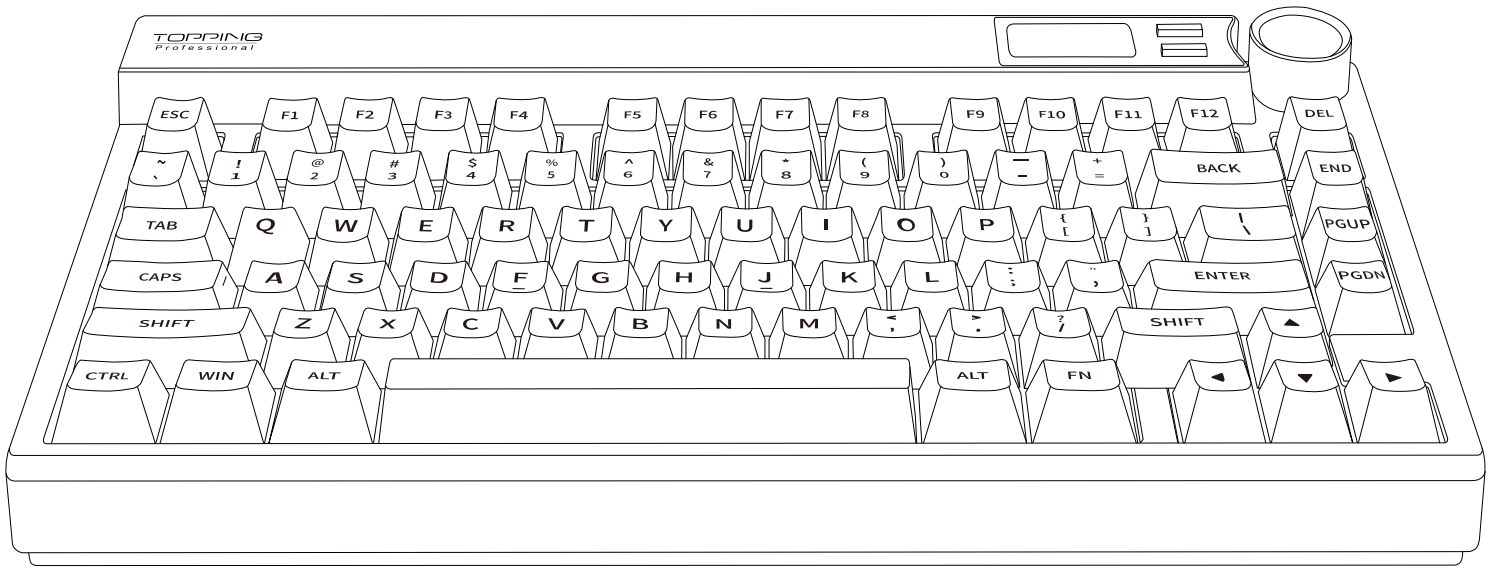
TOPPING
Professional

KB22



V1.1

User manual

Contents

1. Packaging Contents

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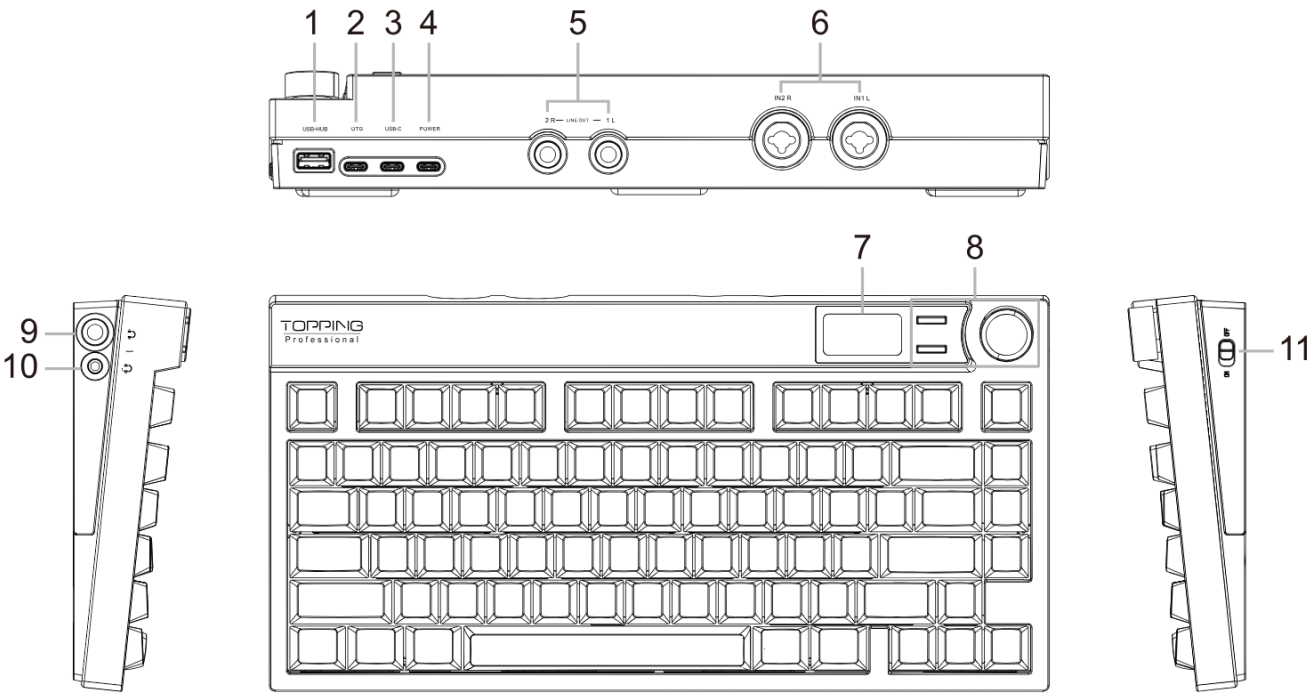
2. Parts and Names

2.1. Ports and Buttons

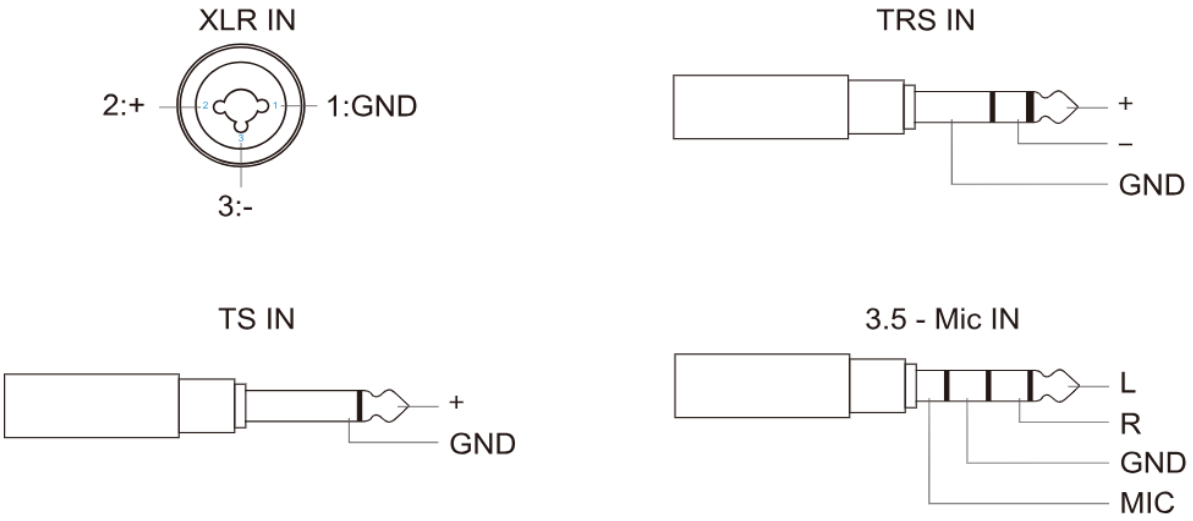


1. **USB Expansion Port**
   Connect devices such as a mouse or USB flash drive while saving a USB port on the computer.
2. **OTG Port**
   Connect a mobile device to this port to record audio from the mobile device to the computer or send audio from the computer to the mobile device.

