Sound BLASTER® K3

Model No: SB1720

1. 設備連接

2. 連線能力

前面板

後面板

地線接頭 (Ground Terminal)
如果耳機出現嗡嗡聲的噪音,請將接地電線從這個終端銜接接到您的 PC 背部的任何金屬表面,使外部接地迴路得以完成。

3. 功能介紹

❶ 混響選取與混響程度旋鈕
(Reverb Select & Reverb Amount Knob)
旋轉旋鈕即可選取不同類型的混響,右方的 LED 會顯示所選取的混響類型 (`-`, `1-9`),(`-`) 表示混響功能為關閉。
若要調整混響程度與混響延遲,請按下此按鈕,LED ❷ 及 ❸ 將簡短顯示 `a` 和 `d`,表示該控制器已轉換至混響程度與混響延遲模式。LED 接著便會顯示 `0.-9.` (數字下方帶有 `.`),使用混響選取與混響程度旋鈕 ❶ 和電音與混響延遲旋鈕 ❺ 來調整混響程度與混響延遲。
再次按下旋鈕 ❶ 即可切換回混響與電音功能。LED ❷ 和 ❸ 將簡短顯示 `P` 和 `a`,表示該控制器已轉換至混響與自動校正選取模式。LED 接著便會顯示目前已選取的混響動和電音基調。

❷ 混響選取/程度顯示螢幕
(Reverb Select/Amount Display)
分別顯示已選取的混響類型或程度。

❸ 電音/混響延遲顯示螢幕
(Auto-tune/Reverb Delay Display)
分別顯示已選取的電音基調或混響延遲程度。

❹ 大調/小調切換 (Minor/Major Switch)
可以在大調與小調間切換。

❺ 電音與混響延遲旋鈕
(Auto-tune Key & Reverb Delay Knob)
旋轉即可在 24 個基礎音調中進行選擇,左邊的 LED 顯示螢幕會表示在 A 至 G 調中已經選擇的音調 (`-`, `A-9`),`-`表示電音功能為關閉,字符底部的 `.` 代表基調降調。詳細內容請見「電音基調」部分。
若要調整混響程度,請按下混響選取與混響程度旋鈕 ❶,右方的 LED 螢幕將切換至 `0.-9.`(字符底部帶有 `.`)。即可切換回混響選取與混響程度旋鈕 ❶ 即可切換回電音選取功能。

❻ 混音開啟/關閉 (Mixing ON/OFF)
將麥克風與其他輸入的音源(線性輸入、USB、吉他)進行混音,接著再輸出至網際網路或電腦上供錄音用。

❼ 監聽開啟/關閉 (Monitoring ON/OFF)
按下後即可在耳機中聽見自己的聲音。

❽ 監聽 FX 開啟/關閉
(Monitoring FX ON/OFF)
按下後即可在耳機中聽見自己加入效果後的聲音。

❾ 混音 FX 開啟/關閉
(Mixing FX ON/OFF)
啟用麥克風的效果,接著再輸出至網際網路或電腦上供錄音用。

❿ 線性輸出音量旋鈕
(Line Out Volume Knob)
旋轉即可控制線性輸出量。

⓫⓬ 耳機 1、2 音量旋鈕
(Headphone 1, 2 Volume Knob)
旋轉即可控制耳機 1 與耳機 2 的輸出音量。

⓭ +48V 幻象電源開關
(+48V Phantom Power Switch)
按下即可啟用 XLR 接頭的 +48V 幻象電源供應。詳細內容請見「幻象電源與麥克風連接功能」部分。
重要備註:啟用 +48V 幻象電源後,兩個 XLR 接頭均以 +48V 供電。幻象電源適用於支援幻象電源的電容式麥克風;如果在不支援幻象電源的麥克風上使用 +48V,可能導致該種麥克風損壞。

⓮ 線性輸入 / 智慧移動裝置輸入音量旋鈕
(Line In / Mobile In Volume Knob)
旋轉即可控制線性輸入 / 智慧移動裝置輸入的音量。

