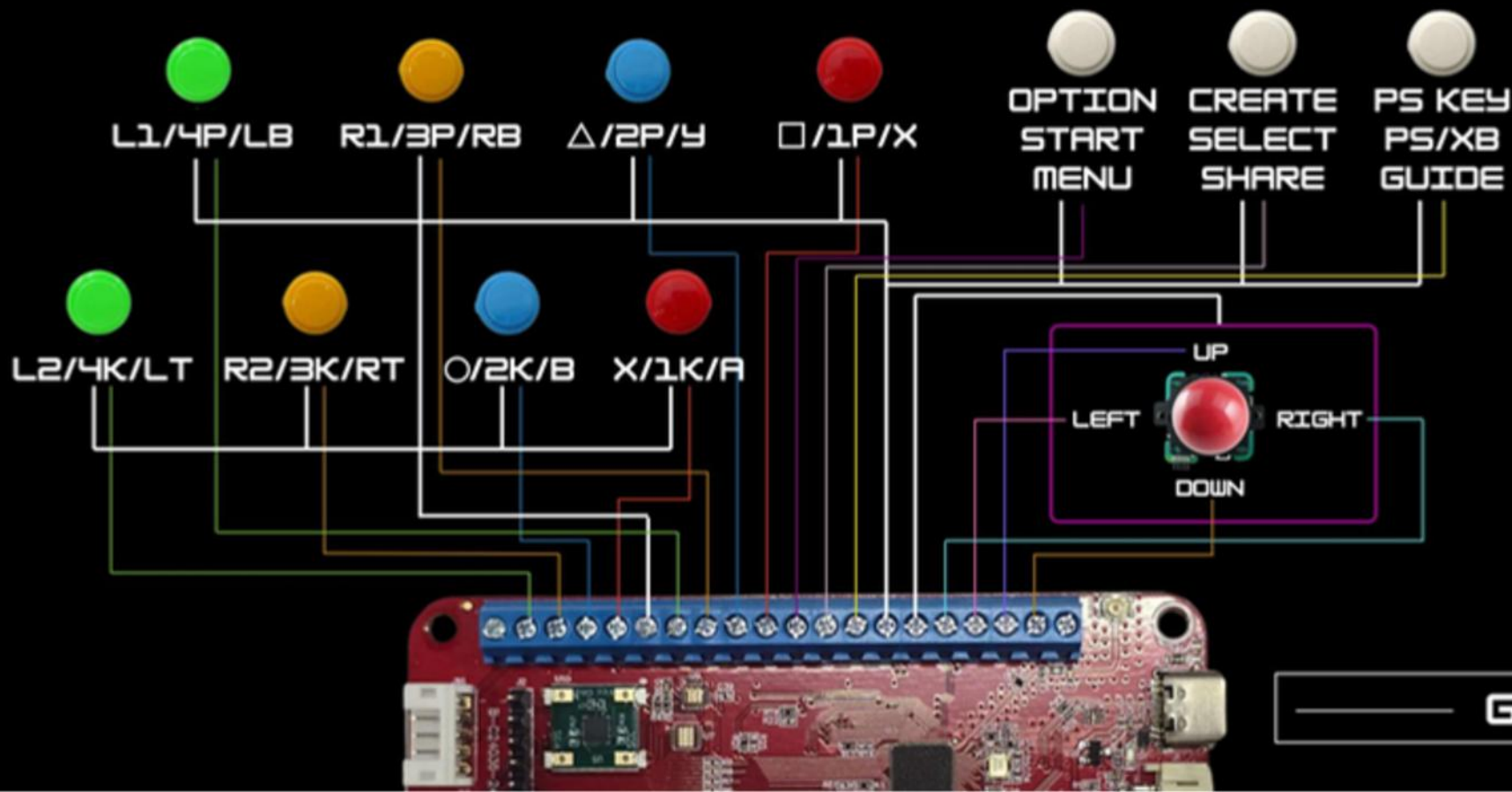
- Install into an arcade stick case and connect compatible buttons to use.
- Case design is fully customizable.
- Button functions and details are listed below.