3. **USB-C Port**
   Connect the computer to this port for data transfer and to power the KB22.
4. **POWER Port**
   When power is insufficient, connect a DC5V power supply to this port. The USB-C port on the left will then be used only for data transfer, not power.
5. **LINE OUT**
   6.35mm TRS balanced port for connecting the main monitoring device.
6. **IN1&IN2 (not supported in HIFI Mode)**
   Combo input port supporting XLR, 6.35mm TRS balanced, and 6.35mm TS unbalanced plugs. Connect a microphone, instrument (such as an electric guitar), or LINE OUT device.
7. **Display**
8. **Button Functions**

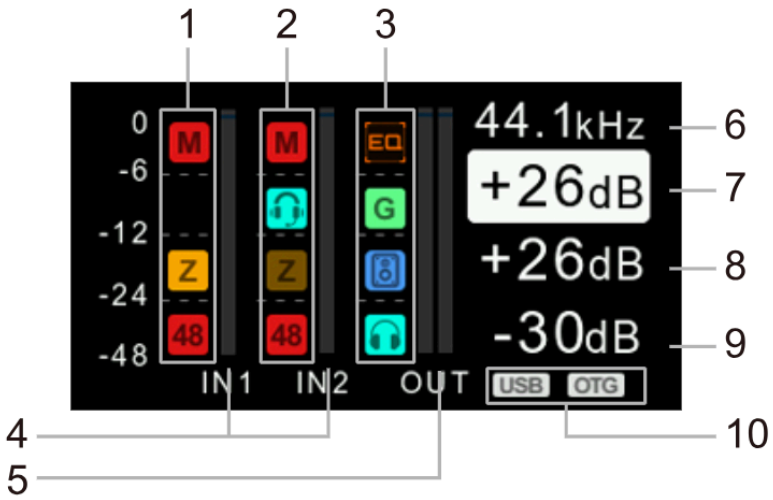
	Up Button	**Down Button**	**Knob**
HIFI Mode	Short press: Open the menu* Long press: Turn output mute on or off	Short press: Switch the USB input Long press: Turn the screen off or on	Turn the knob: Adjust the volume* Short press: Switch the output
Pro Mode	Short press: Open the menu* Long press: Turn Input 1 EQ on or off	Short press: Switch between input/output settings* Long press: Turn the screen off or on	Turn the knob: Adjust the volume* Short press: Switch between input and output volume Double-click: Turn output mute on or off
Game Mode	Short press: Open the menu* Long press: Turn output mute on or off	Short press: Switch between input/output settings* Long press: Turn Input 1 mute on or off	Turn the knob: Adjust the volume* Short press: Switch between input and output volume Double-click: Turn Input 1 48V on or off
Note: Buttons marked with * cannot be customized. The functions of the other buttons can be customized under [Menu-Advanced].			

9. **6.35mm Unbalanced Headphone Port**
10. **3.5mm Headphone/Headset Port (not supported in HIFI Mode)**
3.5mm TRRS port for connecting headphones or a headset (CTIA standard). Provides a 2.5V bias voltage when headset input is enabled.
11. **Power Switch**



2.2. Display Indicators

2.2.1. Pro/Game Mode



1. **IN1 Settings**

   M: Turn mute on or off.

   Z: Switch between line and instrument input. The icon is off for line input and on for instrument input.

   48: 48V Indicator.

   IN1/IN2: When 48V is enabled, 48V phantom power is supplied to the connected microphone. This applies to the XLR input of the corresponding input port.

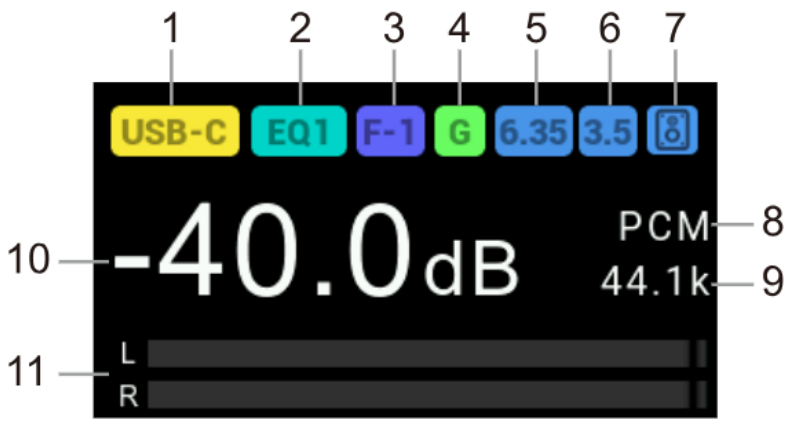
   Important:

   Phantom power is normally used only with condenser microphones. Enabling 48V for a microphone or device that does not require phantom power may cause damage, so keep it off when not in use. Confirm that the microphone supports 48V phantom power before enabling it, and lower the microphone input volume before turning it on or off.

2. **IN2 Settings**
   M: Turn mute on or off.
   Z: Switch between line and instrument input. The icon is off for line input and on for instrument input.
   3.5mm Headset Icon: When this icon is lit, the microphone input of the IN2 port is disabled.
   48: 48V Indicator
   IN1/IN2: When 48V is enabled, 48V phantom power is supplied to the connected microphone. This applies to the XLR input of the corresponding input port.
   Important:
   Phantom power is normally used only with condenser microphones. Enabling 48V for a microphone or device that does not require phantom power may cause damage, so keep it off when not in use. Confirm that the microphone supports 48V phantom power before enabling it, and lower the microphone input volume before turning it on or off.
3. **Output Settings**
   EQ: Turn EQ on or off.
   G: 3.5mm/6.35mm headphone amplifier gain.
   Speaker Icon: Turn LINE OUT output on or off.
   Headphone Icon: Turn headphone output on or off.
4. **IN1&IN2 Input Level Indicator**
   When the signal clips, the CLIP indicator at the top of the level meter lights up. Lower the signal level.
5. **Output Level Indicator**
   When the signal clips, the CLIP indicator at the top of the level meter lights up. Lower the signal level.
6. **Sample Rate Indicator**
7. **IN1 Input Gain**
8. **IN2 Input Gain**
9. **Output volume (3.5mm & 6.35mm & LINE OUT)**
10. **USB input indicator (shown after the device is recognized)**

Note: Except for the sample rate display, the other icons and descriptions in Game Mode are the same as in Pro Mode.

2.2.2. HIFI Mode



1. **USB/OTG input indicator**
   Set this in [Menu - Input Selection]
2. **EQ indicator**
3. **PCM filter indicator**
4. **3.5mm/6.35mm headphone amplifier gain**
5. **6.35mm headphone output indicator**
6. **3.5mm headphone output indicator**
7. **LINE OUT output indicator**
8. **Audio format**
9. **Sample Rate Indicator**
10. **Output volume settings (3.5mm/6.35mm/LINE OUT)**
11. **VU meter**

3. KB22 three operating modes

3.1. Mode comparison

To meet different user needs, KB22 provides three operating modes that can be switched according to the usage scenario.