⓯ 變聲按鍵 (Pitch Shift Switch)
按下即可啟用移調調整功能,LED ❷ 及 ❸ 將簡短顯示 `P` 和 `P`,表示為移調模式。電音與混響延遲旋鈕 ❺ 會變成變聲旋鈕,左方的 LED 螢幕會顯示 `1.-9.`(字符底部帶有 `.`)
`1.` 低音調(男性)
`5.` 原始音調(預設)
`9.` 高音調(女性)
注意:混響程度/延遲調整與電音功能在移調模式中不可用。
再按一次即可切換回混響選取與電音選取模式,LED ❷ 及 ❸ 將簡短顯示 `P` 和 `a`,表示已經回到混響選取與電音模式。此功能只適用於現場表演。

⓰ 麥克風 2 與吉他音量旋鈕
(Microphone 2/Guitar Volume Kob)
旋轉即可控制麥克風 2 或吉他的輸入音量。

⓱ 麥克風 1 音量旋鈕
(Microphone 1 Volume Knob)
旋轉即可控制麥克風 1 的輸入音量。

⓲⓳ 低音與高音調節
(Bass & Treble Knob)
旋轉即可調整麥克風輸入的低音與高音程度。

⓴ 閃避開關 (Voice-Over Switch)
透過麥克風說話時會降低背景音樂。沒有麥克風輸入時會回到原始的音樂音量。按下即可啟用配音功能,再按一次即可停用。

4. 幻象電源與麥克風配對

Sound Blaster K3 支援使用不同作業電壓(XLR + 48、TRS +1.5V)的動圈式麥克風與電容式麥克風與接頭,確保麥克風能順利連線可用。下表中提到幾個可能的麥克風使用情形:

		麥克風 2		
		+48V動圈式麥克風	電容式麥克風	具有內建電池的麥克風
麥克風 1	+48V 動圈式麥克風	麥克風 1:XLR 麥克風 2:XLR	麥克風 1:XLR 麥克風 2:TRS	麥克風 1:XLR 麥克風 2:TRS
	電容式麥克風	麥克風 1:TRS 麥克風 2:XLR	麥克風 1:XLR 或 TRS 麥克風 2:XLR 或 TRS	麥克風 1:XLR 或 TRS 麥克風 2:XLR 或 TRS
	具有內建電池的麥克風	麥克風 1:TRS 麥克風 2:XLR	麥克風 1:XLR 或 TRS 麥克風 2:XLR 或 TRS	麥克風 1:XLR 或 TRS 麥克風 2:XLR 或 TRS

當 +48 V幻像電源開門時,可隨意搭配各種類麥麥(+48V 電容麥除外)使用。
重要告示:此接口提供的 +48V 幻象電源只適用於支援 +48V 幻象電源的電容麥,如用於不支持 +48V 幻象電源的麥克風,可能對麥克風或產品本身造成永久性的損壞。在插入或移除幻像電源電容麥之前,請務必確保 +48V電源處於關閉狀態。

5. 作業模式

Sound Blaster K3 支援 6 種作業模式:

	閃避開啟	混音開啟	混音 Fx	監聽開啟	監聽 Fx
音樂					
聊天				✓	
濕式監聽, 乾式錄音				✓	✓
濕式監聽, 濕式錄音 (卡拉 OK)		✓	✓	✓	✓
喊麥	✓	✓		✓	✓
主播	✓	✓		✓	

音樂播放

正常播放/不監聽和無效果串流麥克風監聽關閉時,將不會聽見麥克風的輸入聲音,但電腦仍會捕捉麥克風的輸入信號。
控制:所有監聽與混音按鈕為「關閉」。

聊天

無效果的聲音傳播。
控制:監聽按鈕為「開啟」。

濕式監聽 — 乾式錄音

監聽時有效果與其他輸入的聲音,網際網路/電腦錄音為乾式錄音(僅人聲,無音樂)。
控制:監聽,監聽效果按鈕為「開啟」。

濕式監聽,濕式錄音,卡拉 OK

人聲監聽與網際網路/電腦錄音均有效果與音樂(濕式)。
控制:監聽,監聽效果,混音,混音效果為「開啟」。

喊麥

在唱歌期間,有人聲輸入時音樂音量將自動降低,沒有人聲輸入時音樂音量將回復至原始音量。此功能對於活動混音師或 DJ/KJ 來說非常重要,如此一來有助於在混音期間有需要時順利發言。
控制:閃避開關,監聽,監聽效果、混音和混音效果為「開啟」。