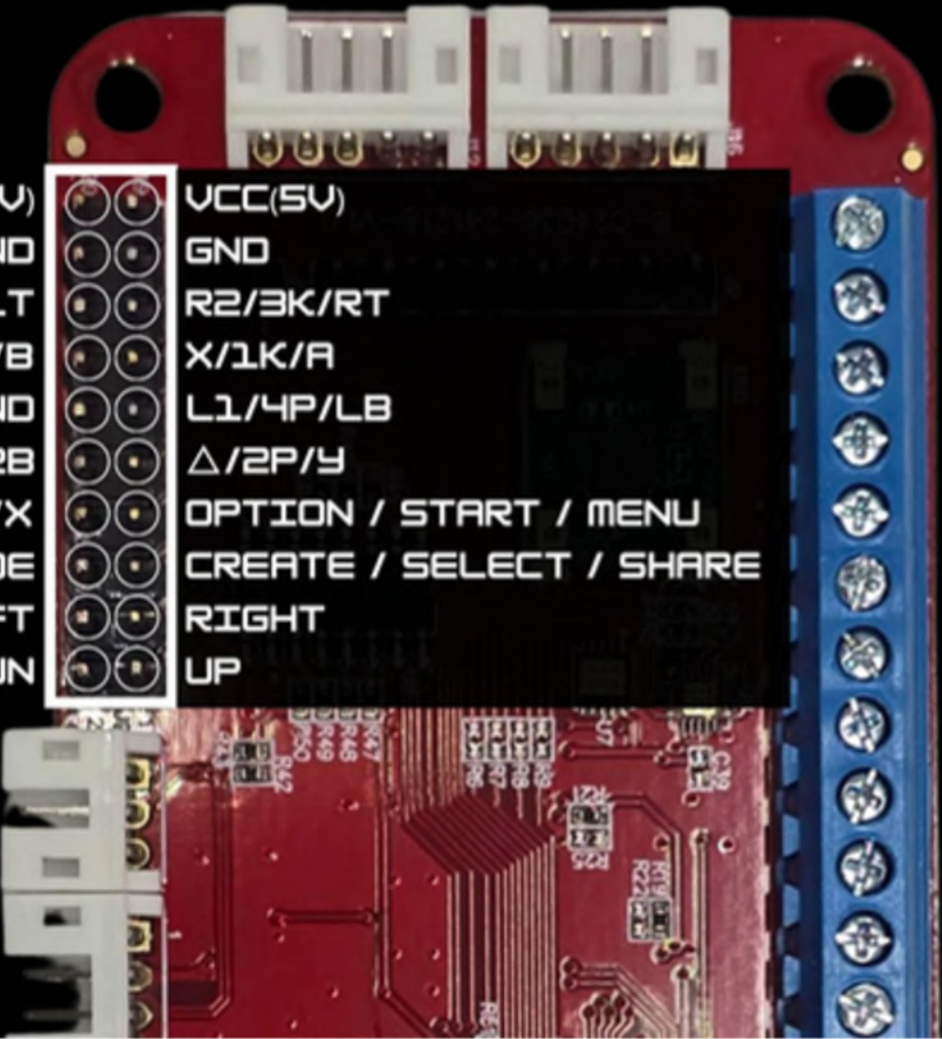
PCB TOP

SIZE : 45.01 X 96.01 mm

HOW TO CONNECT J3 DETAIL



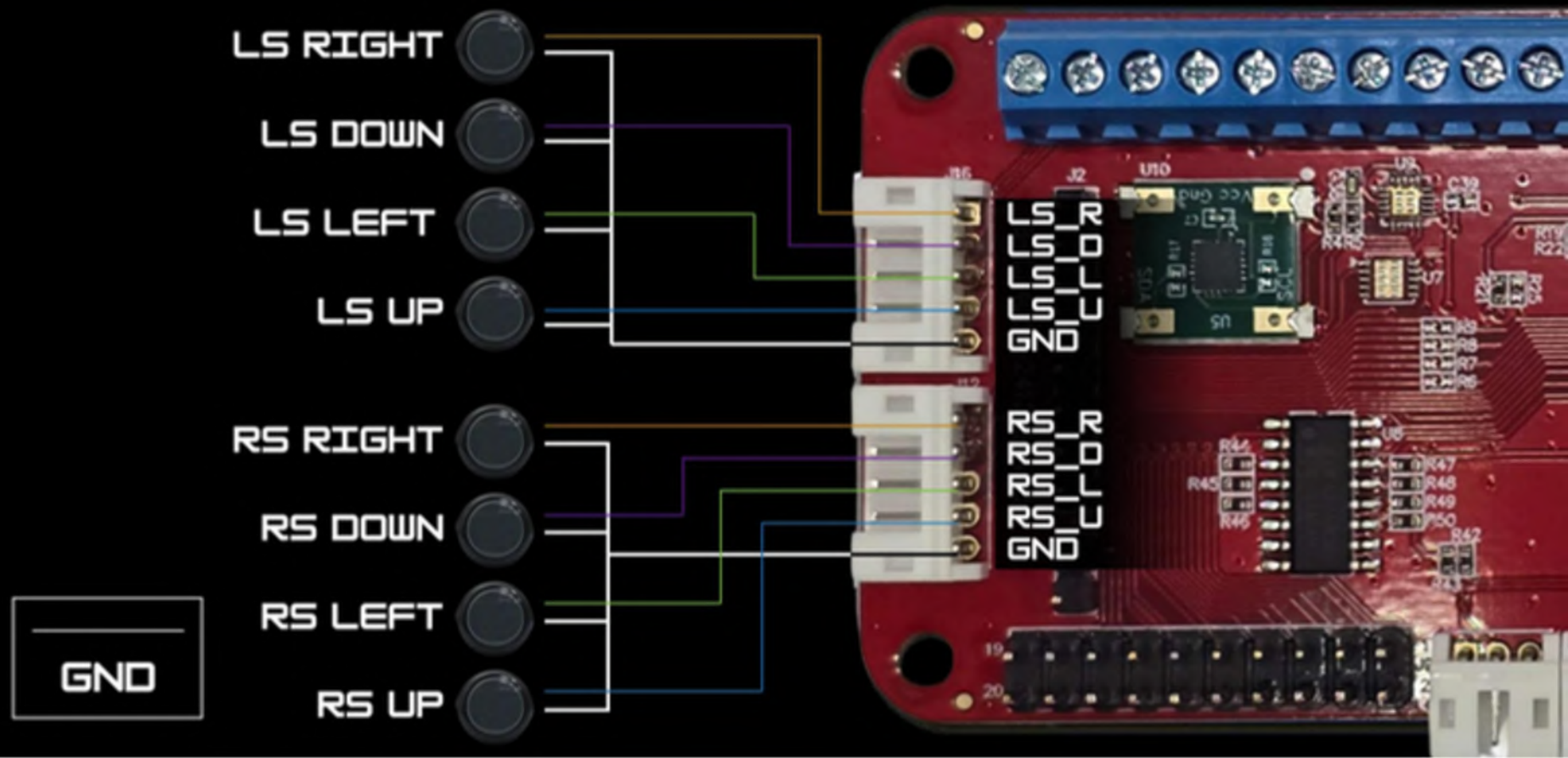
HOW TO CONNECT J9 PIN NAME



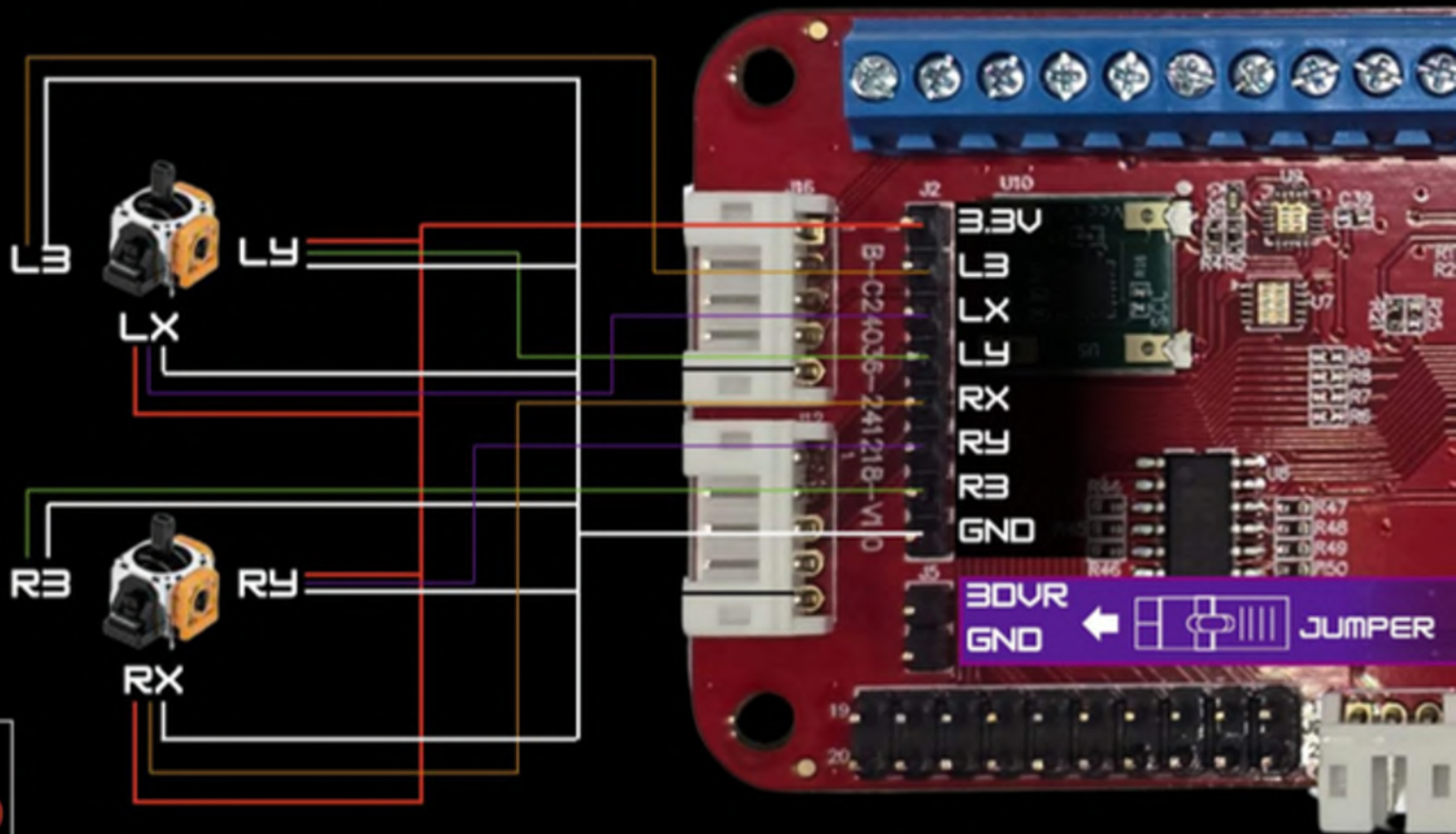
The image shows a red printed circuit board (PCB) with a J9 pin header and a blue terminal block. A black overlay box contains a table mapping pin names to their functions. The pin header is a 2x10 pin connector, and the blue terminal block is a 1x10 pin connector. The table lists the pin names and their corresponding functions, with some pins having multiple functions.