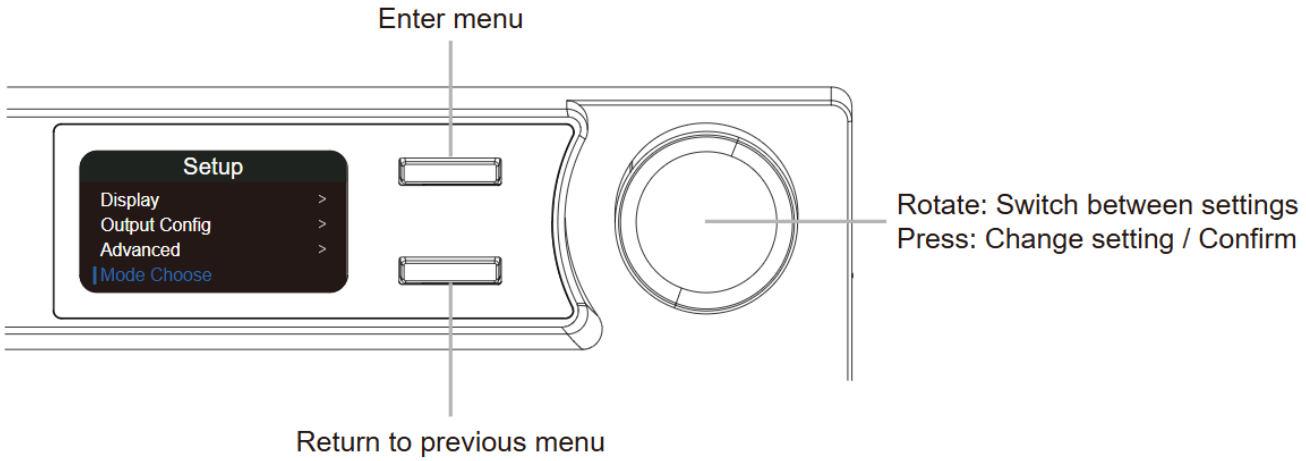
Mode	HIFI Mode	Pro Mode	Game Mode
Recommended use	Suitable for everyday music listening and other light use	For professional users; suitable for recording studios, multi-channel routing, and music production	For gaming; suitable for various game streaming needs
Sample rate	PCM 44.1-384kHz DSD Native 64-256/Dop 64-128	44.1-192kHz	44.1kHz/48kHz
Input channels	UAB-C、OTG	IN1、IN2、3.5-Mic、OTG、 Playback 1/2~7/8	IN1、IN2、3.5-Mic、OTG、 Playback 1/2~5/6
Mix channels	None	Mix A–C (3 groups)	3 groups
Internal recording	None	Loopback 1/2、3/4、5/6	Recording
Effects	EQ	EQ, ducking, noise reduction, compression, expansion, delay, and reverb	Ducking, noise reduction, vocal enhancement, output audio effect enhancement, output spatial enhancement

PEQ adjustment	Headphone/Line Out: 10-band PEQ	Microphone input: 4-band PEQ Headphone output: 10-band PEQ	None

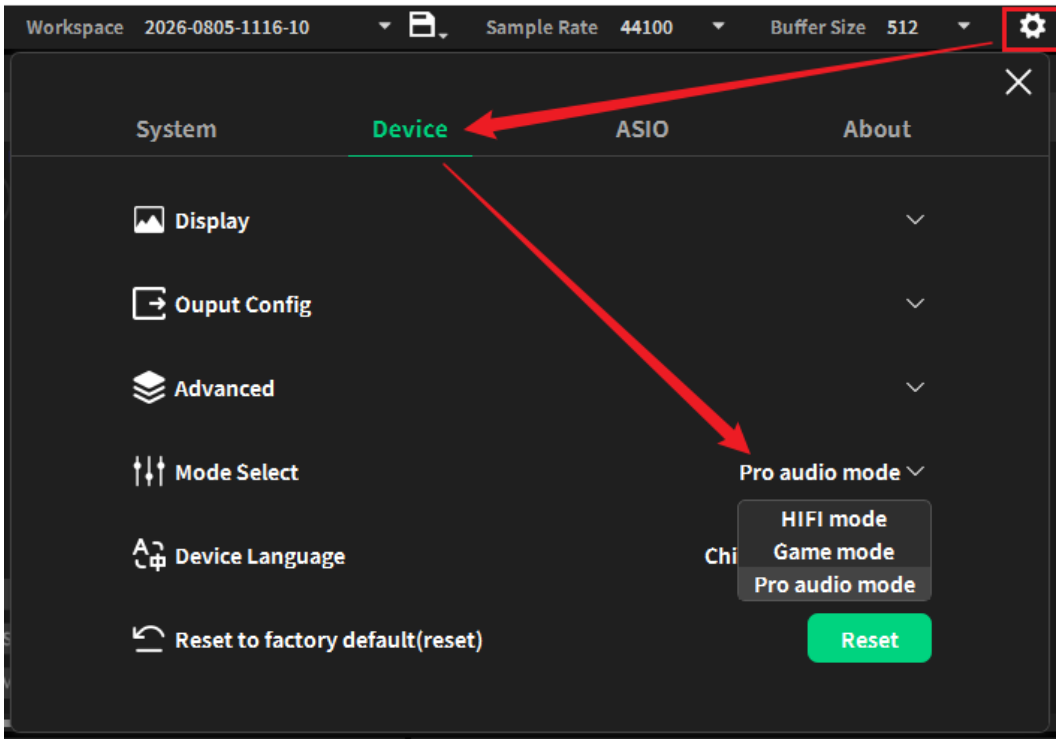
3.2. Mode switching

3.2.1. Switch modes on the device

Set this in [Menu - Mode Choose].



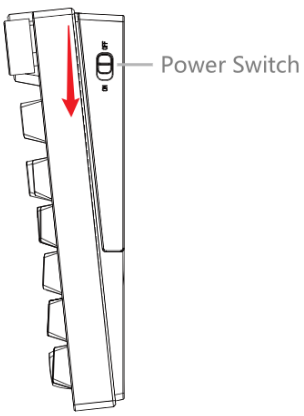
3.2.2. Switch modes in KB Control Center



4. Connections

4.1. Connect the keyboard

Use a USB cable to connect KB22's USB-C port to a USB port on the computer. Then slide the power switch to ON.



Note：The computer may take a few seconds to recognize the device the first time it is connected. After recognition is complete, the keyboard is ready for normal input.
If keyboard input is abnormal, try briefly press FN+A to switch to the Mac layer, or FN+S to switch to the Win layer.

4.2. Pro/Game Mode

4.2.1. Connect a microphone

1. **Select the microphone input port**

IN1/IN2(XLR port) : Connects to dynamic or condenser microphones and provides 48V phantom power.
3.5-Mic (3.5mm TRRS port): Connects to a headset with a microphone.

2. **Lower the input gain**

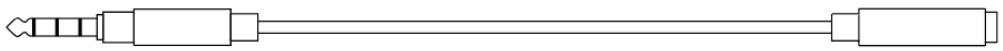
Before connecting a microphone, lower the input gain for the corresponding channel to prevent excessive volume when connecting it. For details, see the manual: 5.2 Volume Settings.

3. **Connect the microphone with the appropriate cable**

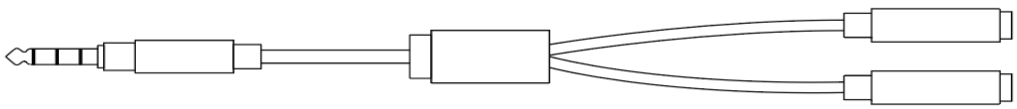
Dynamic/condenser microphone: Use an XLR-to-XLR cable to connect it to IN1/IN2.