主播

主播模式下監聽、網絡和本地錄製的人聲都不帶任何混響效果,但還有混音,是沒有混響效果的喊麥模式版。
控制:閃避、混音和監聽都設在「開啟」。

6. 混音 / 監聽作業行為

	監聽關閉 ❼ + 監聽 Fx 關閉 ❽	監聽開啟 ❼ + 監聽 Fx 關閉 ❽	監聽關閉 ❼ + 監聽 Fx 開啟 ❽	監聽開啟 ❼ + 監聽 Fx 開啟 ❽
混音關閉 ❻ + 混音 Fx 關閉 ❾	錄製: Mic原聲,其他輸入沒有聲音 監聽: 無Mic聲,其他輸入有聲音	錄製: Mic原聲沒有聲音 監聽: Mic原聲,其他輸入有聲音	錄製: Mic原聲,其他輸入沒有聲音 監聽: Mic原聲,其他輸入有聲音	錄製: Mic原聲,其他輸入沒有聲音 監聽: Mic原聲+效果,其他輸入有聲音
混音開啟 ❻ + 混音 Fx 關閉 ❾	錄製: Mic原聲,其他輸入有聲音 監聽: 無Mic聲,其他輸入有聲音	錄製: Mic原聲,其他輸入有聲音 監聽: Mic原聲,其他輸入有聲音	錄製: Mic原聲,其他輸入有聲音 監聽: Mic原聲,其他輸入有聲音	錄製: Mic原聲,其他輸入有聲音 監聽: Mic原聲+效果,其他輸入有聲音
混音關閉 ❻ + 混音 Fx 開啟 ❾	錄製: Mic效果,其他輸入沒有聲音 監聽: 無Mic聲,其他輸入有聲音	錄製: Mic效果,其他輸入沒有聲音 監聽: Mic原聲,其他輸入有聲音	錄製: Mic原聲,其他輸入沒有聲音 監聽: Mic原聲,其他輸入有聲音	錄製: Mic原聲,其他輸入沒有聲音 監聽: Mic原聲+效果,其他輸入有聲音
混音開啟 ❻ + 混音 Fx 開啟 ❾	錄製: Mic原聲+效果,其他輸入有聲音 監聽: 無Mic聲,其他輸入有聲音	錄製: Mic原聲+效果,其他輸入有聲音 監聽: Mic原聲,其他輸入有聲音	錄製: Mic原聲+效果,其他輸入有聲音 監聽: Mic原聲,其他輸入有聲音	錄製: Mic原聲+效果,其他輸入有聲音 監聽: Mic原聲+效果,其他輸入有聲音

以上的預設行為是假設混響選項有打開,若混響沒打開即使監聽、混音效果打開也聽不到,錄不到混響效果的。

7. 電音基調

電音功能
此功能將您的聲音調到所設的基調再將其效果放大以達到電音效果,只需將基調音階設置到所要的音階即可。
`A`, `b`, `c`, `d`, `E`, `F`, `9` 代表 A, B, C, D, E, F, G 音調。
滑動開關即可依序選取大調/小調。
`.` 代表降聲調
電音的音調範圍從 C 大調到 B 小調,如下所示:

LED	MINOR ● ● MAJOR	LED	MINOR ● ● MAJOR
`-`	電音關閉	`-`	電音關閉
`c`	C 大調	`c`	C 小調
`d.`	降 D 大調	`d.`	降 D 小調
`d`	D 大調	`d`	D 小調
`E.`	降 E 大調	`E.`	降 E 小調
`E`	E 大調	`E`	E 小調
`F`	F 大調	`F`	F 小調(降 A 大調)
`9.`	降 G 大調	`9.`	降 G 小調
`9`	G 大調	`9`	G 小調
`A.`	降 A 大調(F 小調)	`A.`	降 A 小調
`A`	A 大調	`A`	A 小調
`b.`	降 B 大調	`b.`	降 B 小調
`b`	B 大調	`b`	B 小調

(基調音階)