VCC(5V)	VCC(5V)
GND	GND
L2/4K/LT	R2/3K/RT
○/2K/B	X/1K/A
GND	L1/4P/LB
R1/3P/RB	△/2P/Y
□/1P/X	OPTION / START / MENU
PS KEY / PS/XB /GUIDE	CREATE / SELECT / SHARE
LEFT	RIGHT
DOWN	UP

HOW TO CONNECT J7 & J10 DETAIL



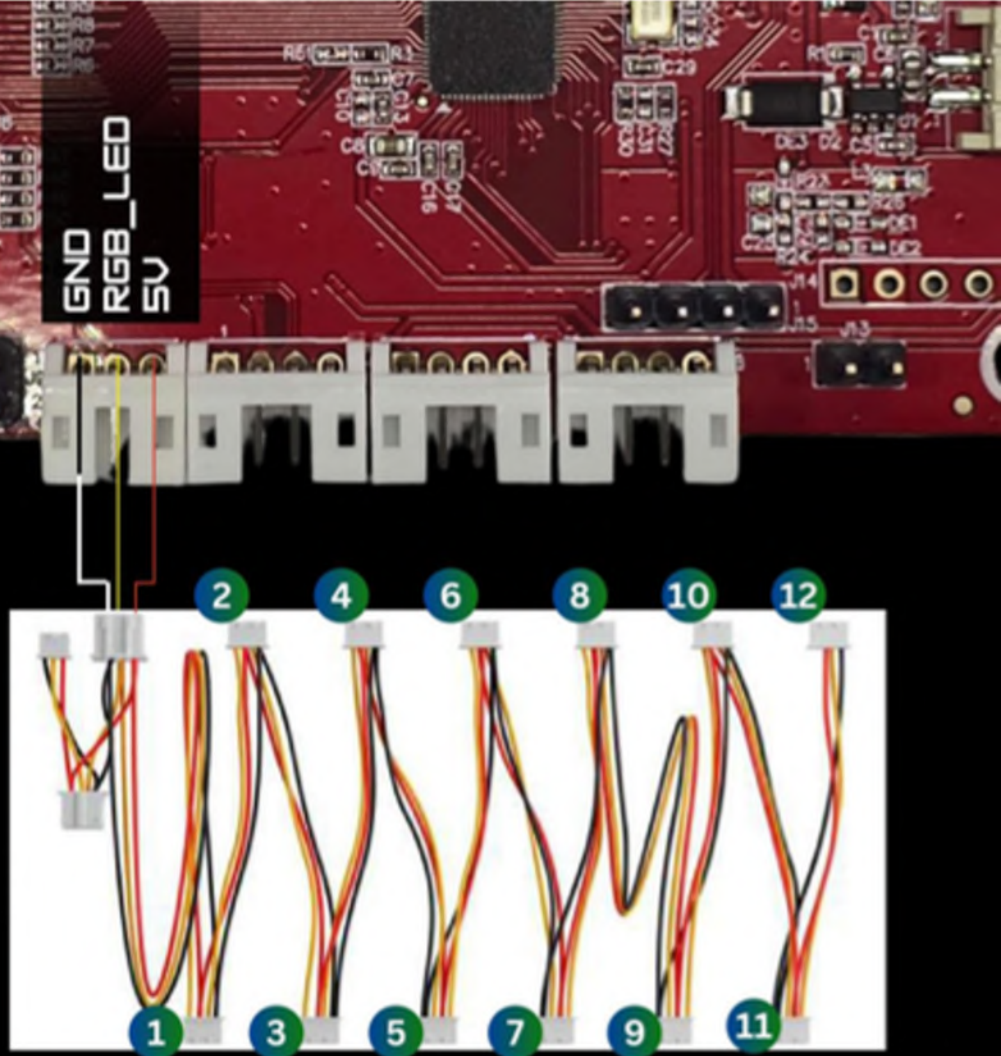
HOW TO CONNECT J2 & J5 DETAIL

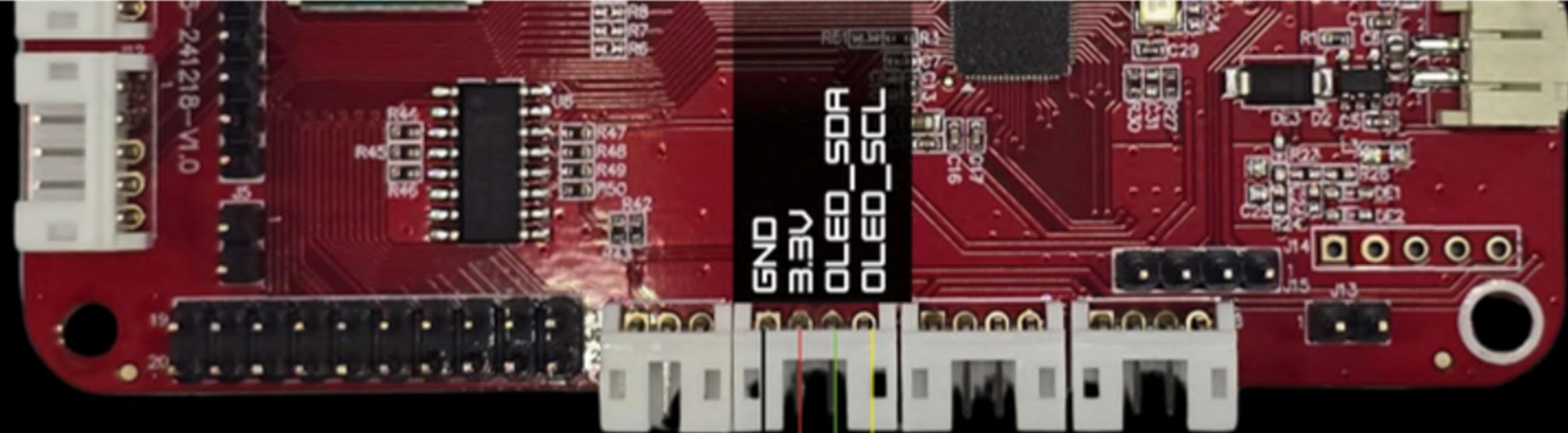


HOW TO CONNECT J11 DETAIL

*The order in which the RGB lights on the buttons illuminate will follow the wiring sequence. For example, the first connection will be numbered as 1, and so on.