Headset / microphone connection:

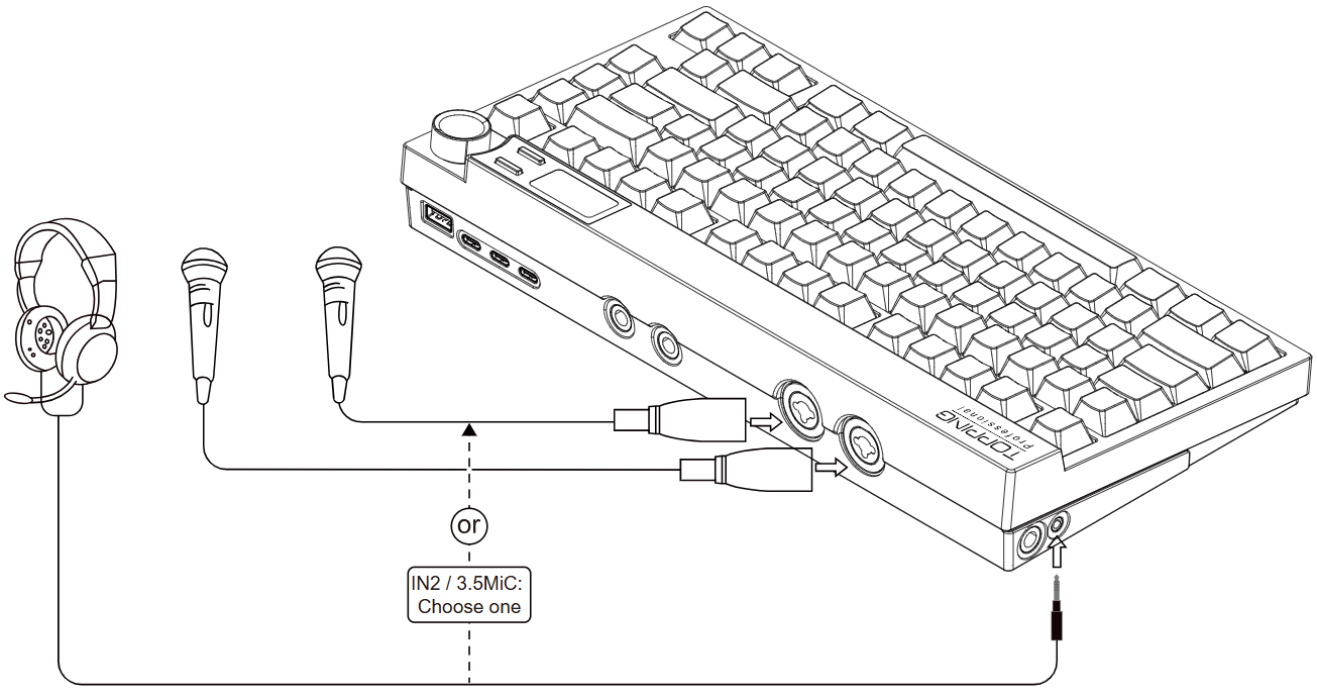
- **4-pole CTIA-standard headset or standalone microphone:** Connect directly to the 3.5-Mic jack.
- **2-pole or 3-pole standalone microphone:** Usually requires a microphone adapter cable that converts it to CTIA TRRS.



- **Standalone microphone and 3.5 mm headphones at the same time:** Use a headset splitter adapter.



The wiring, output level, and power requirements of different microphones may vary. Confirm the specifications with the microphone manufacturer before use. Actual compatibility depends on connection testing.



4. **Microphone input settings**

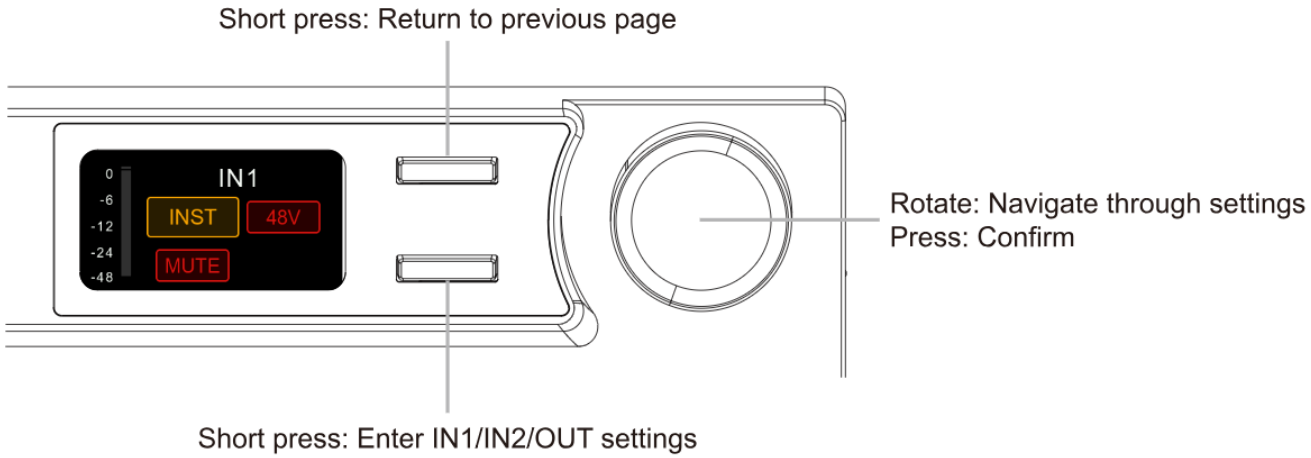
Up to 2 microphone inputs are supported at the same time. IN2 settings include both IN2 input and 3.5-Mic input settings. When 3.5-Mic is enabled, the IN2 microphone input is disabled. Briefly press the down key on the right side of the screen to open the IN1/IN2 settings. For details, see the manual: 5.3 Input/Output Settings.

Enable phantom power (if needed)

- **IN1 / IN2**: When 48V is enabled, 48V phantom power is supplied to the connected microphone.

⚠**Notice:**

- If the connected device does not require phantom power, enabling phantom power may damage the device. Enable this function only after confirming that your microphone requires it.
- Before connecting or disconnecting a microphone, set the device volume to the minimum and turn off phantom power to prevent damage or noise.

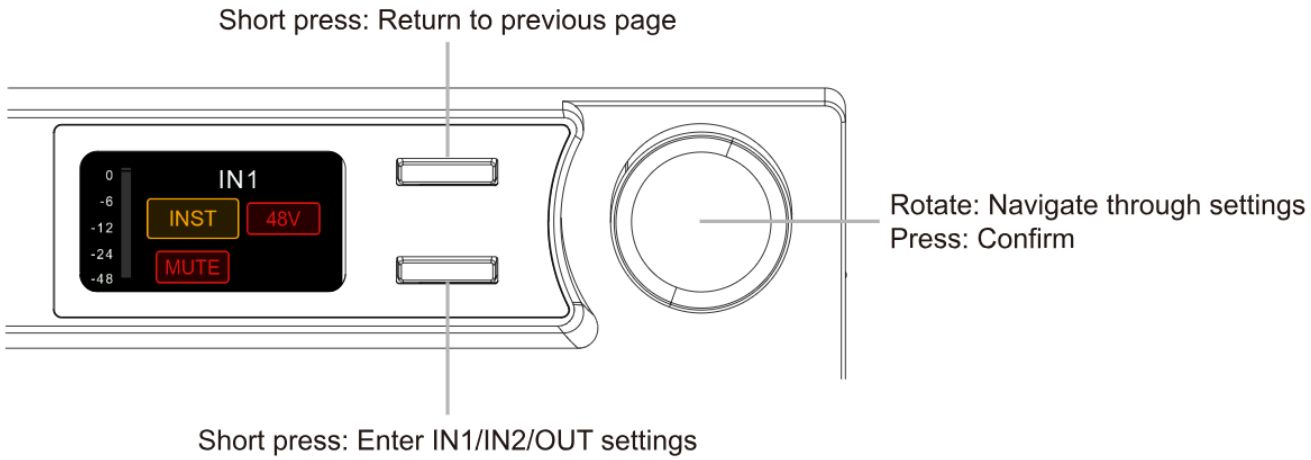


5. **Adjust the input gain**

After connecting the microphone, gradually increase the input gain until you achieve a suitable recording level. For details, see the manual: 5.2 Volume Settings.