8. 混響設定

混響選取
以下為混響設定,程度從 1 至 9。

混響	`-`	混響關閉				
	`1`	房間	`4`	體育場	`7`	混響 + 延遲
	`2`	禮堂	`5`	演唱會	`8`	回聲
	`3`	金屬板	`6`	合聲	`9`	大教堂

混響/延遲程度
通過旋鈕 ❶ 調節混響量或通過旋鈕 ❺ 調節混響延遲量。
以下為混響/延遲程度範圍 `0.-9.`。

混響量/混響延遲量	`0.`	0%(最小)	`9.`	100%(最大)

9. 狀態/模式顯示

LED ❷		LED ❸	
`a.`	混響量	`d.`	混響延遲
`P.`	混響選取	`a.`	自動校正音調
`P.`	混響	`P.`	移調

10. 重新設定為原廠設定

長按混響調整鈕 ❶ 直到 LED 螢幕 ❷ 和 ❸ 顯示 `r` 和 `t`。

限用物質含有情況標示聲明書
Declaration of the Presence Condition of the Restricted Substances Marking Restricted substances and its chemical symbols

設備名稱/Equipment name: 音效聲卡　　型號(型式)/Type designation (Type):SB1720

單元Unit	鉛 Lead (Pb)	汞 Mercury (Hg)	鎘 Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr+6)	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
電線	-	○	○	○	○	○
電路板組件	-	○	○	○	○	○
金屬部件	-	○	○	○	○	○
非金屬部件	○	○	○	○	○	○

備考1.「超出0.1 wt %」及「超出0.01 wt %」係指限用物質之百分比含量超出百分比含量基準值
備考2.「○」係指該項限用物質之百分比含量未超出百分比含量基準值。
備考3.「-」係指該項限用物質為排除項目。

CREATIVE®

請留存本資料供未來參考用。

Sound Blaster® K3

Model No: SB1720

PN 03SB172000000 Rev B

1. FUNCTIONS LABELLING

2. CONNECTIVITY

FRONT PANEL

BACK PANEL
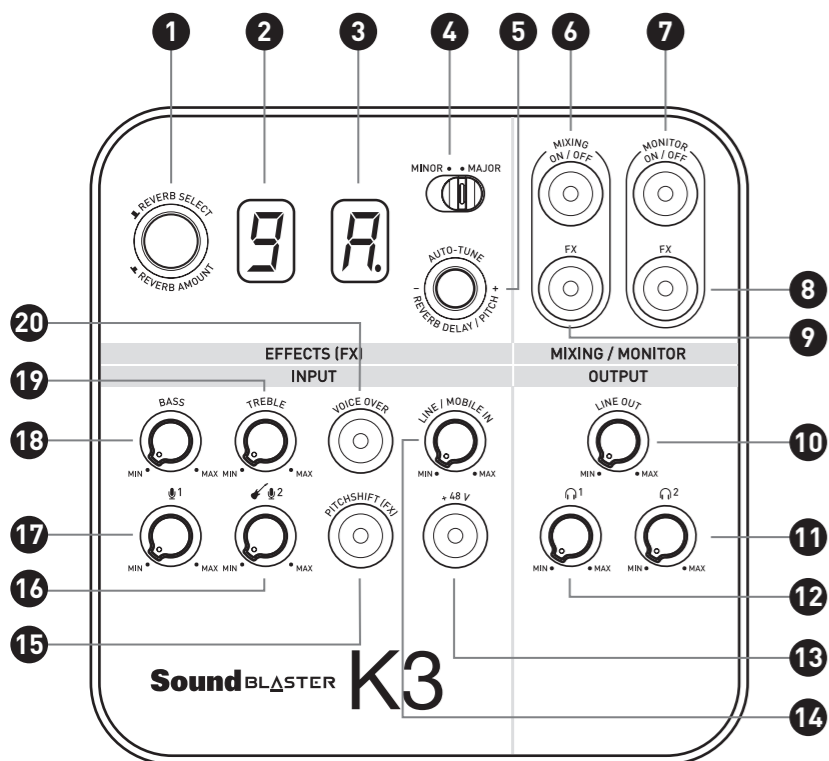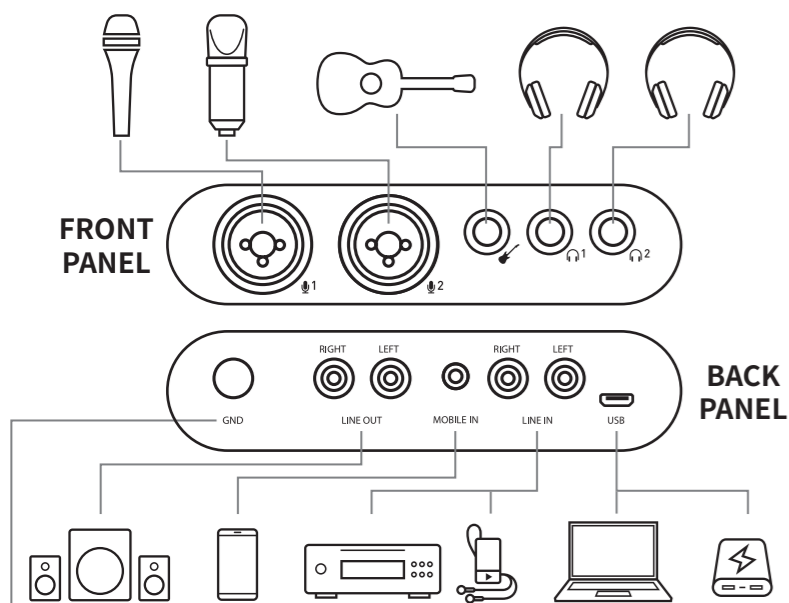
Ground Terminal
Connect a ground cable (not provided) from this terminal to the metal surface at the back of the computer to eliminate humming noise.