*Compatible with WS2812B RGB LEDs and requires a daisy-chaining connection



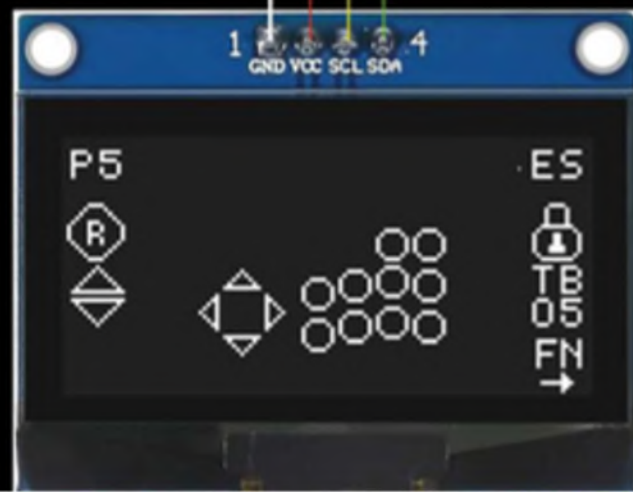


HOW TO CONNECT J17 DETAIL

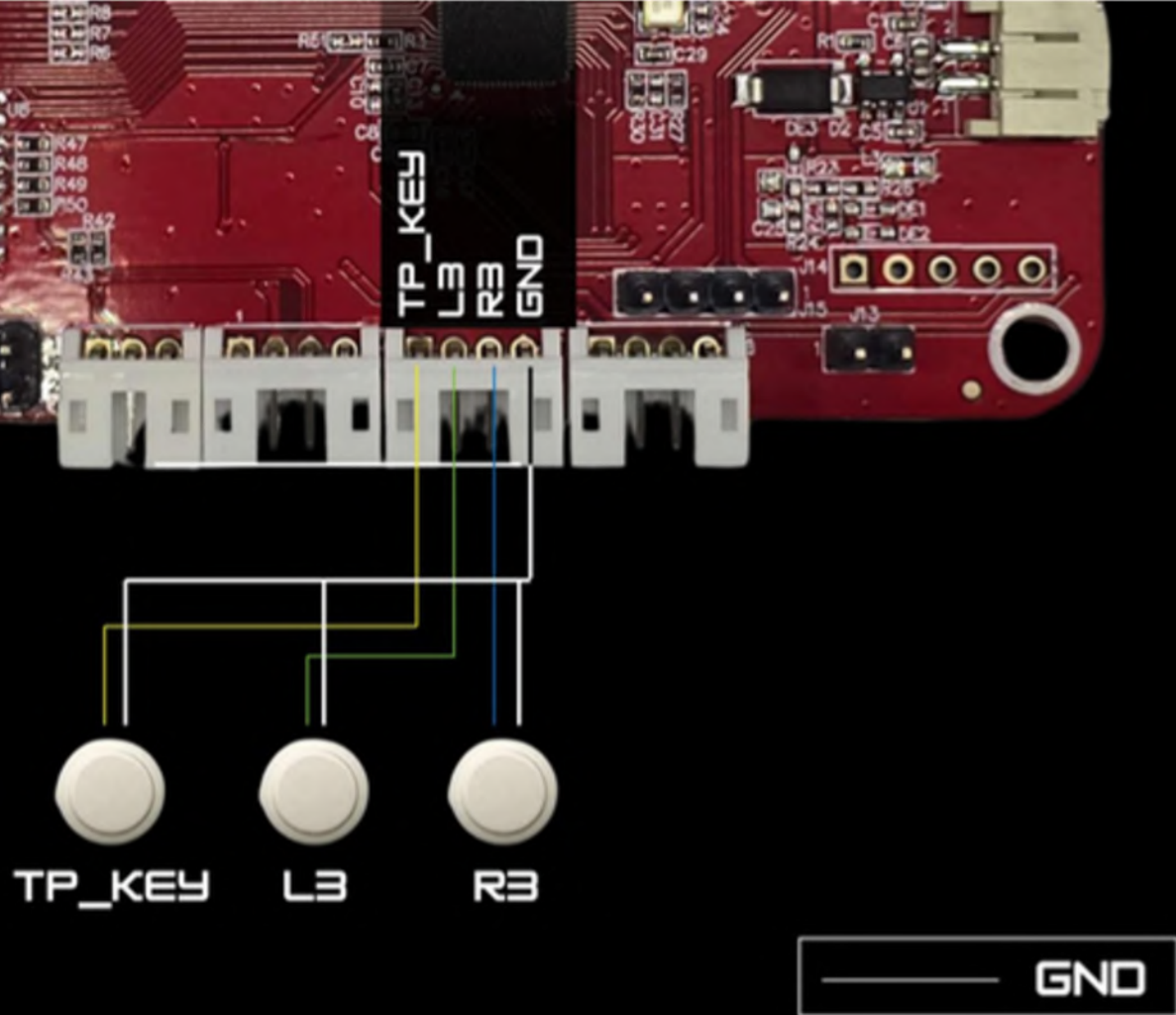


General SPEC

VCC : 3.3v~5v
SCL : Clock Line
SDA : Data Line
Resolution : 128 x 64
Driver IC : SSD 1309, compatible with SSD1306
Interface : I2C Interface