4.2.2. Connect an instrument/line output device

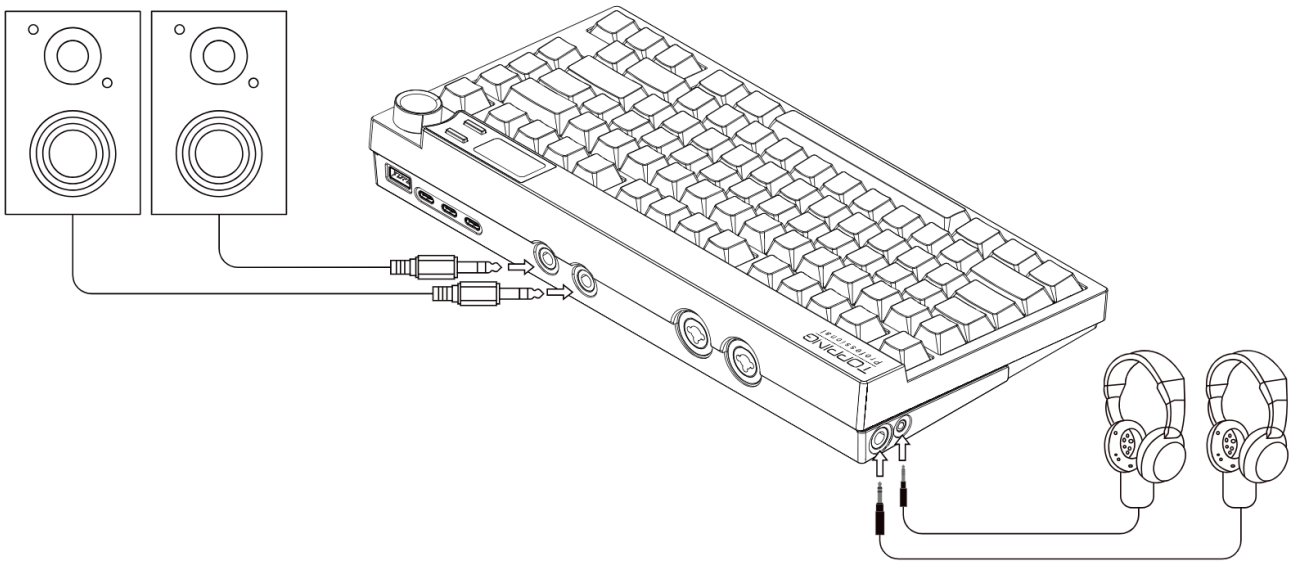
1. Lower the input gain for IN1 and IN2. For details, see the manual: 5.2 Volume Settings.
2. Use a 6.35mm TS/TRS cable to connect an instrument or line output device to IN1/IN2.
3. When connecting an instrument, open the IN1/IN2 settings and turn on the INST switch. No additional settings are required for a line output device.



4. After connecting, gradually increase the input gain until the level is suitable. For details, see the manual: 5.2 Volume Settings.

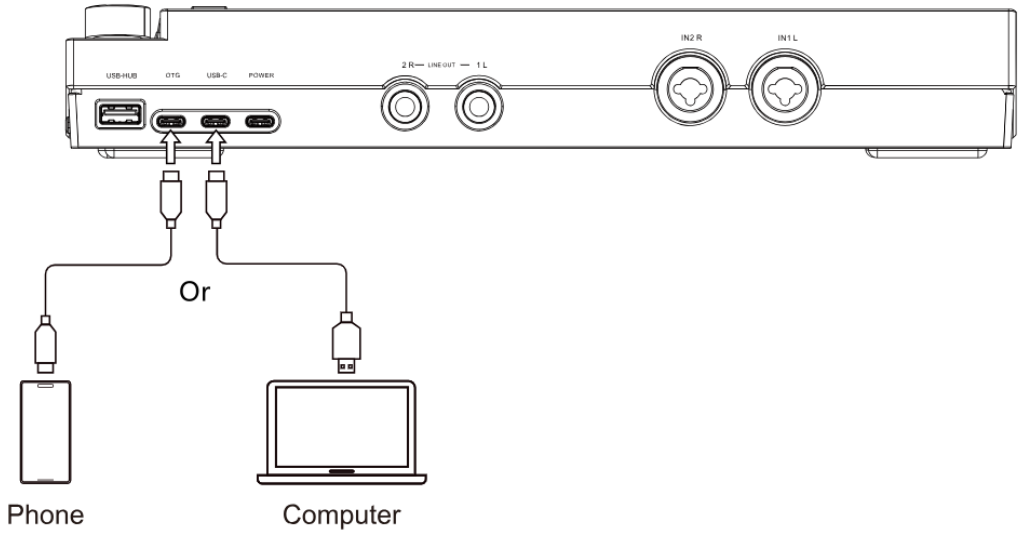
4.2.3. Connect monitoring devices

According to your needs, connect 3.5mm / 6.35mm headphones to KB22's headphone output, or use a 6.35mm TRS balanced cable to connect KB22's LINE OUT to powered monitor speakers. To adjust the output volume, see the manual: 5.2 Volume Settings.



4.3. HIFI Mode

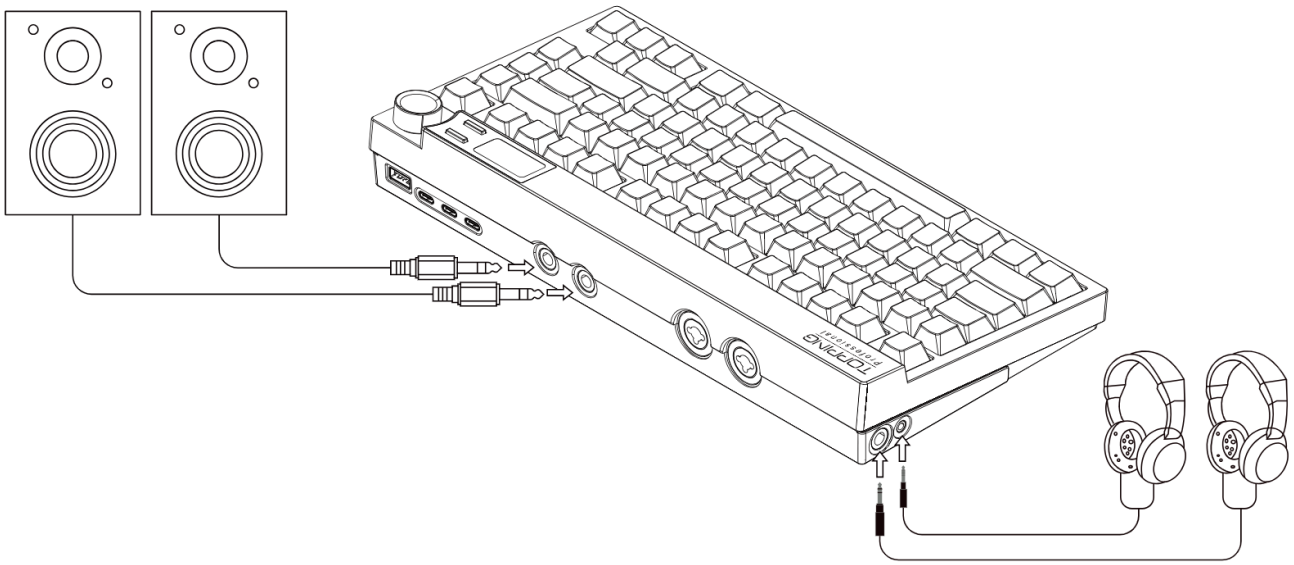
4.3.1. Connect input sources



Note: When connecting a mobile device or when power is insufficient, connect an additional DC5V power supply to the POWER port.