3. DESCRIPTION OF FUNCTIONS

❶ Reverb Select & Reverb Amount Knob
Rotate to select between different types of reverb, LED display on the right indicates the reverb selected (-, 1-9), (-) indicate Reverb is OFF.
To adjust Reverb Amount and Reverb Delay, press down this button, LED ❷ and ❸ will display ∂. and ∂. briefly to indicate control is switch to Reverb Amount and Reverb Delay mode. LED subsequently display 0.-9.(with a · at the bottom of the number). Use the **Reverb Select & Reverb Amount Knob ❶** and **Auto-tune Key & Reverb Delay Knob ❺** to adjust reverb amount and reverb delay accordingly.
Press knob ❶ again to switch back to Reverb and Auto-tune Select function. LED ❷ and ❸ will display Γ. and ∂. briefly to indicate control is back to Reverb and Auto-tune Select mode. LED subsequently display the current selected Reverb number and Auto-tune key.

❷ Reverb Select/Amount Display
Displays the selected reverb type or amount respectively.

❸ Auto-tune/Reverb Delay Display
Displays the selected Auto-tune key or Reverb Delay amount respectively.

❹ Minor/Major Switch
Switch between Minor and Major key.

❺ Auto-tune Key & Reverb Delay Knob
Rotate to select from 24 base key tunes, LED display on the left indicates the key selected (-, A-9) from A – G, - indicate Auto-tune is OFF, · at the bottom of character represents flat key. Refer to "Auto-tune Keys" section for details.
To control Reverb Delay amount, press down Reverb Select & Reverb Amount knob ❶, **the LED display on the left switches to** 0.-9.(with a · at the bottom of the number). Press Reverb Select & Reverb Amount knob ❶ again to switch back to Auto-tune Select function.

❻ Mixing ON/OFF
Mixes microphone and other inputs (Line In, USB, Guitar) and output to internet or computer for recording.

❼ Monitoring ON/OFF
Press to hear your own voice through the headphone.

❽ Monitoring FX ON/OFF
Press to hear your own voice with effects through the headphone.

❾ Mixing FX ON/OFF
Enable microphone with effects and output to internet or computer for recording.

❿ Line Out Volume Knob
Rotate to control the output of Line Out.

⓫⓬ Headphone 1, 2 Volume Knob
Rotate to control the output volume of Headphone 1 and Headphone 2.