HOW TO CONNECT J4 DETAIL



HOW TO CONNECT J8 DETAIL

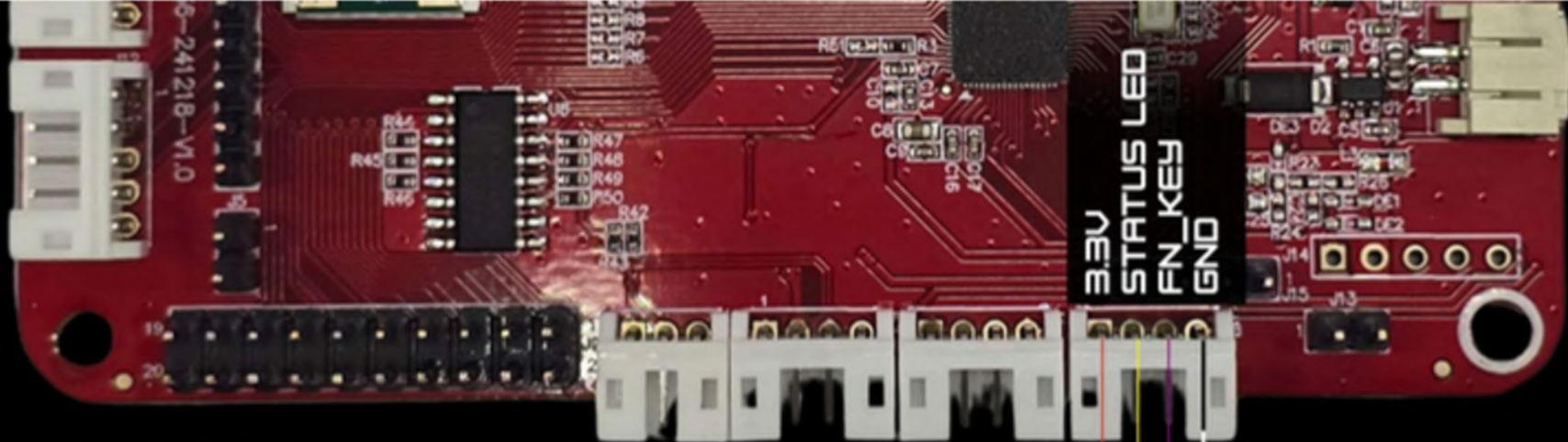
*To use Turbo, RGB LED adjustment, and other settings with hotkey operations, it is necessary to connect an external FN key.

*Compatible with WS2812B RGB LED

STATUS
LED

FN_KEY

GND



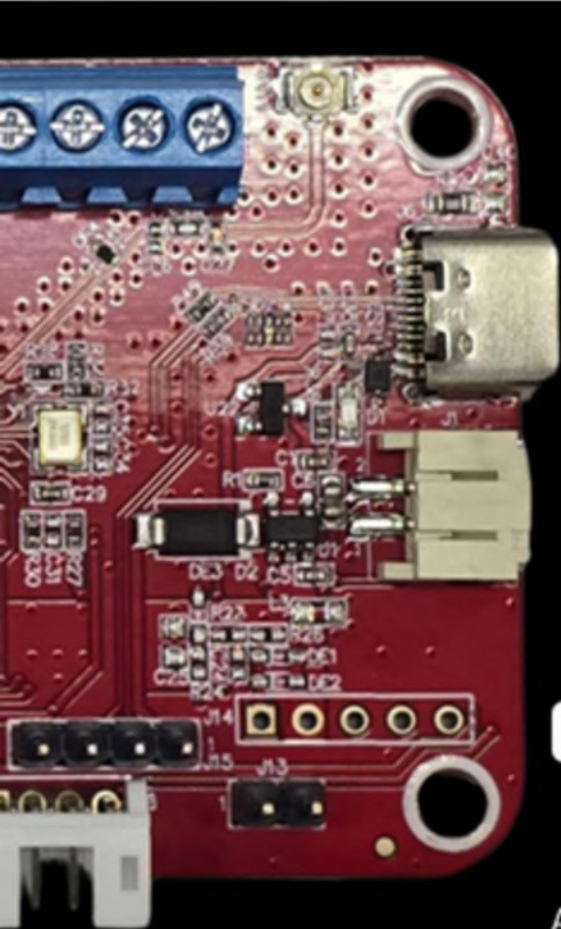
HOW TO CONNECT USB CONNECTOR (J6-1) DETAIL



HOW TO INSTALL AN ANTENNA

It is recommended to install the antenna to enhance stability during wireless gameplay.





HOW TO CONNECT AND INSTALL THE BATTERY

An external battery is required for stable wireless use. When the joystick is disconnected from the console, connecting a USB cable will cause the status LED to breathe. The breathing light will stop once charging is complete.

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Function Operation and Configuration Guide.



Breek

Gen-5 W Fighting Board

1. Supports Switch controller interface mode
2. Supports four SOCD modes
3. Support stick mapping to LS/DP/RS
4. Support Turbo function
5. Supports Touchpad emulation
6. Supports RGB LED
7. Supports Lock function
8. Supports OLED

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Gen-5 W Fighting Board

Button Mapping

PCB Define	SonyPlaystation5 (Steam)	PC(XIN)
Dpad-U	Dpad-U	Dpad-U
Dpad-D	Dpad-D	Dpad-D
Dpad-R	Dpad-R	Dpad-R
Dpad-L	Dpad-L	Dpad-L
Cross	×	A
Circle	○	B
Square	□	X
Triangle	△	Y
L1	L1	LB
R1	R1	RB
L2	L2	LT
R2	R2	RT
L3	L3	LTSB
R3	R3	RTSB
PS_Key	PS_Key	XBox Key
Options	Options	Menu/Start
Create	Create	View/Back
TP_Key	Touch_Key	-
LS_U	LStick-U	LStick-U
LS_D	LStick-D	LStick-D
LS_L	LStick-L	LStick-L
LS_R	LStick-R	LStick-R
RS_U	RStick-U	RStick-U
RS_D	RStick-D	RStick-D
RS_L	RStick-L	RStick-L
RS_R	RStick-R	RStick-R

Bluetooth Wireless Pairing Instructions

1.Wired Pairing :

Connect the device to the PS5 console using a USB cable to complete the pairing process.Afterpairing is complete, press the PS Key to establish a wireless connection.When the wireless connection to the PS5 is successful, the Status LED will start blinking.

2.Direct Wireless Pairing :

While in sleep mode, press and hold **the Create (Select)** button, then press and hold the **PS Key** for about 2 seconds.

When the **Status LED begins flashing twice rapidly** in intervals, the device has entered wireless pairing mode.At this point, use your console to search and pair via Bluetooth.

Supports Switch controller interface mode

- **Manual Switching** : To manually select a mode, follow these steps

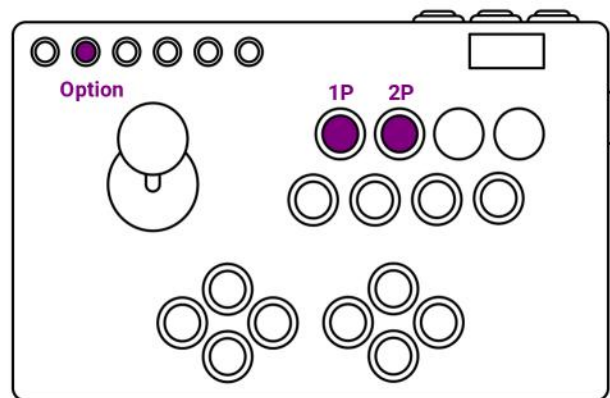
1. Press and hold the desired switch button.
2. Reinsert the device.

*It will remember the last selected settings.

Switch buttons for each mode :

- 1P(Square) : Sony Playstation5
- 2P(Triangle) PC (XID mode)

*Press and hold the Option button, then connect the USB cable to the console to switch back to Auto Detection Mode.