4.3.2. Connect output devices

According to your needs, connect 3.5mm / 6.35mm headphones to KB22's headphone output, or use a 6.35mm TRS balanced cable to connect KB22's LINE OUT to powered speakers. To adjust the output volume, see the manual: 5.2 Volume Settings.



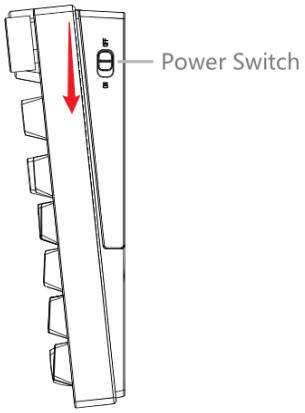
Note: In this mode, the headset input is unavailable. To use a headset, set it in [Menu-Mode Choose-Pro/Game Mode].

5. Operation Instructions

5.1. Power On/Off and Standby

Power On

When connecting to a computer, use a USB cable to connect to KB22's USB-C port. When connecting to a mobile device or when power is insufficient, use a DC 5V charger connected to the POWER port to power the device. After connecting, set the power switch on the right side of the unit to ON to power it on.



Standby

While KB22 is powered on, press and hold the knob to enter standby. In standby mode, briefly press the knob to power on.

Note: When KB22's auto-standby function is enabled, the device enters standby after one minute if no digital signal is detected and the analog signal level is below -40 dBFS. It automatically resumes normal operation when a valid signal is detected again.

To disable auto-standby, set it to Off in [Menu-Advanced-Auto Power-Off].

5.2. Volume Settings

Adjust Volume

Pro Mode / Game Mode: Briefly press the knob to select the IN1, IN2, or OUT volume in sequence, then turn the knob to adjust the selected volume.

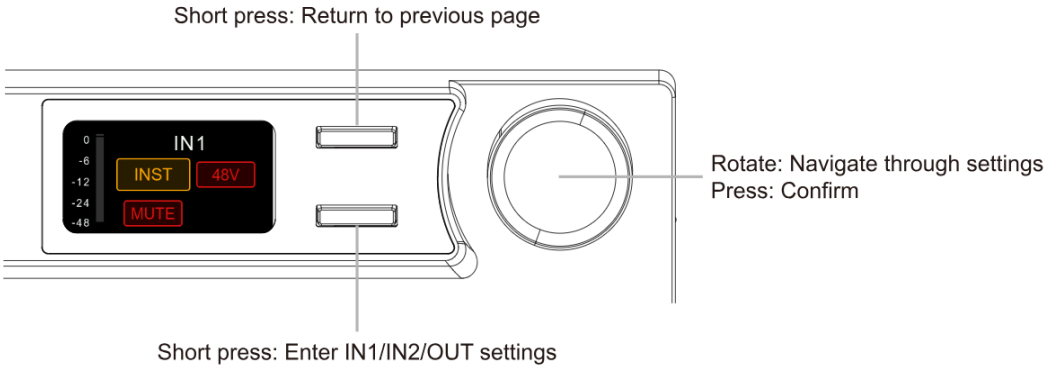
HIFI Mode: Turn the knob directly to adjust the volume.

Mute

Customize shortcut actions under [Menu-Advanced] and assign Mute to the knob or buttons.

5.3. Input/Output Settings

5.3.1. Pro/Game Mode



Note: The OUT gain (GAIN) setting applies only to the 3.5mm and 6.35mm headphone outputs.

5.3.2. HIFI Mode

Input Settings

Briefly press the down button to the right of KB22's display to switch between USB and OTG input.

Output Options Settings

Because the device has multiple output channels, switching may take some time. For greater efficiency, preselect commonly used output channels in [Menu-Output Config-Output Options] to reduce switching time. After selection, the system switches only among the selected channels.

☐ All

☐ Line Out

☐ HPA 6.35mm

☐ HPA 3.5mm

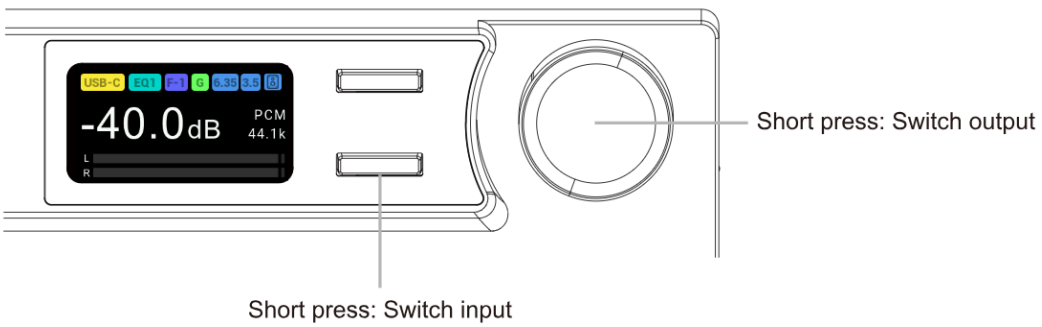
☐ All HP

☐ Line + HPA 6.35mm

☐ Line + HPA 3.5mm

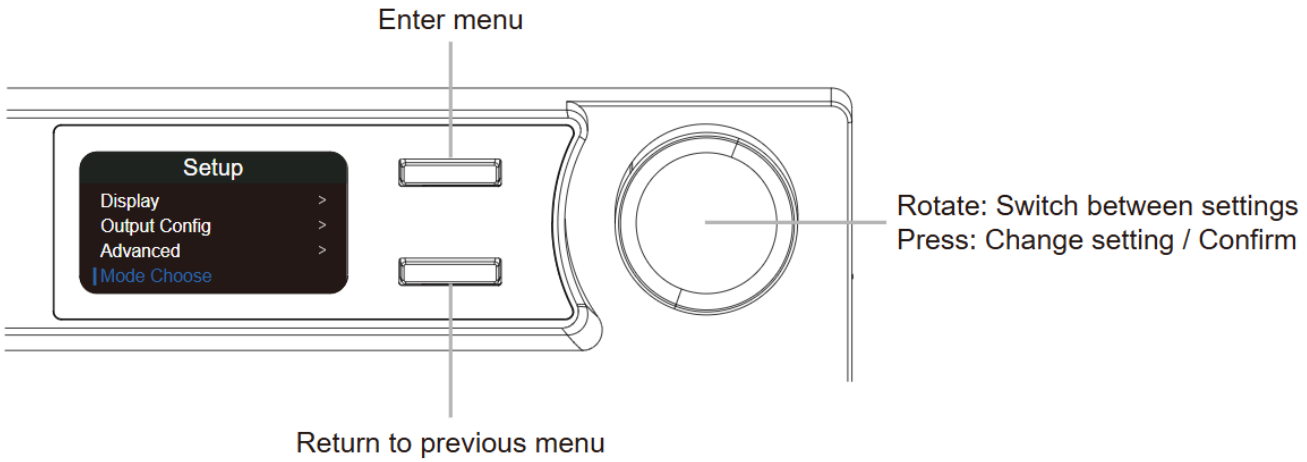
Switch Output Channels

After setting the output options, press the knob to cycle through the outputs.