⓭ +48V Phantom Power Switch
Press down to enable +48V phantom power supply to the XLR connectors. Refer to "Phantom Power & Microphone Connectivity" section for details.
Important: When +48V phantom power is enabled, both XLR connectors will be supplied with +48V. Phantom power is applicable to condenser microphones which support phantom power, applying +48V on microphones that do not support phantom power may cause damage to such microphones.

⓮ Line In/Mobile In Volume Knob
Rotate to control the volume of Line In or Mobile In.

⓯ Pitch Shift Switch
Press to enable pitch shift adjustment, LED ❷ and ❸ will display Γ. and P. briefly to indicate Pitch Shift mode. **Auto-tune Key & Reverb Delay Knob ❺** becomes pitch shifter knob, LED ❸ display 1.- 9.(with a · at the bottom of the number) 1. Low pitch (male) 5. Original voice (default) 9. High pitch (female)
Note: Reverb Amount/Delay adjustment and Auto-tune is not available in Pitch Shift mode.
Press again to switch back to Reverb Select and Auto-tune Select, LED ❷ and ❸ will display Γ. and ∂. briefly to indicate control is back to Reverb Select and Auto-tune mode.

⓰ Microphone 2 & Guitar Volume Knob
Rotate to control the gain of Microphone 2 and Guitar input.

⓱ Microphone 1 Volume Knob
Rotate to control the gain of Microphone 1 input.

⓲⓳ Bass & Treble Knob
Rotate to control the amount of Bass and Treble for Microphone inputs.

⓴ Voice-Over Switch
Suppress background music when speaking through the microphones. Return to original music volume when there is no microphone input. Press to enable Voice-Over, press again to disable.

4. PHANTOM POWER & MICROPHONE CONNECTIVITY

The Sound Blaster K3 supports both dynamic and condenser microphones that are different in various operating voltages (XLR +48V, TRS +1.5V) and connectors, therefore it is paramount to ensure proper connection and usage of microphones. Below table illustrates the possible microphone usage scenarios:

		Mic 2		
		+48V Condensor Mic	Dynamic Mic	Mic with built-in battery
Mic 1	+48V Condensor Mic	Mic 1: XLR Mic 2: XLR	Mic 1: XLR Mic 2: TRS	Mic 1: XLR Mic 2: TRS
	Dynamic Mic	Mic 1: TRS Mic 2: XLR	Mic 1: XLR or TRS Mic 2: XLR or TRS	Mic 1: XLR or TRS Mic 2: XLR or TRS
	Mic with built-in battery	Mic 1: TRS Mic 2: XLR	Mic 1: XLR or TRS Mic 2: XLR or TRS	Mic 1: XLR or TRS Mic 2: XLR or TRS

Important: +48V should be "On" ONLY when condenser mic requires 48V phantom power, applying +48V on microphones that do not require 48V phantom power may cause permanent damage to the microphone. Always ensure that +48V power is "OFF" before inserting or removing phantom power condenser mic.

5. OPERATION MODE

Sound Blaster K3 supports 6 modes of operation:

	Voice-Over	Mixing On	Mixing Fx	Monitor On	Monitor Fx
Music					
Chat				✓	
Wet Monitoring, Dry Recording				✓	✓
Wet Monitoring, Wet Recording (Karaoke)		✓	✓	✓	✓
Voice-Over	✓	✓	✓		✓
Host	✓	✓		✓	

Music Playback
Normal playback/streaming without effects and no monitoring. As Mic Monitoring is not turn on, microphone input will not be heard, however microphone input signal can still be captured by computer.
Control: Monitor and Mixing buttons at "Off" position.

Chat
Voice communication without effects.
Control: Monitor button at "On" position.

Wet Monitor-Dry Record
Vocal monitoring with effects & other inputs, internet/computer recording is dry (vocal without music).
Control: Monitor, Monitor Fx at "On" position.

Wet Monitor-Wet Record, Karaoke
Vocal monitoring and internet/computer recording are with effects and music (wet).
Control: Monitor , Monitor Fx, Mixing, Mixing Fx at "On" position.

Voice-Over
During singing session, music volume is suppressed automatically when there is vocal input, music level will be restored when there is no vocal input. This feature is important for room host or DJ/KJ when they need to intervene during the session.
Control: Voice-Over switch, Monitor Fx, Mixing and Mixing Fx at "On" position.