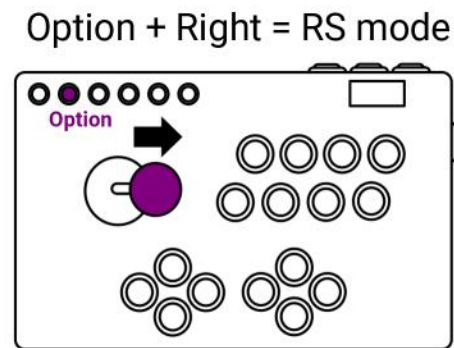
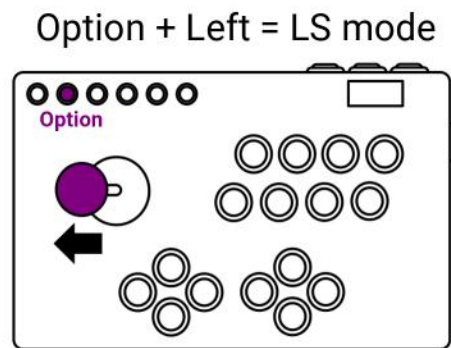
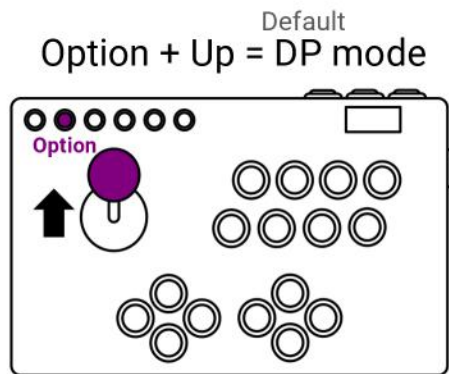
Supports four SOCD modes

- The default setting is Mode 1.
- When you change the SOCD mode, it will be saved automatically.
- Here's how to switch SOCD modes :

	M ode1 UpPriority	M ode2 All Neutral	M ode3 LastPriority	M ode4 ByPass
Mode Switching Instructions	Hold the left button and insert the device or press the Reset button.	Hold the up button and insert the device or press the Reset button.	Hold the down button and insert the device or press the Reset button.	Hold the right button and insert the device or press the Reset button.
←+→	Neutral	Neutral	→	←+→
→+←	Neutral	Neutral	←	→+←
↑+↓	↑	Neutral	↓	↑+↓
↓+↑	↑	Neutral	↑	↓+↑

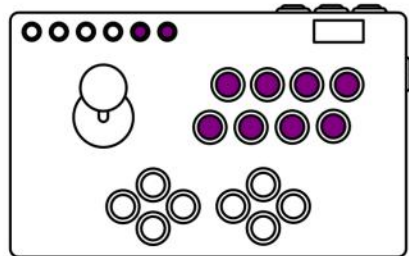
Support stick mapping to LS/DP/RS

- Press and hold the following button combinations for about three seconds to switch between DP/RS/LS modes :



Support Turbo function

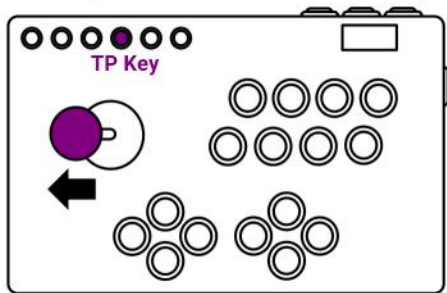
- There are currently five key press frequencies available : 5, 10, 15, 20, and 25 Hits/Sec.
- Hold 【Fn+Option】 , then press ↑ to increase the frequency; press ↓ to decrease the frequency.
- Hold 【Fn+ Option】 , then press the button you want to set or cancel the turbo function
The keys that can be set for the Turbo function are
- : Square、Triangle、
Cross、 Circle、 R1、 L1、 R2、 L2、 R3、 L3



Support Touchpad emulation

- Press and hold the following button combinations to simulate the corresponding touchpad operations :

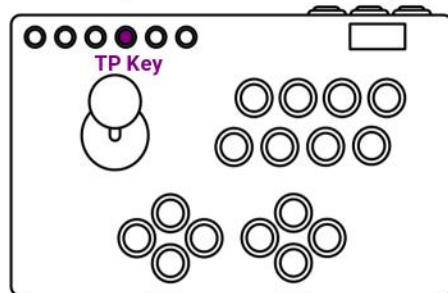
TP Key + Left = Left touchpad



||



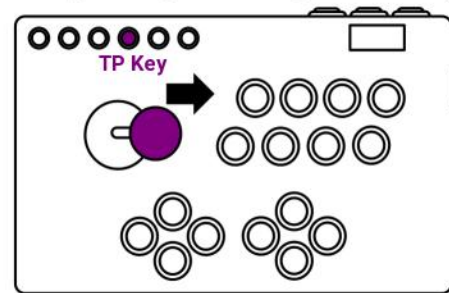
TP Key = Middle touchpad



||



TP Key + Right = Right touchpad



||



Supports RGB LED

- Compatible with WS2812B RGB LEDs and requires a daisy-chaining connection.
- Upon power-up, the RGB LEDs will light up each button in sequence in a marquee style. The lighting sequence will follow the order of the daisy-chained RGB LEDs.

Supports RGB LED

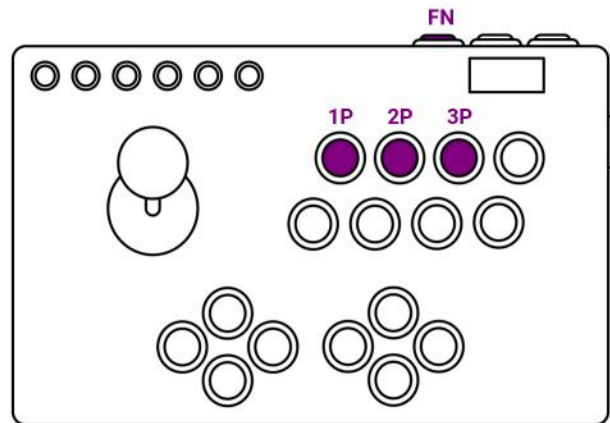
- RGB LED operation and instructions :

1. Fn + 1P : Switch lighting effects.

Effect sequence : All off (default) → Turn off when pressed → Turn on when pressed → Breathing light → Marquee (left to right) → Marquee (right to left)

2. Fn + 2P : Increase brightness

3. Fn + 3P : Decrease brightness

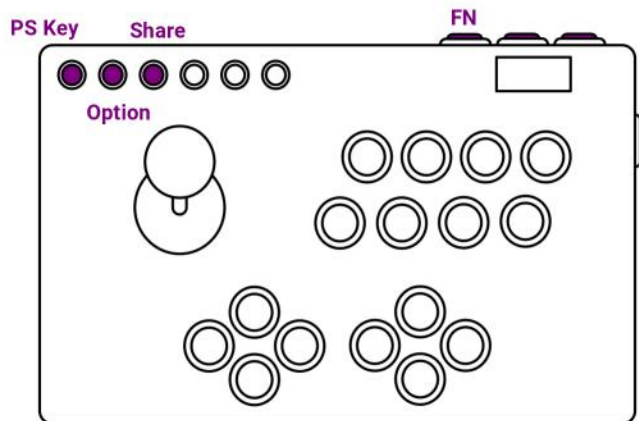


Supports RGB LED-Lighting Effect Description

1. AllOff : RGB LEDs will not light up.
2. Turn off when pressed : Initially, the key LED is on. When pressed, the LED turns off. When the key is released, the LED turns on again.
3. Turn on when pressed : Initially, the key LED is off. When pressed, the LED turns on. When the key is released, the LED turns off again.
4. Breathing Light : The RGB LEDs gradually brighten and dim periodically.
5. Marquee(First to Last) : Colors will change in a gradient cycle from left to right according to the daisy-chained order of the RGB LEDs.
Marquee(Last to First) : Colors will change in a gradient cycle from right to left according to the daisy-chained order of the RGB LEDs.
- 6.