6. Settings Menu

6.1. Open the Menu and Change Settings



6.2. Settings Description

6.2.1. Display

Brightness

Low, Medium, High (default)

VU Style (Pro/HIFI Mode)

Colorful (default), White

Icon Style (HIFI Mode)

Filling (default), Wireframe

6.2.2. Input Selection (HIFI)

USB-C (default), OTG

6.2.3. Output Config

Output Selection (Pro/HIFI Mode)
All (default) / Cycle through the list selected under "Output Options"

Output Options (Pro/HIFI Mode)

Because the device has multiple output channels, switching may take some time. For greater efficiency, preselect commonly used output channels in [Menu-Output Settings-Output Options] to reduce output-channel switching time.

Available output channels include:

☐ All

☐ Line Out

☐ HPA 6.35mm

☐ HPA 3.5mm

☐ All HP

☐ Line + HPA 6.35mm

☐ Line + HPA 3.5mm

PCM Filter (HIFI Mode)

F-1: Fast roll-off (default)

F-2: Slow roll-off

F-3: Minimum phase

HP Gain

Low (default), High

Channel Balance

Available range: C (balanced), L+0.5-9.5dB, or R+0.5-9.5dB. (Default: C)
*When using the knob to set this option, press the knob once to enter the setting, turn the knob to adjust the value, then press it again to exit.

Volume Step

0.5dB (default), 1dB

Polarity

Normal (default), Inverted

6.2.4. PEQ Settings (HIFI)

PEQ
Enabled, Disabled (default)

PEQ Specifications

USB IN: 44.1kHz-192kHz

PEQ Selection

The device includes 3 default presets for selection. To edit them, use the KB Control Center software.

6.2.5. Advanced

Auto Power

On (default), Off

Vol Memory

Input (HIFI Mode): The device remembers the volume and gain settings last used for each input channel and restores them automatically the next time you switch to that channel.

Output (Pro Mode/HIFI Mode): Remember the volume and gain last used for each output channel and restores them automatically the next time you use that channel. (Default)
None: Do not use this function

PEQ Memory

Input (HIFI Mode): Remembers the PEQ configuration selected for each input channel and restores it automatically the next time you use that channel.

Output (Pro Mode/HIFI Mode): Remembers the PEQ configuration selected for each output channel and restores it automatically the next time you use that channel. (Default)

None: Do not use this function

Knob Button (HIFI Mode)

Use this function to customize the shortcut action performed when you short-press the knob on the normal display.

Available inputs, outputs, and controls vary by operating mode, so the functions available by short-pressing the knob also vary with the current mode.

Knob Double-press (Pro Mode/Game Mode)

Use this function to customize the shortcut action performed when you double-click the knob on the normal display.

Available inputs, outputs, and controls vary by operating mode, so the functions available by double-clicking the knob also vary with the current mode.

Up Button Long-press

Use this function to customize the shortcut action performed when you press and hold the Up button on the normal display.

Available inputs, outputs, and controls vary by operating mode, so the functions available by pressing and holding the Up button also vary with the current mode.

Down Button Short-press (HIFI Mode)

Use this function to customize the shortcut action performed when you short-press the Down button on the normal display.

Available inputs, outputs, and controls vary by operating mode, so the functions available by short-pressing the Down button also vary with the current mode.

Down Button Long-press

Use this function to customize the shortcut action performed when you press and hold the Down button on the normal display.

Available inputs, outputs, and controls vary by operating mode, so the functions available by pressing and holding the Down button also vary with the current mode.

6.2.6. Mode Selection

HIFI Mode, Pro (default), Game Mode

6.2.7. Language

English, Chinese

6.2.8. Factory Reset

Selecting Factory Reset opens a dialog. Select OK or No (the selected option is blue), then press the front-panel knob to confirm.

7. Keyboard Functions

7.1. VIA Key Customization

KB22 supports VIA key customization, including changing key assignments, setting lighting effects, and recording macros.

Key Remapping Address: https://usevia.app/

JSON File: https://download.topping.pro/downloads/JSON-KB22_V0101_20250218.zip

		Windows	**Mac (press F1–F12 without Fn)**
FN Key Combinations	Fn+F1	Open My Computer	Decrease screen brightness
	Fn+F2	Open browser	Increase screen brightness
	Fn+F3	Open email	Switch windows
	Fn+F4	Open calculator	All apps
	Fn+F5	Open music player	\
	Fn+F6	Stop playback	\
	Fn+F7	Previous track	Previous track
	Fn+F8	Pause/Play	Pause/Play
	Fn+F9	Next track	Next track
	Fn+F10	Mute	Mute
	Fn+F11	Decrease volume	Decrease volume
	Fn+F12	Increase volume	Increase volume
	FN+WIN_L	Lock/Unlock Windows key	
	FN+|\	Switch backlight mode	Switch backlight mode

	FN+ ↑	Increase main backlight brightness	Increase main backlight brightness
	FN+ ↓	Decrease main backlight brightness	Decrease main backlight brightness
	FN+←	Decrease main backlight effect speed	Decrease main backlight effect speed
	FN+→	Increase main backlight effect speed	Increase main backlight effect speed
	FN+ENTER	Increase main backlight hue	Increase main backlight hue
	FN+BACK	Turn off backlight	Turn off backlight
	FN+Space	Press and hold for 3 seconds to restore factory settings. The entire backlight flashes white 3 times.	Press and hold for 3 seconds to restore factory settings. The entire backlight flashes white 3 times.
	FN+A	Briefly press to switch to the Mac layer	Briefly press to switch to the Mac layer
	FN+S	Briefly press to switch to the Windows layer	Briefly press to switch to the Windows layer

7.2. 2-in-1 Keycap / Switch Puller

Removing Keycaps

1. Fit the wider end of the puller around the keycap.
2. Make sure the wires hook under both sides.
3. Pull straight up gently to remove the keycap.

Removing Switches

1. Remove the keycap first.
2. Align the narrower end with the clips on the top and bottom of the switch.
3. Squeeze inward to release the clips.
4. Keep squeezing and pull the switch straight up.

> Pull straight up and avoid twisting to prevent damage to the switch pins or hot-swap socket. If the switch is tight, make sure both clips are fully pressed before pulling. Do not pry it out.