Host
This is "Voice-Over" without effects in mixing and monitoring for station/channel host. Mixing is still available.
Control: Monitor, Mixing, Voice-Over switch at "On" position.

6. MIXING/MONITORING OPERATION BEHAVIOR

	Monitor Off ❼ + Monitor Fx Off ❽	Monitor On ❼ + Monitor Fx Off ❽	Monitor Off ❼ + Monitor Fx On ❽	Monitor On ❼ + Monitor Fx On ❽
Mixing Off ❻ + Mixing Fx Off ❾	Record: Original mic only Monitor: No mic, only other inputs	Record: Original mic only Monitor: Original mic, with other inputs	Record: Original mic only Monitor: Mic with effects, with other inputs	Record: Original mic only Monitor: Original mic + effects, with other inputs
Mixing On ❻ + Mixing Fx Off ❾	Record: Original mic, with other inputs Monitor: No mic, only other inputs	Record: Original mic, with other inputs Monitor: Original mic, with other inputs	Record: Original mic, with other inputs Monitor: Mic with effects, with other inputs	Record: Original mic, with other inputs Monitor: Original mic + effects, with other inputs
Mixing Off ❻ + Mixing Fx On ❾	Record: Mic with effects only Monitor: No mic, only other inputs	Record: Mic with effects only Monitor: Original mic, with other inputs	Record: Mic with effects only Monitor: Mic with effects, with other inputs	Record: Mic with effects only Monitor: Original mic + effects, with other inputs
Mixing On ❻ + Mixing Fx On ❾	Record: Mic with effects, with other inputs Monitor: No mic, only other inputs	Record: Mic with effects, with other inputs Monitor: Original mic, with other inputs	Record: Mic with effects, with other inputs Monitor: Mic with effects, with other inputs	Record: Mic with effects, with other inputs Monitor: Original mic + effects, with other inputs

The above behaviour assumes that the Reverb Select or Auto-tune is enabled, if not, no effects can be heard even if Monitor FX and Mixing FX are turned on.

7. AUTO-TUNE KEYS

Auto-tune creates special "electric voice" effect by intentionally setting the key to a different key.

A, b, C, d, E, F, 9 represent the A, B, C, D, E, F, G keys.
Select Minor/Major by sliding the switch accordingly.
· represents flat tone

The auto-tune keys ranging from C Major – B Minor are represented as follows:

LED	MINOR • ▪ MAJOR	LED	MINOR • ▪ MAJOR
-	Auto-tune OFF	-	Auto-tune OFF
C	C Major	C	C Minor
d.	D-Flat Major	d.	D-Flat Minor
d	D Major	d	D Minor
E.	E-Flat Major	E.	E-Flat Minor
E	E Major	E	E Minor
F	F Major	F	F Minor (A-Flat Major)
9.	G-Flat Major	9.	G-Flat Minor
9	G Major	9	G Minor
A.	A-Flat Major (F Minor)	A.	A-Flat Minor
A	A Major	A	A Minor
b.	B-Flat Major	b.	B-Flat Minor
b	B Major	b	B Minor

Electronic Tone

8. REVERB SETTING

Reverb Select
Below are the reverb settings ranging from 1-9.

Reverb	-	Reverb OFF				
	1	Room	4	Stadium	7	Reverb + Delay
	2	Hall	5	Concert	8	Echo
	3	Plate	6	Chorus	9	Cathedral

Reverb/Delay Amount
Control reverb amount using knob ❶ and reverb delay amount using knob ❺ respectively.

Below are the reverb/delay amount ranging from 0. – 9.

Reverb Amount/Delay Amount	0.	0% (Min)	9.	100% (Max)

9. STATUS/MODE DISPLAY

LED ❷		LED ❸	
∂.	Reverb Amount	d.	Reverb Delay
Γ.	Reverb Select	∂.	Auto-tune
Γ.	Reverb Select	P.	Pitch Shift

10. RESET TO FACTORY SETTINGS

Press and hold Reverb Adjust button ❶ until LED ❷ and ❸ display Γ. and t.

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