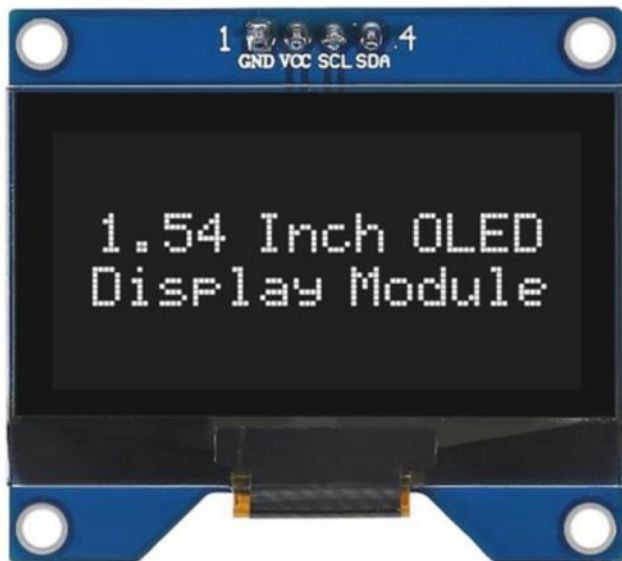
Support Lock function

- Press and hold **【Fn + Option + Share】** to enable or disable the lock state.
The OLED screen will display a corresponding icon.
- When the lock state is enabled, the following buttons will be disabled : PS Key、Option、 Share、 Fn



Gen-5 W Fighting Board

Supports OLED-Display module



GND	Ground
VCC	3.3V~5V
SCL	Clock Line
SDA	Data Line
Resolution	128 x 64
Driver IC	SSD 1309, compatible with SSD1306
Interface	I2C Interface

Supports Status LED

Color	
Lock 状態	Yellow
Player 1	Blue
Player 2	Red
Player 3	Green
Player 4	Purple
No Player ID –WirelessReconnection/Pairing	White
No Player ID –Charging	White

Supports Status LED

Control Status	
Wireless Reconnection Mode	Flashes once per second
Wireless Pairing Mode	Flashes twice per second
TURBO Button is Active	Flashes at TURBO output frequency
Power / Charging Status	
Charging	Breathing Light
Fully Charged	Breathing Light Off
Low Voltage Warning	Flashes once per second

Notes:

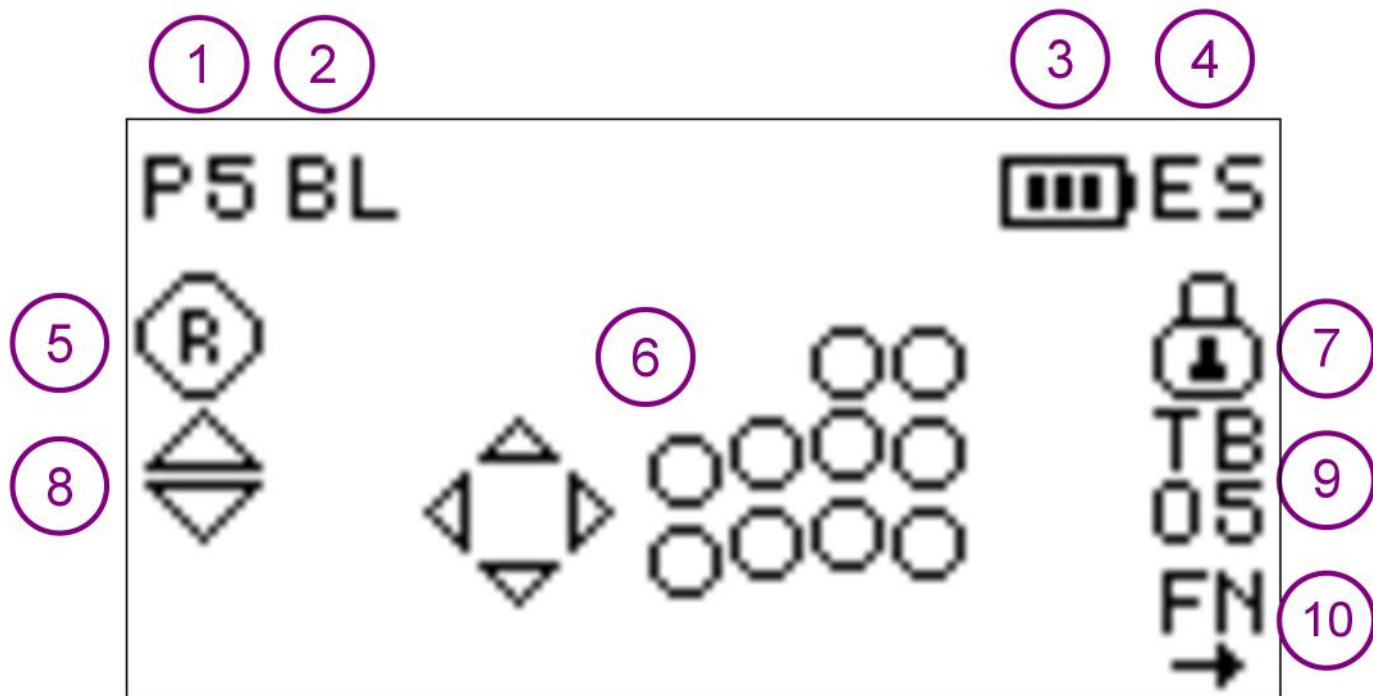
1. Control Status output has higher priority than Power / Charging Status.
2. No Player ID in XIP Mode.
3. In wireless pairing mode, LED flashes twice per second.

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Gen-5 W Fighting Board

Supports OLED-Display Layout



Supports OLED-Display instructions

1. Controller interface mode

Icon	Status/Item Name	Description
P5	Sony Playstation5	The controllerinterfacemode is : Sony Playstation5
PC	PC (XID mode)	The controllerinterfacemode is : PC (XID mode)

Supports OLED-Display instructions

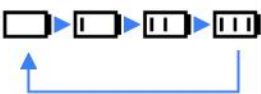
2. Wireless Status: Indicates whether the device is currently connected wirelessly.