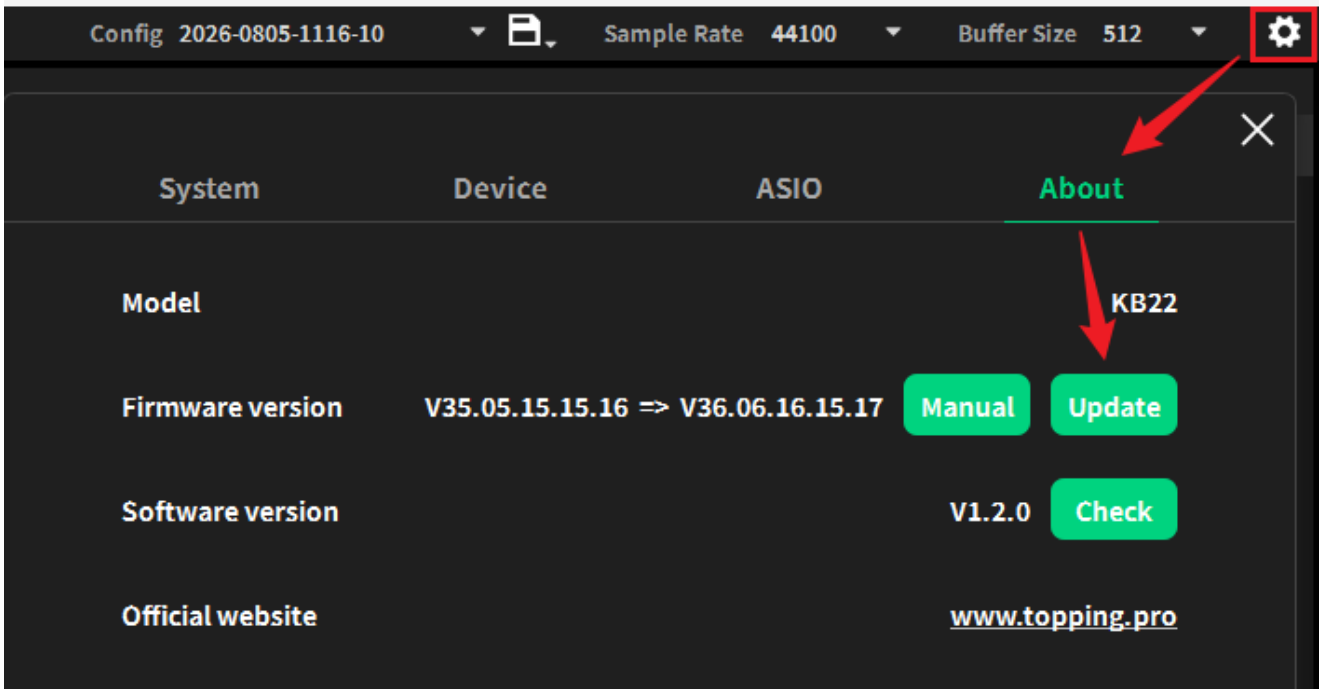
For more details, click the link below: https://topping.pro/supports/99AQV25

8. Firmware Upgrade

Download KB Control Center to update the firmware.

Win: https://topping.pro/download/Roy05zQ

MAC: https://topping.pro/download/Em1vree



9. Precautions

1. Routine Keyboard Maintenance:

Disconnect the keyboard from the device before cleaning. For routine cleaning, turn the keyboard upside down and gently tap the back to remove dust and debris, then use a soft brush to clean between the keycaps and remove surface dust.

For more thorough cleaning, carefully remove the keycaps with a keycap puller, then use a soft brush to remove dust and debris from inside the keyboard. If stains remain, gently wipe the surface with a clean, soft, slightly damp cloth. Allow the keyboard to air-dry in a cool, well-ventilated place. Do not rinse the keyboard with water or spray cleaning solution directly onto it.

During use, do not repeatedly unplug, pull, or bend the keyboard cable, as this may loosen or disconnect the keyboard connector or cause poor contact. Avoid leaving the keyboard for long periods in humid, hot, dusty, or directly sunlit environments.

2. Do not disassemble the case. Have repairs performed by qualified service personnel.
3. For indoor use only.
4. We are not responsible for any loss or damage caused directly or indirectly by product failure.
5. Specifications and functions are subject to change without notice due to product improvements.

10. Main Unit Properties

Basic Properties

Dimensions	32.2 cm x 16.3 cm x 5.0 cm (including protruding parts)
Unit Weight	1.27 kg

Interface Properties

Power Input	POWER USB Type-C port (preferred) or USB Type-C port
OTG Port	OTG USB Type-C port (USB 2.0 FS)
USB-C Port	USB Type-C port (USB 2.0 HS)
USB Hub Expansion Port	USB Type-A port (USB 2.0 HS)
Microphone Inputs	2 (XLR/TRS combo inputs with 48 V phantom power)
High-Impedance Inputs	2 (XLR/TRS combo inputs)
Line Inputs	2 (XLR/TRS combo inputs)
Line Outputs	2 (6.35 mm TRS outputs)
Headphone/Headset Ports	2: 3.5 mm TRRS (stereo headphone output + microphone input, shared with microphone input 2) 6.35 mm TRS (stereo headphone output)

Power Properties

Power Supply	DC 5 V / 1.0-2.0 A (devices connected to the hub increase current consumption)
Hub Power Output	DC 5 V / 1.0 A

Display Properties

Display	1.46-inch color display

Technical Properties

Microphone Preamp Technology	Ultra-linear
OTG Technology	Digital ASRC

Supported Sample Rates	USB Type-C: 16 bit/44.1 kHz-32 bit/384 kHz, DSD64-DSD128 (DoP), DSD64-DSD256 (Native) @ HIFI Mode 24 bit/44.1 kHz-24 bit/48 kHz @ Game Mode 24 bit/44.1 kHz24 bit/192 kHz @ Professional Mode OTG: 16 bit/48 kHz-24 bit/192 kHz
Software Control	Supports KB Control Center
DAW Channels	8 (Professional Recording Mode)
Recording Channels	10 (Professional Recording Mode)
Loopback Channels	6 (Professional Recording Mode)
Operating Modes	3 (HIFI Mode, Game Mode, and Professional Mode)
Operating Systems	macOS / Windows / iOS / Android
Simultaneous Dual-Host Operation	Supported

DSP Effects 1 (Professional Mode)

Mixers	3
PEQ	Each microphone input supports 4-band PEQ Headphone output supports 10-band PEQ (Professional Recording Mode only) Type: Parametric equalizer (PEQ)
Noise Reduction	Noise gate with 70 noise-reduction levels
Compressor	Adjustable threshold, ratio, attack time, release time, gain, and dry/wet mix
Expander	Adjustable threshold, expansion ratio, attack time, release time, gain, and dry/wet mix
Ducking	Switchable ducking from the microphone inputs to all playback channels Adjustable threshold, attack time, ducking amount, and release time
Delay	Adjustable time, feedback, ping-pong effect, and dry/wet mix

DSP Effects 2 (Game Mode)

Noise Reduction	Noise gate with 70 noise-reduction levels
Voice Enhancement	Input voice enhancement with 36 adjustable levels
Ducking	Adjustable threshold
Headphone Output Enhancement	3 presets + custom settings
Headphone Spatial Enhancement	Off, Studio, Small Room

DSP Effects 3 (HIFI Mode)

PEQ	Supports three 10-band PEQ presets

Keyboard Properties

Keyboard Type	Custom mechanical keyboard
Switch Type	Lime Tactile Silent Mechanical Switch (KB22 LM) Anlan Linear Silent Mechanical Switch (KB22 LS)
Switch Feel	Tactile (KB22 LM) Linear (KB22 LS)
Hot-Swap Support	Full-key hot-swappable
Simultaneously Connected Devices	1
Number of Keys	80
Compatible Systems	Multi-system compatibility: macOS / Windows / iOS / Android
Backlighting	RGB
Case Material	Aluminum alloy + ABS
Keycap Material	Double-shot PBT
Keycap Legend Process	Dye-sublimation
Keyboard Structure	Gasket
Battery Capacity	No battery
Connection	Wired
Power Supply Method	Wired power supply
VIA Support	Yes

11. Specifications

For more detailed specifications: https://topping.pro/kb22/