Icon	Status/Item Name	Description
	Bluetooth Wireless Connected	Indicates that the device is currently connected via Bluetooth.
(no icon)	No Bluetooth Connection	Indicates that the device is not connected via Bluetooth.



Supports OLED-Display instructions

3. BatteryIndicator : Shows remaining battery level (only visible when connected to a host with battery installed).

Icon	Status/Item Name	Description
	Empty	Indicates that the battery is depleted.
	Low	Indicates the battery level is low.
	Medium	Indicates the battery level is medium.
	High	Indicates the battery is fully charged.
	Charging	Charging animation shown when connected to power.

Supports OLED-Display instructions

4. Esport Mode: Indicates compliance with competition standards.

Icon	Status/Item Name	Description
	Compliant	Indicates that the current settings meet international esports standards.
	Non-compliant	Indicates that the current settings do not meet international esports standards, possibly due to Turbo and Macro functions being enabled.

Supports OLED-Display instructions

5. Stick mapping mode

Icon	Status/Item Name	Description
	DP mode (Default settings)	The current setting is DP mode.
	RS mode	The current setting is RS mode.
	LS mode	The current setting is LS mode.

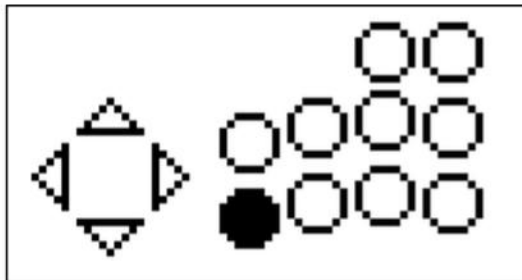
Supports OLED-Display instructions

6. Button Configuration

There are two modes : "Normal Mode" and "Turbo Mode."

Normal Mode

When no buttons have Turbo mode enabled, display the current button press status in real-time.



● : Represent buttons currently being pressed.

○ : Represent buttons currently not being pressed.

Turbo Mode

Display which buttons have Turbo mode turned on.



● : Buttons with Turbo mode

○ : Buttons without Turbo mode

Supports OLED-Display instructions

7. Lock Function States.

Icon	Status/Item Name	Description
	Unlocked.	The current status is unlocked.
	Locked.	The current status is locked.

Supports OLED-Display instructions

8. SOCD Mode

Icon	Status/Item Name	Description
	Up Priority (Default settings)	The current SOCD mode is Up Priority.
	All Neutral	The current SOCD mode is All Neutral.
	Last Priority	The current SOCD mode is Last Priority.
	ByPass	The current SOCD mode is ByPass.

Supports OLED-Display instructions

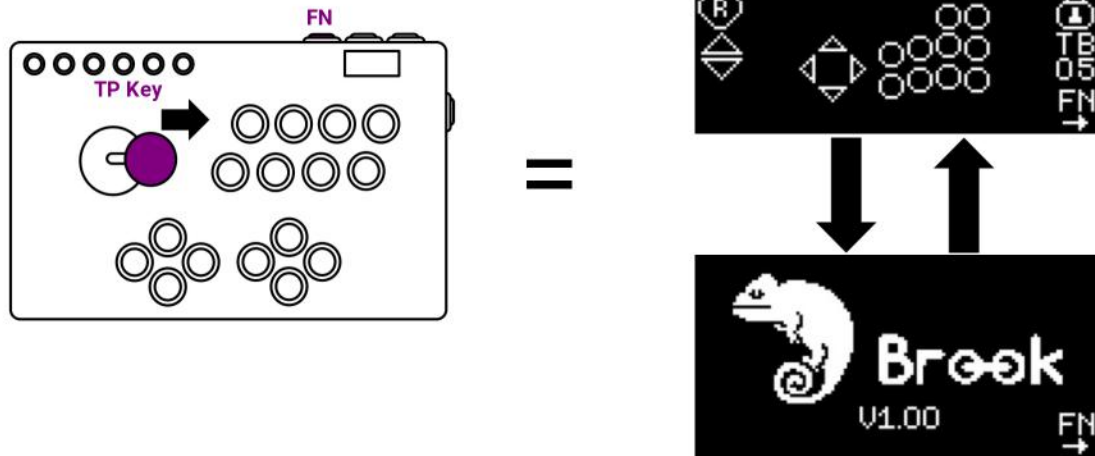
9. Turbostatus

Icon	Status/Item Name	Description
NM	Normal Mode (Default settings)	The current setting is Normal Mode.
TB 05	TurboMode (5 Hit/Sec)	The current setting is TurboMode (5 Hit/Sec).
TB 10	TurboMode (10 Hit/Sec)	The current setting is TurboMode (10 Hit/Sec).
TB 15	TurboMode (15 Hit/Sec)	The current setting is TurboMode (15 Hit/Sec).
TB 20	TurboMode (20 Hit/Sec)	The current setting is TurboMode (20 Hit/Sec).
TB 25	TurboMode (25 Hit/Sec)	The current setting is TurboMode (25 Hit/Sec).

Supports OLED-Display instructions

10. Page Switch Hotkey Hint

Simply press **【FN+ →】** to switch the OLED display to the next page and view the current firmware version.



Electrical Specifications

- Operating Temperature: $T_a = 0^{\circ}\text{C}$ to 70°C
- Power Input: DC 4V
- Operating Voltage: DC 3.6V to 4.2V ($\pm 0.1\text{V}$)
- Operating Current:
 - Bluetooth Connected: 45mA $\pm 20\text{mA}$ (@ DC 4V)
 - Sleep Mode: Under 150 μA (@ DC 4V)

Note: The values above do not include current consumption from RGB-LEDs and the OLED display.

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Gen-5 W Fighting Board

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.

Warning: 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.

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Brook

Gen-5 W Fighting Board

FCC and ISED Radiation Exposure Statement

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

L'appareil a été évalué pour répondre aux exigences générales en matière d'exposition aux RF. L'appareil peut être utilisé en condition d'exposition portable sans restriction.

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Gen-5 W Fighting Board

ISED STATEMENT

-English: "

This device complies with Innovation, Science and Economic Development Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device."

-French:"

Cet appareil est conforme aux normes RSS exemptées de licence d'innovation, sciences et développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."

This radio transmitter(IC:29174-ZPMV006) has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Cet émetteur radio(IC:29174-ZPMV006) a été approuvé par Innovation, Sciences et Développement économique Canada pour fonctionner avec les types d'antennes répertoriés ci-dessous, avec le gain maximum autorisé indiqué. Les types d'antennes non inclus dans cette liste qui ont un gain maximum indiqué pour tout type répertorié sont strictement interdits pour une utilisation avec cet appareil.

Antenna Information

Antenna / Antenna	Type/Taper	Antenna Gain Gain de l'antenna	Impedance/ Impédance	Frequency range/ Gamme de fréquences
Antenna 1	Columnar Antenna	2.00 dBi	50Ohm	2400-2500MHz